

Promoting Archival Engagement Through Computational Interventions

Richard Marciano, Rosemary Grant, Alexis Hill, Phillip Nicholas, Noah Scheer, Alan Wierdak, Mark Conrad and Arthur Ray McCoy

EasyChair preprints are intended for rapid dissemination of research results and are integrated with the rest of EasyChair.

Promoting Archival Engagement through Computational Interventions

Richard Marciano

Advanced Information Collaboratory (AIC)

University of Maryland

College Park, MD USA

marciano@umd.edu

Phillip Nicholas
National Archives and Records Administration
University of Maryland
College Park, MD USA
pnichol2@terpmail.umd.edu

Mark Conrad

Advanced Information Collaboratory (AIC)

Keyser, WV USA

conradsireland@gmail.com

Rosemary Grant

Advanced Information Collaboratory (AIC)

College Park, MD USA

rosemaryegrant@gmail.com

Noah Scheer

Advanced Information Collaboratory (AIC)

University of Maryland

College Park, MD USA

nscheer@umd.edu

Alexis Hill
National Archives and Records Administration
University of Maryland
College Park, MD USA
ahill125@terpmail.umd.edu

Alan Wierdak
University Libraries Special Collections
University of Maryland
College Park, MD USA
awierdak@umd.edu

Arthur "Ray" McCoy

Advanced Information Collaboratory (AIC)
St. Paul, MN USA

amarmccoy@gmail.com

Abstract—This paper illustrates how to design and implement an engaged computational archival framework that leverages big archival records in order to respond to social justice and reparations policy imperatives. The work touches on two of the conference themes: (1) how to handle histories of people whose lives were deeply impacted by public authorities, and (2) Archives as Big Data as a potential restorative strategy.

Over the last few years, Computational Archival Science (CAS) [1] has emerged as a new discipline that explores the use and consequences of emerging methods and technologies around big data with archival practice and new forms of analysis and historical, social, scientific, and cultural research engagement with archives.

Our paper presents a very timely case study focusing on the legacy of urban renewal in Asheville, North Carolina between 1965 and 1980, when housing policies were enacted that ultimately displaced and erased African American businesses and communities with traumatic and lasting effects. "Urban Renewal was a program created by the U.S. Federal Housing Act of 1949, with the intention of redeveloping areas of cities that were deemed blighted". [2]

The study discusses making community members the focus of archives, and designing new interfaces to tell human stories. We explore CAS in the context of reparation, truth and reconciliation based on an earlier project [3] developed by the U. Maryland team. On March 15, 2022 a Reparations Commission [4] was finally formed, with ten seats for appointments representing the areas of criminal justice, economic development, education, health care, and housing and fifteen seats for residents of historically impacted African American neighborhoods.

The authors of this paper believe this work serves as a model for other historical types of reparation that can benefit from CAS approaches.

Keywords—Computational Archival Science (CAS), Archives as big data, Archival records, Social memory, Urban renewal, Reparations.

1. Introduction

Several states and local governments in the United States have established redress commissions and charged them with the task of developing policies on racial reparations. The commissions are attempting to define reparations and identify who should receive them. In North Carolina, the Asheville City Council, along with the Buncombe County Board of

Commissioners, established a Community Reparations Commission, charged with developing short, medium and long-term recommendations designed to "specifically address the creation of generational wealth and to boost economic mobility and opportunity in the black community." In its resolution, the City of Asheville committed to make amends for "carrying out an urban renewal program that destroyed multiple, successful black communities."

To better understand the impact of Asheville's urban renewal program, our research team launched "Measuring the Impact of Urban Renewal", aka the Purple Project (Post-Urban Renewal Profile of Loss of Equity). The project set out to apply Computational Archival Science (CAS) principles [1] through digital mapping and data mining, to create a concrete picture of the properties taken by Asheville's urban renewal program and the properties that remain in the City's possession, and to tell the stories of the lives uprooted by these policies. Our project focuses on telling the story of the East Riverside Project which targeted the Southside neighborhood. This neighborhood is significant because it was home to "3,902 residents living in 1,179 households, which accounted for about 50% of Asheville's black population and 7% of its total population at the time" [5] In addition, the Southside was Asheville's "premier black business district, surrounded by a large residential neighborhood. The Southside urban renewal project was "the largest in the southeastern United States [and the largest in Asheville] and the scale of the devastation here was unmatched." [6]

The paper discusses the close relationship of archives and human rights (Section 2), the history of urban renewal in Asheville (Section 3) showing its origin, playbook, history of redlining, specific implementation in Asheville, with a critical analysis of the foundational documents of the Redevelopment Commission of the City of Asheville from its creation in 1953 to its merging with the Housing Authority in 1967, the origins of the PURPLE project (Section 4), CAS interventions that both reveal identity (telling us who was affected: Section 5) and reveal harm (telling us how people were affected: Section 6), and finally a summary of preliminary key findings (Section 7), organized around the following research questions:

- A. Who was affected by urban renewal?
- B. **How much** did the City pay for urban renewal properties?
- C. Which properties does the City still own?
- D. **How much** are those properties now worth?
- E. When did the City start reselling these properties?
- F. **How much** were these properties resold for?
- G. **Who** was able to repurchase these properties?

2. ARCHIVES AND HUMAN RIGHTS

There is a close relationship between archives and human rights. In his 2002 essay "Archival Temples, Archival Prisons: Modes of Power and Protection," Eric Ketelaar [7] describes how citizens can use archival records as both documentation of human rights violations and also as instruments of empowerment and freedom. To illustrate this point, he reminds us that "many of the files created during and after the Second World War... are now being used in the processes or restitution of and compensation for Holocaust assets."

The International Council on Archives (ICA) now has a section on archives and human rights (SAHR) and their July 2020 newsletter [8] provides updates on reparations initiatives across the world including the establishment of the 2022 City of Asheville, North Carolina, Community Reparations Commission. Increasingly, after the murder of George Floyd, professional organizations like the Society of American Archivists (SAA), have issued statements on the role of archivists to help repair the legacy of structural racism and acts of state-sanctioned violence, and how archivists can no longer be neutral in matters of social justice and politics [9].

