

# Democratizing & Displaying Health Data

Introducing *HealthLandscape.org*

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# Founding Partners



# Health Data & GIS

- Use and utility are well-established
- Broad adoption limited, particularly in the physician community and non-profit health and social service agencies
- Barriers include:
  - Cost
  - Expertise - Learning curve for technology
  - Centralized data
  - Time for implementation

# Aims

- *To build* an interactive web atlas that allows health professionals, policy makers, academic researchers and planners to combine, analyze and display information in ways that promote understanding and improvement of health and healthcare
- *To offer* select users the capacity to upload, geocode and map their own data. Once converted, these data would be shared with the *HealthLandscape* community or securely stored for limited user access

# Core Values

- *Integrity and Reliability*: That platform data would be valid, reliable and consistent.
- *Accessibility*: That data and tools would be accessible to everyone.
- *Functionality*: That the platform would be simple to use correctly.
- *Innovation*: That the platform would bring new dimensions to data.
- *Relevance*: That the platform would be committed to advancing public health policy.

# The Power of Data for Health Policy & Planning

- Maps: Particularly effective for presenting complex data and relationships
- The Demand: Providers, Community Health Planners, Policymakers & Advocates
  - Grasp and think in geographies (particularly political)
  - Want to target resources geographically
  - Crave local/regional analysis
  - Need ways to monitor and depict change over political terms (2 yr, 4 yr, and longer)
  - Don't always see data patterns right in front of their noses

# The Power of Customizing Data

- Web-based mapping tool
  - Bridges Technology/Cost barriers for users
  - Puts 'dormant' data (AMA Masterfile, HPSA, Census, Political Boundaries, etc.) in the hands of grassroots healthcare users and advocates
  - Research Applications: Expand downstream as users multiply, data is pooled

# Audience

- The tool was designed to appeal to health and social service providers, educators, policymakers, advocates, and community leaders. However, the site was also purposefully dynamic, such that not only new data, but new user groups, could be added over time



# What is HealthLandscape?

HealthLandscape is a customizable data delivery tool that allows *anyone* to create maps and tables from a wide array of primary care and health related data

# Who is Using *HealthLandscape*?

- Over 750 users since launch May 2007

## Top User Categories are:

- Academic Researchers (33%)
- Residency Programs (20%)
- Physicians (16%)
- Other Medical Professionals (15%)
- Foundations (10%)
- General Public (4%)
- Other/Unknown (2%)

name: Shiloh Turner [Username] My Recent Projects...

## Community HealthView

Map My Community's Health

Community HealthView gives researchers and policymakers the ability to create custom maps and tables of health in their communities - depicting populations at risk, health outcomes, and the distribution of health interventions. It currently houses health-related data from Greater Cincinnati, the State of Ohio, and the nation.

## Primary Care Atlas

Make Primary Care Maps

The Primary Care Atlas maps Health Professional Shortage Areas (HPSAs), Medicare Physician Scarcity Areas (PSAs), the impact of your residency program graduates on your region, the distribution of physicians by specialty (primary care and other), and populations.

## My HealthLandscape

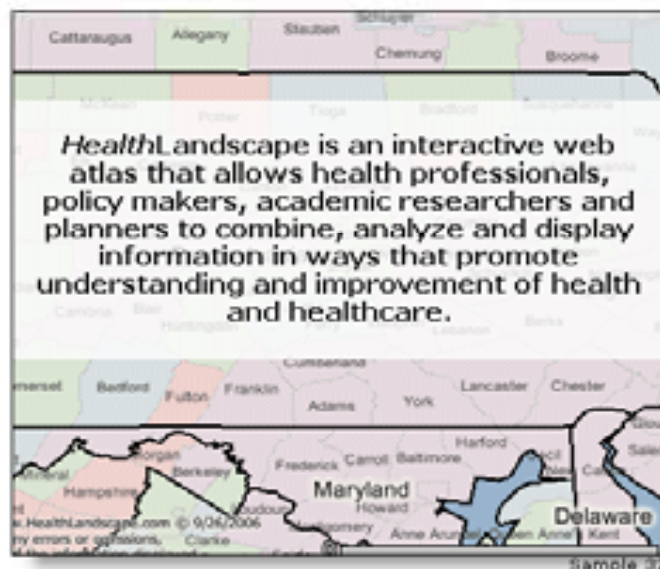
Map My HealthLandscape

My HealthLandscape is a secure environment for users to upload and geocode their own health-relevant data, display that information with key population, demographic, and economic indicators, and collaborate with others in their organization to create a myriad of informative visual displays.

## Health Center Mapping Tool

Map My Health Center

The Health Center Mapping Tool turns your Community Health Center or clinic's data into maps of the patients you serve, the core neighborhoods that comprise your service area, and areas with the densest concentrations of your patients. Also, map U.S. Census data to find populations of interest to you.



