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Purpose of Document

The main purpose of this White Paper is to share best practices and lessons learned from our project. We hope that this will be of use to future applicants to this grant opportunity, and to researchers undertaking similar digital history projects at the planning stage.

To this end, we encourage interested readers to contact members of the core project team at their email and mail addresses below.

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Introduction and History of Project

Urban renewal was—and remains—one of the most important and controversial domestic policies in our nation’s history. The process of renewing America’s cities led to the destruction of our architectural heritage, the displacement of hundreds of thousands of families, and the removal (often closure) of countless small businesses. But destruction and dislocation are only part of the story. The goal of renewal was to rebuild, thereby reversing the economic decline and population loss attendant with white flight and suburbanization in the wake of World War II. The urban crisis was real, and redevelopment projects were well-intentioned responses to it. The Urban Renewal Era left a mixed legacy of successes and failures.

Historians typically date the start of the Urban Renewal Era to the Housing Act of 1949, the first in a series of federal laws that over the course of 25 years distributed roughly \$13 billion in grants and loans to over 1,200 cities.¹ Urban renewal was not simply a top-

¹ These cities, in turn, used federal grants to leverage another \$50 billion in bonds. “\$50 Bil. Notes in Urban Renewal Notes in 1954-79,” *The Bond Buyer*, 9 Feb. 1981.



down policy. In cities like Cincinnati, Ohio and Schenectady, New York, planning for renewal predated federal funding. In wartime New York City, the Metropolitan Life Insurance Company's (MetLife) redevelopment plan for Manhattan's Gas House District served as a model for later federal policy supporting similar clearance and reconstruction projects. In turn, the federal program inspired state-funded projects like the Empire State Plaza in Albany, New York.

The history of urban renewal is typically told in the form of case studies, focused almost exclusively on major cities, such as Boston, Chicago, and New York City. The problem with such analyses is that they exclude the experience of the majority of places that received federal renewal funding. Indeed, in New York and elsewhere, small and mid-sized cities received, on a per capita basis, a greater share of federal redevelopment funds.² These previously neglected cities are only now becoming part of a larger scholarly conversation, and our research has helped foster that conversation. Furthermore, this website aims to break out of the traditional mold by setting up a comparison between four cities, small, mid-sized, and large. This analytical framework is designed to highlight similarities as well as to explore significant differences.

The *Picturing Urban Renewal* website will tell the story of four New York places: Stuyvesant Town in New York City; mid-sized Albany, the state's capital and site of the Empire State Plaza; and two small cities with big urban renewal plans, Newburgh and Kingston. We selected these sites both for their rich visual and documentary record and because placing the stories of these four cities side-by-side allows us to construct a more

² Douglas Appler, "Changing the Scale of Analysis for Urban Renewal Research: Small Cities, the State of Kentucky, and the 1974 Urban Renewal Directory," *Journal of Planning History* 16:3 (2016).



complete and complicated picture of urban renewal and how it continues to shape our nation's cities.

History of the Project. We began researching the history of urban renewal in late 2014, after we discovered thousands of photographs at the New York State Archives that document the construction of the Empire State Plaza, a massive, modernist state capitol complex in Albany. Many of these photos document the people displaced and buildings demolished for the project. These photos, along with our archival research and oral history interviews, convinced us that we could tell the history of urban renewal from the bottom up, an approach seldom taken by urban historians. Our Wordpress blog (<https://98acresinalbany.wordpress.com/>) showcases our use of these photos and oral histories, as well as our from-the-bottom-up storytelling strategy.

In 2017 we discovered that this rich visual record existed for several other cities that underwent urban renewal projects, including Kingston, Newburgh, and lower Manhattan. We decided to develop a place-based, people-centered website that would tell the story of urban renewal in these four places. As we expanded our geographic focus, we also expanded our public and scholarly outreach. In the summer of 2018, we facilitated the transfer of the Newburgh Urban Renewal Agency records, about 100 cubic feet, from the City of Newburgh to the Special Collections department at University at Albany, SUNY.

