THE UNIVERSITY OF CHICAGO

Building a Selective Permeability of Space:

Urban Renewal and The University of Chicago Campus Shuttle System

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Abstract:

On February 4th, 1957, the UC Bus, a privately operated transit system available only to faculty and students at the University of Chicago, began operations. A year and a half later, the Hyde Park-Kenwood Urban Renewal Plan was approved by the City of Chicago, seizing and clearing 106 acres of land and displacing 4,000 families on the city's South Side, in the name of maintaining a "compatible environment" for the university's continued operations. This paper assembles the history of, explores the motives and constituencies behind, and establishes the University of Chicago's campus shuttle system's spatial impact. It places the university's private transportation system within its post-war campaign of urban renewal—a decades-long effort to control the character of the space around its campus—echoing papers that have similarly implicated the university's privately operated police force, charter schools, and assisted housing program for employees.

By combining traditional archival research with computational text mining techniques, this paper finds that while initially conceived as a simple connection to commuter transit and parking lots, the UC Bus was reappropriated as a tool of urban renewal within a year of its inception. The faculty and the student body lobbied the administration to expand its spatial and temporal scale dramatically. This served to establish a selective permeability of space in the neighborhoods adjoining the university, allowing their land to be used by members of the University community without granting undesirable incumbent residents access to the university in turn.

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July 10th, 1959. Julian Levi—the executive director of the Southeast Chicago Commission, a proxy of the University of Chicago—addresses a national conference of faculty and administrators gathered at the Massachusetts Institute of Technology as part of a campaign lobbying Congress to extend the power of eminent domain to institutions of higher education.

"If we are really serious about the needs of our institution, then our problem is not one of compromise; it is rather the establishment of priorities. If we are really serious about the next generation of teachers and scholars, lawyers and doctors, physicists and chemists, then we have got to worry...about the development of a "compatible environment" including substantial slum clearance...We cannot have it both ways. We are either going to have graduate students, who produce leadership for the next generation . . . or we are not going to achieve these results because we are unwilling to disturb existing owners and populations." \(^1\)

January 25th, 1957. An article entitled *Bus Service [Will Be] Initiated to Campus Area; No More Hiking to IC² or CTA Stops*—commissioned by Weston L. Krogman, the University of Chicago's business manager, tasked with overseeing campus operations—appears in the *Daily Maroon*, the university's student newspaper.

"The ["UC Bus"] will furnish east-west transportation from Stony Island west down 59th street to Cottage Grove, then to 57th street and back east to Stony Island...the service will be for the benefit of University employees and students who must walk lengthy distances from public transportation...Passengers will be admitted to the vehicle only upon presentation of a ticket purchased in advance [at one of five locations on campus]...The driver will not be permitted to accept cash...Because of legal restrictions, use of the transportation service will be limited to members of the UC faculty, administration, employees and student body. When purchasing tickets identification...will be required...Employees who have not already been issued identification cards [are urged] to obtain them from their departmental offices."

¹ Arnold R. Hirsch, *Making the Second Ghetto* (University of Chicago Press, 1983): 154

² Illinois Central Railroad, now the Metra Electric District

³ Ronald J. Grossman "Bus Service Initiated to Campus Area; No More Hiking From IC or CTA Stops," *Chicago Maroon*, January 25, 1957, 1

In his 1959 speech at the Massachusetts Institute of Technology, Julian Levi articulates a position that most university administrators still feel the need to shroud in euphemism. In the second half of the 20th century, urban institutions of higher education—in the wake of the Great Migration of African Americans into northern cities and the resulting white flight and mass suburbanization—began to intervene in the urban fabric of the neighborhoods adjoining their campuses. Contravening their self-professed roles as benign centers of knowledge creation, they hoped to maintain their position as the producers and reproducers of the American professional class.

Scholars of urban renewal have recognized the significance of Levi's speech for nearly 40 years and for more reasons than just its rhetorical honesty. The University of Chicago was the first American higher education institution to embark on a comprehensive urban renewal campaign. In 1958—using Levi's South East Chicago Commission as an intermediary—the university had won approval for the clearance of 106 acres of land and the displacement of 4000 families. As a consequence of its proximity to Chicago's South Side "black belt," its possession of America's oldest school of urban sociology, and a demonstrated willingness to work at the edge of the law, the university had intervened in Hyde Park and Kenwood (the neighborhoods adjoining its campus) ahead of any formal law or provision giving it the right to do so, spending tens of millions in its own money. Levi's speech at MIT was made as part of a ferocious lobbying campaign that culminated in the extension of the power of eminent domain to institutions of higher education and the introduction of federal subsidies, legitimizing the interventions of the

⁴ Hirsch, Making the Second Ghetto, 161

University of Chicago and spreading its urban renewal policies to colleges and universities nationwide.⁵

Weston L. Krogman's words in the *Maroon* have not been afforded a similar degree of scholarly attention. The University of Chicago's history as an innovative practitioner of urban renewal—one willing to act unilaterally and later fight politically to formalize and spread its policies—has generated a sustained interest in the university's other locally affective policies. But while the university's private police force, its charter schools for the children of local residents, and even the assisted housing scheme it operates for its employees, have been interpreted as complementary to the sentiments expressed in Levi's remarks. So far, no historian or policy scholar has implicated Krogman's bus system in the struggle to build or maintain a compatible environment.

The aim of this paper is threefold. First, it seeks to assemble a detailed history of the private transportation systems operated by the University of Chicago from primary sources. While most American mass transit systems—including the Chicago Transit Authority, ten years younger than the UC Bus, and the Washington Metropolitan Area Transit Authority, founded tens years later—have maintained a detailed and publicly accessible historical record of their creation and expansion, the UGo system lacks records even for *internal* use. Second, this paper aims to establish (again using period documents) the motives that justified the creation, maintenance, and expansion of the campus shuttle in its first 15 years of operation, as well as the degree of entanglement between the UC Bus system and the University of Chicago's coterminous

⁵ Sharon Haar, *The City as Campus: Urbanism and Higher Education in Chicago* (Minneapolis: University of Minnesota Press, 2011), 65

⁶ See literature review

⁷ Beth Tindel, Director of Transportation and Parking Services for the Department of Safety and Excurity, October 22nd, 2020

campaign to maintain a compatible environment in Hyde Park. Finally, this paper seeks to quantify the campus shuttle system's spatial impact, putting the claims of period figures to the test by comparing the evolving topography of addresses featured in university publications with changes in the service pattern of the campus shuttle system itself.

Overview

This project—the study of a historical, geographic public policy—is inherently interdisciplinary. Methodologies, qualitative and quantitative, were drawn from across the social sciences and enacted in parallel. The process of translating that many-tendrilled effort into a linear paper has produced the occasional rhetorical or structural discontinuity.

This paper commences with a brief description of the present state of the University's UGo campus shuttle system (the contemporary counterpart of the UC Bus) and a discussion of the near-total absence of preexisting scholarship on either it or campus shuttles more broadly. It continues with an overview of the University of Chicago's urban renewal era—the decades-long campaign it waged in the years after the Second World War to maintain a compatible environment (and a white presence) in Hyde Park and Kenwood—and details the wealth of research that has been conducted on the university's local policies. It then argues that the campus shuttle system has not been previously considered in this history or urban renewal because it served not to remake or contain incompatible urban environments but to allow students and faculty to bypass them entirely.

In line with its intention to establish the basic history of the shuttle system, the motivations behind its creation, and its spatial impact, this project uses complementary qualitative and quantitative lines of evidence and their attendant methodologies. For the sake of

clarity, instead of a single section describing methods and others detailing findings, in this paper, the findings of each methodology are featured immediately following the description of the methodology itself. Qualitative methods consisted of traditional archival research conducted in the University of Chicago's Special Collections Research Center, which houses the University period administrative records. Quantitative methods consisted of a computational text-mining effort, which successfully extracted and geocoded 56,608 street addresses—mapping to 9,119 unique locations in South and East Chicago—from the digitized archives of the university's campus publications. This provided unique insights into how the introduction and extension of the shuttle system shaped the frontier of areas accessible to members of the university community.

Section 2:

The University of Chicago Campus Shuttle System

The University of Chicago operates a campus shuttle, a private transit system reserved for staff, students, and faculty. The contemporary "UGo" system bears little resemblance to the "UC Bus" service introduced by Weston L. Krogman in 1957. Over its 64 years of continuous operation, the University of Chicago's shuttle system has evolved from a single rush hour loop (almost entirely confined to the campus itself) into a multi-tendrilled operation with seven daytime routes and five "Niteride" services, which traverse not only Hyde Park (the neighborhood of the university itself) but also neighboring Kenwood to the north and Woodlawn to the south. During the 20th century, the university's shuttle system extended even further; in

⁸ "Getting Around," University of Chicago Department of Safety and Security, https://safety-security.uchicago.edu/services/university_shuttles/

the early years of the 21st, the university's most distant daytime commuter routes were transferred to the CTA—Chicago's municipal bus operator—in exchange for a subsidy that kept them free for members of the University community.⁹

The university's campus shuttle system's existence and extent raise a question: Why has the University of Chicago felt the obligation to run its private transit system, despite residing in the city with America's second most extensive public transportation? Contemporary riders of the system—university students and faculty—are given no means to answer this question. In sharp contrast to publicly operated transit systems—many of which proudly feature dedications to their history on their websites ¹⁰—the web page for the UGo system is entirely bereft of historical information of any kind. In fact, a discussion with Beth Tindel—the head of UChicago Safety and Security, the organ of the University Administration currently responsible for operating UGo—revealed that a formally compiled history of the system doesn't even exist for *internal* use. The date of the system's introduction—February 4th, 1957—was discovered from primary sources in the course research for this paper. It is not posted publicly in any University publication or website. ¹¹ External scholarship provided few answers, and no secondary academic sources have ever been compiled on UGo.

The absence of secondary sources dedicated to the university's campus shuttle system is not characteristic of the university's policies. One would perhaps be surprised by the extent and granularity of scholarly interest in the university's policies during the second half of the 20th century (at least those besides the shuttle system). Many of these studies justify their interest on

⁹ Monique Smith 'CTA and U. of C. Bus Talks Still Rolling Along,' Hyde Park Herald, August 9, 2000

¹⁰ See: https://www.transitchicago.com/facts/

¹¹ If anything at all is to come from this paper, that is an omission I would greatly like to correct

similar grounds: the university's pivotal role in the history of 20th-century, higher-education implemented urban renewal.

Section 3:

Historical Background

"If your neighborhood is changing...then you must act quickly and boldly to save your neighborhood from becoming a slum...the slum warnings are on every street corner in our communities of Hyde Park and Kenwood. But...I believe we have found the answer. It is called "Urban Renewal"...it is, however, a tragic fact that these efforts are today essential to the ability of the institutions to fulfill their primary responsibilities" 12

—Julian Levi

In contemporary parlance, the terms "urban renewal" and "slum clearance" are often used as synonyms. They are used more or less interchangeably to refer to post-Second World War policies introduced by the federal government, which resulted in the clearance of tens of thousands of acres of "blighted" urban land (often on account of its African American population). This fusion of terms is not without merit: the phrase slum clearance drops out of Federal policy terminology almost immediately after the first use of "urban renewal" in the early 1950s, suggesting that the latter term came to serve as a sanitized version of the former. 14

However, during the 1950s, in the minds of the University of Chicago's administration and the University faculty members residing in Hyde Park, slum clearance and urban renewal

¹³ William J. Collins and Katharine L. Shester, "Slum Clearance and Urban Renewal in the United States," American Economic Journal: Applied Economics, January 2013, Vol. 5, No. 1 (January 2013): 239-273, https://www.jstor.org/stable/pdf/43189425.pdf

¹² Haar, The City As Campus, 65

¹⁴ Henry B. Gonzalez, et al., *A Chronology of Housing Legislation and Selected Executive Actions*, *1892-1992*, Congressional Research Service Report, December 1993

were anything but synonymous. The former term described the intentional destruction of an entire community that progressed so far along the neighborhood succession curve as to be unrecoverable. At the same time, the latter was considered a preventative step for neighborhoods at an earlier stage in succession, meant to conserve vibrant and viable areas at risk of becoming slums by surgically targeting specific nearby zones. ¹⁵ It was this dual faith—that the area around the university was inevitably trending towards becoming a slum, and that this natural trend could be arrested by sufficiently aggressive intervention—that motivated the University of Chicago's postwar campaign of urban renewal.

3.1: The Blighting of Hyde Park-Kenwood

"In 1952—a short six or seven years ago—our neighborhood in Chicago was in a state of panic. What had grown from the village of Hyde Park into a fine urban community of 75,000 seemed doomed. Thousands of poor Negroes were moving in; large apartments were being reconverted into small ones, turning middle-class buildings into rows of tenements along streets rapidly becoming slums. There were strange people in blocks where neighbors were all familiar faces. There was a rash of new crimes: burglaries, purse-snatchings, and occasional rapes. People could not safely walk the streets in the evening except in groups. Middle-class white families who had lived for years in Hyde Park and Kenwood were moving away, seeking safety. So were middle-class Negro families who had moved in only months earlier because they wanted decent housing outside of a Negro ghetto. All were being engulfed by a tidal wave of population from the segregated, long-contained black belt at the borders of our neighborhood. The feeling was general that our neighborhood was ended."

—Sol Tax, Professor of Anthropology at the University of Chicago, 1959¹⁶

"A compatible neighborhood is not just a question of taste or aesthetics. The faculty can't do its job unless it is close to the University"

—Julian Levi, 1959¹⁷

¹⁵ Haar, The City As Campus, 65

¹⁶ Sol Tax, "Residential Integration: The Case of Hyde Park in Chicago," *Human Organization*, Vol. 18, No. 1 (Spring 1959): 22

¹⁷ "Chicago U. Spurs Renewal Project," New York Times, November 1, 1959

In the years following the Second World War, Chicago's Black Belt—its borders roughly fixed since the 1919 race riots—began to expand once more, overrunning La Salle Street to the west (which had separated the African American ghetto from the working-class white neighborhoods of Englewood and Bridgeport) and Cottage Grove to its east (the barrier between Hyde Park, Kenwood, and Woodlawn, the white-collar, professional communities abutting the University of Chicago).¹⁸

Blacks were never a welcomed presence in Chicago. The northern whites who had fought to end the moral abomination of Southern chattel slavery were unwilling to live alongside those they helped to free. Most were content to see Blacks confined to sharecropping neo-serfdom. In 1900, 90% of African Americans still lived in the South, a mere 2% decline from the time before the Emancipation Proclamation. This would change radically in the first decades of the 20th century. The Boll Weevil cotton blight, the hardening of Jim Crow, and a seemingly unceasing wave of terrorist attacks and lynchings "shook loose" a vast Black population, who rode the rails to northern industrial centers in search of a better life. ¹⁹ The Great Migration significantly transformed the racial makeup of Chicago. A city that was 2% Black in 1910 was more than 4% a decade later²⁰, a figure that would redouble by 1940 and approach 14% by 1950. ²¹ This

¹⁸ Hirsch, Making the Second Ghetto, 136

¹⁹The railroad had a profound influence on the geography of Black Chicago. Illinois Central Railroad—which ran straight down the Mississippi river valley to New Orleans, passing through the South's richest cotton regions along the way—was the way by which most Blacks entered the city. It's passenger terminal—a mile south of Chicago's commercial core and a stone's throw from Lake Michigan—soon became the nexus of Chicago's Black population, which spread south from it as their numbers increased. Hence, the formation of a literal "belt" of Black communities.

²⁰ Campbell Gibson, "Population of the 100 Largest Cities and Other Urban Places In The United States: 1790 to 1990," United States Census Working Paper (June 1998): 1-16, https://www.census.gov/library/working-papers/1998/demo/POP-twps0027.html

²¹ Chicago's Black population would reach its peak at 39.8% in 1980. It has slowly declined to the low thirties in the time since.

growth, combined with the ever-larger number of whites drawn to the suburbs by New Deal era subsidies, meant that containing Blacks to a one-by-six-mile strip was no longer tenable.²² The floodgates burst open in 1948 when the Supreme Court struck down racially restrictive property covenants in *Shelley v. Kraemer*.²³

In the face of the renewed expansion of the Black Belt, the working-class whites to the Black Belt's west again resorted to street violence. A rumor that Blacks, Jews, and communists were plotting to take over their neighborhood caused a riot in Englewood that lasted for a week in November of 1949. But 10,000 rioters were not enough to stem the tide. The more the Black Belt grew, the more whites fled, which opened up more room for Black growth.

The professionals and University of Chicago professors who resided east of the Black Belt were no more receptive to the growing Black presence in their neighborhoods. They perceived their new neighbors to be harbingers of crime and other social ills that would spark an inevitable process of neighborhood succession, ultimately transforming Hyde Park and Kenwood into slums. From 1940 to 1950, the number of Blacks residing in Hyde Park increased more than threefold, from 573 to 1757. Denied the ability to keep Blacks out legally by the Supreme Court but considering themselves above the street violence of working-class neighborhoods, many white Hyde Parkers simply decamped to the suburbs.

²²The Federal Housing Administration's history of denying both Black families and Black communities access to federally guaranteed mortgages is very well established (Richard Rothstein, *The Color of Law*, 2017). However, less well known is that the New Deal organ, created by the Roosevelt Administration in 1934, also restricted the ability of white families to acquire a home in <u>any</u> already urbanized area (see Tom Hanchett, <u>The Other Subsidized Housing</u>: Federal Aid To Suburbanization, 1940s-1960s, 2000). A pair of identical single families homes could receive dramatically different ratings from FHA underwriters merely on account of their existence inside or outside a municipal boundary. The coercive elements of white flight remain under-studied.

²³ Shelley v. Kraemer, 334 U.S. 1 (1948)

²⁴ Hirsch, Making the Second Ghetto, 139

However, many residents were determined to preserve a white presence in the area. While not Chicago's finest district, Hyde Parkers considered their neighborhood the city's most culturally developed and intellectually rich, one that made a unique contribution to all Chicagoans' wellbeing in the form of its century-long tradition of social reform and progressive activism.²⁵

The University of Chicago—Hyde Park's biggest employer and largest landowner—was similarly committed to resisting the growing Black presence in its vicinity. From 1933 until their nullification by the Supreme Court in 1948, the university had spent \$83,600—nearly 1 million in today's dollars—supporting the racially restrictive covenants of local property owners. As much as residents of Hyde Park considered their neighborhood distinct in Chicago, the University of Chicago considered itself less an institution of higher education and more an academic community, painstakingly built over three-quarters of a century. Intellectual life was supposed to extend from campus into the adjoining residential neighborhoods, setting the University of Chicago apart from rival schools like Columbia University—institutions that began their lives as commuter colleges and never encouraged faculty to live locally. The collapse in the fraction of professors who called Hyde Park home from 90% to less than 70% in the years after the Second World War—and the anticipation that it would fall further still—was considered an existential threat.

²⁵ Muriel Beadle, "The Hyde Park-Kenwood Urban Renewal Years: A History to Date (University of Chicago Press, 1967), 4

²⁶ Hirsch, Making the Second Ghetto, 145

²⁷ Andrew Dolkart, Morningside Heights: A History of its Architecture and Development (New York: Columbia University Press), 160

²⁸ Beadle, The Hyde Park-Kenwood Urban Renewal Years, 6

3.2 Building the Compatible Environment

Today, in November of 1958, the atmosphere is remarkably different. The neighborhood has not only been saved, but it will soon be far better than it ever was...lis. On November 7th, 1958, the city council put the last legal approval on the so-called Hyde Park-Kenwood Urban Renewal Plan...The acceptance of our Urban Renewal plan is hailed as the first case of an urban neighborhood's being saved from becoming a slum.