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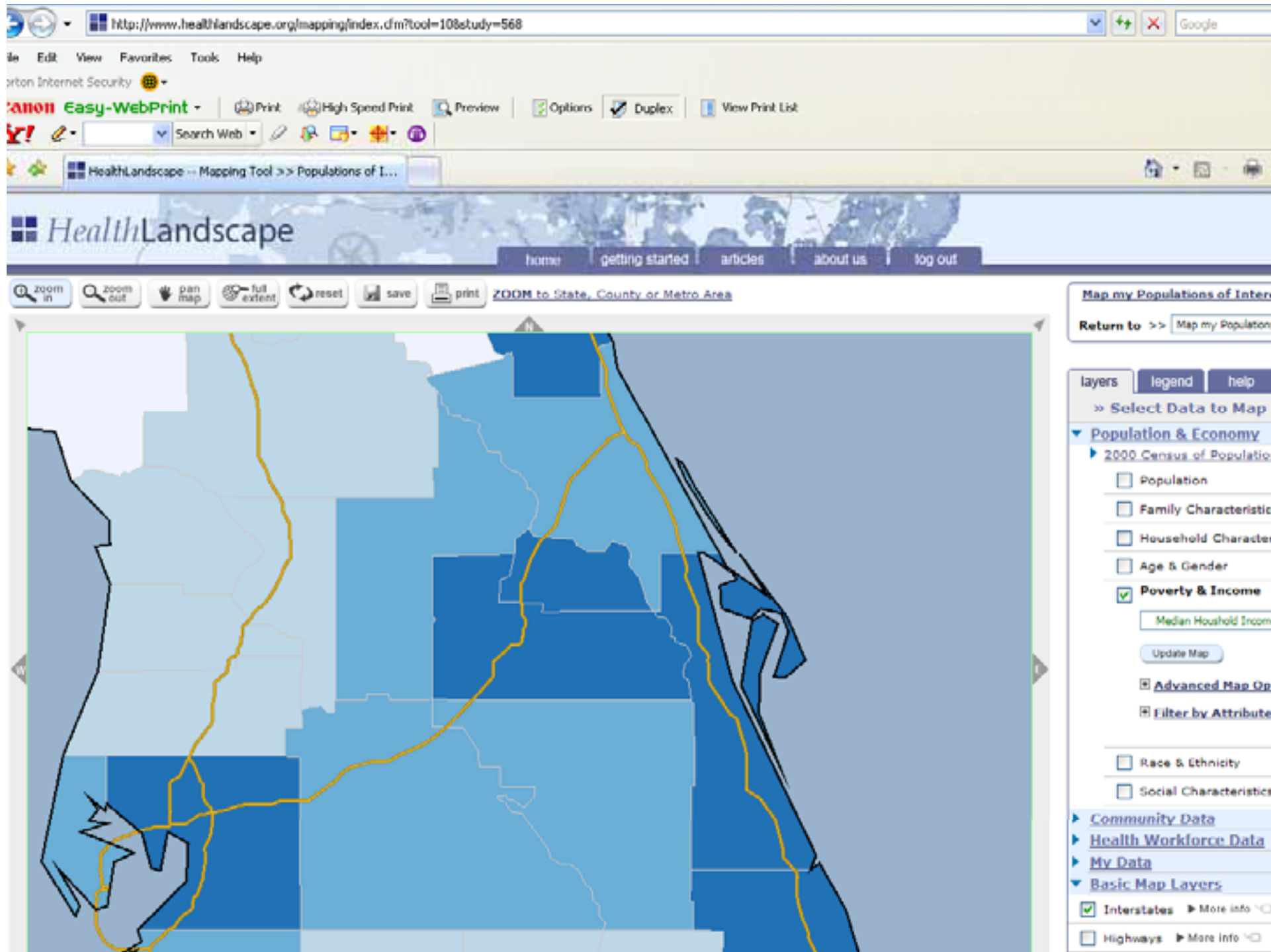
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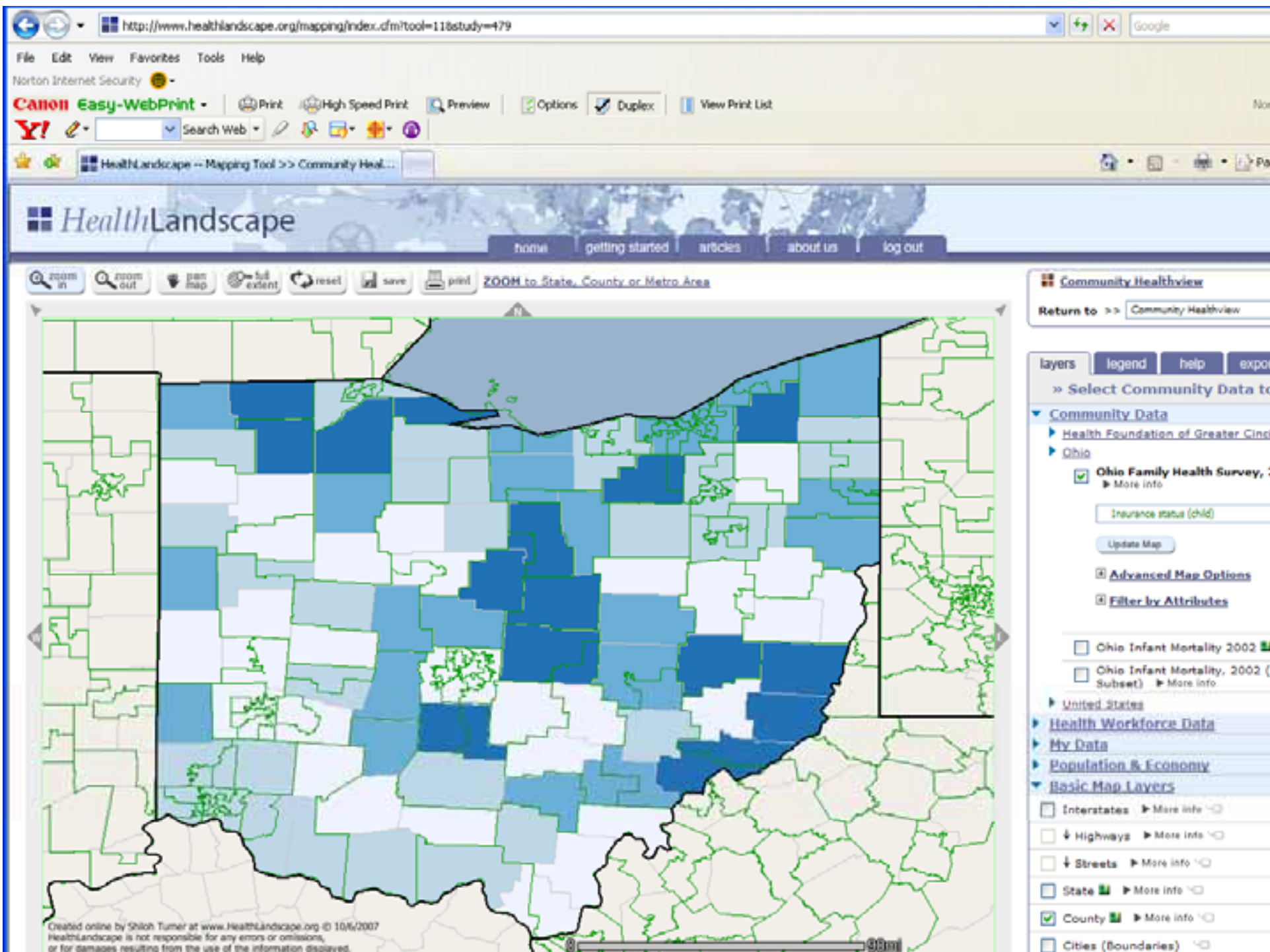
# Community Health View

