

**Regions, Race, Rail and Rubber: An Analysis of How Transportation  
Planning Decisions Contributed to Regional Segregation, 1922 – 1973**

by

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People are trapped in history, and history is trapped in them.

*James Baldwin, 1953*

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## **DEDICATION**

In honor of my father, Daniel L. Pfaff, in whose loving memory I will continue my explorations,  
always.

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## LIST OF ABBREVIATIONS

DSR – Department of Street Railways  
RTC – Rapid Transit Commission  
BSRC – Board of Street Railway Commissioners  
PCC – President’s Conference Committee [type of streetcar]  
DUR – Detroit United Railroad  
GM – General Motors  
NCL – National City Lines  
US – United States  
DDoT – Detroit Department of Transportation  
FHA – Federal Housing Association  
MPO – Metropolitan Planning Organization  
SEMCOG – Southeastern Michigan Council of Governments  
SEMTA – Southeastern Michigan Transportation Authority  
SMART – Suburban Mobility Authority for Regional Transportation  
WPA – Works Progress Administration  
NAACP – National Association for the Advancement of Colored People  
MIC – Mayors Interracial Committee  
ROW – Right of Way [traffic terminology]  
DRPC – Detroit Regional Planning Commission  
FHA – Federal Housing Administration  
UMTA – Urban Mass Transportation Administration [federal]  
SEMTA – Southeastern Michigan Transportation Authority  
HOLC – Home Owners Loan Corporation  
SMART – Suburban Mobility Authority for Regional Transit

## ABSTRACT

Detroit's history of systemic racial inequity has significantly contributed to the uneven development patterns of the entire metropolitan region that persist to this day. The process of central city decline, deindustrialization, and suburban migration in the post-war period compounded existing discrimination in housing and employment for Black residents, effectively trapping them in the city and preventing them from accessing suburban amenities. This dissertation evaluates the role that public transportation planning played in reinforcing racial segregation by restricting transit options to suburban areas, effectually limiting physical mobility of residents. My research demonstrates that the City of Detroit Department of Street Railways (DSR) had knowledge of suburban growth trends, sufficient budget revenues, legal jurisdiction, and the physical resources to provide service to suburban areas, but voluntarily limited suburban transit options. The failure to provide suburban service meant that the DSR could not capitalize on regional growth trends and could not recover from lost ridership numbers as Detroit depopulated through white flight and decentralization. This study analyzes key transportation planning decisions made by City of Detroit officials between 1922 and 1973 using qualitative, primary-source, archival records such as letters, meeting minutes, reports, survey documents, and maps. These sources have not been comprehensively researched or peer-reviewed to date, and my research contributes to a literature gap in the history of public transportation planning in the City of Detroit. Findings are determined using interpretive analysis to understand the role that transportation planning has played in reinforcing racial segregation between city and suburb in post-war Detroit.



## INTRODUCTION

Before Detroit became the automotive capital of the world, an expansive network of streetcars crisscrossed the dense city on fixed rail laid in the street and powered by a grid of overhead electrical catenary wires. In its heyday, Detroit's streetcars moved 659 million passengers in a year, averaging 1.4 million daily rides within the 138 square miles of the city using 2400 vehicles. This complex system had humble origins dating back to 1863 and was slowly built across multiple decades at the end of the 19<sup>th</sup> century in piecemeal fashion by private corporations, usually affiliated with real estate or construction ventures, which introduced horse-drawn lines into outer districts of the city. In 1901, there was a large-scale buyout of these disparate traction companies, resulting in their conglomeration into a unified system, with a set base fare, transfer fees, electrified service, and comprehensive route coverage that connected urban lines in Detroit to interurban lines that spread throughout the rest of southern Michigan and into northwest Ohio.

The presence of streetcars in Detroit was a common sight, as it was in almost every major city across the United States (US) at the start of the twentieth century. The growth of these early transit systems share common historical threads, with independently operated horse-drawn lines being founded in the mid-1800s and electrification beginning around 1888. Ultimately, the lines were consolidated into urban transit monopolies owned by real estate, utility, or railroad companies that dominated city development through World War I (Warner 1978; Foster 1981). The growth of rail transportation in cities was the result of national demographic shifts and a

marked increase in urban populations, life expectancy, and economies of scale that facilitated higher density living and city development. Privately built transportation networks operated for profit were a critical component of urban growth after the turn of the century, and streetcar tracks formed the iron backbone for Detroit's development in the decades before the automobile.

By 1956, Detroit had completely dismantled its streetcar network and replaced it with diesel buses. The original motivation for diesel adoption was to modernize the transportation network to face the urban challenges of the post-war period. Like most major US cities at the time, Detroit experienced a significant decrease in public transit ridership post-1945 and sought to cut down on expensive maintenance and infrastructure costs associated with streetcar use. The shift from rail to rubber was also connected to a number of factors beyond the direct control of transit agencies or cities. Federally subsidized suburbanization programs such as the Federal Aid Highway Act and Federal Housing Acts contributed to significant changes in where people lived, and new municipalities were chartered on the fringes of existing cities that boasted lower taxes, racially exclusive schools and neighborhoods, and larger lot sizes with more privacy. Shifts in the manufacturing sector also significantly impacted cities in the postwar period. Major corporations began relocating factories to take advantage of tax deductions, and new technologies facilitated complex supply chains and logistics, which in turn allowed for decentralized manufacturing outside from urban cores.

The racial and population factors for Detroit's increased focus on regional growth was complicated due to rising racial tensions and a growing number of Black city residents arriving as part of the two waves of the Great Migration. Southern Black families seeking to leave Jim Crow segregation were drawn northwards by the promise of low-skill, high-wage, blue-collar jobs that were readily available in the manufacturing centers in the north. Although racial

tensions existed in years prior to the Great Migrations, the steady influx of Black Detroiters ignited controversies over public housing location, restrictive covenants, and mortgage lending practices as their population share increased from 1% in 1910 to 16% in 1950 (US Census Bureau 1950). Suburban growth in the post-war period reflected heightened racial tensions, and new construction both actively and passively reinforced racial exclusion, creating exclusive neighborhoods for both Black and white residents.<sup>1</sup> Segregation between Detroit and the surrounding suburbs continued through the process of white flight from the urban core towards new peripheral enclaves, resulting in Detroit becoming a majority Black city in the late 1970s. Consequently, the surrounding suburbs of Dearborn, Royal Oak, Warren, and Grosse Pointe became garrisons of middle- and upper-class white residents. Detroit's level of racial segregation between city and suburb persists to this day and ranked as the second-most segregated metropolitan area in the country in 2010 census.

When investigating causes of racial discrimination and metropolitan segregation, public transportation infrastructure is often not considered. However, existing research establishes that racial disparities in the built environment have been historically shaped by discriminatory practices such as redlining, predatory lending, restrictive covenants, block busting, and urban renewal. These tools share a common purpose of demarcating and dividing physical spaces such as homes, blocks, or neighborhoods through processes that reify informal exclusionary practices that operated at local, state, and federal scales.

The changes within Detroit's public transportation system fundamentally adapted to shifting spatial constructions of the city and region. A close study of Detroit's public

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<sup>1</sup> Throughout this dissertation, instances of "Black" as it refers to the collective race and experiences of African or African American peoples will be capitalized. Doing so is deliberate choice to magnify the histories, identities, and culture, and treat them with grammatical dignity and respect. The usages of "white" are deliberately left in lowercase to de-center the common experiences associated with privilege and power they have maintained across the centuries.

transportation history inevitably intersects with critical periods of Detroit city history, including both its meteoric rise as the so-called “Arsenal of Democracy” and its precipitous post-industrial decline and abandonment. The latter exacerbated the rigid color lines between the city and surrounding region that still define the metropolitan fabric to this day. Although the actors, technology, demographics, and decision makers have changed throughout time, the necessity to reach physical destinations within the built environment remains constant. For that reason, a study of the history of public transportation in Detroit provides an analytical lens through which the city’s past can be re-evaluated in such a way that contributes novel insight into contemporary debates about urban growth, decline, and racial equity within the metropolitan region.

This dissertation investigates the history of public transportation planning, operations, and management in the City of Detroit from 1922 – 1973 through an analysis of decision making and motivation. The following chapters outline the complex web of internal and external forces that shaped transportation planning and policy decisions at the municipal level and analyze the consequences of those decisions within the city and metropolitan region. I argue that mode conversion from rail to rubber contributed to the downsizing of public transportation in Detroit. This conversion was conducted with the explicit intention of saving costs, and modernizing the transit system to utilize the flexibility of rubber-tired buses to conduct services in the wider metropolitan region with lower infrastructure costs. Early history of motorbuses demonstrated this flexibility in low-density residential districts outside of the downtown core. Yet despite these measures, the Department of Street Railways never fully or concertedly expanded into suburban municipalities. The failure to provide service to suburbs overlaps with significant racial change in the City of Detroit as the percent of the city population that was Black continued to increase, while white residents decreased, and factory production de-centralized and moved jobs away

from the downtown core. The lack of public transportation access to these newly developed areas perpetuated *de facto* barriers that prevented predominantly Black city residents from accessing suburban destinations for employment, recreation, or retail. The process of out-migration of white residents to surrounding suburbs, and the inability of Black residents to access those spaces, contributed to a segregated metropolitan geography that persists to this day.

The story of the transportation system begins in 1922 when the City of Detroit created the Department of Street Railways (DSR) to purchase and subsequently operate all public transportation services in the city, and concludes in 1973 when the DSR was disbanded and reorganized into the Detroit Department of Transportation (DDoT) in an attempt to serve more regional geographies with bus service. Across the 51-year history of DSR operation, public transportation was initially perceived as a universal public good that marked Detroit as a modern city, but was slowly dismantled, scaled back, and downsized in the post-war period as the city adapted to new land use, commuting, demographic, and consumer patterns. This research intersects with critical Detroit history that has indelibly shaped the city and region. In this dissertation, I discuss the decline of the streetcar network and the adoption of diesel bus usage for the transit system. The wider City of Detroit was heavily influenced by a booming industrial economy spurred by automotive manufacturing sector that earned Detroit its moniker as the so-called “Motor City.” During this rapid industrialization, Detroit experienced a sharp increase in population from 1910 to 1920, rising from 9<sup>th</sup> to 4<sup>th</sup> largest city in the country, and underwent a period of territorial annexation that increased the city limits from 49 to 138 square miles. The promise of high-paying, low-skill jobs also spurred the migration of two waves of Black laborers from southern to northern cities as part of the Great Migration. Rising racial tensions through the Riot in 1943 and the Rebellion in 1967, suburbanization and white-flight that led to an exodus of

nearly 900,000 residents in only 30 years, and culminated in Detroit becoming the first majority-Black city in the country.

Ultimately, my research demonstrates that disinvestment in public transportation has negatively impacted predominantly Black city residents and reified racial segregation in metropolitan areas like Detroit. The gradual decrease in public transportation service to the point of inadequacy was the product of 51 years of transit policy and municipal decision making. My findings demonstrate that transit officials were not explicitly attempting to restrict mobility of Black residents, but negligently contributed to a system of regional segregation by failing to extend transportation services into affluent white areas despite having adequate resources, research, and the legal ability to do so. This represents a new and novel contribution to the literature on the causes of racial segregation, introducing public transportation as a causal explanation that operated alongside other well-researched forms of structural discrimination like redlining, predatory lending, racial covenants, school segregation, school bussing, and urban renewal (Sugrue 1996; Darden 1987; Foster 1981; Mumford 1981; J. D. Hall 2013; Biles 2014). My research represents one of the first comprehensive histories of public transportation in Detroit that details the evolving priorities of city officials as they transitioned from central-city growth towards a regional perspective that still produces discord into the modern day. What follows is a historical case study into how public transportation was planned and executed in Detroit from 1922 to 1973, and an investigation into the racial impact of those decisions as the city transitioned from a majority-white to a majority-Black population.

## Case Study Selection & Background

The city of Detroit was chosen as a case study because unique circumstances that allow for focused analysis of how public transportation impacts race in metropolitan regions. Firstly, Detroit became the first and largest US city to become majority African American in the 1980 decennial census. This was a long process that began with two waves of the Great Migration of southern Blacks up to northern cities like Detroit beginning around 1915. These migrations led to increasing racial tensions between Black and white city residents throughout the period of my study between 1922 and 1973, which included a race riot in 1943 and the Detroit Rebellion in 1967. The second reason to study Detroit is that it was the first major US city to own and operate its own public transportation system. In April of 1922, city residents voted 83% in support of buying out the private transit company, the Detroit United Railroad (DUR) and creating the municipal Department of Street Railways (DSR) to assume control of all assets and manage all public transit in the city. This public control came more than a decade before other major cities like Chicago, New York, Boston, or Philadelphia would launch similar schemes to inaugurate their municipal transit authorities. The vote approving the buyout indicated that city residents sought to escape the private capitalist railroad executives who raised fares without providing additional services. For Detroit officials, the vote was an opportunity to finally build and manage transit expansions at the municipal level to capitalize on the robust urban growth that skyrocketed Detroit to its position as the 4<sup>th</sup> largest city in the nation in 1920. This direct control had significant benefits over the previously tenuous relationship with the DUR that was not guaranteed to act in the best interests of the city or its residents.

For the above two reasons, Detroit stands out as an exceptional case on both race and transit policy. When coupled with other facets of urban history, Detroit offers a unique opportunity to research the rise and fall of a public transportation system. By analyzing both the growth and gradual decline of the DSR within a long historical arc, my research exposes the structural failures of public transportation that preceded Detroit's current issues with providing affordable access across diverse municipal regions. My study covers numerous decisions from city officials that steered transit policy, analyzes their relationship to metropolitan growth, and ultimately underscores how transit disinvestment had a negative impact, even if it was carried out with honest intentions. Although the case of Detroit is unique, the observed outcomes of disparate racial impacts resulting from transportation disinvestment have generalizability to other urban contexts across the US, including in contemporary policy. This study contributes to existent literatures on causes of systemic discrimination that prevent minority populations from accessing services, employment, education, and other amenities to pursue prosperity.

This case study benefits from a wealth of secondary literature from scholars that builds a strong foundation on topics of Detroit history, city planning, urban renewal, race relations, manufacturing, deindustrial decline, metropolitan growth, white flight, and suburbanization, all of which significantly shaped the urban fabric. My research builds upon this foundation to explore the effects of public transportation disinvestment with a particular focus on how it exacerbated existent forms of racial segregation. To these literatures on Detroit, I add new and previously un-researched history about public transportation planning, operation, and management. While some scholars have explored aspects of the DSR system, almost all of the work in this realm was conducted by hobbyists seeking to preserve the legacies of public transit operation, and their research is usually not geared towards understanding or analyzing policy.



There exists a critical literature gap from 1922 until around 1963 wherein there is no peer-reviewed research on the DSR. Because the DSR was a City of Detroit department, all records of its operation and management were preserved and are publicly accessible through the Detroit Public Library's Burton Historical Collection, making possible a genuine historical contribution by exploring Detroit transportation in ways that do not revolve around the automobile and highways. There is a critical research gap around histories of public transportation systems and racial equity in urban areas. Few academic studies have been written that investigate the link between midcentury public transit networks and patterns of racial exclusion and segregation, and they usually focus on cities where overall transit and total population has not declined as markedly as Detroit. This means that there is no concise framework for how to research the role of public transportation in racial studies and analysis. To compensate for this, I triangulate my research methods between scholars of Detroit, and research of other national histories of structural inequalities that touch aspects of the built environment, such as housing, redlining, zoning, and urban renewal. From Detroit scholars, I borrow frames used to analyze the political and social environment of the Motor City. This is paired with scholars of discrimination and segregation, who contribute the extractive and exploitative frameworks that reproduce systems of inequity and racism in cities. Collectively, these scholars have established robust frameworks for understanding the institutional processes that result in significant racial discrimination in contemporary urban environments, which I deploy in my analysis of public transportation and racial impact (Freund 2007; Rothstein 2017; Self 2003; Sharkey 2013; Sugrue 1996; Thomas 2013; 2013; Thompson 2001; Wilson 1997). My dissertation seeks to extend that framework to analyze how historic transportation planning decisions affected racial justice, equity, and regional development in Detroit.

Despite being the automotive capital of the world, Detroit's public transportation system was not killed by the automobile, or by collusion with automotive companies (Adler 1987; E. Black 2007; Snell 1974). Elsewhere in the US, usually in much smaller cities, a conglomerate of powerful rubber, petroleum, and automobile corporations combined to bankroll a private bus company, National City Lines (NCL), in its bid to undercut weak transit systems. After being founded in 1936, NCL spread across 16 states and targeted 46 aging rail systems that struggled throughout the Great Depression. With generous funding and a supply to Mack diesel buses provided on credit, NCL was able to enter these cities and offer cheaper service and force local rail companies out of business. Firestone Tire, Standard Oil, and General Motors Corporation (GM), the corporate interests that backed NCL, were tried and convicted in the charge of conspiring to monopolize sale of buses in a federal anti-trust lawsuit in 1949. This famous anti-trust case has been frequently misunderstood, subjected to hyperbole, and associated with a devious conspiracy by GM to kill streetcars nationwide. A crucial middle step in this conspiracy theory was the notion that buses were inferior to streetcars, less likely to be adopted by public transit riders, and would therefore drive increased sales of personal automobiles. This element of conspiracy does not bear out in evidence and was not upheld in court in the charge of conspiracy to monopolize transit. Moreover, NCL, which was a private bus company, could only perform hostile takeovers of other private companies. In cities like Detroit where the transit agency was owned by the city itself, franchise agreements, taxes, and hundreds of millions of annual riders strongly discouraged or wholly prevented private coach operators from competing for riders within city limits. NCL posed no threat of siphoning riders that utilized comprehensive city-run transit systems, and the Detroit system was not in jeopardy of a conspiracy to dismantle it.

The proliferation of personal automobiles did impact public transportation ridership, especially post-1945. However, as numerous historians of suburban growth have noted, the infrastructure and built environment shifts that enabled private automotive ownership were partially subsidized by state and federal government construction of highways, as well as federally backed mortgages that allowed for home purchases in increasingly far-flung geographies (Ammon 2016; Biles 2014; Biles, Mohl, and Rose 2014; Fishman 1989; Foster 1981; Jackson 1985; D. W. Jones 2008; Mohl 2003; 2014; Rose 1979; Shelton 2017; Teaford 2006; 2008; Thomas 2013) . While this had the effect of reducing transit ridership, it was not through a conspiracy of GM or any other corporation to do so, but a product of urban planners viewing the automobile as the new technology that would deliver modernity upon cities in the post-war period. While automobile use did take riders away from public transit, I focus my research on understanding the decisions made by DSR administrators in retaining ridership and the discussions about expanded service coverage.

This historical planning case study also has relevance to contemporary debates about regional transportation allocation and funding within the Detroit region. In 2012, the State of Michigan legislature approved the creation of the Regional Transit Authority (RTA) to develop a transportation plan that provides consistent and comprehensive service across the metropolitan Detroit area that have infrequent, inadequate, or wholly absent transit coverage. The lack of a comprehensive system has existed since the gradual decline of the DSR began after 1951, and causes material hardships for Detroit residents trying to access suburban employment, as captured in a 2015 *Detroit Free Press* spotlight on the so-called “walking man” James Robertson who walked 21 miles a day to make up for inadequate bus coverage between Detroit and Rochester, Michigan (Laitner 2015). The RTA proposed an ambitious \$4.6 billion dollar project

that was funded through increased property taxes was put to a ballot in 2016, and lost by only 8,000 votes. The failed vote in 2016 represents the 28<sup>th</sup> consecutive time since 1967 that the Detroit region has failed to enact a transportation plan.

Contemporary transportation planning is reliant on the structural and historical legacies of failed plans, and the existent inadequate transportation infrastructure of the built environment. The significance of my research, and my major contribution to transportation planning, is to provide that critical historical context to help create better plans that address current issues. In 2010, the US Census Bureau listed Detroit as the second-most segregated region in the country, narrowly behind Milwaukee, Wisconsin and ahead of Cleveland, Ohio. Although public transportation is not solely to blame for this stark divide, the history of transportation decision-making, especially the voluntary decision to limit suburban bus services in the early days of metropolitan expansion, has contributed to segregation in the larger Detroit region. A larger historical study of transportation planning decisions must be conducted because it contributes an additional dimension to our understanding of how city planners, policy makers, and officials contributed to segregated cities and regions in the post-war period. Knowing how these deliberately exclusionary processes functioned historically is critical to dismantling them in present plans and future initiatives.

### System Origins, Early History, And Structural Background

To understand the structural forces that constrained and inhibited the Detroit Department of Street Railways, we must first explore the early histories of how streetcar transportation got established through private companies in the late 1800s. Like in most other cities around the country, Detroit's public transit was initially a disjointed network of private transportation

systems founded in the 1860s and owned or operated by real estate and utility companies (Warner 1978; M. O. Smith 1997; O'Geran 1931). Detroit's private transportation companies were first created in 1863 and incorporated in 1869. These early firms were granted franchise contracts to operate on city streets (Lehto 2017; Schramm and Henning 1978; M. O. Smith 1997). At the time, Detroit lacked regulatory oversight or constitutional authority to manage these private businesses, so the city merely encouraged development and collected the tax revenues in a symbiotic relationship (M. O. Smith 1997). This encouraged city growth, expanding the physical range of places that citizens could access while companies collected profits as the exclusive carriers in an area, neighborhood, or street (Warner 1978; M. O. Smith 1997). Many of these early companies operated only one line, and named their business after the service area or street(s) they served, such as the Grand River Railroad and the Forest Street Railroad. Despite adopting the term 'railroad,' these early ventures were almost all exclusively horse-drawn carriages that were pulled across rails laid in the streets. These initial transit businesses were not connected with nearby services, had no transfer agreements, and were not spread evenly into all areas of the Detroit, resulting in a piecemeal map of early service and coverage along set corridors.

Investors with enough capital eventually conglomerated these individual companies under the umbrella of the Detroit City Railways (DCR) and slowly bought out rival lines to consolidate transportation and coverage (O'Geran 1931). Between 1880 and 1900, numerous companies bought and sold contracts to establish a foothold in the burgeoning street rail transportation market. The final form of these consolidations emerged in December of 1900 as the Detroit United Railway (DUR), which operated all urban and inter-urban transportation lines across Southeast Michigan and even parts of northern Ohio and Ontario, Canada. The DUR

operated as a private transportation entity within the city of Detroit from 1900 to 1922, and served as the sole public transportation provider until 1921.<sup>2</sup> This set the stage for later clashes with city officials who sought to regulate parts of the DUR's operation during the opening decades of the 1900s and through the remainder of the Progressive Era, which was typified by anti-trust sentiment and fear of monopolies like the railroad empire of the Vanderbilts and others. As documented by historian Neil Lehto, the period of DUR operation from 1900 to 1922 was fraught with legal battles and debates between Detroit officials and DUR administrators (Lehto 2017).

As a private corporation, the DUR was ultimately unable to sufficiently react to the rapid urbanization of Detroit and the surge in population that the city experienced. The city's rapid growth between 1900 and 1920 coincides almost exactly with DUR operation, which exacerbated existing strains on the transit network and negatively impacted the condition of tracks and equipment when finally purchased in 1922 by the City of Detroit. In a 15-year period between 1906 and 1921, Detroit underwent 12 different territorial annexations, doubling in geographical size from 39 to 80 square miles (Burton 1930). At the same time, the DUR was unable to scale transit service with the enormous surge in population. In 1900, the year the DUR was incorporated, the city population was approximately 290,000. Two decades later, the population had increased more than three-fold to 990,000, including a more than 100% population increase between the 1910 and 1920 decennial censuses (US Census Bureau 1920). Although the DUR had a total transportation monopoly on public transit in and around Detroit, their revenue was generated almost exclusively by the nickel fare collected at the time of

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<sup>2</sup> The City of Detroit briefly implemented a limited system of downtown street railways in competition to the DUR in 1921 as a proof of concept, marking the last year of DUR operation as technically in competition with the City before the May 1922 buyout.

boarding. This meant that as the city expanded and grew in population, the DUR could only respond proportionally to their revenue in a given year. Throughout the first two decades of the 1900s, costs of operation grew commensurate with a growing city and inflation drove up the cost of repairs, expansion, and maintenance, but the fare remained fixed at five cents per ride. The DUR gradually lost their capital power to maintain equipment, purchase new streetcars, and construct new track (Lehto, 2017; O'Geran, 1931; Schramm & Henning, 1978).

Detroit Mayor Couzens' response to the slipping service coverage of the DUR was to offer a buyout and establish municipal control over the entire transit system. The issue was put to voters on April 7, 1922, and city residents voted with an 83% majority to approve a bond for \$24 million dollars that would be used to buy out the DUR. The sale transferred all DUR assets into the control of a newly-created City of Detroit Department of Street Railways (DSR), effectively creating a totally city-run transportation system, the first in the nation (Schramm and Henning 1978).

The Department of Street Railways officially took over full administrative and operational control of the entirety of Detroit's transit system at 12:01am on May 15, 1922. This included 363 miles of track, 1,457 streetcars, 12 car houses, and 4,000 employees operating within the 80 square miles that defined the city limits (County Of Wayne, Michigan 1926). All of the equipment, including the streetcars, car houses, rail, electrical wires, and generators were transferred to the DSR in their existing condition. The prior deferred maintenance under DUR ownership of these assets set the stage for every subsequent expansion or change made by the DSR thereafter. With much of the DUR rolling stock and trackage dating back to the turn of the century, this meant that the equipment was already in the middle to late stages of its lifespan. While technically a bargain for Detroit to purchase, the valuation of the DUR dropped \$10

million between an earlier 1916 appraisal and the final sale in 1922, indicating that it was rapidly depreciating, and necessitated replacement or rehabilitation within only ten years as the existing equipment neared the end of its service life (Schram 1991).

Upon commencing city-run operations, the DSR conducted an inspection of all infrastructure and equipment to ascertain the immediate needs of the system. The resulting report characterized more than 70% of the existing track as being in "poor" condition, which accounted for about 250 track miles (Schramm and Henning 1978, 11). These problems were exacerbated by the condition of some streetcars that had to be retired due to age, or their relatively small size and lack of seating capacity. In addition to the depreciating infrastructure, the DSR was seeing surging ridership, increasing by 25 million annual revenue passengers between 1923 and 1927, from 471 million to 495 million, and peaking with 518 million riders in 1929 (City of Detroit Department of Street Railways 1929). In response to this demand, the DSR sought to purchase new streetcars to replace those that were unfit for service to increase capacity. With some trunk routes running at two-minute headways, parts of the downtown network were already at capacity and physically could not accommodate new cars in the crowded spaces of the central business district. This prompted the DSR to invest in larger Peter DeWitt streetcars capable of carrying 55+ passengers to replace the smaller 30-person Birney cars. At points throughout the 1920s the demand for streetcar capacity was so high that the DSR mechanics scrapped or stripped fifty of their own streetcars in-house to remove engines and position them as trailers behind newer units to expand seating capacity on existing lines.



## Methodology

This research was conducted using primary source document analysis of historical materials located in two archival collections. The primary location for my research was the Detroit Public Library Burton Historical Collection, which houses the municipal services files for the City of Detroit, and includes the files for city departments like the DSR. The second archive was the Walter P. Reuther Library at Wayne State University. Importantly, the papers of Mayor Cavanaugh, as well as early documents for the Southeastern Michigan Council of Governments (SEMCOG) and other iterations of regional documents. Within the archives, the boxes contained a multitude of types of documents about system management, including annual reports and financial documents, which were primarily used to establish longitudinal data about ridership and financial health of the DSR. Meeting minutes, letters, notes, memos, correspondence, maps, brochures, catalogs, reports, and engineering documents were also included for analysis. Some of this research overlapped with the COVID-19 global pandemic, which resulted in a shutdown of the archives in Detroit, and very limited hours for viewing material. To fill gaps in the archival record, there is also significant sourcing from three main newspapers, including two daily Detroit publications, the *Detroit Free Press* and the *Detroit News*, as well as one weekly publication, *The Michigan Chronicle*, which was originally published in 1939 and was Michigan's first black newspaper.

## Chapter Outline

In Chapter one, the City of Detroit's rapid urban growth, both in population and in geographical size, posed challenges for the DUR that negatively affected its ability to deliver transit service to all areas and all residents. By buying out the DUR without new significant new

construction or purchases to alleviate pressure, the Detroit Department of Street Railways inherited the issues of a struggling system. This chapter explores early city management of the transportation system throughout the 1920s and 1930s as Detroit tentatively turned towards diesel buses to use as a stopgap transit measure. This chapter explores initial contracts with small private bus companies to operate coaches while streetcar tracks were repaired, and into the eventual creation of dedicated Motor Coach Division beginning in 1925. Between 1925 and 1936, these coaches slowly gained a foothold in the city transit system, establishing themselves as a cheaper alternative to streetcar service. Because of their smaller size, diesel coaches became ideal to use in lower-capacity situations, or to help with surge ridership during shift changes. Streetcar operation remained the norm through most of the central business district and along mainline trunk routes. However smaller, less-dense residential areas, and off-peak transit times began increased utilization of buses operation as a cost-saving measure. Especially for outer neighborhoods that were still building housing, buses were an ideal compromise that provided service, without the high infrastructure cost of track and overhead electrical catenary wires. Because the buses were also smaller, their per-unit cost was also substantially lower than streetcars, about 1/4<sup>th</sup> of total cost in 1935 dollars. Overall, chapter one contributes a structural history of the DSR geography, service, and resources that constrained later decisions to convert the transportation system from rail to rubber, and sets the stage for later transit debates about service provisions, coverage, payments, and taxes covered in later chapters.