—Sol Tax, 1959^{29}

We're Celebrating the reconstruction of Hyde Park...A huge community festival, including music, speeches and fireworks will celebrate the fact that construction is now in progression [on the] Hyde Park redevelopment projects...The program, on which Mayor Richard J. Daley will be the principal speaker, will be held at...55th st. and Lake Park ave., the site cleared for the 115,000 square foot shopping centered planned in connection with the housing project"

— The Chicago Land Clearance Commission, September 23rd, 1958³⁰

As the 1950s drew to a close, the mood among the white residents of Hyde Park bore little resemblance to the pessimism and gloom of the late 1940s. The sense that Hyde Park and Kenwood were in the early stages of an inevitable slide into slum and blight—one that would conclude with their destruction at the end of a bulldozer—was pervasive in the years following the War. But by 1958, there was growing confidence that control had been established over the urban fabric of the area.

Most Hyde Parkers at the time would argue that the tide began to turn on November 8th, 1949—a year after racial covenants were struck down in *Shelley v. Kraemer*, and coincidentally

³⁰ "We're Celebrating the Reconstruction of Hyde Park," Chicago Land Clearance Commission, September 23, 1958. Box 281, File 9, *Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960*, University of Chicago Special Collections

²⁹ Sol Tax, "Residential Integration: The Case of Hyde Park in Chicago," *Human Organization*, Vol. 18, No. 1 (Spring 1959): 22

the same night of the Englewood race riot—with the founding of the Hyde Park-Kenwood Community Conference. Intended to turn Hyde Park's long tradition of social activism and reform—traditionally oriented towards the city of Chicago at large—towards the neighborhood itself, its stated mission was the building of a racially mixed community (i.e., one that still had some white presence to speak of). This framing played well with Hyde Parkers' self-professed progressivism and the perception that the brutal segregationism of other neighborhoods had pushed Blacks into Hyde Park and Kenwood in the first place.

The University Administration would have likely pointed to a different event as pivotal in the preservation of Hyde Park: the creation of the South East Chicago Commission in 1952.³¹ In 1951 advocates for a more active response to the perceived decay of Hyde Park found themselves with an ally in the University President's office when Lawrence A. Kimpton replaced the (by then) inertial Robert M. Hutchins, who had served in the role since 1929. Kimpton entered office insistent that the university was in a fight for its very survival³² but considered the Hyde Park-Kenwood Community Conference incapable of reversing a racial succession process that the University of Chicago's sociologists argued was irreversible. Whatever its grassroots support among faculty members living in Hyde Park, the Community Conference lacked formal powers beyond suing landlords perceived to be creating slum conditions by spending too little on maintenance or splitting their properties into too many units.³³

Kimpton and his allies intended the South East Chicago Commission to be a blunt force, one capable of vigorously asserting the university's power in areas where the legal and community-based approach of the HPKCC had failed. Even though Kimpton served as its

³¹ Hirsch, *Making the Second Ghetto*, 152

³² "Chicago U. Spurs Renewal Project," New York Times, November 1, 1959

³³ Beadle, The Hyde Park-Kenwood Urban Renewal Years, 8

president, executive director Julian Levi was a University alumnus and brother of the Law School head, and the university provided one half of its \$30,000 operating budget in its first year³⁴—the SECC was a notionally independent community organization. It had been organized under state law provisions that granted it some formal powers if it received the consent of 60% of local property owners, convenient given the university's status as Hyde Park's largest single landholder.³⁵

Progressively, "technical and administrative work ordinarily the province of municipal agencies was taken over by the University, the [SECC], and the Planning Unit."³⁶ In 1954, two years after its creation, the SECC won approval for the clearance of 47 acres (known simply as "Areas B &B") in Hyde Park's north and east.³⁷ Soon after, the South West Hyde Park Neighborhood Redevelopment Corporation was organized by the university to engage in renewal activities between its western fringe and Jackson Park. And finally, in 1958, after years of studies, evaluations, and political debates, the SECC's general urban renewal plan for Hyde Park was accepted by the City Council. Of the 856 acres that comprised the area between 59th and 47th Street, from Cottage Grove Avenue to Lake Michigan, 106 acres were cleared. A grand total of 6,147 dwelling units were marked for demolition. Only 2,100 were constructed in their place.³⁸ Hyde Park's commercial heart along 55th Street, long derided as shabby, was demolished and replaced with a massive roundabout and shopping center.

3.3 Maintaining the Compatible Environment

³⁴ Hirsch, Making the Second Ghetto, 144

³⁵ Hirsch, Making the Second Ghetto, 159

³⁶ Hirsch, Making the Second Ghetto, 152

³⁷ "Here It Is: City Agency OK's Site; Plan Rolling," *Hyde Park Herald*, June 30th, 1954

³⁸ Hirsch, Making the Second Ghetto, 161

In the wake of the Hyde Park-Kenwood Urban Renewal Plan's acceptance and implementation, praise for the University of Chicago poured in. Hyde Park was held up as a national model, the first neighborhood to successfully resist racial succession, a community conserved and stabilized instead of demolished. The adulation was mostly focused on Julian Levi. ³⁹ Soon known across the country as "the slum fighter," ⁴⁰ his SECC had steadily muscled out the HPKCC, which by the late 1950s served primarily to "secur[e] the requisite public support for the SECC program" and grant it a progressive facade. ⁴¹

Levi did not rest on his laurels. While the faculty and the members of the HPKCC were happy to celebrate the creation of a "stable interracial community" and declared their goals largely met, Levi was convinced that the university's entanglement with the urban fabric of Hyde Park was just beginning. His 1959 speech at the Massachusetts Institute of Technology—used to open this paper—and the atypical degree of honesty deployed within was not incidental. Three days earlier, on July 7th, President Dwight Eisenhower had vetoed the Federal Housing Act of 1959. The bill—which Levi had lobbied ferociously for on behalf of a national coalition of universities—included Section 112, a provision that would have extended the power of eminent domain to urban institutions of higher education, along with a host of other "slum fighting" measures, formalizations of policies that Levi and president Kimpton had first implemented in Hyde Park. Hyde Park.

³⁹ "Chicago U. Spurs Renewal Project," *New York Times*, November 1, 1959

⁴⁰ Haar, *The City as Campus*, 65

⁴¹ Hirsch, *Making the Second Ghetto*, 152

⁴² Sol Tax, "Residential Integration: The Case of Hyde Park in Chicago," *Human Organization*, Vol. 18, No. 1 (Spring 1959): 24

⁴³ "Vetoes by President Dwight D. Eisenhower," United States Senate, https://www.senate.gov/legislative/vetoes/EisenhowerDD.htm

⁴⁴ Haar, *The City as Campus*, 65

By the late 1950s, dozens of urban institutions of higher education—such as Columbia in New York, Penn in Philadelphia, and Johns Hopkins in Baltimore—were gripped by the same panic that reigned in Hyde Park immediately following the Second World War. 45

The University of Chicago's campaign to maintain a compatible environment had been an enormously costly one, drawing tens of millions from the university's coffers. ⁴⁶ And while some state and federal money had been made available for the Urban Renewal Plan itself—as a consequence of its indirect implementation through the SECC—Levi knew that the bureaucratic and legal contrivances required to make it happen were beyond the capabilities of most American institutions of higher education. Legitimization on the federal level would allow for the generalization of the university's policies across the country. It also promised financial relief for the university, enabling it to sustain its interventions in South East Chicago's urban fabric and undertake them directly as an institution, instead of through intermediaries like the SECC.

The Federal Housing Act of 1959 would eventually pass in November (though not until overcoming a second veto), permanently inscribing into federal law the notion that universities had the right to remake their urban surroundings as they saw fit, especially if they identified obstacles to continued operations. Over the next two decades, tens of thousands of acres of urban land would be declared blighted, expropriated, and remade as higher education institutions saw fit—giving rise to "university communities" as they exist today.⁴⁷

⁴⁵ John L. Puckett and Mark Frazier Lloyd, "Penn's Great Expansion: Postwar Urban Renewal and the Alliance between Private Universities and the Public Sector," *The Pennsylvania Magazine of History and Biography*, Vol. 137, No. 4 (October 2013): 401

⁴⁶ Hirsch, Making the Second Ghetto, 147

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Section 4:

Literature Review and Historiography

Campus shuttle systems possess an array of characteristics that one would expect to be attractive to the scholarly eye. These include their operation by hundreds of American higher education institutions in a wide range of urban, rural, and suburban contexts. Their status as a particularist policy is unique to North America, 48 characterizing the iconic (and much better studied) American yellow school bus. 49

Despite this, campus shuttles have been the subject of vanishingly little academic research. Putting aside a handful of narrow, internally oriented reports, ⁵⁰ there appears to be only one formal, outwardly oriented comparative work on campus shuttles: a 2001 report from the Transit Cooperative Research Program, an initiative sponsored by the Federal Transit Administration. *Synthesis 78: Transit Systems in College and University Communities* documents the proliferation of campus shuttle systems in the decade following the Federal Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, which made a degree of federal funding available to support their operations. The report compares the systems of 30 universities—private and public, large and small, urban and rural—recording, among other things, the number and kinds of services offered, labor conditions and pay, capital expenditures by administrations, and general ridership. It finds that most campus shuttle systems date to the

⁴⁸ The American tendency to embrace highly targeted policies has been frequently contrasted with the universalist healthcare and welfare policies of Europe

⁴⁹ See: "The Yellow School Bus Industry," The National School Transportation Association, 2013, https://s3-us-west-2.amazonaws.com/nsta/6571/Yellow-School-Bus-Industry-White-Paper.pdf

1990s, and only a handful to the 1970s, making the University of Chicago's system (introduced in 1957) is one of, if not the oldest of its kind, in the United States.⁵¹

While *Transit Systems in University Communities* provided the grounds for a useful, albeit somewhat dated, comparative analysis, it is not without its limitations. By its own admission, it is meant to provide a basis for future scholarship, not make arguments of its own. No effort is made to place campus shuttles within a broader policy framework or situate them within the actions of institutions of higher education to shape the urban fabric around their campuses. Its failure to seed a significant scholarship in the 20 years following its publication means that situating the University of Chicago's UGo system within a dedicated campus shuttle literature is simply not possible.

4.1 University Implemented Urban Renewal Literature

In sharp contrast to campus shuttle systems, the past two decades have witnessed a sustained scholarship on the evolving, escalating, and active campaign of universities during the 20th century to ensure their surrounding urban fabric remained a "compatible environment" for continued operations. This literature is the outgrowth of a broader urban renewal scholarship, which came into its own in the 1980s.

Unquestionably, the seminal work of university-implemented renewal literature is Arnold Hirsch's *Making the Second Ghetto* (1983). Though technically an effort dedicated to urban renewal in Chicago at large—arguing that it served as America's national proving ground—Hirsch devotes particular attention to his own institution's interventions (the University of Chicago) in Hyde Park. Hirsch was not the first Chicago faculty member to compile the

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university's urban renewal campaign history. Still, he was the first to do so from an external, critical perspective. During the 1950s and 60s, community members such as Professor Sol Tax and Muriel Beadle⁵² wrote extensively in their dual capacity as University faculty intellectualizing about urban renewal and Hyde Park residents agitating for its implementation.

The new millennium would bear witness to a wave of scholarship building off Hirsch's foundation in the 1980s, deepening his analysis and training in specifically on the role of higher education institutions within urban renewal—and the University of Chicago in particular. The work within this scholarly sub-field which has proven essential to the study of the University of Chicago's campus shuttle system is *Sharon Haar's The City as Campus: Urbanism and Higher Education in Chicago* (2011). Though it splits its time between a number of Chicago institutions of higher education, Haar's work has proven particularly invaluable in understanding the faculty and administration's apocalyptic mindset in the years following the Second World War. Haar draws a through line between the University of Chicago's status as the home of America's first school of urban sociology and the fact that it would become America's first urban renewal university.⁵³

Haar places particular emphasis on the theory of "neighborhood succession," a conception of urban change first developed at the School of Sociology at the University of Chicago in the 1920s. Combining their field observations with the theory of ecological succession being developed in the University of Chicago's Biology department—wherein the impact of established organisms on their environment paves the way for future inhabitants—the

⁵² Wife of university president George W. Beadle, who succeeded Lawrence A. Kimpton in the role in 1960

⁵³ Haar, City as Campus, 41

university's sociologists began to conceive of urban growth and decline as a series of defined stages, each of which laid the groundwork for the next.

"Blight" was a particularly pernicious concept in the framework of neighborhood succession. It was thought that even the smallest decline in "neighborhood character" would inevitably put into motion a self-perpetuating cycle of urban decay, as wealthy residents (implicitly white people) moved out and more members of blight-producing classes and ethnicities (implicitly black people) moved in. Ultimately, Haar argues, the theory of neighborhood succession was responsible for the conviction of figures like Julian Levi and President Kimpton. In the wake of the expansion of the Black Belt—they believed wholeheartedly that the area around the university would inevitably become a slum. They also thought that this natural trend could be arrested through sufficiently aggressive interventions. The desperation of the struggle, and the administration's willingness to act ahead of federal policy, was the product of the belief that if the University of Chicago were to continue to exist in Hyde Park, it would have to viciously fight against the forces of urban change that its scholars had identified as inevitable.⁵⁴

In addition to deepening the University of Chicago's own urban renewal story, recent scholarship has helped to establish the extent of the university's influence on the urban policies of other American institutions of higher education. John L. Puckett and Mark Frazier Lloyd, in their work on the University of Pennsylvania (2013, 2015), argue that the interventions the University of Chicago pioneered in Hyde Park were consciously copied by Penn. ⁵⁵ They also document how the University of Pennsylvania—and other urban institutions of higher

⁵⁴ Haar, City as Campus, 65

⁵⁵ John L. Puckett and Mark Frazier Lloyd, "Penn's Great Expansion: Postwar Urban Renewal and the Alliance between Private Universities and the Public Sector," The Pennsylvania Magazine of History and Biography, Vol. 137, No. 4 (October 2013): 402

education—directly supported the University of Chicago's congressional lobbying campaign in the hopes of being able to replicate its policies.⁵⁶

These generalized historical works have been joined by a set of papers dedicated to individual policies put in place by the University of Chicago. These include Joseph K. Hoereth, Dwan Packnett, and David C. Perry's 2007 examination of the university's employer-assisted housing scheme (which they frame explicitly as a continuation of urban renewal)⁵⁷; the 2017 paper of Paul Heaton, Priscillia Hunt, John MacDonald, and Jessica Saunders, dedicated to the spatial impacts of the university's private police force (the UCPD)⁵⁸; and David Belden's 2017 Dissertation exploring the university's impact on the public education system of Hyde Park and Kenwood.⁵⁹

4.2 A Third Urban Renewal Policy Category

The wealth of secondary sources dedicated to the University of Chicago's history of urban renewal poses a challenge to this paper's attempt to include the university's campus shuttle system among the policies it employed to maintain a compatible environment in Hyde Park.

Why have scholars seen fit to implicate policies as granular as the university's charter school and private police force, but not the university's shuttle system?

⁵⁶ John L. Puckett and Mark Frazier Lloyd, "Penn's Great Expansion: Postwar Urban Renewal and the Alliance between Private Universities and the Public Sector," The Pennsylvania Magazine of History and Biography, Vol. 137, No. 4 (October 2013): 416

⁵⁷ Joseph K. Hoereth, Dwan Packnett and David C. Perry, "University Employer Assisted Housing: Case Study—University of Chicago," Lincoln Institute of Land Policy (January 2007): 19

⁵⁸ Paul Heaton, Priscillia Hunt, John MacDonald and Jessica Saunders, "The Short- and Long-Run Effects of Private Law Enforcement: Evidence from University Police," Journal of Law and Economics, vol. 59 (November 2016): 889-912

⁵⁹ David Belden, "Urban Renewal and the Role of the University of Chicago in the Neighborhoods of Hyde Park and Kenwood." DePaul University, College of Education Theses and Dissertations (2017), https://core.ac.uk/download/pdf/232976495.pdf

While this could be waived away as a consequence of the relative recency of studies on university-implemented urban renewal (which indeed came into its own only in the past two decades), a better explanation exists. The policies scholars have so far identified with the University of Chicago's urban renewal efforts can be divided into two broad categories: transformative policies (i.e., charter schools for incumbent residents) meant to remake the incompatible environment around university campuses, and isolating policies (i.e., the UCPD) meant to contain incompatible areas by physically segregating them from the university. The 1958 Urban Renewal Plan can be considered to exhibit elements of both; demolishing the blighted areas of Hyde Park and Kenwood while establishing a buffer against the even more incompatible Black Belt.

The university's campus shuttle system, by contrast, can be considered a third policy thread, meant not to contain or remake neighborhoods the university conceived of as incompatible but to bypass them. An extensive transportation system only available to university community members created a selective permeability of space. This parallel geography allowed students living off-campus to commute rapidly to and from campus without having to interact with incompatible incumbents, who were denied this enhanced mobility.

Section 5:

Archival Evidence and Qualitative Methods

Due to the absence of any previously compiled history of the University of Chicago's campus shuttle system—and the near-total lack of secondary sources dedicated to campus shuttle systems more generally—this project has been highly dependent on primary source evidence.

Archival research—digital and later physical—was needed to establish basic facts, such as when the system was introduced. This had to be done before any attempt to establish the motives behind the shuttles' introduction. 60

The first phase of research targeted the digitized archives of University of Chicago's campus publications. ⁶¹ A text-searchable, digitized archive of the print publications regularly published by both the student body and the administration, some dating back to the inception of the university in 1891, Campus Publications is dedicated to "official administrative policies and reports as well as general news and feature stories describing activities of faculty, students, alumni, trustees, donors, and friends of the University." ⁶² Within its corpus, one can find the scanned print or microfilm copies of the University of Chicago Magazine, University Record, quarterly calendar, and year (Cap and Gown). The single most prominent feature—and the most significant in the context of this project—are 7,316 issues of the *Chicago Maroon*, the

⁶⁰ When I embarked on this project in the spring of 2020, there was no guarantee that the system's history extended back into the urban renewal era. For all I knew, the UGo system was a modern creation. It took several weeks' research to discover that not only did the shuttle system's operation extend well into the 20th century, and several more to find that they were actually introduced in advance of the 1958 urban renewal plan.

⁶¹ Admittedly, this choice was not entirely voluntary. As a consequence of the exigencies of the COVID-19 pandemic, access to physical archives extremely limited, and took many months to acquire

⁶² See: https://www.lib.uchicago.edu/collex/collections/university-chicago-campus-publications/

university's official student newspaper, which cover a period from the beginning of publication in 1900 to the late 1980s.⁶³

Campus publications provided a comprehensive look at the public face of the UC Bus system. The Maroon was the medium the administration used to announce the system in 1957 and the place where it chose to communicate service changes. It was also the site of a large number of student editorials and articles detailing the system's student experience. However, while digital research in Campus Publications was an effective means to establish the basic timeline of the system, the opinions of riders, and the public face the system's administrators sought to present to the university community, these archival records provided no insights into the operation of the system itself or the motives behind its introduction.

Answering these more fundamental questions required a second round of research, targeting the archived administrative records. Housed in the Hanna Holborn Gray Special Collections Research Center, the university's internal documentation has been compiled with particular diligence. Over four visits, ⁶⁴ I photographed approximately 1,500 physical pages of administrative records—including memos, letters between University officials, financial reports, contracts with outside vendors, and even a handful of plans commissioned by consultants—dating to 24 years between 1951 and 1975. The records' organizational scheme (arrayed around the terms of the three university presidents of that period, ⁶⁵ not the two serving business managers) posed a minor challenge. Still, the effort nevertheless bore fruit and provided a clear look into the decision-making process of the men who created the UC bus system and operated it

⁶³ See: https://campub.lib.uchicago.edu/search/?text=&text-field=text&text-join=&text-prox=&text-exclude=&year= &year -max=&f13-title=Daily+Maroon&smode=advanced

⁶⁴ Conducted on January 22nd, February 25th, March 11th and March 12th of 2021

⁶⁵ Lawrence A. Kimpton (1951-1960), George W. Beadle (1961-1968), and Edward H. Levi (1968-1975)

during its first decade and a half of service. 66 The records of the Kimpton Administration—which covered both the peak of the university's urban renewal era and the shuttle system's introduction—were a particular focus and were the subject of approximately half of all research time.