A forthcoming book (September 2022) "Archives and Human Rights" [10] discusses why and how records can serve as evidence of human rights violations and discusses the emergence of the principles of the right to truth, justice, and reparation. One of the chapters by Trudy Huskamp Peterson (former Acting Archivist of the United States), called "Proof", explores the historical background of compensation payments starting after World War II. Starting with the adoption of the December 1948 United Nations Universal Declaration of Human Rights (where Article 17 (2) states that "No one shall be arbitrarily deprived of his property" [11]), and leading to the December 16, 2005 United Nations General Assembly resolution 60/147 on the Right to Remedy principles [12]. These state that "compensation should be provided for any economically assessable damage, as appropriate proportional to the gravity of the violation and the circumstances of each case... such as lost opportunities, loss of earnings and 'moral damage'." Using this intellectual framework for reparations to individuals, the author develops the notion that a successful claim always requires at least two types of proof: identity and harm, and that for those proofs, records are needed. These two types of proof track closely with the conference themes of: (1) "Archival Records and Social Memory" where archival records can help reveal the identity and histories of people whose lives were deeply impacted by agencies with power, and (2) "Archives as 'Big Data' and the Reuse of Data" where algorithmic and computational treatments of records can help reveal the

mechanisms of harm to develop restorative strategies. We frame our paper using these two concepts of *identity* and *harm* and demonstrate the kinds of computational interventions required.

3. URBAN RENEWAL IN ASHEVILLE

In this section, we explore the origin of urban renewal (UR), the playbook employed, the connections with Redlining, the specifics of the UR process in Asheville using primary sources, and conduct a critical analysis.

A. Origin

The term "urban renewal" refers to the Housing Act of 1949 (under President Harry Truman's Fair Deal legislation) which set aside \$1 billion in federal aid to assist localities with clearing and redeveloping slum areas [13]. It was further modified by the Housing Act of 1954 (under the Dwight D. Eisenhower Administration), which introduced the term into law and inserted language and provisions designed to support urban redevelopment plans, and by the Housing Act of 1965 (under President Lyndon B. Johnson) when federal housing programs came under the purview of the United States Department of Housing and Urban Development (HUD) [14].

B. Playbook

Author Fullilove [14] describes the "land-claiming strategy" embodied in these Housing Acts as a 4-step process:

- (1) an interested city had first to identify the 'blighted' areas that it wished to redo,
- (2) once those areas had been defined, the city had the task of developing a 'workable plan'.
- (3) the workable plan was forwarded to regional urban renewal offices for approval by the federal government,
- (4) once the plan was approved, the designated areas could be seized using the government's power of eminent domain.

"The people and businesses that occupied the site were given a minimal amount of compensation and were sent away. The seized land was then cleared of all buildings and, thanks to federal subsidies, sold to developers at a fraction of the city's costs. The developers then built businesses..., and residences for middle- and upper-income people. In some instances, highrise public housing projects, were built on the cleared land." Fullilove concludes by asking how a plan that subsidized developers, and dramatically worsened the conditions of the poor, came to be the law of the land.

"Communities, mostly African-American neighborhoods, were disrupted as thriving families, businesses and organizations were displaced in the name of the economic development and infrastructure improvement." Fullilove describes the resulting shock of being uprooted as a "traumatic stress reaction to the loss of some or all of one's emotional ecosystem," a trauma she calls "root shock".

She goes on to say that "the experience of root shock—like the aftermath of a severe burn—does not end with emergency treatment, but will stay with the individual for a lifetime. In fact, the injury from root shock may be even more enduring than a burn, as it can affect generations and generations of people... The current situation of Black America cannot be understood without a full and complete accounting of the social, economic, cultural, political, and **emotional** losses that followed the bulldozing of 1,600 neighborhoods."

C. Impact of Redlining

The practice of redlining was initiated by the Home Owners' Loan Corporation (HOLC), a federal agency created in 1933 and signed into law by Franklin Delano Roosevelt as one of several New Deal measures meant to help homeowners avoid foreclosure. Redlining denied loans or made them harder to obtain based on "unfavorable" neighborhood attributes such as racial composition. HOLC's appraisal and redlining policies were eventually implemented across the nation and adopted by the Federal Housing Administration (FHA), thereby institutionalizing exclusion, contributing to the fragmentation of communities, and profoundly reshaping the American urban landscape. The Redlining maps of the 1930s put together by HOLC, were done in collaboration with Homer Hoyt, Chief Land Economist of the Federal Housing Authority (FHA) between 1934 and 1940. He is credited for pioneering the inclusion of racial covenants in property deeds and was a proponent of a hierarchy of racial groups ranked from positive to negative influence on property values.

In 2010, the IMLS-funded T-RACES project [15] produced the first integrated redlining and urban renewal map for Asheville, combining 1937 Asheville HOLC redlining with urban renewed neighborhoods of Asheville (Priscilla Robinson & Richard Marciano). Under HOLC, neighborhoods were color-coded on maps: green for the "Best," blue for "Still Desirable," yellow for "Definitely Declining," and red for "Hazardous."

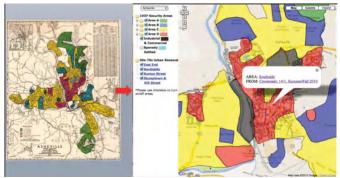


Fig. 1. Connecting Redlining and Urban Renewal in Asheville [16]

In Figure 1, we show that thirty years later, urban renewal re-targets the same neighborhoods that had been color-coded as red in the 1937 Redlining map.

D. The Specifics of the UR Process in Asheville

While section *B. Playbook* above, detailed the typical urban renewal process, it is important to look at the specifics of how things unfolded in Asheville. In terms of "proof", it is important to look at the primary records themselves. We selected passages from Asheville's foundational UR planning documents. Deed Book 1028, Page 443, from Buncombe County's NC Register of Deeds, is a 138-page file documenting

the Redevelopment Commission of the City of Asheville from its creation in 1953 to its merging with the Housing Authority in 1967.

In Appendix A, we provide key excerpts from 4 of the official documents of the Redevelopment Commission. These documents cover actions from the City Council, Redevelopment Commission, Metropolitan Planning Board of Asheville and Buncombe County, and Asheville Planning and Zoning Commission. They show how UR was justified and sold to Southside residents (the East Riverside urban renewal plan was approved by the City Council on June 23, 1966 and amended on June 21, 1973). From the beginning this followed the UR playbook calling for "the clearance and reconstruction or rehabilitation of slum and blighted areas in the City of Asheville". In Appendix A we highlight in "yellow", passages that are relevant to our research.

