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Article

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The Origins of Urban Segregation in the United States

Allison Shertzer and Randall P. Walsh

Segregation by race is a central and persistent characteristic of American cities, and there is a broad consensus among economists that this spatial separation of racial groups is a key driver of socioeconomic outcomes for urban Americans. Researchers have documented that segregation contributes to poverty, adverse educational outcomes, and reduced intergenerational mobility.¹

These findings naturally give rise to a focus on the origins of segregation. Attention has concentrated on three potential mechanisms: uncoordinated individual behavior, collective group action, and government policy, all of which have the potential to overlap and mutually reinforce one another. In this research report, we describe our work on the rise of segregation in pre-World War II American cities. We focus on the early 20th century period during which black ghettos were established or consolidated in most northern urban areas. The decades from 1900 to 1930 saw the largest increases in measured segregation of the century, as black migration from the South accelerated due to a combination of factors such as the boll weevil’s devastation of Southern cotton crops and the slowdown of European immigration after World War I.

Despite the importance of this era for understanding how American cities came to be segregated, it has been the focus of very little empirical work in economics. This lack of attention stems from the absence of finely detailed spatial demographic data on cities for time periods prior to 1940.

We have recently constructed such a dataset. It covers 10 major cities and was built by digitizing maps of census enumeration districts and matching them to the full-count census data from 1900, 1910, 1920, and 1930.² The resulting dataset gives us new opportunities to study urban population dynamics in prewar America.

The Role of White Flight

Recent scholarship in law and history argues that the federal government played a key role in segregating American cities, for instance by “redlining” potentially integrated neighborhoods when issuing mortgage insurance policies beginning in the mid-1930s.³ While these government actions may have been important for maintaining the color line in the postwar era, there exists little empirical support for the notion that government intervention was crucial for the initial establishment of segregated neighborhoods. Given that contemporary urban economics literature highlights how uncoordinated, intra-city household sorting across urban areas can increase segregation by race,⁴ it is natural to ask: is it possible that segregation could have arisen even in the absence of discriminatory federal policies?

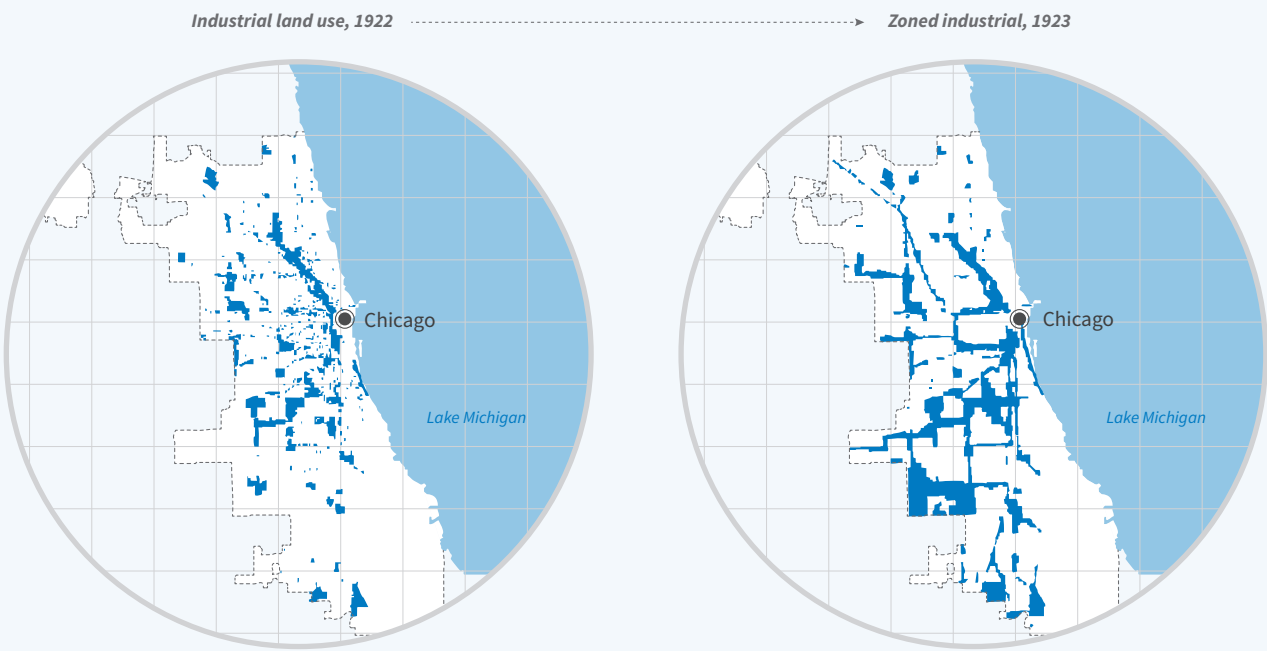
To answer this question, we use our new neighborhood-level dataset to quantify the extent of “white flight” from neighborhoods receiving black in-migrants.⁵ Using methods from the labor economics literature to obtain exogenous variation in where black

migrants settled,⁶ we argue that white households departed neighborhoods in reaction to black arrivals at an accelerating rate over the 1900–30 period. Using a simple counterfactual model to assign blacks to locations that reflect differing levels of institutional barriers to settling in new neighborhoods, we argue that white flight can explain as much as 50 percent of the observed increase in segregation that occurred over the 1920s, the key prewar decade for the consolidation of the ghettos.