Cumulatively, these two lines of research have produced three significant qualitative findings. First, over the 15 years that followed its introduction in 1957, the UC bus underwent a radical spatial and temporal expansion, growing from a single station wagon (confined to campus and running only during rush hours) to a multi-route network that employed school buses and vans, operated 18 hours a day, and extended many miles beyond campus—possessing most of the features of the current UGo shuttle system. Second, the UC bus was first introduced by the university administration, not as a mechanism of urban renewal or in response to pressure from the university community, but as a reprieve to a sharp parking shortage caused by the growing number of professors commuting to work by car from the suburbs because of the perceived decay of Hyde Park. Third, the expansion of the shuttle system off-campus occurred in response

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⁶⁶ The archived administrative records explored and photographed in the course of this research effort include: From the records of the Kimpton Administration:

Box 247 (Folder 1-2): Transportation of staff and students, bus service, 1954-1960

Box 247 (Folder 3): Travel expenses, regulations concerning, 1955-1960

Box 281 (Folder 7): Urban renewal, Hyde Park-Kenwood, New York Times article, 1959

Box 281 (Folder 8-9): Urban renewal, Hyde Park-Kenwood, projects A and B, 1953-1958

Box 281 (Folder 10): Urban renewal, Hyde Park-Kenwood, proposed ordinance, 1958

Box 281 (Folder 11): Urban renewal, Hyde Park-Kenwood, public relations luncheon, 1959

Box 281 (Folder 14): Urban renewal, Hyde Park transportation, 1959

Box 246 (Folder 13): "A Traffic Plan for the Hyde Park-Kenwood Area," by George W. Barton and Associates, 1955

Box 196 (Folder 5-9): Parking, 1951-1960

Box 56 (Folder 7-8): Business Manager, Campus Operations, 1951-1954

From the records of the Beadle Administration:

Box 70 (Folder 5): Business Manager, Campus Operations, Office of, 1963-1968

Box 328 (Folder 7-9): Transportation of staff and students, bus service, 1961-1968 From the records of the Levi Administration:

Box 325 (Folder 1): Transportation of staff and students, bus service, 1968-1975 The full collections of photographs can be found with the following link: https://drive.google.com/drive/folders/1dqBhnI7fytNW7nydSeaP0Fjpb7hJPX5r?usp=sharing

to pressure placed on the administration by two distinct constituencies within the university community: the faculty (on whose behalf the university's 1950s urban renewal campaigns had been waged) and the student body (which would be the impetus for the university's continued involvement in the urban fabric around its campus during the 1960s and beyond).

Section 6:

Qualitative Findings

The UC Bus began service on February 4th, 1957, less than two weeks after business manager Weston L. Krogman placed his article in the Maroon. Fares were set to \$0.05, a fifth of the price of a ride on a municipally operated bus, ⁶⁷ and tickets could only be purchased with a university-issued ID at one of five locations, all on campus. Drivers were strictly forbidden from taking cash. Consisting of a single station wagon—running a loop on 57th and 59th Street between Cottage Grove Avenue on the west side of the University of Chicago campus and Illinois Central (now Metra Electric) on its east side—the service introduced by Krogman bore little resemblance to the multi-tendrilled UGo system of 2021. ⁶⁸

⁶⁷ "A Brief History of Chicago Surface Lines," Chicagobus.org, https://www.chicagobus.org/history

⁶⁸ "Tickets Now on Sale," *Chicago Maroon*, February 1, 1957, 3

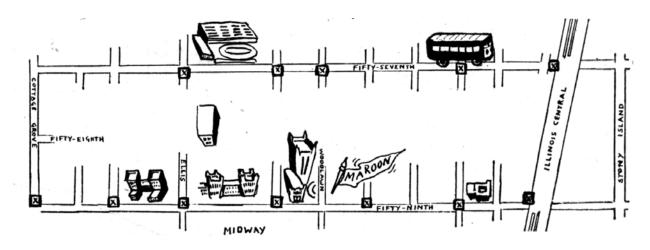


Figure 1: The initial service map, published in the Maroon⁶⁹

Despite its barebones beginnings, the popularity of UC Bus was immediately evident. By April, ridership approached more than 1,000 passengers per week. ⁷⁰ On May 3rd, Krogman announced that the 7:30 to 10:00 am and 3:30 to 11:30 pm rush hour service pattern was filled in, ⁷¹ replaced by a continuous operation from 7:30 in the morning to 10:45 in the evening. ⁷² Finally, on June 7th, days before the school year's conclusion, the lone station wagon was replaced by a proper school bus, with enough room for 40 students. ⁷³

The following year of operation was comparatively uneventful. Ridership rose steadily, hitting nearly 2,000 passengers a week by January of 1958.⁷⁴ In September of 1958, a year and a

⁶⁹ Ronald J. Grossman "Bus Service Initiated to Campus Area; No More Hiking From IC or CTA Stops," *Chicago Maroon*, January 25, 1957, 1

^{70 &}quot;Campus Bus Service Passengers Carried" Weston L. Krogman writing to William. B. Harrell, April 8, 1957.
Box 247, File 2, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

⁷¹ "University Bus Service, Hours of Operation" Weston L. Krogman writing to William. B. Harrell, April 26, 1957. Box 247, File 1, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

^{72 &}quot;Campus Bus to Begin Running Continuously," Chicago Maroon, May 3, 1957, 3

^{73 &}quot;School Bus Appears," Chicago Maroon, June 7, 1957, 11

⁷⁴ "Campus Bus Service Memorandum" Weston L. Krogman writing to William. B. Harrel, December 30, 1960. Box 247, File 1, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

half after Krogman's initial announcement, he stated that a North-South route would be joining the original East-West one the 22nd of that month (and fares would rise to \$0.10). Running on Woodlawn Avenue from 59th Street to 48th Street, the North-South UC Bus route extended almost a mile beyond the northern border of the University of Chicago's campus, in sharp contrast to its less geographically extensive East-West predecessor. He would also make use of a full, 60-person bus, an upgrade that would also be applied to the East-West route. In October of 1959, fares were increased from 10 to 15 cents in the hopes of closing the system's persistent operating deficit. However, after a sharp drop in ridership from 96,375 passengers in the 1958-1959 school year to 80,240 passengers in 1959-1960, the price hike was reversed. The next five years of the UC Bus' history would be marked by few significant changes, the sole exception being a 1963 shift of the east-bound section of the E-W Route one block north to 56th Street, to "avoid heavy traffic" on 57th Street.

⁷⁵ "U-CTA Extends Its Operations," *University of Chicago Magazine*, October, 1958, 22

⁷⁶ "New campus bus added for UC north-south route," *Chicago Maroon*, October 3, 1958, 1

⁷⁷"Transportation Service for University Personnel" Weston L. Krogman writing to Chicago School Transit, Inc, September 5, 1958. Box 247, File 1, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

⁷⁸ "Bus Fares Increase," *Chicago Maroon*, October 2, 1959, 28

⁷⁹"Campus Bus Service Memorandum" Weston L. Krogman writing to William. B. Harrel, December 30, 1960. Box 247, File 1, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

^{80 &}quot;New Campus Bus Routes," *Chicago Maroon*, October 8, 1963, 7

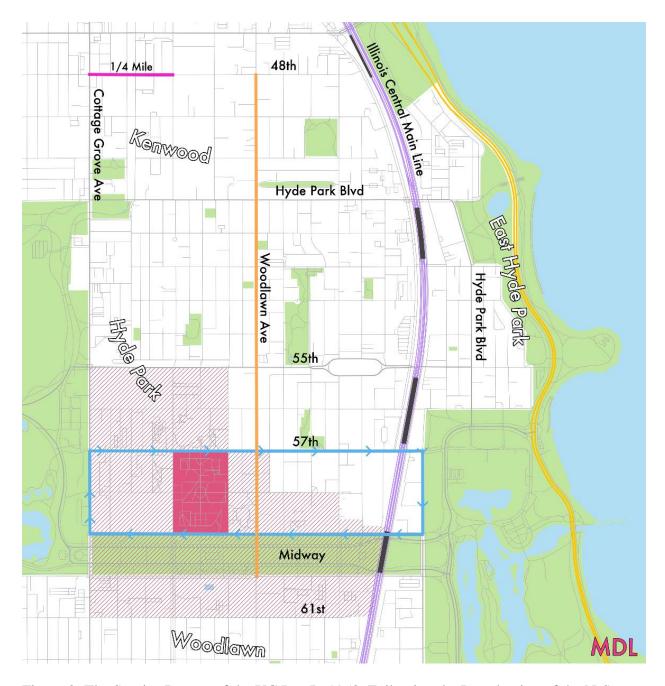


Figure 2: The Service Pattern of the UC Bus In 1958, Following the Introduction of the N-S Route.

In 1965, Weston L. Krogman retired from his position as business manager. ⁸¹ By 1967, his successor in the role, E. L. Miller, would introduce a series of dramatic changes. These would include the adoption of simplified route names ("E" and "N" in place of East-West and North-South), the restoration of the "E" to 57th Street, and a complete overhaul of the service pattern (the extension of the "E" northeast to East Hyde Park and the disaggregation of N Route's two-way run on Woodlawn Avenue into a loop, with a north-running section on Ellis and a south-running section on Dorchester). ⁸² A third route (the "R") linking the dormitories was tested but quickly abandoned. ⁸³ A more permanent addition would come in the form of the "C"—a free combined evening service that took over the duties of the "E" and "N" from 5:30 until 11:30 pm—and the "S," a new commuter route that extended two miles southeast to the neighborhood of South Shore, an area (unlike Kenwood and East Hyde Park) not traditionally affiliated with the university.

Despite fares rising once more to 15 cents (and up to 25 cents for the bus to South Shore) in the 1967-1968 school year, the UC Bus system carried a quarter of a million passengers, enough to warrant increasing the number of school buses contracted by the university from six to eight. 84 The Miller era's last significant change would take the form of a trio of free nighttime "minibus" routes. Introduced in 1971, they centered on the newly completed Regenstein Library

^{81 &}quot;Alumni News: Weston L. Krogman," University of Chicago Magazine, December, 1965, 28

⁸² E.L. Miller "Summer Service," *Chicago Maroon*, July 14, 1967, 8

⁸³ "Campus Bus" R. H. Wade writing to E. L. Miller, August 4, 1967. Box 328, File 7, Guide to the University of Chicago Office of the President, Beadle Administration Records 1916-1968, University of Chicago Special Collections

^{84 &}quot;Orientation Supplement: University of Chicago Campus Bus Service," Daily Maroon, September 27, 1968, 4

on the north side of campus, connecting to the university's scattered student dorms.

Supplementing the "C," the minibuses soon had their operating hours extended to 2:00 am. 85

With the introduction of the minibuses and post-midnight service, the UC Bus would come to exhibit far more similarity to its contemporary counterpart than to the single looping station wagon introduced by Krogman in 1957. The features shared by UGo and the UC Bus of the mid-1970s include distinct daytime and nighttime service patterns with multiple routes, free service (though only at night for the UC Bus; daytime bus fares were 15 to 25 cents⁸⁶), and routes that reached far beyond campus into the neighborhoods adjoining Hyde Park (Kenwood and South Shore in the case of the UC Bus and Kenwood and Woodlawn in the case of UGo). The mix of vans and 60-person school buses operated by Miller even neatly bracket the 25-person shuttle buses of the UGo system in size.

⁸⁵ "New Evening Minibus," University of Chicago Office of Public Relations, November 8, 1971. Box 325, File 1, Guide to the University of Chicago Office of the President, Levi Administration Records 1918-1975, University of Chicago Special Collections

⁸⁶ Only a fraction regular, 45 cent CTA bus fare

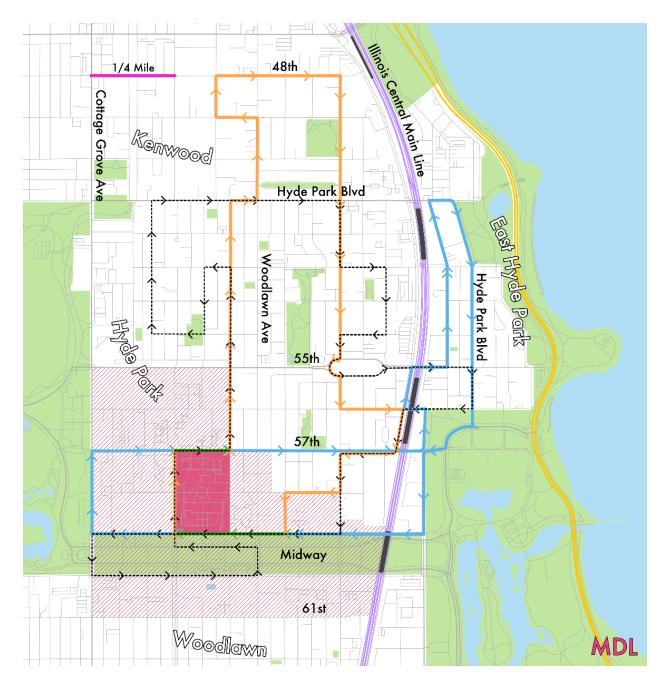


Figure 3: The Service Pattern in 1967, Following the Introduction of the "C" Evening Route

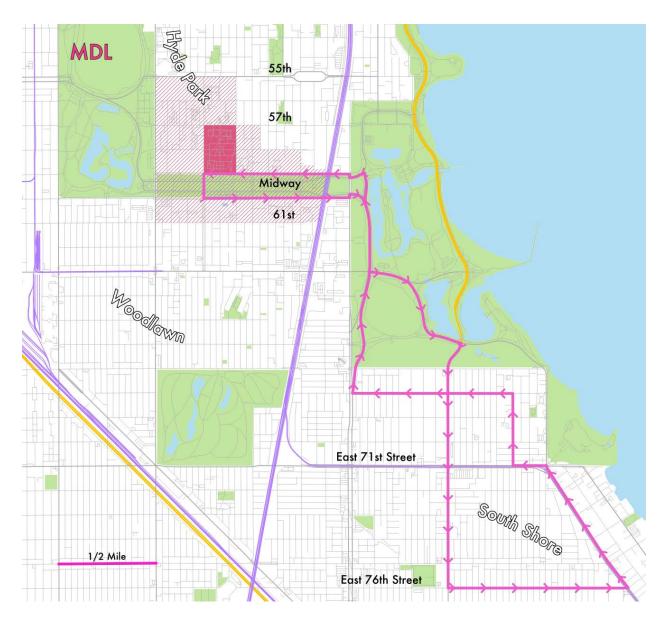


Figure 4: Map of the South Shore Commuter Bus, Introduced in 1967

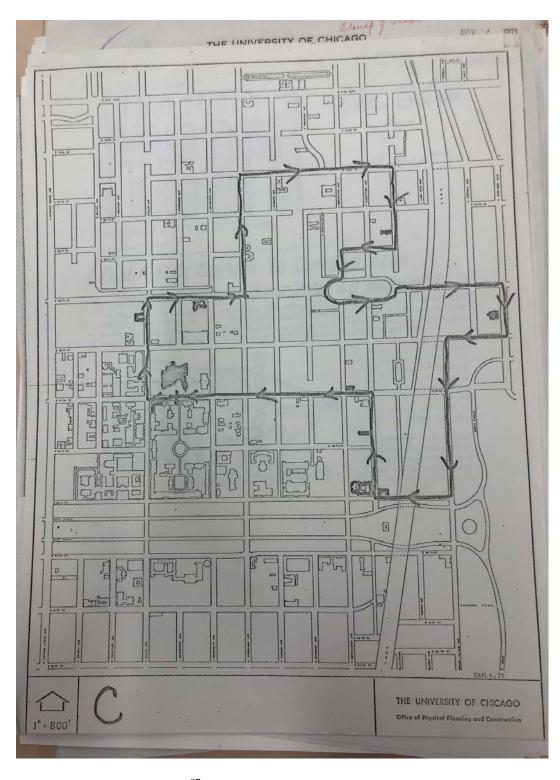


Figure 5: The "C" Minibus⁸⁷

⁸⁷ Box 325, File 1, Guide to the University of Chicago Office of the President, Levi Administration Records 1918-1975, University of Chicago Special Collections

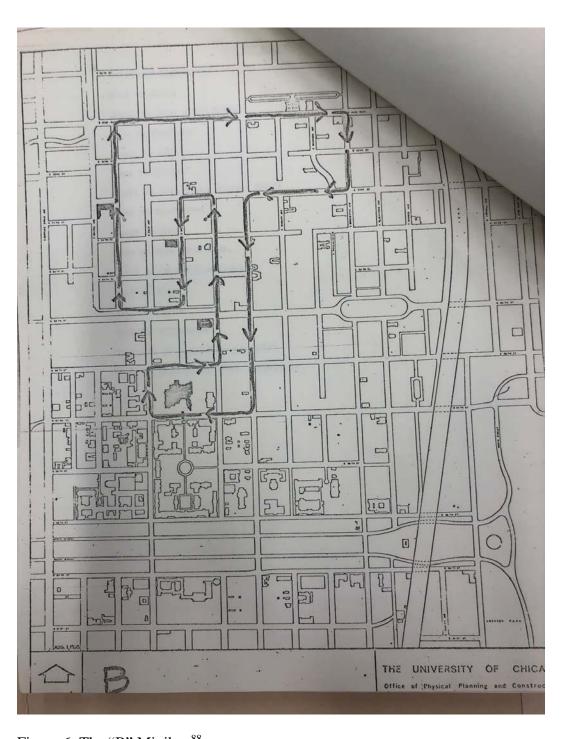


Figure 6: The "B" Minibus⁸⁸

⁸⁸ Box 325, File 1, Guide to the University of Chicago Office of the President, Levi Administration Records 1918-1975, University of Chicago Special Collections

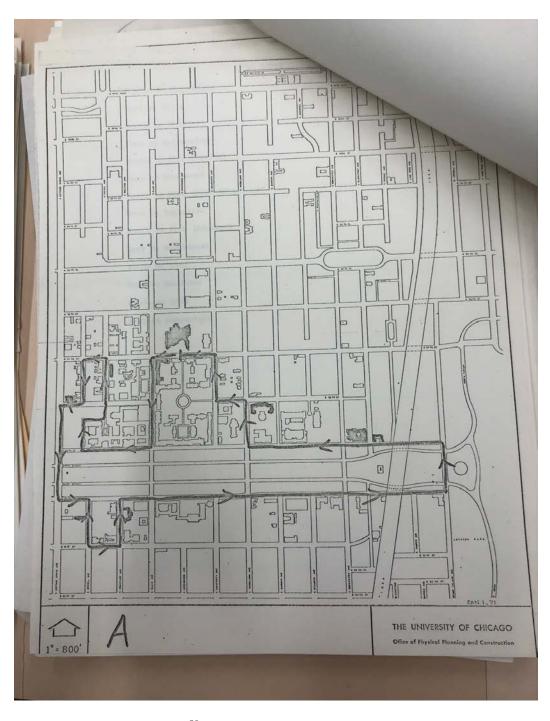


Figure 7: The "A" Minibus⁸⁹

⁸⁹ Box 325, File 1, Guide to the University of Chicago Office of the President, Levi Administration Records 1918-1975, University of Chicago Special Collections

The steady spatial and temporal expansion of the UC Bus in the decade between 1957 and 1967 belies a far more complicated history. Over ten years, the shuttle system's expansions were completed on behalf of three distinct constituencies within the University community. Primary source evidence suggests that the administration first introduced the UC Bus as a stop-gap measure to reduce the demand for parking and provide better connections to off-campus lots instead of an urban renewal mechanism to head off suburban commutes in the first place. By contrast, the subsequent extension into Kenwood was done at the behest of the faculty, while the introduction of nighttime service and the route down to South Shore were the results of a campaign among the student body. Whatever the administration's intention, it is on behalf of these latter two constituencies that the shuttles began running through neighborhoods where the majority of the inhabitants could not join University riders, establishing a selective permeability of space.

