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### Social Explorer

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ADVISOR REVIEWS—STANDARD REVIEW  
**Social Explorer**

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Date of Review: December 1, 2016

Composite Score: ★★★★★

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**Abstract**

Social Explorer is a mapping and data visualization program that creates custom maps, reports, and presentations from a wide array of survey sources, including the U.S. census, the American Community Survey, FBI Uniform Crime Reports, and some international sources such as the World Bank’s development indicators. Though most of its underlying data are published free of charge by nonprofit and government agencies, Social Explorer adds interpretative value by turning complex data into visual abstractions that aid comprehension. Furthermore, Explorer’s presentation and report options help users to compare and contrast data or put them into sociohistorical context, and all through an attractive and thoughtful interface that never overwhelms the user. This review considers Social Explorer’s uses, its limitations, and the many ways its subscribers can customize or otherwise manipulate demographic data.

**Pricing Options**

Social Explorer comes in two varieties, free and premium. Free users can access only a limited portion of the site’s data while premium users get the whole kit and caboodle. The application is primarily distributed through institutional subscription with costs determined by institution size and number of concurrent users. Special prices are available to library consortia. Individuals, too, may subscribe at a cost of \$495 per year or \$149.95 for three months of access. Trials are available by request.

**Product Overview/Description**

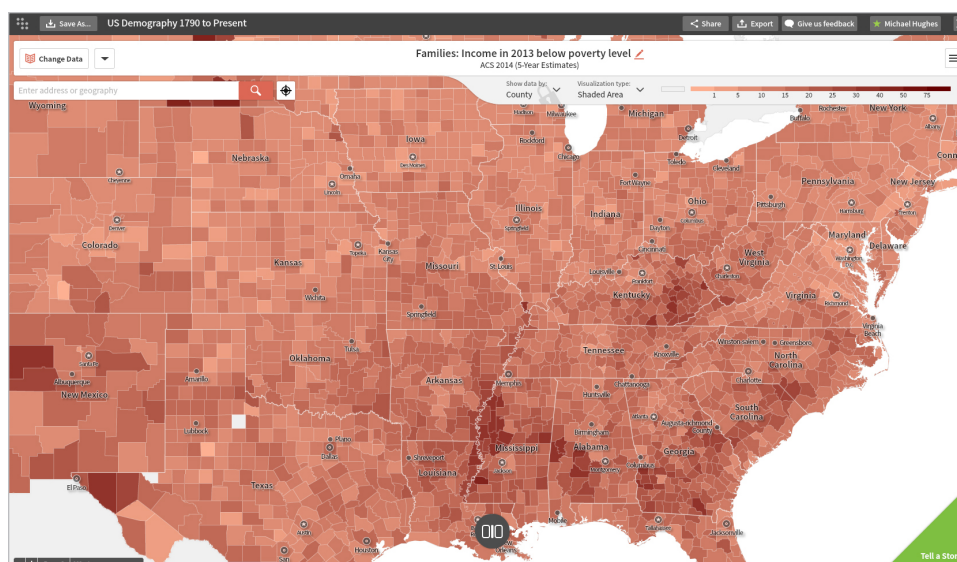
In Jim Hogg County, Texas, nearly 16.5% of workers travel 90 minutes or more during a daily commute. In Salt Lake County, Utah, where I grew up, 31.3% of the population—203,951 people—have attained at least a Bachelor’s degree, whereas 11% never graduated high school. In Michigan, 4,666 people ride a motorcycle to work, and Vermont is home to just 214 people of Hawaiian or Pacific Island descent.

These are but a handful of the variables and statistics that one can summon, plot, and communicate via Social Explorer. Whether supplying introverts with small talk or helping researchers to make evidence-based arguments, this mapping tool brings visual comprehension to a wealth of data: 220 years of the U.S. Census, the entire American Community Survey, and specialized datasets on crime, religious affiliation, and carbon emissions. Most of Explorer’s data is American in nature and origin, but the database includes some international data, including the World Bank’s development indicators, the 2011 Canadian and United Kingdom censuses, and the Eurostat survey, which provides a demographic picture of the European labor force.