Our finding that sorting by whites out of neighborhoods with growing black populations was a quantitatively important phenomenon prior to the postwar opening of the suburbs is novel and calls into question the notion that the federal government was uniquely responsible for segregating America. Our results suggest that, even in the absence of effective barriers to black settlement in white neighborhoods, segregation would likely have arisen as a direct consequence of the widespread and decentralized relocation decisions of white households within an urban area. These results imply that policies that reduce barriers faced by blacks in the housing market—such as those contained in the Fair Housing Act of 1968—may thus not prevent or reverse segregation as long as white households desire to avoid black neighbors or have concerns about the quality of public goods and amenities in neighborhoods experiencing racial turnover.

The above-cited work should not be construed as an argument that gov-

Zoning Directed Industry to Predominately Minority Neighborhoods



ernment actions have had no effect on the spatial distribution of various racial groups in American cities. For instance, recent work finds that Home Ownership Loan Corporation lending risk maps have had a long-term impact on home ownership rates and credit scores of individuals who live in neighborhoods that were unfavorably rated.⁷ Urban governments also have great scope to shape where individuals of different races and incomes live. The impact of city-level policies has received comparatively less attention in the extant economics literature. To this point, we have undertaken several projects with various coauthors to assess the impacts of zoning and public transit infrastructure on the development of segregated cities.

Racial and Land Use Zoning Ordinances

The most direct way that urban governments have attempted to segre-

gate their populations is through the adoption of explicitly racial zoning ordinances. Passed by cities between 1910 and 1917, these ordinances prohibited members of the majority racial group on a given city block from selling or renting property to members of another racial group. Walsh and coauthor Werner Troesken’s work⁸ suggests that prior to the adoption of these laws cities had created and sustained residential segregation through private norms and vigilante activity. Only when these private arrangements began to break down during the early 1900s did whites begin lobbying municipal governments for the passage of segregation ordinances. While these ordinances are salient indicators of racial attitudes in the early 1900s, continual court challenges reduced their direct impact on segregation. The potential efficacy of segregation ordinances was effectively ended in 1917 by the landmark *Buchanan v. Warley* decision, in which the United States Supreme

Court struck down a racial zoning ordinance adopted by Louisville, Kentucky.

The outlawing of racial zoning ordinances meant that city governments could no longer legally enshrine the unequal treatment of neighborhoods by race. However, the potential misappropriation of purportedly race-blind “comprehensive” land use regulation is another way that zoning could have led to increased residential segregation. These ordinances, which set out allowable uses and building volumes for every block in the city, gained traction shortly after World War I. Today nearly every city in the United States has such an ordinance in force.

In joint work with Tate Twinam, we study the original zoning ordinance adopted by the city of Chicago in 1923, which was quite typical of land use regulation at the time.⁹ The initial zoning ordinance was preceded in 1922 by a survey of land use at the city-block level. By digitizing this fine-scale geographic data on pre-existing land use we are able to

separate the effect of zoning from persistence in land use in our empirical work.

We find that, conditional on pre-existing uses, black neighborhoods were targeted for both higher-density and industrial use zoning, compared with neighborhoods with white native-born residents. Discrimination in zoning thus survived in policies that were *de jure* race blind. In related work, we follow land use in Chicago over the 20th century and argue that zoning is far more influential than previously thought in determining the location of economic activity within cities.¹⁰ Land use regulation could thus be a key mechanism through which local governments fostered and maintained segregation by race.

Transportation and Neighborhood Stability

Urban governments also may have facilitated separation between racial groups by investing in public transit infrastructure. The sharp increase in

segregation broadly tracks the proliferation of streetcars and, later, the private automobile. As late as the 1920s, however, significant majorities of urban residents were commuting using public transit in major cities. In ongoing work, we are digitizing maps of public transit systems in major cities to investigate their impact on demographic sorting within urban areas.

We hypothesize that public transportation was critical for the acceleration of white flight because streetcars and subways significantly reduced the cost of living further away from employment centers. Household preferences for racial composition could have interacted with municipal infrastructure investments to increase residential segregation. Such a finding would further underscore the lesson that policies that were race-neutral on their face likely contributed to the development of segregated cities.