6.2: The Administration

"The parking problem no doubt is a great plague to you. I expect it will continue to be an even greater problem than it is now...Prevention of parking within the Inner Quadrangle near Harper Demands firmer measures. In spite of the large sign in front of the entrance to the Quadrangle, cars enter and park on the sidewalks. These are obstructed and Pedestrians must walk on the grass...Most of the offenders are Law students and faculty"

—Norton Ginsburg, Assistant Dean of Social Sciences, writing to Superintendent Zellner, Department of Buildings and Grounds, October 4th, 1954⁹⁰

For the university as a whole, the growing number of professors decamping for the suburbs in the late 1940s and early 1950s in the face of the perceived urban decay of Hyde Park

⁹⁰ 'Parking on the Campus' Norton Ginsburg writing to Superintendent Zellner, October 4, 1954. Box 196, File 5, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1999, University of Chicago Special Collections

and its adjoining neighborhoods was an existential threat to its status as a coherent academic community. But for business manager Weston L. Krogman, it was the source of a far more practical and pressing concern: where on earth was everyone going to park?

In contrast to the period after its introduction, records pertaining to the UC Bus's earliest days are incredibly thin. The archived documents that do survive paint a picture of a policy that came together in only a couple of months, with no advanced consultation among would-be riders. This was a program created almost entirely on the whim of a small cadre of university officials, not in response to a general demand among the faculty or student body, but in the hopes of solving a problem that had dogged the administration for the better part of a decade: parking.

The earliest surviving reference to the possibility of a university-operated shuttle system dates to September 25th, 1956. Three months before operations began, Howard H. Moore (a lawyer for the administration) wrote a letter in response to an inquiry made by Fred Bjorling (the chief of personnel) regarding the legality of employers providing transportation for their employees. ⁹¹ The next reference to the UC bus is a briefing sent by Bjorling and Krogman to William B. Harrell, the vice president for business affairs, on January 14th, 1957. ⁹² This document, drawn up less than three weeks before operations began, details the advanced state of preparations. The contract was due to be sent to Chicago School Transportation Inc., the company tendered to operate the service. ⁹³ A set of documents by Krogman describing final

⁹¹ "Transportation of Employees and Students" Howard H. Moore writing to Fred D. Bjorling, September 25, 1956. Box 247, File 1, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

⁹²"Proposed University Private Bus Service" Weston L. Krogman and Fred D. Bjorling writing to William. B. Harrell, January 14, 1957. Box 247, File 1, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

^{93 &}quot;Copy of Letter of Contract with Chicago School Transit" Weston L. Krogman writing to William. B. Harrell, January 30, 1957. Box 247, File 1, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

preparations—including the penning of the article to be published in the Maroon⁹⁴—and another legal notice sent by Moore⁹⁵ are the only other documents that appear in the archive until the debut of the shuttle system just weeks later, on February 4th.

Krogman seems an unlikely candidate for the introduction and operation of the University of Chicago's campus shuttle system. As business manager for campus operations, he was responsible for a broad portfolio pertaining to campus life's physical infrastructure. Policies as granular as the hours for student-run coffee shops, ⁹⁶ the rates for dormitory housing, ⁹⁷ fixing furnishing damaged by students, flood and fire repairs, ⁹⁸ and banning smoking in classrooms all ran through his office. ⁹⁹ However, as the 1950s progressed, Krogman would be drawn into transportation by parking problems.

Krogman's first tangle with the university's parking problems came in 1951. In March of that year, a series of entreaties was sent from staff and faculty at the University Hospital to James A. Cunningham (the Vice President in charge of Business Affairs, and Krogman's direct superior) detailing the "ever increasing difficult problem of parking" and explaining that "the largest single complaint received from our patients has to do with the intolerable parking

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⁹⁴ "University Bus Service" Weston L. Krogman writing to William. B. Harrell, January 23, 1957. Box 247, File 1, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

^{95 &}quot;Transportation of Employees and Students" Howard H. Moore writing to Weston L. Krogman, January 25, 1957. Box 247, File 1, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

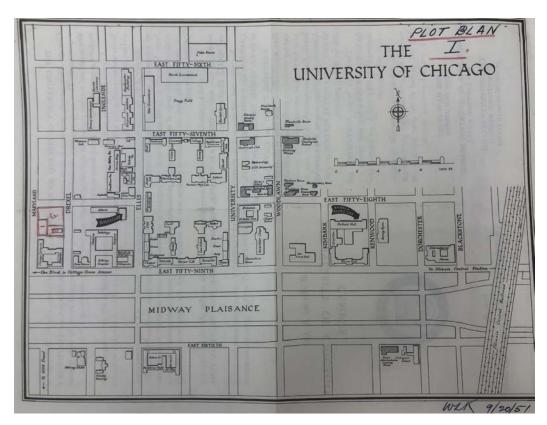
⁹⁶ "Keep C-shop hours," *Chicago Maroon*, April 17, 1953, 3

^{97 &}quot;Announced Rise in house rates," Chicago Maroon, April 11, 1958, 1

⁹⁸ Lylas E. Kay writing to Robert M. Strozier, February 24, 1953. Box 56, File 7, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

^{99 &}quot;UC Ban classroom smoking," Chicago Maroon, November 27, 1964, 1

situation."¹⁰⁰ By April 10th, Krogman had identified a parking site, ¹⁰¹ and by September 20th, a \$55,000 plan¹⁰² to build 280 spaces on a cluster of university-owned lots adjoining the hospitals had been drafted. ¹⁰³ Making way for the lots required the demolition of six buildings containing approximately 50 units of housing, a process Krogman also handled personally. ¹⁰⁴



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¹⁰⁰ "Parking Memorandum from Mr. Ray E. Brown" L. T. Coggeshall M. D. writing to James A. Cunningham, March 30, 1951. Box 196, File 5, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections.

¹⁰¹"Hospital Parking Problem" Mr. Donald W. Murphey writing to James A. Cunningham and Weston L. Krogman, April 10, 1951. Box 196, File 5, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections.

More than half a million, in today's dollars

¹⁰³"Automobile Parking Lot – 58th Street-Drexel to Maryland" Weston L. Krogman writing to James A. Cunningham, September 20, 1951. Box 196, File 5, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections.

Weston L. Krogman writing to James A. Cunningham, July 19, 1951. Box 196, File 5, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

Figure 8: The Maryland Avenue Parking Lot 105

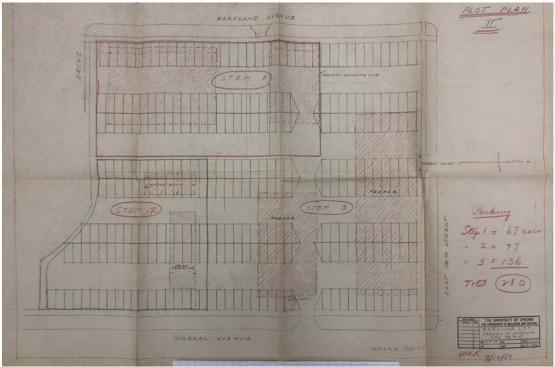


Figure 9: Plan for the Maryland Avenue Parking Lot 106

The parking crisis soon metastasized beyond the hospitals. The University of Chicago's campus—designed in the late 19th century—had been built around modes of transportation that did require on-site vehicle storage (walking, biking, the streetcars of the Chicago Surface Lines, the trains of the Illinois Central, etc.). However, the ever-larger share of faculty moving to the suburbs (in response to the expansion of the Black Belt and the perceived decay of Hyde Park) meant that by the mid-1950s, a "great plague" of automobiles was driving into campus every morning. 107 Faculty and grad student cars soon choked the campus, sidewalks, pedestrian paths,

¹⁰⁵ Box 196, File 5, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections.

¹⁰⁶ Box 196, File 5, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections.

¹⁰⁷ Parking on the Campus. Norton Ginsburg writing to Superintendent Zellner. October 4, 1954. University of Chicago Special Collections, Guide to the Lawrence A. Kimpton Papers 1890-2017, Box 196, File 5.

and even the quadrangles themselves (which became illegal, makeshift parking lots). The creation of a "Commuter's Council" and the organization of a carpool ring failed to rectify the problem. ¹⁰⁸ The university's involvement in creating federal housing standards that explicitly favored automobile-dependent suburbs came back to haunt it a generation later.

Krogman was called in again to confront the crisis. In 1956, the Department of Buildings and Grounds assembled a comprehensive report on the topography of parking on campus, counting 710 extant spaces and identifying 1,009 more that could be built—at an estimated cost of \$147,000¹⁰⁹—largely on scattered sites up to a half-mile removed from campus. Additionally, \$56,300 was set aside to upgrade 15 existing lots, with the money to be spent on "drainage, grading, lighting, bumpers, parking meters as required, signs, fences, gates and driveways as required."

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^{108 &}quot;Commuters Plan Carpool, Establish Message Center, 1955," *Chicago Maroon*, August 12, 1955, 8109 1.4 million in 2021 dollars

¹¹⁰ "Parking Lots: Preliminary Spaces provided and approximate costs," Department of Buildings and Grounds, August 28, 1956. Box 196, File 6, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-2014, University of Chicago Special Collections

¹¹¹ "Automobile Parking University Parking Area" Weston L. Krogman writing to William. B. Harrell, May 24, 1957. Box 196, File 6, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-2013, University of Chicago Special Collections

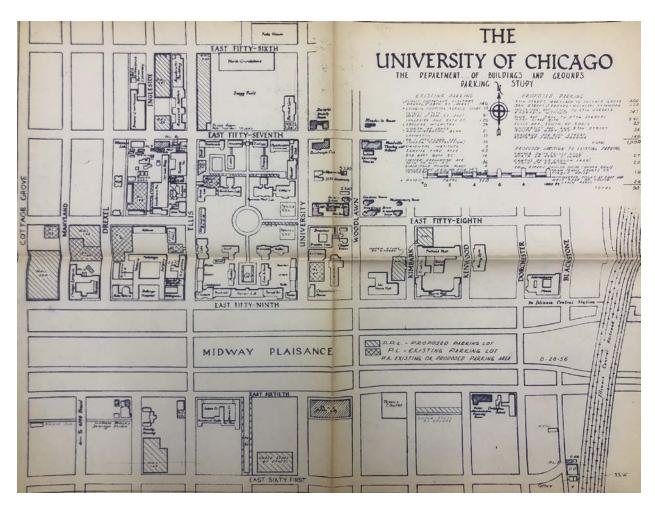


Figure 10: Map from the 1956 Department and Buildings and Grounds Parking Report 112

Ultimately, Krogman never states definitively that the parking problem was his motivation for introducing the UC system. Indeed, "the unbalance between supply and demand" for parking on campus would continue to dog Krogman until his retirement in 1965. 113 However,

¹¹² "Parking Lots: Preliminary Spaces provided and approximate costs," Department of Buildings and Grounds, August 28, 1956. Box 196, File 6, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-2014, University of Chicago Special Collections

¹¹³ "Reserved Parking Facilities on the Campus" Weston L. Krogman writing to William. B. Harrell, September 16, 1957. Box 196, File 6, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-2008, University of Chicago Special Collections

the absence of a "smoking gun" memo or letter is likely due in part to the extreme sparseness of early records on the system. Of the items in Krogman's portfolio—which was primarily oriented around the maintenance and operation of University facilities—parking is the only one directly addressed by the introduction of a shuttle system. By providing a quick connection to both the Illinois Central Railroad on the east side of campus and the newly built lots to the west, ¹¹⁴ the UC Bus could have reduced demand for parking on the quadrangles themselves, allowing Krogman and the Department of Buildings and Grounds to crack down harder on illicit parking. In October of 1957—the beginning of the academic year following the shuttle system's introduction—Krogman established the university's first system of parking permits ¹¹⁵ and fines. ¹¹⁶

6.3: Faculty

"I would like to urge that the university run a bus on Woodlawn between 47th street and 61st street, as it does on 57th and 59th streets. The main advantages to the university would be:

- (1) Increased safety for staff and students
- (2) Some relief of the parking problem around the campus"
- (3) Housing for students and staff to the north of the university would be more available and attractive"

—Professor Lloyd M. Kozloff writing to Weston L. Krogman, June 4th, 1958¹¹⁷

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¹¹⁴ "Proposed Improvements in the Parking Situation" Fred D. Bjorling writing to William. B. Harrell and Weston L. Krogman, June 25, 1957. Box 196, File 6, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-2012, University of Chicago Special Collections

^{115 &}quot;UC establishes traffic fines, paid reserved parking lots," Chicago Maroon, October 5, 1957, 1

¹¹⁶ The introduction of parking fees and fines actually caused a brief dust up with the University's staff. In an otherwise typical labor relations meeting, an employees union made clear to Krogman that it was "100% opposed" to the new system. Krogman charged ahead, over their objections. See "Labor-management meeting," Weston L. Krogman writing to William. B. Harrell, June 27, 1957. Box 196, File 6, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

¹¹⁷ Lloyd M. Kozloff writing to Weston L. Krogman, June 4, 1958. Box 247, File 2, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1980, University of Chicago Special Collections

"I speak for all the members of the committee in expressing our thanks to the University Administration for its prompt response to our suggestion and for the cooperation of your office in the arranging for the bus service...[it] has been of invaluable service to the many members of the university community living north of the University [and] an important factor in the selling of several houses in the Kenwood area to faculty members"

—Professor Kozloff writing to Krogman, March 25th, 1959¹¹⁸

The origins of the UC Bus as the cloistered project of a small group of university administrators would not characterize the rest of its operational history. Primary source evidence indicates that the decision to create the North-South UC Bus Route—extending the system deep into Kenwood, beyond the bounds of the campus for the first time—was done at the behest of a constituency that had first motivated the university's interventions in Hyde Park: the faculty.

In contrast to the original East-West UC Bus route—the product of processes so internal and insular that records of it don't appear until mere weeks before its premiere in February of 1957—the origins of the North-South route feature prominently in the archived administrative records housed in Special Collections. The earliest document detailing the lobbying effort that would culminate in the extension of the UC Bus to Kenwood in September of 1958 dates to nearly a year before: November 20th, 1957. On that day, the university's dean of students, John P. Netherton, sent a letter to the Vice President for Business Affairs, William B. Harrell (the direct superior of Weston L. Krogman and his most frequent interlocutor), detailing a recent meeting of the Hyde Park-Kenwood Community Conference. 119

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¹¹⁸ Lloyd M. Kozloff writing to Weston L. Krogman, March 25, 1959. Box 247, File 2, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1980, University of Chicago Special Collections

¹¹⁹ "Woodlawn Bus Line" John P. Netherton writing to William. B. Harrell, November 20, 1957. Box 247, File 2, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

Netherton claims that Director James Cunningham "strongly urges that university consider a Woodlawn bus line operating between 50th street and 59th street," on the advice of the Community Conference's tenant office, which believed that such a line would attract faculty to the area north of 55th street and "would greatly enhance the sense of safety of the 'Lab School' parents now living there." Netherton, for his part, suggests that if such a route were created, it should employ a university-owned parking lot at 6011-6027 Ingleside as a terminal, providing a convenient location to turn buses around, and linking a lot that "would otherwise be regarded as too far away from the campus."

A second, independent lobbying campaign by a group of Kenwood-residing University professors in the summer of 1958 appears to have been the critical element that convinced Krogman to introduce the route. On June 4th, Lloyd M. Kozloff, a biochemistry professor, wrote Krogman directly, urging him to "run a bus on Woodlawn between 47th and 61st streets, as [the University] does on 57th and 59th streets." He claimed that such a route would provide "increased safety for staff and students," enhanced access to "housing for students and faculty" on the periphery of Hyde Park and in adjoining neighborhoods, as well as "relief of the parking problem around campus." Kozloff insists that his proposal has the backing of Dr. Joseph Sittler (Theology), Dr. John Kenward (Pediatrics), and Professor Harry Kalven (Law School), his neighbors on Kimbark Avenue between 47th and 48th streets. They felt increasingly unsafe making the mile walk down to campus.

Over the following weeks, as Kozloff spread his proposal, an increasing number of faculty joined the lobbying effort. On June 12th, Ernest Beuler, a professor at the Medical School,

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¹²⁰ Lloyd M. Kozloff writing to Weston L. Krogman, June 4, 1958. Box 247, File 2, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

wrote Krogman, simply informing him that he supported the introduction of a Woodlawn bus. ¹²¹
And on June 11th, Dr. Joseph Sittler wrote Vice-Chancellor John I. Kirkpatrick, ¹²² inquiring whether "it [would] be possible for the University to operate a bus on Woodlawn Avenue between 47th and 61st streets," explaining that it was desired by "a number of us who are on the University staff [and] live in the area between 47th and 55th streets [because] larger families can get better houses there." The reasons Sittler provides—including "an increasing number of children from the area...are attending the [University's] Laboratory school," "parking is a headache for us, and for the University," and "it is unsafe to walk home through this area"—are near identical to those put forth by Kozloff in his June 4th letter. ¹²³ Kirkpatrick replied soon after, signaling his openness to the proposal and asking Sittler to contact Krogman, who he insists will be "will be glad to consult with any group as to the feasibility of certain plans and costs involved." ¹²⁴

This campaign's influence would be confirmed in the spring of 1959, six months after the introduction of the North-South UC Bus route in September of 1958. On March 17th, Krogman wrote to Kozloff, thanking him for "the interest and cooperation of you and your committee" in the UC Bus system. On the 25th, Kozloff sent a reply, expressing gratitude to Krogman for his "prompt response to our suggestion and for the cooperation of your office in the arranging for the

¹²¹ Ernest Beutler writing to Weston L. Krogman, June 12, 1958. Box 247, File 2, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

Joseph Sittler writing to John I. Kirkpatrick, June 11, 1958. Box 247, File 2, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections
 Joseph Sittler writing to John I. Kirkpatrick, June 11, 1958. Box 247, File 2, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections
 John I. Kirkpatrick writing to Joseph Sittler, June 26, 1958. Box 247, File 2, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections
 Weston L. Krogman writing to Lloyd M. Kozloff, March 17, 1959. Box 247, File 1, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

bus service," which has "been of invaluable service to the many members of the university community living north of the University" and, in Kozloff's estimation, "an important factor in the selling of several houses in the Kenwood area to faculty members." ¹²⁶

6.4: Students

In order to make Woodlawn and South Shore more desirable living places of students, the [student government's] resolution suggests the extension of the campus policy patrol into Woodlawn and the extension of the University bus service in to South Shore

— "SG considers UC, outside problems," Chicago Maroon, February 25th, 1966¹²⁷

Sublet with option to renew October 1st. One gigantic room in basement. Complete kitchen. Available June 15th. \$75/mo. In South Shore W. nearby campus bus (!!!) stop. MU 4-5949, evenings.

— "Sublet," Chicago Maroon, May 21st, 1969¹²⁸

While the administration first introduced the UC Bus, and its initial expansion offcampus was done at the behest of the faculty, as the 1950s gave way to the 1960s, a third constituency, often overlooked in urban renewal narratives, would emerge as the impetus for its continued expansion: the student body.

In many ways, the middle and late 1960s were defined by student-led social activism, and the student body at the University of Chicago was no exception. An escalating series of protests—against the Vietnam War and in favor of progressive social causes—culminated with a two-week occupation of the Administration Building by 400 students in November of 1968,

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¹²⁶ Lloyd M. Kozloff writing to Weston L. Krogman, March 25, 1959. Box 247, File 2, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

^{127 &}quot;SG considers UC, outside problems," Chicago Maroon, February 25th, 1966, 8

^{128 &}quot;Sublet," Chicago Maroon, May 21st, 1969, 8

following the termination of a left-wing professor. ¹²⁹ However, the shock and extreme visibility of the 1968 protests and occupation have perhaps served to conceal a more sustained and arguably more successful activist campaign amongst the student body, one in favor of intensifying the university's urban campaign renewal.

On April 29th, 1966, David Rosenberg—a University undergraduate and chair of a newly formed Student Government housing committee—published an open letter in the pages of the Maroon. Addressed to the Dean of Students, Warner A. Wick, the letter insisted that the university had "skirted its responsibility in not providing its students with adequate housing" and called for immediate action. In contrast to the many American institutions of higher education, which provided or even required four years of dormitory living, during the 20th century the roughly half of the University of Chicago undergraduate population lived "off-campus," in the townhouses and apartments of residential quarters adjoining the university.