Initially funded by the New York Times and the National Science Foundation, but independent since 2007, Social Explorer takes complex data, figures from which the mind reels, and turns them into comprehensible images. It’s one thing, for example, to learn that 43.1 million Americans live in poverty (Procter 2016). It’s another to see

those numbers plotted as gradations of color, whole swaths of states darkened by the bruise of inequality (see Figure 1). This is what Social Explorer provides: a way to communicate information that is otherwise hard to understand. What’s more, it does so simply and efficiently. The difficulty lies only in selecting from the many variables available for analysis.

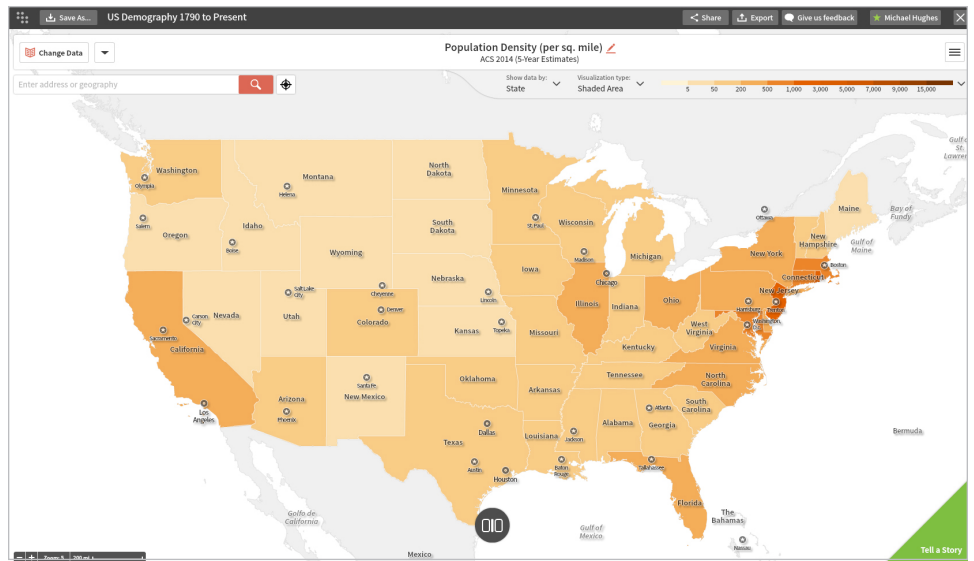
Aside from information about elections and religion data, these variables come from public datasets. Social Explorer’s appealing interface sits atop data gathered and published by nonprofit and government agencies to further public understanding and inform policymaking. This kind of commodification is hardly unique to Explorer; nevertheless, would-be subscribers may wonder why they should pay for data they can freely obtain and which,



**FIGURE 1** Map Showing Poverty U.S. Levels via Social Explorer

**Figure 2 Social Explorer Population Density Map**

as taxpayers, they’ve already had a hand in funding. In truth, Social Explorer is a harmonious marriage of public obligation and private ingenuity. For one thing, nothing prevents a person from sticking with the status quo and gleaning information directly from the Census Bureau. But if the agency provides census data and even some visualization through its Data Mapper program, these provisions are capably augmented in the hands of Social Explorer’s software engineers, who extend the reach and impact of census data by making it approachable and usable to a greater number of people. For evidence, look at Census Explorer, a series of maps produced by the Bureau in partnership with Social Explorer. This de facto endorsement allays any concerns that Social Explorer or Oxford University Press, its distributor, are unjustly preying on the public purse. Moreover, the price that my institution pays for Social Explorer is modest compared to the amount that some vendors charge for access to aggregated public information (Maret 2016).