## Mapping Capabilities:

- Geographic depiction of regional, state, or national census and survey data



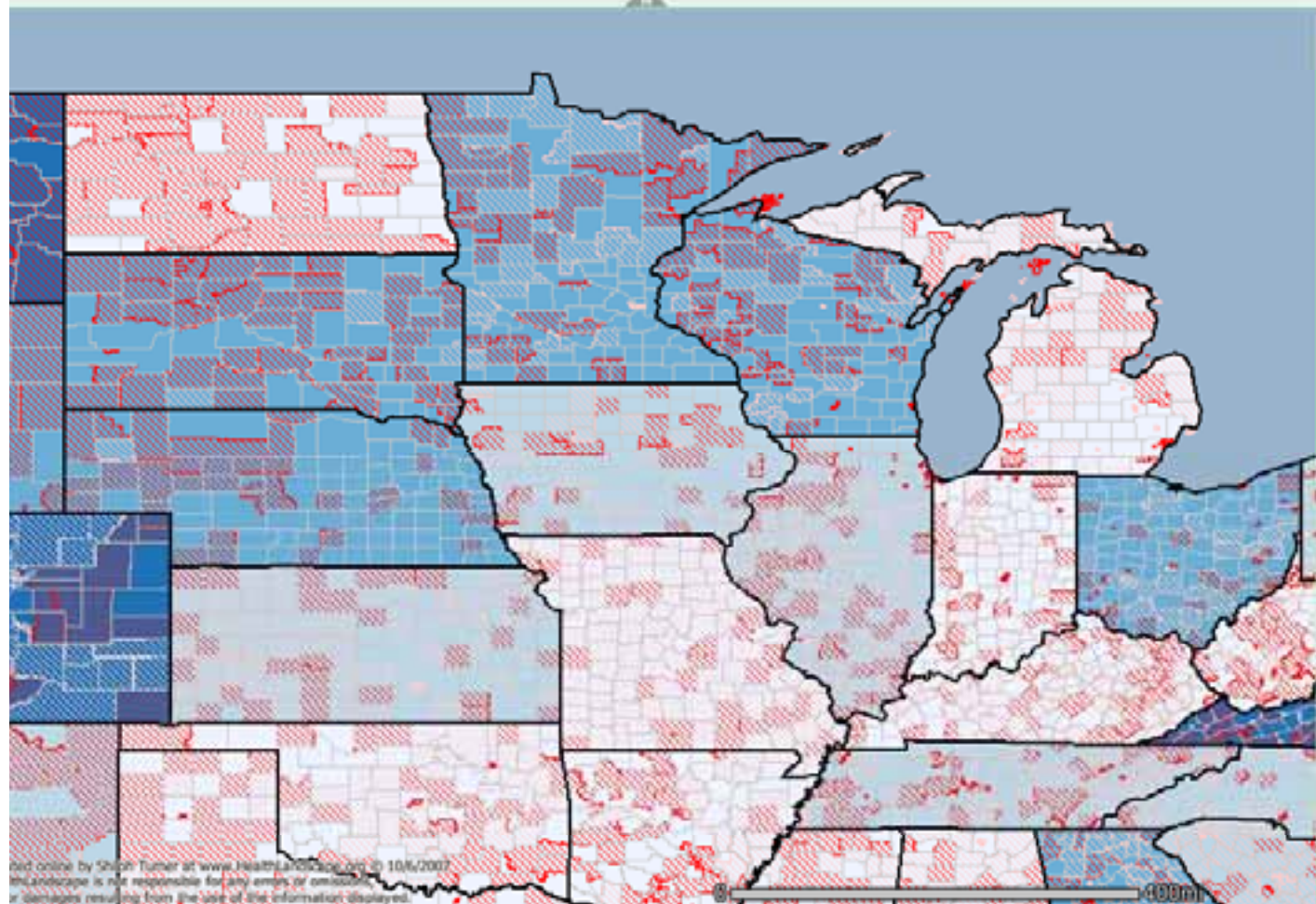




# HealthLandscape

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Zoom to State, County or Metro Area



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ntify query Show Toolbox Scale at map center: 1/9,121,061

## Community Healthview

Return to >> Community Healthview

layers legend help export

>> Select Community Data to Map

### Community Data

Health Foundation of Greater Cincinnati

Ohio

United States

Area-Based Socioeconomic Measures  
More info

BRFSS, 2004

% General Health Excellent

Update Map

Advanced Map Options

Filter by Attributes

County Poverty, 2000 More info

Medically Disenfranchised/County  
More info

Mortality by County per 100,000 by Race  
More info

Mortality by County, 1979-1998

Mortality by County, 1999-2004

State and County Mortality per 100,000  
More info

Virginia County Mortality Data  
More info

### Health Workforce Data

US Medical Schools, 2007

Physician Scarcity Areas (ZIP), 2005

Health Professional Shortage Areas, 2004  
More info

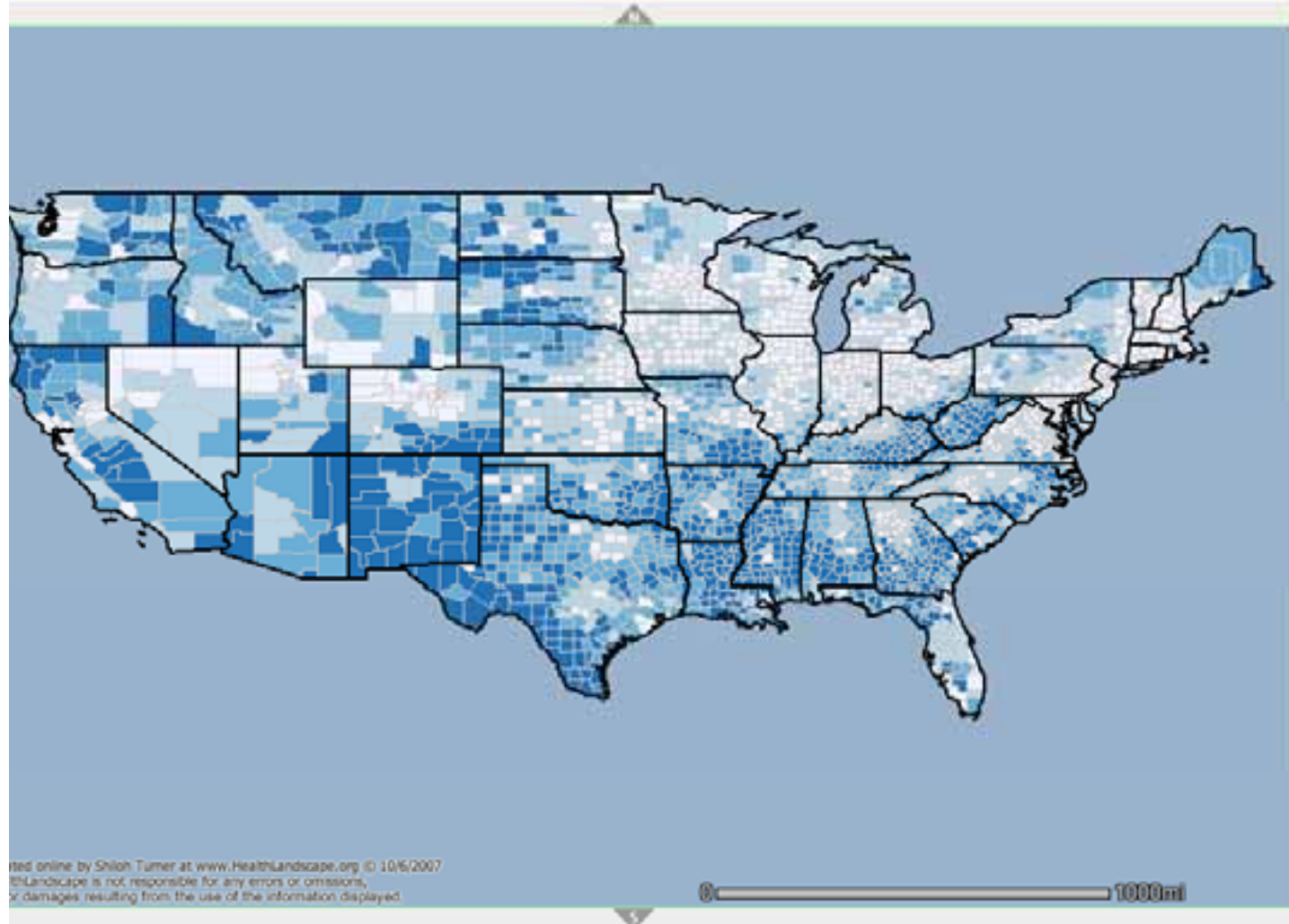
Health Center Locations More info



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room out pan map full extent reset save print ZOOM to State, County or Metro Area