E. Critical Analysis

We conclude with an analysis of these highlighted record excerpts from *Appendix A* related to the Redevelopment Commission of the City of Asheville. Findings include:

- A definition of "blighted" is proposed by the City of Asheville in Appendix A (Document 1: page 11) in 1958, where an area can only be targeted if it is primarily residential and its threshold of dilapidated buildings is at least two-thirds of the buildings in the area. The Council found that blighted areas existed in the City of Asheville, thus triggering the creation of the Redevelopment Commission. The Planning and Zoning Commission subsequently in 1964 declared that the Southside was to be one of the redeveloped neighborhoods in Appendix A (Document 4, page 11).
 - o The Commission found that "82.9 percent of the structures in the [Southside] area, are substandard in some respects." Our extensive examination of the 936 property folders of the Acquisition collection described later in this paper, which typically include three detailed appraisals with photos, descriptions of improvements (type of construction, condition, number of rooms, plumbing, roofing, heating, floor plans, etc.) does not support these numbers. A more detailed analysis is warranted.
- An extensive plan to **eliminate** these alleged blighting conditions was developed and presented to the public in 1965 in *Appendix A (Document 5: page 12)*. While the plan stressed negotiation with the owners for fair market, it stipulated that **eminent domain** would be invoked in case of disagreement.
 - Our research shows that many homeowners protested these "fair market" valuations and went to court. Few prevailed. This observation warrants a more detailed analysis and can be quantified based on the data we have compiled. Such a study would help quantify and map resistance to UR.
- The outcome of this process was to be the **disposal** of the land by sale to public or private parties.
 - The Housing Authority developed the concept of a Property Disposal Map in 1973. This provided a mechanism to

coalesce acquired UR Parcels into larger Disposal Parcels that could be resold to public or private entities. This is part of the challenge of our research where we need to relate Current Asheville Parcels (CA Parcels) to historical UR parcels, using the ephemeral Disposal Parcels (see Section 6).



Fig. 2. From the Land Acquisition and Property Area maps of 1966 to the Property Disposal map of 1973

- The total budget for acquisition and cost of land (including planning, interest and administration) was to be \$7.4M and the projected revenue from the resale of the land \$1.1M.
 - Our research indicates that the total acquisition cost of land ended up being \$6.4M and that the revenue from reselling the land over a 5-decade period was \$3.3M. However, the median value of the resold parcels was less than 1/5th of their acquisition value during UR, indicating that the majority of the parcels were offloaded post-UR for a fraction of their acquisition price. In fact, 83% of the parcels were offloaded below their UR acquisition price.
- The minutes of the 1966 public hearing in Appendix A (Document 6, page 13) are revealing. They highlight: the creation of neighborhood stores and shops "so that you don't have to travel two miles or a mile and a half to pick up a loaf of bread or a carton of milk", preservation of the neighborhood, "one hundred percent concern" for the residents, a promise that if residents wanted to live in the area there were "a number of builders and real estate people who assure us if someone wants a house, they will build it for them", and the promise of a "pretty picture" after urban renewal.
 - o The 1963 City Directory shows at least 140 businesses with at least 16 grocery stores in the Southside. A 2014 article called "Hidden in plain sight: Asheville's food deserts" [17] indicates that 57% of the city's public housing, located in census tract 9 (roughly the Southside), is one of the most food-insecure parts of town, with Hillcrest Apartments, for example, being more than a 1.5-mile walk to the nearest grocery store not a viable option for residents with limited incomes, no car and no money for gas or a taxi."

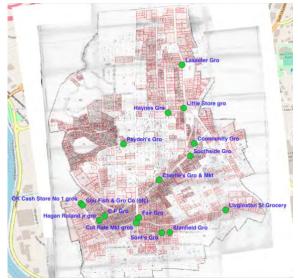


Fig. 3. From the 1963 Asheville Business Directory: grocery stores

O An example of an unrealized promise of UR: Priscilla Robinson discovered photos of her childhood apartment on South French Broad in the UR records. This is not quite the promised "pretty picture" of UR alluded to in *Appendix A* (Document 6, page 13), as Fig. 4 shows her home in 1969 where she is sitting with her extended family on the balcony, and an empty lot 56 years later in 2021.



Fig. 4. Before and after urban renewal (1969 to 2021): B53-P1

- Finally, the minutes of the 1966 public hearing in *Appendix A (Document 6, page 13)*, beyond the claim of deteriorating infrastructure in the Southside, formulate the ideology of the "social indices of blight," with assertations of: venereal disease (26%), tuberculosis (14%), fires (14%), rape and assaults (50%), arson, and murder.
 - o Interestingly, the invocation of the "social indices of blight" conveys how UR was not only seen as an economic imperative but also a moral one. This follows the University of Chicago's program of urban research from the 1920s, where authors Park and Burgess developed an urban ecology framework, in which cities are governed by forces of Darwinian racial evolution. Their model (The City, 1925) predicts that cities would take the form of five concentric rings with area of social, moral, and physical deterioration concentrated near the city center [18].

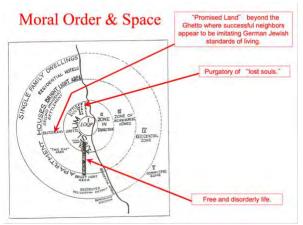


Fig. 5. 1925 Park and Burgess urban model

This accounts for a special category in the HOLC neighborhood "Area Description" form that tabulates the presence of African Americans (5.d. and their percentage) and describes as a "threat of infiltration" (5.e.).



Fig. 6. Description of inhabitants in the 1937 D-1 Asheville area

4. THE PURPLE PROJECT

Our research builds on three earlier projects. The first project, *Making Data Matter* (https://youtu.be/Iz6UsXiLSYQ), from 2011 to 2014, was a collaboration with Cathy Davidson at the time at Duke U., where we researched data, stories and maps related to UR in the Southside neighborhood. This project culminated in an August 3, 2013 public event at the Grant Center with Southside residents, led by Priscilla Robinson.