In Rosenberg's estimation, the university's "stabilization" of Hyde Park, which had so effectively met faculty needs, had destabilized its housing model for students. The demolition of 6,500 units of housing as part of the Hyde Park-Kenwood Urban Renewal Plan, combined with increasing enrollment and the growing confidence that racial succession had successfully been averted in Hyde Park, produced fierce competition for off-campus housing, forcing undergraduates to live further from the Quadrangles. An accompanying editorial was even more strongly worded, stating that "problem of student housing...has reached...crisis proportions," and that "available off-campus apartment housing...has dwindled, quite predictably, as Hyde Park has

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¹²⁹ Supriya Sinhababu, "The sit-in: 40 years later," *Chicago Maroon*, December 2nd, 2008 https://www.chicagomaroon.com/2008/12/02/the-sit-in-40-years-later/

^{130 &}quot;Statement of Ad Hoc Committee on Student Housing," Chicago Maroon, April 29th, 1966, 8

become a desirable place to raise a family because of the success of University-sponsored urban renewal in the area." ¹³¹

Surprisingly, Rosenberg's solution to the student housing crunch was not less university involvement in its surrounding urban fabric but more of it, particularly in the neighborhoods to the south of Hyde Park that the university had written off entirely in the early 1950s. The demands included in Rosenberg's letter were extensive, ranging from more (and better) dorm constructions on campus to the purchase and renovation of existing housing stock in Hyde Park, the prompt replacement of structures razed as part of urban renewal efforts, and the establishment of a permanent staff position dedicated to improving undergraduate housing. A pair of specific requests joined these general policy requests: "the University must provide police protection in north Woodlawn" and "must provide campus bus service to South Shore." 132

Given that the administration famously defeated the 1968 occupation—which chose to simply wait it out instead of calling the police ¹³³—in 1966, Rosenberg and his committee were met with a surprising degree of deference. Rosenberg had argued his case carefully, basing his demands on the results of a student government housing questionnaire, which found that "many University girls will not live in Woodlawn for fear of inadequate police protection" ¹³⁴ and that "over 500 students are already living in South Shore...[and] the great drawback to South Shore is the lack of convenient transportation facilities to take students to and from campus." ¹³⁵
Rosenberg would repeatedly meet with members of the administration. And while major on-

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^{131 &}quot;Housing: The Time Has Come for Action," Chicago Maroon, April 29th, 1966, 7

^{132 &}quot;Statement of Ad Hoc Committee on Student Housing," Chicago Maroon, April 29th, 1966, 8

¹³³ Supriya Sinhababu, "The sit-in: 40 years later," *Chicago Maroon*, December 2nd, 2008 https://www.chicagomaroon.com/2008/12/02/the-sit-in-40-years-later/

^{134 &}quot;Statement of Ad Hoc Committee on Student Housing," Chicago Maroon, April 29th, 1966, 8

^{135 &}quot;SG Asks Bus Service for South Shore," Chicago Maroon, April 12th, 1966

campus dorm constructions would not resume until the early years of the 21st century, the committee's demands regarding the university's relationship to its adjoining neighborhoods would steadily be implemented. The first of these was the extension of the UC Bus to South Shore, which would occur a year later, at the beginning of the 1967-1968 school year. ¹³⁶

The student body took an interest in the UC Bus system's spatial expansion and its temporal growth. An October 21st, 1966 editorial in the Chicago Maroon identifies the "campus bus" as one of four facilities—the others being the coffee shop, the student club, and the library—that needed extended hours of operation to make the University of Chicago a "full-time campus." While it is unclear whether E. L. Miller was responding directly to these demands, a series of changes to nighttime services would occur in the years that followed, including a free nighttime combined route and, in the early 1970s, the three minibus routes centered on the Regenstein Library (described in Section 6.1).

6.5 Quantitative Archival Findings

Beyond allowing a detailed history of the University of Chicago's campus shuttle system to be assembled and serving as a mechanism by which the motivations behind the system's introduction, maintenance, and expansion can be assessed, the archives of the Department of Buildings and Grounds and the Office of Business Manager have proven to be invaluable sources of useful (albeit limited) data.

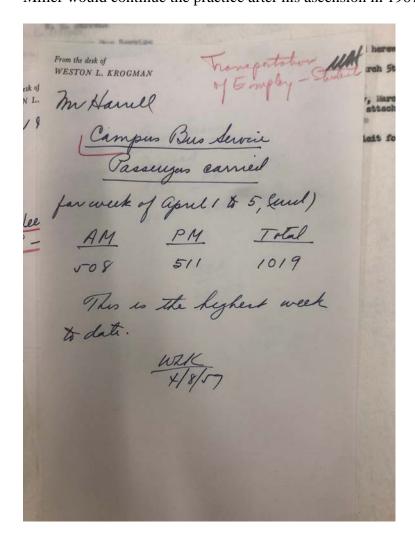
The single most crucial dataset derived from the documents housed in special collections details the system's ridership, fares, and financing. With the exception of the few months

¹³⁶ E.L. Miller "Summer Service," *Chicago Maroon*, July 14, 1967, 8

^{137 &}quot;C-Shop Reopening Should Point Way to Other Changes." Chicago Maroon, October 21, 1966

immediately following the introduction of the original East-West shuttle route, Krogman diligently sent ridership and expense reports to his superior, William B. Harrel.

The earliest surviving report takes the form of a hand-scrawled letter, sent on April 8th, ¹³⁸ although by July, they would evolve into formal memorandums. ¹³⁹ Similarly, Krogman initially reported his data with a weekly data scale before eventually settling on a monthly schedule. E. L. Miller would continue the practice after his ascension in 1967.



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¹³⁸ "Campus Bus Service Passengers Carried" Weston L. Krogman writing to William. B. Harrell, April 8, 1957.
Box 247, File 2, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1960, University of Chicago Special Collections

¹³⁹ "Campus Bus Service Memorandum" Weston L. Krogman writing to William. B. Harrel, December 29, 1960. Box 247, File 1, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1973, University of Chicago Special Collections

Figure 11: Krogman's First Ridership Report, April 8th, 1957¹⁴⁰

Hills I line	THE UNIVERSITY OF		
a Variable		DATE Decemb	per 29, 1960
re Mr. W. B. Marrell	DEPAR	TMENT Vice-Presiden	t - Business Affairs
IN ME Campus Bus Service	DEPAR	TMENT Business Mana	ger - Campus Operati
Summary report for five	month period Inte	20/0	
Total Passes	postou, July,	1900 through Nove	2000
TO OUT THEOMS	orth-South and East-	West 21	1,947 23,668
Total Expense		\$ 1	,770.62 \$ 3,513.90 .847.58 8,826.92
	Net Income	\$ 4	,076.96 \$ 5.313.024
Following is a report of ending November 30, 196	f operations of the E	last-West Campus Bu	S for the period
	I. Passenge	rs Carried	
July-Oct., 1960 Novemb			tal Total to Date
1-4	304	479 7	83
14-	18 405	645 1,0 618 1,0	
21-			44 65
12,701 *	1,664	2,587 4,2	51 16,952
*21 days of actual operation Average number of rides		mber, 19592	49
	Noven	ber, 19602	03
	II. Income and	Expense	
1. Income	July-Oct., 1960	November, 1960	Total
a. Ticket Sales	\$ 1,919.20	\$ 587.30	\$ 2,506.50
b. Gifts Total Income	-0-	\$ 587.30	\$ 2,506.50
2. Expense			2,000.00
a. Service Agreemen	t \$ 5,621.90	\$ 1,388.94	\$ 7,010.84
b. Printing Total Expens	62.58	\$ 1,388.94	62.58
Net Income	\$ 3,765.28**	\$ 801.64**	\$ 4,566.92**
			-
**Deficit	- 1		LIMI
WLK:job			was

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 ^{140 &}quot;Campus Bus Service Passengers Carried" Weston L. Krogman writing to William. B. Harrell, April 8, 1957.
 Box 247, File 2, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1989, University of Chicago Special Collections

Figure 12: A Later, Formalized Report, 1960¹⁴¹

	TY OF CHICAGO DATE November 15, 1965
To Mr. J. J. Ritterskamp	DEPARTMENT Vice President for Administration
FROM W. L. Krogman	
	DEPARTMENT Acting Business Manager-Campus Oper
IN RE: Campus Bus Service - Passengers	3 Camed
I think you will be interested : patronage of the bus services s: February, 1957:	in knowing the increase in ince its beginning in
1001 002 3 2771.	Passengers Carried
From February through June, 195	7 18,511
Fiscal year 1957-58	71,726
1958–59	96,375
1959-60	79,755
1960-61	69,224
1961–62	92,403
1962-63	110,269
1963-64	121,763
1964-65	136,425
	wax
	WMS
WLK: jak	

Figure 13: A Summary Report from 1965¹⁴²

¹⁴¹ "Campus Bus Service Memorandum" Weston L. Krogman writing to William. B. Harrel, December 29, 1960. Box 247, File 1, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1973, University of Chicago Special Collections

 ^{142 &}quot;Campus Bus Service - Passengers Carrier," Weston L. Krogman writing to Vice President for Administration J.
 J. Ritterskamp, November 15, 1965. Box 328, File 7, Guide to the University of Chicago Office of the President,
 Beadle Administration Records 1916-1968, University of Chicago Special Collections

Despite the unique circumstances of its creation and operation, the UC bus exhibited many of the behaviors of conventional, municipally operated transit systems, including price sensitivity and short-term inelasticity of demand. A rise in fares from 10 to 15 cents in 1959-1960 caused a significant decline in ridership after two months had elapsed. 143 Ultimately, the UC Bus system's continued deficits were tolerated well through the 1970s because it had become "a much needed internal service." 144

Although nearly two decades of financial and ridership reporting were photographed in the course of this project's primary source investigation, time constraints meant that only those pertaining to the first three years of operation could be fully transcribed.

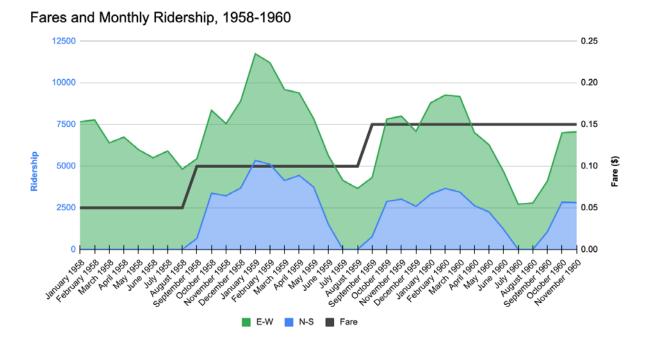


Figure 14: Fares and Monthly Ridership, 1958-1960

¹⁴³ "Campus Bus Service Memorandum" Weston L. Krogman writing to William. B. Harrel, December 29, 1960. Box 247, File 1, Guide to the University of Chicago Office of the President, Kimpton Administration Records 1892-1973, University of Chicago Special Collections

¹⁴⁴ Vice President for Business and Finance G. L. Lee Jr. Writing to E. L. Miller, August 7, 1970. Box 328, File 9, Guide to the University of Chicago Office of the President, Beadle Administration Records 1916-1968, University of Chicago Special Collections

Monthly Ridership and Revenue, 1958-1960

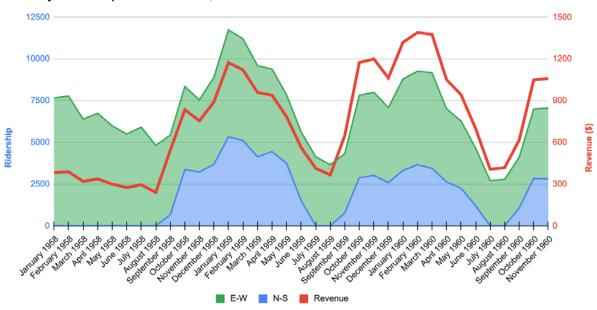


Figure 15: Revenue and Monthly Ridership, 1958-1960

Section 7:

Quantitative Methods

While the digitized archives of campus publications and the administration's physical archives have served as the methodological backbone of this project, the qualitative evidence and quantitative data derived from them are each marred by a significant flaw.

First, while the archive has served as an invaluable record of the constituencies lobbying the administration to expand the UC Bus, it provides no way to evaluate whether it had the effect they expected or claimed it to have. Based on archival evidence alone, Prof. Kozloff's claim that the introduction of the North-South bus route spurred more home sales to faculty in Kenwood, and David Rosenberg's insistence that a South Shore shuttle would make the area more desirable to students living off-campus, can only be taken at face value.

The quantitative data—ridership and financial reports—contained in the archive is marred by an altogether different shortcoming: de-spatialization. Despite its importance to contemporary (and period) transit planning, spatial data simply does not exist for the University of Chicago's campus shuttle system before the 21st century due to ticket sale restrictions to defined locations on campus. The ability for students to "beep" in with their University IDs is a relatively new one. Unlike Chicago's municipal buses and trains, where passengers paid at the stop or at the station, for more than half a century, it was only possible to ride the UC Bus with a ticket acquired on select sites on campus—including the Reynold's Club, bookstore, and bursar's office—and only after presenting a student or faculty ID. Bus drivers were explicitly prohibited from "accept[ing] cash or selling tickets," 145 a policy expressly intended to limit the use of the system to members of the University Community.

¹⁴⁵ "Tickets Now on Sale," *Chicago Maroon*, February 1, 1957, 3

A novel data-gathering technique—not traditionally employed in either the study of urban renewal or transportation policy—has allowed these flaws in the archive to be partially overcome: text mining. By comparing the evolving topography of addresses featured in Campus Publications over time to changes in the service pattern of the UC Bus, it has become possible to formally establish the spatial impact of the university's campus shuttle system and to test the claims and expectations of the constituencies that advocated for its expansion.

7.1: Advertisements

Like any other newspaper of the era, the *Chicago Maroon*—the University of Chicago's student paper—possessed a substantial classified advertisement section. A third or more of a typical issue was occupied by job, roommate and sublet postings, ¹⁴⁶ ads for apartments and businesses, or notices promoting events or student organizations. In the course of my research in the Campus Publications digital archive—in which the Maroon serves as the single most significant constituent part—these advertisements first seemed largely a nuisance. Articles and official announcements returned using search terms like "campus shuttle," "UC Bus," and "campus bus" were buried by dozens and sometimes hundreds of advertisements that listed their proximity to a shuttle stop as an amenity. ¹⁴⁷

As research progressed, the potential to use advertisements as a source of spatial data slowly became evident. In the era before free online mapping services (such as Google Maps),

¹⁴⁶ The University of Chicago, like many institutions of higher education closes its dorms during the summer. Students that live off campus who leave Chicago for the summer advertise in the hopes of attracting a temporary summertime tenant from the pool of students ejected from the dorms.

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¹⁴⁷ See: https://campub.lib.uchicago.edu/search/?keyword=UC+Bus

street addresses were included in advertisements as a matter of course. The advertisements placed in the Maroon were no exception.

As a student paper, the readership of the Maroon was, and still is, narrow, confined to the students, staff, and faculty at the University of Chicago. Hyde Park itself had its own paper, *The Herald*. Consequently, the decision by a business owner or landlord to pay for an advertisement in the pages of the Maroon—as opposed to any number of neighborhood or municipal papers with a broader readership—was significant, a sign that the location of that shop, apartment, job or organization was close to members of the university community who were willing and able to travel. Mapping the addresses featured in advertisements and the dates of their publication could provide a means to track the shifting frontier of the university community and how it changed in response to adjustments to the UC Bus system's service pattern.

7.2: Consultation

A preliminary attempt to make use of the addresses featured in advertisements — manually cataloging them in a spreadsheet as queries in Campus Publications dredged them up— was abandoned after several hundred entries on Professor Kevin Credit's advice. Putting aside the impossibly large scale of the task, the dataset that would have resulted from this effort would not have been representative of the shuttles' effect on the geography of businesses and properties advertised in the Maroon. After all, businesses or apartments made accessible to university students and faculty by the introduction of the shuttle were by no means obliged to include this fact in their advertisements. Prof. Credit instead suggested a computational approach that would produce a comprehensive dataset of addresses featured in Campus Publications.

¹⁴⁸ Then an assistant lecturer at the University of Chicago

Acting on Professor Credit's direction proved a complex task. The digitized documents in Campus Publications are stored as block text, with no internal differentiation, eliminating the possibility to use a simple web scraping script to automatically retrieve address data. An alternative methodology was developed in close collaboration with Professor Jeffrey Tharsen: 149 plugging every one of Chicago's 5.4 million street addresses into the preexisting Campus Publications search tool and recording the dates when each appeared. This "brute force" technique would result in a comprehensive spatial-temporal dataset at the expense of an enormous amount of computing power. The execution was only possible with Midway's computational muscle, a federated supercomputer operated by the Research Computing Center.

7.3: Text Mining Part 1: Addresses

The effort to search the body of Campus Publications for every possible Chicago street address began—perhaps predictably—with the Chicago Street Names dataset, ¹⁵⁰ a spreadsheet of all 2,582 streets in the city, with columns for their attendant directional prefix, ¹⁵¹ street type suffix, ¹⁵² and building address number range (producing a total of 5,416,578 unique street addresses). A Python script—consisting of a "curl" function nested in a pair of "for loops"—was then drafted with the assistance of Professor Tharsen and was used to systematically enter every

¹⁴⁹ Lead Computational Scientist for the Digital Humanities at the University of Chicago Research Computing Center

^{150 (}https://data.cityofchicago.org/Transportation/Chicago-Street-Names/i6bp-fvbx/data)

¹⁵¹Chicago's north-south running streets are split into "North" and "South" subsections by Madison Street. Similarly east-west running streets are split into "East" and "West" by State Street. The intersection of Madison and State in Chicago's Loop central business district serves as the zero for its system of building address numbers.

¹⁵² Such as "ST" for street, "PL" for place, etc.

street (combined with each number in its address range¹⁵³) into Campus Publication's preexisting search tool, before saving the returned search results webpage as an HTML file.

CHICAGO DATA PORTAL	c .					Browse Tutorial	Feedback 0	■ Q Sign in
Chicago Street Name List of all Chicago streets w		inimum and maximum address r	numbers.				El D G Find in to	
Full Street Name	† 1	Direction :	Street	i	Suffix :	Suffix Direction :	Min Address :	Max Address I
E 100TH PL		E	100TH		PL		1	1199
E 100TH ST		E	100TH		ST		1	4001
E 101ST PL		E	101ST		PL		1	699
E 1015T 5T		E	101ST		ST		1	3699
E 102ND PL		E	102ND		PL.		1	699
E 102ND ST		E	102ND		ST		1	3898
E 103RD PL		E	103RD		PL		1	799
E 103RD 5T		E	103RD		ST			3899
E 104TH PL		Ε	104TH		PL		100	799
E 104TH ST		E	104TH		ST		1	3951
E 105TH PL		E	105TH		PL		532	799
E 105TH ST		E	105TH		ST		1	3999
E 106TH ST		É	106TH		ST		200	4099
E 107TH ST		E	107TH		ST		1	4099
E 108TH ST		E	108TH		ST		1	4099

Figure 16: Excerpt From The Chicago Street Names Database

¹⁵³ For example, the street E. 100th Place possesses an address range between 1 and 1199. The script would begin by searching "1 E. 100th PL," continue with "2 E. 100th PL," and go on entering addresses into the Campus Publications search tool until it reached "1199 E 100th PL," after which it would move on to the next entry in the CSV.

