

THE UNIVERSITY OF CHICAGO

# Uneven Spatial Development in Neoliberal Chicago

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## **Abstract**

Overall place-based public expenditure in Chicago has followed patterns of neoliberal spatial selectivity, where business and economic development is prioritized, primarily in and around the central business district or high income residential areas. This prioritization occurs at the expense of social benefits or democratically redistributive policies to help those in need. Tax Increment Financing (TIF) in particular has displayed the same patterns and has been known for egregious abuses. At the behest of critics, the City evaluated its use of TIF with a 2011 reform panel. However, afterwards no noticeable change was realized and TIF use continues within the neoliberal urban entrepreneurialist framework, instead of as a tool to help underserved areas.

## Chapter 1

### Introduction

There is no right answer to the question of the proper role of a democratic government. Furthermore, there is even less clarity regarding the means of measuring whether any regime has achieved success or not. Nevertheless, as defined by the United States Constitution, our democracy's goal is to "form a more perfect Union, establish Justice, insure domestic Tranquility" and "promote the general Welfare" for all citizens.<sup>1</sup> Therefore, abstaining from the process of governance due to the incapacity to achieve a perfect solution, satisfy everyone in all regards, or even to surely know that any action or inaction is appropriate is itself not a suitable or adequate reaction. Moreover, disregarding the actions of government due to preventable ignorance, differences of opinion, or perceived agreement is equally undesirable and indefensible. Understanding and active participation is thus a necessary requirement for successful citizenry. But understanding is only possible through observation of the intentions and acts undertaken by any administration, which is by no means an easy task. This study is therefore motivated to participate in the improvement of government by shedding light on, and helping to convey understanding of, where public money has been spent in recent years within the City of Chicago, by which ideology, and for the benefit or at the cost of whom.

This study's starting point is conditioned by David Harvey's argument that space is fundamentally constructed by social phenomenon and that development occurs unevenly. Therefore, any understanding or analysis of patterns of development should recognize that there are various forces at play within society, reflected in the history of capital accumulation, and that a variety of powers, social and political relations, institutional preferences, and consumption practices interdependently coalesce in the physical.<sup>2</sup> A

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<sup>1</sup> "The Constitution of the United States."

<sup>2</sup> Harvey, *Spaces of Global Capitalism - Towards a Theory of Uneven Geographical Development*.

requisite appreciation of those factors must be incorporated in any conclusions, decisions, or future actions.

This study will demonstrate that the recent history of public action in the City of Chicago has privileged certain classes of people and certain corporate commercial activity over others. The study does not aim to make an explicit value judgment about the efficacy of the new alignment. Nevertheless, a particular point of view is emphasized and implicitly supported, which will undoubtedly become evident in the presentation of the evidence. An appropriate appreciation of and accounting for that fact is requested. The study will proceed in four parts. First, recent influential literature on neoliberalism and Tax Increment Financing will be summarized. Additionally, the history of TIF and its current use in Chicago will be explained. Second, the data and methods used in this study will be discussed. Third, results will be presented and lastly, an interpretation and conclusion of the preceding results will be undertaken.

## Chapter 2

# Literature Review and Background

## Neoliberalism

### *Overview*

In a nutshell, neoliberalization is the processes of extending and enforcing competitive, market-based logics while removing and curtailing government involvement in public affairs and urban management. Neoliberalization aims to decrease state inefficiency and more optimally spur development. Peck and Tickell outline a twofold development of neoliberalization. Initially, during the 1970s and 80s, under the Reagan and Thatcher administrations, neoliberalization took a “roll-back” approach and was concerned with decreasing state participation and funding. Subsequently, since the 1990s, neoliberalist frameworks and policies shifted towards a new “roll-out” structure characterized by more active government involvement yet still conditioned on neoliberal ideology. However, unlike previous active public action, the manifestation of neoliberal “roll-out” policies have caused a decrease in democratically redistributive public programs and involvement, shifting the focus of government towards private wealth accumulation and geographically uneven economic development.<sup>3</sup>

### *Roll-Back Neoliberalism*

From the New Deal through the post-World War II era, public policy in the United States broadly fell into a Fordist-Keynesian framework where the state more explicitly managed the macro economy and anchored institutions towards increased social integration. However, beginning in the 1970s with the Reagan administration, public policy shifted away from a nation-centric form of publicly planned and financed involvement towards an emphasis on localized sub-regional or municipal control and a marketization of both policy and governmental institutions. This new paradigm,

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<sup>3</sup> Peck and Tickell, “Neoliberalizing Space.”



characterized by Peck and Tickel as “roll-back” neoliberalism,<sup>4</sup> prioritized efficiency, entrepreneurialism, economic freedom, deregulation, and lower taxes over democratic steering, redistribution, and public services. As much as possible, the power of the market was introduced into all areas of policy and public action. In conjunction with the shift of policy focus, the federal government also began reducing funding for urban development and social services. Cities were forced to either downsize, eliminate, or seek out alternative funding mechanisms to maintain the projects and services that they deemed most valuable.

### *Roll-Out Neoliberalism*

Beginning in the 1990s, the failings of roll-back neoliberalism caused by state retraction began to show faults and criticisms accumulated. In addition, the growing effects of globalization were leading to increasingly mobile capital, causing multinational corporations to be less constrained by geography and therefore less beholden to any particular location. However, instead of succumbing to critiques and initiating the formulation of new paradigms, neoliberalism mutated and became more pervasive, integrating itself within new forms of state action. The newer neoliberalism, coined “roll-out”<sup>5</sup>, is characterized by inter-city competition and urban entrepreneurialism which has caused development to become increasingly spatially segregated, and thus socially uneven.

Hand in hand with the changes resulting from the shift towards pro-market and anti-statist neoliberalism, rising globalization, as national and international markets are integrated via the neoliberal ideology, and de-industrialization caused investment capital and large multinational corporations to be less and less beholden to specific geographies.<sup>6</sup> In other words, businesses were progressively more likely to search out and physically move their headquarters or offices towards the most fiscally or environmentally attractive

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<sup>4</sup> Graham and Simon Marvin, *Splintering Urbanism*; Swyngedouw, Moulaert, and Rodriguez, “Neoliberal Urbanization in Europe: Large-Scale Urban Development Projects and the New Urban Policy.”

<sup>5</sup> Peck and Tickell, “Neoliberalizing Space.”

<sup>6</sup> Adedeji and Thornton, “International Capital Mobility: Evidence from Panel Cointegration Tests”; Cohen and Centeno, “Neoliberalism and Patterns of Economic Performance, 1980-2000”; Ranney, “Mobile Capital and Economic Development Planning.”

locations, and do so repeatedly. Cities therefore aim to become central nodes in the global economic network and attract businesses and new residents.<sup>7</sup>

To entice and appeal to large businesses and elite consumers, and therefore retain the benefits of high employment and consumption, cities propose and undertake ever larger and more grandiose projects at the expense of previously undertaken social programs or redistributive policies.<sup>8</sup> As Farmer explains, "to lure and entice the global elite, municipal governments recreate urban space by prioritizing megaprojects and infrastructure that help businesses gain a competitive advantage and keep them well connected with international networks in addition to providing amenities for gentrification, tourism and privileged cultural consumption."<sup>9</sup> Therefore, cities shift their primary focus towards self-marketization and gaining international standing through headline developments to appeal and attract businesses while deprioritizing investment for less economically advantageous groups.

However, as cities integrate into the global network with megaprojects and incentive packages they necessarily compete with each other to attract business.<sup>10</sup> As a result, cities enter into a race to the bottom, leveraging more and more of limited budgets towards the attraction of companies. Peck and Tickell explain how,

“In selling themselves, cities are therefore actively facilitating and subsidizing the very geographic mobility that first rendered them vulnerable, while also validating and reproducing the extralocal rule systems to which they are (increasingly) subjected. The logic of interurban competition, then, turns cities into accomplices in their own subordination, a process driven—and legitimated—by tales of municipal turnaround and urban renaissance, by little victories and fleeting accomplishments, and ultimately also by the apparent paucity of “realistic” local alternatives.”<sup>11</sup>

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<sup>7</sup> Johansson, “Inter-Urban Competition and Air Transport in the Deregulated Era.”

<sup>8</sup> Alan Altshuler and David Luberoff, “Megaprojects: The Changing Politics of Urban Public Investment”; Fainstein, “Mega-Projects in New York, London and Amsterdam”; Golubchikov, “World-City-Entrepreneurialism”; Irazabal and Chakravarty, “Entertainment-Retail Centers in Hong Kong and Los Angeles: Trends and Lessons”; Lehrer and Laidley, “Old Mega-Projects Newly Packaged?”

<sup>9</sup> Farmer, “Uneven Public Transportation Development in Neoliberalizing Chicago, USA.”

<sup>10</sup> Lee and Schmidt-Marwede, “Interurban Competition?”

<sup>11</sup> Peck and Tickell, “Neoliberalizing Space.”

The downward spiral both reinforces and accelerates the process of interurban competition and validates those who successfully undertake the most fiscally and democratically destructive ventures. Yet as inter-city competition intensifies, the scale on which projects are undertaken can surpass the local capacity for funding via taxes and require either novel funding mechanisms, budget deficits, elimination of certain programs or policies, or a combination thereof.<sup>12</sup> In sum, cities must become entrepreneurial to remain relevant.

Furthermore, cities have less and less capacity for non-compliance or abstinence from the neoliberal urban entrepreneurial paradigm. By the nature of open-market inter-city competition, if businesses are not supported or given incentives to stay, they will relocate to more aggressive cities willing to offer larger benefits—or at least the illusion of greater benefits. Jobs and high-tax paying residents correspondingly relocate as well. Harvey argues that instead of the free market operating as a beneficial hidden hand, the competition based, capitalist spatial development system works as an external coercive law requiring participation and forcing out “the lowest common denominator of social responsibility and welfare provision”.<sup>13</sup> Additionally, once ensconced in the cycle of neoliberal urban entrepreneurialism every action further cements the status quo and legitimizes ever more action to maintain a city’s competitive place within the global hierarchy.<sup>14</sup>

Urban entrepreneurialism, thus, refocuses the role of government towards creating conditions and enhancing the benefits of capital accumulation.<sup>15</sup> Development therefore, focuses on deploying techniques for achieving economic growth as the exclusively desirable goal and roll-out neoliberalism also shifts the metric by which success is

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<sup>12</sup> McCann, ““Best Places””; Ivan Turok, “Cities, Regions and Competitiveness”; Sager, “Neo-Liberal Urban Planning Policies.”

<sup>13</sup> Harvey, “From Managerialism to Entrepreneurialism.”

<sup>14</sup> McGuirk, “State, Strategy, and Scale in the Competitive City”; Wilson, “Toward A Contingent Urban Neoliberalism.”

<sup>15</sup> Bob Jessop, “The Entrepreneurial City: Re-Imaging Localities, Re-Designing Economic Governance, or Re-Structuring Capital.”

measured to economic outcomes.<sup>16</sup> “This means adoption of pro-growth policies and new institutional structures of urban governance, expecting local officials to be enterprising, risk-taking, inventive, and profit-motivated in their entrepreneurial role. The way cities operate is changed towards business-like strategies, alliances to achieve urban competitiveness, and public–private partnerships.”<sup>17</sup>

The role of local officials thus shifts to “become deal makers rather than regulators” which has resulted in “a peculiar form of nonplanning in which planners participate in individual projects... while failing to place these projects into any broader framework.”<sup>18</sup> As a result, “the planner has become more of an enabler of development” rather than a public administrator focused on community impact or environmental quality.<sup>19</sup> In sum, officials now coordinate directly with business leaders by forging alliances and crafting combined strategies which further fuels the global growth machine.<sup>20</sup>

Peck and Tickel combine and summarize how neoliberalism has affected urban development and policy through the roll-out regime in seven ways. (1) Neoliberalism “promotes and normalizes a ‘growth-first’ approach to urban development” and reimagines the Fordist/Keynesian “social-welfarist arrangements as anticompetitive” and “antagonistic to the overriding objectives of economic development.” (2) Neoliberalism shifts policy evaluation metrics towards market logics. (3) Neoliberalism undermines alternative methods of development. (4) Neoliberalism causes cities to constantly look elsewhere both for opportunities and to monitor competitor cities, lest they be left behind. This occurs in contrast to internally focused concerns with social welfare and infrastructure provision. (5) Neoliberalism is associated with a limited and narrow set of policy plans focused on “capital subsidies, place promotion, supply-side intervention,

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<sup>16</sup> Robert A. Beauregard, “Between Modernity and Postmodernity: The Ambiguous Position of US Planning.”

<sup>17</sup> Sager, “Neo-Liberal Urban Planning Policies.”

<sup>18</sup> Robert A. Beauregard, “Between Modernity and Postmodernity: The Ambiguous Position of US Planning.”

<sup>19</sup> Sager, “Neo-Liberal Urban Planning Policies.”

<sup>20</sup> Judd and Simpson, “Reconstructing the Local State”; Lynne B. Sagalyn, “Explaining the Improbable: Local Redevelopment in the Wake of Federal Cutbacks.”

central-city makeovers, and local boosterism.” (6) Neoliberalism has no appetite for incompetence or noncompliance. (7) The combination of “after-welfarist statecraft and organized resistance to neoliberalization” has positioned cities in a contradictory place leading to “punitive institution building, social surveillance, and authoritarian governance.”<sup>21</sup> In sum roll-out neoliberalism is characterized by the combination of decreases in federally supported programs, increasingly mobile capital, increases in intercity competition, and the rise of urban entrepreneurialism all at the expense of serious engagement in matters of social justice.

### *Effects of Neoliberalism*

The changes in the role, emphasis, and practices of government have not occurred without profound effects for the spatial distribution of people across cities. Indeed, there has been “a marked intensification of spatially uneven development.”<sup>22</sup> The pressures in neoliberal urban entrepreneurialism and inter-city competition to accommodate and adjust for those with higher abilities to pay occurs at the expense of social welfare policies and democratically motivated redistributive practices.<sup>23</sup> Cities are re-imagined and marketed towards creating employment and implementing ever larger elite driven development projects instead of managing and administering social benefits or supporting those in need.<sup>24</sup> Furthermore, in general, and especially in the case of Chicago, “spatial selectivity translates into race and class selectivity.”<sup>25</sup> As a result neoliberalism has

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<sup>21</sup> Peck and Tickell, “Neoliberalizing Space.”

<sup>22</sup> Peck and Tickell.

<sup>23</sup> Albrechts, “Changing Roles and Positions of Planners”; Boyle and Hughes, “The Politics of Urban Entrepreneurialism in Glasgow.”

<sup>24</sup> Acuto, “High-Rise Dubai Urban Entrepreneurialism and the Technology of Symbolic Power”; Begg, “Cities and Competitiveness”; Harvey, “From Managerialism to Entrepreneurialism”; Jessop and Sum, “An Entrepreneurial City in Action”; Kipfer and Keil, “Toronto Inc? Planning the Competitive City in the New Toronto.”

<sup>25</sup> Teresa, “Rationalizing Tax Increment Financing in Chicago.”

implicitly lead to increases in stratification and inequities across class, race, and space.<sup>26</sup>

## **Tax Increment Financing**

### *Overview*

One of the newly developed financing tools to help neoliberal cities is Tax Increment Financing. TIF is employed by local governments to help spur development in underserved areas. At its most basic, TIF allows administrators to pay for programs with the future tax revenues generated because of the initial program. To begin using TIF, officials designate a geographic area—TIF district—that has demonstrated blight conditions. When initially chosen, the property taxes from the TIF district are fixed for a certain period of time, usually around 20 years. Any tax growth that occurs above the fixed base level during that specified period of time is diverted away from the underlying jurisdictions and towards a separate TIF district fund. The difference in revenue is the tax increment. Projects are then undertaken and paid for, most commonly, by money borrowed against the future property tax increases via bonds. Once the time period expires, tax revenues return to the normal distribution among the underlying jurisdictions. Since TIF does not require any direct budgetary expenditure and does not explicitly take money away from any jurisdiction, it has been advocated and widely used as a self-financing development tool. Therefore, “financially strapped local governments can make the improvements they need...without tapping into general municipal revenues or raising taxes.”<sup>27</sup> TIF helps “attract private development and new businesses” which leads to “more jobs, more customers, and, in turn, more private investment for areas most in need.”<sup>28</sup> The TIF revenue process can be viewed below in Figure 1.

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<sup>26</sup> Albrechts, “Changing Roles and Positions of Planners”; Robert A. Beauregard, “Between Modernity and Postmodernity: The Ambiguous Position of US Planning”; Lynne B. Sagalyn, “Negotiating for Public Benefits: The Bargaining Calculus of Public-private Development.”

<sup>27</sup> Illinois Tax Increment Association, “About TIF.”

<sup>28</sup> Illinois Tax Increment Association.

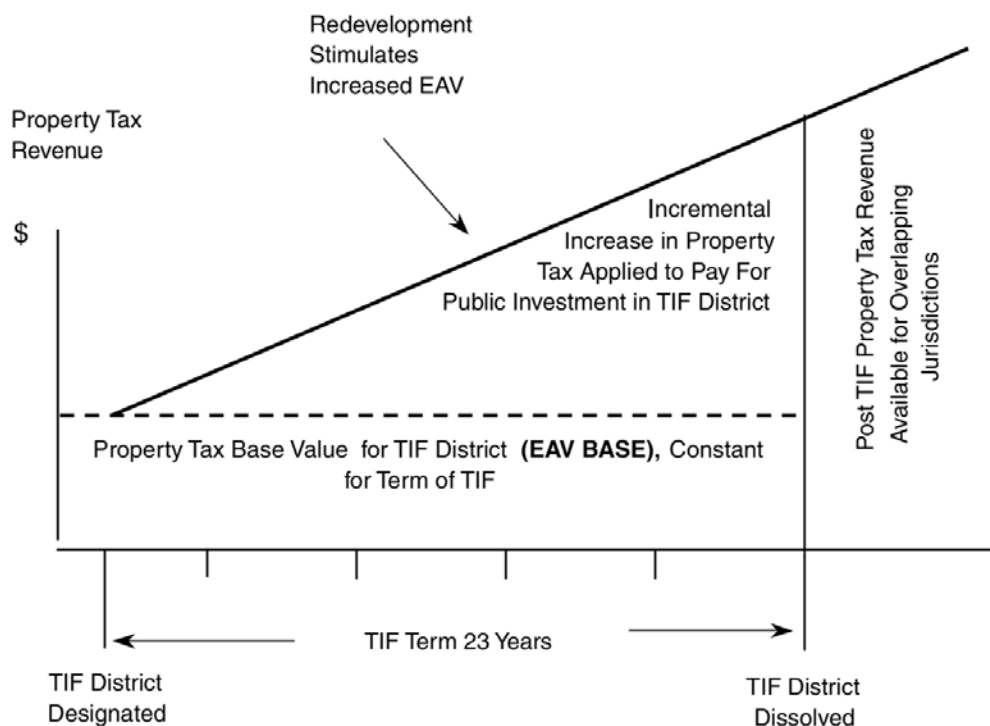


Figure 1: TIF Revenue Process. EAV is the Equalized Assessed Value.<sup>29</sup>

### *Effectiveness of TIF*

Because TIF enables a wide array of different programs across multiple different property classes, all without requiring municipal expenditure or tax increases, it has been widely implemented—in almost every state. Nevertheless, expanding TIF use has not gone without controversy. Indeed, the literature on the effectiveness of TIF is mixed.<sup>30</sup> Some suggest that TIF programs have a positive association with property values.<sup>31</sup> While others find a large degree of variation between different TIF districts themselves,

<sup>29</sup> Smith, “The Impact of Tax Increment Finance Districts on Localized Real Estate: Evidence from Chicago’s Multifamily Markets.”

