14.0 Transportation

14.1 Introduction

Nearing the mid-century, Cuyahoga County began to heavily invest in roadway and bridge construction, adapting to the widespread autocentric movement, even though cars and buses began replacing streetcars and trolleys in the 1920s and 1930s. Petroleum rations put in place during World War II discouraged the use of automobiles, and temporarily revived abandoned streetcar and bus lines (Hays and Toman 1996:190). After the war, Cuyahoga County shifted back to an auto-oriented city and established an intricate freeway system that would become part of the Interstate Highway System in the 1950s, coinciding with post-World War II suburbanization trends.

Light-rail transit in Cleveland was first developed in 1907, by the Van Sweringen brothers, who used their newly constructed transportation route to encourage affluent citydwellers to relocate to the newly planned suburban community of Shaker Heights (Dubelko 2017). By the 1920s, the trolley line expanded to reach the downtown corridor and had been renamed the 'Shaker Heights Rapid Transit', as it offered a direct line to the city. With its own right-of-way, tracks were laid out along median strips on major roadways. Service began on two suburban branches, Moreland (later Van Aken) Boulevard and Shaker Boulevard in April 1920. In 1929, the Shaker Heights Rapid Transit lines had extended eastward from Lynnfield and Warrenville Center Road. The 1929 Stock Market Crash bankrupted the Van Sweringen brothers, forcing the Shaker Heights Rapid Transit company into receivership by the mid-1930s (ECH 2017xx).

Following the financial collapse, creditors of the company kept Shaker Heights Rapid Transit in operation until they sold their holdings to the City of Shaker Heights in 1944, who maintained operations until 1975, when the rapid transit was purchased by the Greater Cleveland Regional Transit Authority (RTA) (ECH 2017xx).

In 1951, the Cleveland Transit System (CTS) expanded a heavy rail-system to easily transport suburban residents to the city-center, to revive the downtown commercial district, and to provide easy access to Cleveland Hopkins International Airport, transforming the metropolitan landscape into a network for multi-modal transportation (Hays and Toman 1996:253).

14.2 Mass Transit

In 1940, Cleveland was said to have the most motor vehicles per mile of road, with 205 cars per mile and 471 traffic signals in place throughout the city (Hays and Toman 1996:177). Just two years earlier, in 1938, the City of Cleveland's contract with the Cleveland Railway franchise failed to be renewed by the city, allowing the company to adjust routes and schedules without city approval. The company was also afforded the luxury of no longer being forced to adhere to compensation requirements set by the city. Although ridership was down from the previous decade, the company still owned and operated 294 buses on 25 bus lines, 1,039 streetcars on 25 streetcar lines, and 28 trackless trolleys on one trackless trolley line (Hays and Toman 1996:178). Streetcar lines started to disappear in large quantities as early as 1940, with many of those streets repaved for automobile traffic.

At the same time, competition from the Greyhound Lines bus company began to challenge Cleveland Railway's streetcar routes by running express buses along the same paths (Hays and Toman 1996:182). Fortunately, the City of Cleveland was able to financially secure their partnership with the Cleveland Railway Company through new contracts in 1941, to form the city-operated CTS (Greater Cleveland Regional Transit Authority 2017). Walter J.

McCarter, who had been the transportation superintendent at Cleveland Railway between 1939 and 1941 and the vice president of the company between 1941 and 1942, was CTS's first general manager (Hays and Toman 1996:189). The city's timely reinvestment with the rail company proved to be beneficial throughout the impending war years.

On April 28, 1942, the CTS took over operations of Cleveland Railway. Wartime restrictions were put on supplies needed for war, including gasoline. Simultaneously, the influx of war-time workers in Cleveland increased transportation demands. With many disenfranchised migrants now working in the city, CTS ridership surged. Both streetcars and buses were heavily utilized, but the older streetcars were in poor condition compared to the newer steel-frame buses, which Cleveland Railway purchased a few years prior to CTS ownership (Hays and Toman 1996:188). Also, before Cleveland Railway sold its shares, 76 streetcars (43 motor cars and 33 trailers) were taken out of commission. Streetcar demand caused certain express bus lines, like the Franklin and Lake Shore lines to close because streetcar services were readily available nearby (Hays and Toman, 1996:190). To increase ride capacity, bus trailers were utilized to transport war-time factory workers from downtown to the aircraft plant located by the Cleveland Airport. (Hays and Toman 1996:192).

Throughout the war, CTS began hiring women as conductors in large numbers, with 223 female employees by 1943 (Hays and Toman 1996:193). Protests during World War I in response to female employment did not repeat during World War II. Protests instead reflected worker's concerns over fair wages and proper working conditions. Upset by the labor shortage, wildcat strikes took place on May 25, 1942 and April 29, 1943, causing Cleveland's mass transportation system to shut down for a short time (Hays and Toman 1996:193).

