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# American Panorama: An Atlas of United States History

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## Introduction

The poster will focus on the Panorama Toolkit built by the [Digital Scholarship Lab at the University of Richmond](#) (DSLUR) and [Stamen Design](#). The first section will outline the capabilities of the toolkit then turn to examples from DSLUR's American Panorama project.

The focus of the toolkit is on the richly dynamic capabilities of modern web maps to enable deep digital scholarship on American History. The components are built on the foundation of open source tools including React and Leaflet libraries -- creating an extensible, public, collaborative framework that will support the continued development of future maps in our Atlas or the user's maps of choice. The components within can be installed via npm and integrated into any web-facing project. American Panorama also includes a template that can be used as a starting point for maps in the American Panorama Atlas, or for other projects that aim to use Panorama components. All of the components are "views" (meaning they appear in the DOM) and use React.

Since it is open-source, people can contribute and add new components that can be used individually, or wired together to create dynamic visualizations. The flexibility of the toolkit allows for a range of complexity, which has been seen in the five maps currently available. We envision this being used not only in academia, but in other projects varying in subject and purpose.

To highlight the possibilities of the toolkit, we will focus on University of Richmond's American Pano-

rama, a series of online maps that use interactive mapping features and innovative cartographic design to encourage active investigation of American History. For over a year, the DSLUR has been working with Stamen Design to investigate spatial exploration across various subjects in 19th and 20th century U.S. history. These maps—which make up the Atlas—cover a wide range of topics designed to communicate knowledge about some facet of American history to audiences that include students, scholars, and the general public.

In 2015, Stamen and the DSLUR collaborated on the first four maps of the Atlas. The first map covers the [forced migration of enslaved people](#) before the Civil War, highlighting the change in net importation and exportation of slaves to and from different parts of the South for each decade between 1810-1860. The migration across the [Overland Trails](#) to the West focuses on the routes emigrants took envisioned through the writings in their journals, along with the locations of forts, ferries, and bridges. The movement of people and goods through [canals](#) highlights not only the location of canals, but visualizes the goods that moved along them. The [immigration of people](#) to the U.S. from 1850 to today shows Foreign-Born populations at various scales from country level to county level.

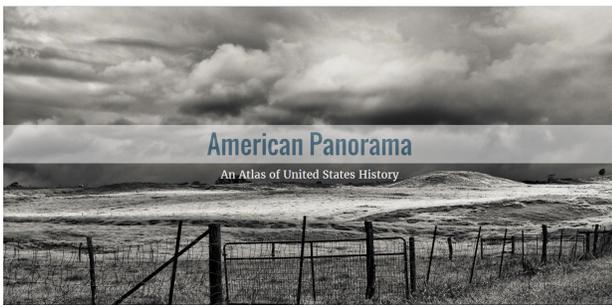
The collaboration between Stamen and DSLUR was the key driver to the success of the first four maps. We combined the knowledge and narrative ideas of DSLUR and the visualization skills of Stamen to translate new knowledge into inviting, elegant displays that respect the complexity of the subjects. American Panorama combined two deeply passionate teams to create not just four deeply engaging maps, but also a toolkit of reusable visualization components that could be used for future atlases in the American Panorama.

In 2016, DSLUR employed the Panorama toolkit to build the fifth map in the American Panorama series, a visualization of the Home Owners' Loan Corporation (HOLC) redlining maps from the early 20th Century. Using the visualization tools developed by Stamen, DSLUR created [Mapping Inequality](#), which updates the study of New Deal America, the federal government, housing, and inequality with twenty-first century tools and scholarship. It offers unprecedented online access to the United States government's collection of "security maps" and area descriptions produced between 1935 and 1940. The toolkit allowed the use of cartographic visualizations like concentric circles, which arguably were the spatial episteme of cities for early twentieth-century Americans. These Concentric circle

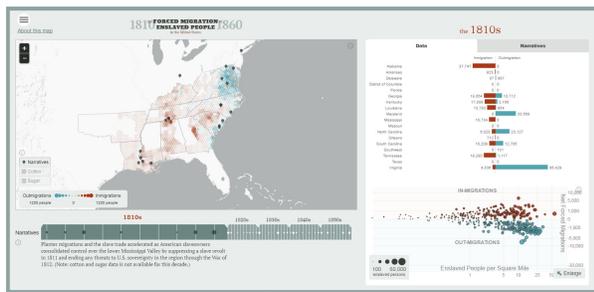
diagrams visualize the relative distribution of HOLC grades in relation to the center of the city.

The toolkit's capabilities are seen in the fifth Atlas map, Mapping Inequality. The foundational components, as well as the flexibility of the software, allowed DSLUR to create an engaging, invoking map highlighting the practice of denying access to mortgages and other forms of credit to neighborhoods based upon discriminatory practices, which later became known as redlining. This last installment of the Atlas showcased that this can be used by anyone wanting to create a project using the capabilities of modern web mapping seen in American Panorama.

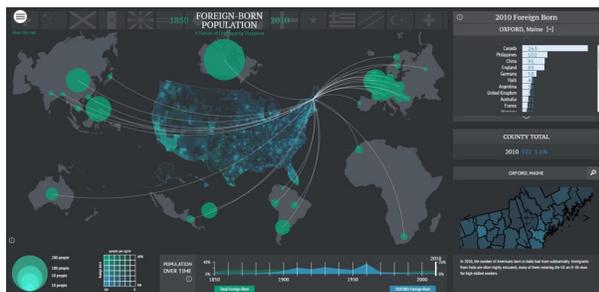
### Screenshots



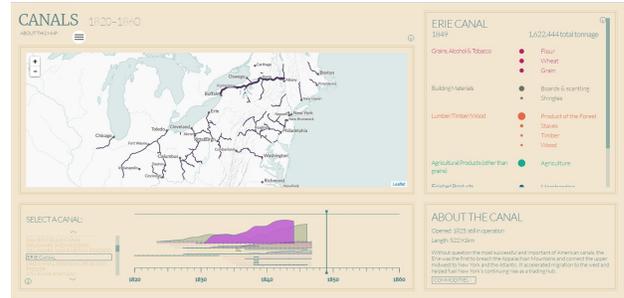
American Panorama



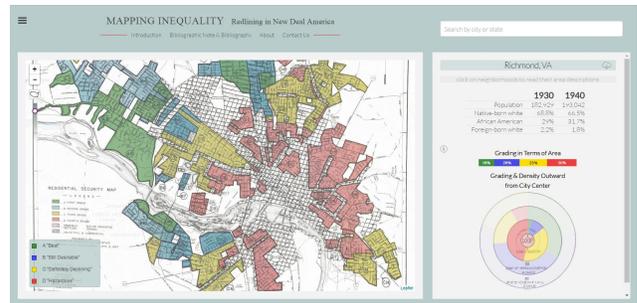
Foreign-Born Population



Forced Migration of Enslaved People



Canals



Mapping Inequality: Redlining in New Deal America

### Bibliography

Digital Scholarship Lab, University of Richmond (2015–) American Panorama. \*[dsl.richmond.edu/panorama](https://dsl.richmond.edu/panorama)

American Panorama. (n.d.) Panorama - Github repository: <https://github.com/americanpanorama/panorama>

Stamen Design LLC. (n.d.) Stamen. \*[stamen.com](https://stamen.com)