GIS/Mapping

Case Study: Eyebeam

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OSI – GIS/Mapping Project
Case Study: Eyebeam R&D – ForwardTrack, FundRace.org
Person Contacted: Michael Frumin

ISSUE: *Are letter-writing campaigns and online petitions dead?*
SOLUTION: *An apolitical non-profit media arts organization develops tools to aid the American public in conceptualizing and understanding political concepts.*

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(Adapted from an interview with Michael Frumin, Technical Director of R&D)

Eyebeam, a non-profit arts and technology center based in New York City, has been nurturing and developing new media technologies since its founding in 1996. Eyebeam runs educational and artist-in-residence programs, along with curatorial space and a research and development lab, dedicated to the identification and expansion of innovative technologies. As the nexus between sociopolitical activity and culture has strengthened in recent years, Eyebeam's R&D department has begun to consider the influence that technologies may have on social dialogue. Although the organization does not espouse any particular political ideology, it has become interested in exploring how the tools it develops can promote a generally active and educated political culture.

This brief case study takes a closer look at two projects undertaken by Eyebeam, as discussed with Eyebeam R&D's Technical Director, Michael Frumin. Although using ArcView is a commodity skill, says Frumin, "programming dynamic and interactive maps and GIS applications, particularly for the web, is not." As such, it makes sense for the non-profit community to embrace the capabilities of mapping, and for programmer-mappers in turn to collaborate with these non-profits.

FUNDRACE.ORG

In early 2004, Frumin, Jonah Peretti, and Eyebeam's Contagious Media Research Group set out to prove a point. During the presidential campaign season, numerous issues had been thrust before the American public, so many so that over-saturation was a danger. Without an explicit effort to draw connections between populations and issues, however, indifference threatened to render these topics empty, and ignored by all but a few focused interest groups. Frumin considered campaign finance reform as one of these issues; central to the campaign, and yet far from most Americans' immediate attention.

Related to this, and equally important to Eyebeam, was the concept of data availability and presentation. Through the

Federal Election Commission (FEC), anyone can access data documenting all campaign finance records, yet with the information available in formats incomprehensible to the average reader, few if any individuals were likely to read this public data on their own. Eyebeam saw the potential in this question – is there a way to use a source of public data and reuse it or present it in a technological way to remind people how meaningful it is to them? Demographic and census figures, street and geographic information and other data sets have all been made free and available by the US government, a resource that makes Americans "lucky," says Frumin. Actually utilizing it, however, is another matter.

Frumin sought to emphasize the interactivity behind the data, and chose *not* to use GIS industry standard ArcView, calling it costly and "almost useless when it comes to the web." He aggregated all of the FEC data and then generated large-scale maps using Microsoft's MapPoint product, which he calls "not so sophisticated, but geared toward mapping [data] for the general Microsoft Office user." Next, geocoding each donation with free software and databases designated a longitude and latitude for each of these campaign contributions. The final collection of political contribution data linked to specific addresses is embodied in FundRace.org, an online tool with which users can seek information on local donations, establish contacts with neighbors who have donated to similar political parties and view national and local patterns of political affiliation by contribution.

"All of this information is available through the Center for Responsive Politics," says Frumin. But for one reason or another, the CRP hasn't chosen to geocode or map the data and increase its accessibility. "We had no political agenda in doing this project," notes Frumin. "Except to note that transparency and accountability in political finance are important and closer to home than you might think."

FORWARDTRACK

Similar to its efforts with FundRace, Eyebeam saw ForwardTrack as its opportunity to demonstrate, through technology, the relative proximity of issues. Recognizing the proliferation of online petitions, Eyebeam considered how each signature carried with it an exponential impact. The lab at Eyebeam opted to design a tool, rather than a full website, with can be installed and customized for other organizations. This program, protected under a GNU General Public License, allows an online campaign the ability to visually map its impact; for each registrant, it plots a dot on a map of the US, and with every degree of subsequent contacts, the dots multiply and deepen throughout the country. ForwardTrack also traces email forwards, maps blog references' impact and employs other social networking

tools. Eyebeam states its goal as "help[ing] people understand decentralized networks and see the power of '6 degrees of separation.'" Providing a powerful illustration of the impacts of each successive signer bolsters the strength of the petition itself. As the functionality remains fairly constant for every installation, organizations can install a standalone product and modify templates to fit their own needs.

With ForwardTrack, Eyebeam developed software as they would any open source project: "ForwardTrack started out as a good idea. Our role was to take it to a logical conclusion, which is done by publishing [the code], and releasing it. It's a design and has gone through a few iterations of code." For a beta test of the software, Eyebeam contacted colleagues at the Brady Bill campaign for the assault weapons ban, running ForwardTrack for TomsPetition.org, an online campaign run by the father of one of the Columbine High School victims. Although Eyebeam, shying away from a specific agenda or political credo, has opted not to conduct a full ForwardTrack promotion, it recognizes its power as an advocacy tool geared toward a multitude of campaigns. Since its release in 2005, the program has already been adopted by a number of public interest groups, including People for the American Way's SaveTheCourt.org and Oxygen's Oh! Speakup campaign for Hurricane Katrina victims, among others.