Chapter two analyzes increased racial tensions as a result of World War II, the Great Migration, incidents of racial mixing on public transportation vehicles in Detroit, and early post-war route conversions to diesel buses. In it, I explain how World War II caused a sharp increase in manufacturing production, and Detroit saw a surge in transportation ridership and factory

employment. An Executive Order from President Franklin D. Roosevelt in 1941 underscored that any contractors producing war goods should not discriminate based on race, and that all Americans needed to unite against a common foreign enemy. Despite this common cause, Detroit experienced increasing racial incidents as white residents were forced to live and work in close proximity to Black laborers on a more regular basis (Capeci and Wilkerson 1991). Increasing racial tensions were evident in public spaces where Black and white workers mixed regularly in close contact and became an almost daily occurrence onboard DSR streetcars and buses between 1941 and 1943. These racial incidents were sometimes passive microaggressions, such as a white driver passing by a Black rider on the curb claiming to have a full bus, but also escalated to verbal and physical altercations that were frequently reported to the Detroit Police. Tensions rose throughout the early 1940s, culminating with the violent race riot in late June 1943 that killed 33 and injured more than 300 (Cowans 1943; Capeci and Wilkerson 1991). Chapter two addresses the history of transportation before, during and after World War II, with a particular focus on how racial issues became intertwined with public transit debates. This chapter contributes an understanding of how the racial tensions during World War II impacted post-war transit system changes as DSR administrators fought to get space on highways to operate vehicles into suburban geographies, a significant battle that would impact its ability to deliver widescale service in coming decades.

Chapter three addresses racial demographic changes at the metropolitan scale and analyzes numerous attempts at balancing the DSR budget amid falling ridership and depopulation, taxation debates, and regional negotiations with suburban leaders. Racial tensions continued to simmer beneath the surface from 1951 to 1973 while suburbanization spurred an exodus of white residents from the city into racially exclusive residential enclaves beyond the

city. This regional growth was underwritten by federal mortgage assistance through the Federal Housing Association (FHA), and white residents could still access Detroit through an ever-growing network of state and federal highway construction. As early as 1946, the DSR began tracking the percentage of population decrease in neighborhoods in Detroit, and the growth of neighborhoods beyond the city boundaries. Internal correspondence and reports from various city departments also acknowledged the shifting regional growth patterns. Despite this awareness, the DSR did not move to substantially offer suburban transit service when they had the power, knowledge, and capability to do so prior to 1951. During this time, the DSR had available cash-on-hand, a legal mandate granted by voters in a 1940 ballot initiative, and the demographic data that supported shifting residential growth patterns into the surrounding region. Despite this knowledge, the DSR still did not expand transit service. After 1951, the narrative shifts towards regional and financial barriers that removed the authority of the DSR to act independently to enact regional transit. Chapter three explores the early failures to initiate regional transportation planning in Detroit and demonstrates how the DSR first attempted to respond to regional growth through city-level changes such as fare experiments and service cuts, but was ultimately beholden to officials at the city and state level who initially delayed structural changes to the DSR charter and funding mechanisms. In this chapter, I argue that the failure to offer suburban service resulted in further increasing metropolitan segregation between the Black Detroiters and white suburban residents during a critical period of racial demographic shifts in the wider region.

By the time that the State of Michigan stepped in to create a regional transit authority in 1967, nearly 20 years after the DSR observed but did not move to offer transit to match suburban growth, the damage was already done, and the DSR power and capacity has dwindled significantly. By not extending public transportation services, the DSR effectively limited access

by Black residents into white suburban spaces. Although this decision was not made with conscious racial intent to harm or segregate, the observed effect is nevertheless persistent racial exclusion from white neighborhoods. This dissertation ultimately explores the history of Detroit public transportation planning from 1922 to 1973, and analyzes the consequences of municipal transportation decisions upon the city and metropolitan region. My research advances an argument that public transportation operation, although not deliberately designed as racist, failed to serve minority city residents in a period of metropolitan expansion, and contributed to segregated growth patterns that still stymie public transportation planning into the modern day.

## **Chapter 1**

### **Early History of the Department of Street Railways: 1925 to 1938**

On May 14, 1922, General Manager Joseph S. Goodwin was given a front-page column in the Sunday paper of the Detroit Free Press. Printed on the eve of the City of Detroit taking total municipal control of public transportation in Detroit, Goodwin assured residents that the transition would be smooth, and that his “one and only aim” was to “make the people of Detroit proud of their newest department of administration” (Detroit Free Press 1922). When the City of Detroit Department of Street Railways (DSR) formally assumed operation in the morning of May 15, 1922, the \$24 million dollar purchase of the transit system was hailed as a major public investment that would contribute to Detroit’s rapid urbanization and mark it as a modern city. Indeed, in the 1920 census, Detroit moved from 9<sup>th</sup> to 4<sup>th</sup> largest city in the country, adding 500,000 residents and approximately 60 square miles of newly annexed territory. Mayor James Couzens had fought for nearly three years with the former private streetcar operator to expand service without raising fares, and hailed this as a major victory for the residents of Detroit, and a testament to the civic investment in building a strong metropolis.

The streetcars that rolled out of carhouses were nearly 20 years old, and in a state of disrepair that dated back to 1913 when the Michigan State Legislature revised its constitution and empowered cities to “own and operate their own traction lines.” With new regulatory authority, the City of Detroit promptly launched efforts meant to curb the wide authority exercised by the sole private transportation operator, the Detroit United Railroad (DUR).

Working through a newly formed Board of Street Railway Commissioners (BSRC), Detroit amended franchise operating agreements on City Streets, and sought to hold the DUR to a 5-cent fare, and levied usage taxes for operating in public thoroughfares. The moves were made as part of an ongoing dispute between the city and the private transit companies, which historian Jared Lehto has likened to a “Thirty Years War” (Lehto 2017). The DUR fought the measures in a series of high-profile legal battles, and during litigation voluntarily deferred maintenance on tracks and equipment, and limited route expansions despite a threefold increase to the population, and new territorial annexations that expanded the physical geography of the city (O’Geran 1931). The result of this deferred maintenance is that the structural and material deficiencies of DUR assets were acquired “as is” by Detroit in the purchase agreement in 1922. While this technically represented a bargain, and saved the city from the substantial costs of having to build a system from the ground up, the condition of track and equipment set the course for every major subsequent expansion or change made thereafter.

This chapter will focus on two key decisions that contributed to the rise of diesel bus use in the DSR fleet. These events demonstrate how the maintenance condition of track and streetcars ultimately led the DSR to renting, and later purchasing, rubber-tired diesel motor buses for use as a stopgap transportation method during track reconstruction. The purchase of diesel buses in increasing numbers throughout the early 20s culminated in the opening of the Motor Coach Division of the DSR in 1925 as it became apparent that the buses had cost-effective applications in low-density situations. Early buses were significantly smaller with 50-75% less seating capacity than the electric streetcar vehicles, but were able to be rapidly deployed for route expansions, did not require tracks or electrical overhead catenary wires, and had significant utility in low-density applications, such as developing neighborhood feeders to trunk line

streetcar routes, or to serve small ancillary production facilities with small work forces. The flexibility of diesel buses was also ultimately used as justification for a significant \$2 million expansion of the DSR bus fleet in 1936. These two decisions that increased bus usage were primarily pragmatic and made in response to factors in the city that were beyond the immediate control of the DSR. Yet both decisions were crucial for laying the groundwork for later diesel bus operation in the DSR throughout the 1940s and 1950s, and set the course for increased bus implementation in future public transportation in the motor city.

This chapter explores the origins of the first usage of diesel buses by the DSR beginning in 1922, and analyzes some of the responses to bus operation submitted through letters from residents and statements from officials. Between 1925 to 1928, and again in 1934 to 1938 the DSR invested significant money in diesel bus operation, infrastructure, and expansions to the fleet, and the motives behind those decisions will be explored. By looking at the years before and after the 1925 decision to create the Motor Coach Division, this chapter includes the contextual history of DSR operation in the early 1920s to demonstrate how General Managers (GMs) were juggling other pressing issues that dovetailed to shape aspects of the transit system, including route expansions to new territory, surging population and ridership, and the onset of the Great Depression in 1929. This historical context long arc narrative and sets up a change over time analysis that demonstrates how city and DSR officials gradually came to appreciate, and rely on, diesel bus service.

This chapter is an exploration of the process of municipal decision making in the 1920s and 1930s that ultimately contributed to the large-scale rail disinvestment in Detroit, culminating with the total switch to rubber-tired diesel buses after 1956. Detroit's move towards diesel buses was a protracted 34-year process in which the city responded to changes in the demographics,



size, and needs of the population, making politically and financially expedient decisions to utilize shrinking assets in a rapidly changing urban environment. If the disinvestment in rail infrastructure is analyzed as a product of a long-arc series of historical processes, rather than simply a result of personal automobiles, it places a greater emphasis on understanding the incremental steps that led to rail disinvestment and wholesale adaptation to diesel bus fleets after 1956. This serves to help us expand our knowledge of public transportation, as well as understand how city officials managed assets while trying to anticipate future urban growth, and new technologies during rapid technological change. The decline of rail-based public transportation systems has been too easily written off as a casualty of consumer choice and automobile competition. These histories obscure the nuances of municipal governance which, in many ways, failed to invest in long term infrastructure expansions well before their ridership began to collapse. This research is important because the impacts of these decisions are still being felt well into the 21<sup>st</sup> century. By gradually disassembling the centralized street rail network, the Detroit officials inadvertently influenced residential settlement patterns concurrent with the suburban out-migration of its white residents and the second great in-migration of Black residents, tacitly reinforcing metropolitan segregation through a lack of transit access.

#### Motor Coach Division

The early operation of the DSR faced challenges caused by territorial annexations, steadily increasing ridership, and deferred maintenance. As a result, early General Managers like James Goodwin had to balance the need for costly rail expansions while simultaneously repairing and retrofitting the equipment to meet ridership needs. This posed an interesting challenge because trackage could not be repaired without halting streetcar service, or requiring

riders to walk around construction to “trapped” cars that operated only on dead end lines while adjoining track was repaired. To address this, the DSR began a pilot program in 1922 to utilize diesel motor coaches to ferry riders around areas with track construction without having to devote a streetcar to a disconnected spur during repairs. The early program, detailed in a 1923 report, used diesel motor coach rentals that were operated by a third-party bus company (City of Detroit Department of Street Railways 1923; Schramm and Henning 1978, 29). The success of these coaches for temporary service led the DSR to purchase 90 diesel buses in 1922 for continued temporary use, to be operated by the DSR. This initial purchase allowed the DSR to avoid contracting an outside party, and gave more direct administrative control over drivers, routes, and maintenance. Out of this small temporary experiment, the DSR would continue to bolster its bus fleet over the next several years, culminating in the formal creation of Motor Coach Division (MCD) in January 1925 (City of Detroit Department of Street Railways 1925). The new division became the 8<sup>th</sup> administrative unit of the DSR and was responsible for all diesel bus operation and maintenance. Although purchase statistics are not available for each year, bus service continued to grow steadily as the department responded to increasing rider demand throughout the Roaring Twenties.

The growth rapid growth of the diesel bus fleet throughout the 1920s was a testament to the flexibility of their cheap deployment. In 1922 when buses were first used by the DSR, they covered only four route miles using only two rented buses. In 1929, less than a decade later, the mileage and fleet had grown exponentially. In 1929, the MCD had a total of 548 buses, and 478 route miles of bus service (O’Geran 1931, 378). In comparison, when the DUR was purchased in 1922, the DSR had 363 route miles of streetcar track, which increased only modestly by 54 miles to total 417 streetcar route miles by 1929. These figures show that the MCD drastically expanded

the service area coverage of the DSR, more than doubling the existing service, and even surpassing total streetcar route mileage. Furthermore, the significant investment in diesel bus usage in such a short period of time underscores their flexibility as a transportation alternative, and demonstrates their application to serve low-density areas, allowing rail investments to concentrate on high-density, high-frequency trunkline districts. Although this chapter nominally focuses on 1925 as the formal date of creation for the MCD, the history of bus usage in Detroit was not solidified in a single day, or even in a single year.

The first use of buses as a means of public transit in Detroit that appears in the historical record was in November 1922 on the Lynch road line.<sup>3</sup> The Lynch road route was previously a DUR streetcar route that was decommissioned after World War I, as the munitions plants it primarily served ceased operation after 1919. In 1922, a group of manufacturers along the corridor requested service be renewed for their workers. Due to previous deferred maintenance by the DUR, the DSR was swamped with other more pressing needs to rehabilitate track, so the department opted for a bussing experiment using three diesel motor coaches. The service consisted of three buses that were rented by the DSR and operated by a third-party company, Detroit Motor Bus Company, while a third bus was purchased and operated by the DSR (City of Detroit Department of Street Railways 1923, 31; Schramm and Henning 1978, 29)

By the conclusion of the 1922 bussing experiment on Lynch road, the flexibility of buses was clearly demonstrated to the DSR. However, the DSR could not turn a profit due to the bus rental rate it had agreed upon with Detroit Motorbus Company. Nevertheless, the buses themselves demonstrated that they were ideal for instant deployment without infrastructure. The profit issue was the sub-contracted operation cost of \$10 per unit per day that was prohibitive on

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<sup>3</sup> While some buses were operating outside of Detroit, through small private firms, this research is focused on buses paid for, and used by, DSR for the purpose of public transit.

a low-traffic, low-density line. If the buses had a higher seating capacity, the DSR could have maintained a profit by renting fewer units, but carrying the same total number of passengers. This exposed a technological weakness in the relatively new diesel motor coach chassis as being too small for adequate seating. The typical streetcar could seat 55+ passengers, while the early-generation diesel buses sat only 15-25 depending on model. This meant that two or even three buses had to be deployed to carry the same number of passengers as a single streetcar, which in turn drastically increased operating costs. The DSR eventually pulled their purchased coach off this line and sold a franchise rental agreement to the Detroit Motor Bus Company to operate on Lynch road until 1924, when the DSR repaired the tracks, and resumed streetcar operation on the route. The post-1924 DSR streetcar service turned a profit (Schramm and Henning 1978, 29).

The Lynch road experiment demonstrated that the buses fit a particular niche in transit operation for rapid deployment of route miles without requiring significant infrastructure investment beforehand. Unlike streetcars, buses were able to immediately operate on any surface, and did not require rails or overhead catenary wires construction before their use. In this light, buses could be used to feed major streetcar lines, offsetting their higher operating cost through a transfer fare, and by the overwhelmingly profit on the high-density trunkline services they fed. By being able to operate on city roadways without any DSR infrastructure beyond the stop locations, the introduction of buses served two key purposes. The first was that they could help address the maintenance deficiencies inherited from the now-defunct DUR operation. The second was that they could be deployed instantly in newly annexed or settled areas to provide transit to trunk streetcar lines into the core.

A 1923 annual report letter from the acting General Manager Ross Schram highlighted the balancing act the DSR was maintaining between providing new service expansions and

rehabilitating existing infrastructure. Schram noted that the deliberately deferred maintenance program of the DUR spent only \$187,500 on system maintenance between 1919 and 1922, compared with \$200,500 spent in a single fiscal year of DSR operation, while their service area expanded by 44 square miles through annexations, and while the population had increased by about 210,000 residents (City of Detroit Department of Street Railways 1923). Schram's larger point was that the DSR was investing roughly 1/3 of their available revenue into system maintenance and rehabilitation of the 250 miles of "poor" track, while also looking to serve swaths of newly annexed land. The bus presented an answer to both issues, allowing for construction transit service that avoided work crews, and instant route development with minimal infrastructure for areas with new construction. This early history makes it evident that the condition and subsequent management of the DSR system was highly dependent on the DUR maintenance and operation procedures that established the trend for depreciation and disrepair. This forced DSR administration to respond with pragmatic solutions that could affordably expand the system, provide necessary repairs, while still transporting the nearly 1.5 million riders the system served daily (O'Geran 1931, 377-78).

The DSR touted the flexibility of buses, and moved to establish permanent bus line services. The first step was a new purchase of 156 buses in 1925. In a single year of operation, the DSR added 155 route miles for diesel buses, jumping from 4 miles in 1923 to 18 in 1924, then further to 172 in 1925. The increase in service meant that the bus operation could no longer be housed under the traditional administration structure of streetcar track and maintenance, and shifted to its own Motor Coach Division in 1925. The MCD purchased 113 additional buses in 1926, followed by 28 in 1927, 184 in 1928, and 47 in 1929. By comparison, only 125 new streetcars were purchased in the same period of time, albeit at significantly higher cost per-unit.

The rapid expansion of the diesel bus fleet testified to their flexible, affordable alternative to the expensive up-front infrastructure costs of rail and wiring required for streetcars.

The biggest draw of the new buses was that they remained significantly cheaper. Peter DeWitt Streetcars, the workhorse of the DSR Fleet from their initial purchase in 1923 onwards, cost \$14,500 per unit. The diesel buses DSR purchased in 1925 cost only \$4,000 each (City of Detroit Department of Street Railways 1926). The initial investment in the MCD was \$2 million, which included some budget to retrofit a streetcar service house into a bus maintenance facility. Buses were not meant to replace streetcars. To the contrary, their use was almost always to assist and supplement street rail operation. One financial report, published by the DSR Auditor William Hauser, responded to a series of questions from the Common Council regarding the statistics of bus operation. In it, Hauser characterized bus operation as “necessary to serve certain sections of the city which had been built up” and that coaches were “the only means that could furnish service” alluding to the costs of rail infrastructure expansion. Using bus operating statistics from October 1926, Hauser noted that a total of 31.1% of passengers on coaches ended up also using rail facilities, and concluded that this use demonstrated that newly erected “coach line service to outlying sections has the tendency to augment the rail line service” (Hauser 1927).

Using buses as feeders allowed the DSR to concentrate its resources on the maintenance and rehabilitation of trunk streetcar lines, rather than on costly expansions into newly annexed areas that lacked the population density to support rail investment. Despite being involved in transporting residents in newly constructed areas recently annexed in the northwest of the city, there was no coordination about early service expansions and annexations between city departments for development for issues like density or land use that could serve transit in memos, meeting minutes, or in newspaper reporting. While the DSR was rapidly responding to

letters requesting service or suggesting improvements, very little correspondence was tagged as “interdepartmental” between branches of the City of Detroit government. So, while the DSR doubtlessly recognized they needed high population density to serve newly annexed areas, especially with rail, nothing to this effect was communicated to the zoning commission that determined lot and residential standards for these new areas. The absence of these coordinating documents within the City of Detroit departments suggests that the DSR was reacting to changes of the expanding city throughout the 1920s and playing catch up on route construction and new service, rather than making proactive investments and decisions.

As the DSR expanded bus operations through the MCD, they also continued the rehabilitation of the rail service, but drew criticism from local government officials for their spending priorities. Between 1927 and 1929, the DSR purchased 100 Peter DeWitt streetcars to the tune of \$14,500 per unit, an expense totaling around \$1.4 million. In total, between 1922 and 1930, the DSR would add 322 streetcars to its rolling stock, which represented barely 1/5 of the total 1,704 passenger rail cars owned by the DSR. This lack of rail funding irked Detroit Common Council member Fred Castator, who argued in a memo to the DSR that 60% of riders used streetcars, and that passengers were increasing by an annual rate of 12% on average each year of the 1920s (“Miller-Schorn Subway Proposal” 1928). Yet despite this extensive use of the rail network, only 15 miles of new street rail was laid between 1924 and 1927. Castator argued that the Department deciding to invest \$2 million in additional busing operations was neglecting a significant component of their day-to-day operations.

The source of the Councilman’s ire was an idea that buses in the 1920s could not provide the same level of service as streetcars, making their purchase appear inconsistent with the massive rail network the city was attempting to maintain. Since the creation of the DSR, the

Board of Street Railway Commissioners was constantly working with the Rapid Transit Commission to improve and rail service capacity and speeds. Indeed, letters written to the DSR by citizens during this time primarily addressed rail service offerings, and very seldom mentioned buses. In making an argument about the system investments, Castator prioritized the preservation of the status quo because of the enormous investment the City of Detroit had chosen to make in purchasing and operating the street rail system. Other city administrators were also skeptical about buses. BSRC commissioners G. Ogden Ellis and John J. Gorman were quoted by the *Detroit Free Press* in November 1928 doubting the ability of the diesel bus to deal with increasing congestion in the central business district (CBD). They argued that the buses lacked seating capacity, and therefore increased the number of vehicles in the CBD to handle the same capacity as the streetcars. Ogden and Ellis noted that they are not opposed to buses, but rather that it has “not yet been proved” that buses could adequately serve public transportation purposes given their fledgling technology, smaller chassis, and smaller engines (Detroit Free Press 1928). This perspective expresses the lukewarm reception of buses by administrative officials in rare public comments about early bus operations in the city.

Although not mentioned specifically by either Ogden or Ellis, the financial and operational statistics of transit system paint a more complicated picture about bus operation. While it is true that buses were cheaper to purchase, and could be deployed without infrastructure, they also depreciated significantly faster. Streetcar route miles were devoted to high-density corridors that utilized the larger interior space to earn a higher revenue per operating hour across shorter distances. Bus route miles, in comparison, surpassed streetcar miles while operating 1,200 fewer vehicles, and carrying fewer than 1/10<sup>th</sup> of the total riders. This represented a greater strain on engines, brakes, manual transmissions, and the vehicles



themselves all while getting a smaller rate-of-return per passenger. The unspoken issue that drove diesel coach investment was the fact that recent territorial annexations concluding in 1926 added approximately 60 square miles to the city geography in the four years the DSR was founded. These areas were marked on DSR population survey maps as experiencing population increase, but their density was significantly lower than the urbanized core. Many of these outer neighborhoods, especially in the northwest corner of Detroit, were established as single-family R1 zoning. This new construction was aptly suited to flexible diesel coach operation, and the buses remained a critical link between residential neighborhoods and mainline trunk service. This is especially true for areas furthest away from the central business district because Detroit's street grid was based on a radial layout of main roads that diverged from the downtown. Nearer the downtown, this radial layout had relatively short distances between spurs, but as you neared city limits, the distance between trunklines was significantly increased, and necessitated specific crosstown service to traverse.

The 1928 comments of the commissioners Ogden and Ellis, and councilmember Castator, reflect a growing frustration over drastically increased traffic in the central business district, and decreasing service speed. In the very first report published by the DSR in 1923, covering the year of operation in 1922, Acting General Manager Ross Schram remarked that “the central [business district] is overflowing” despite some routes running two-minute headways. This same observation was echoed five years later in a report from the Rapid Transit Commission (RTC). The RTC noted that personal automobile registrations were increasing, and per-capita rides were trending down slightly, but that the problem had deeper roots (City of Detroit 1928). The title of the RTC report, “Relation of the Individual to Collective” reflects that the DSR and RTC were both aware of the necessity to balance individual passenger automobiles with the collective

public who commuted daily on the Detroit buses and streetcars. The City of Detroit's population was still increasing, as reported in a 1925 statistic in a DSR memo, the population was up at least 300,000 residents only 5 years after the 1920 census, although exact figures were not available (City of Detroit Department of Street Railways 1925). The congestion of the central business district that was the focus of the RTCs efforts to improve transit had complex origins that reflected all the ailments of the 1920s DSR operation. The congestion slowed service in the core, which was due in part to the rail system that was simultaneously trying to balance an influx of residents, an annually increasing ridership, and the need to rehabilitate old infrastructure and expand into newly annexed areas.

The included transit system map from 1925 (Figure 1, above) demonstrates key points of this system congestion based on Detroit's street layout. The image depicts streetcar lines in solid

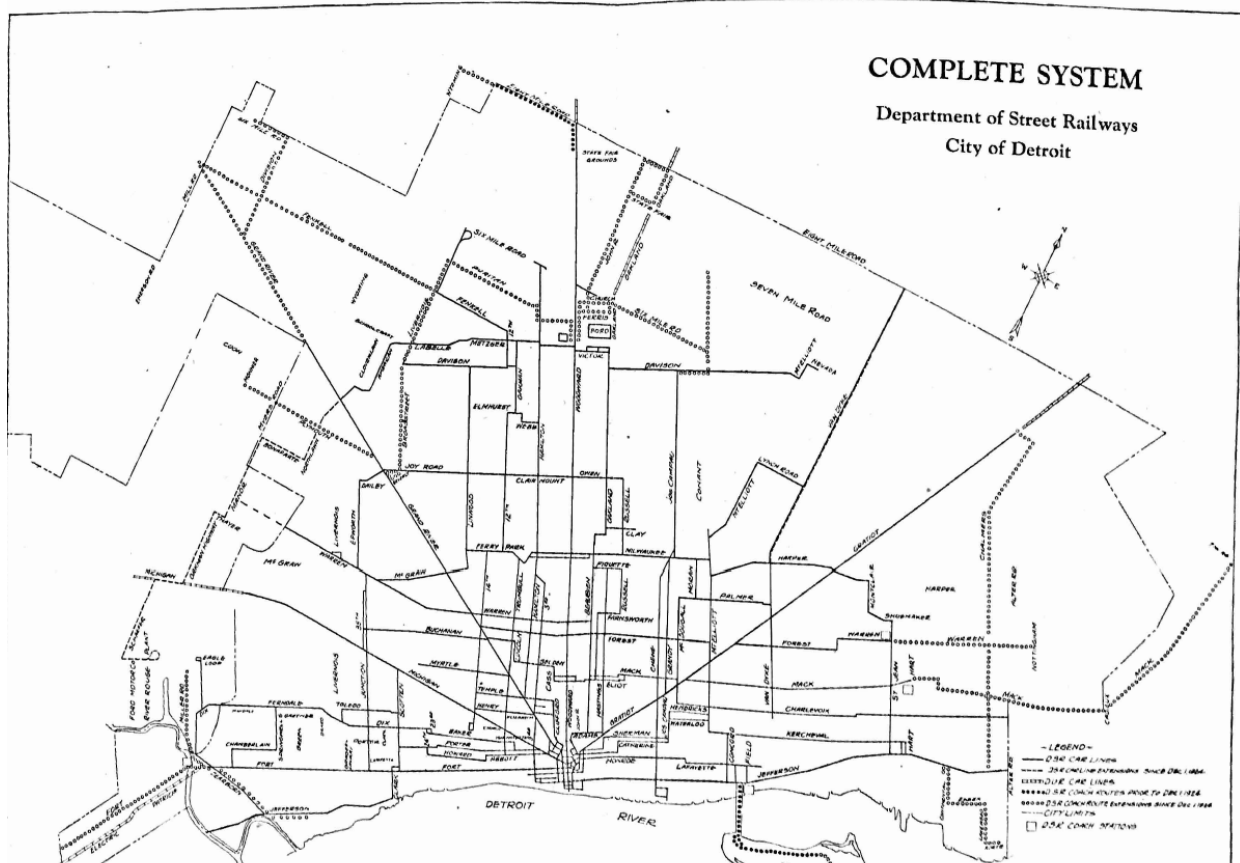


Figure 1.1 - Department of Street Railways System Map, 1925

color, and bus service as dotted lines. The downtown core, located at the bottom center of the image is a confluence of the outer radial and grid streets, and represents the older section of the city with high density, less residential dwelling, and more commercial or light industrial purpose, served almost exclusively by streetcars. This section of the city was frequently referred to by planners during this time as the Central Business District or downtown. Detroit is built upon the banks of the Detroit River, and is canted at a northwestern angle. As is sometimes typical for Detroit maps, is aligned with the main street, Woodward Avenue, as the center. Other maps published in later years, or in more detail such as engineering documents or system brochures for the public, often included a zoomed in section for the CBD to understand how the radial and grid streets intersected in the core. Outer districts of the city, located further out with lower density tended to have more low-rise, single-family residential construction. These areas are depicted in the upper right and left corners of the map, and were added to the City of Detroit through a series of territorial annexations between 1921 and 1927. As noted on the map, these outer residential neighborhoods were served by bus lines.

In response to this congestion, the City of Detroit prepared to do three things. The first was to outlaw jitney operation effective in November of 1928. Jitneys were unlicensed and largely unregulated private transportation that were hailed for short trips, on a semi-fixed route and variable schedule. Many DSR general managers and city officials decried them as a nuisance, and late in 1928 they were finally forcibly removed from the streets in the hopes of clearing up some congestion. The second was to begin to move to rescind the franchise operating permits for the private motor bus operators like the Detroit Motor Bus Company, which was granted by Common Council in 1929, and expired in 1931. This was in an attempt to further limit congestion in the CBD by removing other large commercial vehicles that were not affiliated

with DSR operation. Some private motor coach operators existed outside the city and served small communities to offer inter-urban service, but required a special franchise operating agreement to enter into Detroit, collect a fare, and use the public roadway. The third was a traffic survey ordered by Councilmember Fred Castator, who leveraged his position on the Common Council to collect data on traffic in the core to try and get a better grasp of the situation for policy changes (Detroit Free Press 1928). The resultant figures, recorded by members of the Detroit Police Department, reported an enormous mix of traffic on streets, including private delivery trucks, jitneys, personal automobiles, and even horse-drawn carriages (Waldon 1929).

