

Cleveland: Confronting Rail Transportation Issues in a Rust Belt City

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In 1910, Cleveland was the sixth largest city in the country (Spangler et al. 8). Downtown was crowded with workers on their way to the office towers or steel mills, and shoppers on their way to the major department stores. Supporting this network was a system of streetcars and interurbans that brought citizens in from miles outside of the city center, transporting over 200 million riders per year (Spangler et al. 8). By 1960, this rail system all but ceased to exist, and Cleveland was in the beginnings of an urban decline that is almost unrivaled in American history. While the decline of Cleveland is not tied to the decline of its light rail system, the loss of a major aspect of public transit did nothing to help the city. Yet, Cleveland remains one of the most centralized-decentralized cities in the nation. In other words, there are relatively few important business districts that serve a metropolitan area spread out over several counties (Lendel et al.). Therefore, public transportation remains an essential part of the city's landscape, as people must be transported within the Northeast Ohio region. With light rail being shown to contribute beneficially to cities' economies, should Cleveland expand its light rail system? In short, no; the demographics of the city and financial issues create too high of a barrier to construct/extend the RTA light rail system. In order to address this question more fully, it is important to first understand the history and reasons for the decline of Cleveland's original rail system, asking whether or not these reasons are still considerations today.

In exploring this question, it is important to understand the differences between light rail, streetcars, and interurbans. While light rail and streetcar are often used interchangeably, in theory they represent two different systems. Light rail systems are generally grade-separated

trains that occasionally run on streets, often in dedicated lanes. They also can include subway components, and typically have larger train sets than streetcars (Malouff). Streetcar systems typically do not have grade separated lines for their entire routes, and have smaller vehicles more akin to buses on rails. There are streetcar systems that have lines that could be considered light rail transit, but the vehicles used generally prevent that designation (Malouff). Lastly, there are interurbans, which are intercity train systems that have some light rail qualities (such as single car trains) (Middleton). These distinctions will be important to note throughout the paper.

It is also important to consider the previous rail transport companies that crisscrossed the city. The first, and largest, of these companies was the Cleveland Electric Railway (CR), which was created by the merger of the previous Cleveland Electric Railway Company and the Cleveland City Railway Company (Sensel 53). The new CR owned two-hundred and twenty miles of tracks that extended across the Greater Cleveland area. At the time of CR's formation, streetcars were already a critical part of the city's infrastructure, and one judge even stated that "the [streetcar], which tends more than almost any other material influence to make the residents of country and city a homogeneous people, is a proper vehicle on the city street," (Hambley 3). State Representative Stephen Hambley, who wrote his dissertation, *The Vanguard of Regional Infrastructure*, about the Cleveland electric railway system, described the system as the "economic and social link" of the region. Yet, the company became beleaguered with financial troubles in the 1930s and 40s. This led to the creation of the Cleveland Transit System, an act that began the decline of streetcars in Cleveland.

The other two primary systems in Cleveland during the early 20th century were not

streetcar systems, but interurbans. These light rail vehicles were more akin to commuter trains; they travelled much further from the center city than the traditional streetcar network, often on their own dedicated rails. The older of the two networks was the Lake Shore Electric Railway (LSE), which ran from Cleveland to Toledo by way of Sandusky and Fremont. In the Cleveland area, the rail system passed through the western suburbs of Cuyahoga County and Lorain County, with stops in Rocky River, Beach Park (present-day Avon Lake), and Lorain. (Harwood et al. 5). Often, business on the line came from commuters in these suburbs, with the Cleveland to Toledo rider being less common. The other system was the Shaker Heights Rapid Transit Company, originally known as the Cleveland Interurban Railroad. This interurban, stretching to the eastern suburb of Shaker Heights, was built by the Van Swearingen brothers to connect their planned suburb to the city center (Encyclopedia of Cleveland History, “Shaker Heights Rapid Transit”).

Filmmaker Brad Masi, whose documentary *Streetcar City* focuses on the development of the streetcar suburbs, lists this line as a catalyst for the development of suburbia, as “folks could jet downtown in 20 minutes.” The Shaker Heights interurban was expanded several times throughout its existence, and it now stretches to Green Road on one line and Warrensville Center Road on the other (Dubelko). Of the three primary light rail systems in Cleveland during the early 20th century, this is the only surviving example.

