

Identifying Immigration Settlement Trends

in

Stevens Point Using Historical Census Data

Brad Casselberry, University Archivist, UW-Stevens Point

Doug Miskowiak, Senior GIS Education Specialist, UW-Stevens Point

The Project

- Create an interactive map based on census data that is tied to the properties where individuals lived
- The 1900-1930 censuses identify place of birth
- Plot the data for each property in Stevens Point
- Display data for each census year in a visually appealing way that shows settlement trends in the city
- Allow researchers to look at all census data by individual property

Last Name	First Name	Relation	Street	Old House Number	New House Number	Dwelling Number	Place of Birth	Father's Place of Birth	Mother's Place of Birth	Language Spoken	Trade/Profession
Czapiewski/ Szapiewski/ Chapchefski/ CZAPIEWSKI	MICHAEL	HEAD	SIXTH AVE	323	441	288	POLAND	POLAND	POLAND	POLISH	
Czapiewski/ Szapiewski/ Chapchefski/ CZAPIEWSKI	MARTHA	WIFE	SIXTH AVE	323	441	288	POLAND	POLAND	POLAND	POLISH	
Czapiewski/ Szapiewski/ Chapchefski/ CZAPIEWSKI	ROSALIA	DAUGHTER	SIXTH AVE	323	441	288	WISCONSIN	POLAND	POLAND		

Origins

- Dr. Toshiyuki Sano Professor emeritus of Anthropology at Nara Women's University, Nara Japan
 - Painstakingly compiled data from all publicly available federal censuses
 - His own, unrelated research
 - Donated the data to the University
- Reviewed the data
- Saw an opportunity
- Researcher interest

Why Should You (or anyone) Care?

- Has never been done before (to the best of my knowledge)
- Will show trends of settlement in Stevens Point with an easy to use, interactive online map interface
- Opens the door for numerous research projects going forward
- Can be constantly updated to include new data
 - New censuses
 - Additional information from censuses (trade/profession)
 - Photographs

Challenges



- Get name spellings correct
- Combining all data
- Presenting data in accessible way
- Convert old addresses to current

How Will it be Realized?

- Collaborate with the GIS Center
- Student interns
- Volunteers
- Crowd Sourcing?



Geographic Information Systems



- Computerized mapping tools for
 - Spatial database management
 - Geospatial analysis
 - Mapping and visualization

Database Management

Last Name	First Name	Relation	Street	Old House Number	New House Number	Dwelling Number	Place of Birth	Father's Place of Birth	Mother's Place of Birth	Language Spoken	Trade/Profession
GLODOWSKI	HENRY	HEAD	ACADEMY ST	931	1249	199	WISCONSIN	WISCONSIN	WISCONSIN		ACADEMY
GLODOWSKI	CLARA	WIFE	ACADEMY ST	931	1249	199	WISCONSIN	POLAND	POLAND		
GLODOWSKI	Leona	DAUGHTER	ACADEMY ST	931	1249	199	WISCONSIN	WISCONSIN	WISCONSIN		
GLODOWSKI	DOROTHY	DAUGHTER	ACADEMY ST	931	1249	199	WISCONSIN	WISCONSIN	WISCONSIN		
GLODOWSKI	DELPHINE	DAUGHTER	ACADEMY ST	931	1249	199	WISCONSIN	WISCONSIN	WISCONSIN		
Klein	WILLIAM	HEAD	ALGOMA	107	2409	86	WISCONSIN	GERMANY	GERMANY		CARPENTER
Klein	ALTA	WIFE	ALGOMA	107	2409	86	WISCONSIN	WISCONSIN	WISCONSIN		NONE
Klein	BETTY	DAUGHTER	ALGOMA	107	2409	86	WISCONSIN	WISCONSIN	WISCONSIN		NONE
Baker	AUGUST	HEAD	ALGOMA	115	2425	87	WISCONSIN	GERMANY	BELGIUM		BLACKSMITH
Baker	MARTHA	WIFE	ALGOMA	115	2425	87	WISCONSIN	POLAND	WISCONSIN		NONE
Baker	EDWARD	SON	ALGOMA	115	2425	87	WISCONSIN	WISCONSIN	WISCONSIN		NONE
Baker	ALBERT	SON	ALGOMA	115	2425	87	WISCONSIN	WISCONSIN	WISCONSIN		NONE