**User Interface/Navigation/Searching**

On loading Social Explorer, one is greeted by a map of population density in the United States, painted in shades of “Social Explorer orange” (see Figure 2). From here the user can access each of the features enumerated in this section.

**CHANGE DATA AND ADDRESS SEARCH**

As the name implies, Change Data allows the user to select which variable he or she would like to plot (see Figure 3). The 2014 American Community Survey is loaded by default but users can browse by survey or by locating a particular year, which loads the data that pertains to it. If I select 2016, for example, I can only select data from the County Health Rankings and Roadmaps survey. If I scroll in the opposite direction, all the way back to 1900, the variables are replaced with census data, the only variety that Explorer has for that year. Once a category is selected, the user can search within it to isolate variables, locating tables that pertain to a given key word (e.g., searching “Amish” within religion data).

Beneath the Change Data button is a search field that allows users to locate exact addresses or geographies. The field automatically generates suggestions as the user types, and she can zoom between geographies, moving rapidly from a view of North America to the state of Utah to the Burger King located at 10235 State Street.

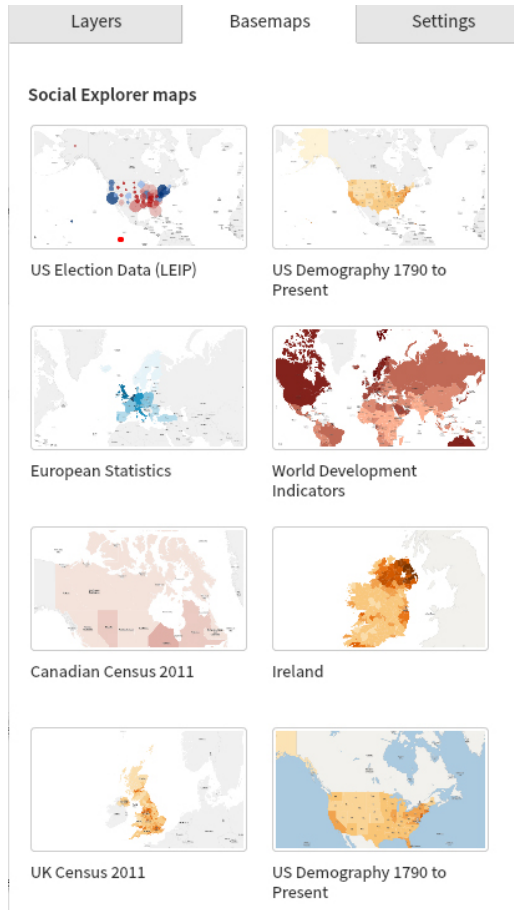
**VISUALIZATION OPTIONS**

The top of the screen shows the current variable and its parent survey. Below that are the map’s geography and visualization options. By default, geography changes as users zoom in and out of the map (i.e., geography narrows from broad to particular as the user zooms in). This automatic scaling can be turned off, however, allowing users to “manually select a data geography” (Social Explorer 2016).



**FIGURE 3 Social Explorer Change Data Options**

Data visualization comes in three flavors: shaded areas, in which dark and light colors correspond to data values; bubbles, which appear as colored circles of varying sizes; and dot density, where dots represent “a discrete amount of values per dot” and are “randomly scattered across the area” (Social Explorer 2016). Some visualization types accord with variables better than others. The state-level view of households that earn more than \$100,000, for example, is fairly undifferentiated when viewed as a shaded area. Switch to bubbles, however, and



**FIGURE 4 Social Explorer Base Maps**

it’s easy to see the vast difference in household numbers from, say, Texas’ 9 million to New Mexico’s 764,000.

For the color conscious, Social Explorer provides 13 sequential palettes and 11 diverging ones, not to mention the more than 16 million hex colors available in the custom palette picker. Honor color theory or make the nation a hellscape of clashing Crayolas—the choice is yours.