In the closing years of the 1920s there were a number of RTC proposals aimed at speeding up streetcar service system wide. Many of these proposals would fail due to lack of funding after the 1929 stock market crash that brought on the Great Depression. The proposals ranged from rather expansive grade separation for any non-streetcar traffic at major intersections, to minor fencing and poles to devote more space for streetcars and passengers and less to automobile passage. There were also subtle tweaks recommended by an outside contractor, Miller and Schorn, to the central business district routing to change some car routes for decreased traffic based on East/West and North/South intersections. However, the most significant proposal was for an underground subway system in the central business district, which was proposed in July 1928, and was effectively killed by the 1929 crash before Common Council could decide on how it could fund the enormous expense. As early as 1925, the RTC had developed schemes to raise the capital for such a project, even while acknowledging that they had yet to pay down significant debts on the 1922 purchase bond for the current at-grade system (Hauser 1923; Waldon and Ellis 1929). However, congestion in the downtown was not new, and was remarked in multiple reports from both the RTC and from the DSR dating back to

the system founding. However despite the success of DSR operation, system finances necessitated consistent expenditures on route maintenance, rehabilitation, streetcar purchasing, and route expansion for new territory (City of Detroit Department of Street Railways 1925; 1926; 1927).<sup>4</sup>

### Great Depression & Ridership Decreases

The sense of urgency to address Detroit's overcrowded and congested core fell away after the Black Tuesday crash in October of 1929. Despite including two months post-crash of decreased ridership, the DSR still had a banner year, posting peak passenger service statistics of 518 million riders (City of Detroit Department of Street Railways 1929). After 1929, the DSR statistics dipped commensurate with the wider effects of the depression that rippled into plant closings, layoffs, and mass unemployment (City of Detroit 1928, 21–25). Financial reports published in 1935 recounted the ridership loss as a result of the depression, with total riders bottoming out at 251 million, or 50% loss. Net income similarly decreased from \$3.1 Million in the peak year of 1929 to \$229,000 in the worst year, 1933 (City of Detroit Department of Street Railways 1937; 1933). Because the DSR had no outside subsidies, their revenues were entirely dependent on ridership. When ridership slumped, so too did the entire budget.

The DSR's lack of income during the depression significantly hampered growth of the system. One 1929 RTC plan for subway financing, dated in July, ceased being mentioned in the record of minutes after the October crash. While the budgets did not preclude any capital outlay projects, the DSR became much more conservative with spending given the severity of the crash.

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<sup>4</sup> Detroit had five separate attempts at founding a subway between 1915 and 1935. Early attempts failed due to their exorbitant cost and the lack of political will to take on additional bonded debt in the city. Later attempts after the 1929 crash failed because Detroit sought external funding through federal grant programs to offset costs, but never became a reality. The closest it came to being a reality was in 1920, when funding was approved by Common Council, but vetoed by Mayor Couzens, who supported an expansion to the surface rail.

The notable exception to this was a 1930 report on grade separations for freight rail proposed by the Milwaukee Junction Manufacturers Association. Here, the Detroit Common Council approved a series of expenditures to complete grade separations between freight rail track that supplied the manufacturing areas east of downtown and along Grand Boulevard. However, as indicated in the report, funding for this project would be split between the Cities of Detroit and Hamtramck which both shared freight rail traffic along this corridor, as well as with the railroad companies. In petitioning the Common Council, Russel R. Rees, the chairman of the engineering committee that drafted the proposal, noted that these grade separations were “required” before the railroads could begin to explore offering suburban rail service (City of Detroit 1930). The grade separation project was funded unanimously in March 1930, despite the budgetary restrictions during this period. Although not tied directly related to public transportation, the freight rail separation was still a project undertaken by the RTC in an effort to remove service impediments by at-grade freight crossings which could stop traffic. The fact that this project was funded in the midst of the Great Depression speaks to the fact that it was funded by multiple entities that were both public and private, and also contributed to ongoing efforts by the RTC to facilitate grade separations for all track, including trunkline streetcar routes out of the CBD to expedite service. However the lack of available RTC reports reflecting new proposals during this period in the archives reflects the fact that the RTC, a specific program in the City of Detroit government, had its budget reduced by \$40,000 annually during the depression (“Rapid Transit Commission Correspondence Couz-Mayor, 1933” 1933).

Between 1929 and 1933, the DSR trimmed its budget wherever possible, demanding union wage concessions, and cutting routes and runs (Schramm and Henning 1978, 53, 59, 63). Despite the severe loss in ridership, however, the system never actually operated in the red in any

single year, although it came close in 1933, earning only \$229,000 in profits. However the DSR financial reports for this period show that they voluntarily put off the yearly \$500,000 debt payment for the original 1922 purchase bond, increasing total interest over the life of the loan. The financial pinch spurred innovative ways to continue to expand the bus fleet and downtown service while still utilizing part of existing infrastructure. One of these tests was to deploy "trolleybuses" on city streets. These rubber-tired passenger coaches resembled a bus, but were powered by an electric engine, connected to the overhead electrical grid by a long swinging arm on the roof. The innovation behind trolleybuses were that they allowed for the maneuverability of diesel buses, avoiding center-lane congestion or traffic stopped on tracks, but offered the speed, silence, and seating capacity of an electric streetcar. A 1933 photo advertisement about the trolleybuses showed them swerving three lanes wide to pass by two cars, presumably indicating their ability to battle road congestion away from fixed tracks, and finding the best of both worlds between electric streetcars and flexible coaches. Predictably, these vehicles cost more per-unit compared to buses; however, the crucial calculation in the cost/benefit analysis conducted by Nolan was the ability to purchase fewer trolleybuses to move more people. With a more powerful engine, the trolleybuses utilized a larger chassis, and held more passengers than the 21-seater diesel motor coaches. Because these trolleybuses would operate using the same electrical grid as streetcars, it did significantly limit their range to the already electrified 420 route miles of the existing transit system, meaning they could not serve the same low-density residential geographies that spurred initial diesel bus investment.

Despite the limited range of existing wired routes in the DSR system, the agency still ran several studies to determine the feasibility of trolleybuses throughout the 1930s. This suggests that, despite the budget shortfalls of the depression, the DSR continued to explore ways to make

transportation service more efficient, and the budget more lean by using existing infrastructure. One such study was commissioned by Fred A. Nolan, then the Financial Director for the DSR, in 1933 on the Livernois Street Line that compared trolleybus and diesel bus operations on the line. The findings were that fifteen trolleybuses could do the work of twenty diesel coaches for \$27,000 less per year. However, the study concluded that trolleybuses were more expensive once taxes, interest, and sinking fund requirements, the payments toward the loans that would be used to purchase the trolleybuses, were factored in, which ended up as \$30,000 in additional expenses (“Comparative Costs of Gas Bus vs Trolley Bus - Livernois 1933” 1933). Similar calculations about the base cost of diesel buses were absent from the itemized evaluation, presumably because the DSR already owned the buses. The study concluded that trolleybuses were not a viable way to provide transit and save money and the DSR never significantly invested in trolleybuses beyond a fleeting interest. However, at least one annual report features a trio of vehicles as the cover art - one bus, one streetcar, and one trolleybus. This representation indicated that they were perceived as a viable mode of transportation during the 1930s, and underscored the desire of DSR officials to develop transit solutions that reduced costs without reducing service.

Conducting studies on experimental transportation technology highlights the depths of some of the issues faced by the DSR in the waning years of the Great Depression that greatly limited transit operation. Despite having bought approximately 300 new streetcars and 500 new buses throughout the 1920s, the DSR still had 1,500 other streetcars that were originally purchased in the early 1900s by the DUR that were approaching their maximum service age that



would soon require replacement.<sup>5</sup> Although the trolleybus experiment did not yield large-scale purchase, it demonstrates that the DSR was thinking about long-term equipment replacements with respect to total system finances and cost. This would be a significant financial investment, and especially coming out of the Great Depression with several back-to-back years of low profit, maximizing return on investment and utilizing the most infrastructure was a very important component of decision making.

The decision on future investments would ultimately come from General Manager Fred A. Nolan. Originally serving as an operator back in the 1920s, he rose through the DSR as a foreman, and later in the administrative service as an auditor. One insight into his financially conservative mindset came in a 1938 set of meeting minutes wherein he cited his own 1933 Trolleybus study to argue against investment in trolleybuses in 1938, deploying a strictly financial rationale for cost-cutting and looking for the best way to utilize all existing resources (“D.S.R Minutes, 1938” 1938). The *Detroit Free Press* had very favorable coverage of Nolan, extolling him as a tested leader with humble roots, thorough familiarity with the DSR operation and procedures through his long tenure, and a keen sense of financial acumen at successfully guiding the system through some of its most dire times (Detroit Free Press 1934b). Well after the depression had abated in 1939, Nolan received effusive praise from the *Detroit Free Press* for managing to keep the DSR operating a profit while other similar systems like Chicago and Philadelphia were operating at significant losses upwards of \$1 million dollars (Detroit Free Press 1939b).

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<sup>5</sup> It is impossible to ascertain the exact date at which rollingstock would age out of the system. Streetcars usually had a 20-35 year service span, which means that a vast majority of the DSR fleet had been purchased by the DUR. While this information would’ve been available to the DSR management, it was not preserved in the archives of either the DUR or the DSR. Given the growth experienced by Detroit between 1900 and 1920, and given the legal battles faced by the DUR and the pressures of growth and expansion, I suspect that a majority of the rolling stock was likely purchased between 1905 and 1915. However due to the lack of surviving records from the DUR, it is difficult to ascertain the exact age of all equipment in the fleet during this period.

## Bus Investment & Nighttime Operation

In June 1934, the DSR began a three-year, \$2.5 million dollar expansion to its bus fleet (Schramm and Henning 1978, 71). This purchase added 847 25-passenger buses, 32 40-passenger buses, and 60 service vehicles for a total of 960 new units purchased. The massive expenditure came in the first year of ridership increase since the 1929 crash. Having seen dropping numbers for five consecutive years, 1934 brought an increase of 70 million riders back into the system, and signaled to the DSR administration that the worst had passed. One newspaper article covering the DSR during the depression noted that revenues were up 34%, and although it only represented about \$400,000 increase in net profit, it was a stark increase to the shoe-string budget a year prior (Detroit Free Press 1934c). Newly appointed General Manager Fred Nolan seized upon these reduced budgets to strongly emphasize fiscal responsibility (“Mayor Probes DSR’s Costs” 1938). As a result of this focus, Nolan pushed towards increased small bus usage, and the DSR made the \$2.5 million bus investment (Detroit Free Press 1934a). This represented the first major purchase post-1929 crash, and ultimately would set the DSR on a course towards increasing bus usage, even despite the shared street rail and diesel bus operation.

With the uptick in ridership and revenues in 1934, there was briefly talk of yet another attempt at a subway in downtown Detroit. This attempt was the 5<sup>th</sup> subway proposal since 1918, and perhaps the final opportunity to make a significant investment in the rail infrastructure of the city. The new proposal was spurred by Mayor Frank Couzens, who was the son of former mayor, James Couzens, who was originally credited with negotiating the original system purchase in 1922 from the DUR (Spartanburg Herald 1935). Given the depression budgets and tenuous return to normalcy this was extremely contentious, and resulted in the ousting of two members of the BSRC, President Col. Sidney Waldon and member at large Herbert L. Russell. One business

leader from the Jefferson Improvement Association remarked in a letter to the editor that Detroit residents did not want a subway, but wanted increased employment through the “25,000 jobs proposition” that the subway promised over four years. However the businessman noted that this proposal was originally during the peak of unemployment in the depression, implying that the city needed jobs, not the subway itself (Robbins 1934). General Manager Fred Nolan echoed this himself, noting that the subway would be an impractical financial drain on resources that was not guaranteed to secure federal funding. This note about relying on federal aid to complete the project was relatively new, likely partially due to the increased programs implemented by the Roosevelt administration. It is significant to note that the notion that Detroit could not undertake this financial endeavor on its own speaks to the extent to which thinking about public transit funding had shifted in little more than a decade after the system was purchased in 1922 using bond funds. The unwillingness to take on an additional \$30 million in construction costs to produce only 2 miles of subway track in a system that had more than 800 combined route miles of streetcar and bus operation further highlights the Nolan’s leadership being fiscally minded. While significant permanent infrastructure investment usually pays dividends in the long run, the renewed subway debate emphasized the immediate needs to be addressed within the transit system practically and pragmatically.

A more modest proposal to increase transit facilities in the city was also considered by the BSRC. The Miller-Schorn proposal, named after its engineers, suggested subterranean pedestrian walkways beneath busy streets that surfaced between boarding zones. This addressed a growing concern with rider safety given center-running streetcar tracks in the middle of busy roads. When the tracks were initially laid as far back as the late 1800s, there was significantly less traffic and danger to riders. Introduction of the automobile, and more strict traffic control

measures like lanes, stoplights, crosswalks and parking zones complicated this urban fabric. For riders to board in the 1930s, they had to cross several lanes of traffic, and then remain in a small coned-off boarding zone in the middle of the roadway while other vehicles passed and while they awaited a streetcar. Early film promotional material published by the DSR shows groups of passengers waiting around near busy intersections to board while other vehicles cross besides and in front of them (*Getting About - DSR 1935*). The renewed focus on rapid transit discussions in 1934 indicated that the health of the system was still on the mind of administrators, voters, and other public officials in light of the increasing profits. However, the crucial point about these discussions was that the subway and RTC proposals were repeatedly rejected in favor of the pragmatic financial decisions of Nolan to invest in bus operation (Detroit Free Press 1931).

In November 1937, the DSR began to capitalize on prior bus purchases to expand the role of the diesel coach in Detroit transportation. Previously, diesel buses were used as ancillary feeders in low-density areas. Beginning in 1937, the DSR began to use buses at off-peak hours after 7:00pm. The decision to cut streetcar service at night was made to decrease operating costs during times with less traffic and less riders when the higher-cost streetcars did not yield as much profit. Nolan briefly considered a fare increase and an employee wage decrease, but settled on nighttime substitutions as a cost-saving measure. The DSR initially announced plans to changeover nighttime services on Saturdays and Sundays between 7:00pm and 5:00am to diesel coaches. During the day, streetcars would run as normal, however the buses would operate at night in off-peak when the demand was lower, and operating costs could be saved. Like most plans in the DSR, this initially started as a smaller experiment on select lines to observe the effects, and a study was conducted on the cross-town Warren route and Fort Street route. The justification given by Nolan and the city was that streetcar operation was great for high-density,

high-traffic lines. Nighttime service between 7:00pm and 5:00am had lower ridership, and that the department could increase revenue by running a smaller bus with less overhead during these off-peak times (“Nightly Bus Trials on Crosstown and Fort St.” 1937) . Due to a union contract, some streetcar operation was conducted by two motormen, one to collect fares, and one to operate the trolley, in part due to the extremely high ridership on some streetcar lines. Rather than fighting the union to institute one-man car operation during off-peak hours in a contract negotiation, Nolan opted to implement night bus operation, which only required one-man operation.<sup>6</sup>

The nighttime weekend bussing experiment was widely hailed as a success by officials and residents. Several months after the first nighttime operation in November 1937, Nolan announced a wider rollout during weekday night operation in March 1938. In a column explaining the decision, Nolan mentioned that buses were better-suited to non-peak service times as a cheaper alternative to streetcars (Detroit Free Press 1938b). In pricing out the savings, he estimated that the DSR would save more than \$166,000 annually. After continued success and cost savings the rollout of nighttime bus operation was expanded by the DSR, adding more routes to the nightly substitution, with a total savings of \$75,000 (Detroit Free Press 1938g).

The \$2.5 million dollar expansion of the diesel fleet, and the switch to night-busing that it enabled several years later, signaled a momentous shift in transportation priorities of the city. When contrasted with the initial skepticism around the 1925 creation of the MCD that came from city officials and residents, this shift was surprisingly well-received by the press and the public. Residents near the routes praised the new service for its speed and quietness, referring mainly to rubber tired buses that did not produce frequent metal clanging of wheels on track that one reader

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<sup>6</sup> The term “one-man” operation is not gender inclusive, but reflects language used at the time. To my knowledge, female operators were not hired to drive buses or streetcars until the 1940s.

called the “grinding” of streetcars (Detroit Free Press 1938d). As the changes came into effect, hundreds of readers wrote to the *Detroit Free Press* and the DSR to express their impressions of the nighttime operation, with a clear majority in favor of the new policy. Some of these letters to the editor were directly clipped out of the paper and kept in a separate folder in the DSR records. This is significant because it indicates that the department itself thought the records of rider response to night service was worthy of tracking and saving.<sup>7</sup> This is notable because this record keeping actually diverges from past norms viewed in the archival collection. Usually, the original copies of letters was not kept, unless it was correspondence with the Mayor’s office directly – however in this instance, all the original letters about nighttime bus service were kept and filed separately.

The *Detroit Free Press* sent reporters onto the buses to interview riders, and cataloged their responses across a series of columns at the end of March 1938. Sentiment from residents was overwhelmingly positive towards the new bus service, while others remarked that streetcars were “doomed” by “superior” bus service and that it was a “blessing in disguise” that had prompted “unbridled enthusiasm” (Detroit Free Press 1938e; 1938d; 1938f) Riders were keen to share their experiences on the “speedier” nightly bus service, and their praise spilled onto the *Free Press*’s opinion pages. Although the actual service times were not different, one rider remarked that the buses had greater convenience to drop off directly at the curb, rather than having to cross the road from a safety zone at night (Detroit Free Press 1938d). Residents who lived along the converted lines also wrote in, thanking Nolan for removing “the noisy streetcars” and remarking that “t’was a treat to be able to sleep soundly.” (“Citizen Response to DSR Bus

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<sup>7</sup> Some of these letters are inaccurately dated in the historical record, but I have done the best I could to corroborate and cross reference the hand-recorded dates of the clipped sections with online newspaper databases. In total, there were approximately 200 letters kept in the file, of which only 15 were negative.

Service” 1938) One reader astutely identified the “elasticity of motor bus operation” and remarked that “the feasibility of this modern, speedy, and most important of all, noiseless method” could not be overstated. Another reader questioned “why this wasn’t done a long time ago on all lines?” (Detroit Free Press 1938c). The lines were so effective, some residents wrote to the *Free Press* to request nighttime service on other lines, like Woodward, which remained streetcar operation 24/7 due to the higher density of the major transit corridor (Detroit Free Press 1938h). One column, not written by a resident but rather an uncredited *Free Press* reporter, addressed the modernity of city administration, commenting on “where Detroit lags” that the streetcars were soon to be replaced by “more comfortable, speedier, safer, and comparatively noiseless busses.” The column also remarks that “the City which automotive industries have placed so prominently on the map still hesitates to scrap outmoded streetcars” and that Detroit had to scrap street rail operation to send a message to the nation.(Detroit Free Press 1938a; 1938c)

Although nighttime bus operation was perceived as an overall positive outcome based on comments written as letters to the editor, as well as based on letters written to the DSR itself, many residents noted that streetcars should be substituted for buses at night, but not during the day. This acknowledged a sentiment by the public that the rail network was more capable of dealing with high-density ridership. Nolan echoed this during an initial press release about nighttime service in a March column. He noted that, “the public transportation service, principally the street-car operation, has become more than ever a rush-hour business with about a five-hour day” (Detroit Free Press 1938b).

The successful deployment of nighttime bus services in Detroit demonstrates the shifting roles played by streetcar and buses in the city transit system. Because of the 1926 territorial

annexations the dense urban core of Detroit gradually became de-emphasized as outer neighborhoods were built up a significant distance away from the early 1900s downtown street grid. Early bus services gave riders from these areas access to the transit system via “feeder” bus services that terminated at trunk streetcar lines, which facilitated neighborhood settlements that were increasingly further removed from the dense central business district. The role of buses continued to increase throughout the 1930s, culminating in the significant investment in bus fleet expansion in 1934. These new purchases, although not meant to replace streetcar operation, nevertheless enabled the gradual expansion of bus operation within the transit system, beginning with the nighttime bus operation. These changes reflect the reality was that Detroit had drastically expanded, and riders did not always utilize the originally designed hub-and-spoke system to travel downtown for leisure activities, or to connect through downtown and out onto other spoke routes. The decision to conduct the original nighttime experiment on the crosstown lines, which provided East/West links between major arteries away from the core, emphasizes this point. Later after 1945, the RTC would issue a report that reached a similar conclusion about throughput of passengers outside of the CBD and urging tweaks to the transportation system to increase cross-town service, especially in the post-war period, but the Nolan bussing decision reflects the origins of this shift in ridership as early as 1937.

The decision to run nighttime bus services had wide-ranging implications beyond the transit system. The first was that the Public Lighting Commission (PLC) and the Electrical Workers Union 17 jointly authored an angry letter to the Common Council in November 1938 demanding that they block the shared nighttime services. The justification offered was that the PLC it had invested \$4 million into the electrical networks of the City to support streetcars, and now it was being wasted (“DSR/PLC Dispute” 1938). The Electrical Workers’ portion of the



plea argued that reduced streetcar operation would reduce total electrical consumption, which in turn would reduce PLC jobs, and thus impact workers' families. In support of their argument, the union cited statistics from a 1937 DSR report that stated operating costs of streetcars at 35 cents/mile versus 15 cents/mile for buses, and noted that despite the lower cost, two or three buses were required to replace one streetcar due to reduced seating capacity on the smaller diesel bus chassis. While this may be true in general, the lower nightly ridership allowed less buses to be used, making them marginally more affordable. Nevertheless, the brief dispute reveals how public transportation infrastructure and operation can impact other sectors of city departments and employment.

Nolan's push for increased buses within the DSR also faced opposition from his colleagues on the Rapid Transit Commission. Colonel Sidney Waldon, President of the Commission, published a report boldly stating "NO" to replacing streetcars with buses. His argument was that bus purchases would invalidate \$60 million dollars' worth of investments towards rail, and force 80% of the riding population to pay four cent higher fares for buses (City of Detroit 1938). Waldon also argued that using buses undercut \$27 million in outstanding debt still owed by the DSR, and that existing roadways would be unable to handle the massive influx of heavy bus traffic to replace streetcar operation. A Department of Public Works (DPW) commissioner pushed back on this notion by noting that a lot of street paving in the 1930s was actually funded through the Roosevelt New Deal era Works Progress Administration (WPA) funds, which allowed both the City of Detroit, and the DSR, to avoid paying infrastructure costs for transit expansion.

Waldon's opposition to the nighttime service was also rooted in a fare discrepancy between the two services that lead to different perceptions of each vehicle type. At the time, the

DSR operated buses as a type of exclusive transit service, on express routing, and on special services. Buses in the DSR operated at a fare rate that was 10-cents per trip, as opposed to the flat 6-cents fare for streetcars. Part of the reason diesel coaches appeared “better” than the streetcar was that they were priced higher. This is reflected in some of the letters to the editor that extolled the modernity of the quiet, comfortable bus. These coaches were also newer, on average, by 10-15 years over some of the streetcars in the DSR fleet. Anecdotal evidence suggests this led to some racial and class stratification in their usage, as most of the areas streetcars were initially deployed were expensive newly constructed single-family homes that tended to be racially segregated. However in terms of the night nighttime bus operation implemented by Nolan in 1937, the rate of fare for buses was actually lowered. Because the buses were coming on at 7:00pm to replace streetcars for the evening, their rate of fare was kept the same as the streetcar on that route.

As the DSR began to rely on buses more often in the 1940s, the fare structure would be completely equalized between buses and streetcars at all hours. As transit historian Sarah Frohardt-Lane notes, this created spaces of “racial mixing” on public transportation and demonstrates that streetcars and buses were fluid sites of racial encounters during the 1940s when Detroit’s wartime economy prompted a massive surge of riders and factory workers (S. Frohardt-Lane 2012). Although race is very rarely invoked anywhere in the archival record of transit operation in 1920s and 1930s in Detroit, racial disputes, including fights and complaints against both white and Black operators were recorded by the Detroit Police Department (Capeci and Wilkerson 1991). As discussed later in Chapters Two, Detroit continued to significantly diversify as the Black population reached beyond 30% of total city population during World War

II. This meant that later transportation decisions inevitably involved discussions about residential areas of the city that were beginning to transition from majority white to majority Black.

The success of the DSRs diesel bus was slightly misrepresented to the public in the annual reports. Multiple reports published in 1938, 1939, and 1941 all highlighted a significant decrease in street rail revenue, and a sharp increase in bus ridership. This increase in bus revenue suggested a better-than-expected performance of buses, but did not tell the entire story, or explain the sharp change in revenue. Bus revenue rose because they were deployed in nighttime operation on select lines after 7:00pm to replace streetcars. Streetcar revenue dropped because they were removed from nighttime operation, and bus revenue increased because they were being operated more frequently. The total number of passengers in the system remained relatively stable, and there were no other significant expansions or contractions during this time. The inclusion of these graphics in multiple annual reports incorrectly suggests that Nolan's policies to embrace buses and bus ridership was a wild success with 31% increased revenue, but did not tell the whole story of what the true cost of that increase was relative to the whole system (City of Detroit Department of Street Railways 1938; 1939; 1941).

In October of 1938 Nolan solidified his favor for buses in a report to the Street Railways Commissioners when he stated that the Department would not update the streetcar fleet through purchases of the newly designed President's Conference Committee (PCC) streetcars (Schramm and Henning 1978, 71). The logic for the decision was rooted in the infrastructural necessities that these cars would demand in both track work and maintenance facilities. Nolan believed that PCCs would not find regular use for the fifteen years necessary to pay back the cost of their purchase, and that the Department needed flexibility in forming new routes with the capital outlays. Ultimately, Nolan's decision to not purchase streetcars highlighted the inexorable shift

in funding priorities of the Department of Street Railways towards continued adoption of diesel bus services. Nolan's decision underscored the poor infrastructural condition of DSR street rail equipment, and further repeated attempts to circumvent rather than address the aging infrastructure. A secondary impetus for Nolan's decision may have also been in direct response to the outpouring of public support for the nightline buses. Although Nolan did not initiate the bus purchases with the intent of a wholesale replacement of streetcar operation, he nevertheless set the DSR on a path towards total diesel bus conversion during his tenure as General Manager.

Nolan's conclusion reflects the budgetary reality that the DSR was financially unable to maintain depreciating rail infrastructure that had required a large investment to obtain in the first place. The decision itself is a testimony to the difficulties faced by the DSR during the Great Depression. In the midst of shrinking budgets, declining ridership, and shifting funding priorities, it simply was not feasible to purchase a costly fleet of PCCs, as well as maintain the structural foundations of track, maintenance, and electricity that they relied on. Ultimately, the shift towards buses in the 1930s reflected the best possible way for the Department to continue to provide quality transportation services to city residents, given the systemic economic and political problems facing the DSR.

## Conclusion

This chapter has illuminated how the initial operation of Detroit's Department of Street Railways was tied to a series of historical developments that shaped the structural capabilities of the overall transit network. These developments included deferred maintenance by the former DUR administrators, a massive increase in city population, geographically expanding city territory through annexation, increasing ridership during manufacturing increases both during

and after World War I, continued congestion of the central business district, and the October 1929 crash that brought on the Great Depression. Throughout these developments, the DSR had relatively limited capital that it could use to address the multiple and simultaneous needs that the transit system faced in the early years of operation. The low per-unit cost meant that Diesel buses ultimately were able to be purchased quickly, and deployed without infrastructure like rails or catenary wires. This flexibility to operate away from existing infrastructure culminated in the creation of the Motor Coach Division in 1925, and steady investments to grow the bus fleet throughout the 1920s. In only 5 years of operation, bus service had increased from 4 route miles operated by 3 buses up to 478 route miles operated by a fleet of 548 buses.

Into the 1930s, the public transportation network was conducted by streetcar operation on trunk line routes and diesel motor coach operation that served lower-density areas and neighborhoods. This framework was established based on the peak years of DSR operation in the 1920s that consistently saw an annual increase in riders, as well as a regular budget surplus to invest in expansions, equipment, and maintenance. However, the financial precarity of the Great Depression, which echoed into the year years of the 1930s was not conducive to supporting the bifurcated system. Under the management of Fred Nolan, the DSR opted to invest first significant budget increase after the Great Depression into an expanded bus fleet, and forego new purchases of street rail equipment. My research shows that Nolan was acting out of political and financial pragmatism, responding to external pressures to balance his budgets, while also expanding coverage to newly constructed residential areas without sacrificing quality of service.

The purchasing decision in 1934 to expand the bus fleet set the DSR on a course that began nighttime bus operation on all lines in 1937. As Chapter Two will show, the DSR gradually began rail-to-rubber route conversions in 1941, and ultimately terminated streetcar

usage entirely 1956 with wholesale reliance on diesel buses. Nolan's pragmatism unknowingly set a course for DSR bus adoption more than two decades before the last streetcar would operate in the motor city. Although the bus was not hailed as a revolutionary new form of transportation, it was flexible, and most importantly, cheap. Even despite arguments from some city leaders that the DSR was disregarding millions in sunk costs and rail infrastructure, Nolan's roadmap for transit involved financially expedient decisions to reduce overall costs without sacrificing service and move away from the legacy rail investments made by his predecessors.

As we will see in future chapters, the DSRs reliance on flexible buses was deliberately designed to be financially pragmatic, and to serve the changing needs and demographics of the city as it underwent significant low-rise residential construction. The lack of required infrastructure, coupled with the low per-unit cost demonstrated that buses could be rapidly purchased and deployed to create new routes and serve new geographies. In only 15 years of bus operation, the DSR added 1,200 new buses, and upwards of 470 miles of new routes. Beginning in 1940, Detroit won a significant statewide ballot initiative that granted the DSR the ability to operate within 10 miles of the city border. This victory was used to great effect to expand transportation service during World War II to serve factories in nearby Dearborn and Willow Run. However as Detroit underwent racial demographic changes at the tail end of the second Great Migration, public transportation became one of the first physical spaces of racial mixing between white drivers and Black workers. One historian described public transit vehicles in Detroit as a space with "fluid racial codes of conduct" that were not strictly defined by a "colored seating section," but were nevertheless contested. After the war, this contestation of racial space would shift from transportation to suburban neighborhoods as Black residents sought purchase homes. However, despite having the ability to provide transportation service

expansions, and the legal authority to operate service, the DSR did not conduct transit expansions to scale with the suburban migrations throughout the metropolitan region.