## Map my Populations of Interest

Return to >> Map my Populations of Interest

layers legend help export

## Select Data to Map

### Population & Economy

#### 2000 Census of Population and Housing

- ☐ Population
- ☐ Family Characteristics
- ☐ Household Characteristics
- ☐ Age & Gender

#### Poverty & Income

% Pop < 150% of Poverty

Update Map

#### Advanced Map Options

#### Filter by Attributes

- ☐ Race & Ethnicity
- ☐ Social Characteristics

### Community Data

### Health Workforce Data

### My Data

### Basic Map Layers



# Primary Care Atlas

## Mapping Capabilities:

- Health Professional Shortage Areas (HPSAs)
- Physician Scarcity Areas (PSAs)
- Residency Footprinting
- Physician Distribution

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identify query Show Toolbox Scale at map center: 1:4,057,547

[wizard](#) [wizard help](#) [Hide Wizard](#)

3 Redram Map

layers legend help export

» Select Data to Map

## Health Workforce Data

US Medical Schools, 2007

Physician Scarcity Areas (ZIP), 2005

Health Professional Shortage Areas, 2004

► **More info**

[Health Center Locations](#) [Make an Appointment](#)

 **Family Medicine Residency Programs \***  
▶ [More Info](#) 

Phrasen Aest. Date

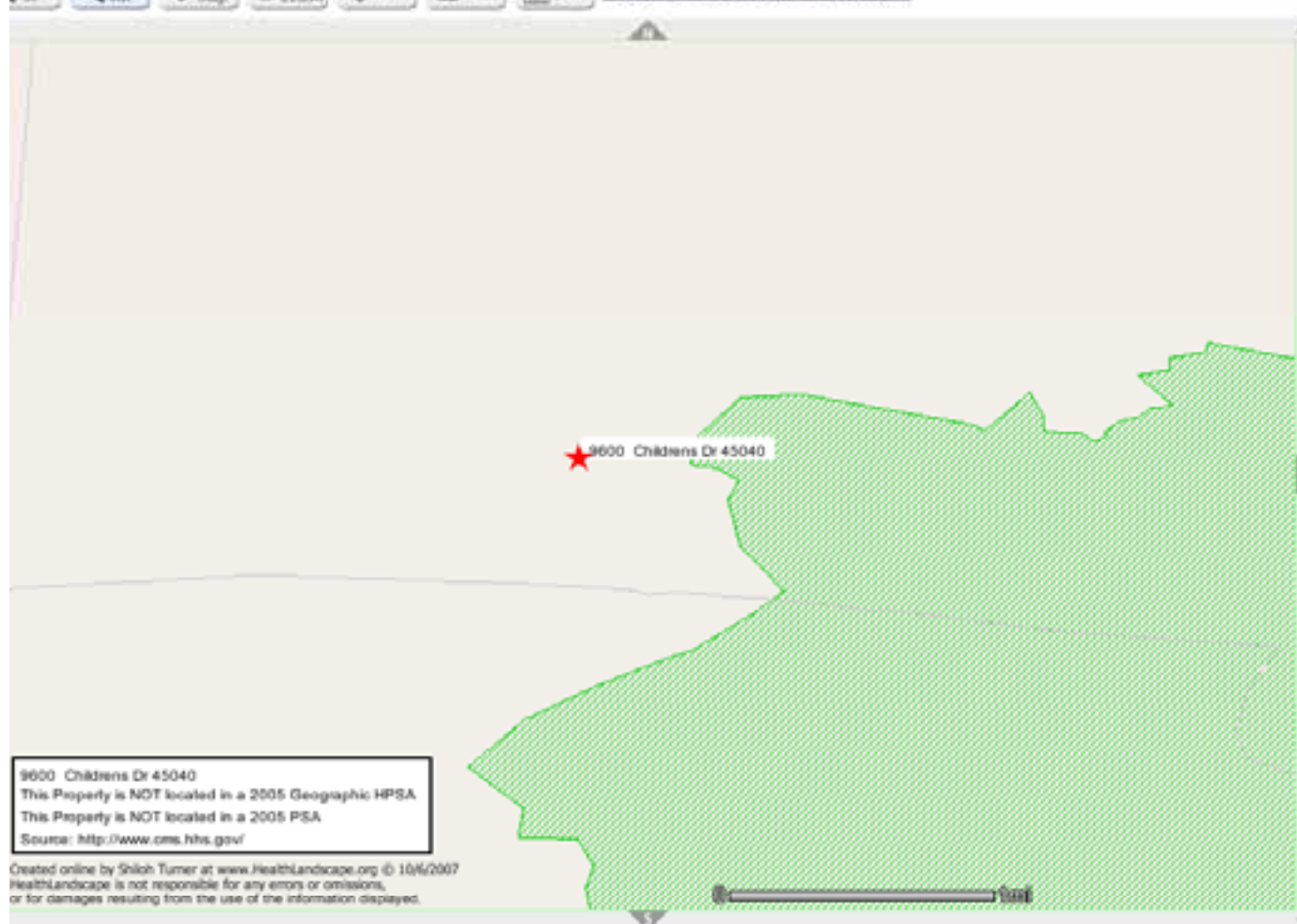
► [Physician Data](#)

► [My Data](#)

- ▶ [Basic Map Layers](#)

Community Data

▶ Population &amp; Economy



## Physician Scarcity Area (Medicare Bonus Payment)

Return to >> Physician Scarcity Area (Medicare Bonus Payment)

wizard wizard help Hide Wizard

1 Choose Area of Interest:  
☐ National ☐ State ☒ My Address  
 Please enter street address and ZIP Code or ZIP Code only.

Address: 9600 Childers Dr.