By providing a variety of tracking methods, ForwardTrack empowers the organizations that have adopted the tool, allowing them to literally map their impact across different media. Unlike traditional GIS projects that allow users to overlay and manipulate data over specific locations, ForwardTrack has allowed only for a range of data on a national scale. Yet by actually enabling a social impact on a massive level, the tool actually becomes part of the effort instead of merely tracking it.
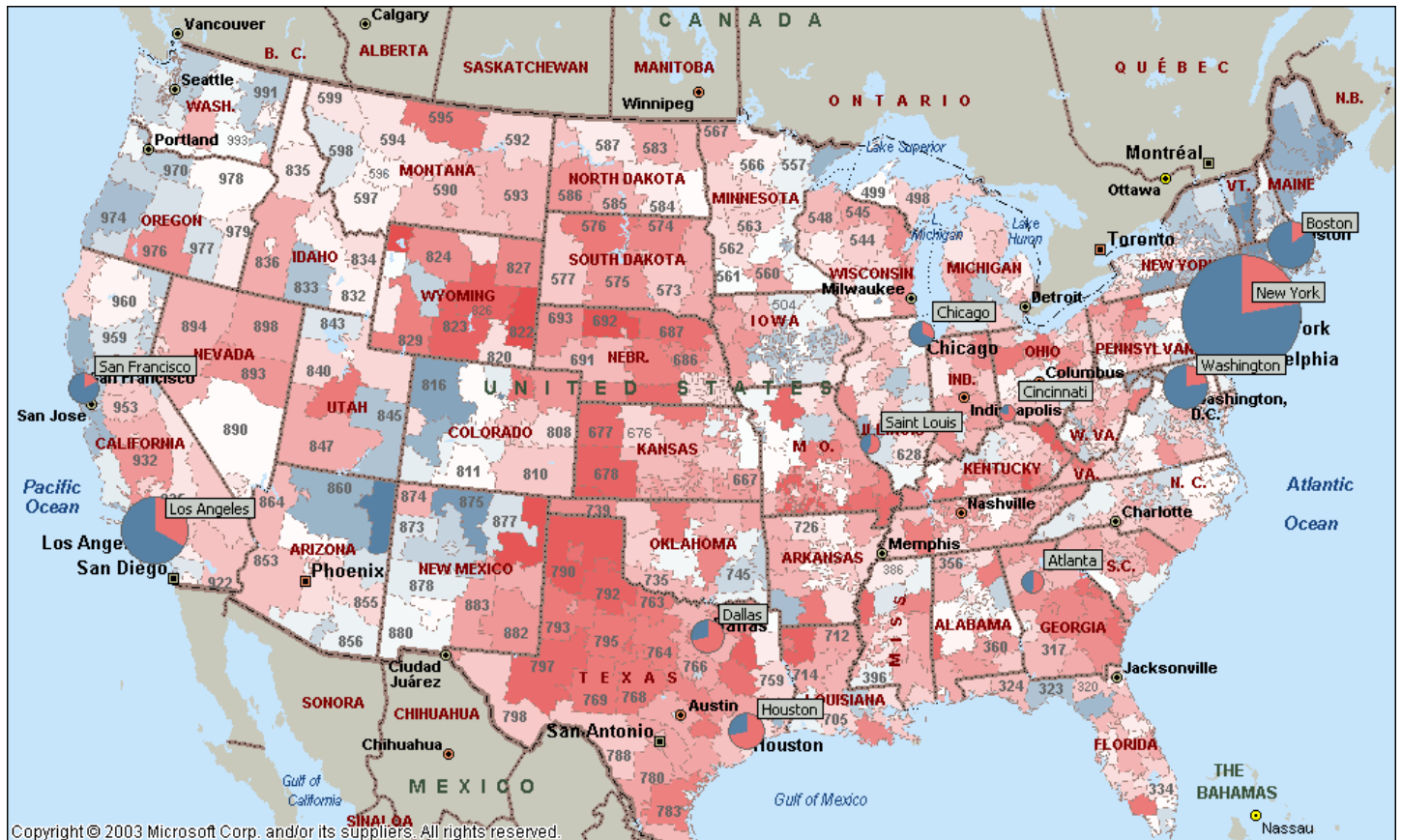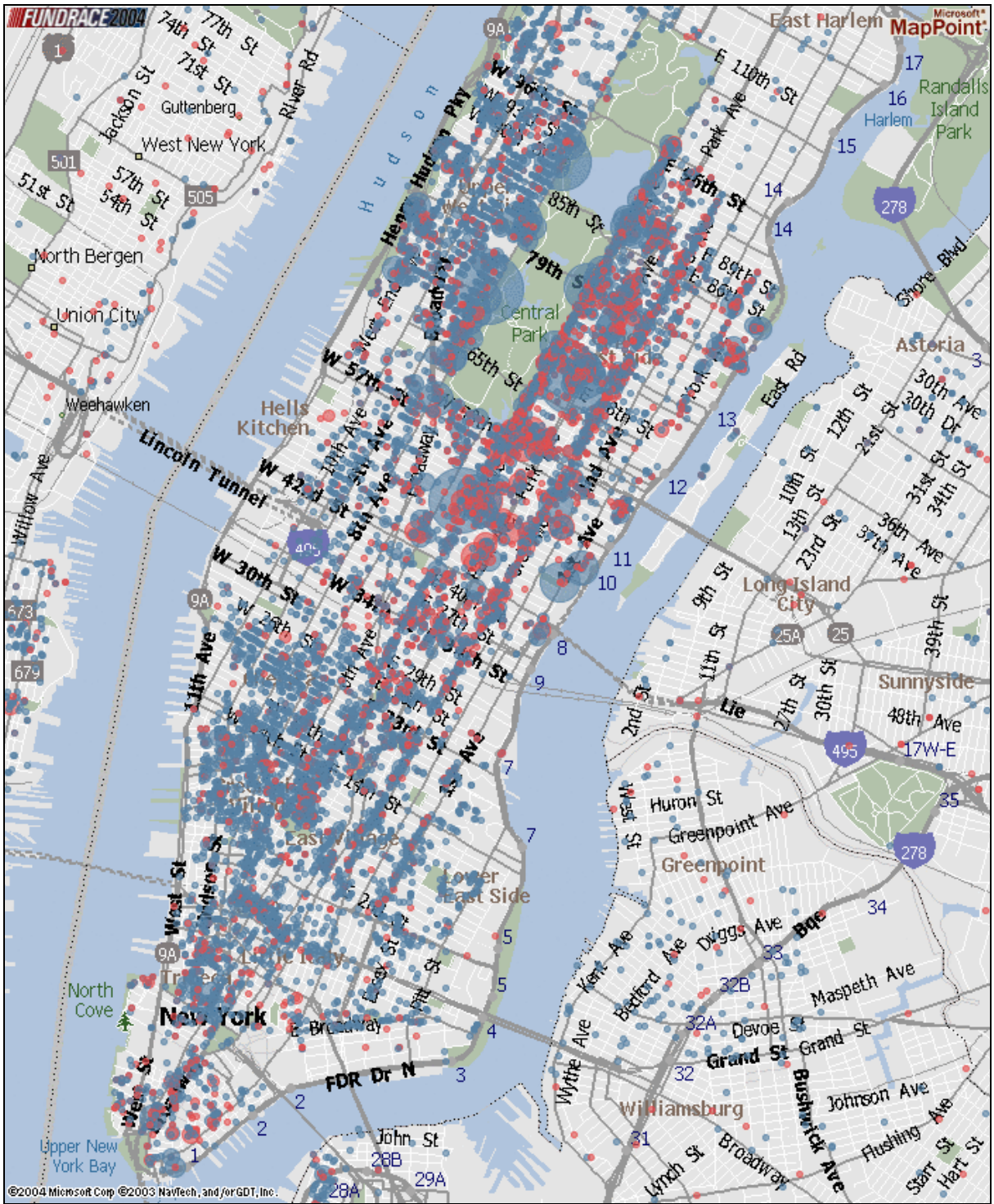
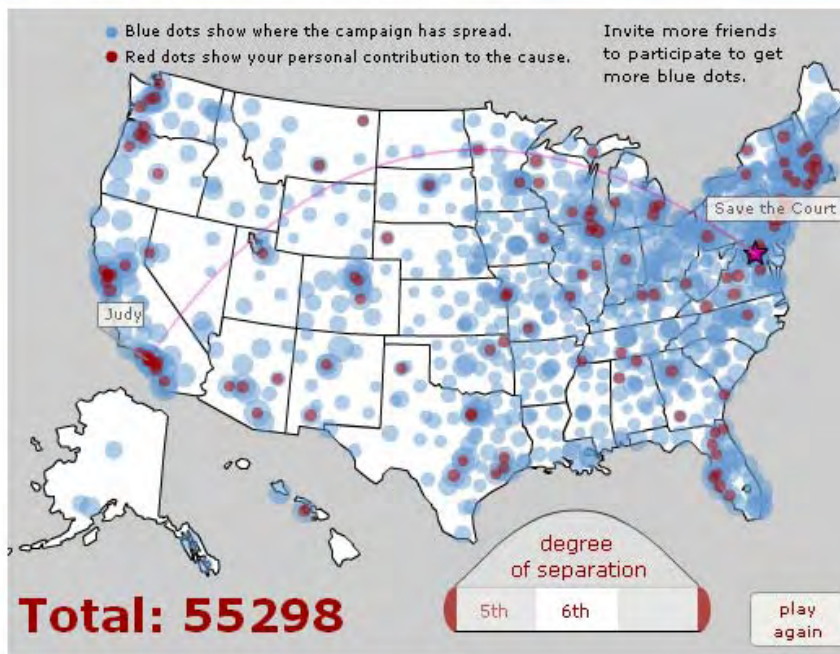Figure 1: FundRace "Money Map"

Figure 2: FundRace "City Map"

Figure 3: A "Personal Impact Page" in PFAW's ForwardTrack Campaign