While Cleveland’s light rail companies experienced their heyday during the 1920s with over 450 million riders per year, thirty years later the system was almost nonexistent. The decline of the Cleveland Railway network and the Lake Shore Electric were due to several different factors, some unique to each line. The LSE, the first to fold, was severely harmed by the introduction of the automobile. As Representative Hambley notes:

the emergence of the private automobile, jitney buses and commercial trucking hindered the streetcar and interurban rail systems starting in the late 1910s and accelerated in the 1920s. As cities further developed and expanded into new neighborhoods in the 1920s, the rail system of streetcars proved to be too expensive and too over-regulated by municipal governments to warrant the investments of the private sector (Hambley, Personal Interview).

Essentially, the automobile was more valued in a competitive economy than the streetcar. Without municipal ownership, the economics of the situation dictated that the company would soon become obsolete. With the onset of the Great Depression in 1929, ridership took a fatal blow, and the company was forced into bankruptcy in 1933 (Harwood et al. 125). In May of 1938, with no suitable buyer and a decline in freight service, the LSE lines were abandoned, ending intercity interurban travel along the western lakefront (Harwood et al. 141).

Separate from the LSE's decline, the decline of the Cleveland streetcar system was far more political. CR's license to use the roads of the city was on a twenty-five year basis. In 1935, once the original 1910 lease expired, the City of Cleveland authorized only one-year leases, as the city wanted to take over the rail system and modernize it (Spangler et al. 9). CR and the city negotiated for several years before settling on a buyout price, and on April 28, 1942, Cleveland took full ownership of the streetcar system. The new organization, the Cleveland Transit System (CTS), in 1943 "drafted a postwar transit modernization program that proposed using existing railroad rights of way to eliminate surface streetcars inside the city limits" (Souther 180). In 1949, the plan was adopted, and construction on the modern day Red Line heavy-rail route began. Five years later, the last streetcar was taken off Madison Avenue,

ending the era of streetcars in Cleveland (Cleveland Memory Project, “Spring Garden Avenue - Cleveland Transit System’s Last Streetcar”).

The reasons for the decline of streetcars in Cleveland are varied. For one, the city wanted to construct a major rapid transit and subway network that would have increased passenger capacity. The city argued this would be cheaper than modernizing the entire streetcar system, as the rapid transit line could be built for only \$22.5 million (Souther 181).

Additionally, Cleveland had begun to spread outwards, with suburban commuters driving into the city. The issue that arises, as Brad Masi mentions, is “one of density. . . . Cleveland, since the 1950’s, has gone through a process of chronic de-densification- moving from a city of almost a million residents to around 370,000 today.” This de-densification made streetcars no longer viable, as many commuters wanted faster transportation (a la modern light rail) to the urban core. The proposed subway system would do just that. However, despite bonds for the subway system being passed, concerns over the downtown portion’s \$35 million cost (which ballooned to about \$50 million) led to the system's defeat (Souther 189). Therefore, a void left by the destruction of the streetcar system, which was supposed to be filled by subways, remains to this day. However, the history of the Shaker Heights rapid line was quite different. Several factors kept the lines running as an independent transit company well into the 1970s, chief amongst them the lack of a freeway running through Shaker Heights. In the 1950s, Cuyahoga County planned a freeway network that would include the Clark Freeway, a superhighway running right down Shaker Boulevard. This freeway was cancelled in the mid-1960s due to environmental concerns, with the proposed path through Shaker Lakes receiving much opposition (Richmond). Therefore, the commute time downtown from Shaker Heights was not reduced, with both automobile and light rail commute times remaining around twenty minutes or less during rush hours (Masi). To this day, there is no expressway or boulevard that directly connects Shaker Heights to Cleveland. Therefore, the Shaker Heights lines were able to provide

a useful means of transport for those who lived within Shaker Heights and the surrounding suburbs.

By the mid-1970s, transit systems began to be regionalized across the United States. This regionalization was argued to create easier access to state and federal money and increase transit efficiency in urban areas. After a seventeen-day strike by Cleveland Transit System workers and increasing ridership issues attributed to a declining system, as well as increasing organizational issues caused by several city-based independent transit systems, Cuyahoga County decided to regionalize. In 1974, the Greater Cleveland Regional Transit Authority (RTA) was formed, and the “individual city lines were all consolidated into a regional system” (Masi). These networks included the Cleveland Transit System’s rapid transit line and the Shaker Heights light rail lines, renamed the Red Line and the Blue/Green Lines. Capital improvements began, with the purchasing of new railcars for all three rail lines and the rebuilding of stations over the next several decades (Greater Cleveland RTA, “History”). In 1996, the RTA opened an extension of the light rail lines to the Cuyahoga River and Lake Erie waterfront, connecting Tower City Center and Public Square with the Flats East Bank, the then-Cleveland Municipal Stadium, and the Rock and Roll Hall of Fame (Naymik). While the line had high expectations in the 1990s, ridership has not met those expectations, and with the exception of special events in the stadium or in the Flats East Bank, the line is rarely used, with “400 riders per day” (Naymik).