**CUSTOMIZATION AND BASE MAPS**

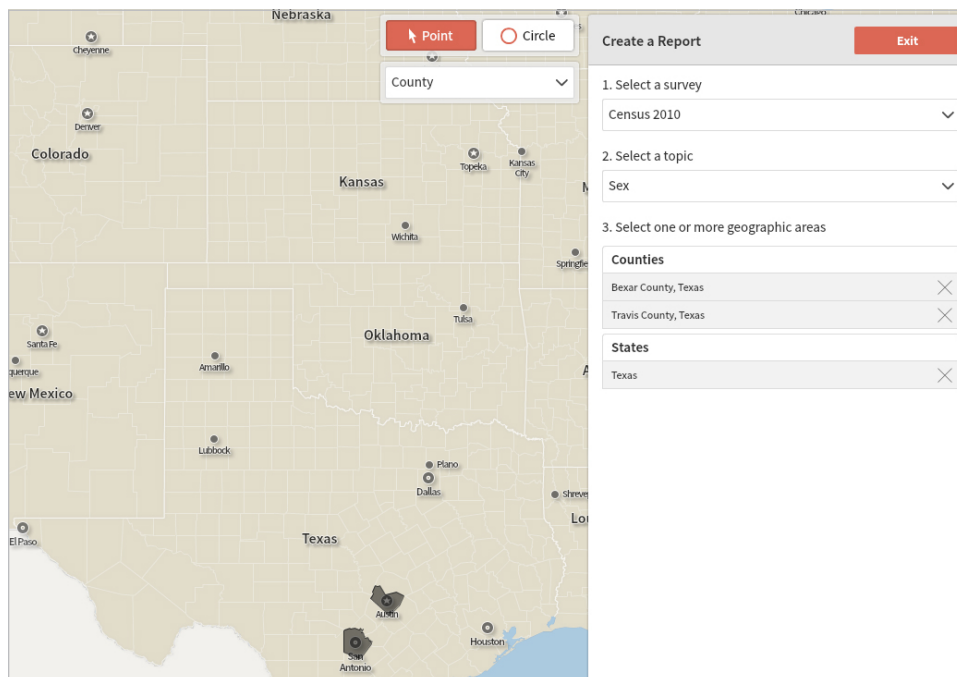
Many of Explorer’s customization options are hidden behind a so-called hamburger button (displayed as ≡) in the upper right of the screen. Here the user can toggle between satellite and simplified maps or annotate them by adding lines, labels, and other symbols to explain results and focus attention. One can also toggle between various layers and labels to decide whether state capitals appear on the map, for example, or whether various geographic boundaries appear according to the level of zoom. Basically, one is free to clear or clutter the map as necessary.

Base maps, too, are located within the customization menu. Each base map is associated with a particular data source, making it easy to switch between or compare data from different surveys (see Figure 4).

**REPORTS**

Social Explorer is chiefly a tool to make data visual, but its reports reverse this dynamic. From the customization menu users can create reports by choosing from Explorer’s surveys, from major topics within those surveys, and from one or more geographic areas (see Figure 5). The resulting reports load in browser and can be directly linked or saved in Excel or CSV formats, ensuring compatibility with statistical software (e.g., SAS, SPSS).

The in-map report tool is a simplified version of Explorer’s robust report builder, which can be accessed from the home page. In addition to table-by-table customization, the builder is compatible with Federal Information Processing Standards, or FIPS codes, which uniquely



**FIGURE 5 Social Explorer Reports Example**



**FIGURE 6 Social Explorer Data Dictionary Example**

identify counties and county equivalents. If you know the FIPS codes that apply to your query, Explorer’s batch loader saves you the hassle of locating and adding them one by one.

**DATA DICTIONARY**

The data dictionary provides a source for each variable right down to the table in which it originally appears. It also provides technical documentation for each survey so users can readily discover what the American Community Survey is, or what it covers, or the methodology governing its data collection. Furthermore, Social Explorer provides a remarkable degree of transparency in how the software computes each variable. The formula used to display data is given in full, and a complete citation, including an explanatory snippet from the relevant documentation, rounds out the bona fides (see Figure 6).