The second project, from 2016-2018, created the first iterations of an urban renewal database and mapping interface (https://www.youtube.com/watch?v=DUKcNcJvOik from 1hr 28min to 2hr 17min).

The third project, from 2019 to the present, explores map-based techniques to visualize historical data, and studies data platforms in the context of local communities and social justice through interviewing diverse stakeholders. This third phase finalized the urban renewal database and mapping interface for the Southside by Myeong Lee and a digital storytelling interface by Priscilla Robinson (https://urbanrenewalimpact.org/ [Click on the DATA->Remapping menu tab for interactive map]. This culminated in a June 2021 public webinar (https://ai-collaboratory.net/2021/06/24/june-24-2021-launch-of-the-urban-renewal-impact-website-initiative/).

Measuring the Impact of Urban Renewal, aka *Purple Project* (*Post-Urban Renewal Profile of Loss of Equity*), tells the complete origin story of UR in the Southside. By completing the story beyond 1980, we detail our new findings in the next two sections on Revealing Identity and Harm.

5. REVEALING IDENTITY: MODELING & LINKING

The Housing Authority of the City of Asheville (HACA) records are currently in the custody of the D.H. Ramsey Library

Special Collections and University Archives at the University of North Carolina, Asheville.



Fig. 7. HACA collection at UNC Asheville

They form a 12-part series comprising 161 linear feet and 171 boxes. Part 7 focuses on the East Riverside Project files and comprises 79 linear feet and 73 boxes. The Acquisition files we used comprise 20 boxes with 936 Property folders [19]. Of the 936 folders, we identified 930 parcels that were actually acquired.

Folders are organized by Block and Parcel number (based on a system that is no longer current), and contain between 7 and 243 pages with an average size of 38 pages. The digitized "Acquisition" Files represent a total of 35,909 pages.

A typical folder contains: acquisition summary sheet, three independent appraisal reports, deeds of record, rental agreements, transfer of deed records, closing statements, HUD relocation claim payments, title search records, offer accepted records, and court case documents. However, folders are only indexed by Block / Parcel and Owner name, as shown in the next figure.



Fig. 8. Block/Parcel and Owner name metadata for Box 75

The current indexing makes it impossible for individuals to locate their personal UR records based on identity criteria such as: name of alternate owners, name of tenants, street name, or street number. The records represent real estate or legal transactions and as such are not people-centric. Yet references to individuals abound in these records. For example, an appraisal report for *Block 53 / Parcel 1 (B53-P1)* reveals that the property is owned by *Sallie Argintar*, and that one of the

tenants is *Herbert Robinson*, Priscilla Robinson's grandfather. They were living on 477 South French Broad Ave and the archival photo below shows young Priscilla with her extended family sitting at a balcony while an appraiser is being photographed by the house holding up a sign.



Fig. 9. Closeup of 1965 appraisal picture with residents at balcony Indexing enhancements could include identifying all the UR Parcels owned by *Sallie Argintar* and whether the parcels were owner-occupied: we found four as shown on the map:



Fig. 10. 4 properties owned by Sallie Argintar

The challenge of "Revealing Identity" is how to make residents the focus of the records? Our approach is four-fold:

a) Seeing all the people:

As an example, we process the *B53/P1* folder to extract all the key associated people: in this example, the names of all the appraisers, owner(s), purchaser, and tenant(s):



Fig. 11. Re-focusing on residents by extracting associated people The three appraisals allow us to study change over time:

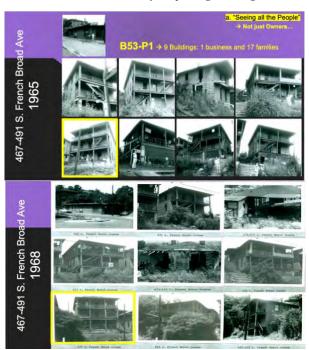


Fig. 12. Change in the condition of homes during UR: 1965 & 1968

b) Revealing residents:

We show next how networks of people are created by linking their references across various types of documents: deeds, claims for relocation payment, authorizations for rent refund, and establishment of rental charges. This is done through crowdsourcing and extraction of "people events":

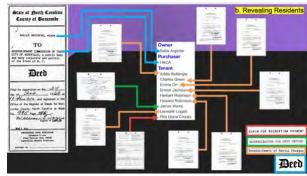


Fig. 13. Extracting people networks through crowdsourcing

c) Exposing relocation and hardship:

The records also reveal other kinds of personal hardship and relocation. This information can be added to form a more complete network of people:



Fig. 14. Augmenting the people networks with relocation information

d) Rekindling neighbor connections:

Analyzing appraisal records and rental agreements allows us to place individuals in the very buildings and floors where they lived. In the next example, a 1965 appraisal record, referencing four families renting at 477 South French Broad Ave, allows us to co-locate *Herbert Robinson*, *Emma Orr*, *James*, *Harris*, *and Howard Robinson*, thus rekindling a sense of neighborhood:

Bailding No.	477	1965:	d. Rekindlin	ig Neighbor	Connections
Uac Type Const.	4 family Concrete	Appraisal Report			
	block		41346	service and are	mex to assure t
Condition	Poor		This agreement between the tile Bengament) and Declary.	Subject special Countries and Subject of Countries of Cou	of Aspertite Shrete satisf
No. of Rooms	16		The Minapowert Service Loads	real by the french and the	from Bryoly bires and taken the city of beloville, North
Plumbing: Lavatory Toilet Tub or Shomer	none		The temperate better into the process of the leavest are better to the leavest and the leavest are the leavest and lea	time of 2 miles have at 15	to some routed and papelle as
Kitchen Sink	3		Tree Lanes will algorithms until Treesed and its element shall be	men its critics upresent made topopt in mottles.	between the Management and 18
Hot Water	none		may it see at 11/2	Harton Heles	
Type Hoof	Flues	17.	Seferological Continuous of the	aritti Land	Jelian
Type Heating	FAUND	_	Shires		
Place Area: Rascorn! First Second Third Porches, etc.	770 1098 1098 542	Herbert ROBINSON Emma ORR James HARRIS	1	1	
Year Built	1920	· Howard ROBINSON		III V	
Puture Economic Life	15	The state of the s		0.00	
Monthly Hental	\$75		TS 12-10 18-11	0.00	
Utilities Included	none		COMPANY OF THE PARTY OF THE PAR	110	
Assessed Valuation				0.00	

Fig. 15. Reestablishing neighborhood ties

The existence of these types of identity in the records, allows us to iteratively design models to capture connections and link them together into Identity networks. This work was carried out across the first three iterations of the project (from 2011 to 2021). The infrastructure developed can be accessed at:

<u>https://urbanrenewalimpact.org/</u>[Click on the **DATA->Remapping** menu tab for interactive map].