## **Chapter 2**

### **Wartime History, Racial Tensions, and Rail to Rubber Conversion**

At the outset of the 1940s, the Detroit Department of Street Railways won a significant victory at the ballot box that set new boundaries for municipal transit operation beyond the city limits. Plans for regional expansion were abruptly put on hold with the outbreak of World War II in 1941. As US industries began to convert from civilian to military manufacturing, Detroit saw a sharp uptick in production and an influx of laborers to fill the jobs on the factory floors across the city. Led by automotive manufacturers changing over production lines to assemble tanks, planes, jeeps, and munitions, factory production in ‘the arsenal of democracy’ increased 40%, while unemployment dropped from 135,000 to only 4,000 (Sugrue 1996, 19). Nationwide there was a critical shortage of workers, housing, and resources as the US industrial engine geared up to provide munitions and supplies for a global war. President Franklin D. Roosevelt addressed the labor shortage by issuing a non-discrimination clause for all federal contractors through an executive order to stem the tide of race and gender discrimination in hiring. This led to a wide-scale publicity campaign that victory abroad necessitated victory at home and urged all Americans to unite against a common enemy.

Despite this common cause, the influx of laborers to Detroit experienced what historians Dominic J. Capeci and Martha Wilkerson describe as “a climate of hate” as white residents were forced to live, work, and commute in close proximity to Black laborers on a regular basis (Capeci and Wilkerson 1991, 188). Wartime supply rations limited the supply of gasoline, steel,



and rubber for personal automobiles and dovetailed with increased factory employment to sharply increase daily transit riders. Packed public transit vehicles like the streetcars and buses of the DSR became one contested space in which racial mixing occurred in close proximity. These interactions fanned the flames of pre-existing racial tensions around housing, employment discrimination, and neighborhood composition and sparked a string of verbal and physical altercations on DSR vehicles that were regularly reported to the Detroit police. Racial incidents increased throughout the early 1940s, culminating with the violent 1943 race riot in late June that killed 33 and injured more than 300 (Capeci and Wilkerson 1991; Cowans 1943). During the rioting, a mob of white residents sought revenge for attacks the previous night, and halted streetcars and buses on Woodward, hauling out and beating Black conductors and riders while police looked on. The violence led Mayor Jeffries to create the Mayor's Interracial Commission (MIC) to review the causes of the riot and issue a report on race relations in the city as a whole. These efforts did little to correct the systemic racial injustice that sparked the initial conflict, and the 1943 riot marked one instance in a long series of racial turmoil that existed beneath the surface of Detroit society. These instances occurred more frequently as the percentage of Black Detroiters continued to steadily increase relative to the total population.<sup>8</sup>

The end of World War II brought an end to supply rationing, and pent-up consumer demand spurred a surging economy for goods and products. For the DSR this was a critical period as the transit agency exited the war with record profits but had to face significant challenges in aged equipment, decreasing ridership, and new suburban construction. How DSR administrators responded to this tenuous period partially depended on past decisions made by General Manager Fred Nolan to forego an update to the streetcar fleet in 1938. However, the

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<sup>8</sup> For information on demographic comparisons, see page 68, Figure 2.2 in this chapter.

decision to invest in a refurbished streetcar fleet was hampered by a series of labor disputes in the post-war period. Initially, the unionized transit operators protested the possibility that newer streetcar vehicles would be single-man operation, despite having a larger seating capacity, effectively cutting jobs while increasing the amount of work for each employee. Wage disputes also hampered system operation in 1951 when the union authorized what was at the time the largest public transportation strike in the country's history, lasting 59 days from April until June. During this strike, entire plants were idled as workers had no way to commute to work, underscoring the significance of public transit to the workforce, even in the post-war period as automobile ownership began to increase (L. Jones 2010).

Racial unrest, wartime profits, post-war maintenance, early suburban construction, highway funding debates, and on-going labor disputes combined for a turbulent 1940s that significantly impacted the Detroit transit network. This chapter addresses these historical events and explores the consequences for the expanding suburban geographies around metropolitan Detroit. During this period, the DSR continued bus service expansions, including rapid bus transit stations in engineering proposals for upcoming highway construction. Regional service beyond Detroit in the post-war period was enabled by Michigan voters in a 1940 public referendum that exempted municipally owned services like the DSR from limits on operation beyond the city border. This authority was used between 1943 and 1951 to reach some suburban municipalities to the south and west like Dearborn, Melvindale, and Lincoln Park, but was slower to reach north of Eight Mile Road into suburban Oakland and Macomb counties. As the DSR sought to implement route expansions, they found the cost of long-distance transit operation prohibitively expensive and began exploring zonal fares, or tax subsidies from nearby cities to counteract this increased cost. The results of these transportation planning decisions

throughout the late 1940s would significantly impact DSR service throughout the remainder of its operation in the 1950s and 1960s as the system underwent route conversions to remove streetcar service in favor of diesel bus operation.

### 1940 Proposal 3 For Regional DSR Operation

In 1939, the State of Michigan legislature passed public act 261, creating the Michigan Public Service Commission (MPSC) to act as a regulatory body over all public utilities in the state (Detroit Free Press 1939a; State of Michigan n.d.). Because of the original history of streetcar consolidation by electrical utility companies, public transportation fell into the category of public utility regulation. Part of the new law amended the [State of Michigan] Motor Carrier Act of 1933, giving the MPSC explicit authority to grant permits for operation of all for-hire public transit vehicles operating on public roads, regardless of if the vehicles were publicly or privately owned.<sup>9</sup> These operating permits, granted by the MPSC, served as a type of road use tax for transit vehicles and paid into the State of Michigan general fund. Almost immediately after the MPSC bill was proposed in the legislature, the Detroit Common Council and the Board of Street Railway Commissioners identified the possible permits and charges as a threat to the autonomy of Detroit to operate its own transportation system (Detroit Free Press 1939c).

The origins of the MPSC regulatory provision were interrogated sharply, and opponents in Detroit alleged that private suburban coach lines were behind unfair lobbying efforts at the Michigan legislature in Lansing. The Detroit Board of Street Railway Commissioners, Mayor Reading, and General Manager Fred Nolan jointly authored a letter to US Attorney General Frank Murphy in Washington DC requesting an investigation into possible impropriety. Nolan

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<sup>9</sup> Chapter three will deal with the public service commission regulatory authority in more detail. Here, the background is used to set context for the subsequent 1940 vote on Proposal 3.

argued that suburban bus companies, which operated in specific, small geographies outside the city, decreased their rate of fare as the bill came before the legislature.<sup>10</sup> The underlying accusation was that the state government was unnecessarily favoring private transit companies by requiring the larger DSR to pay a permitting fee to operate if they sought a transit expansion into suburban areas, which was a cost disincentive. Nolan noted that, if passed, the DSR could be priced out of suburban markets where the department presently had service, and these private coach companies would be given a de-facto monopoly to raise the price of fares on residents who had no other transportation to work in the absence of competition (Prevost 1939). The request was not taken up, and the MPSC bill moved through the legislature and was signed by Governor Dickinson despite the strong opposition by Detroit lawmakers and petitions from residents in both city and suburb. Almost immediately after the MPSC was approved in June, the Detroit Common Council and the Board of Street Railway Commissioners resolved to place the matter before voters in November 1940 and sought a court injunction on the authority of the MPSC until the referendum could be held (Detroit Free Press 1939c). Planning more than a year ahead of the proposed vote demonstrated how important the matter was to Nolan and other DSR administrators and commissioners.

The City of Detroit sponsored Proposal 3 on the November 1940 ballot with simple language to amend the motor carrier act to exempt publicly operated transit agencies from the MPSC permitting authority. A “yes” vote retained the original authority of the MPSC in the 1939 law, requiring the DSR to seek a permit for operation on public roads two miles beyond the city

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<sup>10</sup> Because these smaller systems were privately owned, their system maintenance did not survive in formal archives the way DSR materials have. However, statistics cited in the Detroit Free Press on 28 June 1939 suggested that bus companies like Royal Oak Transit Co. carried about 1.3 million annual riders. Comparatively, the DSR carried 328 million annual riders.

limit.<sup>11</sup> A “no” vote allowed the municipal corporations [the DSR or RTC] their original charter operating limits and explicitly allowed operation within 10 miles from the nearest City of Detroit border. Throughout the 1940s, and especially in the fall as the election neared, the DSR launched a statewide campaign for “No on Prop. 3” and utilized marketing space on streetcars and buses to relay the message to their riders within the city. Nolan also sought advice from the DSR attorney about whether “no on prop 3” could be added to department letterhead and correspondence, but was not given the approval (“D.S.R Minutes, 1940” 1940). As part of a wider public relations campaign, six new DSR coaches, freshly painted in the iconic cream and red livery of municipal operation, traveled in tours of other cities across the state to spread the “no on prop 3” message (Schramm 1993). In an interview, Nolan noted that reception was overwhelmingly positive, with accommodations being made by cities like Marquette and Manistique to temporarily suspend restrictions on public soliciting and use of sound trucks with loudspeakers (“DSR Carries Plea to State” 1940).

The statewide attention of this referendum is significant for two key reasons. First, because it demonstrated the importance of the ballot measure to DSR officials. The concern expressed by Nolan and other administrators emphasized that future plans for public transportation included continued expansions into suburban geographies. At the time the initial bill was passed, the DSR only operated in Dearborn to the southwest, which was the location of large Ford Motor company manufacturing plants along the River Rouge, and Royal Oak to the north. Both of these municipalities enthusiastically joined the calls for a no vote on proposal 3, signaling their support for continued DSR service that could be removed if permits and higher costs were imposed by the MPSC. Their support of the DSR “no” vote indicates that these early

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<sup>11</sup> The two-mile rule was implemented to allow adequate space for vehicles to terminate and turnaround within a reasonable distance of the city border, and facilitate transfers to other systems.

inner-ring suburbs were still dependent on physical linkages to the Detroit urban core via the public transportation network. Fred Nolan and members of the BSRC identified the threat a regulatory permit posed to the existing suburban services, noting that the already slim profit margins of 3 cents per rider were placed in jeopardy if the DSR had to pay significant permitting fees to operate buses beyond the City of Detroit limits.<sup>12</sup> Other smaller circulars, preserved in the archives echoed similar sentiment about the proposed regulations, calling the vote “Life or Death to the DSR” for the potential to price the operation out of suburbs (Rosedale Tattler 1940).

The second reason that this statewide referendum was that significant was because it directly challenged Detroit’s authority to independently manage its own affairs on a regional scale. Several *Free Press* columns refer to the “home rule” of the city being threatened by the MPSC regulations (Donovan 1940c; “D.S.R Minutes, 1940” 1940). The home rule provision was initially passed in Public Act 279 in 1909, and allowed Detroit to author its own laws, operations, and city charter. By saying that the MPSC was an affront to home rule, city officials were saying that their individual autonomy was being challenged (Burton 1930). This debate relates to the wider imbalance of power between a state government and its largest city. With Detroit heading a booming manufacturing industry, home of multiple automotive companies, and ranking as the 4<sup>th</sup> largest city in the country, the power of state government to rein in the city was limited and tenuous. This is an ongoing struggle in Michigan politics that is largely beyond the scope of this dissertation but reflects the difficulty state legislators have in balancing urban priorities for largely lower peninsula cities against the priorities of rural communities further

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<sup>12</sup> The structure of these early suburban service expansions by the DSR utilized the hub-and-spoke system design of public transit in Detroit. This meant that buses picked up in a particular city like Royal Oak, and then drove about 8 miles into Detroit where riders could transfer to other lines to reach their established destinations. However because of the distance away from other lines, additional time was needed to cover the geographical distance, leading to higher wear, and more driver pay with less overall revenue passengers. The key point being that the further out the service, the more expensive it was, and the harder it was for the DSR to turn a profit.

north in the state and across the upper peninsula. This had significant implications for the future growth of the Detroit region. Although the City of Detroit would not create a formal regional planning body until 1953, the vote in 1940 suggested that city officials were already thinking in a regional perspective. Nolan echoed this in a column in the *Free Press* explaining why a no vote was necessary on Proposal 3. In it, he argued that if Detroit's home rule were threatened, the city would be forced to pay operating permits for each neighboring municipality, and the cost would be prohibitively expensive (Donovan 1940a; 1940c). This defense acknowledged that it is the DSR's duty to serve riders who live in these geographies regardless of the civic borders that divide them. This perspective reinforced the notion that Detroit was the center of the growing suburban geography and that transportation service had to be furnished between the two areas as an essential service for the residents and the local economy. The DSRs strong position in favor of a "no" vote also reflected the system design as a hub-and-spoke transit network where riders were brought towards main lines, and then into the center of the city to reach connection points and other points of interest. To Nolan, MPSC regulation raised the costs of suburban service enough to threaten the ability of the DSR to provide buses to new suburban riders, and threaten the loss of future revenues.

The attempts at state regulation also focus on costs as a method of economic control over the DSR and City of Detroit. This relates back to the original charter creating the DSR in 1922 that charged the department to fully fund its own operation through fares. Permits costs would force the DSR to either withdraw suburban service or have Detroit residents somehow subsidize operation costs to non-Detroit destinations through some type of tax. Neither represented a politically feasible solution. However, the reclassification of the MPSC to regulate both public and private transit carriers was likely a calculated move by the state to check the reach and

authority of both Detroit and the DSR. Deploying a permit requirement either guaranteed the State of Michigan general fund would reap profits if the Detroit region continued to expand, or it would promote some level of private competition by making sure Detroit had to participate on a level playing field with private coach operators. This also was not the first time that the state intervened to limit Detroit's authority. In 1927, the legislature amended the process of annexation to prevent Detroit from absorbing any additional areas and locked its size at 138 square miles. By Detroit bringing this matter to a statewide vote, and by launching an active campaign in multiple cities using branded buses, the DSR demonstrated the power the massive industrialized metropolis wielded to residents across the state, and reinforced the self-determination of Detroit to deal with transit affairs in the surrounding suburbs.

Private coach companies also launched their own advertising campaign in support of a "yes" vote on Proposal 3, spending an exorbitant sum in 1940 dollars to argue that the vote ultimately came down to a city versus state issue and that Detroit was receiving an unfair advantage by not having to pay taxes or fees associated with transit operation (Donovan 1940b). Several leaflets and brochures were distributed throughout the city and state by the bus companies, and copies were saved within the 1940 DSR archival materials, indicating that the administration was keenly aware of opposition, and actively collected, read, and tracked materials in advance of the vote to strategize ("Here's Why You Should Vote YES on Proposal #3" 1940; Highway Users Conference of Michigan 1940). The language employed by proponents of Proposal 3 leaned heavily upon the notion of fairness and asserted that voters were already subsidizing the DSR operation. One argument stated that private automobile owners were paying more to maintain roadways that were being regularly used and "ruined" by Detroit buses that did not contribute "a single cent" to their upkeep. Another reason to vote yes



contended that the municipal operation of the DSR meant that the industry did not pay nearly \$1 million in annual taxes, plate fees, and vehicle registrations to the State of Michigan. A chairperson [unnamed] of a bus interest board lamented that, if left unchecked by the MPSC, the DSR could impose service upon suburban areas that did not want service. These arguments stressed that supporting Proposal 3 meant that Michigan residents would benefit from increased revenue if Detroit paid their fair share. In short, the proponents for a “yes” on Proposal 3 maintained that this was an apolitical issue that was only about fairly charging all for-hire public transportation services, regardless of private or public status – but the private companies stood to gain the most if Proposal 3 was approved.

The arguments in favor of Proposal 3 were overall disingenuous and rife with misinformation and half-truths. Firstly, the DSR did pay taxes. When the City of Detroit charter was amended to incorporate the Department of Street Railways, it structured their operation “as if it were a private corporation” to be self-reliant but also to pay taxes as a private entity would. This amendment essentially assured that the City of Detroit would not have a significant budget shortfall when the DUR ceased operation. These taxes were a sore spot for General Managers throughout the early 1930s, because the so-called “wheel tax” of municipalities they operated within, Detroit, Hamtramck, Highland Park, and Dearborn, combined to take up a significant portion of the limited budgets in the lean depression-era years of low ridership, and later the BSRC attempted unsuccessfully to get a revision to the city charter to avoid their payment. Secondly, the notion that Proposal 3 represented fair tax did not immediately mean that residents would receive some tax break on gasoline or vehicle registration if the DSR were to suddenly pay permitting fees. Finally, the bus companies alleged that the DSR did not have to abide by vehicle or road safety standards without oversight by the MPSC, but safety standards were set by

a separate regulatory branch of state authority over traffic, and the DSR abided by safety standards set by both the city and state.<sup>13</sup> MPSC did not have jurisdiction over vehicle load, size, weight, and safety until an executive order in 1968.

Ultimately, Proposal 3 received a majority “no” vote in the November 1940 election. Residents across the state voted 60% to 40% to reject the MPSC revisions to the motor carrier act. In doing so, voters upheld the permit fee exemption for publicly owned transportation agencies like the DSR, resulting in a huge win for the City of Detroit and the Department of Street Railways. Contained in the 1940 archives was a county-by-county vote breakdown on Proposal 3. Despite how the vote was pitched as Detroit versus the state, a surprising amount of rural and low-density counties were split almost evenly on the matter. Without a proverbial horse in the race, these areas did not stand to lose transit or gain a tax break, but still broke evenly in the vote tallies, helping Detroit. Also, a surprising analysis in the vote tabulation was that in other urban areas of the state, particularly in the industrialized and western regions of the lower peninsula, cities like Grand Rapids, Kalamazoo, and Jackson, voted strongly in favor of approving Proposal 3. Counties around Detroit, including Oakland, Macomb, and Wayne were strongly opposed. Wayne County’s vote share, which includes Detroit as well as Dearborn and other suburbs to the south “down river,” stands out by a margin of 250,000 “no” votes. The total vote count was 640,000 for and 930,000 against, meaning that the Detroit area significantly contributed to the victory (Shields 1940).

By successfully defeating Proposal 3, the DSR was not subject to MPSC permits and fee controls on its operation beyond city limits. Additionally, in defeating the proposed changes,

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<sup>13</sup> This argument alleging that DSR vehicles were unsafe as likely an allusion to the frequent crashes and regular injury payouts for victims. A surprisingly large portion of meeting minutes are devoted to making sure settlement payments were issued to aggrieved parties. Although an extensive focus on accidents or safety of the DSR is beyond the scope of this dissertation.

Detroit defended its home rule right to operate a transit system within the limits of its city charter. Because the MPSC change was voted down, Detroit could continue to operate public transportation service within 10 miles from the nearest city border, thus retaining bus service to Dearborn and Royal Oak. At the end of 1940, meeting minutes reflected a positive attitude about the system health from General Manager Fred Nolan. While he did note that they were dealing with some supply shortages and could not purchase as many coaches as necessary, the victory in November meant that the system could continue to serve nearby cities, and even expand bus services to other suburbs to link them to the center of Detroit (“D.S.R Minutes, 1940” 1940). Nearby city councils in Dearborn, Hamtramck, Highland Park, and Melvindale all unanimously approved boilerplate congratulations addressed to Detroit Mayor Edward Jeffries throughout the end of November following the vote. The suburbs of Melvindale and River Rouge filed a formal request with General Manager Nolan to begin receiving DSR bus service after the vote was settled (City Clerk of Highland Park 1940; Dearborn City Commission 1940; “DSR Carries Plea to State” 1940).

#### Wartime Rationing, Ridership, Racial Clashes, and the 1943 Riot

The DSR’s victory to continue suburban expansions was short-lived, as both new bus acquisitions and new home construction were halted a year after the Proposal 3 vote upon America’s entrance into World War II in December 1941. Strict supply rationing imposed by the government restricted private citizens’ access to resources like gasoline, and personal automobile usage dropped, forcing residents to commute by public transportation. Civilian assembly lines changed over to wartime production, and manufacturing output and factory employment both sharply increased. These changes meant that both streetcar and diesel coach lines became flush

with passengers going to and from factories throughout the city, and ridership rose sharply, increasing from 345 million riders in 1940 to 659 million in 1945, as seen in table 2.1, below.

<b>Year</b>		<b>Total Riders</b>	
<b>1940</b>	345,956,740	<b>1943</b>	587,410,915
<b>1941</b>	384,570,418	<b>1944</b>	652,509,529
<b>1942</b>	427,988,453	<b>1945</b>	659,680,219

*Table 2.1 Department of Street Railways Ridership, 1940 – 1945 (City of Detroit Department of Street Railways 1946).*

The DSR was hard-pressed to serve this influx of riders given the supply and rationing shortages imposed by the government, and many service vehicles became increasingly crowded as ridership increased by 300 million between 1940 and 1945. Congestion worsened when the federal War Production Board mandated that all shared-service transit lines, like nighttime bus operation and joint rail/bus routes, be converted entirely to streetcar use. The implementation of rationing was meant to divert critical supplies such as rubber and gasoline to wartime use. Shared services in Detroit were changed because it was believed that running a bus alongside a streetcar created a redundancy that could save critical supplies. To comply with this order, the DSR resurrected previously retired streetcars from the early 1920s, bringing them out of the storage yard, into the shop, and back onto the streets to replace buses that were idled. In two cases, DUR-era streetcars from the late 1910s with a coal-burning furnace for heat were repainted and sent out to conduct passenger service (Schramm 1992; Schramm and Henning 1978, 77). Prior to this mobilization and rehabilitation of old streetcars, the DSR had not purchased a new streetcar since 1930 (City of Detroit Department of Street Railways 1951). The age of the fleet, supply shortages, and unprecedented ridership all resulted in a constant maintenance battle required to keep the system in operation. Despite the best efforts to field a reliable fleet, the DSR still

experienced significant overcrowding due to the influx of daily riders. Letters from citizens written to the DSR between 1941 and 1943 almost universally report frequent instances of “jammed” bus bypassing riders waiting on the curb, while those aboard complained of being “packed like sardines” and “pushed around like prisoners” (Detroit Free Press 1942a; “Letter to Mayor Jeffries” 1942).

The overcrowding on streetcars was further complicated by the rising population of Black war workers migrating to Detroit in search of factory employment. While Black workers had been present in the city for decades, their share of the population rose steadily after 1920 during the waves of Great Migration into northern cities. As families settled, took jobs, and entered communities, Black involvement in society became more marked and noticeable in the historical record. In 1938, the DSR employed the first Black bus driver, and in 1939 Michigan launched its first Black newspaper, the *Michigan Chronicle*, which circulated weekly. Table 2.2 shows the population by real number and percentage, listed for Black and white residents of Detroit between 1920 and 1950.

<b>Year</b>	<b>Total Pop.</b>	<b>White</b>	<b>Percent White</b>	<b>Black</b>	<b>Percent Black</b>
<b>1920</b>	993,678	952,065	96%	40,838	4%
<b>1930</b>	1,568,662	1,446,656	92%	120,066	8%
<b>1940</b>	1,623,452	1,472,662	91%	149,119	9%
<b>1950</b>	1,849,568	1,545,847	83%	300,506	16%

*Table 2.2 City of Detroit Demographic Population Data, and corresponding percentage of racial composition*

With increasing wartime employment, increasing public transportation ridership, and increasing racial diversity of the city population, the streetcars and buses of the DSR became a site of intimate physical mixing of races in a way that was unprecedented within Detroit society.

While neighborhoods, housing, and employment remained fiercely segregated along de-facto lines, transportation was one space in which racial exclusion could not be maintained (Capeci 1984; Capeci and Wilkerson 1991; Jackson 1985; Sugrue 1996; Thomas 2013; Thomas, Richard Walter 1992). Both white and Black workers had to commute to workplaces around the cities, and on their journey, they rode shoulder-to-shoulder in the same overcrowded DSR vehicles. Rising racial tensions during this period, coupled with the stress of war, exhaustion from work, and inconveniences in packed transport, all contributed to short tempers that frequently erupted with verbal and physical altercations (Capeci and Wilkerson 1991, 188). These reports were so numerous, numbering at least one per day during 1943, that they were treated separately by the Detroit Police Department, and the statistics were regularly tracked by the DSR General Manager William Bullock.<sup>14</sup> In one report, Bullock indicated that racial incidents had increased by 300% in just Spring and Summer 1942. Historian Sarah Frohardt-Lane aptly categorized how streetcars and buses became fertile ground for hostile racial encounters through frequent “close encounters” in uncontrolled spaces of public transit vehicles (S. Frohardt-Lane 2012).

Racial incidents on public transportation during World War II reflected the racial disputes in city politics over housing, employment, wage, and discrimination that had been going on for decades. Previous bigotry was evident in exceptional cases like that of Dr. Ossian Sweet, but other forms of prejudice occurred daily in more passive, subversive, and normalized ways that did not make it into the historical record.<sup>15</sup> Racial encounters on streetcars in Detroit in the 1940s

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<sup>14</sup> Bullock, previously a superintendent of transit in the DSR rose to the post of Acting General Manager in 1943 when Fred Nolan took a position in Chicago to manage their surface lines. These DSR “incident” files are housed in the Walter P. Reuther archival collection, and kept separate from the actual DSR system operation files maintained by the City of Detroit in the Burton Historical Collection.

<sup>15</sup> This method of historical analysis interrogates aspects of archival silences to intuit and interpret gaps in reporting as meaningful demonstrations that minority populations are less likely to have their voices heard or recorded. The reference to Dr. Ossian Sweet refers to a 1924 standoff when Sweet, a Black doctor, purchased a home in a white neighborhood. This was relatively unprecedented at the time, as mortgage and lending controls through banks and realtors deliberately steered Black residents away from white districts.

changed this narrative. Black conductors and DSR staff were mistreated by white passengers. Black riders disobeyed or obstructed white riders. White conductors verbally harassed Black customers. And white riders harassed Black riders. With nearly 3 billion riders in a 5-year timespan, we can assume that many instances of racially motivated behavior did not meet the threshold of reporting. In contrast, other interactions where drivers made inappropriate comments followed by their badge number suggest that some incidents were reported but were not taken seriously by superiors. All of these incidents underscore the extent to which public transit vehicles were a contested racial space, regardless of whether there were formal charges filed or bodily harm done.

Black drivers received a fair amount of discrimination and prejudice for their roles in conducting transit vehicles as stereotypes of inattentive or risk-taking behavior were built upon existing complaints about DSR crashes and accident rates. After a fatal bus crash with a freight train, a police officer responding to the site reportedly told the bystanders that happened to include a *Free Press* reporter, that the bus driver responsible was probably “one of those damned N----- drivers” when the operator was actually white (Detroit Free Press 1942b). Riders also complained about Black drivers in explicitly racist terms that stereotyped their behavior. One unnamed white author wrote an angry missive to Mayor Jeffries, stating:

“Sir, it is disgusting to see these dirty niggers on the streetcars, they are full of diseases. Syphallus [sic], rotten and shouldn’t be allowed to handle money. The drivers rush right through on...lights and leave the public standing and staring. We will take over the cars and push the niggers off” (“Letter to Mayor Jeffries” 1943).<sup>16</sup>

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<sup>16</sup> The language used in the sourcing for this section reflects the explicit racial intent of the authors at the time they were written. This language is appalling and demeaning. The original language is printed here – as it appears in the archives – to relate the depth, frequency and hostility with which racial verbal abuse was aimed at Black drivers and riders. These histories, although deplorable, are a component of our collective past and are related here for analysis in the historical record. Knowing how racial discrimination functioned historically is critical to dismantling its vestiges in the present.

As Capeci, Wilkerson, and Frohardt-Lane have noted, Detroit had a high percentage of Black drivers, which caused greater racial tensions because the conductors were given a position of authority over white passengers. This shifted racial power dynamic was a new and uncomfortable experience that few white residents were familiar with, and one that challenged the perceived superiority of whiteness in public space (Capeci and Wilkerson 1991; S. K. Frohardt-Lane 2011). In one instance, a white passenger requested an early transfer from F. Williams, a Black driver. Per DSR policy at that time, the driver was not permitted to take money or distribute transfers while the vehicle was in motion. The passenger verbally harassed and used vulgarity until the driver capitulated and issued the transfer. After apparently being inconvenienced, the disgruntled passenger remarked, “the [DSR] ought not to tolerate you damn nigger sons of [bitches] on this job,” and Williams lashed out, striking the man in the face. The incident was reported by Williams himself, who noted that he struck the man “before I could think” (Detroit Police Department 1943). The use of verbal or violent attacks against Black operators from white passengers was an attempt to reclaim some sense of lost authority or power.

A 1971 University of Philadelphia study on “Negro Employment” in transit industries remarked that Detroit’s rate of Black transit employment was actually exceptionally high, relative to other cities like Chicago and New York. The report shows Detroit’s Black operator employment in 1943 at 1,336 drivers, or 27% of the total DSR workforce. By comparison, New York City was the second closest system in percent of non-white employment at only 7% (Jeffress 1971, 580).<sup>17</sup> The percentage of Black DSR drivers was about three times greater than

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<sup>17</sup> New York City had a significantly larger transit system, employing 36,000 people. Their percentage of non-white employees is only 7%, but reflects, in real numbers, 862 Black operators. Still lower than Detroit’s 1,336. In New York City, 2,509 other transit positions, such as shop workers, janitors, or porters were filled by Black laborers, but even counting these non-operator positions, the percent of total Black employment in New York City’s transit system only 9.4% of the total 36,000 laborers. The share of Black workers in New York was closer to the representation of Black residents in the overall population, which was 6.1% according to the 1940 US Census. As Jeffres notes, “the Detroit experience is clearly not representative of the entire transit industry.” (Jeffress 1971, 579)



the overall Black population share in Detroit for the same period, which was 9% in the 1940 census. Additionally, the first Black DSR operator, George W. Jackson, was only hired in 1938 meaning that Black employment rose significantly between 1938 and 1943. Before being promoted to driver, Jackson lobbied both union officials and DSR administrators to secure driving positions, culminating in having to wait outside Fred Nolan's office for four hours before being approved for training (Detroit Free Press 1986). The marked increase in Black drivers from 1938 to 1943 is likely a result of organizers like Jackson, coupled with internal factors like increasing bus operation, and decreasing available white drivers due to military enlistment after the outbreak of World War II in 1941. While Black men won additional employment in the civil service, Gender discrimination persisted for Black women. Out of the 1,336 Black drivers, only 150 of those drivers were women (Jeffress 1971).