<sup>30</sup> Greenbaum and Landers, “The Tiff Over TIF: A Review of the Literature Examining the Effectiveness of the Tax Increment Financing.”

<sup>31</sup> Joyce Y. Man and Mark S. Rosentraub, “Tax Increment Financing: Municipal Adoption and Effects on Property Value Growth.”

and in comparison to non-TIF districts.<sup>32</sup> It is also likely that administrators choose areas that have a higher likelihood of growing faster and therefore will generate a larger tax increment, explicitly, but not necessarily accurately, demonstrating successful programs.<sup>33</sup> TIF districts that focused on commercial activity have appeared to directly compete in a zero-sum game with other areas in a municipality, whereas industrial zones were generally found to have a more positive overall impact.<sup>34</sup> Weber questions whether raising property values are actually beneficial to local businesses and residents as higher taxes and gentrification could force people to move.<sup>35</sup> Viewing economic development more broadly, as opposed to just property values, the evidence is even less conclusive. Man and Wassmer find either positive or statistically insignificant associations between TIF adoption and employment.<sup>36</sup> Whereas, Byrne finds a negative association between retail development and employment.<sup>37</sup> In determining whether a TIF district is actually self-financing, the literature concludes that many if not most projects do not pay for themselves.<sup>38</sup> Finally, a major question surrounds the ‘but-for’ test: would economic development occur to the same degree, or at all, without TIF? Lester finds that TIF does not actually spur development or create jobs beyond what would have occurred otherwise.<sup>39</sup>

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<sup>32</sup> Merriman, Skidmore, and Kashian, “Do Tax Increment Finance Districts Stimulate Growth in Real Estate Values?”; Weber, Bhatta, and Merriman, “Does Tax Increment Financing Raise Urban Industrial Property Values?”

<sup>33</sup> Merriman, Skidmore, and Kashian, “Do Tax Increment Finance Districts Stimulate Growth in Real Estate Values?”

<sup>34</sup> Byrne, “Does Tax Increment Financing Deliver on Its Promise of Jobs? The Impact of Tax Increment Financing on Municipal Employment Growth.”

<sup>35</sup> Rachel Weber, “Tax Increment Financing Theory and Practice.”

<sup>36</sup> Joyce Y. Man, “The Impact of Tax Increment Financing Programs on Local Economic Development”; Robert W. Wassmer, “Can Local Incentives Alter a Metropolitan City’s Economic Development.”

<sup>37</sup> Byrne, “Does Tax Increment Financing Deliver on Its Promise of Jobs? The Impact of Tax Increment Financing on Municipal Employment Growth.”

<sup>38</sup> Michael Dardia, *Subsidizing Redevelopment in California*; David B. Lawrence and Susan C. Stephenson, “The Economics and Politics of Tax Increment Financing.”

<sup>39</sup> Lester, “Does Chicago’s Tax Increment Financing (TIF) Programme Pass the ‘But-for’ Test?”



## *TIF in Neoliberal Chicago*

From a neoliberal perspective, TIF checks all the appropriate boxes. It is, in theory, revenue neutral—paying for itself—thereby allowing municipalities to circumvent shrinking budgets and decreasing federal funding. It can be used broadly, both from a geographic and programmatic perspective, allowing administrators to undertake projects where and how they see fit. Finally, the mechanism by which funding is diverted allows TIF administrators to capture all associated revenue without having to compromise with other municipal departments, jurisdictions, or coordinate between government agencies. In many senses TIF is the ideal neoliberal tool and fits well within a roll-out neoliberal framework. Thus, TIF can, and is frequently used for urban entrepreneurialism and inter-city competition. It is no surprise that TIF use grew rapidly throughout the country and across cities.<sup>40</sup>

In Chicago specifically, TIF was initially used largely as an instrument for real estate development and championed by private consultants.<sup>41</sup> However, as time went on, due to the changes in the logic conditioning the role of government and new financially based metrics of success, TIF shifted from a tool focused on real estate development i.e. a primarily physical, place-based mechanism, towards a more fungible asset class that could be employed as desired for uses such as training, administration, infrastructure, or interest payments.<sup>42</sup> Chicago's TIF administrators displayed preferences towards attracting and supporting corporations who were perceived to generate higher economic growth potential in and around downtown at the expense of alternative projects in other parts of the city. They viewed TIF as a cost-free instrument to help secure deals with those corporations and used it frequently in areas that did not need supplementary public support. Additionally, by selectively choosing TIF districts in areas with the highest future growth potential, city officials could justify the continued abuse of TIF by pointing to a successful but rigged track record. In a study looking at whether TIF actually

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<sup>40</sup> Teresa, "Rationalizing Tax Increment Financing in Chicago."

<sup>41</sup> Rachel and Sara, "The Historical Roots of Tax Increment Financing, or How Real Estate Consultants Kept Urban Renewal Alive"; Teresa, "Rationalizing Tax Increment Financing in Chicago."

<sup>42</sup> Weber, "Selling City Futures: The Financialization of Urban Redevelopment Policy."

jumpstarted projects that would not have otherwise occurred, Lester found no evidence that TIF made any substantive impact in Chicago.<sup>43</sup> Lester's results imply that city officials claimed undue credit by designating TIF districts in areas where property values were increasing naturally and TIF support provided no added benefit, yet from the outside TIF still appeared successful. Teresa explains that "although TIF districts [were] used in poorer neighborhoods, access to TIF funds [was] greatest in those areas of the city where future development and increases in property value [were] seen as secure and inevitable."<sup>44</sup> As such, TIF was not used as intended in disadvantaged areas, nor was it employed in a politically neutral manner, instead Chicago's TIF use demonstrated profound neoliberal spatially selective patterns.<sup>45</sup>

Common examples of neoliberal TIF use in Chicago include the subsidization of corporate headquarter relocation or renovation, general support and incentivization for private companies, or upscale development in and around the economically advantaged downtown Central Business District (CBD)<sup>46</sup>. For example, United Airlines received \$31 million to relocate into Chicago, CNA received \$13.7 million to renovate its headquarters and Carbide and Carbon received \$8.5 million to renovate the Hard Rock Hotel.<sup>47</sup> Support also went to companies such Quaker Oats, CareerBuilder, UPS, Target, and Jewel-Osco, among others.<sup>48</sup> Some non-profits also benefited, Rush University Medical Center received \$75 million, Presence Health received \$5.5 million, and the Chicago Symphony Orchestra received \$2.5 million.<sup>49</sup> \$55 million went to the McCormick Place Marriot Marquis or potentially Navy Pier.<sup>50</sup> Hundreds of millions have gone to support

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<sup>43</sup> Lester, "Does Chicago's Tax Increment Financing (TIF) Programme Pass the 'But-for' Test?"

<sup>44</sup> Teresa, "Rationalizing Tax Increment Financing in Chicago."

<sup>45</sup> Jones, "Spatial Selectivity of the State?"

<sup>46</sup> "Chicago Vehicle and Transportation Code: 9-4-010."

<sup>47</sup> Juan-Pablo Velez, "TIF Aided Public and Private Projects Almost Evenly, Analysis Shows."

<sup>48</sup> Ellyn Fortino and Margaret Smith, "Corporate Giants Received TIF Money, Records Show"; Ecker, "Presence Health in Line for \$5.5 Million TIF Subsidy."

<sup>49</sup> Ellyn Fortino and Margaret Smith, "Corporate Giants Received TIF Money, Records Show."

<sup>50</sup> Chase and Ecker, "How City Power Players Diverted \$55 Million in Blight- Ghting TIF Cash to Navy Pier"; Danny Ecker and John Chase, "Aldermen Blast City, McCormick Place Officials over Navy Pier"

upscale private residential development projects across the city.<sup>51</sup> Unsurprisingly, a large and sustained public outcry has subsequently arisen around the City's use of TIF.

Therefore, in 2011, to respond to the increasingly fervent critiques alleging misuse and abuse, Mayor Rahm Emanuel established a reform panel to review the City's use of TIF and make recommendations for improvement. The panel's goal was to establish a more comprehensive policy, develop metrics to track performance, and improve overall accountability of TIF use across the City. The panel was represented by a variety of interested groups, held open hearings, and received comments from the public at large. Additionally, as a part of the process, the panel began to disseminate previously withheld information about actual patterns of TIF use across the city. They showed that TIF districts covered about one-third of the City's area, brought in roughly \$500 million in revenue, and that the distribution of TIF spending was roughly equal between public and private interests but that the Mayor's office was only vaguely accounting and accountable for its activity.<sup>52</sup> In conclusion, the panel determined that even though TIF was generating hundreds of millions of dollars in revenue each year, there was no formal policy governing TIF district establishment and the use of TIF funds and general information about TIF was not easily accessible. As such, they made six recommendations to improve TIF use in Chicago. (1) The City should create a development plan and clearly delineate how TIF will achieve any stipulated goals, then submit the proposal to the City Council for review. (2) The City should budget TIF spending in accordance with a multi-year expenditure plan, again submitted to the City Council for consideration. (3) The City should establish metrics for TIF use that align with broader development goals and report on those metrics regularly. (4) The City should publicize TIF expenditure. (5) The City should review TIF district performance regularly. (6) The Mayor should form a new body, accountable for all aspects of TIF.<sup>53</sup>

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TIF Plan"; David Reifman and Lori Healey, "No TIF Funds Were Divereted to Navy Pier, City Officials Say."

<sup>51</sup> Juan-Pablo Velez, "TIF Aided Public and Private Projects Almost Evenly, Analysis Shows."

<sup>52</sup> Juan-Pablo Velez.

<sup>53</sup> Brown, *Findings and Recommendations for Reforming the Use of Tax Increment Financing in Chicago: Creating Greater Efficiency, Transparency and Accountability*.

While a comprehensive, point-by-point review of whether the reform panel’s specific recommendations were followed, and to what effect, is outside the scope of this study, a brief look at the current patterns of TIF use in Chicago is in order now, and a broader analysis of spending patterns surrounding the 2011 panel, later. Currently TIF districts cover 36% of the City’s area and account for roughly \$600 million in annual revenue.<sup>54</sup> Focusing specifically on the downtown area, there are three TIF districts in the loop, encompassing 21% of the total loop area and 32% of the developed portion of the loop. Enlarging the area to observe the CBD, there are twelve TIF districts encompassing 22% of the total area. A map of citywide TIF districts with the Loop and CBD displayed can be seen below in Figure 2.

At first glance, merely observing the area covered by TIF districts can be misleading, instead, to determine the actual patterns of expenditure across the city, it is necessary to observe the distribution of funding within districts. As such, maps of single TIF projects by cost and aggregated projects by community area can be viewed below in Figures 3. and 4. respectively.

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<sup>54</sup> “TIF Funding Sources and Uses by TIF, Fiscal Year, and Type | City of Chicago | Data Portal.”