Project Goals and Accomplishments

Goals for the Level I Digital Humanities Advancement Grant. Our overall goal for this project is to develop a map-based, interactive website that will showcase the visual record (photographs, maps, plans, etc.) of urban renewal in four locations in New York state (Albany, Kingston,



Newburgh, and Stuyvesant Town in Manhattan). We intend the heart of this website to be four map layers for each of the four urban renewal sites. The layers were consistent with four overlapping periods of the typical urban renewal project: 1) just before demolition; 2) the future as imagined by urban planners and architects; 3) the era of reconstruction; 4) the results of urban renewal. Both the map layers and embedded visual assets would reveal how dramatically American cities and their populations changed during the era of urban renewal.

We specified in our application narrative that our concrete goals for the Level I grant were to “develop a design, technical plan, and prototype” for this eventual website. On the whole, we succeeded at meeting these objectives. The collaboration between the three historical investigators and our web developer DigitalGizmo resulted in a set of mockups that illustrate the front end of the planned website; that is, the user-facing architecture, navigation, and user experience. Though much more work remains to be done, we are confident that this architecture will remain fairly stable as the project progresses. This architecture can be viewed at <http://dev.digitalgizmo.com/urban-renewal/>.

However, we fell short of creating a full prototype. In particular, we did little work on the back end, or server side, of the eventual website. In consultation with our web developers, we thought that this would best be done during a future prototyping stage of this project.

Other Accomplishments. Another accomplishment during this grant cycle was the creation of reports by content consultants Robin Campbell, Michael Christenson, William Krattinger, Robert Nelson, Emily Thompson, Lynn Woods, and Samuel Zipp. All of these reports will be included in modified form in the “Themes and Essays” section of the eventual website.



Finally, project personnel made significant contributions to the scholarly literature on urban renewal during this grant period. Pfau and Sewell wrote an article on urban renewal in Newburgh for a special issue of the *Journal of Planning History* (19:3, Aug. 2020) on urban renewal in smaller cities. PI Hochfelder co-edited this issue with Douglas Appler of the University of Kentucky. This article (and the entire issue) are available online, though the issue has not yet appeared in print. All three PIs contributed the essay on “Urban Renewal” to the online *Inclusive Historian’s Handbook*, a joint project of the National Council on Public History and the American Association for State and Local History. In addition, Hochfelder and Sewell presented papers at the NEH-funded New Perspectives on Urban Renewal conference in Sept. 2019. Hochfelder’s paper discussed how to research urban renewal using state and local archival resources. Sewell’s discussed the role of the New York State Urban Development Corporation in the history of urban renewal. Papers presented will be published as an edited volume.

Humanities Content and Themes.

Urban renewal continues to polarize even today. The public typically holds fixed and unshakeable opinions about whether redevelopment was good or bad. Our overall goal is to move beyond this division, to foster a deeper understanding of redevelopment, its causes, and its consequences. Ultimately, we hope to promote critical engagement, not just with the past, but also with the present and future shape of our cities.

To achieve this goal, the Picturing Urban Renewal website is designed to:

- Encourage Empathy. Picturing Urban Renewal will introduce a broad range of historical actors and encourage visitors to look at the past and present from multiple vantage points—displaced resident, city leader, architect, planner, construction



- worker, community organizer, gentrifier, and reporter. Inhabiting a range of perspectives will help visitors understand decisions they may not agree with and confront perspectives they may have overlooked.
- Cultivate Critical Thinking. Picturing Urban Renewal will promote critical thinking by encouraging visitors to test their beliefs against evidence drawn and contextualized from primary source documents, including the U.S. Census, local planning documents, scholarly studies, oral histories, and local news reports. This evidence, presented in engaging and accessible formats, will demonstrate, for example, both the depths of the post-World War II urban crisis and the damage done to the nation’s most economically vulnerable communities.
 - Facilitate Visual Learning. Picturing Urban Renewal will feature visual, spatial, and audiovisual information to reinforce verbal content, appeal to visual learners, and make use of the rich photographic record we uncovered. To encourage active looking, we will include essays by scholars of material culture and architectural history. We also plan to offer the user digital tools, such as [then-and-now sliders](#) and digitally reconstructed streetscapes that enable them to actively engage in close visual examination of images.