Zip Code: 45040

9600 Childers Dr 45040

2 Include the following layers:  
☐ Health Professional Shortage Areas  
☒ Physician Scarcity Areas

3 Redraw Map

Help with PSA (Medicare Bonus Payment) Mapping

layers legend help export

Select Data to Map

Health Workforce Data

☐ US Medical Schools, 2007

☐ Physician Scarcity Areas (ZIP), 2005

☐ Health Professional Shortage Areas, 2004

☐ Health Center Locations

☐ Family Medicine Residency Programs

Physician Asst Data

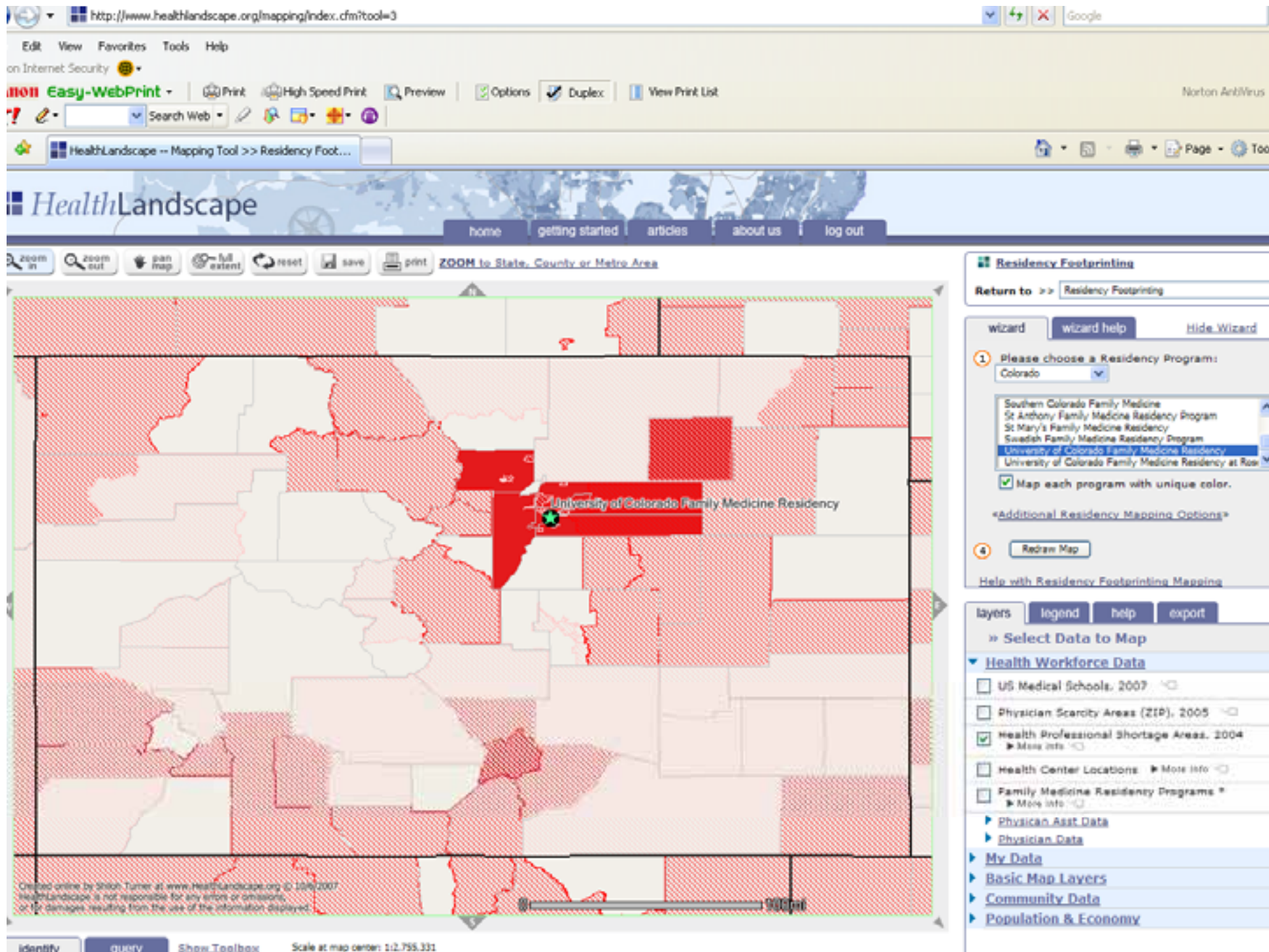
Physician Data

My Data

Basic Map Layers

Community Data

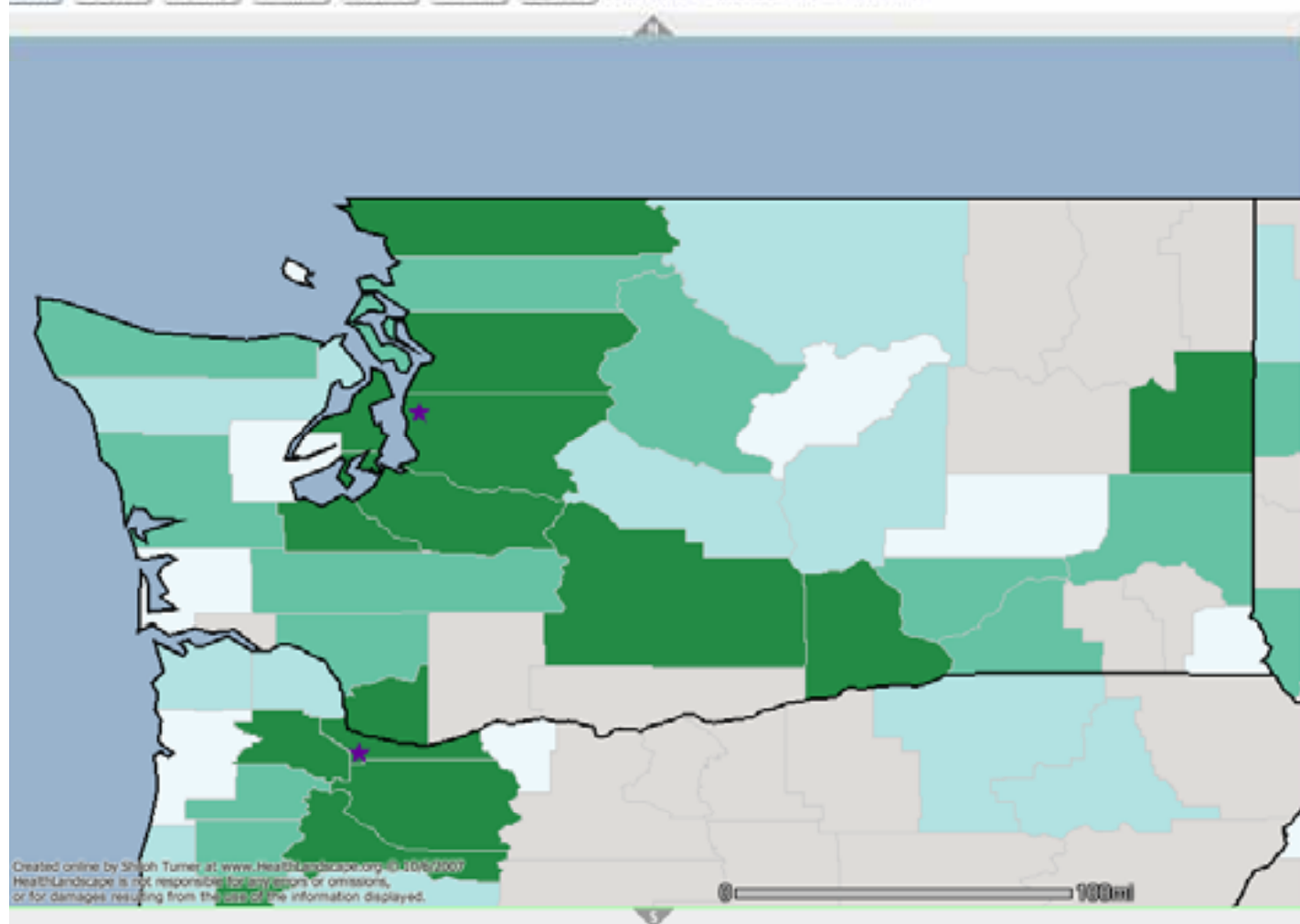




## HealthLandscape

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Zoom In Zoom Out Pan Map Full extent Reset Save Print ZOOM to State, County or Metro Area