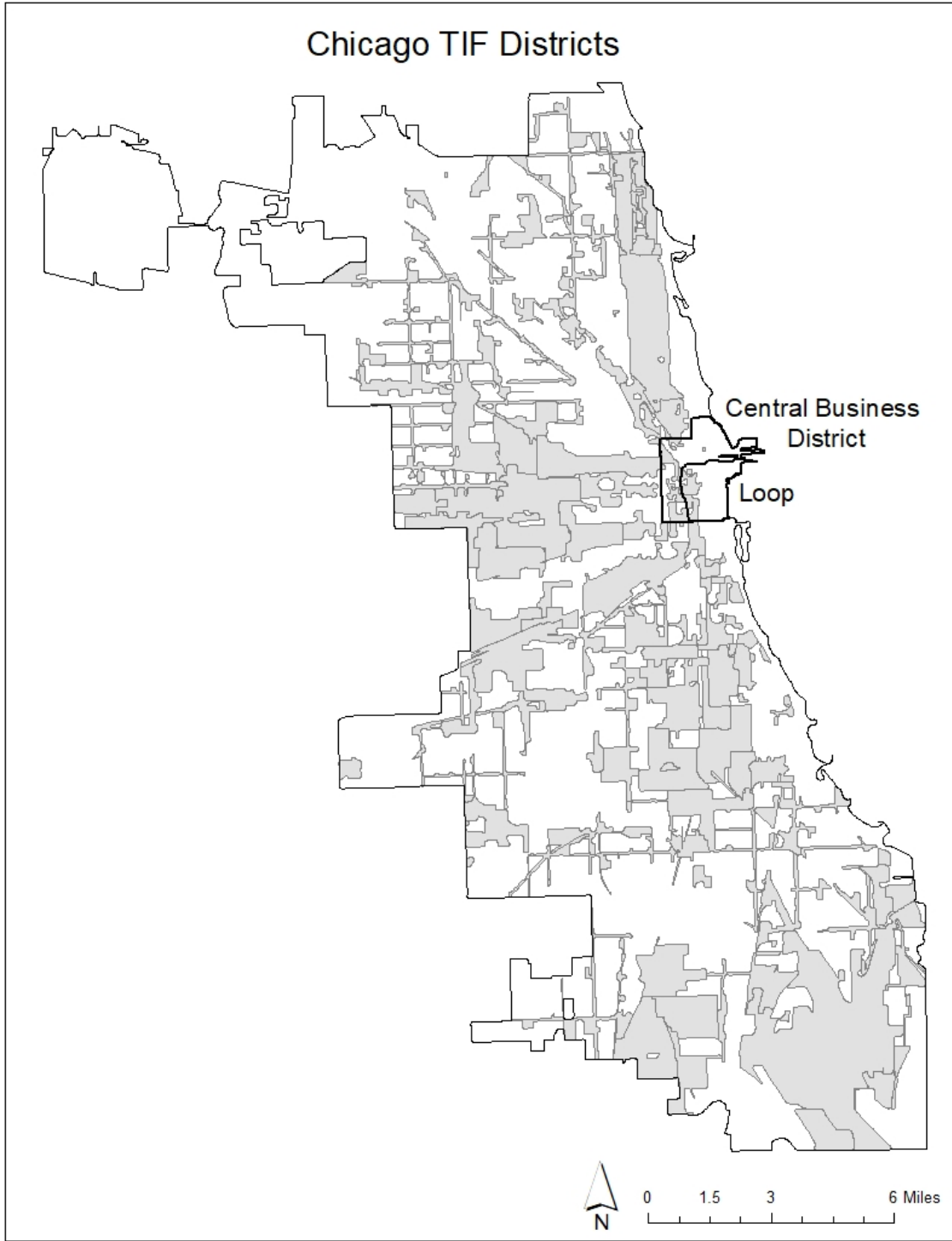


Figure 2: Chicago's TIF Districts with the CBD and Loop

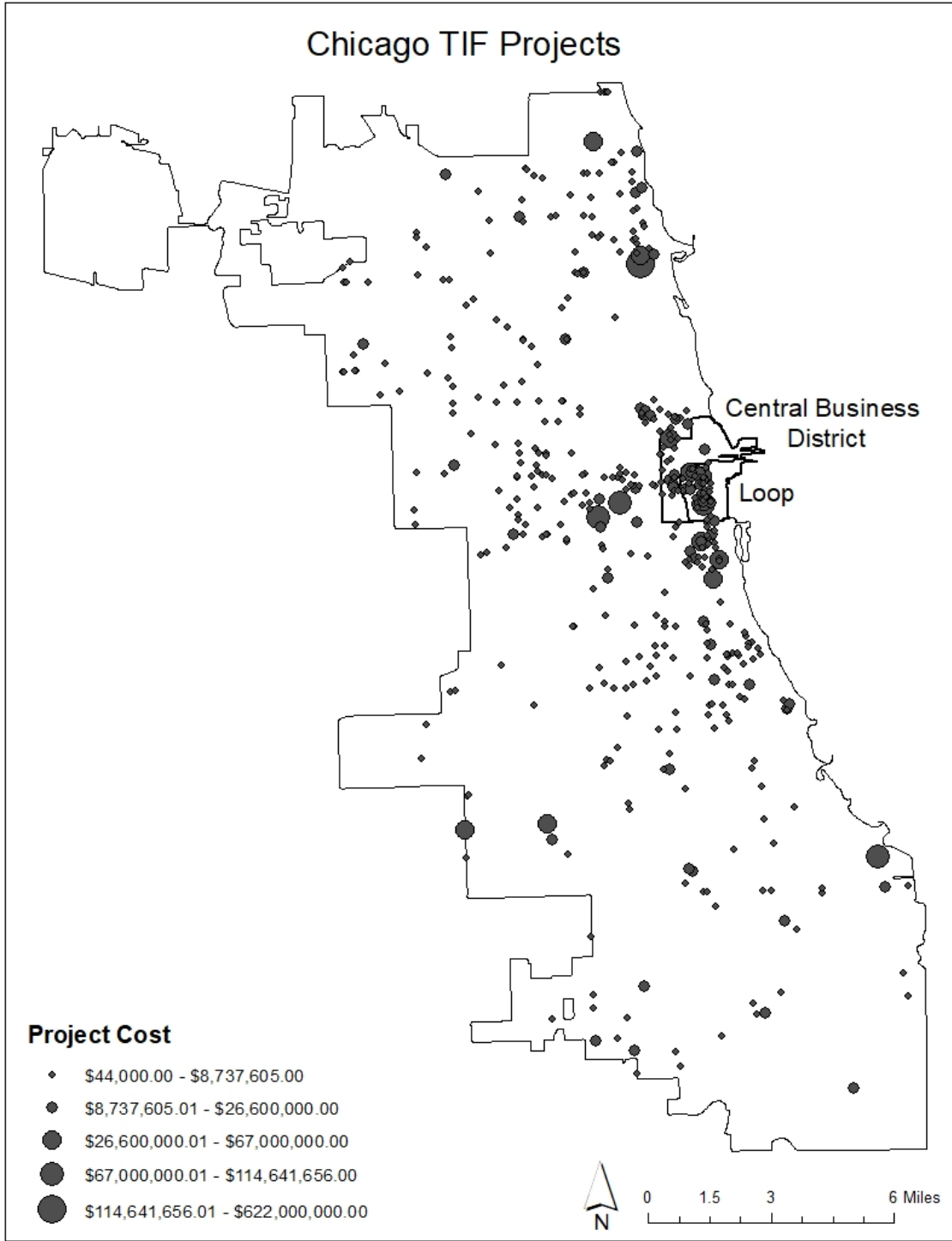


Figure 3: TIF Project Locations and Costs

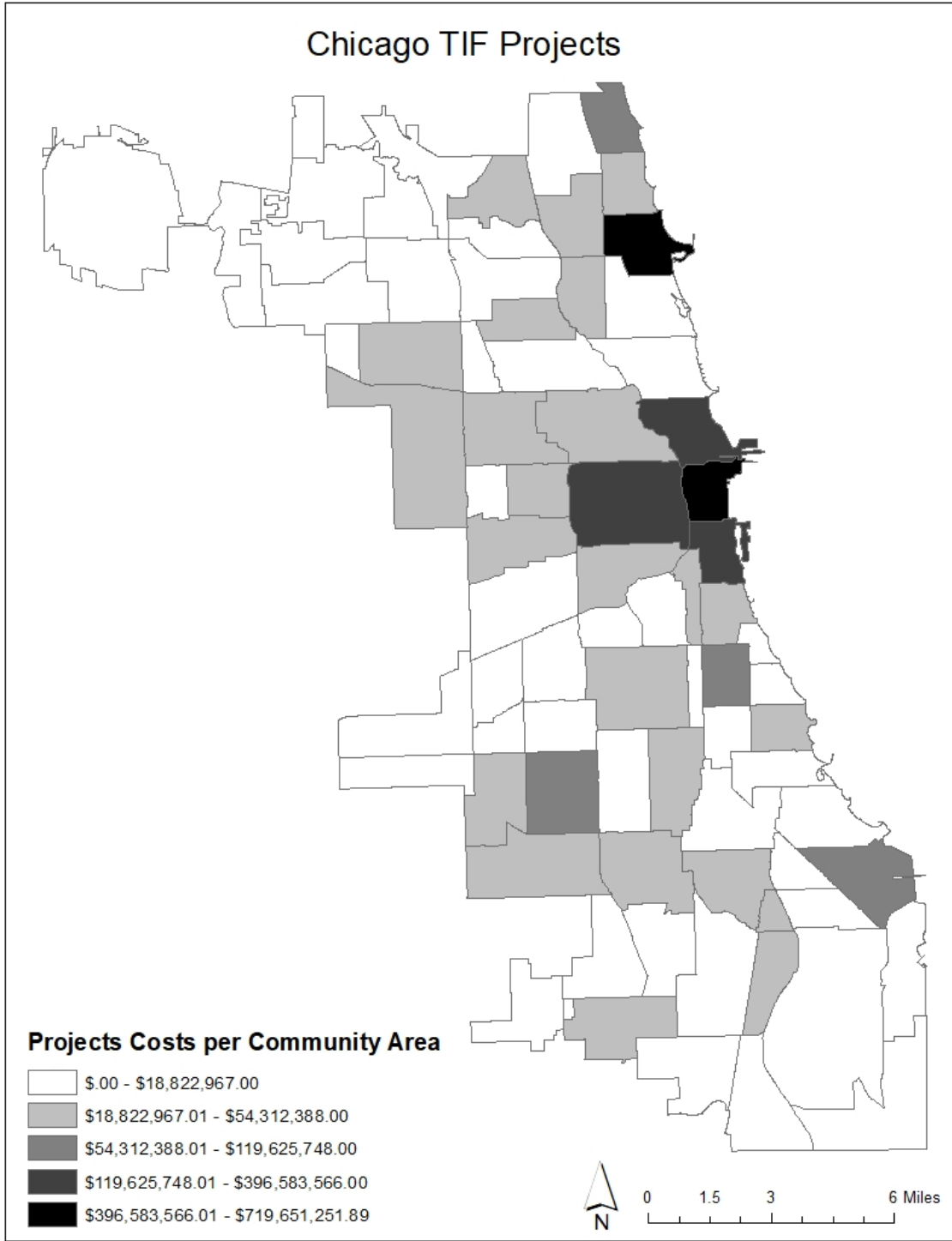


Figure 4: TIF Project Spending by Community Area

## Chapter 3

# Data and Method

### Data and Variable Description

This study will proceed in roughly two interlinked parts, first, an analysis of overall spending patterns across the city, and second, TIF use by itself, both before and after the 2011 reform panel will be analyzed. Each part will be undergirded and framed by the history of neoliberalism and specifically that of roll-out neoliberalism. Conclusions will follow.

The primary data analyzed are a combination of six separate data sets on public expenditure taken from four overarching government programs at various levels of administration. Additionally, a selection of different socio-economic variables from the census for The City of Chicago were employed. The data is from publically available data portals or other government sources and has been geolocated and extensively organized.<sup>55</sup> Each expenditure dataset and the census variables used are explained in detail below.

#### *Expenditure Data*

First, the City of Chicago's Capital Improvement Program (CIP) is concerned with the building and maintaining of infrastructure for the city such as streets, water mains, police stations, or green space. The CIP deals with many of the classic tasks of government concerning the physical built environment. The City produces and releases plans every year based on the goals and needs for the upcoming five-year period. Therefore, the CIP is not a specific, all-inclusive inventory, of projects that are undertaken regarding the City's infrastructure but can be understood more broadly as a blueprint for future development. For the purposes of this study, the aggregate emphasis

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<sup>55</sup> "City of Chicago: Capital Improvement Program"; "DCEO Grant Tracker"; Bureau, "Census.Gov"; "TIF Funding Sources and Uses by TIF, Fiscal Year, and Type | City of Chicago | Data Portal."



of spending is the critical information to be gleaned. No single project or program is considered exclusively by itself, instead a higher-level unit of aggregation is used to eliminate the future movement the City undertakes as needs and goals on the ground shift over the five-year time period. In other words, the City's spending within a certain area—census block or community area—is used as the unit of analysis to eliminate or decrease the uncertainty at the margin. As such, the CIP provides a very detailed and localized look into the geographic importance certain areas hold and the actual spending patterns of the City. Funding for CIP projects comes directly from city budgeting as capital expenditure. In certain cases, federal or state funds are applied to specific projects or cost sharing with private investment is employed, however only public expenditure is considered. For this study, two different five-year CIPs were collected and cleaned, first the 2013-2017 report and second the 2016-2020 report.

A subset of the CIP, the Aldermanic Menu Program (AMP), is another dataset used in this study. The AMP is a yearly allotment to all 50 wards of \$1.32 million to be used at the discretion of each alderman for infrastructure needs. As such, in line with the CIP, the AMP allocates money for such things as street paving, curb construction, lighting, or painting. AMP spending was collected and cleaned for each year from 2012 through 2016. For the purposes of analysis, for both the CIP and AMP, center points were calculated and used to represent expenditure for any project without a specific address or point location. For example, a street paving is represented and analyzed by the midpoint of the length of the paved area. In total the two five-year CIPs and five one-year AMPs represent just under \$9 billion in direct expenditure, almost entirely by the City of Chicago.

Second, Tax Increment Financing projects, as conceptually and procedurally explained above, were collected from 1986 through 2017. The TIF data comes from the City's public data portal. In total 461 TIF projects were supported by the City representing over \$3.4 billion in government expenditure. TIF projects require an address and points were geocoded from those addresses.

Third, the Illinois Department of Commerce and Economic Opportunity (DECO) provides grants to help stimulate, offer opportunities for, and improve the quality of life of businesses, entrepreneurs, and Illinois residents. The agency partners with businesses,

other governmental agencies, organizations, and individual workers and families all with the goal of enhancing the state's economy. While DECO is a statewide agency and thus provides funding support to the entire state, for the purposes of this study, only funding specifically allocated within the City of Chicago was considered. Grant data covers the years from 1986 until 2018 and was accessed via DECO's grant tracker portal online. In total DECO allocated \$3.4 billion in public expenditure for projects within Chicago.

Fourth and final of the expenditure data sources, the federal New Markets Tax Credit (NMTC) program was also analyzed. The NMTC program incentivizes community development and economic growth by providing tax credits to private investors to undertake projects in distressed areas. The NMTC program brings private capital and decision making to bear through specialized financial intermediaries called Community Development Entities (CDEs). To qualify as a CDE an organization must be primarily focused on serving low-income communities, remain accountable to the community by including constituent resident representation, and be certified by the US Treasury Department's Community Development Financial Institutions Fund—the administering agency of the NMTC program. NMTC funding, as administered by a CDE can be allocated to a large variety of businesses or projects within low-income community areas. To participate, investors commit their money to a CDE for seven years. Over that period the investor is paid back a percentage of their stake in the CDE which, depending on the profitability of the CDE, could either fall short, but normally exceeds the initial investment. In this fashion, CDEs are incentivized to undertake projects that make sound financial sense and will likely generate a profit.<sup>56</sup> The acquired NMTC data covers 2010 through 2017 and represents \$133 million in federally approved tax credit incentives. Expenditure data from each source was combined and then aggregated from individual points up to different spatial units. A map of raw expenditure data, organized by community area, can be seen below in Figure 5.

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<sup>56</sup> "NMTC Overview"; Abravanel et al., "New Markets Tax Credit (NMTC) Program Evaluation Final Report"; Forbes, "Using Economic Development Programs as Tools for Urban Revitalization: A Comparison of Empowerment Zones and New Markets Tax Credits."

## Raw Expenditure by Community Area

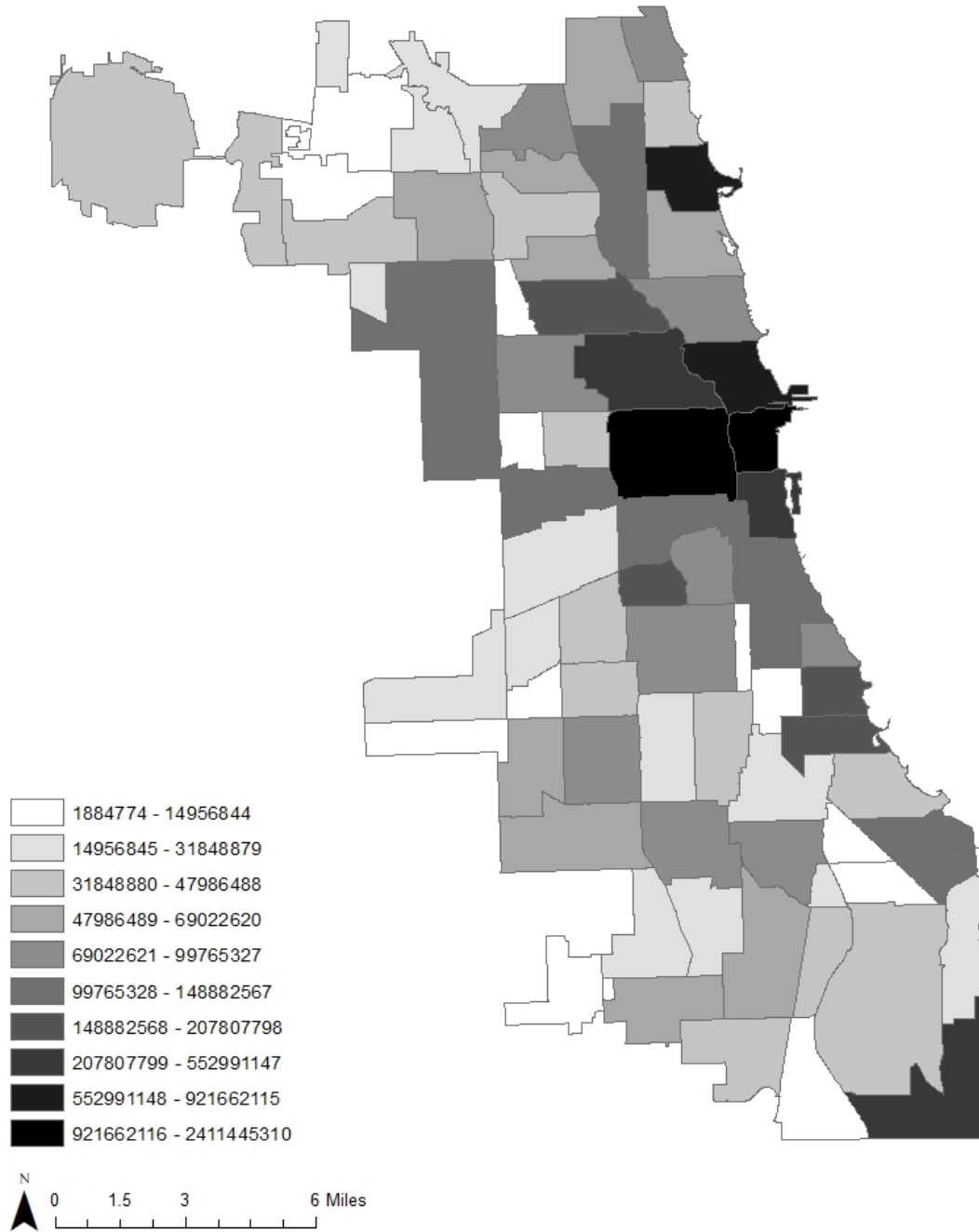


Figure 5. Raw Expenditure by Community Area

For the purposes of analysis, raw expenditure data was not used by itself. Instead a population-controlled difference from expected expenditure statistic was created and used for each spatial aggregation unit. Equation 1. below outlines how this new statistic was calculated.

$$S = \text{Actual Expenditure} - \left( \frac{\text{Total Expenditure}}{\text{Total Population}} \right) \text{Unit Population} \quad (1)$$

The new statistic, S, demonstrates the difference from the expected expenditure in any given area based on the population in that area. Any reference to expenditure or analysis based on expenditure will use the above statistic instead of raw expenditure data.

However, the population-controlled statistic S still demonstrates non-normal distribution patterns. Therefore, a Box-Cox transformation method was used to normalize the data for statistical analysis. But, the Box-Cox method requires strictly positive values, therefore, an adjusted log transformation was employed and is calculated by:

$$= \log(1 + Y - (\min(y))) \quad (2)$$

The Box-Cox transformation itself is a frequently used power transformation method and is defined by:

$$y = \begin{cases} \frac{x^\lambda - 1}{\lambda} & \lambda \neq 0 \\ \ln(x) & \lambda = 0 \end{cases} \quad (3)$$

where y is the final transformed value for each point in the data set, x is the value being transformed, and  $\lambda$  is an estimated parameter given the assumption that the set of transformed values  $y_i$  are normally distributed.<sup>57</sup> A map of controlled and transformed expenditure can be seen below in Figure 6.

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<sup>57</sup> Box and Cox, "An Analysis of Transformations"; Zhang et al., "Use of Local Moran's I and GIS to Identify Pollution Hotspots of Pb in Urban Soils of Galway, Ireland."

## Controlled Total Expenditure by Community Area

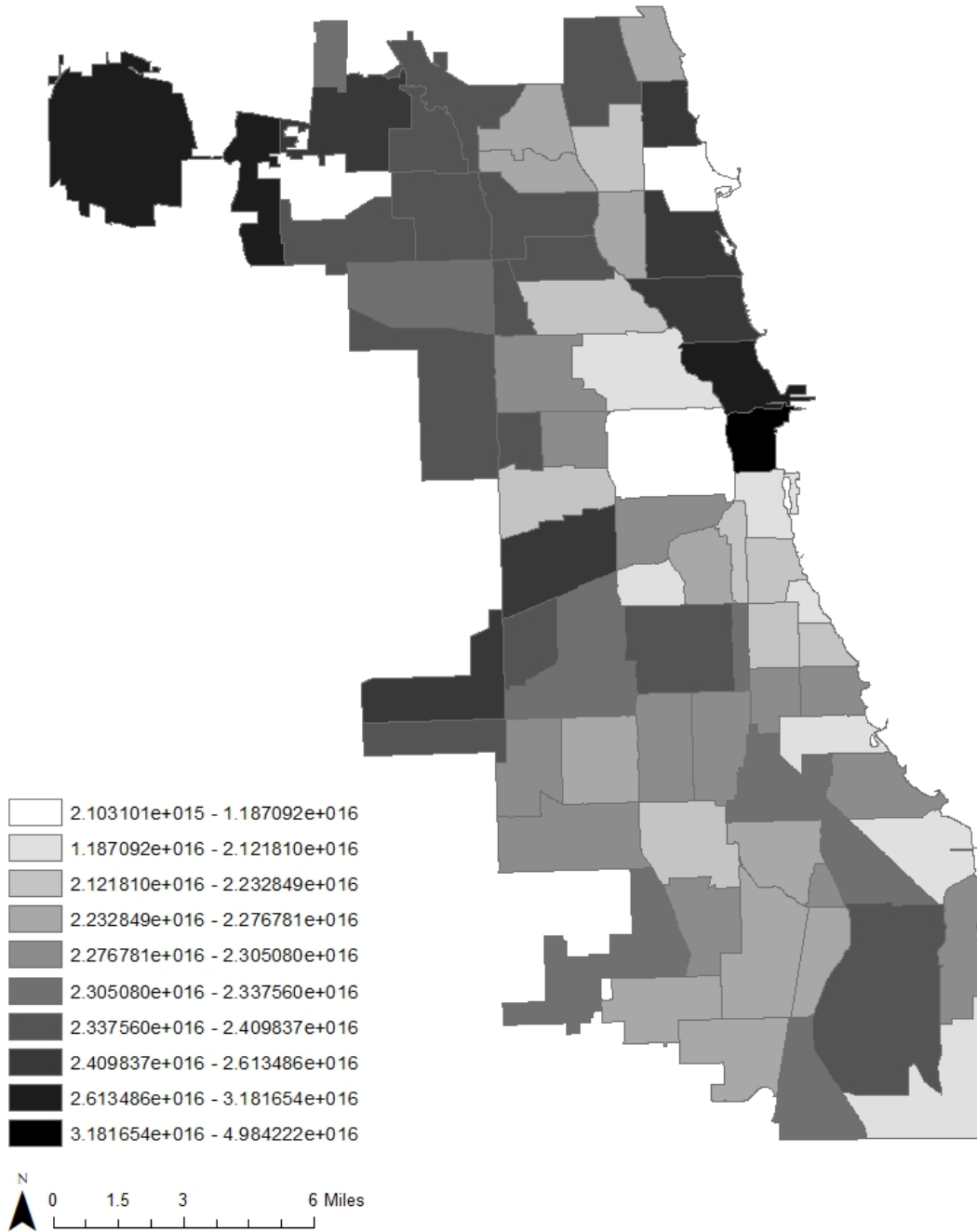


Figure 6: Controlled Public Expenditure by Community Area

### *Socio-Economic Data*

To determine patterns of spending and spatial selectivity, a variety of different socio-economic variables were collected and used in comparison to expenditure. First, hardship, as developed by Nathan and Adams, is an indicator of overall difficulty of living conditions in a given area. Hardship is determined by:

1. Unemployment (percent civilian labor force older than 16 unemployed)
2. Dependency (percent persons less than 18 or older than 64)
3. Education (percent 25 and older with less than a high school diploma)
4. Income (per capita income)
5. Crowded housing (percent housing units with more than one person per room)
6. Poverty (percent families below poverty line)

Each of the above six indicators are used to create a ratio based on the maximum and minimum values within the entire study area. Equation 4. below details that calculation.

$$X = \left( \frac{Y - Y_{min}}{Y_{max} - Y_{min}} \right) 100 \quad (4)$$

Where X is the standardized ratio, Y is the observed value for the indicator in the given area, and  $Y_{min}$  and  $Y_{max}$  are the minimum and maximum values of said Y indicator over the entire study area. An X value is determined for each indicator, in each spatial unit, and all six are summed and then divided by six to arrive at the final hardship value for said area.<sup>58</sup> A map of hardship across the City of Chicago can be seen below in Figure 7. Of note, hardship closely follows areas with high African American and Hispanic populations.