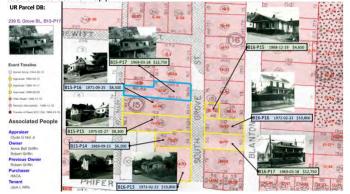


Fig. 16. Historical UR Parcel database with timeline, people photos & prices

We captured a number of events associated with each acquired UR Parcel including the acquisition date and purchase amount.

6. REVEALING HARM: COMPUTATIONAL INTERVENTIONS

The work described in this section is entirely from our **Measuring the Impact of Urban Renewal**, aka *Purple Project (Post-Urban Renewal Profile of Loss of Equity)*. We use computational interventions to address the problem of mapping current addresses to historic locations. How do we relate a current CA Parcel in 2022 to one or several UR Parcels from the 1960s or 1970s? How do we relate all 930 acquisition UR Parcels to the 224 CA Parcels from 2022?

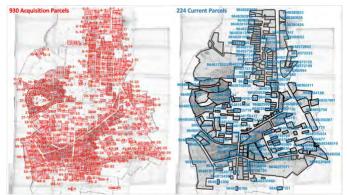


Fig. 17. 930 Acquisition UR Parcels vs. 224 CA Parcels

A specific example illustrates some of the challenges and shows: CA Parcel #9648262985 on 10 Gilliam Place (in red), disposed of on April 4, 1978 for \$5,450, and an intersecting historical UR Parcel, B15-P17 on 239 South Grove Street (in blue), acquired on March 18, 1969 for \$12,750.



Fig. 18. Pre-UR and Post-UR overlapping parcels

The changes that occurred in this area are substantial: Dewitt Street (east-west) and South Grove Street (north-south) and an alley (north-south) between South French Broad Avenue and South Grove Street, no longer exist; and Gilliam Place is a new cul-de-sac that was carved out of a number of acquired parcels. As a result, the older and newer parcels are unrelatable.

Our approach is to geo-reference and vectorize two of the historical scanned maps: the Land Acquisition Map and the Property Disposal Map (shown in Fig. 2), and use the current parcel GIS layer from Buncombe County. These three layers capture three moments in time (1965, 1973, and 2022):



Fig. 19. Land acquisition (1965), Property disposal (1973), Parcels (2022)

Next, we highlight current parcel #9648262985 for 10 Gilliam Place (in yellow), with a Google Satellite background:



Fig. 20. Parcel #9648262985 highlighted in yellow

We then intersect that CA Parcel with all eight overlapping historical UR Parcels:

B15-P17 B16-P13 B15-P16 B16-P15 B15-P15 B16-P16 B15-P14 B16-P17



Fig. 21. Same as Fig. 20 but with historical UR parcel intersecting overlays This allows us to compute the percentage of overlap.



Fig. 22. Same as Fig. 21 but with percentage of UR Parcel overlap The "COMPUTED Acquisition" value is \$23,044 and calculated as a weighted sum as follows:

Blk/Pcl	Percent		AcqVal	Contrib
B15-P14	9%	*	\$6,200	\$558
B15-P15	92%	*	\$8,300	\$7,636
B15-P16	67%	*	\$8,500	\$5,695
B15-P17	35%	*	\$12,750	\$4,463
B16-P13	9%	*	\$10,800	\$972
B16-P15	42%	*	\$4,650	\$1,953
B16-P16	14%	*	\$10,800	\$1,512
B16-P17	2%	*	\$12,750	\$255

SUM: \$23,044

Each of the 224 CA Parcels is matched with the set of overlapping UR Parcels and a Computed Acquisition value is automatically calculated. This allows us to connect the past with the present and relate parcels that are no longer compatible, by determining the number of contributing UR Parcels and the combined weighted valuation of those parcels that goes into the CA Parcel.

For CA Parcel #9648262985 on 10 Gilliam Place, we can thus easily retrace the chain of ownership that has been composed of multiple historical UR Parcels. We find it was resold on April 4, 1978 for \$5,450.

Deed date	DeedBook / Page	Grantor	Grantee
05/18/2020	5898/706	Gilliam, Lawrence/ Sr. Gilliam, Gloria H. Gilliam, Gloria H./ Sr.	Gilliam (Le) Lawrence Sr; Gilliam (Le) Gloria H.
04/04/1978	1186/541	НАСА	Gilliam, Lawrence/ Sr Gilliam, Gloria H

Fig. 23. Using the chain of ownership to reveal the reselling of CA Parcels

7. PRELIMINARY KEY FINDINGS

Revealing Identity helps us build a historical database about the acquired UR Parcels. Revealing Harm helps us build a database of how CA Parcels were formed through the disposal process. These two databases allow us to formulate the following ten key takeaway findings on the more complete story of urban renewal in the Southside.

PRELIMINARY KEY FINDINGS: a link to the full Executive Summary with details and graphs can be found at: https://ai-collaboratory.net/2022/06/18/june-18-2022-measuring-the-impact-of-urban-renewal/

A. **Who** was affected by urban renewal?

Our Team focused on the Southside neighborhood of Asheville, where we:

- Identified 930 parcels acquired during Urban Renewal in Asheville from 1965 to 1980 (UR Parcels). The data shows that many homeowners resisted these acquisitions and went to court.
- Created a profile for each of these UR Parcels: showing original owners and tenants at the time of acquisition, property pictures, and a history of everything that happened to that parcel during UR.
- Created a map interface that allows searching, interaction, and display across all 930 UR Parcels.
- Identified 224 existing parcels (as of June 2022), or Current Asheville Parcels (CA Parcels), that were assembled from parts of the 930 UR Parcels.