Since then, there has been no expansion of any rail transportation in the City of Cleveland. However, the city has continued to sprawl since the 1950s, leading to many areas not being served by rail transit. With issues such as climate change and urban sprawl coming more into focus, there has been an increasing amount of new transit construction in other cities around

the nation. Light rail has led the way during this new era of transit, with cities such as Portland, Denver, and Los Angeles expanding/constructing light rail systems (Levinson et al. 74-75). In contrast, Cleveland's transit system has been shrinking, even though the metro area's population has been relatively steady since the 1980s. If Cleveland were to follow the lead of other American cities there are several factors that must be considered, including ridership, funding, and the change in demographics that led to the decline of the original streetcar system.

Before I discuss the challenges and benefits of a potential light rail system in Cleveland, I would like to illustrate the importance of this question. Mass transit in general is a key institution in local society, allowing for the transportation of workers across regional areas (White). In many cases, those most affected by public transit issues are those who need government assistance. Gillian White, in her article regarding the importance of public transit, states that in "many cities, the areas with the shoddiest access to public transit are the most impoverished," (White). As the job of the government, according to the Constitution, is to "promote the general welfare," taking action to lift those out of poverty is a must. Anything else would represent a violation of ethics through the violation of the national charter. One of the issues White mentions is the lack of geographic reach for transit, leaving those without cars in an impossible situation. In Cleveland, this is a major issue, as there are neighborhoods within the city where car ownership is below 70% (Lendel et al.). Additionally, some lines can take an inefficient amount of time to travel to the city center from their endpoint, a commute time that has a disproportionate effect on the impoverished who may not be able to afford childcare or other time-conscious services. The RTA estimates that 20,000 residents depend on mass transit for commuting to work (Greater Cleveland RTA, "Overview"). It is clear that light rail would increase overall access by increasing the capacity of transit lines, allowing for more efficient

transportation across a larger regional area, and providing that efficient transportation at a low cost. This research can be justified as important to society, as improving access and efficiency of public transportation has been shown to positively impact those who need these public services the most.

With regard to a potential expansion of Cleveland's light rail system, there are several factors to consider. The first is whether or not the issues that doomed the original streetcar network exist today. One of the more profound differences between Cleveland today and the Cleveland of the early 20th century is the physical size of the metro area. Cleveland is far less dense today than it was during the streetcars of yesteryear due to "rapid suburbanization and corresponding population decline in Cleveland" (Masi). The central neighborhoods of the city have been impacted the most, with neighborhoods such as Fairfax losing over 80% of their population since the 1950s (Lay et al.). This decline in both urban population and population density was, as Masi stated, one of the primary causes of the decline of the original Cleveland streetcar system, and continues to this day. Therefore, an extension of the rail system must take this decentralization into account. For example, Toronto, which has perhaps the most successful streetcar system in North America, is also one of the most densely populated cities in the continent. Portland and Seattle are other examples of densely populated cities with streetcars (DH Toronto Staff). Less densely populated cities, such as Cincinnati, have had more of an issue establishing a successful streetcar system. Yet, comparable less-dense cities, such as Denver, Pittsburgh, and Minneapolis, have found success with light rail systems, which are able to "move riders more efficiently across greater distances" when compared to streetcar systems (Levinson et al. 67). As such, keeping the failures of the original Cleveland streetcar system in

mind, it would be more preferable to establish a suburban light rail line, which would be far more befitting of Cleveland's population density than a traditional streetcar line.