These number of Black operators in at the wheel of DSR vehicles suggests that transportation vehicles were a place where most white Detroiters were most likely to encounter members of the other race, particularly in the driver's seat. This high rate of municipal employment became critical for the creation of the Black middle class, but some city officials voiced concerns over hiring to the National Association for the Advancement of Colored People (NAACP), noting that when "Negroes are accepted [as employees]....only as a 'war measure'" and that after the war, white men returning home from Europe may want driving positions back. This comment implied that Black transit operators were only tolerated in their positions because of the extreme conditions of the war. An oral history of a Black DSR driver James T. Jenkins demonstrates what it was like to be a minority driver in a white transit system. "We drove up to a corner, and they would turn their backs and say 'I don't ride with niggers'... People used to get

on...and take their money out and hold it in a way that they wouldn't have to touch your hand" (Moon 1993, 209).

White drivers also disrespected Black passengers aboard their vehicles. In one instance, Mary Biggs wrote to the Mayors Interracial Committee to complain of a white conductor that identified a stop at a local factory as the "slaves entrance." Before Biggs could verbally protest his remark, the man gave his badge number, implying that this would not be his first complaint and that he would not get in trouble for the remark (Detroit Police Department 1943). In a separate instance, a white conductor insulted Mary Doctor as she chaperoned schoolchildren aboard a streetcar ride, deriding her for being unable to control "the flock of monkeys" that "ought to be back in Africa where they belong." In this situation, the white driver threatened to remove Mary Doctor and the children, also gave his badge number, and ridiculed Doctor's attempt to handle the situation in a high-pitched imitation of a female voice (Doctor 1943; S. K. Frohardt-Lane 2011, 40).

Violence and abuse between passengers of both races also appear in the police reports of DSR incidents. In one instance, an intoxicated white passenger was removed after verbally harassing Black passengers who boarded the streetcar before him at a stop. A white conductor reported the incident, explaining he was concerned that the "vulgar language" being used by the man would cause "something serious" to happen (S. Frohardt-Lane 2012, 217). Frohardt-Lane, Capeci, and Wilkerson note that many more benign interactions on packed streetcars and buses are difficult to ascertain racial intent and that incidents were likely underreported unless it escalated. For example, during a stop, if you are bumped by a passenger, it is hard to know if this was a deliberate act that took advantage of a change in momentum or if it was a genuine result of losing your balance. Rumors of a so-called "bump club" perpetuated this fear that black riders

were hitting white residents under the pretense of losing their footing during a stop, disguising an act of disrespect as an accident. However, there are no documented incidents of police reports being filed about rough bumping because it was a grey area of questionable intent that could not be proven. Nevertheless, the fact that rumors existed speaks to the fact that passengers treated these everyday interactions with suspicion, derived from their discomfort at having to ride shoulder to shoulder with members of the opposite race.<sup>18</sup>

On 20 June 1943, major fighting broke out in Detroit for two days after a racial attack on Belle Isle where Black youths harassed a white resident. The next day, a mob of angry white Detroiters numbering about 500 sought retribution for the attack and blockaded streetcars and buses along Detroit's busiest thoroughfare, Woodward Avenue. During the riot, white residents stopped all transit vehicles and searched them for Black employees and riders. When they were found, they were hauled off and beaten while police looked on (Capeci and Wilkerson 1991, 9).



*Figure 2.1 A Detroit Peter DeWitt Streetcar is stopped by a white mob on Woodward Avenue near Warren. A White passenger blocks the door and pleads for calm. In the background, other DSR transit vehicles are also stopped. The*

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<sup>18</sup> The Detroit Police Department and the Detroit Committee on Community Relations (DCCR) actually tracked rumors in an effort to prove their validity, and discredit them where necessary.

*mob searched these vehicles for Black drivers, motormen, and passengers. Image taken from the Detroit Free Press, 22 June 1943*

The fact that streetcars were explicitly targeted by the white rioters in the blockade on Woodward demonstrates that it was commonly known that they were used by Black residents. This reinforces the argument that streetcars were a site of racial mixing if they were so readily targeted by white mobs seeking to catch Black people in public. Other violence at the time consisted of whites vandalizing stores and breaking windows in Paradise Valley, the majority-Black district several blocks east of Woodward. These instances clearly show that Black residents were targeted, and that white Detroiters knew where they were likely to be. Choosing to blockade Woodward, the largest and busiest streetcar thoroughfare in the city, was an intentional decision that exemplifies this.

At the end of the two day riot, 34 people had died, and 400 more were injured (Capeci and Wilkerson 1991). In a reflection after the violence, the *Michigan Chronicle* wrote a column condemning the “bitter fruit” of racism and segregation that divided Detroit and its residents. In it, the editors note that “for several years the democratic voices in this city have warned that a war between the races was being carefully promoted” and that public officials like the Mayor, the Attorney General, and the Federal Housing Authority “have failed to heed this warning, and in some instances doggedly persisted in going counter to it” (Michigan Chronicle 1943). This argument underscores the uncomfortable truth that racial tensions had been steadily increasing in Detroit for several years, punctuated by racial events like the 1943 Packard “hate” Strike by white workers, and the 1942 integration of the Sojourner Truth homes (Capeci 1984; Freund 2007; Sugrue 1996; Thomas, Richard Walter 1992).

Tom Sugrue pointed out a similar effect in *Origins of the Urban Crisis* in which he called housing “Detroit’s time bomb” alluding to the slowly building pressure to house the influx of

Black migrant workers who were met with exorbitant rents for substandard apartments and exclusion from new construction (Sugrue 1996). These forms of explicit segregation, operating through both de jure and de facto processes, had been around in Detroit, and other US cities, for decades (Rothstein 2017; Trounstein 2018). The pressures imposed by war rations, reduced personal automobile use, and increased factory employment exacerbated these existent racial problems to a boiling point where they became increasingly common in Detroit society and on the incident reports of the police force. While the *Michigan Chronicle* editorialized that “segregation must end, now and forever” in the wake of the 1943 riot, it seemed that increased close proximity between white and Black residents in the city, and all the misunderstanding and hate that those encounters bred, was going to continue for the foreseeable future (Michigan Chronicle 1943). Even once removed from close physical proximity after 1945, the issues of segregation would merely evolve to fights over resource allocation and services between city and suburb as the region segregated along racial boundaries that persist to this day.

### Post-War Conversion & Early Highways

At the conclusion of World War II, the federal government lifted supply rations and re-opened sectors of the consumer economy for purchasing. Detroiters flocked back to dealerships to purchase personal automobiles, while the DSR took stock of its vehicle inventory to determine how best to continue offering public transit service in the Detroit area. Elsewhere in the local government, Wayne County formed a commission to investigate highway construction and contracted well-known New York engineers to design Detroit’s high-speed system of roadways for automobiles of the future.

When World War II ended, the DSR had unprecedented system revenues and ridership, but faced significant barriers in its age of equipment, and an uncertain future as suburban construction began to restart. Newly hired General Manager Richard Sullivan was tasked with guiding the system through a comprehensive overhaul, which he explicitly described as a “modernization” program to serve the mass transit needs of Detroit in the future. In his first annual report as General Manager, Sullivan praised the previous management of the DSR for getting it to its present state, acknowledging the strong financial situation of the system. With over \$60 million in total investment in the 24 years of operation, the total debt owed was only \$11 million, and the strong ridership years of the Great Depression allowed the system to pay off obligations at nearly \$2 million per year. By contrast, some years pre-war were lucky to have \$1 million in net profit after all expenses were covered (City of Detroit Department of Street Railways 1946).

The modernization that Sullivan proposed centered around a major overhaul of the DSR fleet, with 1,500 new vehicle purchases and retirement of 500 aged units that had been heavily used during the war. This modernization proposal was split into investments in both the streetcar and diesel fleets, further reaffirming that the future of DSR transportation was a hybrid of rail and bus. For streetcars, the urgent need was to replace the aging rollingstock, some of which dated back almost three decades into the 1920s when the newly formed DSR purchased Peter DeWitt model cars. Despite the fact that Sullivan had planned a larger investment in diesel buses, he still recognized that the streetcar served high-capacity lines in downtown. Although no new track extensions had been built since before 1935, the streetcars remained the heart of the system. To preserve the role of streetcars in high-density parts of the system, Sullivan selected a bid from the Missouri-based St. Louis Car Company for 186 Presidential Conference Committee

streetcars (PCCs) to be delivered in 1947 and 1949. This is the same model that former General Manager Fred Nolan bypassed in 1938 in favor of spending additional funds on diesel coaches (City of Detroit Department of Street Railways 1947). At the time of their purchase, the DSR operated 610 streetcars, so the new PCCs would come to operate roughly 1/3<sup>rd</sup> of the total streetcar transit trips in Detroit. However, no plans for additional purchases were made, which suggests that Sullivan had planned to continue scaling back rail service. For diesel buses in the DSR fleet, new purchases ordered by Sullivan constituted almost a complete replacement of all existing vehicles. By the close of 1947, more than 1,500 new units had been purchased, although deliveries were taken on a rolling basis from manufacturers due to supply shortages. Before this purchase, the DSR owned 2,100 diesel coaches, the oldest of which was put into service in 1941 (City of Detroit Department of Street Railways 1947). For both rail and bus procurements, new purchase bonds were issued between 1946 and 1950 to cover costs, adding \$20 million in debt to the overall obligations of the DSR (City of Detroit Department of Street Railways 1951).

Sullivan's decision to continue significant investment in the bus fleet was a testament to the modernization vision he espoused from the helm of the agency. The justification behind this was that Detroit and Wayne County were in the planning phases of massive state highways along major arterial routes in the area. Similar trends were evident in other major cities across the country as highway engineers and planners prepared to modernize cities to be accessed by automobiles. In many cases, the prevailing thought was that failure to build cities and streets for automobile mobility would threaten a city with obsolescence (Bullard, Johnson, and Torres 2004; Foster 1981; Rose 1979). To prepare for this, DSR transit planners began to forecast significant bus service expansion throughout the southeastern Michigan region to nearby suburbs that would operate on these new roadways as early as 1946. This predicted expansion built upon

the victory in Proposal 3 in 1940 and allowed DSR buses to operate for 10 miles outside the City of Detroit border. The DSR tracked the growth of these areas through the population, construction, and land surveys conducted from 1946 onwards. These surveys reinforced the need to commence service expansion to suburban areas upon identifying multiple areas outside Detroit that were seeing significant population increases of 50% or greater between 1946 and 1949. This analysis was also paired with a separate map of population density that compared population figures to total size to help map service expansions (Department of Street Railways 1949a; 1949b). While the DSR did operate select suburban service to Dearborn, particularly the Ford Rouge plant, as well as into Royal Oak and Melvindale, the proposed highway plan would carry it to significantly more suburban municipalities and connect back into the radial street grid of Detroit's bustling central business district.

To prepare for this expanded suburban bus service, Sullivan began the permanent conversion of select routes from electric streetcar to diesel bus operation. The first rail to rubber conversion took place in December 1945, intermittent replacements occurring through subsequent years as supplies allowed. The justification given by Sullivan and others at the DSR was to facilitate more reliable transportation at a more affordable rate. The decision to convert certain lines was made based on the current profits of rail operation, condition of the track to avoid replacement costs, and the number of available diesel coaches to handle the new service. Increasing the DSR's reliance on a single mode of transportation was ultimately aimed at cutting costs of rail infrastructure and maintenance, preparing the system for service expansions to the suburbs, capturing shifting urban demographics while maintaining the quality of service.

At the outset of rail to rubber conversion by under Sullivan, it was not initially conceived that all streetcars would be replaced. Rather, budget expenditures for new PCC streetcars, in



addition to newer, heavier gauge track and paving along Woodward, demonstrated that the DSR believed some of the highest density lines like Woodward, Jefferson, and Gratiot should remain as electric streetcar service for the foreseeable future. The investments in rail were typically made with long time horizons, as the vehicles could last up to 30 years, while the track usually was in place for 10-15, depending on the severity of harsh Michigan winters. The route conversions occurred slowly between 1945 and 1949 as the DSR gradually overcame post-war supply shortages, added buses to the fleet, retired aged equipment, and discontinued rail lines where heavy infrastructure repairs to track or wire were cost prohibitive. Only one line was discontinued in 1945. Out of a total of 49 streetcar routes in the DSR network, only one was converted in 1945 as an experiment. When this turned out to be successful at saving money and lowering costs of operation, the rate of conversion increased in subsequent years as the pressures to operate the system at a profit forced additional cost saving measures. Eight streetcar routes were removed in 1947 and another eight removed in 1948, with five being removed in 1949 at the end of Sullivan's tenure as General Manager. These early conversions were easier to implement because the lines were selected based on overall performance and cost. Additionally, the initial route conversions were done in batches where multiple lines were converted on the same date. This was done because some adjacent or intersecting lines connected via shared track back to a specific car house, requiring both to be closed simultaneously, essentially converting entire branches of the rail network in batches.

The Department of Street Railway's conversion to a diesel bus fleet not only saved operating costs and limited infrastructure outlays, but it also stood poised to capitalize on the future growth of regional highways proposed in the post-war period. Detroit and Wayne County produced the first iteration of a comprehensive highway plan in 1945 with the consulting and

engineering provided by New York-based W. Earle Andrews. The original engineering documents forecasted a cost of \$240 million across 10 years of construction for 3 major projects and 4 smaller ones. The initial funding for this was proposed to be a split between federal, state, and local authorities, with the federal government fronting 50% of the total cost, the state 25%, and Detroit and Wayne County each contributing 12.5%. In real dollars, that meant the federal government would be responsible for \$120 Million, the State of Michigan paying \$60 Million, and Detroit and Wayne County each paying \$30 Million.<sup>19</sup> The proposal called for three major projects, including expanding capacity on existing major streets like Grand River to alleviate congestion with a wide boulevard and median, in addition to the creation of two new, sunken multi-lane expressways that would serve the northwest and northeast portions of the city and suburbs, which comprised a majority of the proposed cost (Donovan 1945). The proposed map of expressway constructions is reflected in Figure 2.2 below and shows the numerous current and future projects for interstates to crisscross areas of the city, and ultimately connect to the wider region.

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<sup>19</sup> It is important to note that this 1945 Detroit proposal pre-dates the Federal Aid Highway Act of 1956 passed under President Dwight D. Eisenhower that created the modern-day network of interstates freeways. This 1956 act had a significantly different, and more generous, funding structure that pledged 90% of costs to be covered by the federal government, with the states matching the remaining 10%.

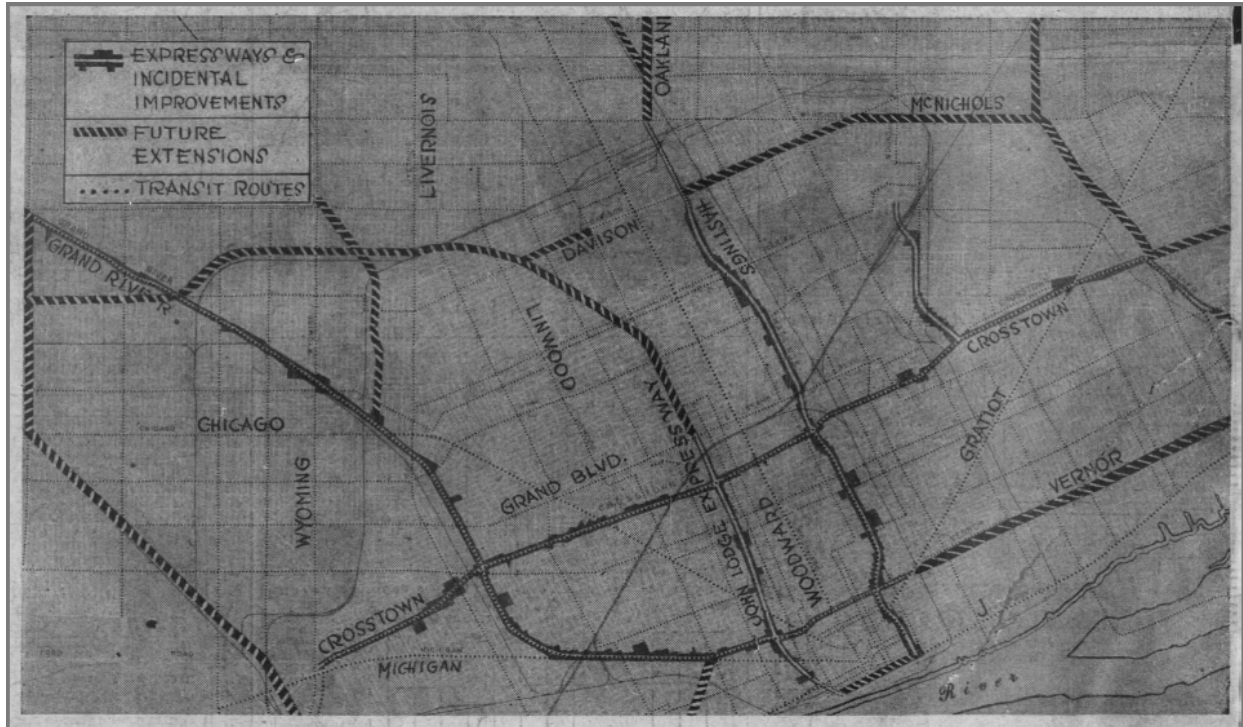


Figure 2.2 City of Detroit proposed highway construction plan, 1945. *Detroit Free Press*, 28 February 1945

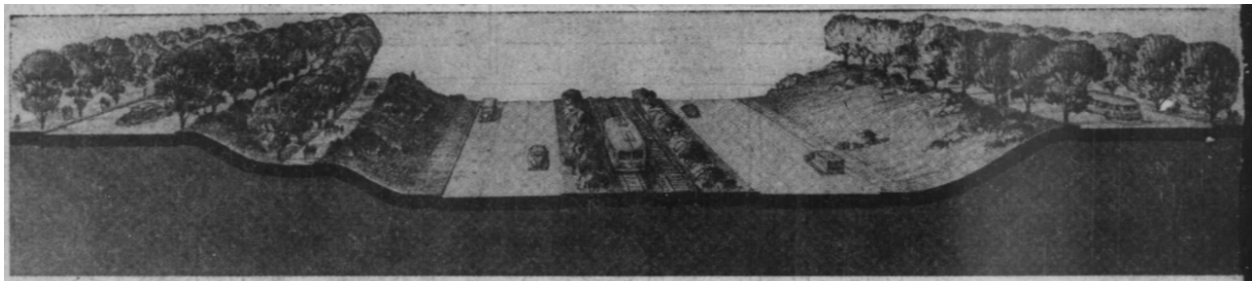


Figure 2.3 The 1945 City of Detroit proposed highway plan had this lateral cutout to show lanes, green space, embankments, and transit. *Detroit Free Press*, 28 February 1948

Part of the enormous cost of the plan was because the original engineer, W. Earle Andrews, planned for right-of-way (ROW) of 50 ft in the center median for rapid transit streetcars to operate, as seen in figure 2.3 above.<sup>20</sup> This came as a surprise to DSR planner Col. Fred Taylor upon receipt of the plans, because the DSR believed they would conduct transit on

<sup>20</sup> Right-of-Way (ROW) as it pertains to transit operation is the dedicated space for sole operation of transit vehicles. Surface-level streets in Detroit used “mixed” ROW traffic where any vehicle could drive over streetcar tracks in the direction of travel, which generally has slower operating speeds for safety. A dedicated ROW solely for transit, as depicted in the highway plan allowed for higher speed operation due to no interfering traffic.

the new highways using buses in mixed traffic. If the city took the DSR approach, it would save considerable money because the physical space required to purchase, and dig an additional 50 feet of width into the roadway was substantial – about \$1.3 million per-mile. W. Earle Andrews and his fellow engineer that assisted on the project, Charles E. deLeuw from Chicago, both argued that exclusive ROW was necessary for expedited transit service in the median, and that buses could get stuck in traffic with lower overall ridership (Deatrich 1945). Detroit officials were skeptical, noting that the total traffic expected by Andrews and deLeuw drastically exceeded forecasts from the within the city, essentially saying that the roadway would be over-engineered and never near the capacity the two expected. This critique reflected the fact that both engineers came from larger cities, representing New York and Chicago respectively, where traffic volumes were significantly higher. Wayne county engineer Leroy C. Smith contended that if transit ROW needed to be added, it could be “notched” into the embankment at a later date, hoping to shave millions off the proposed cost by narrowing the total width (Detroit Free Press 1945; 1947). What sounded like a very semantic and niche discussion about transit policy became a contentious debate between city departments. Members of the RTC and the City Plan Commission supported rapid rail transit ROW, which was something proposed by Col. Sidney Waldon dating back to the 1920s as a method to expedite service. The BSRC sided with the DSR and Department of Public Works (DPW) in opposition, stating that DSR buses could use the highway to offer effective service, cut costs, and streamline the project between departments and purposes. In the final engineering plans, the center-running rail transit was scrapped by the Detroit Common Council, citing cost as the primary reason for their opposition (Detroit Free Press 1947). The State of Michigan also refused to allocate revenues from the state gasoline tax, citing concern that the funds could only be used for road construction and maintenance, not

constructing transit facilities, leaving it up to Detroit to fund the shortfall, which they refused (Biles 2014, 848). The high cost and multi-phase design of these enormous highway construction programs meant that, although originally proposed in 1945, shovels were not in the ground on the finalized construction until 1953, with completion in 1955. Nevertheless, later members of the BSRC and Common Council held up final funding and bond proposals on separate occasions in 1948, 1949, 1951, and 1953 to revisit the issue and tried unsuccessfully to reinstate transit in the larger median (Weber 1953).

By the time the final proposal made its way to council in 1953, the only surviving proposed highway out of the original 1945 plan was what would become the John C. Lodge freeway, or M-10, serving the northwestern section of the city and suburbs near Southfield (Biles 2014). Funding secured later in the 1956 Federal Aid Highway Act would follow the template from the original 1945 proposal to build the remaining three major below-grade interstates in Detroit, I-75, I-94, and I-96. On the 1945 drawing from Figure 2.2 above, they represent the Hastings Street, crosstown, and Grand River routes respectively. In particular, the Hastings Street route which would eventually become I-75 and connect with spur I-375 towards the river, were focused highway development projects that were constructed deliberately through the middle of major Black districts in the city, bulldozing Black Bottom which was the major business district for Black-owned businesses, and Paradise Valley which was a residential area of Black homes on the lower east side of the city (Thomas 2013).

As the final construction plans were created, the “expressway boss” in charge of the project published an op-ed in the *Detroit Free Press* to weigh in on the controversy over center-running transit. His views on the project and his strong language that condemned “‘impractical’ planners” underscored key shifts in the perception about public transportation and the use of

diesel buses (Weber 1953). The expressway boss was Glenn C. Richards, the Department of Public Works Commissioner appointed by Mayor Cobo to manage expressway plans and act as a liaison between state, federal, and local authorities to coordinate the complicated funding structure needed for the highway construction and final approval from all parties (Biles 2014). Reacting to another recent attempt to implement center-running rapid rail transit in a wider median, Richards said “most planners never have to go beyond the idea stage and get down to the hard practicalities of actually building something” and that the current highway plan, without a wide median for rapid transit represented “the most modern, economical and feasible way of meeting the needs of both public and private transportation” (Weber 1953). He also noted that “the DSR will be able to provide fast and efficient service on these highways” with speeds between 40 and 55 mph, reaching downtown and linking to cross-town routes within 20 minutes.

These comments emphasized how the transportation planning environment had changed in Detroit. The DSR, despite being one of the larger city departments in term of budgets and staff, was not contributing to discussion about highway design. Instead, the DPW commissioner was speaking about what DSR service could be expected on the newly paved roads maintained by DPW. This division of responsibility reflected that it was just assumed that the DSR would operate on whatever roadway was paved and provided. On the topic of center-running transit, Richards implied that if the DSR wanted additional ROW to operate rail rapid transit, they needed to pay for it out of their budget, reflecting the inability to use state gasoline tax revenue to build public transit. He said, “the extra cost of a center mall for the operation of trains could never be financed by the DSR without heavy subsidy, even if the plan were practical” and added that he “was not opposed to so-called rapid transit facilities” but that they “cannot be paid for with fare box revenue alone” (Weber 1953).

## Conclusion

Richards' vocal opposition to the 'impractical' planners presaged the single largest debate about regional transit operation after 1945 – someone had to pay for the high costs of furnishing service to distant municipalities. As distance increased, so too did the costs associated with operation. This included wear on vehicles, as well as the wage of the driver, while the total number of passengers was fixed at the capacity of the bus. At the time of Richards' column, DSR ridership forecasts were grim because a large number of Detroiters were re-locating outside of the city, and in many cases beyond existing transit service. Anecdotal accounts from riders interviewed by the *Detroit Free Press* suggested that some of these suburban residents would prefer to ride on the DSR services, but did not have routes that were frequent near their new homes, and they did not like long headways between buses (Detroit Free Press 1963).

Declining urban population was a major issue because the DSR charter required that the transit revenues fully fund all operation. During early territorial annexations carried out by the City of Detroit, the DSR successfully expanded service using feeder buses coordinated under the newly created Motor Coach Division to capture revenue from newly settled low-density neighborhoods, and brought them towards established high-density, high-frequency lines into the city center. This model of DSR service led to three decades of consistently high-performing transit operation that never operated at a deficit and never with a public subsidy. However regional growth of the municipalities around Detroit was increasingly incompatible with this vision of service. As the metropolitan region grew, the locations of work, recreation, and leisure also shifted. Residents in surrounding communities no longer desired to get on a small feeder bus to a major trunk line, then transfer again in the city to reach their destination. Some wanted to cross between suburban areas to access nearby malls or go direct from their home in Southfield

to their factory Dearborn. Mayor Jeffries presciently identified this possibility in his comments to a congressional committee in 1944, stating that this intra-suburban transit would spur business growth, but leave Detroit with “nothing left but industry” (Biles 2014, 844). The 1940 victory on Proposal 3 meant that the DSR could legally provide this desired level of direct intra suburban service. However, there were diminishing returns on profits as the mileage increased. The DSR was faced with Detroit’s slowly declining population, and a paired decrease in ridership. As residents spread out across metropolitan Southeastern Michigan in lower densities, and without new transit extensions, it became clear that the transit system could no longer be supported based on farebox revenue alone.

The DSR did fight against the loss in ridership, and sought to optimize service and save on costs wherever possible through practical and economical changes to simplify the transit fleet. The decision to downsize the rail fleet in favor of rubber conversions reflect this practical and economical change by lowering overall vehicle maintenance costs, and by reducing the need to maintain infrastructure like rails and wires. In promoting this gradual conversion, Sullivan and his successor Leo Nowicki were actively preparing the system to take advantage of new highway construction for rapid bus service that could link the municipalities not only to Detroit, but to each other. The investments approved by Sullivan to purchase new PCC streetcars and carry out track replacements on Woodward Avenue reduced the overall rail fleet, but invested in streetcar longevity on a few key lines like Woodward and Jefferson. This effectively reduced costs associated with rail transit, while preserving the primary benefits of rapid service in high-density areas like Woodward Avenue, but still favored increased use of diesel motor coaches elsewhere in the system. The modernized Detroit transit system would be buses that could operate flexibly



on any surface, with low overhead and maintenance costs in lower-density residential areas, while streetcars remained to operate on high-density thoroughfares in the dense urban core.

What Nowicki and Sullivan could not predict was the extent of social changes that contributed to suburban migration. Beyond the material comforts of a larger home on a larger lot, suburban growth was also driven by the desire to create racially homogenous and exclusive communities (Freund 2007; Jackson 1985; Sugrue 1996). These communities were, in turn, served by the creation of new shopping, dining, and leisure activities that would grow to make these previously sub-urban spaces self-sufficient (Fishman 1989). By virtue of being disconnected, or at least infrequently connected, to the racially diverse city, these new suburban spaces reflected the racial demographics of the suburbs, and not of the larger metropolitan region. As argued by Darden, Hill, Thomas and Thomas, the racial politics and policy of the metropolitan region, being formulated with a deliberate intent of racial exclusion and discrimination, posed significant barriers to extending services and initiating any kind of political transformation within the wider region (Darden 1987).

The growing social isolation of the suburbs was product of regional fragmentation. Small suburban municipalities with their own budgets and taxing authority were able to pick and choose which aspects of a regional network they wished to partake in (D'Anieri 2007, 2). Throughout the late 1940s, Detroit and the State of Michigan successfully engaged these municipalities in schemes to capture and share revenue from the gasoline tax in order to fund highway construction projects, or for common utilities like water, electric, gas, and sewerage (Biles 2014; D'Anieri 2007). However, the suburbs were less inclined to support a transportation system. Early suburban service in Dearborn and Royal Oak was a self-sustaining venture by the DSR, meaning the profits made off those lines totally paid for their operation. When costs

increased in post-war inflation, and ridership dipped as residents changed their travel habits and daily trips to the city, the profitability of suburban service became an issue at the same time that the DSR had to expand to retain riders.