Following World War II, CTS began to integrate buses back into their mass transit routes,

phasing out streetcars completely. In 1951, plans for an alternative rail-system were beginning to take shape. With an almost \$30million loan from the Reconstruction Finance Corporation, an eastern and western route was assembled. Service on the eastern line began in March 1955 and ran approximately 7.8-miles from Terminal Tower (Tower City Center) on Public Square to Windermere in East Cleveland, sharing the Shaker Heights Rapid Transit track from downtown to East 35th street. The 5.3-mile western line opened in August 1955 and extended from Terminal Tower to West 117th Street and Berea Road in Lakewood (ECH 2017yy).

CTS's new rail-system was designed as heavyrail. The western line was extended to West 143rd Street in 1958 and, in 1968, a federal grant financed a four-mile rail extension to Cleveland International Hopkins Airport (1961). making Cleveland the first US city to offer highspeed rail services to a major airport. After President Ford signed the National Mass Transportation Act in November 1974, \$11billion was designated for mass transit improvements. Cuyahoga County Commissioners and the Cleveland City Council authorized the formation of the RTA in December 1974 (Greater Cleveland Regional Transit Authority 2017).

14.3 Highways

The 1944 Express Highway Plan for the Cleveland Metropolitan Area reflected the results of the growing popularity of the automobile necessitating the construction of innerbelt freeways and interstate highway development. The first innerbelt freeways constructed in the city were the Memorial Shoreway (1938) and Willow Freeway (1940). Memorial Shoreway was paved in 1941 to alleviate congestion triggered by heavy commutes from the city to the suburbs, via the Detroit-Superior Bridge. Of the 325,000 total cars in Cleveland, 100,000 were owned by suburban residents (Hays and Toman 1996:181). Constructed by the WPA for approximately \$8.2-million, it ran along Cleveland's lakefront as the city's first east-west freeway, stretching four-miles from East 9th to East 55th streets (ECH 2017zz).

Willow Freeway, also constructed by the WPA, ran vertically from Memorial Shoreway and introduced the state's first cloverleaf interchange. The Willow Freeway and cloverleaf cost upwards of \$5.6-million, but the onset of World War II halted its construction until the war ended (ECH 2017ab).

Construction commenced on the Cleveland Innerbelt in October 1953, to connect Willow Freeway, Memorial Shoreway, Lakeland Freeway, and the Berea-Airport Freeway, and was completed by December 1961 (Hays and Toman 1996:266). Lakeland Freeway opened for traffic on November 2, 1962, as an extension of Memorial Shoreway, stretching from East 152nd Street to East 260th Street (ECH 2017ab).



Figure 14-1. 1952 aerial of the construction of Willow Freeway (Cleveland Press Collection, Michael Schwartz Library, Cleveland State University).

Completed in November 1968, the Berea-Airport Freeway provided drivers with a direct route from downtown Cleveland to the airport (Hays and Toman 1996: 278). Work on the \$26-million Innerbelt Bridge, which replaced Central Viaduct demolished ca. 1939, began on December 10, 1954 and was completed by August 15, 1969. Connecting the Innerbelt Bridge to Memorial Shoreway required the clearing of hundreds of buildings from the rightof-way, such as St. Bridget's Church and houses along Millionaires Row. At 4,233-feet in height and 116-feet in width, the Innerbelt Bridge held eight lanes of traffic (Hays and Toman 1996:267).

The enactment of the Federal Highway Act of 1956 by President Eisenhower, provided Cleveland with the opportunity to connect the city's innerbelt freeway system with the federally funded Interstate Highway System. Much of the planning for the interstate would derive from the 1957 Cuyahoga County Corridor Report. Willow Freeway vertically bisected the City of Cleveland and would eventually become I-77. Northwest Freeway, constructed ca. 1978, was said to be a major link for the highway system, connecting the Ohio Turnpike with Memorial Shoreway, Lakewood Freeway, and Innerbelt Freeway to constitute 29.1-miles total of I-90 (CPD 1967b:8; CPD 1970:14-A).

Outer Belt East, originally constructed to run from Euclid south to Warrensville Heights, according to the 1944 Express Highway Plan, later became part of the I-271 loop in 1971 (Hays and Toman 1996:195). The Outer Belt South Freeway, designed to go west from Outer Belt East, was developed into I-80 between 1956-1987 to meet the Ohio Turnpike, (CPD 1967:8). Medina Freeway was completed in August 1968, becoming I-71 in Cuyahoga County (Hays and Toman 1996:279). The 19mile Medina Freeway linked the city center with Cleveland Airport towards Outer Belt South (CPD 1958b:4; CPD 1967b:8).