**SHARE AND EXPORT OPTIONS**

The usual complement of options—from stable URLs to social media links—is provided, as is embed code, allowing librarians to display maps on LibGuides or in other HTML environments.

Maps can be exported as PNG files in various sizes and resolutions or as PowerPoint slides. Users’ personal accounts, too, are found in the upper-right corner of the interface. If you’ve saved maps or projects this is where you’ll find them.

**STORYTELLING TOOLS**

Though amusing to plot variables for their own sake (“Where are construction jobs concentrated?” “Where do the wealthy live?”), most Explorer users have questions to answer or arguments to make. They need to compare and contrast data or put them into sociohistorical context. In other words, they need to tell stories and three Explorer features help them do it. A side-by-side view doubles the interface, permitting the user to select a variable for each map, displaying separate but related variables or creating contrasts between them. In the fig-

### Data Dictionary: ACS 2014 (5-Year Estimates)

YOU ARE HERE: [▶ choose a survey](#) ▶ [survey](#) ▶ [data set](#) ▶ [table](#) ▶ [variable details](#)

**▶ Survey:** ACS 2014 (5-Year Estimates)  
*Data Source:* Social Explorer, U.S. Census Bureau

**▶ Data set:** Social Explorer Tables: ACS 2014 (5-Year Estimates) (SE)  
**▶ Table:** T2. Population Density (per sq. mile) [3]  
*Universe:* Total Population

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#### Variable Details

**T2. Population Density (per sq. mile)**  
*Universe:* Total Population

**T002\_002 Population Density (per sq. mile)**

Percent base: None - percentages not computed

Aggregation method: Division of Sums: variables: Sum(B01001001) / Sum(T003\_002)

Formula used to compute this variable:

```
if (Geo:AREALAND.IsNotNull || ACS14_5yr:B01001001.IsNotNull || Convert.ToSingle(Geo:AREALAND) == 0) Return_Value.IsNotNull = true; else Return_Value = ACS14_5yr:B01001001 / (Convert.ToSingle(Geo:AREALAND) / 2589988);
```

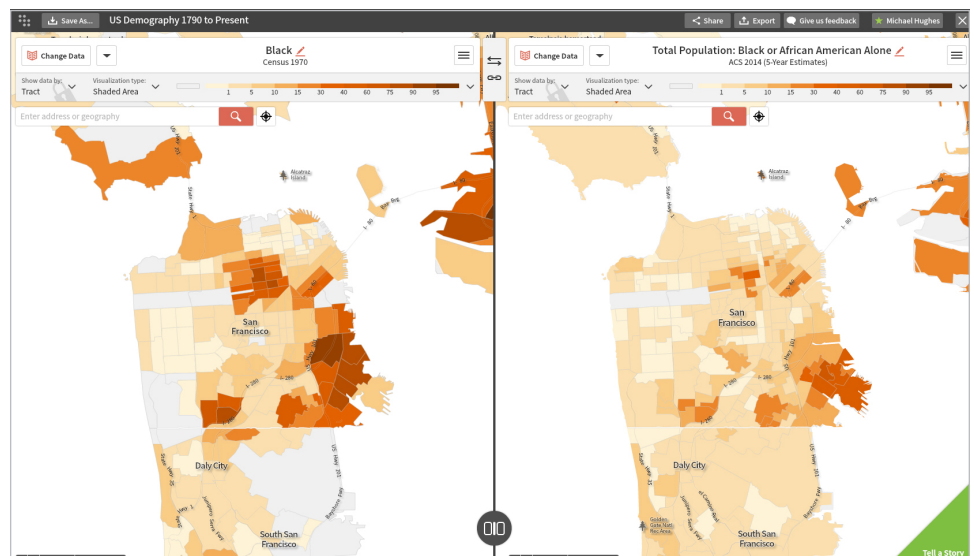
Variables used in the formula:	
Geo:AREALAND	Area (Land)
ACS14_5yr:B01001001	Total Population

ure you can see changes in San Francisco’s black population, and the further subdivision of the city’s census tracts, from 1970 to 2014 (see Figure 7).