TEN KEY DATA TAKEWAYS:

- B. **How much** did the City pay for urban renewal properties?
 - 1. The total UR Parcel acquisition cost was \$6.4M: across the 930 UR Parcels.
 - 2. The median UR Parcel acquisition value was \$5,350 (half higher and half lower): with 85% of the acquisitions below \$10K.
- C. **Which** properties does the City still own?
 - 3. The City of Asheville continues to have an 18% UR impact: the City of Asheville still owns 13 CA Parcels in the Southside that were acquired through UR and overlap with 169 UR Parcels, which represents 18% of the original pool of 930 UR Parcels.
 - **4.** The Housing Authority of the City of Asheville (HACA) continues to have a 16% UR impact: HACA still owns 7 CA Parcels that were acquired through UR and overlap with 147 UR parcels, which represents 16% of the original pool of 930 UR Parcels.
 - → This represents a 34% combined City-HACA UR impact: across 20 CA parcels that overlap with a total of 316 UR parcels, representing over a third of the original pool of 930 UR Parcels.
- D. **How much** are those properties now worth?
 - 5. There is a 400% increase in the valuation of the 224 CA Parcels since UR (as of June 2022 and after inflation adjustment): based on Buncombe County's Parcel Ownership Dashboard. This is a conservative increase well below actual current market prices (using Zillow valuations may show an even higher value, up to a 1,000% increase).
- E. When did the City start reselling these properties?
 - 6. HACA primarily (94%) and the City of Asheville (6%) resold UR Parcels for five decades: while 86% of the UR Parcels were resold in the 70s and 80s, another 14% were offloaded between the 1990s and 2010s. We call the beneficiaries of the first round of reselling "repurchasers".
- F. **How much** were these properties resold for?
 - 7. The UR Parcels were resold at discounted prices: the median value of the resold parcels was less than 1/5th of their acquisition value during UR, indicating that the majority of the parcels were offloaded post-UR for a fraction of their acquisition price [83% of the parcels were offloaded below UR acquisition cost and the total resale revenue was \$3.3M].
- G. Who was able to repurchase these properties?
 - **8.** There were 6 categories of repurchasers: Individuals (46%), Businesses (40%), City (7%), HACA (3%), Churches (3%), County (1%), with 152 unique repurchasers across all 224 CA Parcels.
 - 9. The top 10 repurchasers were responsible for the buying of 32% of all 224 CA Parcels: none of these top 10 repurchasers were Individuals.
 - **10.** Only 14 Individuals repurchased in the Southside after losing their property during UR: these 14 Individuals represent 9% of the 152 unique repurchasers.

8. CONCLUSIONS AND FUTURE WORK

The project may provide an invaluable resource to the Asheville Community Reparations Commission in its effort to both evaluate the loss and define reparations with respect to Asheville's commitment to make amends for its destructive and discriminatory urban renewal program. Our approach is generalizable to other neighborhoods of Asheville and other cities. Our results quantify how much urban renewal deprived Southside homeowners of a very significant source of intergenerational wealth.

This is a work in progress designed to provide new data in a form that can promote policy and decision-making regarding reparations in the City of Asheville. "Successful claims always require at least two types of proof: identity and harm, and records are needed to support proof" [3]. This new data can be used as follows:

- 1. The Reparations Commission can use the data compiled to identify the specific individuals, families and businesses who were torn from their community and deprived of property under the guise of urban renewal. We call this **revealing Identity**: to determine **WHO** was affected
- 2. The data compiled can also be used by the Asheville Reparations Commission to begin to fashion a remedy or definition of reparations by looking at the types of harm that occurred. We call this **revealing Harm**: to determine **HOW** people were affected.

9. ACKNOWLEDGMENTS

We wish to acknowledge the support of two Laura Bush 21st Century Librarian (LB21 grants: (1) "Piloting an Online Collaborative Network for Integrating CT into Library and Archival Education and Practice" (RE-246334-OLS-20), and (2) "Launching the TALENT Network to Promote the Training of Archival & Library Educators with iNnovative Technologies" (RE-252287-OLS-22). These grants are advancing data science education and infrastructure across the library, archives, and museum ecosystems.

REFERENCES

- [1] Computational Archival Science (CAS) portal: https://ai-collaboratory.net/cas
- [2] What is Urban Renewal: https://storymaps.arcgis.com/stories/ba1e9d724a1a4916bc9ff134283e5a 43
- [3] The Fourth Thursday: "Urban Renewal Impact" in Asheville, June 24, 2021: https://ai-collaboratory.net/2021/06/24/june-24-2021-launch-of-the-urban-renewal-impact-website-initiative/
- [4] Buncombe makes final reparations picks; 25 individuals will lead the historic process, March 15, 2022: https://www.citizen-times.com/story/news/local/2022/03/15/buncombe-county-asheville-announces-final-members-reparations-commission/7051468001/