Picturing Urban Renewal explores the history of urban renewal in four cities—small, mid-sized, and large—each of which has a different story to tell. Yet, together, these four stories build a broader picture of urban renewal and its short and long-term impact. We have developed four humanities themes that tell the history of urban renewal across these four cities. Each humanities theme corresponds to a period in the life cycle of a typical urban renewal project, and each serves as the organizing principle behind each map layer described at the start of the Project Goals and Accomplishments section of this document.



The four humanities themes are:

1. The Roots of Renewal: After World War II, American cities were perceived to be on the decline and suffered real losses of population and wealth. Proponents of redevelopment argued that “obsolete” buildings and “blighted” communities justified dramatic change.
2. Lost Places/Displaced People: Nationwide, hundreds of thousands of families lost homes and businesses to urban renewal and highway construction. Indeed, redevelopment destroyed whole communities. The people displaced suffered both economic losses and psychological pain.
3. Reconstruction: On parcels cleared for redevelopment, private developers and state and local governments built modern civic structures, housing complexes, and office buildings. But in some places, nothing was built to replace lost neighborhoods.
4. A Mixed Legacy: By 1974, when federal urban renewal funding dried up, large-scale redevelopment projects had transformed our nation’s cities. The altered urban fabric both reinforced racial and economic divisions and also motivated communities to organize.

The interpretive approaches, website features, and content delivery strategies we developed during grant cycle are designed to address the needs and interests of a wide audience. We propose to test them on the following visitor groups: Culture Seekers and Lifelong Learners; Urbanists, Planners, and Architects; Historic Preservationists; Engaged Citizens and Civic Stakeholders; Genealogists and Amateur Historians; High School and College Educators; and High School and College Students.



Design Philosophy

Both our humanities themes and audiences shaped our overall approach to the design and user experience (UX) as illustrated in our set of mockups and city story, viewed here:

<http://dev.digitalgizmo.com/urban-renewal/>.

During this grant cycle, the three co-PIs and digital media developers engaged in a creative and productive collaboration. We held an ongoing series of meetings that began at the outset of the project and continued for the duration of this grant cycle. These meetings afforded us the opportunity to review and discuss our goals and ideas for the evolving website. To facilitate the discussion, the digital media specialists visualized the thinking from the previous meeting via sketches or mockups and shared these with the rest of the team. Likewise, the historians brought sample interpretive text, content outlines, lists and examples of visual assets. Each session sharpened our shared understanding of the project, enabling us to collaboratively imagine the content architecture of the site as well as our editorial approach and user experience strategy. We developed draft humanities content in parallel with UX and technical design ideas. While these mockups may appear resolved or “real,” they more accurately represent a vision for the Picturing Urban Renewal website that, with future funding we will test, revise, and refine. Nevertheless, this planning process, which brought together content, design, and technical expertise, provides us with a clear roadmap for moving forward.

We have developed editorial and design approaches that support a wide range of user experiences and create a flexible and accessible website. Drawing on images and maps from our rich repository of visual assets, we will create invitingly scannable pages intended to draw in readers. We also plan to incorporate personal stories and video and audio throughout the site. We will look for opportunities to employ a wide variety of media



formats (video, audio, spoken word, and ambient sound effects) to heighten the website’s story-telling impact.