Geocoding



- Transforms a physical address description to a location on Earth's surface.
 - Street
 - City
 - State
 - Zip

Geocode Table


Geocode Table

When using the ArcGIS World Geocoding Service, this operation const. X

Input Table
Census1930

Input Locator 
ArcGIS World Geocoding Service 

Input Address Fields	Multiple Field
Locator Field	Data Field
Address or Place	ADDRESS
Address2	<None>
Address3	<None>
Neighborhood	<None>
City	CITY
County	<None>
State	STATE
ZIP	ZIP
ZIP4	<None>
Country	<None>

Output
Census1930_Geocoded1 

Add output to map after completion

Geocoding

• From this

Last Name	First Name	Relation	Street	Old House Number	New House Number
GLODOWSKI	HENRY	HEAD	ACADEMY ST	931	1249
GLODOWSKI	CLARA	WIFE	ACADEMY ST	931	1249
GLODOWSKI	Leona	DAUGHTER	ACADEMY ST	931	1249
GLODOWSKI	DOROTHY	DAUGHTER	ACADEMY ST	931	1249
GLODOWSKI	DELPHINE	DAUGHTER	ACADEMY ST	931	1249
Klein	WILLIAM	HEAD	ALGOMA	107	2409
Klein	ALTA	WIFE	ALGOMA	107	2409
Klein	BETTY	DAUGHTER	ALGOMA	107	2409
Baker	AUGUST	HEAD	ALGOMA	115	2425
Baker	MARTHA	WIFE	ALGOMA	115	2425
Baker	EDWARD	SON	ALGOMA	115	2425
Baker	ALBERT	SON	ALGOMA	115	2425

• To this



Geospatial Analysis



- Query 1930 Census attributes
 - Head-of-household
 - Relation to head-of-household
 - Place of birth
 - Parents place of birth

Mapping and Visualization



- Symbolize residences based upon attribute characteristics
 - Place of birth
- Symbolize residences by density of common place of birth