One drawback of light rail, however, is its expense. Light rail systems cost considerably more to construct than the average streetcar or bus line, with the cost of the mile-and-a-half long Waterfront Line at \$70.9 million dollars alone (Greater Cleveland RTA, "How the Waterfront Line Was Constructed"). The cost of Boston's Green Line Extension, a current project, is estimated at "\$490 million per mile," (Levy). As such, funding is a key item to discuss when planning any light rail system. With the financial crisis currently striking the RTA, this discussion becomes even more important. The RTA has had funding issues for years, stemming from the fact that the State of Ohio has spent far less on public transit than other states. In fact, Ohio ranks 45th in the nation on per capita public transit spending (LaFleur). Considering that the state has three of the thirty largest metropolises in America, this is a striking statistic. When examining local transit funding issues, the effects of underfunded/mismanaged public transit is clear. An Ohio railroad and mass transit advocacy group, All Aboard Ohio, estimated that the RTA has a "\$254 million gap in capital program funding needed to bring RTA bus and rail equipment and facilities up to a state of good repair" (Prendergast). Therefore, the RTA has fallen into a state of financial emergency, being forced to cut back service in order to maintain the current system. These cuts have impacted both the service frequency and maintenance of the rail lines, with All Aboard Ohio declaring that rail transit is endangered in Cleveland (Prendergast). With forty-year-old rolling stock and poor levels of infrastructure quality (the RTA has been "cannibalizing" existing rail cars for parts instead of purchasing new ones), the RTA is not in the best position to provide the funding for a light rail extension (Prendergast). If the state or federal government were to provide funds for

a capital improvement of that magnitude, then the RTA would do well to explore a light rail extension, but with the agency's current financial situation, any form of light rail extension would be cost prohibitive.

Assuming that funding was to be secured for a light rail line, the next issue that planners should consider is ridership. This is an issue that is known to Cleveland; the Waterfront Line, connecting Tower City to the Flats Entertainment District and the football stadium, has fallen far below its initial ridership projections, to the point of being dubbed a "Ghost Train" (Naymik). If a new light rail line were to be constructed and maintained, it must follow a line that runs to the outer suburbs, where those who work in the city of Cleveland live. Specifically, the line should be focused toward the western suburbs, as there are fewer jobs located within those suburbs that would not require a vehicle to reach. The eastern suburbs generally have more entry-level jobs within their own cities, as well as two existing light rail lines (Lendel et al.). Regardless, with 100,000 workers in downtown Cleveland, there must be a way to efficiently serve these potential riders (Exner). As long as it is more efficient to drive downtown and park, any rail line will have little impact. Yet, an opportunity exists to take advantage of downtown commuters using transit by efficiently utilizing a park-and-ride system, in which a large parking area is built near a rail station to allow commuters a carless trip downtown. This system could be realistically implemented using the current RTA light rail system. For example, the Green Line could be extended to a park-and-ride at Beachwood Mall along I-271, and the Blue Line to I-480. These park-and-ride lines would echo the more successful light rail systems in the U.S., including Denver, Los Angeles, and St. Louis, which primarily serve commuters through suburban stations (many of which have park-and-ride components) (Duncan et al. 155-156). Again, without a vast amount of funding, this scenario is

at best a distant possibility and at worst a pipe dream, and any light rail expansion of that magnitude would be in the range of several hundred million dollars.

Given the issues of population density, transit agency funding, and construction costs, and that the issues of funding and demographics led to the failure of the original Cleveland streetcar system, the RTA should not endeavor to construct a new light rail line. While a short expansion, such as a one-mile extension of the Blue or Green Lines to a park-and-ride at I-480 or Beachwood Mall, should be considered, the RTA has more pressing concerns at the moment. Additionally, with the issues of population decline and urban sprawl in the Cleveland metro area, as well as the sufficiency provided by the current highway network for suburban commuters, the benefit of a new light rail line would likely not exceed the cost. Instead, the RTA should consider capital improvements on its existing system, such as rebuilding stations, ordering new train sets, constructing new bus stops, and other items that can create a higher quality system.

Others may argue, however, that many Midwestern cities with similar qualities to Cleveland have constructed successful light rail systems. One study specifically points out the economic benefit of St. Louis's Metrolink, a light rail system serving a city with fewer people than Cleveland (Garrett 19-20). However, the economic benefits of a new light rail line do not outweigh the damage such a line would place on an overburdened transit system like the RTA (Bliss). For example, the Cincinnati Streetcar, which has a ridership of two-thirds of its initial projections, has been credited with promoting development in the Over-the-Rhine neighborhood (Bliss). Yet, critics say that the cost of the streetcar is too high to justify the meager benefit it has produced. With the RTA in the state that it is in, the possibility of an expensive light rail line becoming a financial burden would be disastrous, even if economic

development was spurred. Once the RTA is financially stable, then a light rail line should be considered, but as demand at the moment is not high enough to warrant the cost and disruption that a light rail line will create, the RTA should not pursue this type of project.