Our current work also explores the intersection of household preferences

and collective action by whites to create neighborhoods populated almost entirely by African Americans, in particular the phenomenon of “blockbusting.” This term was used to describe the process by which ghettos expanded in American cities. Real estate agents would select a promising area, usually adjacent to an existing black neighborhood, acquire a few properties, and rent them to African American families. The ensuing panic amongst the remaining white residents allowed realtors to buy the remaining properties at a discount and divide them into cramped apartments for additional black tenants.

To explore the housing market dynamics associated with blockbusting, we are constructing a unique panel dataset of addresses spanning the 1930s, a decade which saw significant expansions of ghettos in northern cities. Specifically, we are matching addresses from the population censuses of 1930 and 1940, the first national surveys to

ask about housing prices. The resulting dataset will allow us to explore the housing price dynamics associated with racial turnover in urban neighborhoods, providing a fuller picture of the welfare implications of blockbusting and increased segregation.

¹ E. Ananat, “The Wrong Side(s) of the Tracks: Estimating the Causal Effects of Racial Segregation on City Outcomes,” NBER Working Paper No. 13343, August 2007, and the American Economic Journal: Applied Economics, 3(2), (2011), pp. 34–66; D. Card and J. Rothstein, “Racial Segregation and the Black-White Test Score Gap,” NBER Working Paper No. 12078, March 2006, and the Journal of Public Economics, 91(11-12), 2007, pp. 2156–84; R. Chetty, N. Hendren, P. Kline, and E. Saez, “Where is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States,” NBER Working Paper No. 19843, June 2014, and The Quarterly Journal of Economics, 129(4), 2014, pp. 1553–623.

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² A. Shertzer, R. Walsh, and J. Logan, “Segregation and Neighborhood Change in Northern Cities: New Historical GIS Data from 1900–30,” Historical Methods: A Journal of Quantitative and Interdisciplinary History, 49(4), 2016, pp. 187–97.

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³ R. Rothstein, The Color of Law: A Forgotten History of How Our Government Segregated America, New York: Liveright, 2017.

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⁴ D. Card, A. Mas, and J. Rothstein, “Tipping and the Dynamics of Segregation,” NBER Working Paper No. 13052, April 2007, and The Quarterly Journal of Economics, 123(1), 2008, pp. 177–218.

[Return to Text](#)

⁵ A. Shertzer and R. Walsh, “Racial Sorting and the Emergence of Segregation in American Cities,” NBER Working Paper No. 22077, March 2016.

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⁶ L. Boustan, “Was Postwar Suburbanization ‘White Flight’? Evidence from the Black Migration,”

NBER Working Paper No. 13543, October 2007, and The Quarterly Journal of Economics, 125(1), 2010, pp. 417–43.

[Return to Text](#)

⁷ D. Aaronson, D. Hartley, and B. Mazumder, “The Effects of the 1930s HOLC ‘Redlining’ Maps,” Federal Reserve Bank of Chicago Working Paper, 2017(12).

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⁸ W. Troesken and R. Walsh, “Collective Action, White Flight, and the Origins of Formal Segregation Laws,” NBER Working Paper No. 23691, August 2017.

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⁹ A. Shertzer, T. Twinam, and R. Walsh, “Race, Ethnicity, and Discriminatory Zoning,” NBER Working Paper No. 20108, May 2014, and the American Economic Journal: Applied Economics, 8(3), 2016, pp. 217–46.

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¹⁰ A. Shertzer, T. Twinam, and R. Walsh, “Zoning and the Economic Geography of Cities,” NBER Working Paper No. 22658, September 2016.

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Allison Shertzer is a faculty research fellow in the NBER’s Development of the American Economy Program. An assistant professor of economics at the University of Pittsburgh, she received bachelor’s degrees in industrial engineering and mathematics from Arizona State University in 2006 and a PhD in economics from the University of California, Los Angeles in 2011. She is a member of the boards of editors of *Explorations in Economic History* and *Historical Methods*.

Shertzer’s main areas of research are cities and immigration in early 20th century America. Her work on the origins of residential segregation by race has been supported by the National Science Foundation. She has also studied how the arrival of European immigrants shaped the provision of public goods in prewar urban areas.

Shertzer traces her ancestry to mid-18th century German immigrants who settled in Pennsylvania, of which she is a ninth-generation resident. She lives in Pittsburgh with her husband and two young daughters.



Randall Walsh is a research associate in the NBER’s Environment and Energy Economics Program and a professor of economics at the University of Pittsburgh. He received his bachelor’s degree in economics from the University of New Hampshire in 1996 and his PhD from Duke University in 2002. He is a member of the editorial council of the *Journal of Environmental Economics and Management*.

Walsh’s research focuses on issues arising at the various intersections of race, the environment, cities and politics. This work has been supported by both the National Institutes of Health and the National Science Foundation.

Walsh traces his southwestern Pennsylvania roots back to Richard “Big Dickey” Dotson, who prowled the region’s woods while serving in the U.S. Army as an “Indian Spy” during the Revolutionary War. He lives in Pittsburgh with his wife and two teenage daughters.