Second, employment and income statistics were used from the US Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) program. The LEHD program merges data from workers and employers to produce a combination of more detailed and geographically specific statistics on employment, earnings, and job flows at different spatial scales. As such LEHD allows for analysis on where people are working, how

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<sup>58</sup> Nathan and Adams, "Understanding Central City Hardship."

much in aggregate they are making, and then where they return home to.<sup>59</sup> Maps of workplace and residential locations of high and low-income earners—as determined by those making above \$3,333 and below \$1,251 per month respectively—can be seen below in Figures 8 and 9.<sup>60</sup>

Third, as an indicator of commercial activity, the sum of all business sales, from ESRI’s Business Analyst database based on ESRI’s and Infogroup’s data was also used.<sup>61</sup> A map of business sales can be viewed below in Figure 10.

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<sup>59</sup> US Census Bureau Center for Economic Studies, “US Census Bureau Center for Economic Studies Publications and Reports Page.”

<sup>60</sup> US Census Bureau, “LEHD Origin-Destination Employment Statistics (LODES) Dataset Structure.”

<sup>61</sup> “Data & Reports | ArcGIS Business Analyst.”

# Community Area Hardship

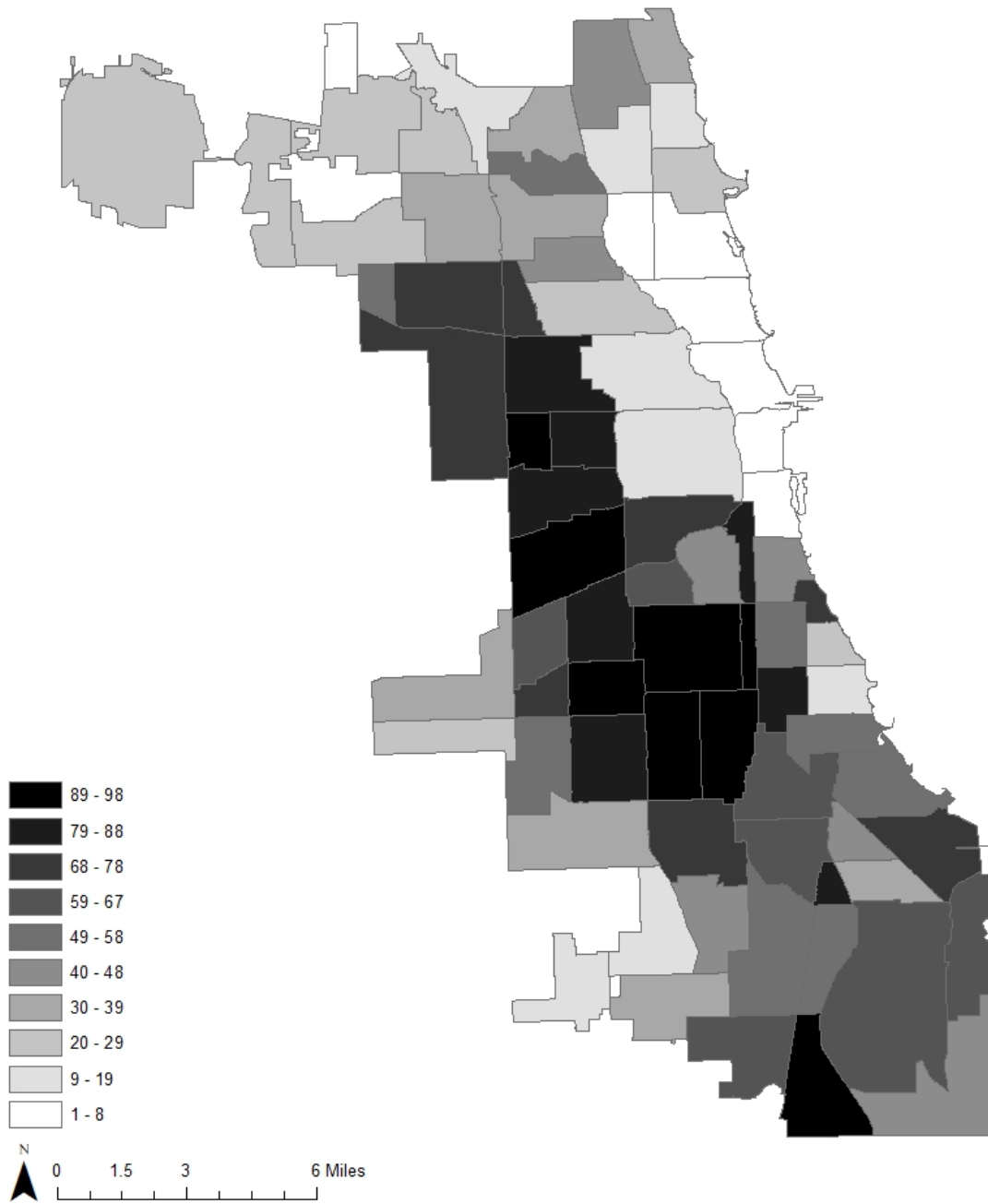


Figure 7: Hardship by Community Area



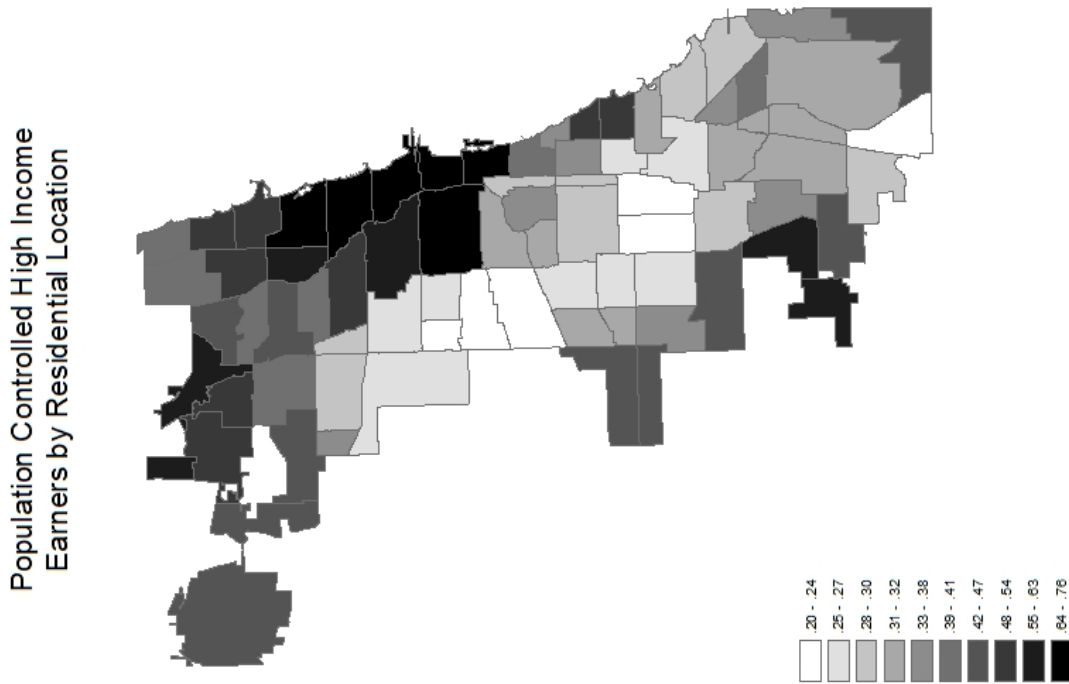


Figure 8: High Income Earners by Residential and Workplace Locations

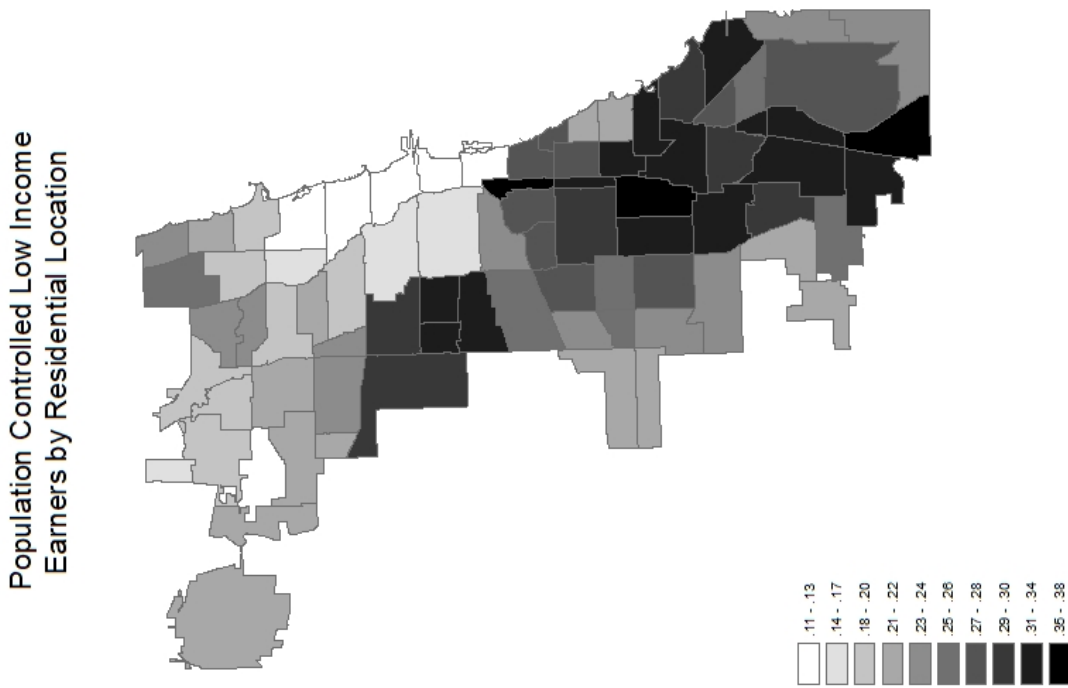
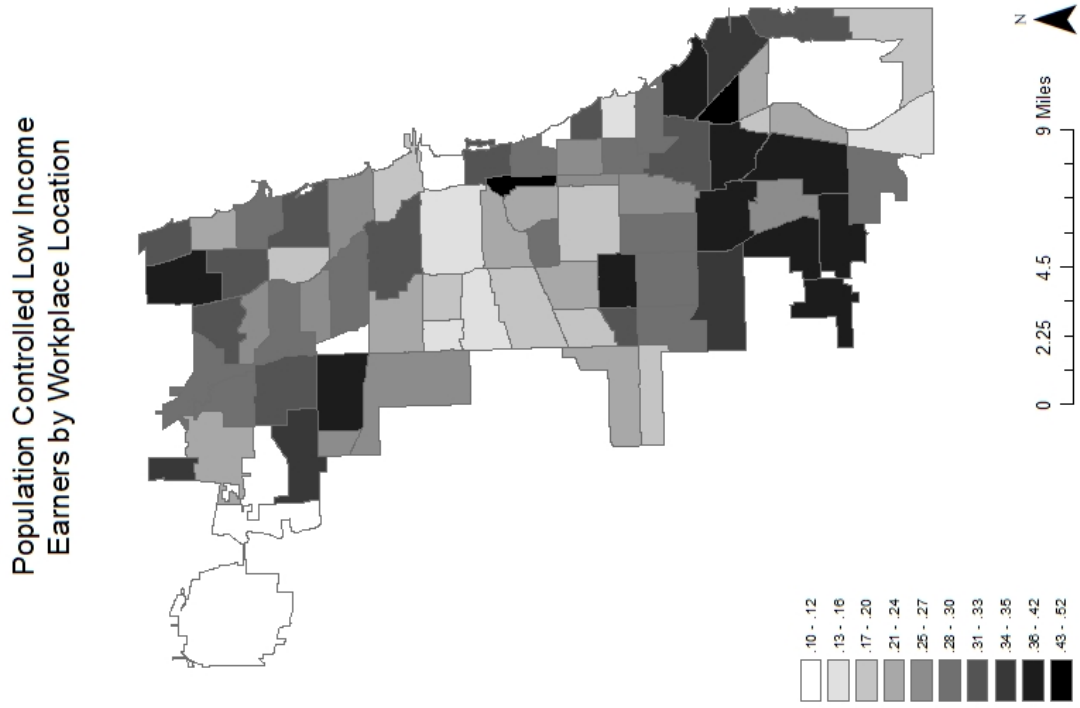


Figure 9: Low Income Earners by Residential and Workplace Locations

## Business Sales by Community Area

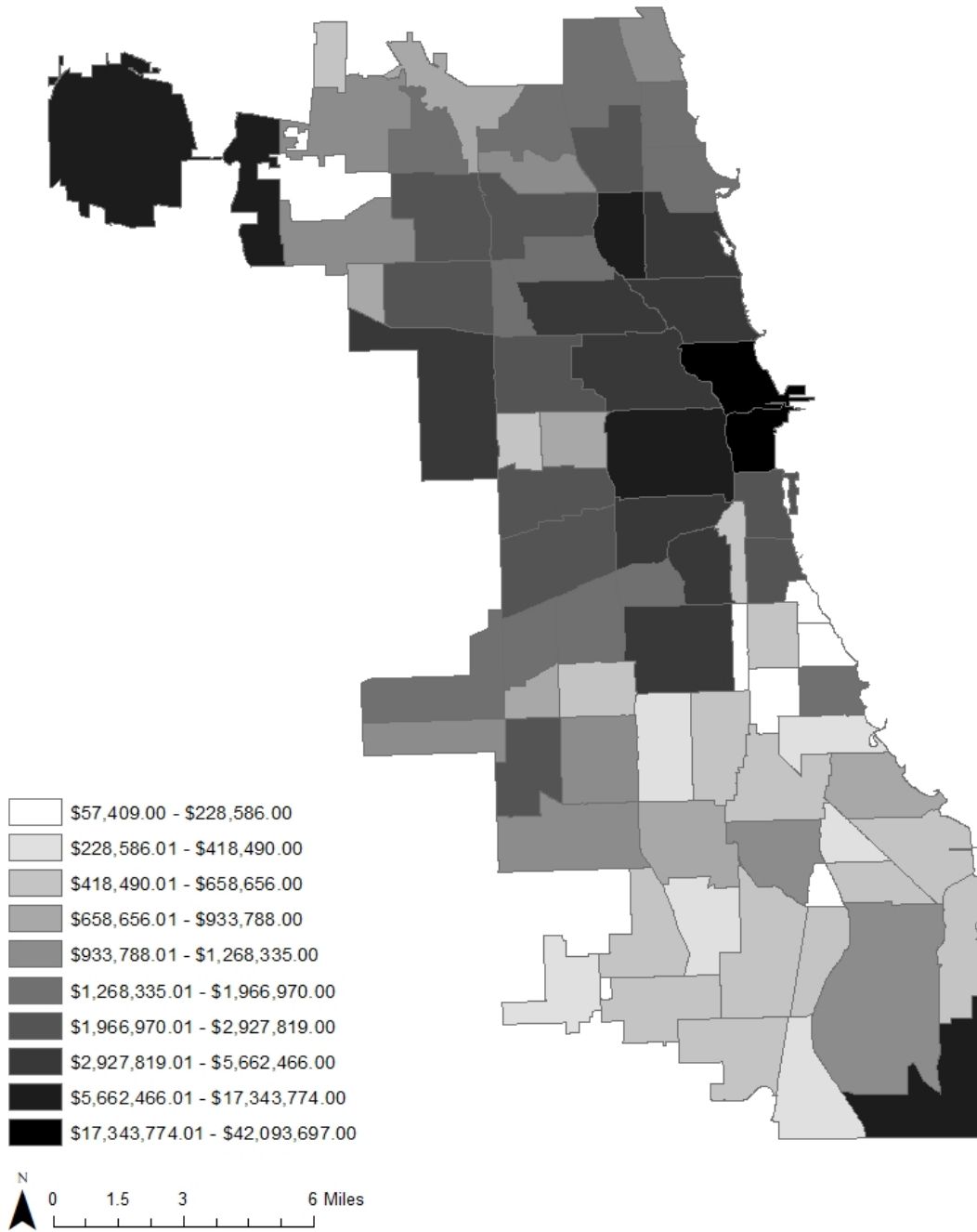


Figure 10: Business Sales by Community Area

## Methods

A few different analysis techniques were employed to observe the spatial patterns of public expenditure and the relations between expenditure and the various socio-economic variables. This section will outline the mathematical underpinnings of those techniques and the following chapter will report the results. At the more basic end of the spectrum, bivariate scatter plots are used to assess the linear relationship between two variables. Determining the degree and significance of relationships between two variables is the first step in almost any analysis. Indeed, that is also the case here. However, in many cases with the expenditure data, a non-linear regression line is more appropriate. As such, for some plots, a LOWESS (locally weighted scatterplot smoother) will be overlaid on top of the traditional linear best fit line. Similar to a linear regression, the LOWESS calculates a least squared regression for each point given a specified bandwidth around said point. In other words, the LOWESS shows a best fit for smaller subsets of the overall data and therefore can demonstrate patterns at more localized scales or where breaks occur in the data. This is in contrast to considering the entire dataset which is how a linear regression line is calculated. Unfortunately, an  $r^2$  goodness of fit coefficient is not possible with a LOWESS because the  $r^2$  calculation depends on values for the entire dataset. Nevertheless, merely observing the patterns exposed by the LOWESS is enlightening.

Next, to demonstrate the local spatial autocorrelation of a single variable, use of a Local Indicator of Spatial Association (LISA) as developed by Anselin, and specifically the localized version of the global Moran's I statistic is employed.<sup>62</sup> A LISA is both an indicator of "local pockets of nonstationarity, or hot spots" and an assessment of the magnitude of an individual location's influence on the global statistic i.e. outlier identification.<sup>63</sup> The sum of all LISA calculations for a given dataset corresponds to the global indicator of spatial association for said data. A LISA extends the global statistic of spatial autocorrelation which can suggest clustering to demonstrate specifically where

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<sup>62</sup> Anselin, "Local Indicators of Spatial Association—LISA."