As discussed above, our overarching design goals are to encourage empathy, cultivate critical thinking, and facilitate visual learning. During this grant cycle we discussed and developed design strategies to achieve these goals while also conveying our humanities themes and content in an engaging and accessible manner. The design we have explored for the website is guided by the following strategies and approaches:

1. A thoughtful balance of sequential or linear narrative structures with opportunities for more open-ended, user-directed exploration of the material. One example of this is the use of Guided Maps found within the context of City Stories that link to the corresponding Interactive Map for deeper, independent exploration.
2. Strong visual storytelling. We will leverage the emotional and informative power of images to tell the story of urban renewal. The Sights & Sounds and Visual Record sections of the website do this most directly, but the interpretive content of the City Stories, Personal Stories, and Themes & Essays are, to a great extent, communicated via imagery.
3. Learning from design strategies used with success in other disciplines. We sought to incorporate ideas and techniques from journalism (e.g. scrollytelling as seen in New York Times map story: [Your Children’s Yellowstone Will Be Radically Different](#) and the Washington Post’s [2° C. Beyond the Limit](#)) as well as other innovative forms of storytelling like [The Boat](#), an immersive, narratively simple yet highly evocative animation that also makes use of audio to heighten the emotion impact. We have been inspired by filmmakers, like Bill Morrison, who combines art, history, and deep archival research to create compelling cinematic storytelling. Another source of



inspiration is the design of museum exhibitions, like the Metropolitan Museum of Art's [Visitors to Versailles](#), which appeal to the senses in order to heighten emotional engagement.

4. Consistent, careful curation of information. Our website will contain a wealth of information and serve as an authoritative resource for students, educators, and professionals, as well as for engaged citizens, amateur historians, and culture seekers. To satisfy a wide range of visitors, we experimented with breaking historical content down into smaller pieces. We are also working to provide clear signposts so that visitors know what to expect, and are not overwhelmed, when they decide to enter a particular section of the website. Relevant editorial elements include brief, scannable titles and pull-quotes; bite-sized chunks of larger introductory copy; engagingly titled chapters that are easy to navigate; and longer narratives broken into chapters. We plan to relegate more scholarly (less story-driven) analyses to the Themes & Essays section of the website, where the most motivated researchers will seek them. We plan to indicate in advance the length of content to follow in order to let visitors know what to expect before beginning a text.
5. A variety of on-ramps and networked content. We intend to provide multiple entry points into the website content and from within a particular place in the website, make it easy for visitors to advance, go back, or skip sections without getting lost. We also plan to offer links to related content elsewhere in the website, forming a network of relevant information that avoids dead-ends and makes it easy for visitors to follow an area of interest that will result in wider exploration of the website.
6. Multiple perspectives and a variety of voices. The Personal Stories area of this website will most directly communicate these voices, but we also plan to include



quotes and a variety of first-person perspectives throughout the website. These voices will help communicate the historical content presented in the City Stories and Sights & Sounds sections of the website.

Technical Specifications

Overview. The Picturing Urban Renewal website will include interpretive text, metadata, and geographical information as well as video, audio and a vast store of images. The website will be constructed using modern web standards: HTML5, CSS3, and JavaScript. We are committed to using open source tools throughout, including our Content Management System (CMS), front-end technologies, and server (Linux). These are all fully described below.

Separating back-end from front-end. In our overall site structure we will keep the back-end CMS separate from the front-end interface using a RESTful API (Representational State Transfer Application Programming Interface--<https://restfulapi.net/>). Flexibility is a key advantage of this approach—we can choose the best system for content without being tied to its requirements or limitations for front-end delivery. Likewise, we can choose the most efficient and feature-rich front-end technology without worrying about its CMS capabilities. Sustainability is another key advantage of this approach—the content and metadata can be stored as fixed files (in JSON format) without the need for a live back-end. This can serve all of the site’s features except some dynamic searches, such as in the Visual Record.

