Overview of Interim Findings:
Kirwan Institute for the Study of Race & Ethnicity

**Utilizing GIS to Support Advocacy and Social Justice:**
**A Case Study of University Led Initiatives**

*Presented to the Health Equity Mapping Advisory Committee as part of the Web Conference: Harnessing Maps and Mapping Tools to Advance Health Equity*

November 7th 2008 – Oakland, CA
Interim Findings Presentation

- Study purpose & goals
- Approach and research methods
- Interim findings
  - Critical ingredients for success
  - Understanding advocacy impact
  - Future directions
  - Challenges
- Next steps
Framing our Inquiry

- Mapping as another analytical & communications tool
  - Can mapping be a tool for social justice?
- How can we effectively use maps for advocacy?

Redlining Map of Philadelphia, PA
Study Purpose & Goals

- Identify exemplary case studies of promising mapping initiatives that targeted equitable health outcomes to assess
  - Impact, audience, goals, lessons learned, challenges and opportunities

- Identify promising trends for
  - Assisting advocacy and legal strategies to reduce health inequities
  - Raising public awareness of the spatial dimensions of health inequality
    - How health is shaped by community characteristics such as poverty, joblessness, and poor public investment
    - Building public will for policy solutions

- Identify recommendations to support more effective use of GIS(mapping) to promote health equity
From the OSU Lantern

New class to bring maps, service to Near East Side
Holly Davis
Issue date: 10/29/08

- A new geography course to be offered for the first time winter quarter will not only teach students about cartography and map design, but also teach them to benefit the community.

Geography 580S is a service learning course that will use basic map design to address community needs within the Near East Side of Columbus, said Tim Hawthorne, a graduate student in geography, who will be instructing the course.

"[The Near East Side] historically has one of the lowest health care accessibility rates within the city of Columbus," Hawthorne said. The goal of the final project in the course is to have students create maps that illustrate resource facilities such as low-cost health care providers, public transportation locations, food pantries and groceries, so residents know what is available. The final project can take the form of a brochure, wall map or any other creative use of the map.

The maps might provide "compelling visual evidence" that the community lacks necessary resources, said Ola Ahlqvist, an assistant professor in geography who is collaborating with Hawthorne on the class.

Students will take a tour of the Near East Side community to visit places they want to map and familiarize themselves with the community and its needs. They will also use GPS technology and mapping software to create data sets and use existing data from places such as the Center for Urban and Regional Analysis to help them complete their final projects.

The class will work with the Ohio State African American and African Studies Community Extension Center, which will conduct the tour of the near east side of Columbus and will serve as the course's "outreach arm to the community," said Carla Wilks, the center's program coordinator. The center will work with the students to help them distribute their final projects to the organizations and people who would most benefit.
Approach & Research Methods

- Literature review and assessment of organizations/professionals in the field
  - Survey and investigated nearly three dozen organizations or mapping professionals in the field of or affiliated with academia
- Practitioner Qualitative Surveys
  - Conducted ten in-depth case study interviews with organizations/professionals
  - Nine domestic projects (one international)
  - Identifying exemplary case studies
- Internal Assessment of our Projects
  - Incorporated an analysis from our experience in conducting community-client based opportunity mapping in ten different initiatives
List of recent interviewees

- Case study interviews conducted at this date
  - **Bill Buckingham**, Applied Population Laboratory, University of Wisconsin
  - **Prof. Mark Becker**, Center for International Earth Science Information Network, Columbia University
  - **Prof. Neal Richman**, Center for Neighborhood Knowledge, School of Public Affair, UCLA
  - **Ms. Pamela Waterman**, Project Director, The Geocoding Project, Harvard School of Public Health
  - **Prof. Andrew Curtis**, Department of Geography, University of Southern California
  - **Prof. Sara McLafferty**, Department of Geography, University of Illinois at Urbana Champaign
  - **Prof. Sarah Elwood**, Center for Studies in Demography and Ecology, University of Washington
  - **Ms. Tara Jackson**, Research Director, Cartographic Modeling Lab (CML), University of Pennsylvania
  - **Prof. Gerard Rushton**, Department of Geography, University of Iowa
  - The Children’s Environmental Health Initiative (CEHI), Duke University
- We will expand this list significantly before the report is complete
Exemplary GIS projects

- Center for Neighborhood Knowledge, UCLA
  - Neighborhood Knowledge Los Angeles (NKLA): http://nkla.sppsr.ucla.edu/index.cfm
  - Neighborhood Knowledge California (NKCA): http://nkca.ucla.edu/

- Applied Population Laboratory (APL) in collaboration with School of Medicine and Public Health, University of Wisconsin
  - Participatory Photo Mapping Project (PPM): http://www.fammed.wisc.edu/research/external-funded/communities-risk/ppm

- Center for International Earth Science Information Network (CIESIN) in partnership with the International Center for AIDS Care and Treatment Programs (ICAP), Mailman School of Public Health, Columbia University

- Cartographic Modelling Lab (CML), University of Pennsylvania
  - Overhauling DHS, City of Philadelphia

- The Children’s Environmental Health Initiative (CEHI), Duke University
Emphasis of evaluation