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## Physician Specialty Distribution

Return to >> [Physician Specialty Distribution](#)wizard wizard help [Hide Wizard](#)

- 1 Choose Year: 2006
- 2 Choose geography level for mapping:  
☐ State ☒ County ☐ Tract
- 3 Please specify a practice type:  
All Types
- 4 Please choose Specialties of Interest:  
All Physicians  
All Primary Care  
Family Medicine (FM/FPG/FSM/GP)  
General Internal Medicine (IM/IMG/ISM)  
General Pediatrics (PD)  
AS - Abdominal Surgery
- 5 ☐ Map specialty to population ratio.  
[View Mapping Options:](#)
- 6 [Redraw Map](#)

[Help with Physician Specialty Distribution Mapping](#)

layers legend help export

&gt;&gt; Select Data to Map

## Health Workforce Data

- ☒ US Medical Schools, 2007
- ☐ Physician Scarcity Areas (ZIP), 2005
- ☐ Health Professional Shortage Areas, 2004  
More info
- ☐ Health Center Locations  
More info
- ☐ Family Medicine Residency Programs \*  
More info

Identify query Show Toolbox Scale at map center: 1:2,678,054

# My HealthLandscape

## Mapping Capabilities:

- Upload and geocode your data in a secure environment
- Share your data with select users, or nominate your data to the public side of the site





# HealthLandscape

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Welcome: Shilah Turner [Upgrade] My Recent Projects... HealthLandscape >> Data Submission

## Data Uploading Progress:

1. Terms of Use
2. Describe Data
3. Upload Data
4. Assign Fields
5. Preview

## After Processing:

1. Return when complete
2. Add to HealthLandscape
3. Create Maps

Start Over

- > Community HealthWorker
- > Primary Care Atlas
- > My Health Data
- > Health Center Mapping Tool

## Health Data Upload Tool

Instructions: Please answer the following questions to classify your data for HealthLandscape. For state, county, tract or block group data, the file must contain a single, unique field for FIPS. For address locations the street address, city, state, and zip or geographic coordinates (x,y) are required.

### 1 Every record in my tabular dataset represents a:

- ☒ State ☒ County ☐ Zip-3 ☐ Zip-5
- ☐ Tract ☐ Block Group ☐ Point (Address Location)

### 2 My Data has a FIPS or other unique ID for connecting to geography:

- ☒ Yes ☐ No

< Back

Next >

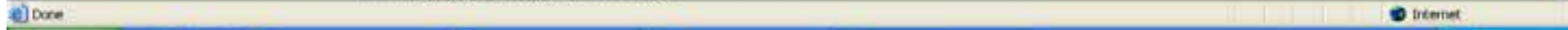
- > Getting Started
- > Frequently Asked Questions
- > Demonstration
- > Explanation of Tools
- > Who uses the Primary Care Atlas and what are they doing?
- > Who uses the Health Center Mapping Tool and what are they doing?
- > Who uses the Community HealthWorker and what are they doing?

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Welcome: Shiloh Turner [Upgrade](#) My Recent Projects... [HealthLandscape](#) >> My Uploaded Data

## Datasets (Lisa Carrozza) [182]

ID	Name	Type	Created	Records	Processing	
3875	Test3 (TestFacility3)	Private Point	8/17/07	499	Complete (100% Successful)	[Map] [Metadata] Owner: Lisa Carrozza

## Datasets (Mark Carrozza) [373]

ID	Name	Type	Created	Records	Processing	
3883	Fake Data 1 (FakeData)	CHC Point	8/28/07	1038	Complete (83% Successful)	[Map] [Metadata] Owner: Mark Carrozza

## My Datasets [124]

ID	Name	Type	Created	Records	Processing	
3888	ADAPAD Membership File (ADAPAD Membership HL...)	Private County	9/7/07	88	N/A	[Map] [Metadata] <a href="#">Edit Layer</a> <a href="#">DELETE</a>

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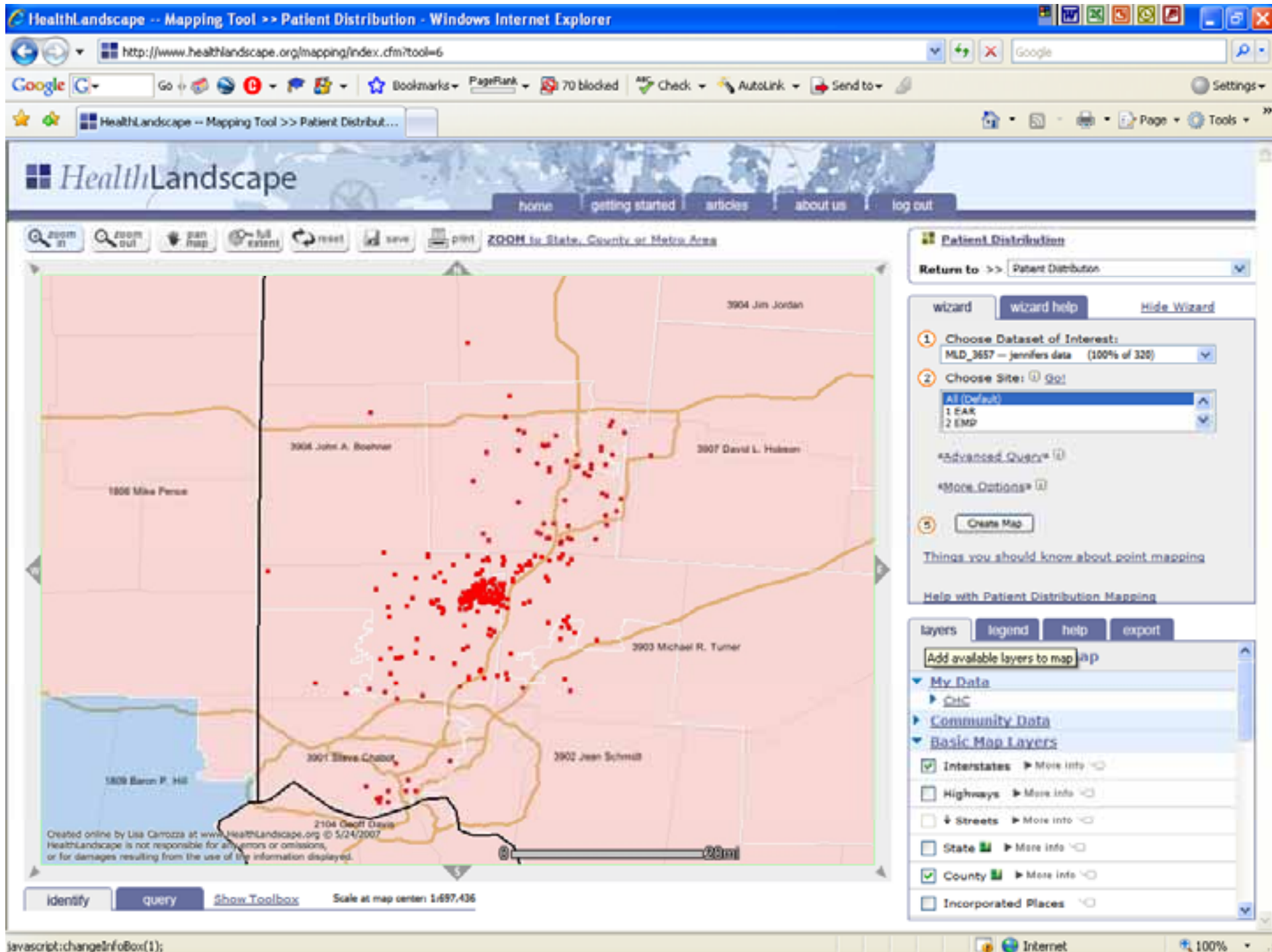