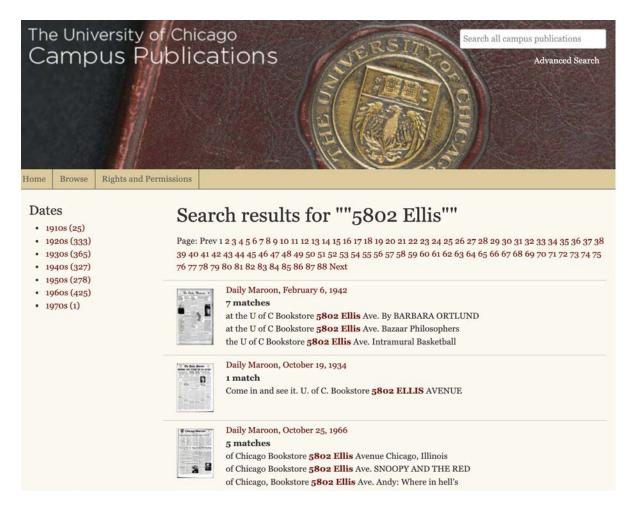


Figure 17: Preview of Campus Publications Search Results for "5801 Ellis"

A pair of significant complicating factors almost immediately assailed this simple script. The first was that addresses featured in Campus Publications, particularly in the Maroon pages (which charged on a per-line basis¹⁵⁴), were rarely written in full. Of the four components of a complete address, two (the directional prefix and the street type suffix) were often dropped. A search for "5859 South Ellis Avenue," for example, retrieves no results, while "5859 Ellis" returns a full 37 results. Simply truncating the searches down to street names and address

¹⁵⁴ https://campub.lib.uchicago.edu/view/?docId=mvol-0004-1978-

^{0804;}query=%22per%20line%22#page/10/mode/1up/search/%22per+line%22

https://campub.lib.uchicago.edu/search/?keyword=%225859+South+Ellis+Avenue%22

¹⁵⁶ https://campub.lib.uchicago.edu/search/?keyword=%225859+Ellis%22

numbers was no solution: the elements that could be omitted without causing confusion or ambiguity varied from street to street. While the name "Ellis" is used for Ellis Avenue, which only exists on Chicago's South Side, Ashland Avenue crosses Madison Street and possesses both "North" and "South" variations. Similarly, there exists both a 33rd *Street* and a 33rd *Place*.

Chicago's streets were ultimately divided into ten subsections: "East" and "West" streets with names repeated for multiple street types (which had to be searched with both directional prefixes and street type suffixes, i.e., 1500 East 33rd Place); "East" and "West" streets with non-repeated names (which could be searched for with directional prefixes, i.e., 1700 East 61st); "North" and "South" streets with names featured on both sides of Madison Street (which had to be searched with directional prefixes, but didn't need suffixes, i.e., 5700 South Ashland); and finally "North" and "South" streets with names that appeared only on one side of Madison Street, which had to be searched twice, once with only name and number (i.e., 5700 Ellis), and once with name, number, and directional suffix (i.e., 5700 South Ellis). 157 Cumulatively, these ten divisions amounted to 13,298,786 searches due to the multiple spellings and abbreviations employed for both street type suffixes and directional prefixes, necessitating numerous searches for each address that included them.

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¹⁵⁷ This had to be done because the directional suffix appears between the number and the street name, while the street type suffix appears after the street name. While a search of "5700 South Ashland" would capture "5700 South Ashland Avenue," a search of "5700 Ellis" would not capture "5700 South Ellis." Truncated addresses is the dominant mode, but not universal.

enumerated num	official_	nam Direction	Street	Suffix	combined_name	min_add_num	max_add_num	add_range	sum
0	1 E 100TH	I PL E.	100TH	PL	E. 100TH PL	1	1199	1198	1198
1	1 E 100TH	PL East	100TH	PL	East 100TH PL	1	1199	1198	2396
2	1 E 100TH	I PL E.	100TH	Place	E. 100TH Place	1	1199	1198	3594
3	1 E 100TH	PL East	100TH	Place	East 100TH Place	1	1199	1198	4792
4	2 E 100TH	ST E.	100TH	ST	E. 100TH ST	1	4001	4000	8792
5	2 E 100TH	ST East	100TH	ST	East 100TH ST	1	4001	4000	12792
6	2 E 100TH	ST E.	100TH	Street	E. 100TH Street	1	4001	4000	16792
7	2 E 100TH	ST East	100TH	Street	East 100TH Street	1	4001	4000	20792
8	3 E 101ST	PL E.	101ST	PL	E. 101ST PL	1	699	698	21490
9	3 E 101ST	PL East	101ST	PL	East 101ST PL	1	699	698	22188
10	3 E 101ST	PL E.	101ST	Place	E. 101ST Place	1	699	698	22886
11	3 E 101ST	PL East	101ST	Place	East 101ST Place	1	699	698	23584
12	4 E 101ST	ST E.	101ST	ST	E. 101ST ST	1	3699	3698	27282
13	4 E 101ST	ST East	101ST	ST	East 101ST ST	1	3699	3698	30980
14	4 E 101ST	ST E.	101ST	Street	E. 101ST Street	1	3699	3698	34678
15	4 E 101ST	ST East	101ST	Street	East 101ST Street	1	3699	3698	38376
16	5 E 102ND	PL E.	102ND	PL	E. 102ND PL	1	699	698	39074
17	5 E 102ND	PL East	102ND	PL	East 102ND PL	1	699	698	39772
18	5 E 102ND	PL E.	102ND	Place	E. 102ND Place	1	699	698	40470
19	5 E 102ND	PL East	102ND	Place	East 102ND Place	1	699	698	41168
20	6 E 102ND	ST E.	102ND	ST	E. 102ND ST	1	3898	3897	45065
21	6 E 102ND	ST East	102ND	ST	East 102ND ST	1	3898	3897	48962
22	6 E 102ND	ST E.	102ND	Street	E. 102ND Street	1	3898	3897	52859
23	6 E 102ND	ST East	102ND	Street	East 102ND Street	1	3898	3897	56756
24	7 E 103RD	PL E.	103RD	PL	E. 103RD PL	1	799	798	57554
25	7 E 103RD	PL East	103RD	PL	East 103RD PL	1	799	798	58352

Figure 18: Excerpt From the "East_Repeated_w_Suffix" Search CSV

7.4: Text Mining Part 2: Extra Pages

Of the 5,607,343 searches made with Midway—the 7,691,443 potential searches contained in the three "North" and two "West" divisions were reserved for a later date—there were 9,119 returned results. Conveniently, the "no results" page of Campus Publications, when saved as an HTML file, is always 2,782 bytes in size, allowing the "valid addresses" to be easily transferred to a separate folder. With these valid addresses in hand, a second text mining complication became evident: extra pages.

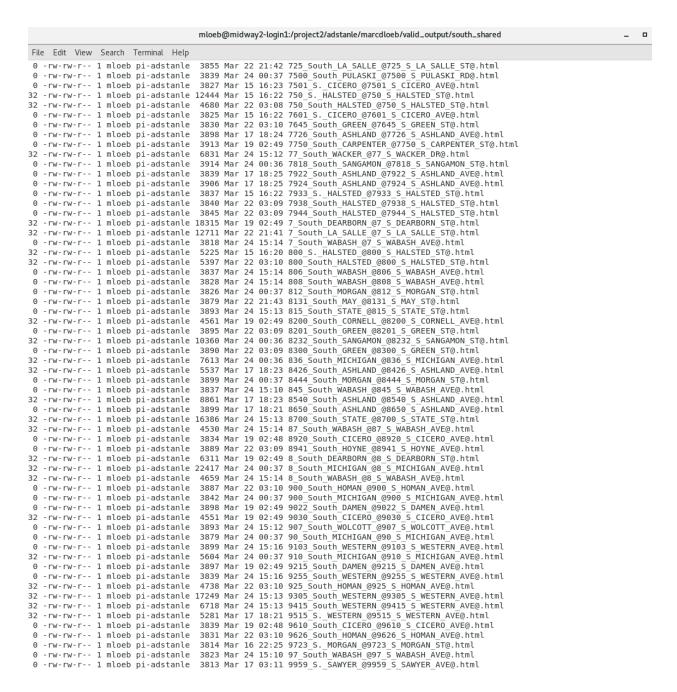


Figure 19: Excerpt of the "Valid Addresses" of "South_Shared"

The Campus Publications search tool caps the number of results displayed on a single page at 20. Additional returns from a text search are displayed on extra pages, which can be clicked to form a list that appears at the bottom of the page. The initial text mining process did

not capture these additional pages. Doing so would require two more Python scripts. The first relied on Beautiful Soup—a widely used Python library employed to scrape data from HTML files—to detect the presence of the extra pages menu (signifying that a searched address had more than 20 appearances in Campus Publications) and retrieve the largest number that appeared within, which was equal to the total number of results pages for that address. These results were then saved as a CSV spreadsheet (alongside their corresponding address).

Of the 9,119 valid "east" and "south" addresses, 506 had at least one additional page. These pages were retrieved and saved as HTMLs with a third Python script. The extra page URLs followed a consistent formula—which included a number equal to 1 + (20 * the page number -1) allowed them to be generated from the original searched address and the number of extra pages retrieved by the second script. Ultimately, 1,356 extra pages were produced, bringing the total number of saved HTML files to 10,475.

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¹⁵⁸ The searched address with the single largest number of additional pages, 5802 Ellis (the University bookstore), had 88 additional pages in total.

The url for the second results page for "5802 Ellis" is https://campub.lib.uchicago.edu/search/?keyword=%225802+Ellis%22&startDoc=21, while the url for the third results page is, https://campub.lib.uchicago.edu/search/?keyword=%225802+Ellis%22&startDoc=41, etc.

search_and_address	page_num
1155_East_60TH_@1155_E_60TH_ST@.html	0
1025_East_58TH_@1025_E_58TH_ST@.html	2
25_EJACKSON_@25_E_JACKSON_BLVD@.html	3
1414_E59TH_@1414_E_59TH_ST@.html	4
1414_East_59TH_@1414_E_59TH_ST@.html	7
1510_East_56TH_@1510_E_56TH_ST@.html	4
1642_East_56TH_@1642_E_56TH_ST@.html	7
50_East_HURON_@50_E_HURON_ST@.html	6
1531_East_HYDE_PARK_@1531_E_HYDE_PARK_BLVD@.h	2
970_East_58TH_@970_E_58TH_ST@.html	8
19_East_JACKSON_@19_E_JACKSON_BLVD@.html	4
960_East_58TH_@960_E_58TH_ST@.html	2
975_East_60TH_@975_E_60TH_ST@.html	0
237_EONTARIO_@237_E_ONTARIO_ST@.html	3
950_East_59TH_@950_E_59TH_ST@.html	3
1121_East_60TH_@1121_E_60TH_ST@.html	2
1050_East_59TH_@1050_E_59TH_ST@.html	2
71_EMONROE_@71_E_MONROE_ST@.html	2
1116_East_59TH_@1116_E_59TH_ST@.html	2
70_ECONGRESS_@70_E_CONGRESS_PKWY@.html	2
1111_East_60TH_@1111_E_60TH_ST@.html	3
1307_East_60TH_@1307_E_60TH_ST@.html	4
78_EWASHINGTON_@78_E_WASHINGTON_ST@.html	3
55_East_WASHINGTON_@55_E_WASHINGTON_ST@.htm	2
64_East_LAKE_@64_E_LAKE_ST@.html	3

Figure 20: Excerpt from the "Extra Pages" of "East_No_Suffix"

7.5: Completing the Dataset (Geocoding and HTML Scraping)

With the text mining of Campus Publications complete and the HTMLs for the valid addresses and their extra pages saved on Midway, two steps remained to create a valid spatial-temporal dataset: geocoding and date extraction.

Retrieving the dates on which each address appeared in Campus Publications—an essential step to the stated goal of gauging the spatial impact of shuttle routes as they were introduced—was relatively straightforward. Each of the 20 returns on one of the pages produced by the Campus Publications search tool is identified by the publication it was retrieved from, the edition (where applicable), the year it was published, and the month and day (where applicable).

A fourth Python script was composed, again making use of the Beautiful Soup library. Crawling through the HTML files contained in the "valid_output" and "extra_pages" folders, it hunted for the tags identifying the search return results on each webpage (and the tags within those results marking biographical information) and retrieved the accompanying text. This text was then added to a CSV spreadsheet, along with the HTML file name from which it was mined. Each row in the sheet—56,608 in all—corresponded to a single date that an address appeared.

earch_and_address	old_search	old_addr	page search	addr	city_state	full	quantit	ty publication	month	day	year	edition
age_5_@71_East_MONROE_@71_E_MONROE_ST@.html	71_East_MONROE_	71_E_MONROE_ST	5 71 East MONROE	71 E MONROE ST		71 E MONROE ST, Chicago, IL		1 Cap and Gown				Vol. 26
lage_5_@71_East_MONROE_@71_E_MONROE_ST@.html	71_East_MONROE_	71_E_MONROE_ST	5 71 East MONROE	71 E MONROE ST	Chicago, IL	71 E MONROE ST, Chicago, IL		1 Cap and Gown			1923	Vol. 28
page_5_@71_East_MONROE_@71_E_MONROE_ST@.html	71_East_MONROE_	71_E_MONROE_ST	5 71 East MONROE	71 E MONROE ST	Chicago, IL	71 E MONROE ST, Chicago, IL		1 Cap and Gown			1917	Vol. 22
page_5_@71_East_MONROE_@71_E_MONROE_ST@.html	71_East_MONROE_	71_E_MONROE_ST	5 71 East MONROE	71 E MONROE ST	Chicago, IL	71 E MONROE ST, Chicago, IL		1 Cap and Gown			1918	Vol. 23
page_5_@71_East_MONROE_@71_E_MONROE_ST@.html	71_East_MONROE_	71_E_MONROE_ST	5 71 East MONROE	71 E MONROE ST	Chicago, IL	71 E MONROE ST, Chicago, IL		1 Cap and Gown			1916	Vol. 21
page_5_@71_East_MONROE_@71_E_MONROE_ST@.html	71_East_MONROE_	71_E_MONROE_ST	5 71 East MONROE	71 E MONROE ST	Chicago, IL	71 E MONROE ST, Chicago, IL		1 Cap and Gown			1920	Vol. 25
page_5_@71_East_MONROE_@71_E_MONROE_ST@.html	71_East_MONROE_	71_E_MONROE_ST	5 71 East MONROE	71 E MONROE ST	Chicago, IL	71 E MONROE ST, Chicago, IL		1 Cap and Gown			1924	Vol. 25
page_5_@71_East_MONROE_@71_E_MONROE_ST@.html	71_East_MONROE_	71_E_MONROE_ST	5 71 East MONROE	71 E MONROE ST	Chicago, IL	71 E MONROE ST, Chicago, IL		1 Cap and Gown			1922	Vol. 27
page_5_@71_East_MONROE_@71_E_MONROE_ST@.html	71_East_MONROE_	71_E_MONROE_ST	5 71 East MONROE	71 E MONROE ST	Chicago, IL	71 E MONROE ST, Chicago, IL		1 Cap and Gown			1914	Vol. 19
page_4_@25_East_JACKSON_@25_E_JACKSON_BLVD@.html	25_East_JACKSON_	25_E_JACKSON_BLVD	4 25 East JACKSON	25 E JACKSON BLVD	Chicago, IL	25 E JACKSON BLVD, Chicago, IL		1 Cap and Gown			1929	Vol. 34
page_4_@19_East_JACKSON_@19_E_JACKSON_BLVD@.html	19_East_JACKSON_	19_E_JACKSON_BLVD	4 19 East JACKSON	19 E JACKSON BLVD	Chicago, IL	19 E JACKSON BLVD, Chicago, IL		1 Cap and Gown			1913	Vol. 18
page_2_@101_East_ONTARIO_@101_E_ONTARIO_ST@.html	101_East_ONTARIO_	101_E_ONTARIO_ST	2 101 East ONTARIO	101 E ONTARIO ST	Chicago, IL	101 E ONTARIO ST, Chicago, IL		1 Cap and Gown			1956	Vol. 49
age_2_@101_East_ONTARIO_@101_E_ONTARIO_ST@.html	101_East_ONTARIO_	101_E_ONTARIO_ST	2 101 East ONTARIO	101 E ONTARIO ST	Chicago, IL	101 E ONTARIO ST, Chicago, IL		1 Cap and Gown			1958	Vol. 51
rage 2 @101 East ONTARIO @101 E ONTARIO ST@.html	101 East ONTARIO	101 E ONTARIO ST	2 101 East ONTARIO	101 E ONTARIO ST	Chicago, IL	101 E ONTARIO ST, Chicago, IL		1 Cap and Gown			1954	Vol. 47
age 6 @1414 East 59TH @1414 E 59TH ST@.html	1414 East 59TH	1414 E 59TH ST	6 1414 East 59TH	1414 E 59TH ST	Chicago, IL	1414 E 59TH ST, Chicago, IL		1 Cap and Gown			1941	Vol. 45
age 6 @1414 East 59TH @1414 E 59TH ST@.html	1414 East 59TH	1414 E 59TH ST	6 1414 East 59TH	1414 E 59TH ST	Chicago, IL	1414 E 59TH ST, Chicago, IL		1 Cap and Gown			1953	Vol. 46
age 2 @64 East LAKE @64 E LAKE ST@.html	64 East LAKE	64 E LAKE ST	2 64 East LAKE	64 E LAKE ST	Chicago, IL	64 E LAKE ST, Chicago, IL		1 Cap and Gown			1964	Vol. 57
page 2 @64 East LAKE @64 E LAKE ST@.html	64_East_LAKE	64 E LAKE ST	2 64 East LAKE	64 E LAKE ST	Chicago, IL	64 E LAKE ST, Chicago, IL		1 Cap and Gown			1965	Vol. 58
page_3_@25_E_JACKSON_@25_E_JACKSON_BLVD@.html	25_E_JACKSON_	25_E_JACKSON_BLVD	3 25 E. JACKSON	25 E JACKSON BLVD	Chicago, IL	25 E JACKSON BLVD, Chicago, IL		1 Cap and Gown			1915	Vol. 20
age 2 @71 E. MONROE @71 E MONROE STØ.html	71 E. MONROE	71 E MONROE ST	2 71 E. MONROE	71 E MONROE ST	Chicago, IL	71 E MONROE ST, Chicago, IL		1 Cap and Gown			1915	Vol. 20
age 3 @19 East JACKSON @19 E JACKSON BLVD@.html	19 East JACKSON	19 E JACKSON BLVD	3 19 East JACKSON	19 E JACKSON BLVD	Chicago, IL	19 E JACKSON BLVD, Chicago, IL		1 Cap and Gown			1938	Vol. 4
age 3 @19 East JACKSON @19 E JACKSON BLVD@.html	19 East JACKSON	19 E JACKSON BLVD	3 19 East JACKSON	19 E JACKSON BLVD	Chicago, IL	19 E JACKSON BLVD, Chicago, IL		1 Cap and Gown			1936	Vol. 40
age 3 @19 East JACKSON @19 E JACKSON BLVD@.html	19 East JACKSON	19_E_JACKSON_BLVD	3 19 East JACKSON	19 E JACKSON BLVD	Chicago, IL	19 E JACKSON BLVD, Chicago, IL		1 Cap and Gown			1940	Vol. 44
age 3 @19 East JACKSON @19 E JACKSON BLVD@.html	19 East JACKSON	19 E JACKSON BLVD	3 19 East JACKSON	19 E JACKSON BLVD	Chicago, IL	19 E JACKSON BLVD, Chicago, IL		1 Cap and Gown			1939	Vol. 43
age 3 @25 East JACKSON @25 E JACKSON BLVD@.html	25 East JACKSON	25 E JACKSON BLVD	3 25 East JACKSON	25 E JACKSON BLVD	Chicago, IL	25 E JACKSON BLVD, Chicago, IL		1 Cap and Gown			1911	Vol. 16
page 3 @25 East JACKSON @25 E JACKSON BLVD@.html	25 East JACKSON	25 E JACKSON BLVD	3 25 East JACKSON	25 E JACKSON BLVD	Chicago, IL	25 E JACKSON BLVD, Chicago, IL		1 Cap and Gown			1912	Vol. 17
page 3 @25 East JACKSON @25 E JACKSON BLVD@.html	25_East_JACKSON	25_E_JACKSON_BLVD	3 25 East JACKSON	25 E JACKSON BLVD		25 E JACKSON BLVD, Chicago, IL		1 Cap and Gown			1930	Vol. 35
age 4 @1510 East 56TH @1510 E 56TH ST@.html	1510 East 56TH	1510 E 56TH ST	4 1510 East 56TH	1510 E 56TH ST		1510 E 56TH ST. Chicago, IL		1 Cap and Gown			1921	Vol. 26
age 3 @20 East JACKSON @20 E JACKSON BLVD@.html	20 East JACKSON	20 E JACKSON BLVD	3 20 East JACKSON	20 E JACKSON BLVD	Chicago, IL	20 F JACKSON BLVD, Chicago, IL		1 Cap and Gown			1916	Vol. 2
page 3 @20 East JACKSON @20 E JACKSON BLVD@.html	20 East JACKSON	20 E JACKSON BLVD	3 20 East JACKSON	20 E JACKSON BLVD	Chicago, IL	20 E JACKSON BLVD, Chicago, IL		1 Cap and Gown			1919	Vol. 24
age 3 @20 East JACKSON @20 E JACKSON BLVD@.html	20 East JACKSON	20_E_JACKSON_BLVD	3 20 East JACKSON	20 E JACKSON BLVD		20 E JACKSON BLVD, Chicago, IL		1 Cap and Gown			1915	Vol. 20
page 3 @20 East JACKSON @20 E JACKSON BLVD@.html	20 East JACKSON	20 E JACKSON BLVD	3 20 East JACKSON	20 E JACKSON BLVD		20 E JACKSON BLVD, Chicago, IL		1 Cap and Gown			1926	Vol. 31
page 5 @71 East MONROE @71 E MONROE ST@.html	71_East_MONROE	71_E_MONROE_ST	5 71 East MONROE	71 E MONROE ST		71 E MONROE ST, Chicago, IL		1 Daily Maroon	January			
sage 5 @71 East MONROE @71 E MONROE ST@.html	71 East MONROE	71 E MONROE ST	5 71 East MONROE	71 E MONROE ST		71 E MONROE ST, Chicago, IL		1 Daily Maroon	June		1927	
sage 5 @71 East MONROE @71 E MONROE ST@.html	71 East MONROE	71 E MONROE ST	5 71 East MONROE	71 E MONROE ST		71 E MONROE ST, Chicago, IL		1 Daily Maroon	May	20	1927	
page 5 @71 East MONROE @71 E MONROE ST@.html	71 East MONROE	71 E MONROE ST	5 71 East MONROE	71 E MONROE ST		71 E MONROE ST, Chicago, IL		1 Daily Maroon	April	22		
age 5 @71 East MONROE @71 E MONROE ST@.html	71 East MONROE	71 E MONROE ST	5 71 East MONROE	71 E MONROE ST		71 E MONROE ST, Chicago, IL		1 Daily Maroon	lune			
page 5 @71 East MONROE @71 E MONROE ST@.html	71 East MONROE	71 E MONROE ST	5 71 East MONROE	71 E MONROE ST		71 E MONROE ST, Chicago, IL		1 Daily Maroon	September	21		
age 5 @71 East MONROE @71 E MONROE ST@.html	71 East MONROE	71 E MONROE ST	5 71 East MONROE	71 E MONROE ST		71 E MONROE ST, Chicago, IL		1 Daily Maroon	October	11		
age 5 @71_East_MONROE_@71_E_MONROE_ST@.html	71 East MONROE	71 E MONROE ST	5 71 East MONROE	71 E MONROE ST		71 E MONROE ST, Chicago, IL		1 Daily Maroon	December	14		
age 5 @71 East MONROE @71 E MONROE ST@.html	71 East MONROE	71 E MONROE ST	5 71 East MONROE	71 E MONROE ST		71 E MONROE ST, Chicago, IL		1 Daily Margon	October	-		
lage 5 @71 East MONROE @71 E MONROE ST@.html	71 East MONROE	71 E MONROE ST	5 71 East MONROE	71 E MONROE ST		71 E MONROE ST, Chicago, IL		1 Daily Maroon	December	16	2720	
rage 5 @1642 East 56TH @1642 E 56TH ST@.html	1642 East 56TH	1642 E 56TH ST	5 1642 East S6TH	1642 E 56TH ST		1642 E 56TH ST, Chicago, IL		1 Daily Maroon	April	15		
rage 5 @1642 East 56TH @1642 E 56TH ST@.html	1642 East 56TH	1642 E 56TH ST	5 1642 East 56TH	1642 E 56TH ST	Chicago, IL	1642 E 56TH ST, Chicago, IL		1 Daily Maroon	February	14		
rage_5_@1642_East_561H_@1642_E_561H_51@.ntml	1642_East_56TH_	1642_E_S6TH_ST	5 1642 East 56TH	1642 E 56TH ST	Chicago, IL Chicago, IL	1642 E 56TH ST, Chicago, IL		1 Daily Maroon	October	11		
page 5 @1642 East 56TH @1642 E 56TH ST@.html	1642 East 56TH	1642 E 56TH ST	5 1642 East 56TH	1642 E 56TH ST	Chicago, IL	1642 E 56TH ST, Chicago, IL		1 Daily Maroon	October	15		
page 5 @1642 East 56TH @1642 E 56TH ST@.html	1642_East_56TH_	1642_E_56TH_ST	5 1642 East 56TH	1642 E 56TH ST		1642 E 56TH ST, Chicago, IL		1 Daily Maroon	January	17		