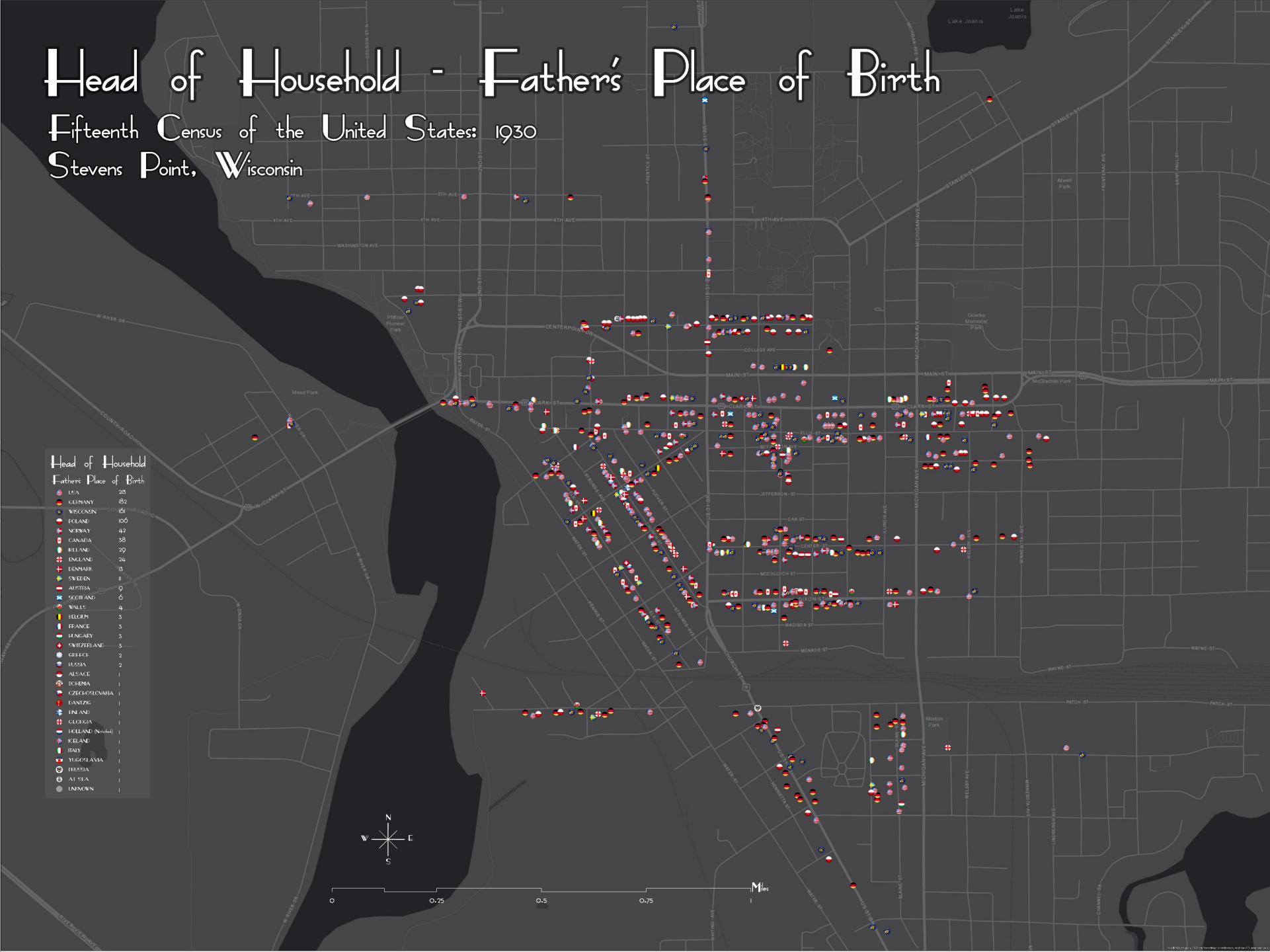
Head of Household - Father's Place of Birth

Fifteenth Census of the United States: 1930

Stevens Point, Wisconsin

Head of Household Father's Place of Birth

USA	25
GERMANY	182
WISCONSIN	161
POLAND	100
GERMANY	42
CANADA	38
IRELAND	29
ENGLAND	24
DENMARK	15
SWEDEN	11
AUSTRIA	9
SCOTLAND	6
WALLES	4
BELGIUM	3
FRANCE	3
IRELAND	3
SWITZERLAND	3
CZECH	2
RUSSIA	2
ALSAZ	1
CZECHIA	1
CZECHOSLOVAKIA	1
DANTZIG	1
FINLAND	1
GREECE	1
HUNGARY (N=44)	1
IRELAND	1
ITALY	1
YUGOSLAVIA	1
RUSSIA	1
AT SEA	1
UNKNOWN	1