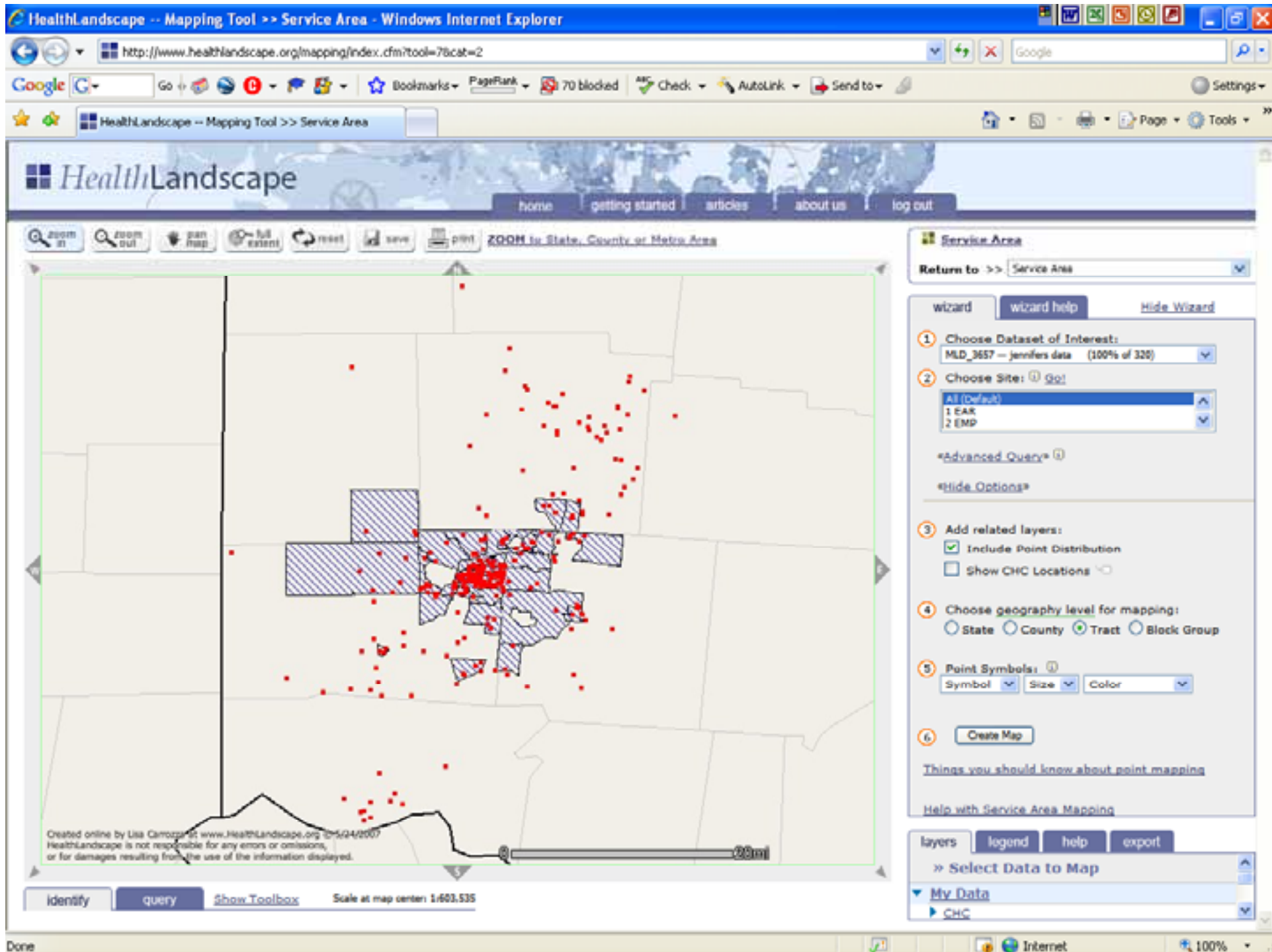
# Health Center Mapping Tool

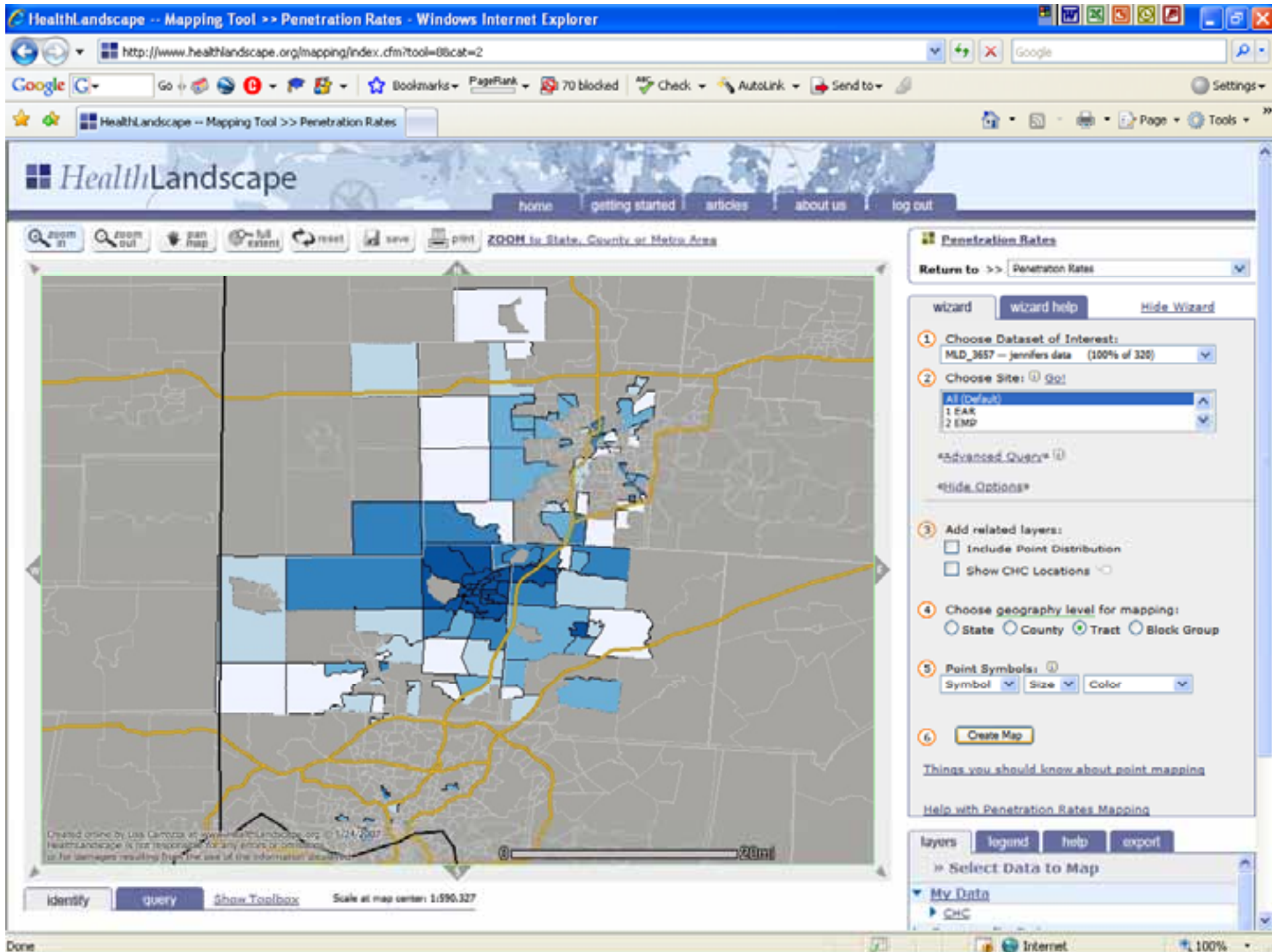
## Mapping Capabilities:

- Upload your health center patient data in a secure environment
- Share it with select users
- Determine penetration rates