There are, of course, many other points that can be raised either in support of, or against, light rail transit in Cleveland. Opportunities for further research include commuter rail, Bus Rapid Transit, and light rail routing that would enhance the transportation scene in the city. These other methods of transportation may be able to achieve many of the goals of light rail, but studies have shown that light rail, when well planned, is one of the most effective forms of mass transit. However, the Greater Cleveland Regional Transit Authority should be concerned with the maintenance and operation of its current fleet, which has been lacking in recent times. If the transit organization is able to stabilize its funding issues, it should consider expanding rapid transit capacity to increase the efficiency of the transit system and increase access to mass transit, issues that have plagued Cleveland since the streetcar era. Only then will there be a potential to rise above the issues that have plagued Cleveland transit for almost a century, and return to the world-class transportation system that existed at the beginning of the 20th century.

Works Cited

- Bliss, Laura. "Enough With the Streetcars Already." *CityLab*, Bloomberg Media, 2 Oct. 2017.
 bloomberg.com/news/articles/2017-09-29/streetcars-like-detroit-qline-still-underperform.
 Accessed 29 Nov. 2020.
- Dubelko, Jim. "The Shaker Lakes Trolley - 'The Earlier 'Rapid' Trip Downtown.'" *Cleveland Historical*, 5 Mar. 2012. clevelandhistorical.org/items/show/418.
 Accessed 29 Nov. 2020.
- Duncan, Michael, and Robert K. Christensen. "An Analysis of Park-and-Ride Provision at Light Rail Stations across the US." *Transport Policy*, vol. 25, 2013, pp. 148–157.
- Exner, Rich. "How Downtown Cleveland Is Changing: By the Numbers." *Cleveland.com*, 13 May 2016.
 cleveland.com/datacentral/2016/05/how_downtown_cleveland_is_chan.html.
 Accessed 29 Nov. 2020
- Greater Cleveland RTA. "History of Public Transit in Cleveland." *Greater Cleveland Regional Transit Authority*, 27 Sept. 2019.
<http://www.riderta.com/history#:~:text=Bus%20Garage%20dedicated,-.Light%20rail%20begins,Line%20and%20the%20Blue%20Line>. Accessed 29 Nov. 2020.
- Greater Cleveland RTA. "How the Waterfront Line Was Constructed." *Greater Cleveland Regional Transit Authority*, 3 Apr. 2019.
 riderta.com/routes/waterfrontline/about. Accessed 29 Nov. 2020.

Greater Cleveland RTA. "Overview: Facts about the Greater Cleveland RTA." *Greater Cleveland Regional Transit Authority*, n.d. riderta.com/overview. Accessed 29 Nov. 2020.

Garrett, Thomas A. *Light-Rail Transit in America Policy Issues and Prospects for Economic Development*. Federal Reserve, 2004.
[stlouisfed.org/~media/files/pdfs/community%20development/research%20reports/li
ght_rail.pdf](http://stlouisfed.org/~media/files/pdfs/community%20development/research%20reports/light_rail.pdf). Accessed 29 Nov. 2020.

Hambley, Stephen. Personal interview. 15 Apr. 2020.

Hambley, Stephen D. "The Vanguard of Regional Infrastructure: Electric Railways of Northeast Ohio, 1884-1932." *The University of Akron*, 1993.

Harwood, Herbert H., and Robert S. Korach. *The Lake Shore Electric Railway Story*. Indiana University Press, 2000. *JSTOR*, www.jstor.org/stable/j.ctt1d10hgq. Accessed 29 Nov. 2020.

Lay, Tim, and Bestor Cram, directors, *Cleveland: Confronting Decline in an American City*, Northern Lights Productions, 2007.

LaFleur, Pat. "Ohio Spends Less than Most States on Public Transit, Policy Analysis Shows." *WCPO*, ABC, 17 July 2017. [wcpo.com/news/insider/ohio-spends-less-than-most-
states-on-public-transit-a-recent-analysis-shows](http://wcpo.com/news/insider/ohio-spends-less-than-most-states-on-public-transit-a-recent-analysis-shows). Accessed 29 Nov. 2020.