Two projects, Clark Freeway and Jennings Freeway, were only partially completed before the 1970s. Clark Freeway was to be constructed as I-290 in 1958 at a cost of \$23-million, however in 1966, construction was cut-short, and the 2.5-mile road was later absorbed into I-480 in the 1908s. Similarly, construction on the Jennings Freeway, which was to become I-490, halted in 1969, with only the northern portion towards I-71 opening to traffic. In the 1990s, it was completed to alleviate traffic on I-77, joining I-480, west of I-77, to I-71 (Jennings Freeway 2017).

The Cleveland Innerbelt Freeway system was constructed to ease vehicular congestion on other main arteries in the city but, in order to improve traffic congestion, they were designed to cut through some of the city's physically and economically declining neighborhoods. As previously mentioned, the Innerbelt Bridge required the demolition of many buildings from the right-of-way. No other transportation-

infrastructure project related did more destruction to the cityscape than the development of Medina Freeway (now 1-71) between 1940-1970. Spanning the entire length of the city, Medina Freeway physically divided the dense Tremont neighborhood, shortening over 40 local streets, and destroying the neighborhood's historic fabric by razing many low-income buildings (Ellis 2012:67). Transportation-focused urban renewal policies in the 1960s and 1970s resulted in Tremont losing 2,018 dwelling units (25 percent) and 8,194 residents (33 percent) (Ellis 2012:67). Consequently, Tremont was divided into North Tremont, South Tremont, Lincoln Heights, Duck Island, and SoTre. In the 1990's CMHA's Valleyview Homes would be destroyed to complete the remainder of I-490 (Ellis 2012:70).



Figure 14-2. 1952 Aerial view of the I-77 and I-90 interchange (Cleveland Press Collection, Michael Schwartz Library, Cleveland State University).

14.4 Other Major Roadways

The popularity of the automobile necessitated diverse transportation-related infrastructure, resulting in the Federal-Aid Highway Act of 1925. Portions of already extant roads became US routes and were further developed to accommodate higher volumes of traffic (ODOT 1912). Constructed and maintained by individual state and local governments, these roadways connected residents to downtown and outer neighborhoods (Buettner 2006). By 1940, US 42 was a pre-interstate roadway that stretched from Cincinnati to Cleveland (Hays and Toman 1996:188). In Cuyahoga County, US 42 began in Strongsville at the southern border, and continued north to Middleburg Heights, Parma Heights and Parma, where it became known locally as Pearl Road. As US 42 reached the City of Cleveland, it passed through the westside, known locally as West 25th Street, terminating in downtown's Public Square (ODOT 1940).

Public Square was also the terminus for other US routes, including US 422, US 20, and US 6. By 1955, ODOT maps showed US 422 as it extended eastward on Kinsman Road into the suburbs of Shaker Heights, Beachwood, and Moreland Hills before entering Chagrin Falls and continuing towards Youngstown, Ohio. In the same 1955 ODOT map, US 6 is labeled as US 6–20, which follows the contour of Lake Erie. In Cuyahoga County, the route connected the western Rocky River suburb to Public Square, by way of Lakewood and the Detroit-Superior Bridge, continuing through East Cleveland and the City of Euclid, nearing Richmond Heights (ODOT 1955).

14.5 Airports

Three airports served residents in Cleveland and Cuyahoga County during the mid-century. The Cleveland Hopkins International Airport, was dedicated as the Cleveland Municipal Airport in 1929, and renamed on July 26, 1951 for its founder, William R. Hopkins (ECH 2017ac). Modernizations and additions to the airport began as commercial travel demands increased. A new terminal opened in 1956, and two new concourses were built in 1968 and 1978. Cleveland Hopkins Airport added the international designation upon completion of its first concourse in 1968 (ECH 2017ac).

The Cleveland Burke Lakefront Airport, dedicated in 1947, was named for Cleveland's Mayor Thomas A. Burke. As part of the city's Official Lakefront Development Plan, it became the first downtown and municipally owned and

operated airport in the United States. Burke called it "landing places for land and amphibious planes", because of the significant impact it had on Cleveland's downtown and lakefront settings (Cleveland Burke Lakefront Airport 2017). When it opened, the airport featured a 2,000-foot dirt runway, an airplane hangar, and a small operations facility. In 1950, the airport was awarded a federal grant to complete a 5,200-foot permanent runway surface, which would be completed in 1957. By 1968, a control tower, terminal, and concourses were added. Further expansion in the 1970s consisted of a new runway and accompanying buildings, including a control tower and an aviation school (Cleveland Burke Lakefront Airport 2017).

The Cuyahoga County Airport opened on May 30, 1950. Located approximately ten miles east of downtown Cleveland, it borders Richmond Heights, Highland Heights, and Willoughby Hills (ECH 2017ad). As a private airport, it sought much of its revenue from corporate aircrafts, becoming a local hub for aviationrelated industries. With help from federal funds, the airport grew substantially between the 1950s and 1960s, and was able to reach 585acres in size by 1970 (ECH 2017ad).