Figure 21: Excerpt from the Dates Extract for "East_No_Suffix"

Geocoding the addresses—the process of transforming the text description of a location into formal geographic coordinates ¹⁶⁰—proved slightly more complex, requiring two scripts written in R instead of Python. The first script (again written in collaboration with Professor Tharsen) crawled through the "valid_output" folder and recorded file names as part of a data frame. The filename generated by the first and third scripts (described in 7.3 and 7.4) included two components—the truncated address searched in Campus Publications, and the full official street name and number—separated by a "@" symbol, which served as a delimiter. These names were then split into their component parts (the search term and the official address) and saved as columns in a CSV spreadsheet.

The batch geocoding of text street addresses was accomplished with R's ggmap package, with code adapted from Aleszu Bajak. ¹⁶¹ With the acquisition of a free API key, ¹⁶² ggmap is able to directly interface with Google Maps, feeding it street addresses ¹⁶³ and returning longitude and latitude coordinates. The sixth and final script retrieved the official addresses recorded in the CSV produced by the fifth script. These were run through ggmap and Google Maps before the resulting coordinates were appended to the CSV.

 $[\]frac{160}{\text{https://desktop.arcgis.com/en/arcmap/latest/manage-data/geocoding/what-is-geocoding.htm\#:} \sim : text = Geocoding \% 20 is \% 20 the \% 20 process \% 20 of, at \% 20 once \% 20 in \% 20 a \% 20 table}$

¹⁶¹ A senior data reporter for USA TODAY, and a former professor in data journalism at Northeastern University (https://www.aleszu.com/) (https://www.storybench.org/geocode-csv-addresses-r/)

https://console.cloud.google.com/apis/library?project=macro-theater-

^{306806&}amp;supportedpurview=project&q=maps

¹⁶³ Qualified first by the state and city of that address

addr	search	city_state	full	lon	lat	geoAddress
1 E CHICAGO AVE	1 E. CHICAGO	Chicago, IL	1 E CHICAGO AVE, Chicago, IL	-87.62819	41.896692	1 e chicago ave, chicago, il 60611, usa
1 E CONGRESS PKWY	1 E. CONGRESS	Chicago, IL	1 E CONGRESS PKWY, Chicago, IL	-87.62761	41.875718	1 e congress pkwy, chicago, il 60605, usa
1 E DIVISION ST	1 E. DIVISION	Chicago, IL	1 E DIVISION ST, Chicago, IL	-87.62866	41.903936	1 e division st, chicago, il 60610, usa
1 E JACKSON BLVD	1 E. JACKSON	Chicago, IL	1 E JACKSON BLVD, Chicago, IL	-87.62722	41.878041	1 e jackson blvd, chicago, il 60604, usa
1 E DIVISION ST	1 East DIVISION	Chicago, IL	1 E DIVISION ST, Chicago, IL	-87.62866	41.903936	1 e division st, chicago, il 60610, usa
1 E ERIE ST	1 East ERIE	Chicago, IL	1 E ERIE ST, Chicago, IL	-87.62762	41.893821	1 e erie st, chicago, il 60611, usa
1 E MONROE ST	1 East MONROE	Chicago, IL	1 E MONROE ST, Chicago, IL	-87.62765	41.880755	1 e monroe st, chicago, il 60603, usa
1 E ONTARIO ST	1 East ONTARIO	Chicago, IL	1 E ONTARIO ST, Chicago, IL	-87.62811	41.89328	1 e ontario st, chicago, il 60611, usa
10 E CHICAGO AVE	10 E. CHICAGO	Chicago, IL	10 E CHICAGO AVE, Chicago, IL	-87.6277	41.896969	10 e chicago ave, chicago, il 60611, usa
10 E OHIO ST	10 East OHIO	Chicago, IL	10 E OHIO ST, Chicago, IL	-87.62755	41.892649	10 e ohio st, chicago, il 60611, usa
10 E PEARSON ST	10 East PEARSON	Chicago, IL	10 E PEARSON ST, Chicago, IL	-87.62782	41.897764	10 e pearson st, chicago, il 60611, usa
100 E LAKE ST	100 E. LAKE	Chicago, IL	100 E LAKE ST, Chicago, IL	-87.62441	41.885772	100 e lake st, chicago, il 60601, usa
100 E OHIO ST	100 E. OHIO	Chicago, IL	100 E OHIO ST, Chicago, IL	-87.625	41.892525	100 e ohio st, chicago, il 60611, usa
100 E CHICAGO AVE	100 East CHICAGO	Chicago, IL	100 E CHICAGO AVE, Chicago, IL	-87.62541	41.896801	100 e chicago ave, chicago, il 60611, usa
100 E OHIO ST	100 East OHIO	Chicago, IL	100 E OHIO ST, Chicago, IL	-87.625	41.892525	100 e ohio st, chicago, il 60611, usa
1003 E 56TH ST	1003 East 56TH	Chicago, IL	1003 E 56TH ST, Chicago, IL	-87.60118	41.793227	1003 e 56th st, chicago, il 60637, usa
1005 E 60TH ST	1005 E. 60TH	Chicago, IL	1005 E 60TH ST, Chicago, IL	-87.60028	41.7854	burton-judson courts, 1005 e 60th st, chicago, il 60637, usa
1005 E 60TH ST	1005 East 60TH	Chicago, IL	1005 E 60TH ST, Chicago, IL	-87.60028	41.7854	burton-judson courts, 1005 e 60th st, chicago, il 60637, usa
1007 E 60TH ST	1007 East 60TH	Chicago, IL	1007 E 60TH ST, Chicago, IL	-87.6002	41.785444	1007 e 60th st, chicago, il 60637, usa
1008 E 60TH ST	1008 E. 60TH	Chicago, IL	1008 E 60TH ST, Chicago, IL	-87.601	41.785912	1008 e 60th st, chicago, il 60637, usa
1009 E 60TH ST	1009 E. 60TH	Chicago, IL	1009 E 60TH ST, Chicago, IL	-87.60011	41.785445	1009 e 60th st, chicago, il 60637, usa
1009 E 60TH ST	1009 East 60TH	Chicago, IL	1009 E 60TH ST, Chicago, IL	-87.60011	41.785445	1009 e 60th st, chicago, il 60637, usa
101 E ONTARIO ST	101 E. ONTARIO	Chicago, IL	101 E ONTARIO ST, Chicago, IL	-87.62473	41.892918	101 e ontario st, chicago, il 60611, usa
101 E OAK ST	101 East OAK	Chicago, IL	101 E OAK ST, Chicago, IL	-87.62564	41.900514	101 e oak st, chicago, il 60611, usa
101 E ONTARIO ST	101 East ONTARIO	Chicago, IL	101 E ONTARIO ST, Chicago, IL	-87.62473	41.892918	101 e ontario st, chicago, il 60611, usa
1010 E 59TH ST	1010 E. 59TH	Chicago, IL	1010 E 59TH ST, Chicago, IL	-87.60083	41.787912	1010 e 59th st, chicago, il 60637, usa
1010 E 59TH ST	1010 East 59TH	Chicago, IL	1010 E 59TH ST, Chicago, IL	-87.60083	41.787912	1010 e 59th st, chicago, il 60637, usa
1018 E 43RD ST	1018 East 43RD	Chicago, IL	1018 E 43RD ST, Chicago, IL	-87.60087	41.817066	1018 e 43rd st, chicago, il 60653, usa
1020 E 58TH ST	1020 E. 58TH	Chicago, IL	1020 E 58TH ST, Chicago, IL	-87.60015	41.790077	1020 e 58th st, chicago, il 60637, usa
1020 E 58TH ST	1020 East 58TH	Chicago, IL	1020 E 58TH ST, Chicago, IL	-87.60015	41.790077	1020 e 58th st, chicago, il 60637, usa
1025 E 58TH ST	1025 E. 58TH	Chicago, IL	1025 E 58TH ST, Chicago, IL	-87.60015	41.789051	1025 e 58th st, chicago, il 60637, usa
1025 E 58TH ST	1025 East 58TH	Chicago, IL	1025 E 58TH ST, Chicago, IL	-87.60015	41.789051	1025 e 58th st, chicago, il 60637, usa
103 E CHICAGO AVE	103 East CHICAGO	Chicago, IL	103 E CHICAGO AVE, Chicago, IL	-87.62532	41.896528	103 e chicago ave, chicago, il 60611, usa
103 E OAK ST	103 East OAK	Chicago, IL	103 E OAK ST, Chicago, IL	-87.62556	41.900512	103 e oak st, chicago, il 60611, usa
104 E OAK ST	104 East OAK	Chicago, IL	104 E OAK ST, Chicago, IL	-87.62553	41.901032	104 e oak st, chicago, il 60611, usa
105 E DELAWARE PL	105 East DELAWARE	Chicago, IL	105 E DELAWARE PL, Chicago, IL	-87.62564	41.89904	105 e delaware pl, chicago, il 60611, usa
105 E OHIO ST	105 East OHIO	Chicago, IL	105 E OHIO ST, Chicago, IL	-87.62443	41.892531	105 e ohio st, chicago, il 60611, usa
105 E ONTARIO ST	105 East ONTARIO	Chicago, IL	105 E ONTARIO ST, Chicago, IL	-87.62468	41.893208	105 e ontario st, chicago, il 60611, usa
1050 E 59TH ST	1050 East 59TH	Chicago, IL	1050 E 59TH ST, Chicago, IL	-87.6006	41.788697	1050 e 59th st, chicago, il 60637, usa

Figure 22: Excerpt from the Geocoding of "East_No_Suffix"

7.5: Results

With the conclusion of date extraction and geocoding, a comprehensive spatial and temporal dataset of every address (on an "east" or "south" street) ever featured in Campus Publications was complete. The two CSVs were imported into QGIS, the geocoding spreadsheet's coordinates converted to geographic points, and the points joined to the dates CSV. The result was a shapefile of 56,608 distinct points, one for each mention of the 9,119 valid addresses. ¹⁶⁴

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¹⁶⁴ A collection of shapefiles, CVSs, HTMLs and full sized maps (too large to fit in this document) can be found with the following link:

https://drive.google.com/drive/folders/1WIXHRY5hP5xadKzNK8MJn41_JY4RYOGx?usp=sharing

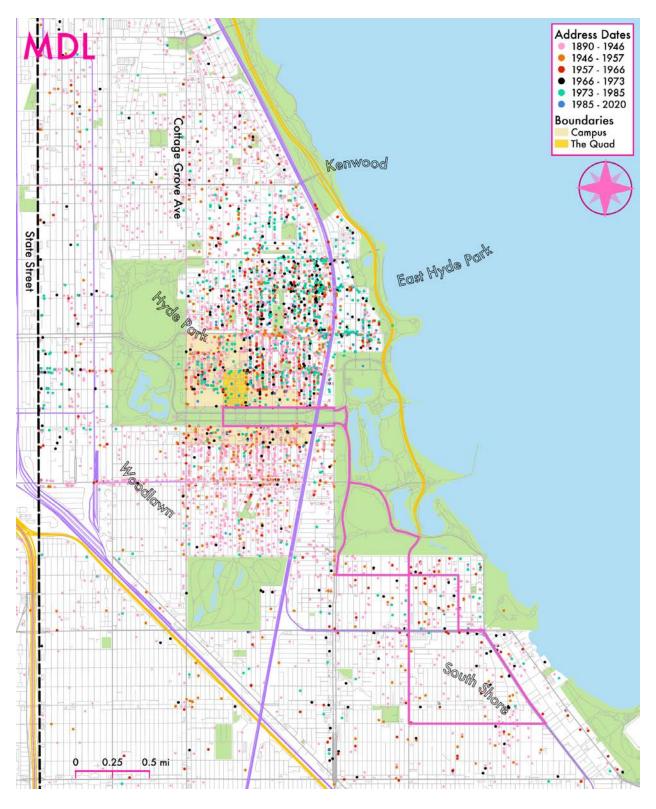


Figure 23: Address-Date Map of the Campus and Near Neighborhoods (More Maps Found with the Link Above)