<sup>63</sup> Anselin.

clusters occur. The basis of Local Moran's I is therefore the Moran's I measure which is defined by Equation 5. below.<sup>64</sup>

$$I = \frac{\frac{N}{S_0} \sum_i \sum_j w_{ij} z_i z_j}{\sum_i z_i^2} \quad (5)$$

Where  $z_i = x_i - \bar{x}_i$  or the difference from the mean for the variable of interest  $i$ ,  $w_{ij}$  is the spatial weight between the variables  $i$  and  $j$ ,  $N$  is the total number of observations, and  $S_0 = \sum_i \sum_j w_{ij}$  or the sum of all weights. If weights are row-standardized for the variable  $z$ , so  $S_0 = N$ , then  $I$  is the slope of the regression  $\sum_j w_{ij} z_j$  on  $z_i$ . In other words, the Moran's I is the “cross-product statistic between a variable and its spatial lag, with the variable expressed in deviations from its mean.”<sup>65</sup> So Moran's I takes into account both the value of a given variable and its spatial relationship to all other variables. The output demonstrates whether features are clustered or dispersed in comparison to what would be expected under a random distribution. However, because the global Moran's I only yields a single statistic, it does not show where clusters occur or whether there are positive or negative values within the defined area, merely that clustering is or is not present. As such a more geographically informative measure of clustering is necessary, hence the use of a LISA.

The local version, instead of looking at values across the entire area, observes spatial autocorrelation for a single feature at a time and calculates the statistical significance for said single  $I_i$ . Local Moran's I can be described by Equation 6. below.

$$I_i = \frac{z_i}{m_2} \sum_j w_{ij} z_j \quad (6)$$

Where  $m_2 = \frac{\sum_i z_i^2}{N}$  and if weights are row-standardized  $N$  cancels out leaving  $m_2$  as a constant for all  $i$ ,  $z_i$  is the same as above. Therefore, for the local version, instead of summing over all  $i$  and  $j$  indices simultaneously, the LISA only sums over the  $j$  indices and outputs the result for each  $i$ . To return to the global stat one can sum over all  $I_i$  thus the global can be thought of as an average of all local stats. Positive output values for a

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<sup>64</sup> Moran, “The Interpretation of Statistical Maps”; Cliff and Ord, “Testing for Spatial Autocorrelation Among Regression Residuals.”

<sup>65</sup> Anselin, “Global Spatial Autocorrelation.”

given  $i$  demonstrate that the surrounding features also have high or low values. In contrast, a negative output demonstrates that the surrounding features have dissimilar values to the  $i$  under consideration. To map the Local Moran's I method, each location is classified, if significant, as either High-High, High-Low, Low-High, or Low-Low. High-High and Low-Low represent clusters of high and low values respectively whereas High-Low and Low-High demonstrate spatial outliers.<sup>66</sup>

Finally, taking cluster analysis a step further, instead of only looking at one variable at a time, the relationship and clustering of two variables is also considered. Bivariate Local Moran's I or BiLISA, extends the univariate Local Moran's I stat and is defined below in Equation 7.

$$I_{kl}^i = z_k^i \sum_j w_{ij} z_l^j \quad (7)$$

$z_k^i$  is the value for the  $i$ th element of the variable  $z_k$  multiplied by the sum of values and weights of the second variable  $z_l$  at the surrounding  $j$  locations. Anselin explains how “this statistic gives an indication of the degree of linear association (positive or negative) between the value for one variable at a given location  $i$  and the average of another variable at neighboring locations.”<sup>67</sup> In other words the similarity of one variable to another at a given location indicates a combined cluster for the two. The output is classified the same as a univariate Local Moran's I with a combination of high and low values demonstrating statistically significant positive or negative spatial autocorrelation and outliers. For all clustering methods, a 0.01 significance level is used and determined based on 9999 randomized permutations of the data.

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<sup>66</sup> Anselin, “Local Indicators of Spatial Association—LISA.”

<sup>67</sup> Anselin and Smirnov, “Visualizing Multivariate Spatial Correlation with Dynamically Linked Windows.”

## Chapter 4

### Results

Overall, this analysis finds a connection between government expenditure and archetypal roll-out neoliberal patterns of development where money goes to support businesses and higher income residents to the exclusion of others. Furthermore, TIF—specifically intended as a tool to help underserved areas—was actually used and abused as a component of the neoliberal paradigm. Additionally, after the reform panel made its recommendations and conclusions, this analysis found no significant changes in the patterns of TIF expenditure.

#### Overall Expenditure

In comparison to hardship, public expenditure has a statistically significant negative correlation. In other words, as hardship increases, spending decreases and vice versa. This can be observed in the scatter plot of Figure 11. below. In contrast, in comparison to business sales, public expenditure has a statistically significant positive correlation. In other words, the opposite of the relationship with hardship is occurring. So, when sales increase in a given area, there are also higher levels of public expenditure. This can be viewed below in Figure 12. Additionally, there is positive correlation between high income earners and public expenditure both for workplace and residential locations. Again, this implies a connection between more economically successful citizens and higher amounts of public expenditure. The connection between expenditure and either residential or workplace locations of low income workers, however, does not hold. Therefore, the City is not making investments, to the same degree, in areas with higher levels of less economically productive and successful citizens. These correlations or lack thereof can be viewed in Figures 11-13. below.

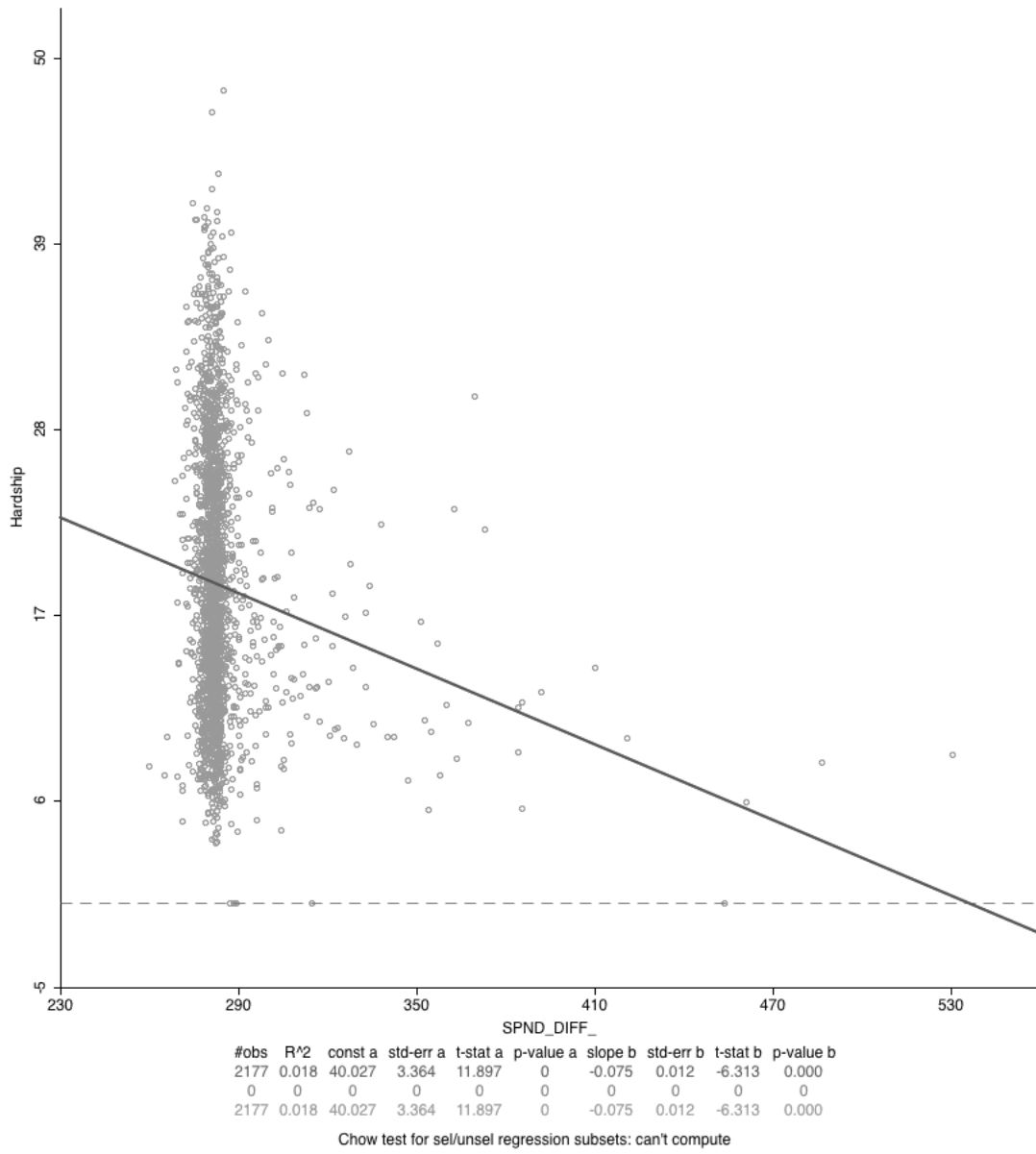


Figure 11: Hardship vs Expenditure



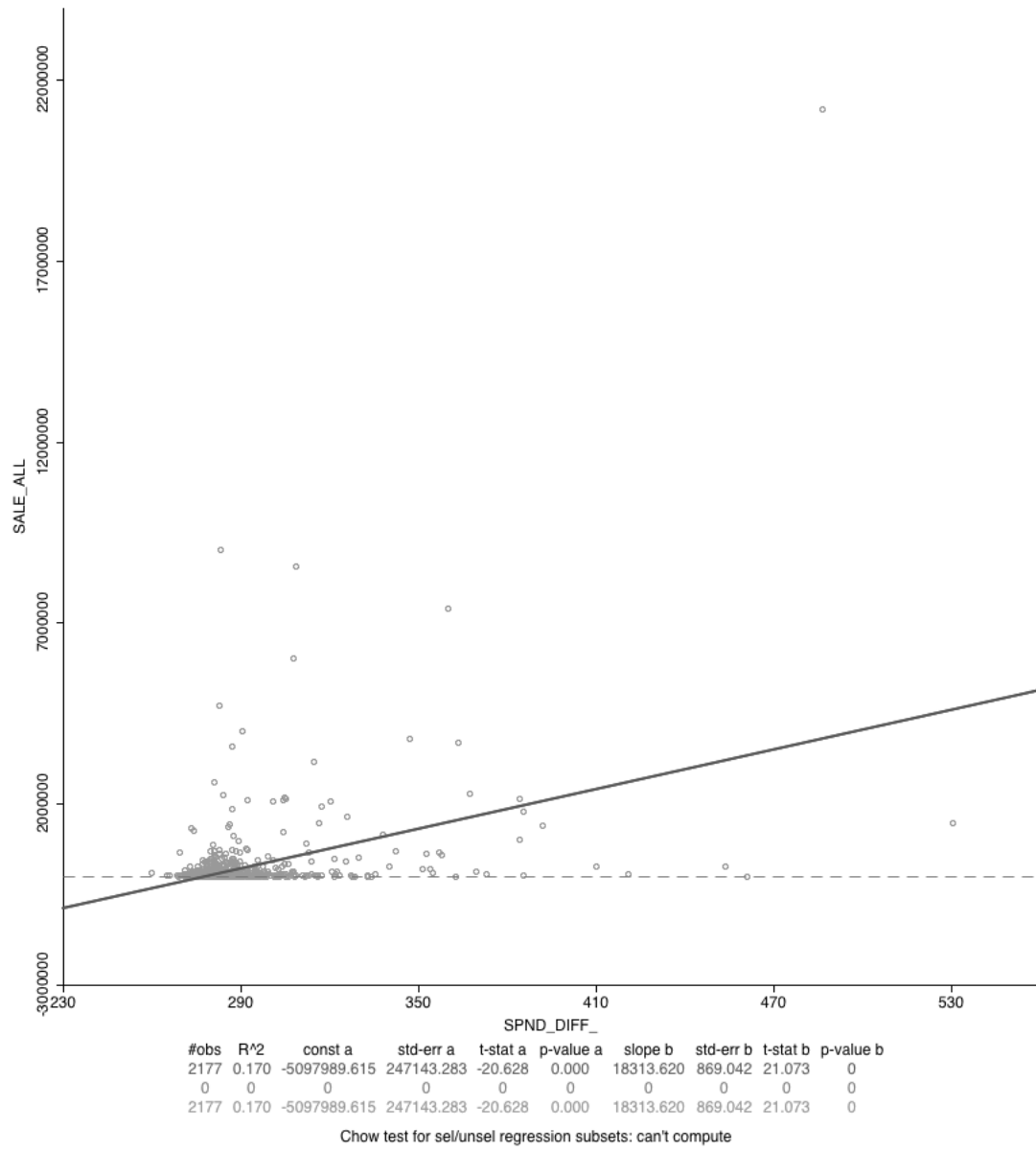


Figure 12: Sales vs Expenditure

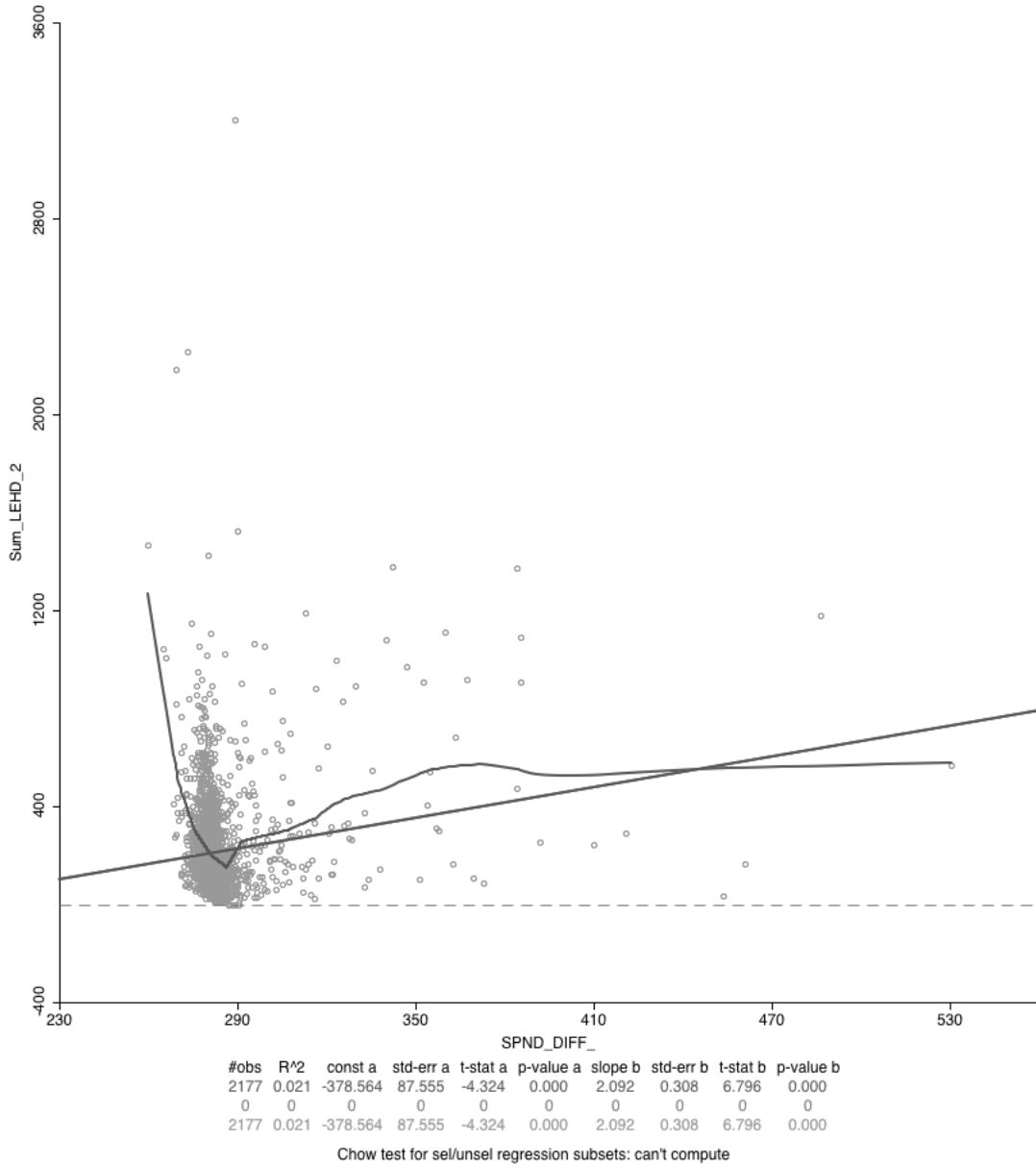


Figure 13: High Income Earners vs Expenditure

Besides the non-geographic linear relationship between expenditure and various socio-economic variables, Moran's I clustering demonstrates to what degree a variable is spatially autocorrelated. In other words, do like values of a variable group together against what would be expected were the variable to be distributed randomly. For each variable used in this study, statistically significant positive or negative clustering is observed. The Moran's I statistic for each can be seen below in Table 1.

Table 1. Results of Univariate Moran's I

Variables	Moran's I	P-value
Raw Expenditure	0.1011	***
Controlled Expenditure	0.1658	***
Low-Income Earners by Workplace Location	0.0737	***
High-Income Earners by Workplace Location	0.5206	***
Low-Income Earners by Residential Location	0.1707	***
High-Income Earners by Residential Location	0.6021	***
Business Sales	0.1759	***
Hardship	0.5475	***

Note: \*\*\*  $P \leq 0.001$ , \*\*  $P \leq 0.01$ , \*  $P \leq 0.05$

However, demonstrating that clustering exists across a dataset is merely a precursor to viewing where clusters actually occur. Thus, univariate Local Moran's I is employed. LISA clearly demonstrates where and to what degree, areas experience groupings of alike values. For expenditure alone, significant high-value positive spatial autocorrelation is observed in and around the downtown central business district with groupings of significant low-value positive spatial autocorrelation towards the peripheries of the city. In other words, high rates of expenditure occur across many of the census tracts in the downtown area and low rates of expenditure occur in clusters of tracts around the outside of the city. This finding clearly and succinctly demonstrates the prioritization of public money for use in and around much of the most economically successful areas. The LISA map for expenditure can be seen below in Figure 14.

Similar to expenditure, univariate LISA of business sales show significant and large numbers of high value clusters, again around the CBD, with occasional high value tracts in specific outlying areas such as O'Hare International Airport. Low value clusters occur primarily throughout the South Side with groupings in the West Side and single outlying tracts sporadically around the periphery of the city. The LISA map for sales can be seen below in Figure 15.