- Analyze patient data by diagnostic code

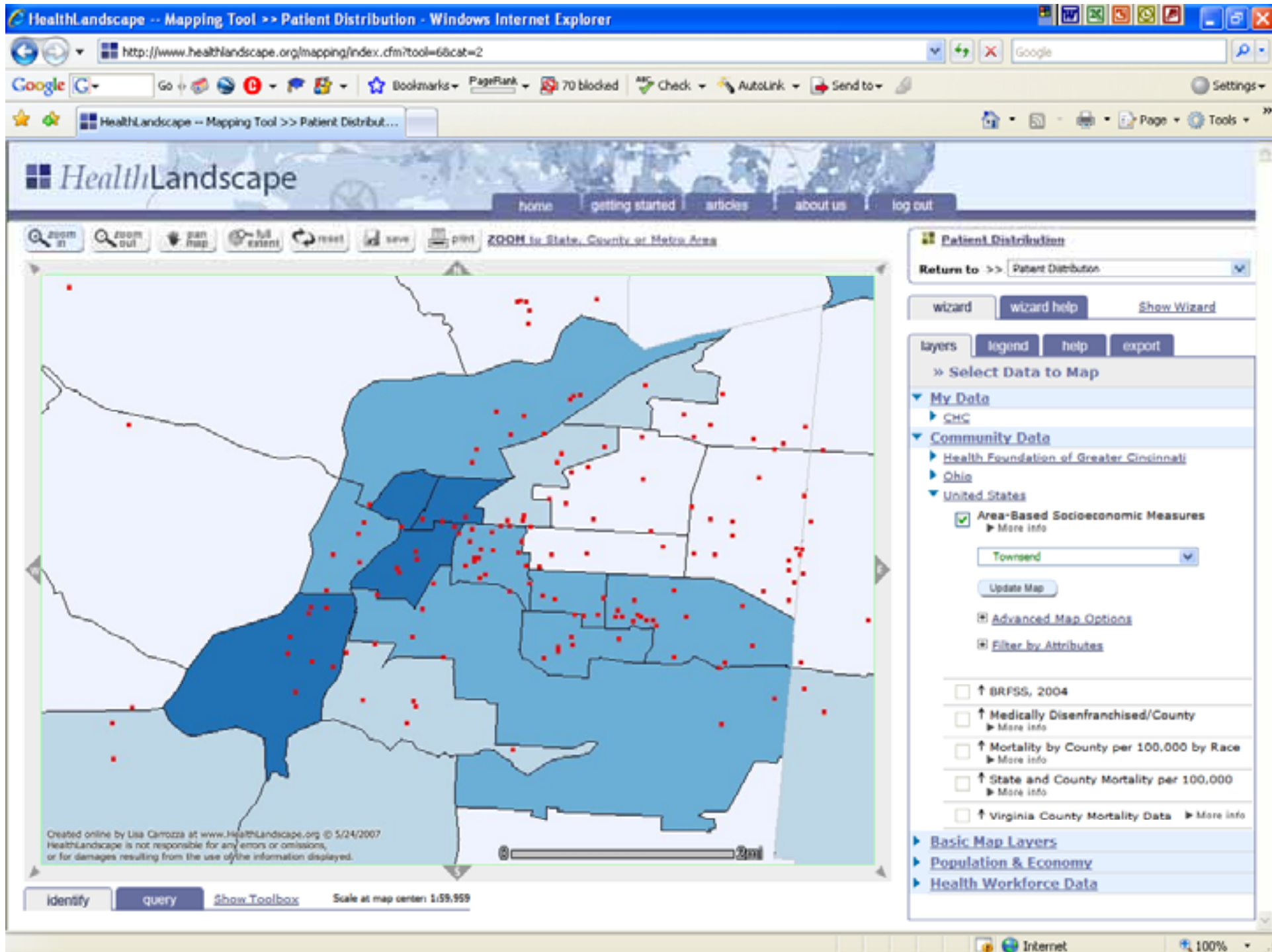














# *Health*Landscape

- *Visualize* your data
- *See* your community
- *Reveal* relationships
- Put the power of *mapping* to work *for you*

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