Search_and_address	old_search	old_addr	search	addr	city_state	full	Quantity Po		Month	Day	Year	Edition		lat geoAddress
1018_East_43RD_@1018_E_43RD_5T@.html	1018_East_43RD_	1018_E_43RD_5T	1018 East 43RD	1018 E 43RD ST	Chicago, IL	1018 E 43RO ST, Chicago, IL	1 0	ap and Gown				1916 Vol. 21	-87.600867	41.817066 1018 e 43rd st, chicago, il 60653, usa
64 East MADISON @64 E MADISON ST@ html	64 East MADISON	64 É MADISON ST	64 East MADISON	64 E MADISON ST	Chicago, IL	64 E MADISON ST, Chicago, IL	1 0	ap and Gown				1920 Vol. 25	-87.62556	41.882195 64 e madison st, chicago, il 60602, usa
27 E. MONROE @27 E. MONROE ST@ June	27_E_MONROE_	27_E_MONROE_ST	27 E. MONROE	27 E MONROE ST	Chicago, IL	27 E MONROE ST, Chicago, IL	1 0	ap and Gown				1915 Vol. 20	-87.626737	41.880603 27 e monroe st, chicago, il 60603, usa
78 East JACKSON @78 E JACKSON BLVD@ Mml	78_EHR_JACKSON_	78_E_IACKSON_BLVD	78 East JACKSON	78 E JACKSON BLVD	Chicago, IL	78 E JACKSON BLVD, Chicago, IL	1 0	ap and Gown				1921 Vol. 26	-87.624952	41.87853 78 e jackson blvd, chicago, il 60604, usa
78 East JACKSON @78 E JACKSON BLVD@ html	78_East_SACKSON_	78 E JACKSON BLVD	78 East JACKSON	78 E JACKSON BLVD	Chicago, IL	78 E JACKSON BLVD, Chicago, IL	1 0	ap and Gown				1925 Vol. 30	-87.624952	41.87853 78 e jackson blvd, chicago, il 60604, usa
78 East JACKSON @78 E JACKSON BLVD@ html	78 East JACKSON	78 E JACKSON BLVD	78 East JACKSON	78 E JACKSON BLVD	Chicago, IL	78 E JACKSON BLVD, Chicago, IL	1 0	ap and Gown				1924 Vol. 29	-87.624952	41.87853 78 e jackson blvd, chicago, il 60604, usa
78 East JACKSON @78 E JACKSON BLVD@.html	78 East JACKSON	78 E JACKSON BLVD	78 East JACKSON	78 E JACKSON BLVD	Chicago, IL	78 E JACKSON BLVD, Chicago, IL	1 0	ap and Gown				1923 Vol. 28	-87.624952	41.87853 78 e jackson blvd, chicago, il 60604, usa
78 East JACKSON @78 E JACKSON BLVD@.html	78 East JACKSON	78 E JACKSON BLVD	78 East JACKSON	78 E JACKSON BLVD	Chicago, IL	78 E JACKSON BLVD, Chicago, IL	1 0	ap and Gown				1922 Vol. 27	-87.624952	41.87853 78 e jackson blvd, chicago, il 60604, usa
78 East JACKSON @78 E JACKSON BLVD@.html	78 East JACKSON	78 E JACKSON BLVD	78 East JACKSON	78 E JACKSON BLVD	Chicago, IL	78 E JACKSON BLVD, Chicago, IL	10	ap and Gown				1927 Vol. 32	-87.624952	41.87853 78 e jackson blvd, chicago, il 60604, usa
78 East JACKSON @78 E JACKSON BLVD@ html	78 East JACKSON	78 E JACKSON BLVD	78 East IACKSON	78 E JACKSON BLVD	Chicago, IL	78 E JACKSON BLVD, Chicago, IL	1 0	as and Gown				1926 Vol. 31	-87.624952	41.87853 78 e lackson blvd. rhicago, il 60604, usa
65 East LAKE @65 E LAKE STØ.html	65 East LAKE	65 E LAKE ST	65 East LAKE	65 E LAKE ST	Chicago, IL	65 E LAKE ST, Chicago, IL	1 0	ap and Gown				1931: Vol. 36	-87.625652	41.885616 65 e lake st, chicago, il 60601, usa
20 East 16TH #20 E 16TH ST# html	20 East 16TH	20 E 16TH ST	20 East 16TH	20 E 16TH ST	Chicago, IL			ag and Gown				1895 Vol. 1	-87.626858	
63 East MONROE @63 E MONROE STØ html	63_East_MONROE_	63 E MONROE ST	63 East MONROE	63 E MONROE ST	Chicago, IL			ap and Gown				1915 Vol. 20	-87.625459	41.880637 63 e monroe st, chicago, il 60603, usa
63 East MONROE @63 E MONROE ST@ html		63 E MONROE ST	63 East MONROE	63 E MONROE ST	Chicago, IL			ap and Gown				1916 Vol. 21	-87.625459	
63 East MONROE @63 E MONROE STØ html	63 East MONROE		63 East MONROE	63 E MONROE ST	Chicago, IL			ap and Gown				1914 Vol. 19	-87.625459	
589 East ELINOIS @589 E ELINOIS ST@ html	589 East ILLINOIS	589 E ILLINOIS ST	589 East ILUNOIS	S89 E ILLINOIS ST	Chicago, IL			ap and Gown				1925 Vol. 30	-87.6118	41.891028 589 e Illinois st, chicago, il 60611, usa
589 East ILUNOIS (#589 E ILUNOIS STIP html	589 East ILLINOIS	589 E ILLINOIS ST	589 East ILUNOIS	589 E ILLINOIS ST	Chicago, IL			ap and Gown				1924 Vol. 29	-87.6118	
27 East MONROE #27 E MONROE ST# html		27 E MONROE ST	27 East MONROE	27 E MONROE ST	Chicago, IL			ap and Gown				1923 Vol. 28	-87.626737	
27 East MONROE @27 E MONROE STØ html		27 E MONROE ST	27 East MONROE	27 E MONROE ST		27 E MONROE ST, Chicago, IL		ap and Gown				1918 Vol. 23		41.880603 27 e monroe st, chicago, il 60603, usa
27 East MONROE @27 E MONROE STØ Jitml		27 E MONROE ST	27 East MONROE	27 E MONROE ST	Chicago, It.			an and Gown				1917 Vol. 22	-87.626737	
1221 East 56TH @1221 E 56TH ST@ html	1221 East 56TH	1221 E 56TH ST	1221 East 56TH	1221 E 56TH ST	Chicago, IL			ap and Gown				1936 Vol. 40	-87.595608	
657 East PERSHING @657 E PERSHING RD@.html	657 East PERSHING			657 E PERSHING RD	Chicago, IL			ap and Gown				1922 Vol. 27		41.823755 657 e pershing rd, chicago, il 60653, usa
1375 East 60TH @1375 E 60TH ST@ html	1375 East 607H	1375 £ 60TH ST	1375 East 60TH	1375 £ 60TH ST	Chicago, IL			ap and Gown				1953 Vol. 46		41.785851 1375 e 60th st, chicago, il 60637, usa
1 E CHICAGO @1 E CHICAGO AVE@ html	1 E CHICAGO	1 E CHICAGO AVE	1 E CHICAGO	1 E CHICAGO AVE	Chicago, IL			ap and Gown				1931 Vol. 36		41.896692 1 e chicago ave, chicago, il 60611, usa
14_East_JACKSON_@14_E_JACKSON_BLVD@.html		14_E_JACKSON_BLVD	14 East IACKSON	14 F JACKSON BLVD	Chicago, IL			ap and Gown				1931 Vol. 36	-87.627045	41.87839 14 e jackson blvd, chicago, il 60604, usa
469 East OHIO @469 £ OHIO STØ html	469 East OHIO	469 E OHIO ST	469 East OHIO	469 E OHIO ST	Chicago, IL			ap and Gown				1921 Vol. 20	-87,615718	
1315 East 58TH @1315 E 58TH 57@3oml	1315 East SBTH	1315 E 58TH ST	1315 East 58TH	1315 £ 58TH ST	Chicago, IL			ap and Gown				1934 Vol. 38	-87.594186	
				59 E VAN BUREN ST	Chicago, IL							1917 Vol. 22	-87.534186	
59_East_VAN_BUREN_@59_E_VAN_BUREN_ST@.html 17_East_MONROE_@17_E_MONROE_ST@.html	59 East VAN BUREN 17 East MONROE	17 E MONROE ST	17 East MONROE	17 E MONROE ST	Chicago, IL			ap and Gown ap and Gown				1917 Vol. 22	-87.626698	
54 East MONROE @54 E MONROE ST@ html		54 E MONROE ST		54 E MONROE ST	Chicago, IL			ap and Gown				1915 Vol. 20		41.880981 54 e monroe st. chicago, il 60603, usa
232_East_ERIE_@232_E_ERIE_ST@.html	232_East_ERIE_	232 E ERIE ST	232 East ERIE	232 E ERIE ST	Chicago, IL			ap and Gown				1930 Vol. 35	-87.62193	41.89445 232 e erie st, chicago, il 60611, usa
21_East_MADISON_@21_E_MADISON_ST@.html	21_East_MADISON_		21 East MADISON		Chicago, IL			ap and Gown				1909 Vol. 14		41.881907 21 e madison st, chicago, il 60602, usa
1421_East_60TH_@1421_E_60TH_ST@36ml	1421_East_60TH_	1421_E_60TH_ST	1421 East 60TH	1421 E 60TH ST	Chicago, IL			ap and Gown				1955 Vol. 48	-87.591036	
650_East_60TH_@650_E_60TH_ST@.html	650_East_60TH_	650_E_60TH_ST	650 East 60TH	650 E 60TH ST	Chicago, IL			ap and Gown				1902 Vol. 7		41.785795 650 e 60th st, chicago, il 60637, usa
150_East_56TH_@150_E_56TH_ST@.html	150_East_56TH_	150_E_56TH_ST	150 East S6TH	150 E 56TH ST	Chicago, IL			ap and Gown				1920 Vol. 25	-87.621615	
14_East_GOTH_@14_E_GOTH_ST@.html	14_East_60TH_	14_E_60TH_ST	14 East GOTH	14 E 60TH ST	Chicago, IL			ap and Gown				1922 Vol. 27		41.785668 14 e 60th st, chicago, il 60637, usa
80_East_RANDOLPH_@80_E_RANDOLPH_ST@.html	80_EHIT_RANDOLPH_			80 E RANDOLPH ST	Chicago, IL			ap and Gown				1918 Vol. 23	-87.62502	
80_East_RANDOLPH_@80_E_RANDOLPH_ST@ Asmi	80_Est_RANDOLPH_			80 E RANDOLPH ST	Chicago, IL			ap and Gown				1912 Vol. 17		41.884501 80 e randolph st, chicago, il 60601, usa
80_East_RANDOLPH_@80_E_RANDOLPH_ST@.html	80_East_RANDOLPH_			80 E RANDOLPH ST	Chicago, IL			ap and Gown				1911 Vol. 16	-87.62502	
80_East_JACKSON_@80_E_JACKSON_BLVD@.html		80_E_IACKSON_BLVD		80 E JACKSON BLVD		80 E JACKSON BLVD, Chicago, IL		ap and Gown				1935 Vol. 39	-87.624888	
64_East_LAKE_@64_E_LAKE_ST@.html	64 East LAKE	64_E_LAKE_ST	64 East LAKE	64 E LAXE ST	Chicago, IL			ap and Gown				1966 Vol. 59	-87.625539	41.88589 64 e lake st, chicago, il 60601, usa
727_East_60TH_@727_E_60TH_ST@.html	727_East_60TH_	727_E_60TH_ST	727 East 601H	727 E 60TH ST	Chicago, IL			ap and Gown				1955 Vol. 48		41.785593 727 e 60th st, chicago, il 60637, usa
190_East_DELAWARE_@190_E_DELAWARE_PL@.html		190 E DELAWARE PL		E 190 E DELAWARE PL				ap and Gown				1966 Vol. 59	-87.622329	
190_East_DELAWARE_@190_E_DELAWARE_PL@.html		190_E_DELAWARE_PL		E 190 E DELAWARE PL				ap and Gown				1967 Vol. 60	-87.622329	
190_East_DELAWARE_@190_E_DELAWARE_PL@:html		190_E_DELAWARE_PL		IE 190 E DELAWARE PL				ap and Gown				1964 Vol. 57	-87.622329	
1553_EHR_HYDE_PARK_@1553_E_HYDE_PARK_BLVD@								ap and Gown				1965 Vol. 58	-87.586883	
1553 East HYDE PARK @1553 E HYDE PARK BLVD@	1553 East HYDE PAR	1553 E HYDE PARK B	U 1553 East HYDE PA		U Chicago, IL		p, 1 C	ap and Gown				1964 Vol. 57		41.802323 1553 e hyde park blvd, chicago, il 60615, u
28_East_43RD_@28_E_43RD_ST@.html	28_East_43RD_	28_E_43RD_ST	28 East 43RD	28 E 43RD ST	Chicago, IL.	28 E 43RD ST, Chicago, IL	1 0	ap and Gown				1908 Vol. 13	-87.624657	41.816502 28 e 43rd st, chicago, il 60653, usa
84_East_JACKSON_@84_E_JACKSON_BLVD@.html	84_East_JACKSON_	84_E_JACKSON_BLVD	84 East JACKSON	84 E JACKSON BLVD	Chicago, IL	84 E JACKSON BLVD, Chicago, IL	1 0	ap and Gown				1915 Vol. 20	-87.624813	41.878532 84 e jackson blvd, chicago, il 60604, usa
101_East_ONTARIO_@101_E_ONTARIO_ST@.html	101_East_ONTARIO_	101_E_ONTARIO_ST	101 East ONTARIO	101 E ONTARIO ST	Chicago, IL	101 E ONTARIO ST, Chicago, IL	1 0	ap and Gown				1957 Vol. 50	-87.624731	41.892918 101 e ontario st, chicago, il 60611, usa
20_East_HURON_@20_E_HURON_ST@ html	20_East_HURON_	20_E_HURON_ST	20 East HURON	20 E HURON ST	Chicago, IL	20 E HURON ST, Chicago, IL	1 0	ap and Gown				1930 Vol. 35	-87.627041	41.895085 20 e huron st, chicago, il 60611, usa
18 East LAKE @18 E LAKE ST@ html	18_East_LAKE_	18_E_LAKE_ST	18 East LAKE	18 E LAKE ST	Chicago, IL	18 E LAKE ST, Chicago, IL	1 0	ap and Gown				1914 Vol. 19	-87.627179	41.886088 18 e lake st, chicago, il 60601, usa
173 East RANDOLPH @173 E RANDOLPH ST@ MHI	173_East_RANDOLPH	173 E RANDOLPH ST	173 East RANDOLP	H 173 E RANDOLPH ST	Chicago, IL	173 E RANDOLPH ST, Chicago, IL	1 0	ap and Gown				1903 Vol. 8	-87.62273	41.8843 173 e randolph st, chicago, il 60601, usa
57 East MONROE @57 E MONROE STØ html	57 East MONROE	S7_E_MONROE_ST	57 East MONROE	57 E MONROE ST	Chicago, IL	57 E MONROE ST, Chicago, IL	1 0	ap and Gown				1915 Vol. 20	-87.625586	41.880635 57 e monroe st, chicago, il 60603, usa
25 East DELAWARE @25 E DELAWARE PL@ html	25 East DELAWARE		25 East DELAWARE	25 E DELAWARE PL	Chicago, IL			ap and Gown				1931 Vol. 36	-87.627393	41.898979 25 e delaware pl, chicago, il 60611, usa
230 East OHIO @230 E OHIO ST@ html		230_f_OHIO_ST	230 East OHIO	230 E OHIO ST	Chicago, IL		10	ap and Gown				1927 Vol. 32	-87.621681	
50 East LAKE Ø50 E LAKE STØ html	SO EMI LAKE	SO E LAKE ST	50 East LAKE	50 E LAKE ST	Chicago IL	50 E LAKE ST, Chicago, IL	1.0	ap and Gown				1913 Vol. 18	-87.626095	41.885896 50 e lake st. chicago, il 60601, usa
1157 East 56TH @1157 E 56TH ST@.homi		1157 E 56TH ST	1157 East 56TH	1157 £ 56TH ST		1157 E 56TH ST, Chicago, IL		ally Maroon	Nousehar		6	1953		41.793142 1157 e 56th st, chicago, il 60637, usa

Figure 24: Excerpt From the Dated and Geocoded CSV of "East_No_Suffix"

Division	Searches	Valid Addresses	w/ Extra Pages	# of Appearances
South Alone No Prefix	719,697	5334	280	34,570
South Alone With Prefix	1,439,394	713	26	3253
South Shared	2,120,782	650	37	3218
East Not Repeated	142,522	702	45	4,466
East Repeated	1,184,948	1720	118	11,101
Total	5,607,343	9,119	506	56,608

Figure 25: Text Mining Summary

Due to the text mining's methodological complexity, date extraction, and geocoding process, ¹⁶⁵ little time remained for a formal spatial analysis of the address-date points. However, even a visual inspection speaks to the shuttle system's spatial impact, or at the very least the 1967 extension down to South Shore. Compared to other neighborhoods far south of the university, South Shore features many address mentions. Woodlawn and South Shore also exhibit an exceptionally high ratio of post-urban renewal to pre-urban renewal address mentions, speaking to the South Shore bus route's specific spatial impact.

This dataset has the potential to shine a light on the university's general urban renewal story. The "Cottage Grove Avenue Barrier" was not merely a turn of phrase. While not absolutely impermeable, the increased frequency of addresses to its east in the pre-war periods is immediately visually apparent. Similarly, it is remarkable to see the significantly greater geographic extent of addresses mentioned before the War. The extent to which the University community retreated to Hyde Park and Kenwood (even abandoning most of Woodlawn) is also visually apparent.

Confirming these exploratory observations with a more rigorous spatial analysis is an effort I expect to undertake shortly as a Harris graduate student pursuing a Masters of Science in Public Policy and Computation Analysis. Elements of such an analysis would include the conversion of the raw address-date points to density measures via spatial joins to area units, the establishment of a proper treatment and control to test the impact of the Kenwood and South Shore extensions, Moran's "I" cluster analysis, and other formal spatial data science techniques.

¹⁶⁵ Which ultimately required five months to complete

Section 8:

Policy Recommendations:

This project has primarily been one of documentation, not recommendation. However, there are actionable steps the university can take to help make amends for the historic role its shuttle system played in urban renewal and racialized exclusion.

Establishing an alternative to an established policy is rarely an easy thing. However, in the case of the University of Chicago's campus shuttle system, the university's policy decisions provide a road map to unwinding the selective permeability of space established by the system in the 20th century. In the summer of 2000, the university's bus and shuttle operating contract was up for renewal. Hank Webber, Vice President of Community Affairs, announced that the university would be breaking with its four-and-a-half decade-long precedent of contracting only with private transit operators. While the nighttime shuttles would remain within the university's domain, some daytime routes—those that extended farthest beyond the bounds of the campus—would be handed over to the CTA, Chicago's municipal bus operator. In exchange for a subsidy from the university, they would remain free to students and faculty. However, unlike the UC bus of the 20th century, they would be open to persons not directly affiliated with the university.

While likely done for cost and convenience, the administration's decision to hand its exclusive commuter buses to the CTA represented a fundamental change in the university's mobility and transit approach. Overnight, members of the university community were transformed from participants in a particularist system—from which incumbent residents were excluded—to riders helping to support the operation of a universally accessible transit service.

166 Monique Smith 'CTA and U. of C. Bus Talks Still Rolling Along,' Hyde Park Herald, August 9, 2000

The shift from particularism to universalism would be reinforced soon after by the introduction of UPass, a free CTA student transit card.

While the introduction of UPass, and the 171, 172, and (later) 192 CTA bus routes were a dramatic step towards the kind of universalist transit that is common outside of North America—wherein students provide a ridership base for municipally operated transit systems, instead of riding their own—they are still just a single step. As described at the beginning of this paper, the university continues to operate an extensive campus shuttle system that local residents cannot ride. The 171 and 172 bus routes are among the shortest in the CTA's portfolio, covering only the area between 61st and 50th Street, the portions of Hyde Park and South Kenwood that were so fundamentally transformed by the 1958 Urban Renewal Plan.

The most obvious means by which the selective permeability of space could continue to be unwound would be coordinating with the CTA to extend the 171 and 172 north of 47th Street and south of 61st Street, into neighborhoods not as fundamentally transformed by The University's 20th century urban renewal campaign. An even more radical step would be to municipalize the remaining UGO campus shuttle routes or open them up to non-University affiliated persons willing to pay a standard bus fare with a CTA Venture Card. This would allow the university to continue to serve specific sites on campus with additional transit without perpetuating a particularist transit policy or a selective permeability of space.

Conclusions

Significant work awaits the University of Chicago's campus shuttle system. As a consequence of the COVID-19 pandemic and its impacts on archival accessibility, records only pertaining to the first decade and a half of the UC Bus system were included in this thesis

project. Similarly, the methodological complexity of this project's data gathering effort has left space for a far deeper spatial analysis. Nevertheless, this project represents the first secondary source ever compiled on the University of Chicago's campus shuttle system. Despite the work that remains, this undertaking has generated several conclusions about the system's origin and maintenance.

The University of Chicago's campus shuttle system commenced operations on February 4th, 1957, and has run near continuously for 64 years. According to archived administrative records, it began life as the UC Bus, a cloistered project of a handful of University administrators (business manager Weston L. Krogman chief among them). Confined to campus, with ridership restricted to members of the university community, the shuttle system was meant to relieve a brutal parking crunch caused by the faculty's suburbanization in response to the perceived decay of Hyde Park. However, in the years following its introduction, the shuttle system was steadily extended off-campus, transforming it into a policy of urban renewal and establishing a selective permeability of space in the neighborhoods adjoining the university. This was done in response to pressure by members of the faculty (such as Lloyd Kozloff) and undergraduate students (such as Dave Rosenberg), who hoped that a "safe" and university-exclusive mode of transportation would open up the abundant housing of neighborhoods such as Kenwood and South Shore to University-affiliated persons. Their expectations have been preliminarily confirmed by a computational text-mining effort, which has extracted, geocoded, and dated more than 56,000 street addresses (corresponding to 9,000 unique locations) featured in the pages of 20th-century campus print publications.

In the first years of the new millennium, the exclusionary regime represented by the UC Bus (since rebranded as UGo) was partially unwound (primarily for economic reasons) with the

municipalization of some long-distance shuttle routes and the creation of the 171, 172, and 192 CTA lines. This speaks to a general truth about American 20th-century urban policy—including exclusionary zoning and urban highways: bringing about a greater degree of racial equity is often a matter of simply not spending vast amounts on segregationist regimes.

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