- [5] Mace, R. L. 1967. Inside East Riverside. Housing Authority of the City of Asheville Records, Box 43, D. H. Ramsey Library, Special Collections, University of North Carolina Asheville: https://drive.google.com/file/d/12MUm_8xapLT05cC2hJLssDciFIo5JqE1/view
- [6] 2010 Twilight of a Neighborhood, NC Humanities Council: https://www.yumpu.com/en/document/view/8229229/twilight-of-a-neighborhood-north-carolina-humanities-council
- [7] Ketelaar, Eric. 2002. "Archival Temples, Archival Prisons: Modes of Power and Protection." Archival Science 2 (3–4):221–238: https://link.springer.com/article/10.1007/BF02435623
- [8] Archives and Human Rights, News from the ICA Section on Archives and Human Rights (SAHR), Issue no. 128, July 2020, written and compiled by Trudy Huskamp Peterson.
- [9] SAA Council Statement on Black Lives and Archives, June 2, 2020, https://www2.archivists.org/statements/saa-council-statement-on-black-lives-and-archives
- [10] Archives and Human Rights, edited by Jens Boel, Perrine Canavaggio and Antonio Gonzalez Quintana, ISBN 9780367724603 September 26, 2022, Forthcoming by Routledge, 352 pages: https://www.routledge.com/Archives-and-Human-Rights/Boel-Canavaggio-Quintana/p/book/9780367724603
- [11] United Nations, Universal Declaration of Human Rights, 10 December 1948. http://www.un.org/en/universal-declaration-human-rights/index.html
- [12] United Nations General Assembly resolution 60/147, Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law, 16 December 2005. http://legal.un.org/avl/pdf/ha/ga 60-147/ga 60-147 ph e.pdf
- [13] Renewing Inequality Urban Renewal, Family Displacements, and Race 1950-1966 -- Richmond https://dsl.richmond.edu/panorama/renewal/
- [14] Root Shock: How Tearing Up City Neighborhoods Hurts America and What We Can Do About It. Random House, New York, 2004.
- [15] T-RACES (Testbed for the Redlining Archives of California's Exclusionary Spaces), Richard Marciano, funded by IMLS in 2006, http://t-races.net/T-RACES/.
- [16] Big Historical Data" Feature Extraction, Richard J. Marciano, Robert C. Allen, Chien-Yi Hou, Pamella R. Lach, Journal of Map & Geography Libraries, Advances in Geospatial Information Collections & Archives, Volume 9, 2013 Issue 1-2: Working Digitally with Historical Maps, Apr. 17, 2013: https://www.tandfonline.com/toc/wmgl20/9/1-2?nav=tocList
- [17] Hidden in plain sight: Asheville's food deserts, Dec. 30, 2014, https://mountainx.com/food/hidden-in-plain-sight-ashevilles-food-deserts/
- [18] Robert Park and Ernest Burgess, Urban Ecology Studies, 1925, Nina Brown, 2002, Center for Spatially Integrated Social Science, U. Santa Barbara, https://escholarship.org/uc/item/6f39q98d.
- [19] Housing Authority of the City of Asheville: http://toto.lib.unca.edu/findingaids/mss/housing_authority_city_asheville/default_HACA.html

Appendix A: Records related to the Redevelopment Commission (1953 to 1967)

We selected key passages from Asheville's foundational UR planning documents. Deed Book 1028, Page 443, from Buncombe County's NC Register of Deeds, is a 138-page file documenting the Redevelopment Commission of the City of Asheville from its creation in 1953 to its merging with the Housing Authority in 1967.

We use excepts from 4 of the 12 Documents (Doc 1: page 11, Doc 4: page 11, Doc 5: page 12 & Doc 6: page 13 below):

Document 1: Resolution of City Council of the City of Asheville on August 21, 1958 creating the Redevelopment Commission of the City of Asheville.

WHEREAS, there exists in the City of Asheville blighted areas, which said blighted areas are defined by Section $16-456\,(q)$ to mean the following:

"(g) "Blighted area" shall mean an area in which there is a predominance of buildings or improvements (or which is predominantly residential in character), and which, by reason of dilapidation, deterioration, age or obsolescence, inadequate provision for ventilation, light, air, sanitation, or open spaces, high density of population and overcrowding, unsanitary or unsafe conditions, or the existence of conditions which endanger life or property by fire and other causes, or any combination of such factors, substantially impairs the sound growth of the community, is conducive to ill health, transmission of disease, infant mortality, juvenile delinquency and crime, and is detrimental to the public health, safety, morals or welfare; provided, no area shall be considered a blighted area nor subject to the power of eminent domain, within the meaning of this article, unless it is determined by the planning commission that at least two-thirds of the number of buildings within the area are of the character described in this section and substantially contribute to the conditions making such area a blighted area;"

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF ASHEVILLE THAT:

Section 1. The Council hereby finds as a fact that blighted areas as defined in the preamble hereof exist in the City of Asheville.

Section 2. The redevelopment of such areas is necessary in the interests of the public health, safety, morals or welfare of the residents of said municipality.

Document 4: Certification of the Asheville Planning and Zoning Commission dated July 20, 1964.

WHEREAS, the Asheville Planning and Zoning Commission has reviewed and studied data and maps compiled by the Planning Staff showing that 82.9 percent of the structures in the [Southside] area are substandard in some respects and that the predominantly residential area is blighted; and,

WHEREAS, the Planning and Zoning Commission, during a called meeting on July 20, 1964, examined the area on a field trip and found that more than two-thirds of the number of buildings in the area have one or more of the following characteristics:

- 1. Dilapidated, deteriorated, obsolescent;
- Inadequate provision for ventilation, light, air, sanitation, or open spaces;
- High density of population and overcrowding;
- Unsanitary or unsafe conditions, or the existence of conditions which endanger life or property by fire or other causes;

and that because of these conditions, the area substantially impairs the sound growth of the community, is conducive to ill health, transmission of disease, infant mortality, juvenile delinquency and crime, and is detrimental to the public health, safety, morals, or welfare; and

WHEREAS, it has been determined by the Asheville Planning and Zoning Commission that the Area is "Blighted Area" as defined by G.S. 160-456(g).

Document 5: Redevelopment Plan of the Redevelopment Commission of the City of Asheville for East Riverside Urban Renewal Area Project No. N. C. R-48 dated December, 1965.

(B) Description of Project Area

The Project Area is a blighted area predominantly residential in character and is considered eligible under Section 110 c. 1. of the Housing Act of 1949, as amended, and under the North Carolina Urban Redevelopment Law of 1951, as amended, N. C. G. S. 160-454 through 160-474.

2. Types of Proposed Renewal Action

... The various proposals of the Plan have been adopted to remove conditions which have created, contributed to or perpetuated the substandard character of the Project Area... The specific provisions and actions included in the Plan have been developed and are necessary to achieve the following objectives:

- To eliminate blighting conditions which prevented the economic utilization of the land.
- To create sizeable areas of land for residential use to relocate the occupants of substandard housing within their incomes.
- To provide for sound, economic redevelopment of commercial, industrial and institutional land in the Area in accordance with the Plan and the needs of the City of Asheville.
- To provide adequate facilities and utility services in order to create a self-sustained neighborhood at par with any other standard neighborhood of the community. Such public facilities include space for parks, public housing, expansion of school grounds, a Y.M.C.A.

(D) Project Proposals:

1. Land Acquisition

a. <u>Identification of Real Property-to-</u> be-Acquired

... Parcels will be acquired by negotiation with the present owners. Where negotiation does not result in a satisfactory agreement, the properties will be taken by eminent domain proceedings and just compensation will be awarded in accordance with the law. The basis for negotiations will be the fair market value of the property as determined by competent appraisers and approved by the LPA [Local Public Agency].