- We are not focusing on characteristics of individual projects today
  - For detailed information about these projects please refer to our final report or visit the associated web sites
- Instead we are focusing on issues and themes identified across projects
  - Across the various initiatives and projects...
    - what are the common themes, challenges, ingredients for success, impacts, opportunities etc.
Interim Findings: Critical ingredients for success

- Community interaction is critical
  - Collaborative relationships and direct feedback with the community is critical
  - Community must be actively involved in evaluating and guiding map development, this must be an ongoing process
- Initiatives must capitalize on the communicative power of maps
  - Maps are intuitively more understandable as a communications tool
    - “People feel like they understand maps. Nobody will give you feedback on a regression analysis.”
Interim Findings: Critical ingredients for success

- Mapping can successfully serve two functions
  - Identify targeted areas of discrimination or areas for intervention
  - Show universal problems of concern across communities
    - Forcing people to think outside of just “local”

- “Bridge” organizations strengthen linkage between academia and community
  - Mapping initiatives completed by intermediary organizations that act as bridges between academia and the community were often identified as more likely to be successful
Measuring the impact of mapping on advocacy goals is difficult

- A few instances where direct policy change was attributable, but these were limited; policy change was the result of multiple actions and efforts (rarely attributable to just the mapping)
- Maps “add value” to depth of deliberation and debate
  - Providing an additional layer of detailed information and analysis to inform on-going decision making
- “Soft” benefits
  - Mapping broadens people’s understanding of geographic “linked fates”
  - Maps have been significant in changing on-going discussion or debate around a particular issue or project
  - Maps have encouraged philanthropic organizations and other funders to support future advocacy
Interim Findings: Understanding/Evaluating Impact

- Maps are more often cited as being useful in guiding better policy implementation (in contrast to changing policy)
  - Mapping initiatives to provide information and analysis to guide service provision in government (or for non-profits) were very common
- Evaluation of impact is limited and conceptually difficult
  - Few initiatives, organizations or professionals devote significant resources to tracking or identifying the impact of mapping advocacy in policy change (especially in a quantitative sense)
  - Identifying comparable and consistent direct measures for assessing impact is difficult (there are challenges in finding consistent benchmarks to measure and compare the success of one mapping initiative to another)
Interim Findings: Future Directions

- Two primary areas of growth in the field
  - Participatory mapping initiatives
  - On-line mapping systems
- Strengths
  - On-line mapping systems will grow tremendously in the future due to the growth of open source mapping technology; this will have significant impact on changing the mass-distribution and cost barriers to community mapping.
  - Well designed community based participatory research can provide the best opportunity for building community ownership of projects/initiatives.
    - These initiatives will also allow for the collection of new and unique types of data; handheld remote mapping/GPS devices will spur the growth of these initiatives.
Challenges

▪ Outside of directly measuring visitors to web sites, it is difficult to assess the impact of web based mapping (limited interaction-follow up with users)

▪ Movement toward web based systems limit community interaction (which is also essential to successful advocacy)
  ▪ How can web based systems be directly linked to community involvement and participatory research?
Resource and funding shortages

- All initiatives report severe challenges in finding sustainable funding for projects and initiatives. The public sector had little funding to fund projects and foundations primarily wanted to fund new innovation but not long term maintenance of the systems.
  - Funders were more likely to embrace long term investments when mapping was directly integrated into their mission or programmatic goals for internal use.
Interim Findings: Challenges

- Disconnect between academia and community
  - Interview respondents noted that significant challenges exist in bringing mapping in academia to community based issues
    - Map making for community purposes is different (in style and substance) than map making (and analysis) for academic research and publications
    - Academics may not have the ability to consistently interact with a community over the long term, limiting their standing in the community (in contrast to “bridge” organizations or intermediaries who are actively working with communities on a sustained basis)
Interim Findings: Challenges

- Are intermediary organizations advocates or just data/service providers?
  - Intermediary organizations often cited themselves as having no set “agenda” or “research agenda” enabling stakeholders to see them as neutral
  - But, can you be an advocate without an explicit advocacy agenda?
    - Are organizations merely providing data and analysis or framing messages and research to proactively address an advocacy agenda (putting values to mapping)
Unresolved Questions: 
Mapping & Social Justice Litigation

- No organizations or practitioners in these case studies utilized mapping in a litigation context
  - Based on our previous experience, utilizing mapping in the litigation context raises a number of significant challenges and level of scrutiny not seen in community based or policy based advocacy mapping initiatives
  - These critical issues must also be explored in more detail to better understand challenges and opportunities in utilizing maps in the litigation context

Map prepared by The Reinvestment Fund from the Wells Fargo/Baltimore Fair Housing Suit
Next Steps

- Our next steps
  - Integrating feedback from committee
  - Conducting additional practitioner surveys
  - More in-depth analysis of primary exemplary case studies
  - Additional literature review linked to major themes identified in qualitative interviews
    - Does literature support or refute these issues? Which of these observations are not currently in the literature debate?
Additional Thanks to:
Research assistance provided by Kwabena Agyeman, Graduate Research Associate, City & Regional Planning Masters Candidate, The Ohio State