For high-income residents by workplace location, along similar lines, high-value clusters occur in and around the CBD and extend north throughout the wealthier residential areas of the Near North Side. Low value clusters cover the South and West

sides of the city. Clusters of high-income workers by residential location demonstrate near identical patterns. The dispersion of higher income residents demonstrates the striking patterns of economic segregation across the city. However, a more detailed exploration of individuals' location patterns is outside the scope of this study. Low-income workers, instead of falling within a single clearly demarcated and distinct area like their wealthier counterparts, are more dispersed across various different zones and form smaller, regional clusters of high employment or residential location. As such high-value clusters of low-income workers by workplace location, are noticeable through Pilsen and Bridgeport, the West Loop, West Side, and West Ridge and Rodger's Park neighborhoods. In contrast low-value clusters cover the Gold Coast, Near North Side, and, somewhat surprisingly, a smattering of the South Side. Univariate Local Moran's I cluster maps of high and low-income earners by both workplace and residential location can be viewed below in Figures 16-19.

# Expenditure Clustering

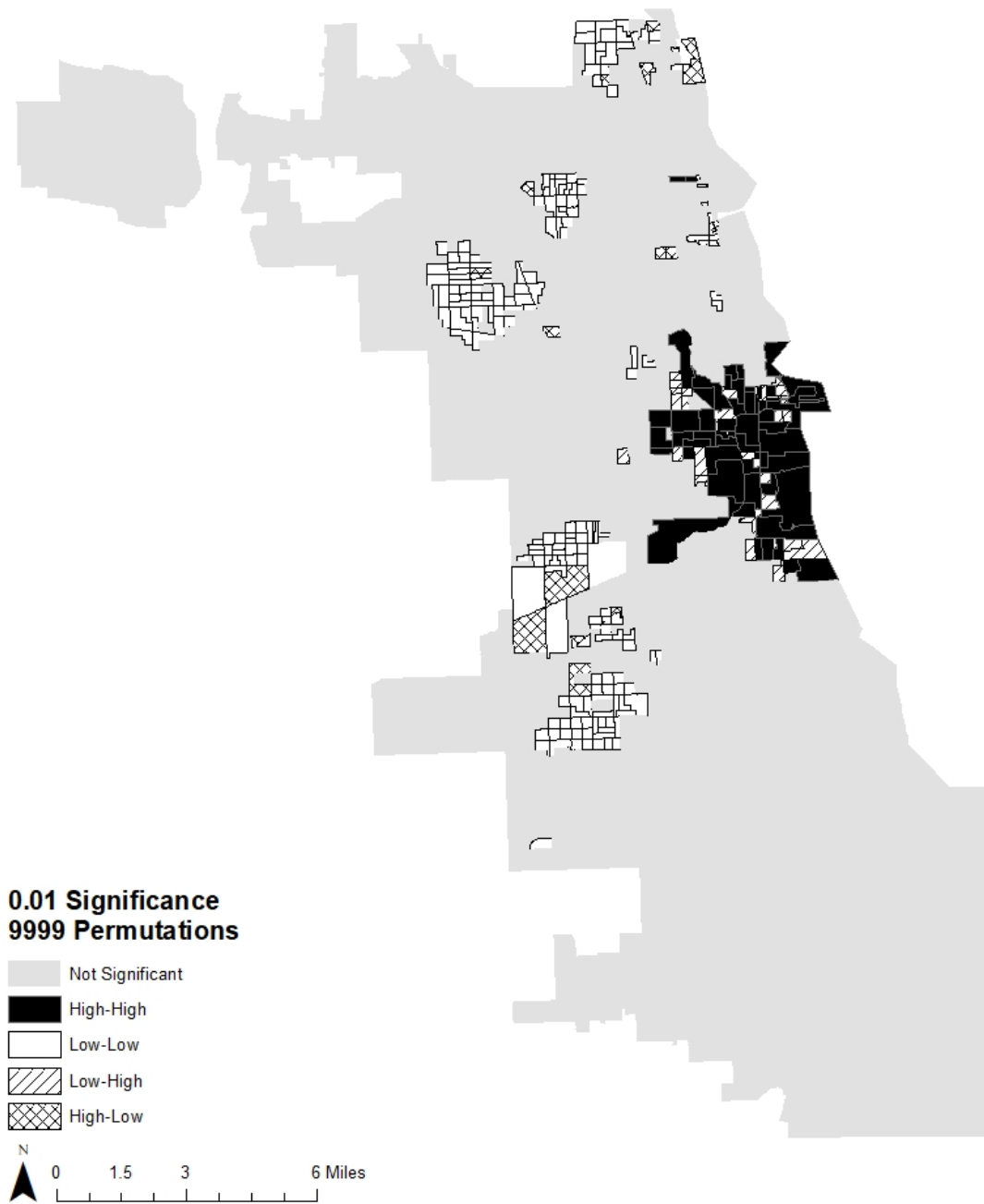


Figure 14: Expenditure Clustering

# Sales Clustering

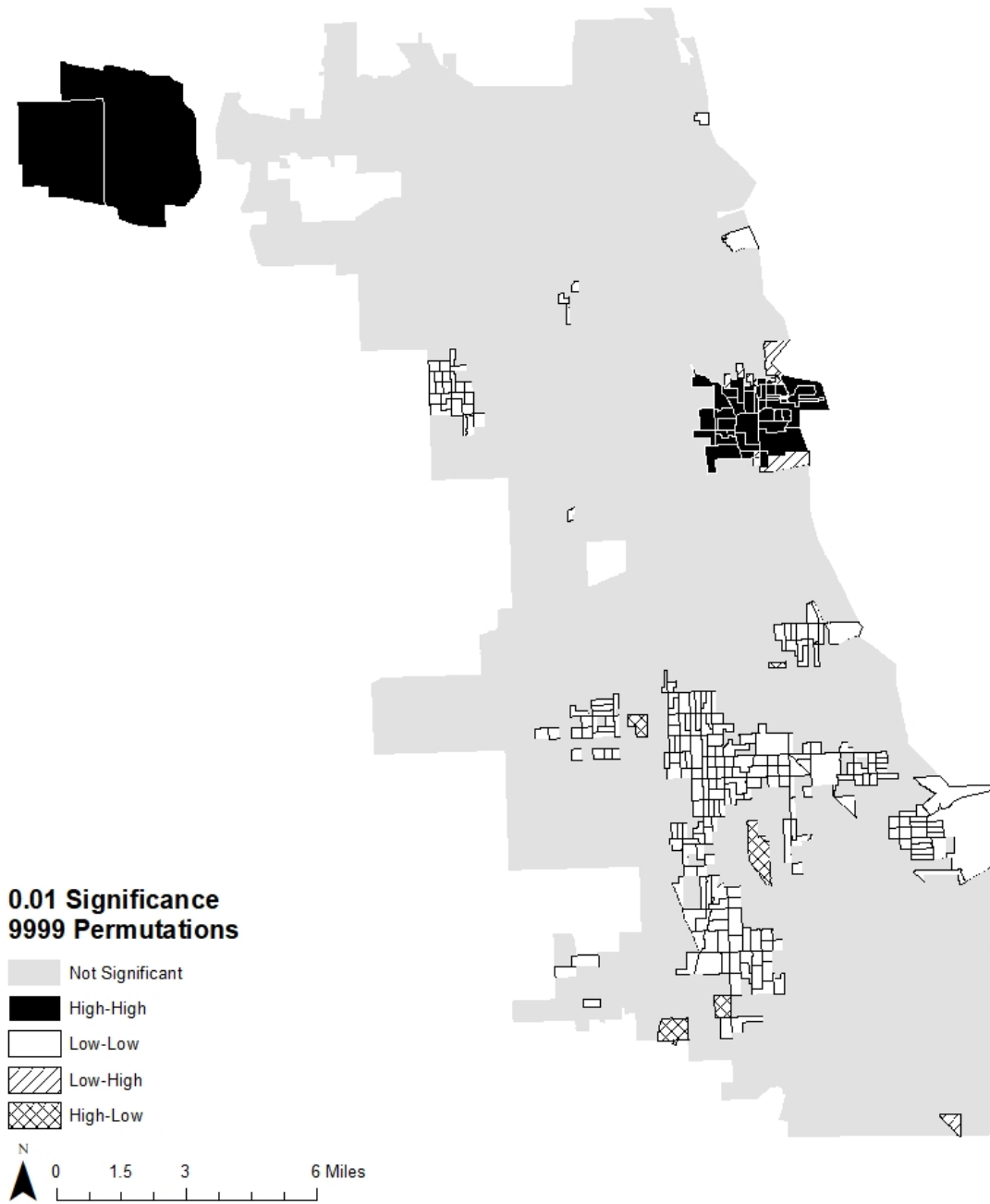


Figure 15: Business Sales Clustering

## High Income Earners Workplace Location Clustering

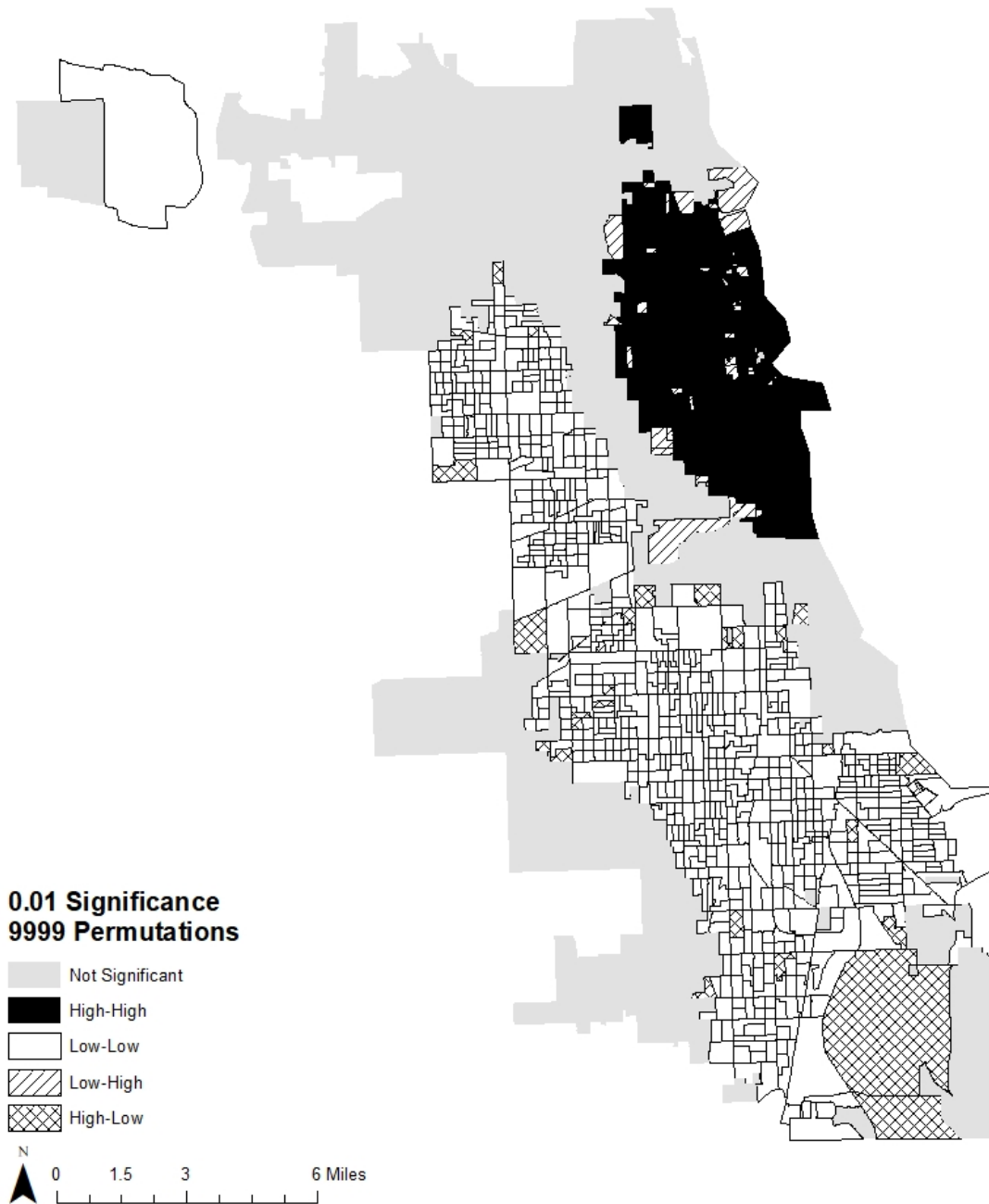


Figure 16: High-Income Earners by Workplace Location Clustering

# High Income Earners Residential Location Clustering

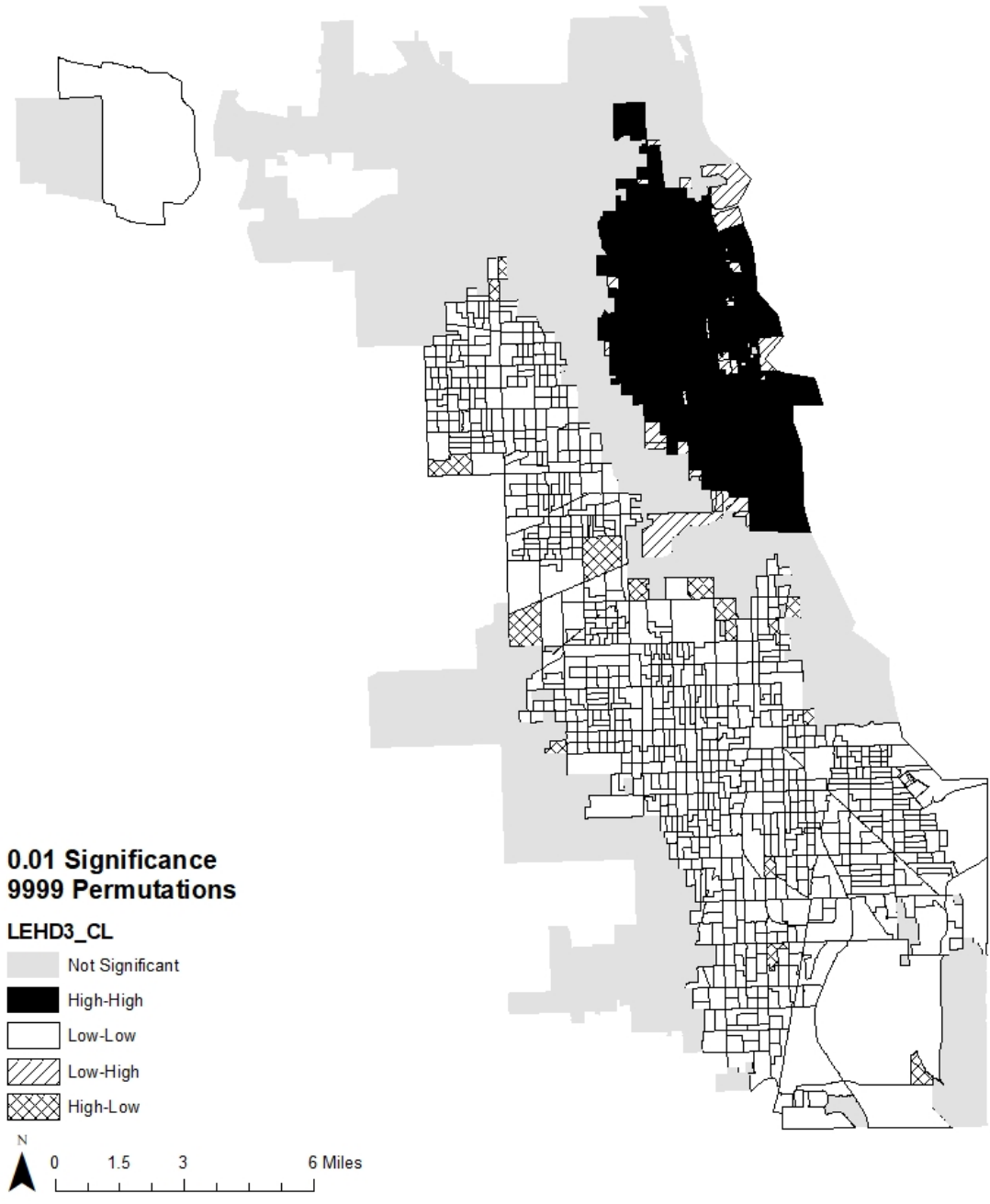


Figure 17: High-Income Earners by Residential Location Clustering



## Low Income Earners Workplace Location Clustering

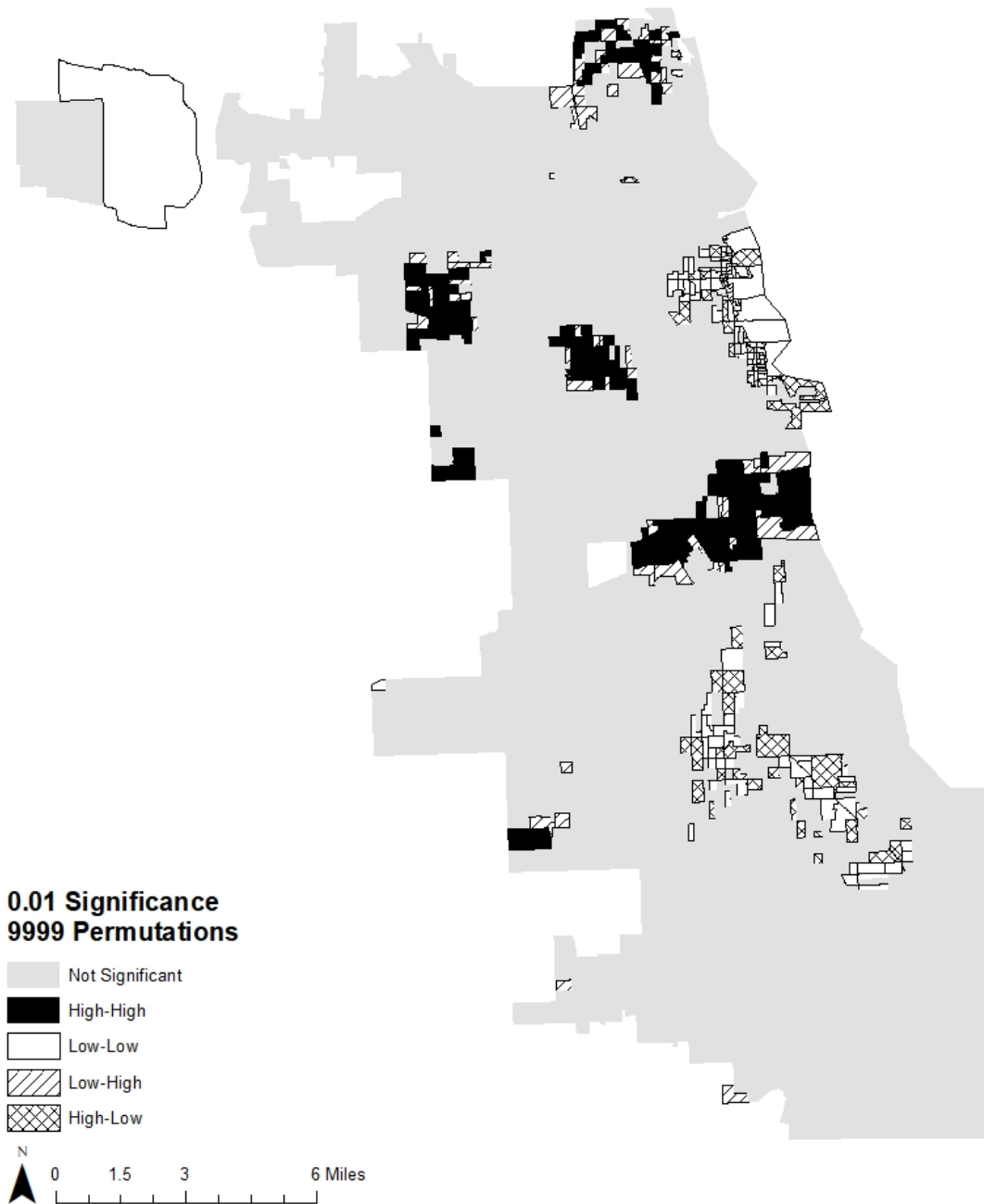


Figure 18: Low-Income Earners by Workplace Location Clustering

# Low Income Earners Residential Location Clustering

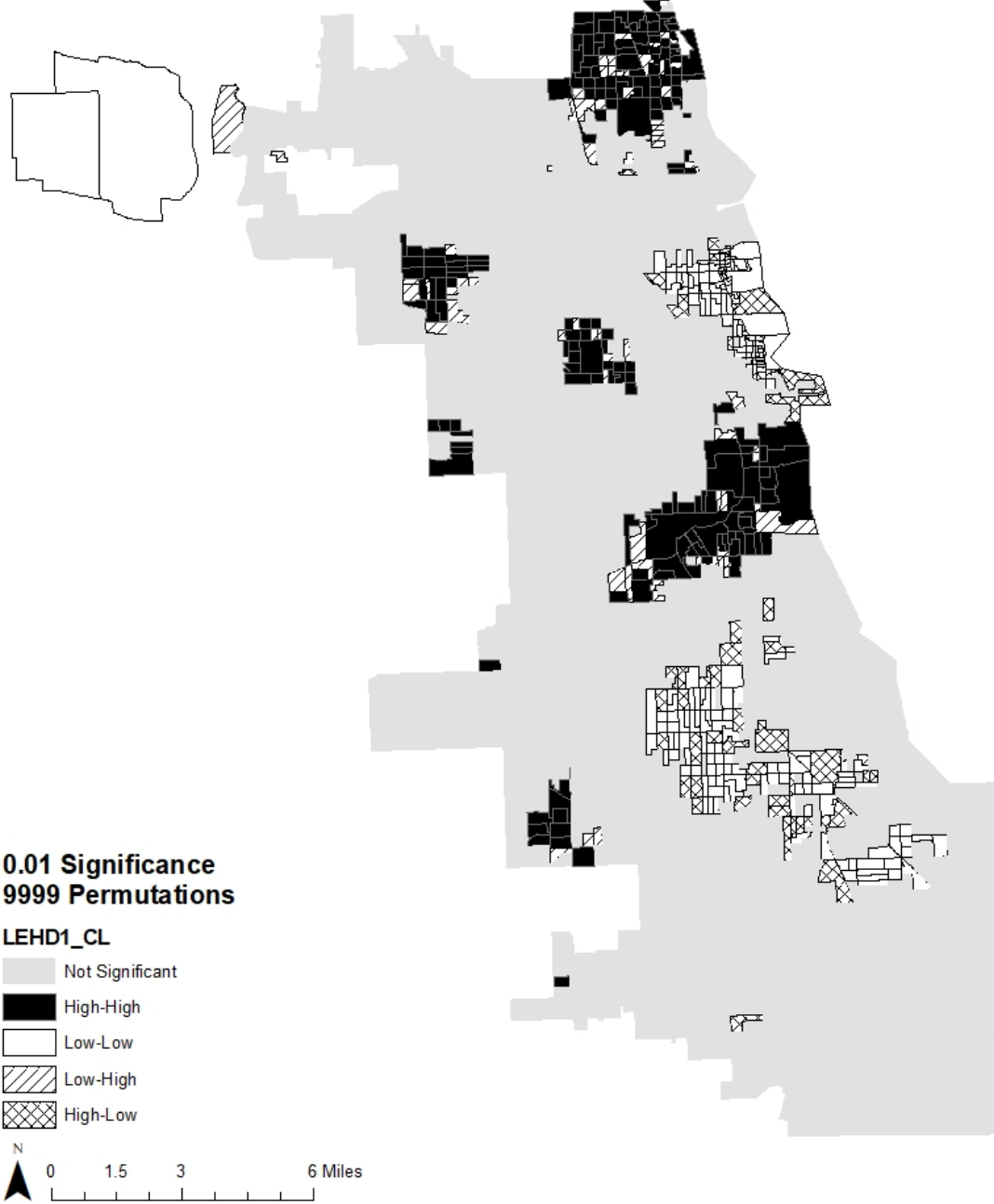


Figure 19: Low-Income Earners by Residential Location Clustering