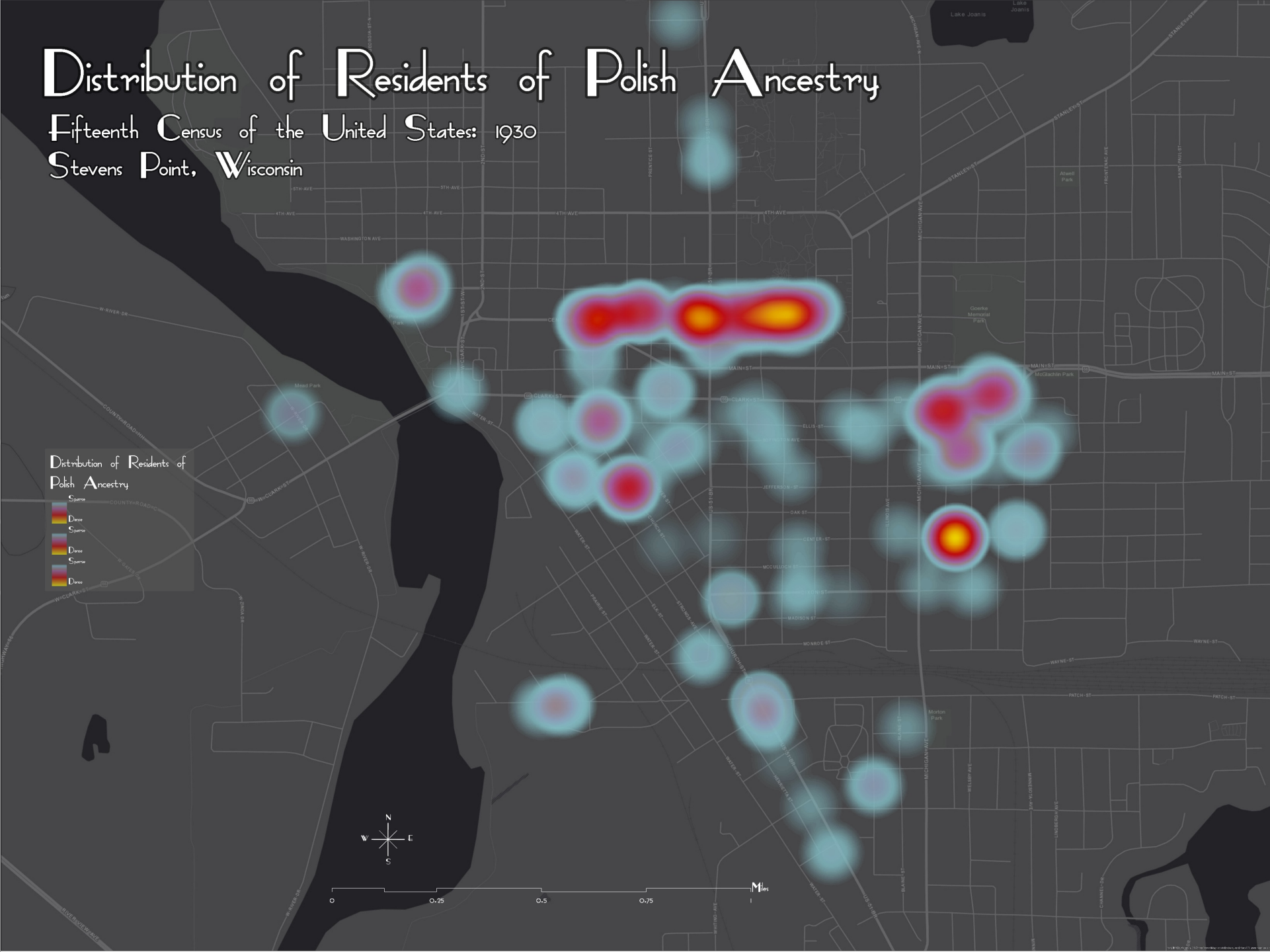


Distribution of Residents of Polish Ancestry

Fifteenth Census of the United States: 1930

Stevens Point, Wisconsin

Distribution of Residents of Polish Ancestry

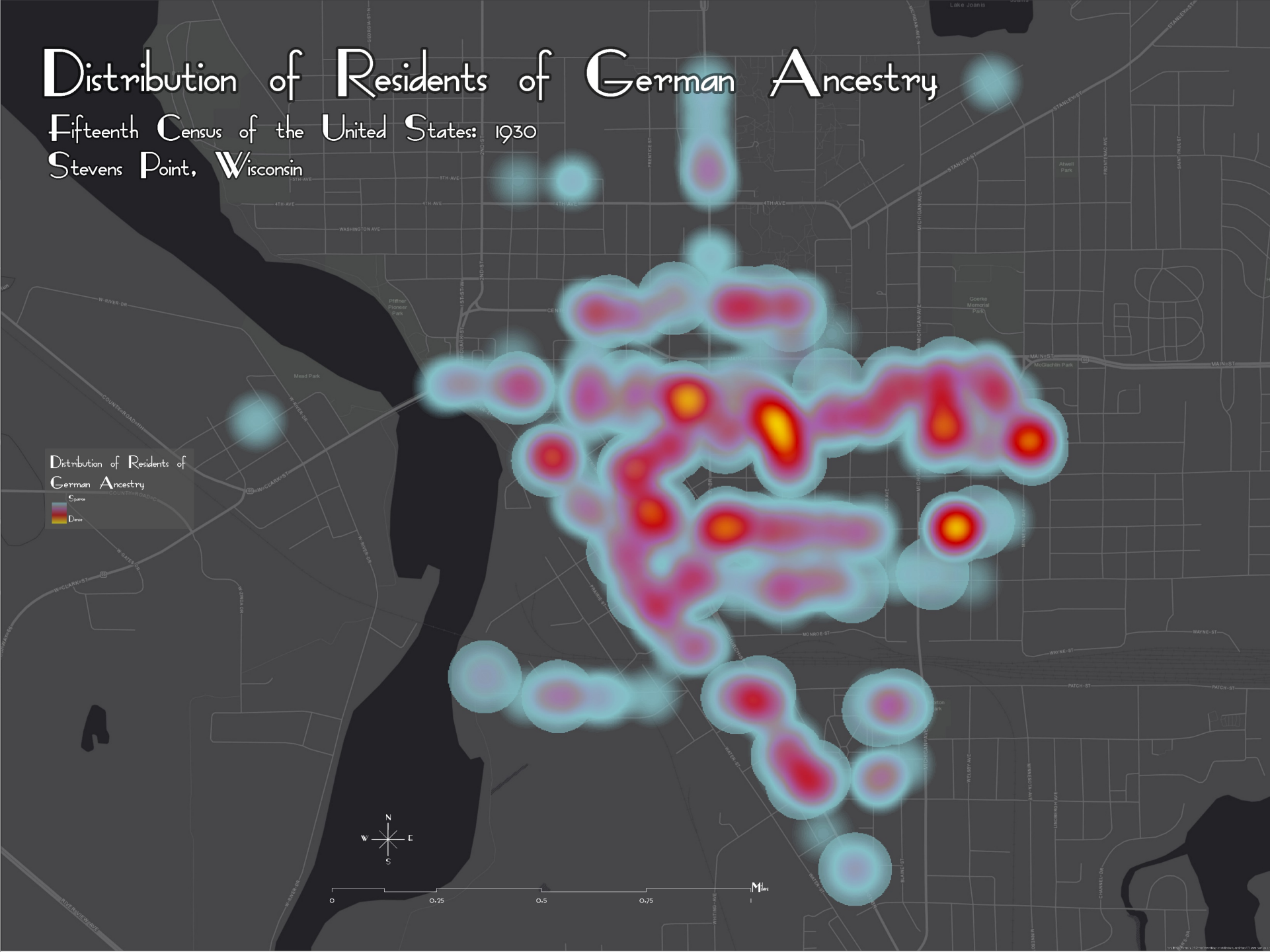


Distribution of Residents of German Ancestry

Fifteenth Census of the United States: 1930

Stevens Point, Wisconsin

Distribution of Residents of German Ancestry



Next Steps

- Integrate data from other U.S. Census products
 - 1890
 - 1900
 - 1910
 - 1920
- Web-based mapping interfaces
 - Public facing
 - Facilitate interaction with data