As we will see in Chapter three different system subsidies are proposed for the DSR throughout the 1950s, but blocked by either Mayor Albert Cobo, the Detroit Common Council, or suburban municipalities. As ridership continued to decrease, it became apparent that the DSR could not support its operations on farebox revenue alone. Beginning in the late 1950s, the DSR begins collecting an annual sum from the Detroit general fund to continue daily operation. The issues with DSR financing as regionalism accelerated underscore the necessity to address system structure and funding. When the State of Michigan entered the discussion about transportation funding in 1967, it created a new, multi-jurisdictional transit agency in the form of the Southeastern Michigan Transportation Authority (SEMTA) which possessed the critical legal authority to levy taxes in multiple counties. While this proves to be a major shift in the possibilities for overcoming the barriers to DSR operation, it led to significant debates about funding, allocation, service coverage, and representation that have stymied regional transit growth in subsequent decades.

## Chapter 3

### Post-war Regionalism, the Decline of the Department of Street Railways

Suburbanization, highway construction, and the personal automobile drove down the annual number of Detroiters who boarded the cream and red vehicles of the Department of Street Railways (DSR) for their daily commute. Ridership figures remained high immediately following the conclusion of World War II, and the outlook of DSR administrators remained positive about the future of public transportation in the city. That rosy sentiment noticeably changed after 1951 as ridership began to decline markedly. Because the DSR was required to be a self-sustaining city department, the drop in ridership and reduction in overall revenue significantly impacted its ability to continue to offer high-quality transit service on short headways.<sup>21</sup> After 1951, General Manager Leo Nowicki adopted a new operating policy for the Department that prioritized cost savings and efficiency as a method to trim budgets.

Declining ridership placed the DSR in a precarious position during a critical period of Detroit history. According to the U.S. Census Bureau, Detroit's population peaked in 1950, and began declining thereafter as residents migrated out of the city and into the suburbs. This posed unique challenges to the DSR because the strength of the system was predicated upon its ability to offer rides to where Detroiters needed to go. If ridership decreased below a certain threshold, it could cause service reductions and prevent route expansions to newly settled areas. If residents

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<sup>21</sup> The term "headway" refers to the interval between two transit vehicles on a particular line. A five-minute headway means that a bus or streetcar will arrive at a stop every five minutes. Within the streetcar network in Detroit, some routes operated on headways as low as 30 seconds, and some lower-density bus routes had headways of ten to fifteen minutes.

did not have reliable public transit options, they would turn to other more convenient forms of travel to facilitate movement to their destinations. For a majority of the DSR's operation from 1922 to 1950, this resulted in a delicate balance of route expansions and service improvements using the limited revenue obtained from collected fares. During this time, the DSR was entirely self-sustaining, and did not receive any tax subsidies or outside funds with the exception of an occasional construction bond that was repaid with standard interest. New transportation technology, like the diesel motor coach, initially contributed positively to the transit network by allowing cheap rapid route expansions on any paved surface, providing quick service to newly annexed areas that were added into the City of Detroit. This same growth model was applied to suburban municipalities throughout the 1930s and 1940s, and the DSR offered bus service to nearby suburbs, planning for continued bus expansions that utilized proposed highways throughout the city and region. This model of predicted regional growth changed after 1951 when operating costs began to eclipse the revenue gained from fares collected. DSR officials like General Manager Leo Nowicki and Board of Street Railway Commissioners (BSRC) president Fred Sisson knew that suburban route expansions were necessary to maintain high ridership across the entire system and remain "competitive" to the automobile, and actively strategized ways to lower costs associated with providing long-distance rides. Throughout the 1950s, the DSR would trial a proposed zone-fare, the first ever tax subsidy proposal to city voters, tax abatement requests to nearby municipalities, and a charter amendment to the original operating authority of the Department.

Despite the slipping revenues, the DSR did have a solid core of transit operation in 1951 with a fleet of modern vehicles poised to serve the needs of the expanding metropolitan region. Initial rail to rubber conversions allowed for replacement of older streetcars and lower-density

lines, leaving a strong core of high-density, high-frequency streetcar routes that consistently had a high rate of return for revenues, although these lines were not going to be expanded with new streetcar track. Rail to rubber route conversions dropped total streetcar route mileage in the system from 405 route miles in 1945 to only 65 in 1951. Outward from the dense urban core, a network of rubber-tired diesel buses linked Detroit neighborhoods with the surrounding region. The legal authority for operating beyond the city was derived from a favorable 1940 state-wide vote on Proposal 3 that reaffirmed the DSR's authority to operate within 10 miles of the municipal border. This situated the DSR as one of the primary linkages for residents to access downtown businesses, amenities, churches, and factories. Despite rising rates of personal automobile registration across Wayne County, more than one million people still rode the DSR each day. In 1951, Detroit operated suburban bus routes to several neighboring municipalities, including Royal Oak, Dearborn, River Rouge, Melvindale, Ypsilanti, and Centerline, and had active plans to expand rapid transit buses onto highways in the region to continue this service. Despite being named after street railways, a majority of DSR-operated vehicles were buses in the 1950s, totaling 1,960 in a fleet that covered 1,174 route miles.

This chapter addresses the final phase of public transportation planning in the DSR from 1951 through its dissolution and reorganization in 1973. During this time, metropolitan demographic shifts resulted in new budget constraints on the DSR, which prompted a series of fiscal changes to cut costs to maintain service frequency. These changes culminated in total abandonment of all streetcars in Detroit in 1956, and prompted attempts to broker tax subsidies, fare adjustments, cost-sharing agreements, and a charter amendment to help the DSR maintain and expand service to the entire metropolitan region. Ultimately, this chapter analyzes the final 22 years of DSR operation, and details how City of Detroit transportation planning decisions

responded to declining ridership and expanding regional transit opportunities. Prior to 1951, I argue that the DSR had resources, knowledge, and legal capacity to initiate wide-scale regional service expansions, but chose not to. After 1951 a series of cumulative factors led to the DSR losing its power to independently enact regional transit, primarily due to declining ridership and service cuts. By failing to expand to serve new regional networks, and through the inaction of city and suburban leaders, the majority of the 1950s and 1960s was a slow decline of public transit that has persisted well into the modern day. The decline of public transit in Detroit during this period was multicausal, and reflects the complex political reality of the 1950s and 1960s where Detroit officials frequently battled with suburban and state leaders to determine which political entity had the power to steer regional decisions that spanned multiple municipalities and counties. After 1951, Detroit's ability to determine its own transit future significantly declined, and public transit took a proverbial back seat to debates about tax policy, operating subsidy, and city charter amendments. Previous scholarly research on failed regional transportation planning emphasizes that regionalism was blocked by the inability of suburban and urban leaders to reach a consensus on funding after the State of Michigan created a specific regional transit body, the Southeastern Michigan Transportation Authority (SEMTA) in 1967 (Nelles 2013; D'Anieri 2007; Hall and Jonas 2014) . My research advances the timeline for these regional debates backwards by nearly 20 years and demonstrates that the DSR actively positioned itself at the center of the region, initially leveraging bus service as a critical transit link up until nearby suburban areas such as Dearborn, Highland Park, and Hamtramck refused to contribute money to offset operating costs.

## 1951 Labor Strike

In the spring of 1951, Detroit Mayor Albert Cobo granted a 7.5-cent hourly raise to city employees but denied the same wage increase to the transit workers in the Department of Street Railways. Seeing this as an injustice, Division 26 of the Amalgamated Association of Street, Electric Railway & Motor Coach Employees of America fought the city for the same increase. Cobo held his ground, stating that the DSR lacked sufficient funds to finance such a raise, and that any funds for operation had to come from the DSR itself. The situation escalated when city negotiators cancelled a State Mediation hearing, prompting the Division 26 operators to authorize a general strike beginning on the upcoming Saturday (Detroit Free Press 1951a). This was a calculated threat meant to initiate negotiations but also avoid damage to the economy by starting on a Saturday and not on a Monday. Even with this threat, Cobo and the city administrators maintained that they could not raise wages for operators because the DSR operating charter required that it maintain its own budget that was separate from Detroit's general fund budgets. With no resolution, 3,700 streetcar and bus operators did not show up to work on 21 April 1951. The stoppage ultimately lasted 59 days and was the longest public transportation strike in American history at that time.

The strike caused numerous disruptions across the city, from traffic backups to general sales drops to factory production slowdowns. During the strike, public transportation operations conducted by the DSR in Detroit and the surrounding suburbs completely ceased. On the first day of the strike, Detroiters without personal automobiles were left standing at the curb unaware of the disruption, sometimes for hours, or stranded at home unable to reach their job, office, or factory across the city (Jones 2010). Those who could drive caused massive traffic backups and arrived late for shifts, only to find most factories already idled. Smaller businesses organized

localized carpools for fellow coworkers (Detroit Free Press 1951f). Factories and businesses across the city were forced to close due to the lack of staff, reporting a rise in absenteeism that totaled about one-fifth of the workforce. Commercial shopping also reported a strong hit, noting a 50 percent decline in sales (Detroit Free Press 1951c). The lack of public transportation caused the Motor City to grind to a halt.

Citizens of Detroit took out their frustration in letters to the mayor, the DSR, and the local newspapers, expressing their displeasure with the transit system operation. Public opinion turned sharply against the striking workers, who were perceived as greedy, selfish, and entitled as they halted all city transit for their personal gain. Irene Wilson, a department store clerk, said “I don’t think they ever stopped to think about people who depend on them to get to work. Another regular rider who asked to remain anonymous remarked the strike was a “terrible blow” that was “sabotage against the public” (Detroit Free Press 1951d). A majority of letters and comments written to the mayor’s office mirrored the anti-union sentiment expressed by the *Free Press* editorial board. Most writers hailed Mayor Cobo as an ardent proponent for justice and legality, offering praise for standing up to the bullying of the union for the good of Detroit residents. One citizen wrote “I admire you for your courageous stand in the DSR Dispute” while another wrote “to congratulate you on your stand! Don’t back down! Law and order must win” (Admirer 1951; Polk 1951). An anonymous individual mentioned that “the strike has been an inconvenience but I hope you hold firm to principles + law” (“Letter to Mayor Albert Cobo” 1951). Other writers invoked the danger of the DSR with comments like “Every right-thinking citizen is behind you in the present DSR controversy. Laws must be upheld – otherwise we open the door to anarchy” (Citizen 1951). Signed only as “Freeman”, one letter thanked the mayor for “emancipat[ing riders] from the tyrants who operate the busses on Grand River Line.” The letter



stated that the workers who usually relied on the DSR had been carpooling since the start of the strike, and would continue to do so, concluding with “power to you” (Freeman 1951). Other residents like W. Stuart McEwan wrote to praise the Mayor for attempting to correct the deficit in the DSR; “We as taxpayers of the city wish to compliment you on your effort to make the DSR pay or make a profit as it should” (McEwan 1951).

Not all letters to Mayor Cobo were as effusive, and a number of residents wrote in to express their frustration with how the event was being handled. Some citizens, constituting roughly 15 percent of the total letters in the archival collection on the strike, harshly criticized the mayor for stubbornly digging in his heels and refusing to bargain in good faith. These letters took aim directly at Cobo, saying things like “I wonder if your scheme is to bust the DSR and turn it over to a private capital and get a block of stock as a bonus. In case you don’t know it, living costs have gone up about 100% in recent years” (Calloway 1951). Another writer demanded that Mayor Cobo “stop being so stubborn. I am a taxpayer. A voter. A Bus rider that does not own a car and not a member of any union” implying that others were suffering because of his principled stand against organized labor (Anonymous 1951). Another unnamed resident echoed this sentiment, stating simply that “prolonging this strike is inhumane” suggesting that riders who relied on the transit system for their daily commute were being burdened by the mayor’s uncompromising stance (Unnamed 1951). In one instance, a US soldier from Detroit fighting in the Korean war wrote a letter to the *Free Press* editorial page, urging the two sides to come together in service of “the greater good” so that tanks and trucks could continue to be delivered to the war theater, demonstrating how widespread the news of the strike had become (A GI In Korea 1951). These criticisms shared common threads in blaming Cobo for the

hardships they were facing, and was distilled simply by resident David King who said “this long strike is injuring business and transportation” (King 1951).

For the DSR administrators, the 1951 strike represented a significant turning point in how the system was perceived by city residents. Mayor Cobo had been actively issuing public statements to control the narrative on the strike through the *Detroit Free Press* and sought to distance himself, stating that his hands were tied, and noting that DSR funding policies were unable to support a wage increase. This was particularly harmful to the DSR because it suggested that the DSR was being mismanaged, and shifted the narrative away from structural issues with the system in favor of perceived corruption from union bosses. This narrative situated Detroit as the victim, being held hostage by greedy drivers who sought to extract concessions and wage increases for personal gain. The *Free Press* ran multiple columns to this effect during the strike that vilified drivers like George Knoppe, the highest paid in the system, for drawing an abnormally large salary for his role on the union executive board (Detroit Free Press 1951e). A separate column in the same issue noted that DSR drivers were the highest-paid in the nation when fringe benefits were factored in, but did concede that base pay for coach drivers was ranked seventh overall, while the base rate for streetcar drivers was even lower (Detroit Free Press 1951b).

The DSR strike remained in a stalemate for nearly a month until May 19 when the conflict came before Circuit Court Judge Ira B. Jayne. The strike reached the court because DSR lawyers filed suit, claiming that the strike was illegal based on the Hutchinson Act, PA 336 of 1947. The State of Michigan legislation was meant to limit public sector union activity and discourage city or state employees from striking with harsh punishments. However at the time that Detroit sued Division 26, the Hutchinson Act was yet un-tested in court, and it was an open

question about whether it was even legal (Jones 2010). Upon meeting with lawyers from Detroit, as well as union officials in Division 26, Judge Jayne set up a series of hearings through early June to decide two key issues. The first was whether to grant an injunction to the City of Detroit to force the striking workers back on the job. This was ultimately denied, and the judge determined the workers had cause to strike. The second, more significant, issue was whether Public Act 336, or the Hutchinson Act, applied to the DSR employees, which would mean they could be fired and lose contract protections for an illegal strike.

The 1947 act was written in a way that prevented public employees from striking, and stated that any illegal strikers could be fired at will, lose seniority, and only be hired back on condition of two-year probation with no wage increases. The act was intended to reduce public sector union activity that disrupted operation in any state or municipal department or agency. The DSR lawyers argued that, as a City of Detroit department, the Hutchinson Act should apply to the 3,700 striking operators. Specifically, pursuant to the legislation, Detroit Mayor Cobo sought to fire the operators as a retaliation for their work stoppage, which would've significantly reduced their benefits, pay, and seniority granted through collective bargaining – a major challenge to union authority. Judge Jayne eventually issued a nuanced ruling on this matter, and found that the DSR was a quasi-public institution. Although the DSR was a city department, it did not receive tax benefits, subsidies, or operating assistance, which meant that it was, in effect, privately funded and not beholden to city or state funding covered under the 1947 legislation. All striking workers could be brought back onto the job with no penalty to their seniority, and their pay could not be docked. Finally, Jayne ruled that both sides must attend state-mediated arbitration on the original wage dispute. The operators union agreed to the terms, and voted to

end the strike and resume service on Tuesday, 19 June 1951 after 59 days off the job (Weber and Perrin 1951; Detroit Free Press 1951g).

#### Aftermath of the 1951 Strike

In the aftermath of the DSR strike, the *Detroit Free Press* editorial board ran a column investigating what the strike meant to future transit operation in the city. Titled “A Chance To Rebuild”, the column praised Mayor Cobo and assailed the “brazen outlaw attack” from the operators union. The editors noted that the strike could be an opportunity to re-assess transit operation and “wipe the slate clean and start from scratch, building a transportation system tailored to the City’s needs, which can function efficiently” without the “tyranny of union despots.” In assessing blame, the *Free Press* asserted that “Detroit has fumbled along with its outmoded and creaking DSR...because we did not know quite what to do with it” and that “now is the time for the citizens of Detroit to declare that the DSR, as we have known it, should be abolished. Let something realistic to the modern motor age take its place” (Detroit Free Press Editorial Board 1951). This skepticism was paired with an editorial cartoon representation of the DSR literally flying off the tracks, with both management and the drivers emerging from the affair with black eyes, symbolizing that neither won anything after an unprecedented 59-day halt of transit service, depicted in figure 3.1, below.



*Figure 3.1 Detroit Free Press editorial cartoon depicting a Detroit Department of Street Railways Streetcar literally flying off the tracks. In the front and rear of the vehicle, both management and operators have a black eye from the long 1951 strike fight, but neither have anything to show for their efforts because they are both aboard the same train.*

The negative perspective expressed by the editorial board reflects a general idea that the post-war operation of the DSR was no longer satisfactory to the residents in Detroit because of declining revenues. The core thought behind this opinion was the reality that ridership was declining from its war-time boom, while cost of labor, materials, and benefits were increasing. The DSR management originally tried to offset these rising costs with fare increases and other system efficiencies, but the efforts were ultimately insufficient given the rate of inflation. Although the DSR still was carrying upwards of 500 million daily passengers, and had system revenues that were the highest in its history of operation, the rising costs still caused the system to begin regularly slipping into the red, posting net losses after 1949. One significant contributor

to these rising costs was ballooning pension obligations that were reaching nearly \$4 million per year, or 10 percent of the operating revenue (City of Detroit Department of Street Railways 1952, 11). For comparison, ten years prior, in 1941 the payouts were only \$250,000 or 1.20 percent of the total operating revenue. As the DSR neared 30 years in age, retirement payouts to former operators were set to increase, and would remain a burden on the system for years to come.

The *Free Press* editorial draws into question the metric by which the health or success of a transit system was measured. The idea that the DSR was “outmoded and creaking” does not bear out, given that the entire system had 2,200 new transit vehicles that were less than 5 years old that were purchased with nearly \$24 million in new bonded debt. In terms of pure dollars and cents, as the city charter required, the system was not in good health. It had to fund all of its financial obligations purely through farebox revenue, a feat that becomes increasingly difficult to do given inflation, wage increases, and other costs. However, in terms of total riders served, the DSR was doing quite well. Even accounting for ridership decreases in the post-war period, the total network still ferried 384 million passengers in 1952, and the number of rides per-capita remained above pre-war ridership figures, which reflected the growth of both Detroit, and the blue-collar industries that buoyed social and economic activity.<sup>22</sup> By this measure, the DSR was more than adequate in serving as the physical linkage for citizens to access destinations across the city and region. While there was increasing competition from rising automobile registrations in the late 1940s and early 1950s, the DSR was not immediately pushed to obsolescence.

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<sup>22</sup> I do not compare to rides per-capita in the post-war period, because the war-time surge in ridership (peaking at 659 million annual passengers) was extraordinary in the system. Pre-war numbers from 1938 – 1940 relate a more average system performance.

The 1951 strike ultimately marked a critical year that was a turning point in the transit system. Although ridership continued a steady decline, the overall number of passengers remained above pre-war ridership levels, and revenues were stronger due to fare increases. Almost all passenger equipment was recently purchased and in newer condition. The system was far from dilapidated, underutilized, or outmoded. What changed after the 1951 strike were attitudes towards the DSR from the public. Rising costs brought frequent clashes over wages, benefits, and fare increases that drained the riding public. Depictions of transit operators as union fat cats, living on exorbitantly high wages did not help public opinion. Passengers sensed something was wrong with the system but did not truly understand the complexity of the challenges faced by DSR management. The *Detroit News* posted regular letters to the editor in their opinion columns throughout December in 1951, and all manner of residents wrote in to suggest fixes, including changing boarding doors, ending low fares for students, ending free rides for city employees, cutting pensions, and cutting drivers. Similarly, the *Free Press* ran a full-page spread in a Sunday paper in September 1951 for writers to propose solutions titled “If I were Boss of the DSR.” The solutions proposed ranged from modest suggestions such as shutting off idling buses to save fuel, partnering with businesses, or hiring more female ‘motorette’ drivers, to more radical suggestions like building a new subway network, firing all the drivers and setting a new base wage, or ripping out all the streetcar tracks completely (Detroit Free Press 1951j). Notably, 5 out of the 15 respondents based their proposals on presuppositions that the DSR was corrupt, and that the system could be fixed if DSR administrators were forced to ride their own transit system for commutes or had a salary cap, or if drivers were held accountable, or if aspects of system spending were investigated. Out of all responses, only one resident suggested “If I were boss of the DSR, I’d leave it alone” and that even with the new fare

increase to 15 cents, the DSR remained the best bargain in the “inflation-ridden” city (Detroit Free Press 1951j).

The actual response of the DSR boss, Leo Nowicki, was to call for a series of structural changes in a live television interview. These could only be granted by the combined action of the Mayor and Common Council, and the most critical was a city charter amendment to reclassify how debts and pensions had to be funded. This televised broadcast is significant because the technology was relatively new at the time, and the appearance of the head of a city department after a record-setting strike underlined the importance of using the aftermath to generate necessary change. Nowicki appeared on WXYZ-TV only two days after the strike ended on 24 June 1951. There, he argued that “we [the DSR] are trying to operate in 1951 under rules set up in 1921” and that “the rules will have to be rewritten...to permit the DSR to operate” (Detroit Free Press 1951h). In particular, Nowicki focused on the city charter’s mandate that controlled revenue and profits as a major barrier to system operation. The charter stipulated that all costs of DSR operation had to be paid entirely by the DSR – as if it were a private company and could not receive any outside support. This included balance sheet line items like unfunded pension obligations and bonded debt that were categorized as so-called ‘operating costs’ for the year and had to be paid by farebox revenues. Nowicki’s argument was that re-writing aspects of the DSR charter would allow the DSR more latitude to finance debt and long-term obligations through other means. Changing how these debts were funded effectively freed up operating revenue to be used entirely for the maintenance and expansion of the system. Throughout the remainder of this chapter, I refer to this nuanced revision to the charter amendment in short-hand as the requirement for profitability, referring to the charter provision that governed operating costs and expenditures.



The other critical structural component that Nowicki identified for revision was the ambiguity around the DSR as a quasi-public transit agency that paid private taxes like a private utility company. Nowicki stressed that the DSR was a public-serving institution that was established for the common good, but paid taxes as if it were a private business in all cities it operated in, averaging \$1.3 million per year that was split between Hamtramck, Highland Park, Royal Oak, Dearborn, and Detroit.<sup>23</sup> These taxes were a legacy of the former private transportation company, which was originated as a public utility for electrification. This history is critical to understand because it meant that Detroit's transportation was subjected to state regulation through the Michigan Public Services Commission that was usually directed at other more traditional public utilities, like water, sewerage, electric, telecommunications, or natural gas. Structurally, this was difficult to change because the DSR actually derived some benefits from the ambiguous definition quasi-public transit agency. The identity between public and private operation was manipulated to the advantage of the DSR on numerous occasions, and was fluidly interpreted by DSR lawyers and General Managers to deliver effective service. Specifically, in 1940, the agency claimed to be offering a public service in order to secure the Proposal 3 victory that allowed regional operation. Likewise, in 1951, the Division 26 Union claimed that the private operation and no financial support from the City or State meant that anti-union legislation targeted at public agencies did not apply to the DSR. Along the lines of this fluid identity, a deliberate reclassification of the DSR as a public agency in the City of Detroit could (and later, did) jeopardize its ability to operation beyond the City of Detroit borders, and subjected it to additional regulatory mechanisms. In many respects, the argument about DSR

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<sup>23</sup> Although the DSR operated in other suburban areas, these areas did not charge taxes, perhaps because tax policy for public transit operation was not levied there at the time some statistics are available. The DSR did receive some minor tax breaks in vehicle registrations from the State of Michigan for license plates. City voters rejected an amendment to exempt the DSR from paying city taxes in 1949.

taxation in Nowicki's 1951 media appearance was akin to a Pandora's box about regional services and pay in an era before there was clear state regulation and guidance about the legal authority of municipalities to interact in their economic area of influence. Nowicki was making a nuanced appeal to neighboring municipalities to voluntarily provide tax relief to the DSR to enable expanded public service on good faith, without triggering any of the myriad potential pitfalls.

Overall, Nowicki stressed that these two key structural changes needed to be made for the DSR to remain a viable transit system – the city charter needed to be updated to remove the requirement that the transit agency must be profitable, and taxes levied by municipalities should be removed to reflect the benefit the DSR brings to those communities. Critically, these proposed changes represented a significant turning point in transit operation. Prior to this point, the constraints on DSR finances, including the taxes and charter requirements, were overcome by sheer volume of transit riders and the fares they paid to use the service. However, Nowicki's public interview signaled that, unless there was an intervention, that was shifting after 1951. Declining ridership meant that the system could not continue to provide the same level of service, and that cuts were imminent if the structural financing of the system was not addressed.

Nowicki's proposed changes were quite progressive and had the potential to radically reshape transportation in Detroit during a critical period. A city charter amendment to change how debts were funded would free up significant amounts of operating revenue to be used on route expansions and equipment purchases, and could forego service cuts or additional fare increases. An additional suggestion to create a metropolitan transit board to replace the existing Detroit Board of Street Railway Commissioners could expand the DSR service coverage in the Detroit metropolitan region, and would build on the existing system as the basis for operation.

Representation would be derived from all areas in and around the city and region with staggered terms and equitable representation. However there were significant barriers to such a proposal, namely that the Detroit metropolitan region spanned three separate counties and at least a dozen municipalities of varying size. In theory, the only body authorized to create a legal entity of that size was the State of Michigan. Nevertheless, Nowicki proposed it in 1951 as a way to ultimately lower the amount of taxes the DSR paid in neighboring suburban areas throughout the region. Interestingly, Nowicki's regional proposal came before the City of Detroit formed its own regional body, the Detroit Regional Planning Commission (DRPC) in 1953, 12 years before the federal government mandated the creation of Metropolitan Planning Organizations (MPOs) in 1963, and 16 years before the State of Michigan created a metropolitan transit agency in the form of SEMTA in 1967. These ideas from Nowicki underscored that the DSR needed to look regionally to remain a viable transit system, and that that the DSR was losing the power to independent enact regional transportation without the consensus of outside political leaders and city officials. Unfortunately, Nowicki's claims fell on deaf or unsympathetic ears, and there were no changes to city transit operation or funding structures.

While Mayor Cobo debated amending city tax policy and editing the charter with the Common Council, Nowicki tinkered around in the margins to explore potential shifts to fare policy to make the system more profitable. In particular, Nowicki focused on making longer-distance operation more financially viable. Between 1951 and 1954, Nowicki led the DSR through a series of fare changes and experiments, including raising express fares and attempting a zone fare on select suburban routes. The emphasis on longer-distance operation and profitability indicated that Nowicki still believed that suburban service was essential to the DSR's operation. In an attempt to bring the DSR budget back into the black after the revenue

loss of the strikes, Nowicki moved quickly to trial a zone fare structure as early as July 1951. The proposal was intended by Nowicki to be a trial-run that would charge an increased fare to people traveling a longer distance on transit, including up the John C. Lodge freeway to Southfield, or north across Eight Mile into Warren or Royal Oak. The justification was to offset costs of operation and higher maintenance wear on the diesel coach. Several residents wrote into the *Free Press* opinion column expressing frustration with the zone structure, not understanding what they were paying for. J.L. Decker noted angrily that commute distance did not impact wages paid for employees, distance from the pumping station did not impact water rates, and distance from the printer did not impact newspaper cost – which suggested that the DSR should not charge more if no other industry billed by distance. Decker added that “it is quite impossible for [the city population] to live within the three-mile circle” of downtown, noting that distance from the core was a fact of life. Another letter from Frank E. Whipple showed similar anger because a zone fare was not like other public utilities, and stated that drivers needed to take a pay cut if they wanted to keep afloat, and that the system should avoid the “confusion and turmoil” that could come with a new fare structure (Detroit Free Press 1951i). In both cases, the residents reference other public utilities, notably water infrastructure, as a point of comparison to argue against a DSR fare zone. These opinions assume incorrectly that transit cost is fixed across any distance and implies that residents were growing frustrated with repeated fare changes and cost increases associated with riding. An editor’s note at the bottom of the columns tries to correct this misconception and points out that train tickets increase over longer distances, so too should the DSR.

The zone fare experiment ultimately failed to produce significant profits and was discontinued in August 1951. Instead, Nowicki reverted to a flat 25-cent express fare, and

northbound riders disembarking beyond the municipal limits had to pay a nickel as they exited (Weber 1951). A separate pricing structure was briefly attempted March 1952, focusing on the Mound Road line that served the US Army tank arsenal in southern Warren, approximately two miles outside the city. The trial fare structure required that northbound passengers exiting the bus had to pay an additional nickel depending on which ‘mile road’ they disembarked, or a dime if they exited past Twelve Mile Road, which was four miles north of the city border at Eight Mile Road. Southbound trips into the city were charged at a flat rate of 30 cents per ride, which was 10 cents higher than the express fare (Weber 1952). In both cases, the experimental fare changes did not yield enough profits to make adjustments across the entire transit system fare structure. Despite the zone fares not working, the five-cent additional charge for northbound riders remained in effect if patrons exited past the city limits. These early experiments demonstrated that the DSR still sought to provide suburban service, identifying the residential growth of those areas but struggling to maintain the cost-to-profit ratios of longer distance operation.