The swipe tool is similar except that it layers one map atop another so that by moving a dividing line back and forth you can dynamically reveal changes from one year to another, a bit of stagecraft for emphasis.

Finally, Explorer’s storyboard tool helps users create interactive projects. The interface will be familiar to anyone who’s used PowerPoint or Google Slides, but it also suffers by comparison. Users can create and tweak slides, or add images and audiovisual elements to their presentations. They can even create custom charts within the Explorer platform. But unless interactivity, like the aforementioned swipe tool, is crucial to one’s demonstration, PowerPoint or your preferred slide software will prove more flexible than the solution provided here.

**FIGURE 7 Social Explorer Side-by-Side Feature**





## Social Explorer Review Scores Composite: ★★★★★

*The maximum number of stars in each category is 5.*

### Content: ★★★★★

Social Explorer is rich in U.S. data, but those in need of international sources may find it wanting.

### User Interface: ★★★★★

The interface is a pleasure to use. It loads quickly, runs smoothly, and never overwhelms the user with options.

### Pricing: ★★★ 1/2

Social Explorer adds enough value to public data to justify the four-figure sum my library pays, but \$495 is a steep cost for independent researchers.

### Purchase/Contract Options: ★★★ 1/2

OUP uses a single standard agreement to cover its many products. Consequently, some language fails to properly accommodate a product like Social Explorer. The provision on data mining seems unduly cumbersome given the public nature of the data.

That said, the storyboard tool loads within Social Explorer and supports collaboration, making it ideal for in-class projects or prototyping.

## Critical Evaluation

If Social Explorer's chief virtue is ease of use, it comes at the cost of specialization. Microdata, "untabulated records about individual people or housing units," is not supported (U.S. Census Bureau 2016), and some geographies, such as those "found in print reports for the older decennial censuses or in the National Historical GIS, are not available in Social Explorer," nor is the Dubester set of "non-decennial (intercensal) data from 1790 to 1945" (Cisela et al. 2016). For hardcore data analysts this lack may prove a deal-breaker, but it's doubtful that Social Explorer has this sort of customer in mind. Explorer is demography for dummies, or if that's too reductive, call it data visualization for the rest of us. It's a product as welcome in a high school classroom as the pages of the *New York Times*. Explorer's power lies not in the granularity of its data manipulation, though what's here is remarkable. Rather, it lies in the software's transmogrifying effect on intimidating data. It transforms eye-glazing rows of dry statistics into vibrant maps full of meaning. It awakens curiosity. It makes census data, dare I say, exciting.

That said, there are limits to what you can do with Explorer's data, and those limits will vex some users. You can only combine 'eligible variables' from the same category and survey year: a map showing the white, black, and Asian population of 1980 Cedar Rapids, for example. But that is the extent of Explorer's aggregation. One cannot combine variables to map compound figures. I've used Explorer in marketing contexts, and here the product reveals its limitations. If I want to locate *Popular Science* readers, for example, using data provided by the magazine's media kit, I would need to create a compound variable combining sex, median age, household income, educational attainment, employment status—you get the idea. But this is not a feature that Social Explorer currently supports, and given its social science roots, not to mention competition from marketing-oriented mapping products, I doubt it figures high on the company's list

of priorities. But while this necessarily limits Explorer's classroom applications, not to mention professional ones, the richness of data provided by the platform, coupled with multiple options for export, means that users can acquire data and then present, overlay, crunch, or otherwise manipulate them to arrive at a reliable approximation of their needs.