In addition to single variable cluster analysis, combining two variables together for bivariate Moran's I tests further demonstrates the spatial patterns of expenditure prioritization across the city. Bivariate stats show, roughly speaking, a composite of the univariate Moran's I results for the two variables being observed. Bivariate Moran's I for variables across the entire dataset demonstrate highly significant clustering, the results of which can be seen below in Table 2. The local bivariate Moran's I of public expenditure and high-income workers show high value clusters, again, in and around the CBD, extending into the Near North Side. Significant low value clusters cover the South and Western sides of the city. Similarly, the bivariate LISA of public expenditure and business sales show a tight grouping of high value clusters in the CBD and a smattering of low value clusters principally across the South Side. Finally, the bivariate of expenditure and hardship displays unusual patterns principally due to the two variables being inversely related to each other. As such, for areas of high expenditure there are lower levels of hardship and vice versa. Therefore, combining the two statistics together does not yield striking or particularly meaningful results. Nonetheless, the maps for each bivariate analysis can be viewed below in Figures 20-22.

Table 2. Results of Bivariate Moran's I with Controlled Expenditure

Variables	Bivariate Moran's I	P-value
High-Income Earners by Workplace Location	0.2002	***
Business Sales	0.1521	***
Hardship	-0.0927	***

Note: \*\*\*  $P \leq 0.001$ , \*\*  $P \leq 0.01$ , \*  $P \leq 0.05$

## Expenditure and High Income Earners Workplace Location Clustering

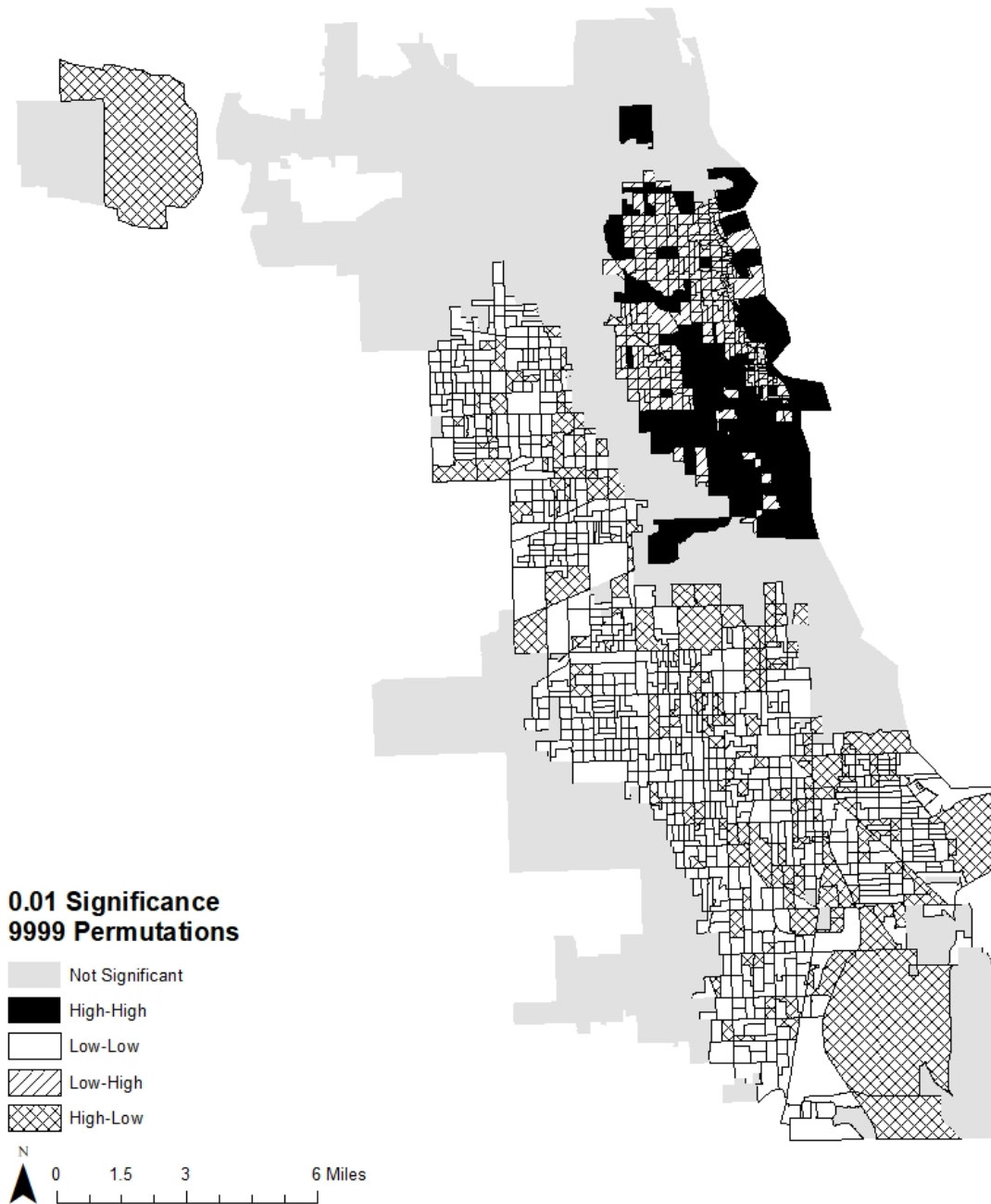


Figure 20: Bivariate Expenditure and High-Income Workers by Workplace Location

# Expenditure and Business Sales Clustering

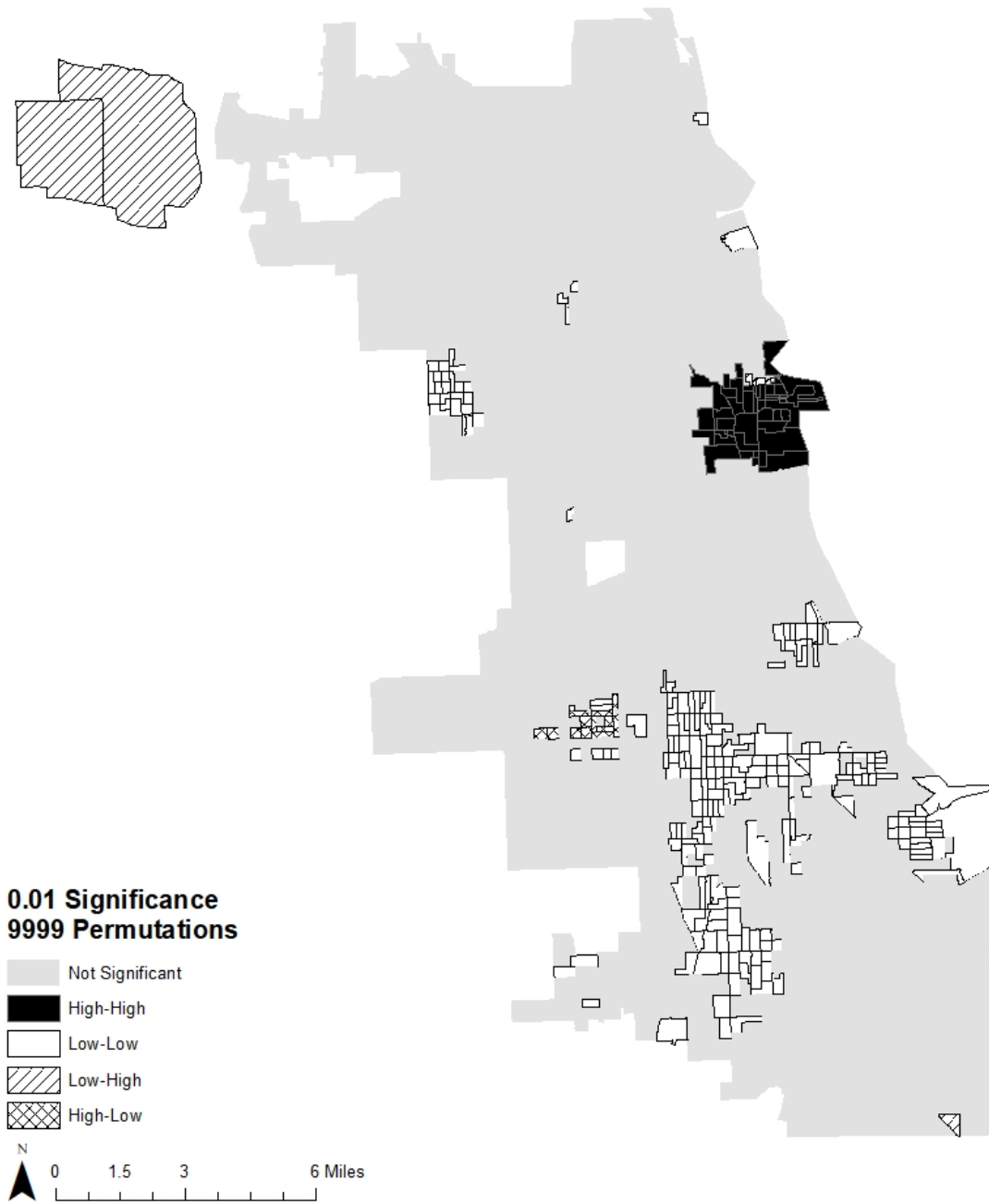


Figure 21: Bivariate Expenditure and Business Sales

## Expenditure and Hardship Clustering

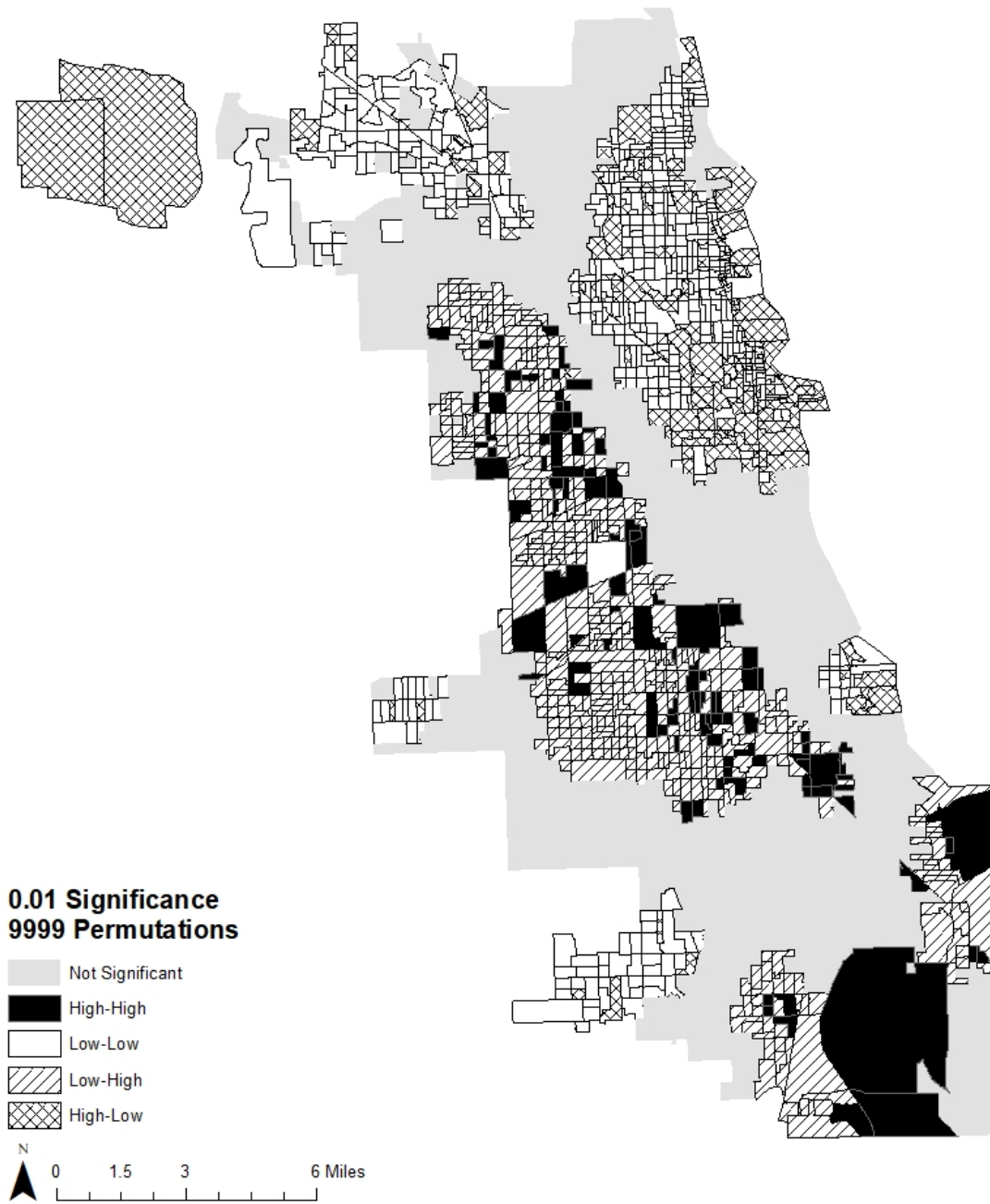


Figure 22: Bivariate Expenditure and Hardship

## **TIF**

Separating TIF from the rest of the spending data yields strikingly little difference. Like overall expenditure, TIF projects are primarily undertaken in the downtown CBD and adjacent West Loop. A smattering of other areas across the city also benefit from increased TIF spending but there is no discernable pattern and no correlation with other socio-economic statistics. Further separating TIF spending into two categories: pre-reform and post-reform, would ideally demonstrate noticeable changes between the two categories, i.e. that the reform panel had an impact on objectionable behavior and curtailed TIF misuse, however this is not observed. Rate maps and scatter plots against hardship for both pre and post-reform TIF can be viewed below in Figures 23 to 26.