The fare experiments demonstrated the limited capacity that Nowicki and other DSR administrators had to raise system revenues on their own. While creative, these did not make a significant dent in the projected system deficits, and continued fare increases risked pricing residents out of the system. While Nowicki attempted to raise revenues through increased service, he also urged for a systemic change to the charter and tax structure that the DSR behind the scenes with Mayor Cobo and the Common Council. Initial attempts to waive the DSR’s tax obligation at the city level were mired in controversy and bad publicity. The DSR paid an average of approximately \$1.3 million in taxes that were split among the municipalities it operated within, with the majority (about \$750,000) going back to the City of Detroit general

fund.<sup>24</sup> The sticking point in the debate about a city tax waiver for the DSR was that, even if Detroit waived the tax, the DSR would still pay an average of \$500,000 to suburban municipalities (Detroit Free Press Editorial Board 1954b). Because most of the operating budget shortfall came from longer-distance bus operation to the suburbs, opponents to the tax waiver argued that Detroit residents were effectively paying to subsidize suburban riders, while the DSR still paid taxes there (Woodford 1951). One resident summed up the frustration of a DSR tax subsidy to the editors of the *Detroit News*, questioning “why should we subsidize transportation for people who live outside Detroit and pay no taxes here” (TK 1951). Common Council and Mayor Cobo both were leery of reducing the city revenues and losing what the DSR contributed to the general fund. Behind closed doors, Cobo argued that Detroit would reduce taxes when suburbs contributed their fair share, and that he preferred for continued fare adjustments and system optimizations to realize a profit rather than a larger systemic change (Detroit Free Press 1954b; Weber 1954).

On the issue of taxes paid by the DSR, long-time board commissioner Rodney Baxter noted that he had attempted for 28 years to get the DSR stop paying taxes and advocated for similar tax waivers in adjacent suburbs. “The facilities are municipally owned and it is unnatural to tax a city-owned facility” Baxter argued, noting that Highland Park and Hamtramck “should pay the DSR for servicing them” (Detroit Free Press 1954b). Common Council member Eugene Van Antwerp echoed a similar sentiment in his support of a 1954 BSRC resolution to remove the DSR tax, stating that “the DSR is more or less a service to all citizens in that it helps the poor who do not own their own transportation, it aids the manufacturer by conveying employees to

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<sup>24</sup> Average cost of taxes is used here, because the amount varied year-to-year based on the number of actual revenue miles of operation conducted by the DSR. The total amount of taxes paid generally ranged from \$990,000 up to \$1.5 million. The payment to each municipality was based on the amount of operation in those areas, therefore the City of Detroit received a majority of the tax dollars, while the smaller municipalities with less service received proportionally fewer tax dollars.

work and it adds the merchant by bringing customers” (Detroit Free Press 1954b). Members who opposed the 1954 resolution, like Edward D. Connor, argued that this would just “juggle the books” and that “the real answer was in terms of better service” that would entice Detroiters back onto the buses and streetcars. Cobo voiced similar opposition, stating “I just don’t care. I don’t believe it would really mean much to relieve the DSR from taxes...I’m sure it won’t solve the problems of the DSR” (Detroit Free Press 1954b). The *Free Press* editorial board on the tax debate encapsulated the political stalemate:

“We think that the citizens of Detroit who own the DSR should be given the opportunity to vote on whether they think tax relief will help it. The way they vote will depend, in large measure, we believe, on how well the DSR management can convince the people that it will be able to turn the tax relief into better service. In other words, if help is given will the DSR management be able to help itself? And should a vote on the tax issue occur, the trend will also depend on how well convinced Detroiters are that neighboring communities are prepared to grant the DSR tax relief too. After all, Detroiters should not be expected to bear what amounts to a fare increase unless all users will share the burden with them” (Detroit Free Press Editorial Board 1954b).

The Common Council, backed by Cobo, and one commissioner, Herman Moekle, ultimately blocked a vote on a tax subsidy to the DSR in 1954, pushing the issue further down the road, and forcing Nowicki to look at other ways to increase revenue and decrease costs. The hesitance to grant tax relief to the DSR was connected to the larger issue of the role of the DSR within the metropolitan region. The agency was expressly governed by the city charter but operated in a quasi-regional capacity within adjacent suburban areas. As reflected in the earlier quote from Councilmember Antwerp, the DSR served the entire regional economy by bringing customers to shops and employees to factories. This was previously reaffirmed in the 1940 vote on proposal 3, which granted the DSR operating authority for 10 miles outside the city border. However, the rising cost of service and operation meant that this regional operation was unsustainable without tax relief. The surrounding municipalities of Highland Park, Hamtramck,

Dearborn, and Royal Oak were not inclined to approve a tax reduction for DSR operation. Those areas, particularly Dearborn, viewed the DSR as a City of Detroit service that ought to be paid for by those who worked, shopped, or travelled to the City of Detroit. In their eyes, that payment was made through fares in that system, not through extra tax relief or subsidy support. By that logic, suburbs should not subsidize DSR operation because not all residents rode the DSR but they still recognized, and requested, service throughout the 1950s and 1960s.

The suburbs desire to have the essential public service of transportation with minimal effort and no tax relief was often discordant at times, like in 1954 when the Dearborn City Council requested that the DSR expand bus service into Dearborn after a small private bus carrier, Intertown Lines, raised fares to an unsustainable level. Dearborn recognized that the DSR was a major carrier for the Ford automotive factory workers at River Rouge plant, and essential to local industry. When faced with the fare increases for transit within the Dearborn city limits, the Dearborn City Council revoked the operating permits for Intertown Lines and voted to permit the DSR to operate buses on the routes (Detroit Free Press 1954a). This would have been a considerable service expansion for the DSR, as the contemporary Dearborn routes largely provided service to factories that connected back to Detroit but did not serve municipalities like Dearborn in their entirety. The expansion was blocked by the DSR commissioners Baxter and Moekle who expressed hesitancy to “force a private system out of business” and underscored that the DSR had dubious authority to operate transit entirely within a suburban city like Dearborn that did not connect back to the main system in Detroit. Rather than replace Intertown Lines’ operation, they preferred that the DSR buy out Intertown’s service entirely. The *Free Press* editorial board chimed in on the vote, noting that the DSR was juggling their own troubles with Detroit operation, and pondered “whether a broad extension of service into the suburbs



would restore the health of the DSR, or only complicate its present problems” (Detroit Free Press Editorial Board 1954a). This brief debate about suburban service in Dearborn, although not approved, highlighted the political dynamic of the DSR commissioners who were uncertain of widespread suburban expansions while the core system operation was not healthy, and who doubted the legal grounds that the DSR could use to disrupt a private bus operation outside of their own jurisdiction. This ties back to Nowicki’s earlier point from the 1951 interview that the DSR could transition into the role as the metropolitan transit agency, but that it would require representation and consent from those suburban areas. The DSR also understood that, if a private bus company was already struggling to earn a profit despite raising fares, it was unlikely that DSR service could be any cheaper or more efficient. This was because the DSR operation itself found efficiencies through connections and transfers into the main network in Detroit. Without an operating subsidy, Dearborn transit would likely have been infeasible. This denial of service, however, was not connected to the number of existing employees or buses owned by the DSR, which were both in a surplus in 1954.

Later in 1962, the issue of suburban expansion by the DSR would be rekindled when Intertown Lines declared bankruptcy. With the abrupt halt of private service, residential transit service across 14 suburban communities in Wayne County, geographically located south and west from the City of Detroit, was significantly disrupted. The DSR received a request to provide “emergency” service to these “downriver” suburban communities and responded promptly to deploy buses by the next business day on the former Intertown routes. In this instance, transit service was furnished by Detroit’s DSR because, rather than operating in direct competition with a private firm, and instead of a cash buyout of Intertown Lines as initially proposed by Commissioner Baxter in 1954, the company had gone bankrupt and was no longer a direct

competitor (Detroit Free Press 1962c). The service was also conducted on an emergency, and presumably temporary, basis. The matter of emergency DSR operation was briefly contested by a court injunction request by stockholders of the former Intertown Lines. They sought to reorganize their assets into another transit agency and merger, and alleged that the DSR operation was blocking them from raising sufficient revenue. Circuit Court Judge George G. Rashid ruled against the stockholders, reaffirming the DSR's ability to operate within a ten-mile radius of the city border (Detroit Free Press 1962a; 1962b). The suburban service was surprisingly profitable and popular, with revenues on the extended lines doubling from \$4,000 to \$8,000 after only two months, and with increased transfers into core of the DSR system (Detroit Free Press 1962c). The new suburban lines served between 30,000 and 75,000 residents on a temporary basis throughout 1962 until a new private bus company could resume operation. Although briefly successful, the system operation was not prolonged.

#### Service Reductions & Rail Abandonment

Between 1951 and 1954, the core of DSR system operation in Detroit was weakening with declining ridership and revenues, despite the efforts by Nowicki to tweak fares and trial different service structures, like zone charge. Without the possibility of a tax subsidy from the city, General Manager Nowicki was forced to make two significant decisions due to the declining revenues. The first was to implement service cuts in route frequency. The second was to abandon all streetcar operation in the DSR network. These decisions were primarily driven by reduced revenues. Service cuts implemented by Nowicki did not remove routes from the network, but did reduce the frequency of their operation. One tactic to cut costs was to slow down the headways during off-peak transit times, primarily after 7pm, and to remove some

weekend transit service entirely, particularly cutting Sunday service when most factories and businesses were closed, but at the detriment to communities and especially churches. Between 1952 and 1954, these service reductions resulted in about a 10 percent decrease in revenue miles operated, dropping from 57 million to 52 million (City of Detroit Department of Street Railways 1952; 1954).<sup>25</sup> With lower revenue miles operated, there was less wear on the buses that required maintenance, and less hourly wages paid to drivers. But, in trade off, there was also fewer total passengers.

Most of these service reductions were routine and implemented across the board to meet declining revenues.<sup>26</sup> However, this became an issue when Black community groups wrote in a formal protest to the Common Council and to Nowicki's office, upset that weekend service had been removed to an area with a high concentration of Black churches and businesses on the John-R/Oakland line (Michigan Chronicle 1953). The letter of protest had ten churches, four businesses, and two community groups as signatories. The service area in question was located just north of the majority-Black Paradise Valley neighborhoods, and had experienced a relatively large percentage increase in the Black population according to a comparison with the 1940 and 1950 census maps (Sugrue 1996). The groups alleged that the DSR had previously pledged to increase service in this area, but instead cut service despite the growth in population. The protest letter noted that businesses, community organizations, and religious congregations were especially harmed by the service reduction (Michigan Chronicle 1953).

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<sup>25</sup> Revenue miles operated is a metric of total number of route miles driven with revenue passengers. It is used to determine hourly ratios of operation cost to expense. If a bus route is 10 miles long, and that route is run 10 times by 1 bus, that is 100 revenue miles.

<sup>26</sup> There is not detailed, granular level archival data available for this period to show exactly what areas had service reductions, just notes that service overall was being scaled back to match declining ridership and revenue numbers, with this broad-based approach to changes.

The other major change to reduce cost was in the total abandonment of the streetcar network in Detroit. This decision was made by General Manager Nowicki in 1953 given the continued decrease in ridership and revenue experienced by the DSR. However, the final streetcars would run until April 1956 in order to allow time to purchase new buses and find another city interested in buying Detroit's 186 PCC Streetcars. The primary motivation for this abandonment was to decrease expenses, which could be achieved through streamlined operation of the transit system under one type of vehicle – the diesel motor coach. One DSR press release stated that a change to bus operation would save \$400,000 in operating costs on the Gratiot and Woodward lines, and permit 25% increase in service (Detroit Free Press 1956). In this rare instance, General Manager Nowicki, Mayor Cobo, and the Board of Commissioners were in agreement that the streetcar needed to be replaced. Contributing to the shift from rail to rubber was also a system traffic report from 1951 that suggested that newer, larger motor coaches built by Mack Corporation could handle the route and passenger density on the remaining streetcar lines. Later promotional material for bus operation was included in the municipal archives of the DSR, including an advertisement for Mack C-50 diesel coaches that boasted two sets of boarding doors, and state of the art design and function for that period (Mack Trucks Inc. 1951).

The decision to abandon all rail service went against the policies of the previous DSR Manager, Richard Sullivan, who initiated the original PCC purchase in 1947 under the pretense of changeover of some, but not all, streetcar lines. Given the long service life of rail transit vehicles, the costly new purchase of PCC streetcars in 1947 reaffirmed that Sullivan believed that some core routes, particularly the highest density ones on Woodward, Jefferson, and Gratiot, would continue to operate as streetcar lines due to their high patronage. While 21 streetcar lines were discontinued under Sullivan's control, and overall streetcar track mileage was cut by about

half through early bus conversions, the high-cost acquisition of new units was meant to modernize and solidify the core of the system for at least 30 years, the length of the typical service life on streetcar vehicles during the period.

The financial basis for rail to rubber conversion is dubious. Department revenue documents published in annual reports indicated that streetcars operation was substantially *more* profitable than bus operation, consistently maintaining a far higher revenue-to-cost ratio, even when accounting for variances in the number of revenue miles operated by each mode. Table 3.1 and 3.2 below show operating revenue and operating expenses per mile, by transit mode for 1952-1956.

Year	Revenue Miles	Revenues	Expenses	Profits	Profit / Mile	Cost / Mile
1952	7,645,915	\$ 8,262,959.06	\$ 5,944,928.41	\$ 2,318,030.65	\$ 0.30	\$ 0.78
1953	6,808,487	\$ 8,941,543.82	\$ 5,630,025.26	\$ 3,311,518.56	\$ 0.49	\$ 0.83
1954	5,975,600	\$ 7,602,837.93	\$ 4,896,100.94	\$ 2,706,736.99	\$ 0.45	\$ 0.82
1955	5,138,438	\$ 6,084,477.16	\$ 4,120,812.12	\$ 1,963,665.04	\$ 0.38	\$ 0.80
1956	4,959,914	\$ 3,935,172.15	\$ 2,572,244.53	\$ 1,362,927.62	\$ 0.27	\$ 0.52

Table 3.1 (above), Department of Street Railways Streetcar Operation Costs and Revenues Comparison, with profit-per-mile operated calculated in the second column from the right. The rightmost column is the total operating cost (maintenance, labor, infrastructure, vehicle) of bus per-mile Data aggregated from Annual Report Data and Financial Statements from 1952 – 1956.<sup>27</sup>

Year	Revenue Miles	Revenues	Expense	Profits (loss)	Profit / Mile	Cost / Mile
1952	56,027,376	\$ 27,376,713.11	\$ 27,607,231.64	\$ (230,518.53)	\$ (0.00)	\$ 0.49
1953	57,324,331	\$ 33,363,702.54	\$ 29,530,725.99	\$ 3,832,976.55	\$ 0.07	\$ 0.52
1954	54,546,485	\$ 31,732,550.13	\$ 30,074,183.12	\$ 1,658,367.01	\$ 0.03	\$ 0.55
1955	52,004,511	\$ 30,361,423.07	\$ 28,768,113.39	\$ 1,593,309.68	\$ 0.03	\$ 0.55
1956	53,727,027	\$ 31,198,416.59	\$ 29,183,822.42	\$ 2,014,594.17	\$ 0.04	\$ 0.54

Table 3.2 Department of Street Railways Diesel Bus Operation Costs and Revenues Comparison, with profit-per-mile operated calculated in the second column from the right. The rightmost column is the total operating cost (maintenance, labor, infrastructure, vehicle) of bus per-mile. Data aggregated from Annual Report Data and Financial Statements from 1952 – 1956.

The tables demonstrate that, even despite ongoing rail abandonment projects throughout the 1950s, the streetcar operation remained significantly profitable. Comparison of the two sets

<sup>27</sup> Streetcar operation figures in 1952 were combined with electric trolley bus operation by the DSR. To filter for just streetcar numbers, I averaged trolley operation for three years from 1950 – 1952, and subtracted it from the total. The numbers in 1952 are therefore approximations based on data trends.

of data show that buses did not have the same rate of return, even when accounting for the difference in the revenue miles operated per mode. It is true that streetcar operation was more expensive per mile operated, averaging 75 cents per mile, compared to diesel bus operation cost average of 53 cents per mile. However, streetcars also carried more passengers on account of the density of the service area that was built up with rail and electrical infrastructure. Although not included in the data above, other longitudinal figures of streetcar versus bus operation still hold that streetcar operation had been consistently more profitable than buses since the pre-war period. In this way, Sullivan's original plan to remove under-performing streetcar lines was likely financially sound, and it left only the densest and most profitable streetcar lines in the system to turn a profit after 1951. However, Nowicki's subsequent removal of these lines in 1956 was not financially justified, as they were more than paying for themselves. Other revenue data post-conversion, from 1957 onwards, does not show a noticeable uptick in coach operation and profits despite the absorption of the former streetcar routes.<sup>28</sup>

In a 1957 memo about rail conversion, Nowicki defends the ultimate conversion as a cost-savings exercise. Some streetcar operation required two DSR operators: one to physically drive the car and manage the electrical motor and brakes, while another collected fares and made change and transfers for passengers. This was an archaic provision that dated from the 1930s streetcar operator contract with the Division 26 union, and was deemed necessary because the vehicles had two boarding doors and handled high density routes. However, it also meant higher wages and more employees ultimately landing on the ballooning pension rolls. Nowicki mentions this explicitly in the memo, stating that "The elimination [of streetcars] permitted the

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<sup>28</sup> There were other cost efficiencies to be realized under Nowicki's conversion plan that are not expressed in the total system profit of the streetcar vs bus tables shown above. Notably that streetcars had a policy to be conducted by two employees, one to collect fares and one to drive the vehicle, and that they had more expensive maintenance to their electric motors, steel wheelsets, and the infrastructure such as track and overhead wire.

Department to effect substantial reductions in pay roll costs, the average number of employees being reduced from 4,427 to 3,949, a decrease of 478. This sharp reduction in pay roll enabled the Department to absorb some \$1,700,000 in additional pay rate and employee benefit costs without a change in the fare structure.” He goes on to note that, although lower ridership and revenues hamper the current system and “preclude any immediate optimistic forecast,” he is “confident that the long-range program for expansion of Detroit’s network of expressways, to cover more and more of the metropolitan area, will permit the Department to provide fast and convenient express service of a type to attract an increased number of riders” (City of Detroit Department of Street Railways 1957). This decision, and the justification offered by Nowicki, underscored that the system was struggling in the early 1950s, and shifted towards total diesel bus operation as a way to prepare the department for expanded metropolitan operation.

In retiring the streetcar assets, the DSR administrators sold off equipment that was less than 1/3<sup>rd</sup> of the way through its expected service life of 30 years. Ultimately, the City of Detroit sold 183 of the PCC streetcars at a loss to Mexico City, where they were operated until they were damaged in a 1985 earthquake.<sup>29</sup> With much fanfare, the PCC Streetcar participated in a parade procession on Woodward on April 8, 1956, marking a ceremonial end to 93 years of operation on the streets of Detroit. Both the *Detroit Free Press* and the *Detroit News* ran large retrospective pieces that nostalgically covered the history of streetcar operation, including an abridged history of private ownership, electrification, and ultimately municipal operation by the city, complete with photos and mementos (Driver 1956; Weber 1956; Carlisle 1956; R. P. Smith 1956). Neither paper gestured toward the future of transit operation in the Motor City. The last streetcar,

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<sup>29</sup> Detroit operated a total of 186 PCC streetcars. Two cars, which had earlier prototype model engines were rejected from the sale, and a third car was wrecked in an accident and scrapped. The last original Detroit PCC Streetcar sits derelict outside the Michigan Transit Museum in Mount Clements, Michigan, about 25 minutes north of Detroit between Gratiot and Groesbeck Avenues. The car #268 was a gift from Mexico City after the rest of the PCC fleet was scrapped after the 1985 earthquake.

bringing up the rear in a parade down Woodward, was draped with signage that read “The Journey’s End” and, in a nod to its future life in Mexico City, another sign that read “Adios” (Craig 2014).

## Metropolitan Transportation & Decentralization

The ultimate shift from rail to rubber in Detroit’s transit network was not the result of any one person, company, technology, or historical event, but a product of cumulative transportation planning decisions made by city officials dating back decades. Use of diesel buses in Detroit began in 1922 to help bypass construction and keep passengers moving along streetcar routes. Buses later demonstrated their flexibility by rapidly deploying to newly annexed residential areas and acted as a feeder that allowed passengers to transfer onto arterial mainline routes into the center of Detroit. General Manager Fred Nolan expanded bus capabilities after 1936, and invested significant profits in continued bus operation, betting that small feeder buses would continue to serve the growing low-density residential geographies in the periphery of the city, while the central business district retained the legacy rail infrastructure dating back to private ownership. Successors to the General Management position, Richard Sullivan and Leo Nowicki also invested heavily in bus service, once again relying on the flexibility of the rubber tires to cheaply and efficiently deploy bus service anywhere within the city or surrounding metropolitan region, including on the ambitious new expressway projects planned to provide fast automobile travel.

The vision of expansive suburban transit operation, and a metropolitan transit agency centered on the DSR, never became a reality for the City of Detroit. Despite strong system health and finances through the 1940s, a tumultuous early portion of the 1950s resulted in repeated



declines in service, ridership, and revenues that resulted in rail abandonment. Structural funding issues such as city taxes, a city charter amendment, and an operating subsidy were not addressed until the middle of the 1960s. By the time Mayor Jerome Cavanaugh finally placed a charter amendment on the city ballot in 1964, federal transit money could not resurrect aspects of system operation that had been long neglected. A significant bulk of mode share had shifted further towards personal automobile ownership, and city bus ridership continued to drop. To financially balance the system, fares had risen significantly, cresting 40 cents per-trip, and causing outcry from community groups that could not afford automobiles. Upon taking up his post as General Manager in 1948, Leo Nowicki noted in his first financial report to the Common Council and Board of Commissioners that:

“It must be remembered that the Department operates under a Charter provision which requires it to live within its income...Under these conditions, the amount of service that the system can supply will be determined by the efficiency of its operations and the income which they bring in...Future operations will be influenced very markedly by the projected system of expressways. These will bring added opportunities for better and faster service, but they will also bring keener competition from the private automobile. However, by continuously improving our service and working unceasingly to improve our operating efficiency and to keep our fare structure as low as a sound fiscal policy will permit, we feel that we can successfully meet this competition” (City of Detroit Department of Street Railways 1948, 3–4).

City officials, particularly Mayor Cobo, members of the Common Council, and DSR Commissioners did not heed the warning to alleviate the financial burdens imposed on the transit agency. Throughout the 1950s, there was a steady backslide as ridership and revenues declined, costs increased, deficits increased, fares increased, and service was scaled back.

The depopulation of Detroit, and subsequent rise of suburban living, heavily contributed to declining transit ridership in the central city. As residents moved to far-out suburbs, ridership decreased, revenues decreased, the transit system contracted, and regional transit service also decreased proportionally to save costs. This decline was driven by larger processes of

decentralization, deindustrialization, and white flight. Predominantly white affluent residents left the city by the thousands in favor of racially homogenous communities in the suburban periphery. Asked about this trend in a 1956 interview with the *Montgomery Advertiser*, segregationist Dearborn Mayor Orville Hubbard noted that Dearborn's population had already doubled since the 1950 census, and that a majority of new residents were "Poles and Italians who were 'crowded out of Detroit by the colored people coming in'" (Johnson 1956). Hubbard went on to add that "[The Poles and Italians] 'are so anti-colored – much more so than you in Alabama.... If they ever took a vote on this up North, you'd be shocked at the results. But, no, people don't like to talk out loud because they don't want to stimulate the thing'" (Johnson 1956). Later in 1965, a separate interview with Hubbard boasted about the racial exclusivity of Dearborn, noting that the city only had 15 Black residents, 14 of whom were domestic workers who did not own their own property in the city (Putnam 1965). Similarly racial homogeneity was seen in other fast-growing suburban areas, including Warren, which grew to be Michigan's third largest city where whites made up 99.5% of the population in 1970 (US Census Bureau 1970).

As discussed by historian Tom Sugrue, industries that had formed the basis of the industrial economy nationwide, including textile, steel, appliances, and military goods began to relocate their factories into suburban areas. This change was made possible by increases in automation, supply chain management, and improved logistic capacities that allowed for manufacturing to disaggregate, and take advantage of lower land costs, and lower labor costs (Sugrue 1996, 6; Cumbler 1989; Ryan and Campo 2013).<sup>30</sup> This process of deindustrialization occurred nationally in multiple industries, but in Detroit in particular it meant that automotive

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<sup>30</sup> An intended side effect of decentralization was also to remove the bargaining power of labor unions like the United Auto Workers (UAW) who could threaten wholesale work stoppages at centralized factories. Labor organizers had considerably greater difficulty in maintaining a picket line across multiple factories, especially in other states or regions. For more information on this process, see especially Tom Sugrue *Origins of the Urban Crisis* Chapter 5

factories and their ancillary suppliers began migrating northward across Eight Mile, the northern boundary of Detroit, or southwest into “downriver,” resulting in a decrease in manufacturing employment of 120,000 jobs between 1947 and 1957 (Sugrue 1996, 144). While there was a high number of Black employees in these relocated factories in white suburban areas around Detroit, the minority workers themselves did not own property in the suburbs until later into the 1980s or 1990s. In Warren, a 1969 a Department of Housing and Urban Development (HUD) funding review found that 1/3<sup>rd</sup> of the workforce in the city was Black, but that very few of the workers resided within the city limits (Riddle 1998, 12). In Dearborn, a similar reality was acknowledged by noted racist Mayor Orville Hubbard who noted that the Ford River Rouge production facility employed 15,000 Black employees, many of whom commuted for work from neighboring Detroit. Hubbard states “I am for complete segregation, one million per cent, on all levels. I believe in economic equality (for Negroes), but social equality is a horse of a different color. If a man works – I don’t care what color he is – he ought to be paid” (Johnson 1956).

In this interview Hubbard differentiates between living and working in Dearborn, and what the segregationist deems to be ‘acceptable’ racial integration, advocating for allowing Black workers to receive jobs, salaries, and employment at Dearborn factories, but not own property and risk integration in lily-white suburb. He states “Not a single negro” was allowed to live there, and that “they can’t get in here. We watch it. Everytime we hear of a Negro moving in – for instance, we had one last year – we respond quicker than you do to a fire” adding that this was an “unwritten law” enforced by all property owners in the city (Johnson 1956). The faintest whiff of racial invasion spurred white homeowners to enforce this “unwritten law,” as was the case when a mob gathered on the lawn of Giuseppe Stanzione’s house on Kendall Street in Dearborn, throwing bottles, rocks, and verbal insults when they thought he sold his property to a

Black family. Police were called, but they only circled the block and did not intervene. It turned out Stanzone had only rented the property to a white family, and the new tenants employed Black movers for their belongings (Freund 2007, 3). Despite these strong racist views about housing, Hubbard's own support of DSR transit on two separate occasions underscores his view on Black employment, and his comfort with Black workers. In 1954 and again in 1962, Hubbard actively petitioned the City of Detroit to receive DSR bus service (Detroit Free Press 1954a; 1962c). On a separate occasion, he touted the importance of DSR transit for factory employment within the metropolitan region, and even advocated for the formation of a regional transit body that built off the DSR service (Detroit Free Press 1961). Hubbard's support of transit was calculated to continue to bring white and Black workers into Dearborn, and coexisted alongside his *de facto* segregationist views that withheld property from Black families. While these two views, on the surface, may be fundamentally incompatible, to Hubbard, effective public transit for workers to commute meant that they did not need to reside in Dearborn proper. Thus, Hubbard charted a complicated political course that, on one hand, campaigned for the removal of proposed public housing projects in Dearborn, while on the other praised DSR service and promoted regional transit, but still voted against any type of payment or subsidy to such a system. It is critical to note that the DSR service to River Rouge Henry Ford automotive manufacturing plant was an older route that had existed for decades, and barely reached into suburban Dearborn as it was directly across the municipal boundary – so the continuation of service was economically essential, while being socially distinct from the proposed affordable housing projects that Hubbard vehemently opposed.

Similar issues for labor market access were also seen north of Detroit, in the suburb of Livonia. There, a reduction in regional transportation by the DSR negatively impacted primarily

Black workers at the Livonia Mall Shopping Center in 1968. Mall manager Robert W. Poris found his hiring impacted by a DSR legal case, *Northville Coach Line v. Detroit* that was before the state supreme court. Small suburban private bus operator Northville Coach Lines, which owned 22 buses with 7 employees, protested that the DSR was pushing them out of business with a bus route that ran through Livonia and terminated at the mall. Such a route was in keeping with the traditional system design of the DSR, operating within 10 miles of the city border, and to suburban destinations that residents may want to shop, work, or live near, with the opposite end feeding back into the dense main city network. Northville Coach Lines successfully won a temporary injunction on the DSR bus operation by arguing that DSR service was not a formally sanctioned “governmental purpose” that fell under municipal operation of transit beyond the city limits as written in the charter. The case had wider ranging repercussions to DSR service in the suburbs, but the effects were felt almost immediately by the Livonia Mall. Complying with the injunction, the DSR halted 24 daily bus trips that ran from Detroit out to the mall twice an hour. Mall manager Robert Poris subsequently noted he had not been able to hire and keep janitorial staff for the mall for two years during the length of the dispute and subsequent operation injunction. “I’m just getting madder and madder because there are people who want to work and I can’t hire them because they can’t get out here” Poris complained to a *Detroit Free Press* reporter. Seeking help through a regional recruiting firm, Poris stated that he found 20 qualified applicants, but only one of which owned a car and could reach the mall. The manager’s frustration was particularly acute because he stated that the mall construction was originally coordinated with DSR service to guarantee bus operation. Now that the operation was subject to a court injunction, Poris could not get laborers, even for a decent paying job. He expressed that

his hiring goal was “simply to make it possible for an Inner-City man to reach the mall without a two-hour bus ride and two transfers [from DSR to private Northville Coach]” (Morris 1968).