3. Redeveloper's Obligation

The land in the area will be disposed of, by lease or sale, to public or private parties for redevelopment by them in accordance with the provisions of this

Plan and their contract with the LPA [Local Public Agency].

(E) Other Provisions Necessary to Meet State and Local Requirements:

1. Estimated Cost and Method of Finar	ncing
<u>Item</u> .	Amount
Planning, Interest and Administration	7, 388, 523
Acquisition and Cost of Land) Site Improvements and Supporting Facilities	2,421,828
GROSS PROJECT COST	9, 810, 351
Resale Value of Land	1,068,349
NET PROJECT COST	8,742,002
This cost will be borne as follows:	
Federal Capital Grant (includes \$640,600. Relocation & Rehabilitation Grant) Local Cash or Grant-in-Aid	6, 468, 602 2, 914, 000
TOTAL	9, 382, 602

The City or locality must under Title I of the Housing Act of 1949, as amended, make certain local contributions of cash or improvements, or other aid which would equal at least 1/3 of net project cost. Present planning indicates the locality's share would be as follows:

Non-	Cash Local Grants-in-Aid		
	Demolition and removal work	•	62,714
	Site Improvements: paving, grading, water, sewer, storm drainage, and engineering (some items are partially eligible only)		577,168
	Supporting Facilities		977,444
	Public Housing Credits (Sec. 107)		839,652
Cash	Local Grants-in-Aid		492,172
	Total Local Share		2,914,000

Additional costs to the city which are not chargeable to this Project include the following:

4,837	
2,267	
I, 455	
9, 243	
	2, 267 1, 455

Document 6: Minutes of the Public Hearing on the East Riverside Urban Renewal Project given by the Redevelopment Commission of the City of Asheville on Tuesday, May 31, 1966

PRESENT:

Asheville Redevelopment Commissioners:

J. Alfred Miller, Chairman

Eugene C. Ochsenreiter, Jr., Secretary-Treasurer
Joseph Sternberg

Dr. David K. Hall

Anthony Redmon, Attorney
Jacques Laboureur, Planner Eric Hill
Associates, Atlanta GA

Redevelopment Commission staff members:
James W. Greer, Executive Director

Burnitt Bealle, Jr., Assistant Director Kent Washburn, Administrative Assistant Ned Henry, Relocation Advisor Vito LePore, Rehabilitation Supervisor William Roland, Rehabilitation Inspector Mrs. Norma Grayson, Social Worker Miss Leilani Littlejohn, Clerk-Typist

MR. J. ALFRED MILLER, CHAIRMAN:

... Parts of this area have been in declining structural stage for several years. The Citizens Advisory Committee first. suggested this area for consideration as an urban renewal project. After study by the Advisory Committee, they recommended a course of action to City Council. The City Council referred the matter to the Asheville Planning and Zoning Commission as required by State Law. After an study extensive bу the Planning Commission, the area was certified as eligible for urban renewal activity. At this point the Redevelopment Commission applied for Federal funds to make a detailed study of the area. This has been done. You are here tonight to review these studies and recommendations and to hear from you and your comments.

MR. JAMES W. GREER:

... The Redevelopment Commission in trying to arrive at plans for this area has taken into consideration every single one of approximately 1,300 structures in the area. Each structure was inspected and graded according to its physical condition. Interviews were held with almost every family living in the East Riverside area. After the interviews and inspections were completed, information was turned over to a planning consultant who was hired to advise this Commission as to what the best course would be in trying to preserve the good property in the area and how best to eliminate the bad property and what could best be replace in the area.

... In addition to the 500 units of low-rent public housing, we anticipate that anywhere between 150 and 200 units of houses will be built by private means. This will be some apartments and some single-family houses. In addition to this, there will be provided areas for commercial use, limited commercial use for neighborhood stores and shops so that you don't have to travel two miles or a mile and a half to pick up a loaf of bread or a carton of milk.

... I think it should be stressed that is the Commission's intention to preserve as much of the original neighborhood in this neighborhood as is possible. What cannot be saved, what the owner refuses to rehabilitate, it will be necessary for this Commission to acquire.

... a great deal of emphasis is being given to the side of the people... We have done a great many things to date and will be continuing to do them in the future that are concerned one hundred per cent with the people of the area, their thoughts, their considerations, their recommendations, their problems and their needs.

... Some of the reasons other than just bad structural conditions for which we are carrying out the redevelopment project is the tremendous range of social problems in terms of disease and crime, health problems and fire problems that we find in the area. We found that although this area contains eight per cent of the City's population, that in every case of venereal disease, tuberculosis, fire, rape, arson, murder, that more than eight per cent of the occurrence of these happenings in the City of Asheville are found in this area. Fifty per cent of the rapes and assaults are in this area. Fourteen per cent of the City's fires are found in this area. Twenty-six per cent of the venereal disease reported in the City of Asheville is found in this area. We can go on and on. TB is fourteen per cent. Fourteen per cent of the TB in Asheville is found in this area. These are what we refer to as social indices of blight. In other worlds, these are things that occur in blighted or slum areas because the area is slum and blighted.

... We have a map showing what we think and what we are sure the area will look like after urban renewal. Now, you will look at this map and you will say, "Well, that's

just a pretty picture. That will never come to be." I can assure you that it has come to be in hundreds of communities across our nation, in dozens of communities in North Carolina, and there is no reason why it can't come to pass in Asheville.

... Both the Federal government and the State of North Carolina require that all the families and individuals be offered a decent, safe and sanitary place to live before they are required to move from where they presently live. In other words, if we buy the house in which you are now living, or if you are living in a house which we end up buying in the East Riverside area, you do not have to move unless and until you are offered a house or apartment that meets the minimum housing code standard of the City of Asheville... Other housing accommodations will be furnished by the private housing which will be built in the area. Experience has proven over many, many years that if there is a demand for housing somebody in the community will build them. This is new housing we are talking about, outside the East Riverside boundaries. We have discussed this matter with a number of builders and real estate people who assure us if someone wants a house, they will build it for them. That is their business and that's how they make their money. You may think because nobody has been building houses in the City of Asheville for so many years that you might want to live in or can afford to live in or are being built in an area that you might want to live in that they will not be built. This is not the case. Housing will be built if there is a demand.