Content Management System. We will use a “headless” content management system in keeping with the separation mentioned above between the body/back-end and the head/front-end. During the prototyping phase of the project, we will evaluate and choose between two frameworks for content management. The more traditional approach would be



to use Django—it is open source, has a large and active development community, and is based on Python, which is also widely and actively supported. This will assure regular security updates. We believe both Django and Python are inherently more secure than PHP-based platforms. Python has powerful tools to support our visual database search features. Our tech members have quite a bit of Django experience, and there is now comprehensive literature on using Django as a headless CMS. The alternative would be to use an open source, JavaScript/Node.js based CMS such as Strapi (<https://strapi.io/>). This and other JavaScript based CMSs are growing in popularity and they integrate well with either of the JavaScript front-ends we plan to use. There is a well documented connection between Strapi and Vue.js: <https://strapi.io/integrations/vuejs-cms>. One of our future tasks will be to select this back-end tool. Whichever tool we select will need to be able to accommodate:

- a structure that mixes images and text that we will have in our scrolling stories.
- extensive demographic data in spreadsheets that will need to be normalized and imported.
- storing metadata for a large collection of primary source material.
- managing a large collection of images.

Database. We will store data in PostgreSQL which has a very active developer base and posts regular security updates. In addition to its power, currency, and being open source, it also supports an extension, PostGIS, that can natively store geographic data.

Image Management. We will adhere to the International Image Interoperability Framework (IIIF - <https://iiif.io/>) standards and APIs as we establish our digital asset management environment. We will use those standards for metadata as well as for our exploration of image zoom technologies.



Front-end Technologies. The front-end presentation and interactivity will be created using a modern reactive framework — either Vue.js or React. Work during the Prototype phase will help us determine the best fit for performance and longevity. React currently has a larger user base, because it was created by Facebook, but Vue.js is growing fast and has a [higher favorability rating among developers](#). These frameworks support a high degree of interactivity with much less code than previous approaches such as jQuery. Both frameworks provide built in tools for CSS pre-processing (SASS) and post-processing (prefixing for older browsers and normalizing for browser rendering differences).

City Stories / Scrolly-telling. As shown by the Albany: Lost Places, Displaced People proof-of-concept, we will be using scrollytelling stories for much of our narrative content. The proof-of-concept was developed with the ScrollStory jQuery library, but we plan to develop our prototype with Waypoints which does not require jQuery, but rather works with the more up-to-date front end frameworks we will be using, Vue.js or React.

Interactive Maps. We will eventually develop maps for each city with extensive interactive features. For the prototype we will develop the greater part of one such map. We will use Leaflet, which is open source, mature, and full-featured. We will use Vue2Leaflet, or its equivalent for React—these are open source libraries that integrate the Leaflet API into the front end framework streamlining development, and easing maintenance.

[American Panorama -- something on their site, About?]

Responsive Design. The front end will be designed with a “mobile first” approach, making use of media queries to ensure that the interface responds appropriately to all sizes of displays and types of user input. To facilitate user testing of the prototype, we plan to build it to render correctly on the most recent versions of each of the popular browsers.



Sustainability Plan. Our use of open source tools and established web standards will help ensure that the site and data remain accessible and operational for as long as possible. With this approach our digital team has created sites that have now lasted 20 years and counting, e.g. *1704*, *Laura Jernegan*, *Girl on a Whaleship* and [American Centuries](#). Not surprisingly, the instances where we did use proprietary software have been problematic -- we now need to replace interactives created with Adobe Flash. Thankfully, there are now open source alternatives. Along the way we have learned the importance of regular updates for server operating systems and database servers as well as for underlying programming languages and web frameworks. The Picturing Urban Renewal team is committed to performing these updates. Still, no web technology will last forever. If feasible, in future years, the website will be migrated to more current platforms. The fact that the dynamic front-end technology of the site is separated from the backend CMS, as described above, should make any such migration more feasible--the front or the back can be updated or migrated independently, without major structural changes. If migrating becomes infeasible, web archives will still preserve the dynamic content of the Picturing Urban Renewal website in the same context it was created and used. The entire website will be preserved as an ISO-compliant WARC file which can be “replayed” in any web browser using open source tools such as the Python web archiving toolkit (<https://github.com/ikreymer/pywb>). Additionally, the web archives will be publicly available for long-term use through both the Archive-It site of the M.E. Grenander Department of Special Collections and Archives at the University at Albany and the Internet Archive’s Wayback Machine.