This complicated view of limited regional access allowed for the movement of Black workers, while simultaneously restricting opportunities at homeownership in racially exclusive areas through processes that were established and familiar. Between 1950 and 1970, total suburban populations doubled nationwide, while the 25 largest cities saw a net population decrease in the same time period (Kenyon 2004, 19). This rapid growth in suburban home construction was facilitated by federally backed mortgage guarantees that were available from the Federal Homeowners Association (FHA) and granted based on the practice of “redlining” racial minorities to protect property value and investments (Taylor 2019; Jackson 1985; Freund 2007; Kenyon 2004). Redlining explicitly discriminated based on race and national origin, marking properties in areas with high minority concentrations as a greater lending risk. This practice utilized property and tract surveys conducted by the Home Owners Loan Corporation (HOLC) to delineate areas of high risk, and to prevent home sales to minorities, especially Black and Eastern European immigrants that could jeopardize home value or destabilize neighborhood racial composition and jeopardize property investments. Although most suburban areas were built up after HOLC conducted residential surveys in the 1930s, the practice of redlining and exclusion based on race persisted, but under the guise of protecting investments, homeowners rights, property values, or preserving neighborhood character (Freund 2007, 6–9). Although these arguments for residential security were not racially coded, legally enforceable, or racially exclusionary, the result of their action led to racially homogenous growth of single-family homes owned by white individuals located in the suburban fringe beyond the reach of central cities

(Rothstein 2017; Taylor 2019; Freund 2007; Jackson 1985; Glotzer 2020; Sugrue 1996; Fishman 1989; Darden 1987).

Metropolitan growth was also underwritten by the federal government subsidizing homeownership for white citizens, and through federal financing of highway construction projects that facilitated fast automobile travel between distant suburban geographies and the central city. In many cases, funds were used in urban renewal programs beginning in 1949, and targeted for slum clearance, and later for highway development through blighted areas that were occupied by a majority of minority residents (Zipp 2013; Thomas 2013; Ammon 2016; Mumford 1981; Shelton 2017). These renewal projects, as their name implies, sought to remake parts of cities that were dilapidated, cramped, blighted, or otherwise unwelcoming in order to stop the process of perceived urban decay that was driving residents out. The process of urban renewal therefore leveraged federal investments to make it more livable to residents, and also modernized to be more easily navigable by car to avoid obsolescence (Zipp 2013).

In Detroit in particular, two major urban renewal projects displaced Black residents in the late 1950s and early 1960s in the Black Bottom and Paradise Valley neighborhoods. The first was business spur I-375 on the east side of Detroit that would link the I-75 expressway down directly into the central business district, ending on Jefferson Avenue at street level just 3 blocks away from Woodward Avenue. The construction of I-375 followed the original 1945 highway proposal for Detroit and was engineered to improve high speed and throughput for automobiles using an eight-lane sunken expressway with dirt embankments. The middle of 375 was sited over Hastings Street, which was the main street for Black-owned businesses. As part of the process of construction, the businesses and the families that relied on them were displaced and scattered throughout the rest of the city. The second major project was a widescale housing redevelopment

project in Gratiot Park, now Lafayette Park, that displaced 1,900 families. The area was redesigned by famous modernist architect Mies van der Rohe to include several condo towers, and smaller low-rise modernist buildings. While initial site plans called for public housing, to be constructed, those drawings were scrapped by Mayor Albert Cobo, and the resultant construction catered to educated and affluent members of the community to prevent “negro inundation” (Thomas 2013).

Both urban renewal projects significantly damaged the street grid of Detroit, and displaced families, communities, and businesses in the process. The before and after effects are visible in the Figures 3.2, 3.3. and 3.4 below. The images are aerial photographs that were taken in 1949, 1961, and 1967 respectively on the east side of the city, and downtown is seen at the bottom left, denoted by the confluence of the diagonal streets and taller buildings. Figure 3.1 shows the former dense street grid of Detroit in 1949, prior to construction. Figure 3.2 is an in-process image of the clearance that had begun in 1961. In figure 3.2, the Gratiot Park clearance is a larger white square in the center right of the frame, and north of it you can see the narrow rectangle of street clearance beginning for the expressway. The final figure, 3.3, shows the project in late stages of clearance in 1967. At this time, Gratiot [Lafayette] Park was completed, and some finished landscaping and curvilinear roads is visible. To the north, construction was continuing on the I-375 dig, which is now a much more pronounced and cohesive long skinny rectangle where clearance and digging was taking place. It would eventually run directly alongside the new Mies van der Rohe housing development, and curve westward into the downtown near the river.





*Figure 3.2 1949 aerial photograph of Detroit's east side depicting the complete street grid before the start of urban renewal projects and clearances. At the bottom center left of the image, the taller buildings of downtown are visible. These photos are aligned with cardinal directions on the compass. Wayne State University Library, DTE Aerial Photographs, 1949.*



*Figure 3.3 1961 aerial photograph showing the early urban renewal clearance for Gratiot Park happening in a large square at the center right. To the north, a narrow strip of land is being cleared for the I-375 expressway. Wayne State University Library, DTE Aerial Photographs, 1961*



*Figure 3.4 1967 aerial photograph, slightly more zoomed out than previous images. This shows the completed construction in Gratiot [Lafayette] Park with final landscaping. To the north, clearance continues for I-375 in a narrow rectangular strip of land that would eventually stretch all the way south before curving west to downtown.*

Suburbanization was not a proverbial light switch that instantaneously transferred residents and wealth to new geographies, but was a gradual process of migration that took place across decades as white city residents slowly moved out, and Black residents moved in. Between 1950 and 1970, this long process of white flight converted Detroit into the first majority-Black city in the United States, but also depleted the total population, losing 600,000 residents, even though it added 300,000 new Black residents in the same period. This demographic change brought significant flux to municipal budgets, especially the property tax base, sales tax, and income taxes. One tally of Detroit's property tax showed that the city dropped from \$5.1 billion down to \$4.6 billion in just the five year period from 1959 – 1963 (Riddle 1998). Reduction of this taxable property resulted in a similar deduction of city services, including schools, water, sewer, electric, trash, recycling, and snow removal, which in turn expedited increasing white

flight (Trounstone 2018; Shedd 2015; Mirel 1999; D’Anieri 2007). Neighboring municipalities of Dearborn, Warren, and Royal Oak notably prided themselves on prompt city services that responded quickly to the needs of residents (Johnson 1956; Riddle 1998; Mirel 1999). Within this expanding “Metropolitan Revolution” of post-war urban America, the growing battle was over capital resources, coordination, and board representation that all undermined the authority of the central city and threatened regional unity (Teaford 2006). In Dearborn, Mayor Orville Hubbard staunchly opposed an operating subsidy for the DSR, retorting “Are they dreaming? What do you [Detroit] want us [the suburbs] to do, put you on welfare?...They are already taxing the suburbs a half of one percent” referring to the City of Detroit income tax to non-residents (Holland 1970).

This process of suburbanization and central city decline significantly impacted service offerings for the public transit agency within Detroit. In this time period, the DSR did not directly control the larger political agenda of urban renewal or white flight, but they did experience a proportional decrease in ridership and reduction in operating revenues as the city population decreased after 1950. During this time, the power of the DSR to independently create a comprehensive regional system continued to decline. Without the financial capability to fund large-scale regional expansions, ridership continued to decline, and the fate of the DSR became closely tied to external forces and other political actors. This was a marked shift from the late 1940s, when the DSR was riding a wave of high ridership and profits after the conclusion of World War II, but actively chose not to fund new route expansions. As urban renewal, deindustrialization, and central city decline set in, the transit network effectively lost the financial independence and the power to determine suburban route expansions as these processes

of regional formation began to take shape, and redefine the interaction between the city and surrounding region throughout the 1950s, 1960s, and 1970s.

### The Decline of the DSR

With the suburbs unlikely to contribute funds to the transit network outside of their fares, Detroit Mayor Jerome Cavanaugh made the first step to offer an operating subsidy to the DSR in 1964 through a proposed City Charter amendment. With language approved by the Common Council, Cavanaugh introduced Proposal G to the city ballot in November, with long-sought language that exempted the DSR from paying taxes to the city. Cavanaugh pitched this politically not as a tax subsidy, but as a change that was required for the DSR to access funds from the newly passed federal Urban Mass Transit Act (UMTA) legislation. This was partially true, because in order for the DSR to qualify for federal dollars, there had to be a minimum threshold of matching funds contributed by the municipality (Detroit Free Press 1964). In his support of Proposal G, Cavanaugh acknowledged that he did not want to raise fares because the DSR provided “a vital function” for at-risk communities like “68,000 senior citizens who ride for 10 cents, the lowest such fare in the United States; to 50,000 school children who ride for 15 cents, and to the 16,000 occupants of Housing Commission dwellings, many of whom have no other means of transportation” (Detroit Free Press 1964).

Proposal G passed by a wide margin among city voters in November 1964, giving the DSR its first tax break after 42 years of operation, and briefly pausing the sliding revenues and ridership numbers – but ultimately the amendment was too little and too late. By the time the tax abatement was enacted, DSR ridership was 1/3<sup>rd</sup> of what it was back in the early 1950s, and it was unlikely the system would recover significant revenues or riders. The amendment was

written in such a way that allowed the DSR to recoup the taxes already paid in that calendar year. In an unfortunate twist that demonstrated how the city transferred funds between accounts, the tax revenue that the DSR contributed to the general fund was already paid out to the Detroit public school system, which had to refund \$554,000 as a result of the Proposal G vote (Golden 1964). A separate charter amendment in 1969 was also approved by city voters that temporarily alleviated the total amount the DSR had to contribute into its own pension fund annually, and freeing up additional capital (Cooper 1969). Two charter amendments in six years demonstrated the dire financial straits that the DSR was facing throughout the 1960s, but provided temporary relief.

The DSRs ability to apply for UMTA funding buoyed operation and finances in the middle of the 1960s and provided temporary stability to some metrics of service, but did little to correct the historic downward trend of riders throughout the system. Between 1964 and 1967, the transit system briefly rebounded in ridership and revenue, rising from a total of 154 million total passengers in 1964 up to 173 million in 1967, and operating with net profits once again (City of Detroit Department of Street Railways 1967; 1966; 1964). During these years, revenue miles operated also increased to accommodate the bump in ridership. However, the overall trends remained negative, and even a modest boost in ridership did not significantly alter negative trends from the 1945 peak of 659 million riders. Nevertheless, General Manager Lucas S. Miel reflected positively about the performance, noting that relative to other cities, the DSR's increase in ridership was the highest increase of any transit system in the nation. He also notably expressed optimism, as did most planners at the time, that urban renewal projects would attract residents back into cities, and onboard the public transit vehicles once again (City of Detroit Department of Street Railways 1966, 22).

Despite the brief respite offered by the charter amendment revisions, the DSR continued to slip into debt, and had to consider fare hikes to sustain operation at the end of the 1960s. Additionally, the court issued a final and unfavorable ruling in *Northville Coach Lines v. Detroit*. The findings asserted that the DSR, when operating beyond the City of Detroit municipal limits, it was acting as a common motor carrier of passengers for hire, and not in service of “governmental purpose” as it was when operating within its jurisdiction. Effective from the denied appeal in 1968, this ruling voided the 1940 Proposal 3 vote by the citizens of Michigan, and rescinded the 10-mile operation clause that the DSR was using to provide suburban service up to this point. Further, the ruling required compliance with the Michigan Motor Carrier Act, which meant that the DSR had to request and pay for operating permits from the Michigan Public Service Commission for any bus operation on public roads or highways beyond two miles past the municipal border (Supreme Court of the State of Michigan 1967). Despite the unfavorable ruling for the DSR, there was not a major shift in the revenue miles operated, or in the total system route miles after the decision. This suggests that, although empowered to operate suburban transit, the DSR had already scaled its longer distance back suburban operation, or had routes like the one to the Dearborn Ford River Rouge plant that was within the two mile operating limit.

Unable to access new markets of potential riders, the DSR languished as the City of Detroit population continued to dwindle, and residents were unable to take public transit to job opportunities that existed in the suburban municipalities. Coverage of DSR affairs increased in the *Michigan Chronicle* during the end of the 1960s, including mentions of neighborhood community groups and meetings that were overlooked by reporters at the larger *Free Press* or *Detroit News*. One such meeting was a public hearing for comments on a proposed fare increase

to 40 cents held by the DSR Commission and the Common Council in 1972 that was attended by 200 community residents. By comparison, the fare was 22 cents in 1966, so this proposed increase represents nearly a doubling in cost. One community representative, Mrs. Lena Bivens representing the Brewster-Douglas Council, blasted the DSR officials for their single minded fixation on finances. “All you’re thinking about is \$7,000,000...not about how we’re gonna make it. I’m talking about the community I was, born, raised and still live in. I think all of you, including the mayor, better take another look at what you’re doing....While you’re out sipping cocktails, we’re out there in the street battling and scratching – trying to live” (B. Black 1972). Another respondent, a student named Charles Peeples also spoke out about high fare costs hurting students and young workers who were “trying to go to school and ‘make it’ the right way” but could not afford \$1 per day in fare costs that the new increase would charge. Mrs. Janie Peterson voiced a similar concern, adding that “if you raise fares you’re going to take our children out of school...how is my son going to get home from way out at Marygrove? You were put in office to help us, not hurt us” (B. Black 1972). An advertisement for a bus riders advocacy group urged similar community action, arguing “Black people support the DSR more than whites but get the worst service. Waiting periods are sometimes as long as 40 minutes to an hour, especially at night” (Henry E. Slayton Sr. 1970). Other newspaper reports from regular commission meetings continued throughout the late 1960s and early 1970s to capture the sentiment of residents and community members as well as administrators debated system changes that would ultimately increase fares. These frequent fare increases demonstrated that the DSR was in desperate need of financial aid and ran the risk of running out of cash to meet payroll.

The State of Michigan legislature stepped in to try and resolve the ambiguity around transit operation in the metropolitan region in 1967 when it created the Southeastern Michigan Transportation Authority (SEMTA) to consolidate the disparate private transit organizations across the metropolitan region, and attempt to build a comprehensive regional network. When SEMTA was created, it was given access to regular funding in the form of state license renewals. The nascent transit agency did not have any legal authority to levy taxes on its own (D’Anieri 2007). While SEMTA could buyout private coach lines and build a fleet of second-hand buses, it lacked the ability to raise substantial capital needed to fund a larger transit project with infrastructure improvements or expansions. As detailed by Phil D’anieri, SEMTAs early operation was plagued with distrust and concern by both suburban and city leaders that other municipalities would take advantage of their participation and tax base (D’Anieri 2007).<sup>31</sup> On one hand, Detroit comprised a vast majority of system ridership, and the existent transit operation met the criteria for federal aid through UMTA that would be critical to fund future projects. On the other hand, suburban leaders were hesitant to pledge their tax dollars to a regional project that they did not directly control. The suburbs especially feared that they would contribute more funds due to their property tax base, and that those funds would be disproportionately spent outside of their community, to construct transit facilities for residents that were not in their community, and ultimately build system that would not be used by their community. Ultimately, the Detroit and the suburbs could not agree on a system design, an equitable payment scheme, or equitable committee representation. Even with major players like Michigan Governor William Milliken, and two U.S. Presidents Ford and Carter attempting to

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<sup>31</sup> For a much more thorough dive into the regionalism and transportation operation of SEMTA within the metropolitan Detroit area post-1967, see D’Anieri, Philip J., *Regional Reform in Historic Perspective: Metropolitan Planning Institutions in Detroit, 1950 – 1990*. 1v., 2007. Especially Chapter 5 “Transit.”



grease the wheels by pledging \$600 million in total financial assistance, there was no compromise on a regional transit system, and nothing substantive was built. In a twist of historical irony, one of the major sticking points in debates about SEMTAs plans to build a unified and comprehensive transit system was the necessity to construct a keystone element in downtown Detroit that could anchor the entire metropolitan system – something that had longevity, reliability, and the capacity to move large amounts of people quickly across the entire Central Business District and through major employment areas. Nearly 20 years after Detroit had discontinued the streetcar, SEMTA was trying to reinvent the rail.

The 1950s and 1960s represented a critical period of Detroit’s metropolitan expansion, both in terms of demographics and transit operation. While the wider region underwent a racialized process of white flight and suburban growth, the City of Detroit experienced a gradual decline in property tax revenue, total population, and transit service. The 1950s was a crucial period in deciding the future of transit in the Detroit region when ridership began to slip. Although revenues declined, the total system still had the necessary staff, equipment, and density of service to provide a high speed, high frequency travel throughout the area. However, DSR administrators were prohibited from implementing necessary system changes by financial barriers that were beyond their control, notably imposed by the city charter, and in the municipal tax codes. City officials, namely Mayor Cobo and members of the Board of Street Railway Commissioners, had the political power to alter these rules but lacked the political will to do so. Nowicki in particular highlighted the necessary changes to keep the DSR competitive as early as 1951 in his public televised appearance, but the commissioners, and Mayor Cobo all did not move to even consider a tax proposal until 1954, and even then the matter did not get in front of the Common Council for consideration. The result of their inaction post-1951 was that the DSR

had was caught between rising cost of service, and decreasing ridership, and declining urban population. This predicament necessitated significant intervention to trim service and raise fares, which began a cycle of pricing out residents that had long relied on the DSR for daily commutes. By the time these structural issues were addressed, and Detroit approved financial relief in 1964, the intervention was too little and too late to save aspects of the transit system that had already been divested, and whose riders had either already moved, or purchased private transportation. To those that remained, a growing majority of Black residents, further service reductions threatened the health, safety, and livelihoods of workers, students, and residents who relief upon transportation to reach their jobs, schools, or families. Increasing fares and decreasing service placed an unfair cost burden that were shouldered with alone. The suburbs, and SEMTA, made clear their opinion to shut out possible avenues for revenue sharing to neighboring transit systems. After the Rebellion in 1967, the unfavorable court ruling from the Michigan supreme court, and the creation of SEMTA, it became clear that DSR buses would not cross the municipal border, and that the ailing finances of the system had to be addressed through the city alone. When this lack of physical mobility was coupled with housing discrimination that prevented Black families from purchasing homes in white neighborhoods, the racial boundaries in the Detroit region reified. As suburbs grew throughout the remainder of the 1970s and 1980s, Detroiters seeking jobs needed a car to access opportunities beyond the city limits. Despite state and federal intervention to create a metropolitan transit authority in 1967, the same problems of regional funding would stymie attempts at establishing a unified transit network for decades to come.

## **Conclusion**

In 1922, the City of Detroit purchased a private streetcar company, and took municipal ownership of all public transportation in the city through the newly created Department of Street Railways (DSR). The purchase represented a critical investment into an essential city service that was seen as the cornerstone of a modern metropolis. As Detroit continued its rapid population growth in subsequent years of the roaring 1920s, the cream-and-red livery of the DSR streetcars were the omnipresent vehicles that formed the backbone of life in the city, moving nearly one million riders each day to work, school, shopping, and other urban amenities. The largest streetcar network to be entirely publicly operated was not without faults, and faced enormous growing pains as it struggled to provide reliable transit service to low-density, residential areas that were newly constructed, or in newly annexed plots in far-flung reaches of the city. When the cost of rail infrastructure expansion proved cost prohibitive to serve these areas, the DSR turned to small diesel motor buses to act as low-capacity feeders. The decision to implement and formalize bus transit service was instrumental in providing transit service to every corner of the city, allowing for low-cost route expansions that could be deployed with minimal infrastructure investment. Streetcars remained the financial foundation of the transit network, carrying the most passengers on extremely short headways through crowded streets and along major routes. Within only five years of bus deployment, the rubber-tired fleet surpassed the total route mileage of streetcars, but carried far fewer passengers. Despite their lower capacity, they successfully served an essential task as feeders that allowed residents in low-density neighborhoods to

transfer onto mainline service on the nearest radial arterial avenue that carried them downtown and to points beyond.

Detroit's transit ridership declined significantly during the Great Depression, reflecting high unemployment and the struggling national economy. Upon ridership returning in the late 1930s, General Manager Fred Nolan made a pivotal decision to invest in a significant expansion to the diesel bus fleet, and forego purchasing updated streetcars. Gradually from 1936 through 1938, rubber tired buses were deployed along major routes during off-peak times, and were well received by residents who favorably regarded them as a quiet and modern form of transit. At the outset of World War II, a massive surge in employment and manufacturing took place to produce tanks, bombers, vehicles, and munitions for the war effort. Government supply rations limited gasoline, rubber, and steel for civilian use, and ridership on the DSR soared as passengers commuted to factories throughout the so-called Arsenal of Democracy. By 1945, the ridership would reach its total peak at 659 million passengers.

Upon exiting World War II, the DSR underwent an ambitious modernization campaign that removed the oldest and poorest performing streetcar lines, and purchased an entire new fleet of streetcars and buses. Seeking to capitalize on the shift towards city-funded freeway construction, General Manager Richard Sullivan prepared the transit system for regional service expansions into the rapidly growing suburbs. Maps during this period track suburban growth between 75 and 100 percent in areas just beyond the city border. For the DSR, buses would once again demonstrate their flexibility and low-overhead to provide feeder service to low-density residential areas and transport them to Detroit. A positive state-wide referendum in 1940 affirmed the DSRs capacity to operate 10 miles beyond the City of Detroit border. The transit system had new buses, high ridership, sufficient revenues, legal authority to operate, and

knowledge of suburban growth trends – all the necessary power to execute suburban transit service – but did not capitalize on the wave of post-war suburban growth.<sup>32</sup>

After 1951, the Department of Street Railways no longer had the power to determine or execute suburban service on its own. A series of factors coalesced to bring financial hardship upon the DSR throughout the 1950s. In April, a major union strike of transit operators halted service for 59 days, and ridership and revenues dropped significantly. A provision of the original DSR operating charter required that the system earn a profit, so a combination of fare increases and service cuts were used to boost income and decrease operating costs. Rising costs of pensions, materials, and labor in the post-war economic boom also stressed budgets, increasing costs of repairs and parts. City officials like Mayor Cobo and the Board of Street Railway Commissioners did not act upon an early 1951 plea by General Manager Leo Nowicki to alleviate the average annual \$750,000 tax burden that the DSR paid to the City of Detroit, and did not move to make a charter revision to shift how debts were funded to free up cash for operating expenses. Additional taxes paid yearly to nearby neighboring suburban municipalities were also not waived by suburban officials, who simultaneously acknowledged the importance of transit, but did not provide tax relief for its operation. Seeking to simplify aspects of maintenance and further lower operating costs, General Manager Nowicki opted to totally phase out and convert the final streetcar lines in the central city to diesel bus operation in 1956. These financial woes compounded throughout the 1950s and 1960s ultimately resulting in repeated service cuts and fare increases that negatively impacted Detroiters that still relied on the transit system. The 1963 creation of the Southeastern Michigan Council of Governments (SEMCOG) as

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<sup>32</sup> Some minor suburban routes were added during this period, but they did not penetrate far into suburbs, and served primarily points of interest such as new shopping malls, or along arterial paths. The DSR never operated permanent intra-suburban transit.

the regional Metropolitan Planning Organization (MPO) undercut the centrality of Detroit as a broker within the larger region, formalizing the role of the State of Michigan in delineating responsibility, which grew to build a specific regional transit network in the form of the Southeastern Michigan Transportation Authority (SEMTA) in 1967. With these two state agencies, the possibility of a regional system headed by the DSR was effectively ended.

Overlaid onto the narrative of the rise and fall of public transportation in Detroit is also a social history of race and Black migration. Originally starting just before 1920, two waves of immigrants arrived in Detroit seeking low-skill high-wage factory work. Detroit Black population increased seven fold from 1920 to 1950, increasing from 40,000 to 300,000. Wartime employment shortages led to Black residents taking jobs as transit operators, while packed streetcars in this period meant that white and Black residents were forced into uncomfortably close proximity on a regular basis. These encounters often erupted into vulgar insults, or physical aggression, and even lead to white mob carrying out targeted beatings on Woodward streetcars during the 1943 race riot. As the overall Detroit population began to decline after 1950, white residents fled to racially homogenous suburbs, while Black residents largely remained in the city, unable to access loans to purchase homes as a result of practices like redlining. Although Detroit did not officially become a majority-minority city until the 1980 census, the process of depopulation and out migration of predominantly whiter, more affluent residents meant that remaining residents languished with less access to quality services that were once a hallmark of the thriving metropolis. Service cuts and fare increases, although not meant to target Black Detroiters, were disproportionately borne by Black communities that loudly protested when buses stopped running to their churches, and when continued fare increased priced them out of regular riding.

The history of Detroit's municipal transportation operation does not include decisive racism that determined the fate of the city. The segregated metropolitan area that exists in contemporary Detroit is the product of decades of systemic racial behaviors that entrench and secure whiteness, power, property, and wealth, while actively preventing Black families from accessing equal opportunities for education, or property ownership and generational wealth accumulation. Redlining, urban renewal, school segregation and busing controversies, and restrictive covenants are just a few of many methods used to restrict access and resources of Black families. These types of existent exclusionary and discriminatory practices are not the focus of this dissertation. To this rich literature of racial animosity, I add the additional dimension of transportation decline, and show how transportation decisions contributed to the inability of black residents to access physical destinations such as work, school, church, or shopping. The nuanced history of this growing transit insecurity was not an instantaneous light switch, but a long and gradual process that is tied to governance factors within the Department of Street Railways, the City of Detroit, and the wider state and metropolitan region. I argue that, prior to 1951, Detroit and the DSR had the power and capacity to expand suburban transit but ultimately did not. The consequences of this decision were borne out post-1951 in the form of financial constraints, service reductions, and generalized decline in service speed and coverage that impacted residents who could no longer get to their destinations. Delineating the power of the DSR to determine its own future prior to 1951 draws upon the previously un-told history of transit operation and management from its conception in 1922, and transitions into a narrative of regional growth, fiscal hardship, and ultimately the decline of the central city system throughout the 1950s.

The consequences of inadequate transportation are wide ranging. In January of 2015, the Detroit Free Press published a profile of 56-year-old Detroit resident James Robertson. Titled “Detroit’s Commute of Heart and Sole” the story demonstrated the gaps in public transportation offerings in the Southeastern Michigan region that forced a bus commuter to walk a total of 21 miles on his daily commute to a second shift factory job in the northern suburb of Rochester Hills. The human-interest piece extolled Robertson’s resilience for his “olympic” commute, and even included a quote from the plant manager who praised his attendance and perseverance, noting that if Robertson could walk to work from Detroit, other employees had no excuse for absenteeism. The story got viral attention and was covered in national papers from New York to California, as well as shared in online publications like VICE and Vox. Three separate GoFundMe pages were launched, and donations poured in to total \$360,000. A local Ford dealership seized upon the media hype in a savvy public relations move and donated a brand-new cherry-red Taurus. Robertson ultimately used the donated funds and new car to relocate himself to the suburbs. While these heartfelt donations were enormously generous, the response to Robertson did not fundamentally address the underlying structural inequity of the poor public transportation around Detroit. Robertson’s commute was couched as a triumphant capitalist feat of a man overcoming lack of transit connectivity and persevering through Michigan’s blustery winters.

The story of James Robertson is one of deep inequality, and sparked understandable questions about the disjointed transit network in the Detroit metropolitan region. On the surface, a 21-mile walking commute could be caused by many different factors – poverty, income inequality, high cost of ownership for a personal automobile, and so forth. While these are not desirable in any society, they are all mask the true reason that Robertson walked 21 miles a day



for more than 10 years – there was an inadequate transit system that was historically shifted away from cross-county service. Detroit once operated the largest bus transit system in the entire nation, and had the power, legal authority, cash, and knowledge to provide a regional system, but did not. Regardless of if this decision was made with racial intent – the effects experienced by Black Detroiters without access to reliable transportation demonstrate that the impact is disproportionately racial.

A year after Robertson’s story was published, the Detroit region very narrowly voted down an ambitious \$4.6 billion dollar regional transportation plan assembled by the state-appointed Regional Transportation Agency (RTA) that was tasked with providing reliable and comprehensive transit throughout the entire region. Later, the *Detroit Free Press* reported that this was the 27<sup>th</sup> failure of Detroit region to enact a comprehensive transit plan dating back to the repeatedly blocked attempts of SEMTA in the 1970s. My dissertation research, although not specifically addressing contemporary planning debates, nevertheless provides invaluable historical context that planners and politicians should be aware of as they try to, once again, seek to connect the city and suburbs using public transportation. I argue that public transportation systems *need* to be considered when analyzing processes linked to suburbanization, white flight, and suburban wealth because lack of access to transit is a spatially exclusionary practice that reinforces segregation within metropolitan regions. James Robertson’s 21-mile daily walk exemplifies the impact of insufficient transit facilities, and is itself the result of a long history of uneven services between municipalities. Although public transportation is not solely responsible for racial segregation, it contributes to, and reinforces, other forms of existing discrimination such as redlining, school bussing, restrictive covenants, predatory lending, block busting, and urban renewal. While literature on these practices is very common, we do not understand the role

or process of public transportation systems as it pertains to racial exclusion between city and suburbs. Detroit's public transportation sought to modernize city transit to meet contemporary challenges, but ultimately never comprehensively operated the new buses in the surrounding suburbs, despite having sufficient resources, knowledge, and jurisdiction to do so. This dissertation ultimately seeks to contribute a missing dimension to existing literatures in urban planning, urban history, and urban studies, and expands our understanding of racially exclusionary processes in metropolitan regions with the goal of correcting decades of inequity. Knowing how these processes functioned historically is critical to dismantling them in present plans, and future initiatives to build a more just, equitable, and peaceful city.

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