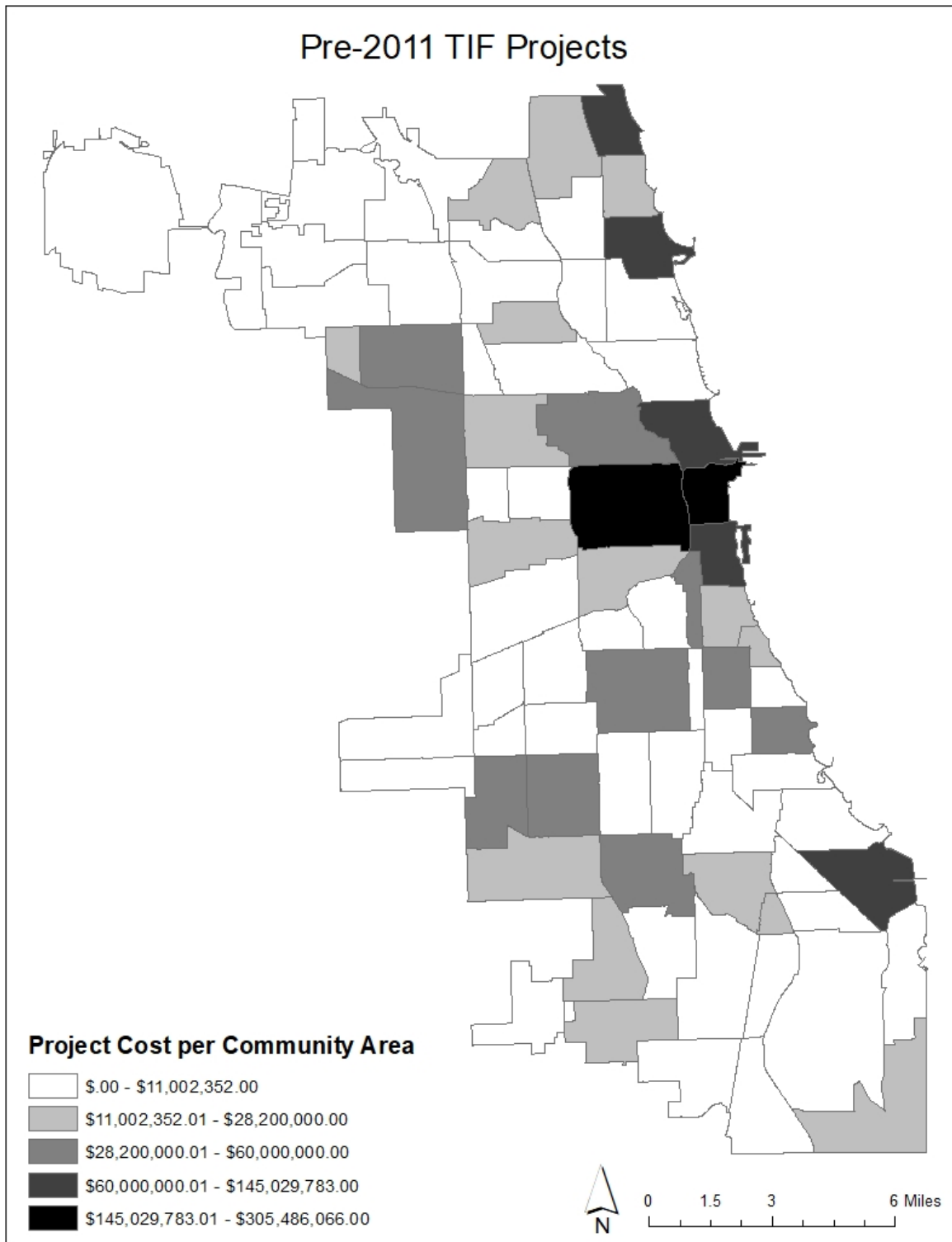


Figure 23: Pre-2011 TIF Expenditure by Community Area



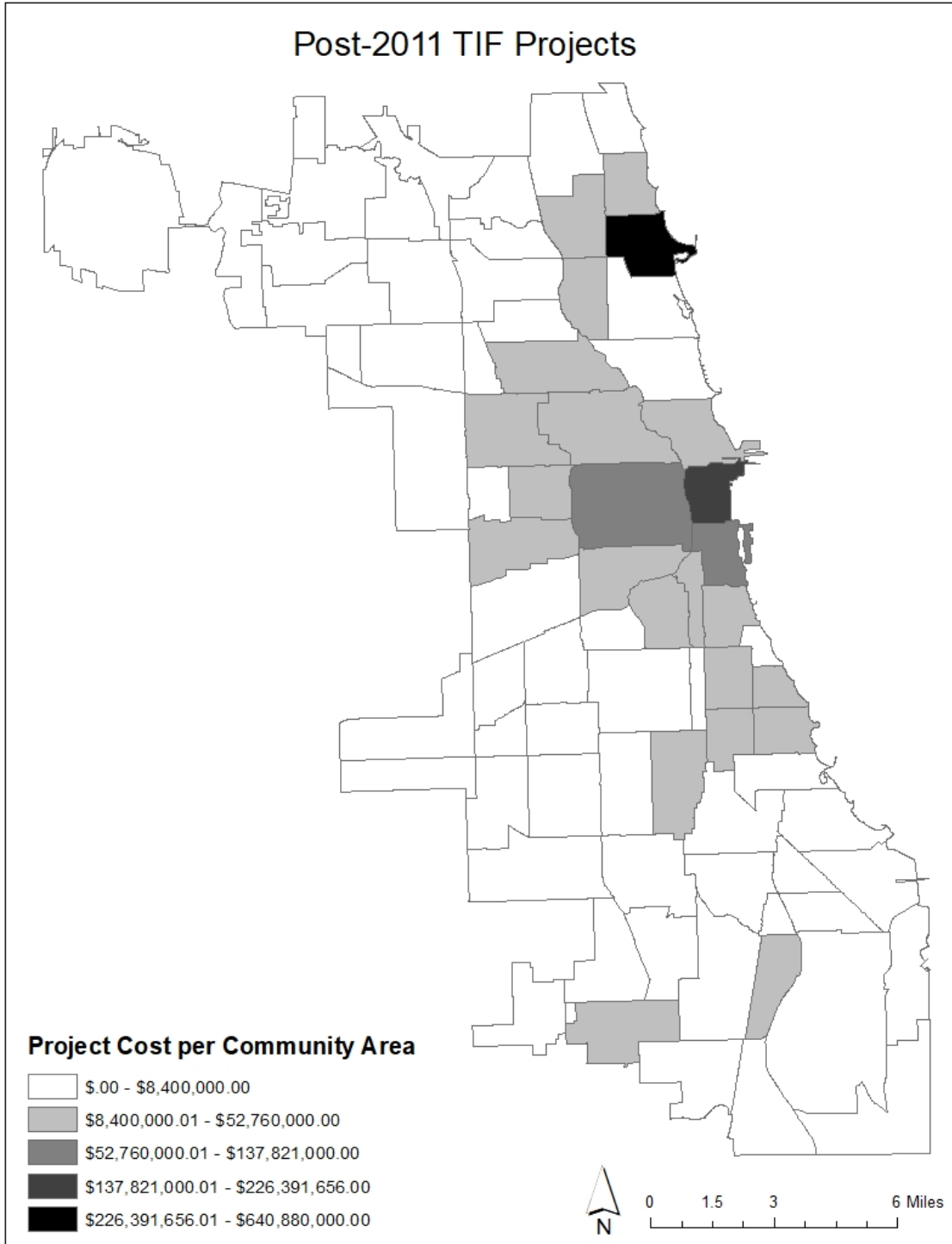


Figure 24: Post-2011 TIF Expenditure by Community Area

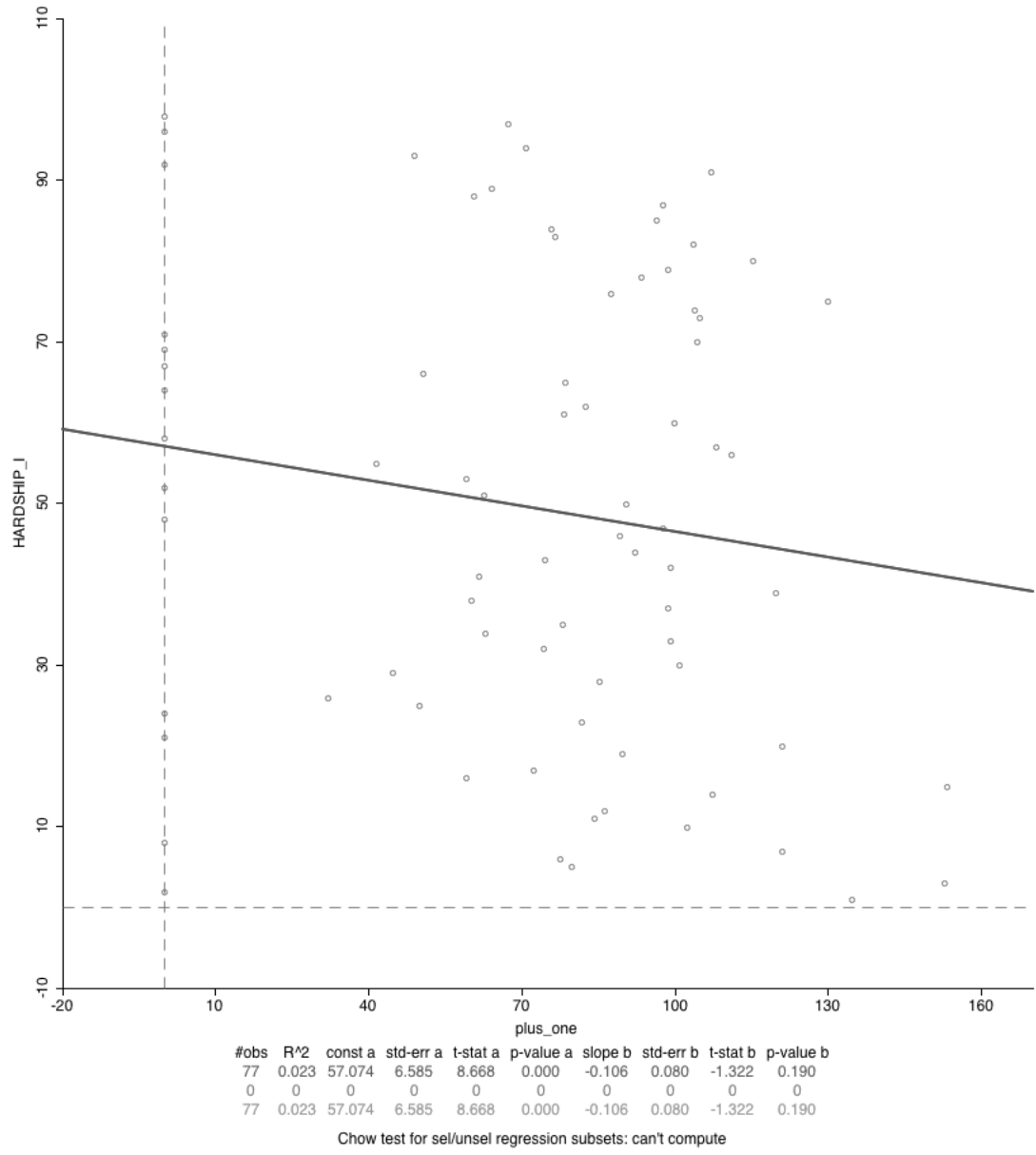


Figure 25: Pre-2011 TIF Expenditure vs Hardship

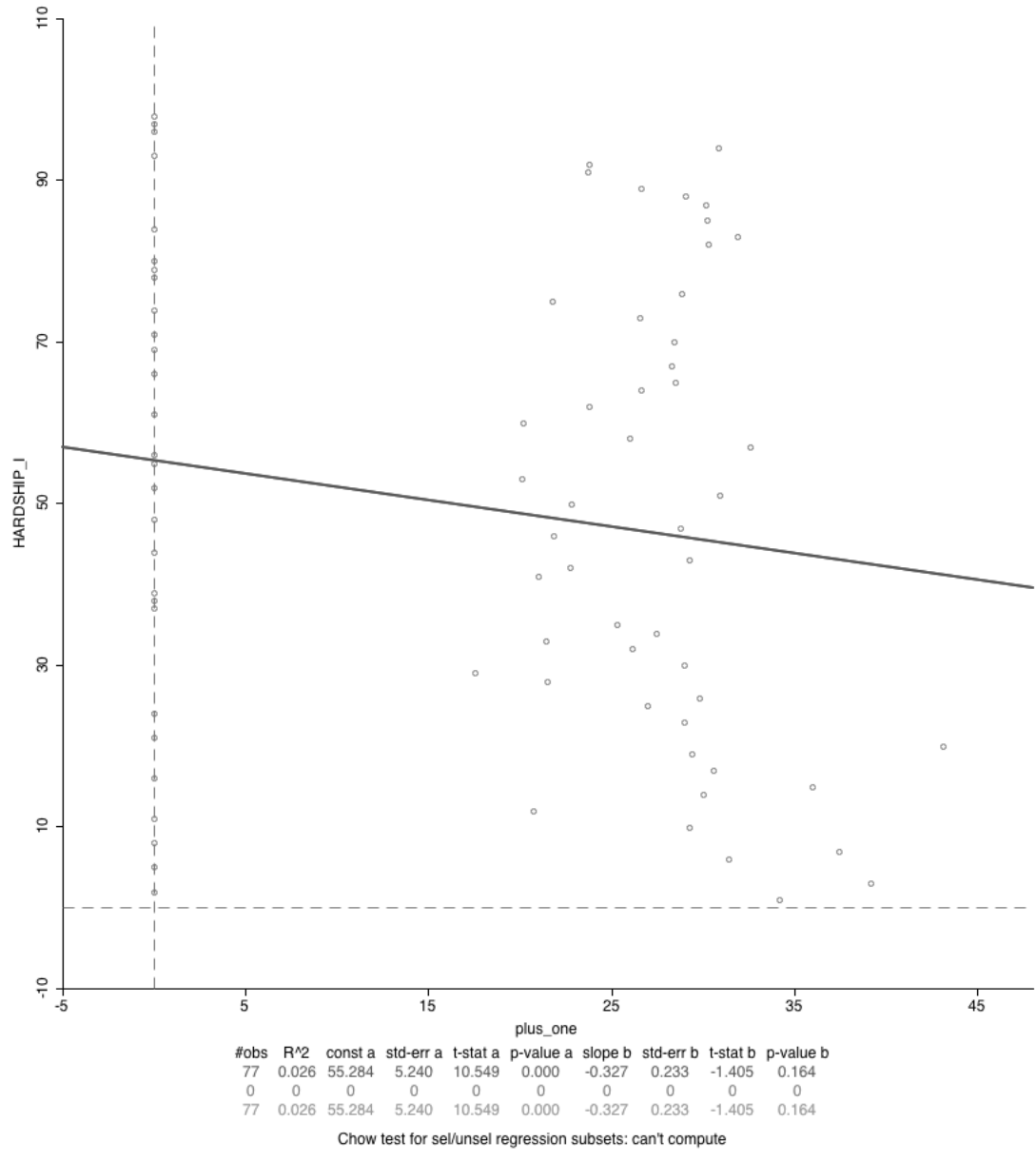


Figure 26: Post-2011 TIF Expenditure vs Hardship

## Chapter 5

### **Discussion and Conclusion**

Over the preceding decades, the neoliberal rationale for how money should be spent has permeated into government at various levels and conditioned the thinking of and metrics for measuring governmental action. Chicago in particular, like many major cities across the United States has been influenced by and subscribed to the theoretical changes wrought by neoliberalism. Indeed, with changes to the high-level focus came corresponding changes to patterns of expenditure on the ground. The techniques of state action adapted to the new paradigm, both enhancing and solidifying the grip of neoliberalism. While never entirely zero-sum, the changes do represent significant and meaningful shifts. As such, the resulting spatial pattern of expenditure, whether consciously or not or desired or not, has prioritized different outcomes and accordingly different populations. Again, in Chicago's case, patterns of expenditure have transitioned towards new areas and in more exclusive support of certain populations. The fundamental question is thus whether these new geographical and social prioritizations are actually how the government should be aligned and if that represents an ideal, or even a desired result. Concrete answers to such a value question, if they do exist, are outside the scope of this study. Nevertheless, an understanding of where things currently stand, and the implications and results therein, is still a fundamental necessity for even beginning to determine what a desirable future can or will entail.

This study has attempted to provide some clarification on the current state of government spending within the City of Chicago and found a correlation between public expenditure and high economic activity and opportunity. Additionally, the specific program of Tax Increment Financing, which by definition is supposed to help those most in need, followed the same patterns instead of prioritizing the underprivileged. Furthermore, while the City of Chicago, recognized that its implementation of TIF was

improper, there was no noticeable change after the 2011 Reform Panel made a variety of recommendations for improvement.

While neoliberalism helps explain the pattern of overall expenditure, it is discouraging that planners could not remove themselves from its conditioning influence, even while seeming to recognize, at least to a degree, its permeation into the mechanisms of their institutions and the effects therein. In other words, why did nothing change after the Reform Panel brought to light some of the biases of neoliberal TIF use and formalized metrics through which those biases could be addressed? Furthermore, besides this study's results that no noticeable change occurred, it could be argued that TIF use has, in reality, become even more egregious since the Panel concluded. While not to overly condone analysis by anecdote, Chase and Ecker with the Better Government Association and Crain's Business Chicago uncovered an "elaborate financial shell game that obscured payment of \$55 million for renovations at Navy Pier" with TIF money officially reserved for other purposes.<sup>68</sup> The inevitable conclusion is that the neoliberal system of competition, marketization, self-enforcing feedback mechanisms, and lengthening history of implementation has so conditioned the spatial and social patterns of development that a full appreciation of its effects is difficult to fully grasp or emerge from underneath. Hopefully this study has illuminated some of those biases and will lead to more conscientious action in the future, either on the part of the public or administrators.

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<sup>68</sup> Chase and Ecker, "How City Power Players Diverted \$55 Million in Blight-Fighting TIF Cash to Navy Pier"; Danny Ecker and John Chase, "Aldermen Blast City, McCormick Place Officials over Navy Pier TIF Plan"; David Reifman and Lori Healey, "No TIF Funds Were Diverted to Navy Pier, City Officials Say."

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