Figure 14-3. Expansion work underway at Burke Airport in 1956 (Cleveland Press Collection, Michael Schwartz Library, Cleveland State University).

14.6 Conclusion

From the 1940s to the 1970s, the implementation of transportation infrastructure, such as freeways, heavy-rail, and airports permanently changed the physical and social landscape of the Cleveland Metropolitan area. Mid-century freeway and rail development was most beneficial for those living in Cleveland's suburbs, as they could more easily travel to the city through the interconnected transportation network. From the downtown area, I-90 linked cities on the west side, such as Lakewood and Rocky River, to the Euclid, on the east side. I-71 allowed residents in Brook Park, Middleburg Heights, and Strongsville to commute to the city more quickly than could be done via US 42. I-77 continued south from the city center to the proximity of Broadview Heights and Brecksville. The I-271 belt provided access from I-90, near Euclid, to the suburbs of Shaker Heights, Pepper Pike, Highland Hills, Warrensville Heights, and Bedford Heights (ODOT 1955). In later years, the construction of I-480 tied Cleveland Hopkins International Airport and communities in North Olmsted, Parma, and Maple Heights to extant interstates, such as I-71 and I-271 (Jennings Freeway 2017). Not only did the city's infrastructure adapt to accompany the technological advancements of the autoindustry and commercial air travel, but Cleveland was able to set itself apart from all other Ohio cities by investing in heavy-rail. The mid-century modernization of the Cleveland's entire transportation network would become a significant factor in the advancement of the city in years to come.

14.7 Survey Results

The importance of new and improved transportation routes cannot be understated in the importance of suburban development. Without interstates, widened US and state highways, and the creation and improvement of local roads, suburban expansion would not have been as successful. Cuyahoga County's interstate system include the north-south routes I-71 and I-77, which both terminate in downtown Cleveland, the east-west route of I-90 along Lake Erie, and loop routes of I-271, I-480, and I-490, which connect to I-71 and I-77. These routes and four-lane divided highways opened new areas to development as accessing these places was easier. Workers no longer had to live close to their places of employment. Families could still attend their places of worship even if they no longer lived nearby. Those wanting to shop at a different mall or to visit relatives and friends across town could easily accomplish these tasks. Beyond the region, families had a convenient way to travel without relying upon dwindling passenger train options or costly airfares.

14.7.1 Car-related

Resources associated with this topic extend beyond the roadways themselves and often cross over into other categories. For example, the industrial complexes of the Ford and General Motors plants, the drive-in movie theater, and sprawling shopping centers and malls are intricately connected to automobile popularity.

Vehicular resources reviewed under transportation are those particularly aligned with the topic, even though each could appropriately be discussed with other topics, especially under commerce and arts and recreation.

Survey identified a former Buick dealership that now serves as a medical office in Mayfield Heights (CUY 1129125). Architectural features that indicate its prior usage include the large storefront window openings that encompass all or most of the wall space, built for interested customers to view the newest car models at any time, along with a large parking area to display vehicles on the market. The building also a taller one-story included portion to accommodate a garage for vehicle maintenance.

Gas stations and car washes are also common car-related resources that were surveyed in

Cuyahoga County, although contemporary types of these resources are built to contain more gas pumps and parking areas. Survey discovered the first specialty-built headquarters of the Cleveland Automobile Club which was the oldest American Automobile Association (AAA) unit. The building served members from 1968 through 1999 by providing travel advice and offers, licensing, and insurance.



Plate 48. Former Buick dealership (CUY1129125), constructed in 1969, 6777 Mayfield Rd., Mayfield Heights.



Plate 49. Gas station (CUY 1139917), constructed in 1968, 10602 W. Pleasant Valley Rd., Parma.



Plate 50. Car wash (CUY 1142017), constructed in 1964, 7875 Day Dr., Parma Heights.

14.7.2 Air-related

Cuyahoga County includes three airports, none of which were surveyed for this report because of previous survey, age, or accessibility. However, the Aviation High School, built in the early 1970s as part of the City of Cleveland Public School District, was surveyed for this report. The school was erected on the Burke Lakefront Airport property and was intended to educate students interested in careers in the growing aviation industry. The school was open to those outside of the city district and focused training on mechanics, management, maintenance, and air traffic operations. The school closed in 1996, and the building's future remains uncertain.



Plate 51. Aviation High School (CUY 1127501), constructed in 1972, N. Marginal Rd., Cleveland.

14.8 Survey Recommendations

For purposes of this report, survey focused mainly on buildings associated with mid-century transportation across Cuyahoga County. Further survey of transportation structures (bridges, culverts, public transit shelters, equipment storage areas, etc.) is recommended to explain the installation of these resources for highway and public transportation projects.