Lendel, Iryna, et al. "Greater Cleveland RTA Economic Impact and Contributions to Local Economy: Main Findings." *Urban Publications*, 2019.
https://engagedscholarship.csuohio.edu/urban_facpub/1593

- Levinson, Herbert S., et al. "Light Rail Since World War II: Abandonments, Survivals, and Revivals." *Journal of Urban Technology*, vol. 19, no. 1, Jan. 2012, pp. 65–79.
- Levy, Alon. "Why It's So Expensive to Build Urban Rail in the U.S." *CityLab*, Bloomberg Media, 26 Jan. 2018. [bloomberg.com/news/articles/2018-01-26/the-u-s-gets-less-subway-for-its-money-than-its-peers](https://www.bloomberg.com/news/articles/2018-01-26/the-u-s-gets-less-subway-for-its-money-than-its-peers). Accessed 29 Nov. 2020.
- Malouff, Dan. "How to Tell the Difference between Streetcars and Light Rail." *Greater Greater Washington*, 13 Jan. 2015. [ggwash.org/view/36980/how-to-tell-the-difference-between-streetcars-and-light-rail](https://www.ggwash.org/view/36980/how-to-tell-the-difference-between-streetcars-and-light-rail). Accessed 29 Nov. 2020.
- Masi, Brad. Personal interview. 15 Apr. 2020.
- Middleton, William. "Goodbye to the Interurban." *American Heritage Magazine*, Apr. 1966. [americanheritage.com/goodbye-interurban](https://www.americanheritage.com/goodbye-interurban). Accessed 29 Nov 2020.
- Naymik, Mark. "RTA's Waterfront Line, Aka Ghost Train, Should Be the First Service Trimmed to Help Close Budget Shortfall." *Cleveland.com*, 11 Mar. 2016. [cleveland.com/naymik/2016/03/rtas_waterfront_line_aka_ghost.html](https://www.cleveland.com/naymik/2016/03/rtas_waterfront_line_aka_ghost.html). Accessed 29 Nov. 2020.
- Richmond, Matthew. "The Clark Freeway Fight Offered A Lesson on What It Takes to Protect a Neighborhood." *Ideastream*, 17 Nov. 2017. [ideastream.org/news/the-clark-freeway-fight-offered-a-lesson-on-what-it-takes-to-protect-a-neighborhood](https://www.ideastream.org/news/the-clark-freeway-fight-offered-a-lesson-on-what-it-takes-to-protect-a-neighborhood). Accessed 29 Nov 2020.

Prendergast, Ken. "Cleveland Rail Shutdown Unavoidable." *All Aboard Ohio*, 19 Oct. 2015.
allaboardohio.org/2015/10/19/cleveland-rail-shutdown-unavoidable/#:~:text=The%20%E2%80%9CDead%20Line%E2%80%9D%20at%20the,r est%20of%20the%20system%20running. Accessed 29 Nov 2020.

Semsel, Craig. "More than an Ocean Apart: The Street Railways of Cleveland and Birmingham 1880-1911." *The Journal of Transport History*, vol. 22, no. 1, 2001.
EBSCOhost, doi:10.7227/TJTH.22.1.4. Accessed 30 Nov. 2020.

"Shaker Heights Rapid Transit." *Encyclopedia of Cleveland History*, Case Western Reserve University, 12 May 2018, case.edu/ech/articles/s/shaker-heights-rapid-transit.

Souther, J. Mark. "A US\$35 Million Hole in the Ground: Metropolitan Fragmentation and Cleveland's Unbuilt Downtown Subway." *Journal of Planning History*, vol. 14, no. 3, 2015. journals.sagepub.com/doi/abs/10.1177/1538513214545849 . Accessed 30 Nov. 2020.

Spangler, James, and James Toman. *Cleveland and Its Streetcars*. Arcadia Publishing, 2005.

"Spring Garden Avenue - Cleveland Transit System's Last Streetcar." *The Cleveland Memory Project*, Cleveland State University,
 clevelandmemory.contentdm.oclc.org/digital/collection/lakewood/id/1280/.

DH Toronto Staff. "Report: Toronto Has Third Highest Population Density of Any Canadian City." *Urbanized*, Daily Hive, 9 Jan. 2018. dailyhive.com/toronto/toronto-density-fraser-institute-january-2018. Accessed 30 Nov. 2020.

White, Gillian B. "Stranded: How America's Failing Public Transportation Increases Inequality." *The Atlantic*, Atlantic Media Company, 16 May 2015. theatlantic.com/business/archive/2015/05/stranded-how-americas-failing-public-transportation-increases-inequality/393419/. Accessed 30 Nov. 2020.