## Competitive Products

Similar products in this market include PolicyMap, Maptitude, and SimplyMap. The latter two are business and marketing oriented, leaving PolicyMap the most direct competitor. While many features overlap between the programs, Social Explorer is easier to use, a consequence of its attractive simplicity and thoughtful interface design. The tradeoff, not surprisingly, is that PolicyMap is more capable, especially for sociological or journalistic queries. PolicyMap is a product of the Reinvestment Fund, a nonprofit that "integrate[s] data, policy and strategic investments to improve the quality of life in low-income neighborhoods" (Reinvestment Fund 2016). Consequently, the software contains, in addition to demographic variables, data on housing, lending, education, and quality-of-life indicators such as internet and food access or proximity to Superfund sites and other environmental hazards. For more information on PolicyMap and whether it or Explorer is the better fit for your needs, consult reviews by LaGuardia in *Library Journal* and Nicholson in *Choice*.

## Accessibility

Explorer's FAQ contains only this brief statement: "Due to the functionality available on the site, Social Explorer may not be accessible to all visually impaired users" (Social Explorer 2016). When asked about it, CEO Andrew Beveridge admitted "we're behind in documenting our accessibility" but hastened to add that his team "understands the concern" and that it "will do everything to ensure reasonable accommodation" (Beveridge 2016). Beveridge also noted that one can use a screen reader on the tables and that maps can be customized to accommodate the color blind. Soon his team will make it

possible to zoom into maps even closer so the vision impaired can better read map labels, and Beveridge plans to create a Voluntary Product Accessibility Template, or VPAT, to describe the software's usability features.

## Purchase & Contract Provisions

### ASSESSMENT

Social Explorer provides data in ICOLC format. Sessions (logins) and pages per session are counted.

### COURSE PACKS

Academic institutions may "incorporate links to the Licensed Work in electronic course packs and course management systems for use in connection with courses offered by the Licensee for academic credit provided that no person other than an Authorized User may use such links" (Oxford University Press 2016).

### DATA MINING

Non-academic users must obtain consent in writing before data mining. Academic users may perform non-commercial text mining provided they abide by the following stipulations:

"such copies are made and stored only to the extent necessary for the purposes of such computational analysis; such copies are not transferred to any other person or used for any other purpose without the Licensor's consent; such copies are destroyed once they are no longer necessary for the relevant computational analysis; the Authorized Users acknowledge the use of the Licensed Work if any results of the computational analysis are published; and the Authorized Users comply with all Licensor usage policies communicated to them or made available to them" (ibid).

### INTERLIBRARY LOAN

You can't loan Explorer, of course, but a patron could, in theory, request a map or report via Interlibrary Loan. OUP retains the right to "request reports in respect of the Licensee's use of the Licensed

**Free Text Keywords:** data visualization | information visualization | information design | demography | digital maps | census | statistical data

**Primary Category:** Multidisciplinary (or interdisciplinary)

**Secondary Categories:** Business & Economics; Government Information; Political Science & Law; Sociology, Education, Anthropology, Psychology

**Type of product being reviewed:** Data sets; Reports; Software; Statistical database; Other

**Target Audience:** Secondary; General public; Undergraduate (including community colleges); Graduate/Faculty/Researcher

**Access:** Subscription

## Contact Information

### Social Explorer, Inc.

Oxford University Press

198 Madison Avenue

New York, NY 10016

Phone: (888) 636-1118

E-mail: <info@socialexplorer.com>

Product URL: <<http://www.socialexplorer.com>>

Producer URL: <[www.oup.com/](http://www.oup.com/)>

Works in such interlibrary loans, provided the confidentiality of user data shall be maintained" (ibid).

## Authentication

Social Explorer is authenticated via IP address or EZ-proxy. If accessed from a campus network, users will be automatically logged in and the institution's name will appear at the top of the screen (e.g., "Professional license provided by Trinity University").

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## About the Author

**Michael Hughes** is an instruction librarian and assistant professor at Trinity University in San Antonio, Texas. He lives with his partner, two cats, and a rack full of bargain red wines. ■