

RAMSEY COUNTY
History
A PUBLICATION OF THE RAMSEY COUNTY HISTORICAL SOCIETY

From Streetcars to Soccer

**The Rise and Fall of
TCRT's Snelling Shops**

JOHN W. DIERS, PAGE 11



Sunday, a painting by Cameron Booth.

St. Paul's Mary Griggs Burke, Abby Weed Grey, and Aimee Mott Butler

**Three Extraordinary Women
Who Supported Art and Artists**

MOIRA F. HARRIS, PAGE 1

By the Numbers . . .*Summer slide loss statistics*

Months of math skills lost
over the summer

2.6

Months of reading skills lost
over the summer

2

Months of overall learning lost over the
summer

1

Weeks spent in the fall relearning old
material after summer slide

6

Hours per week needed over the
summer to prevent any learning loss

2-3

SOURCES:

www.summerlearning.org/?page=know_the_facts

www.readingrockets.org/article/summer-reading-loss

www.littlescholarsllc.com/blog/summer-learning-loss-facts/

Teresa Swanson's article beginning on page 22 provides information on an innovative program designed to fight summer slide.

ON THE COVER

Horses quietly standing in fields or near barns were a favorite subject for Cameron Booth. This large undated oil is called *Sunday*. Courtesy of the Hazelden Betty Ford Foundation, Photo by Karen Kolander.

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Message from the Editorial Board

Art lovers, soccer fans, and curious kids might all find something in this issue to spark their interest. Moira Harris writes about three local women art collectors who strengthened institutions with gifts from their informed passions. Mary Griggs Burke journeyed to Japan thirty times, studying and seeking the best examples of fine East Asian art, which are now in the New York's Metropolitan Museum of Art and the Minneapolis Institute of Art. Abby Weed Grey also traveled, but her inspiration was contemporary Middle Eastern art; those works found a home at New York University. And Aimee Mott Butler furnished the walls of Hazelden Betty Ford Foundation with carefully chosen works by Minnesota artists. The new Minnesota United soccer stadium (Allianz Field) at Snelling and University is rising from the ashes of the old Twin Cities Rapid Transit shops. John Diers shares the history of this bustling center, which once held 400 employees and 200 streetcars while they were repaired and refurbished for their daily runs through the Twin Cities. And Terry Swanson tells us about our RCHS summer program for schoolchildren, *Investigate MN!* We have partnered with other nonprofits to give kids a taste of different aspects of local history, from food to artifacts to the natural world. It's another way that RCHS is bringing history into the present and laying the groundwork for future informed perspectives.

Anne Cowie
Chair, Editorial Board

The Ramsey County Historical Society thanks Board Member James A. Stolpestad and affiliate AHS Legacy Fund for supporting the updated design of this magazine. Publication of Ramsey County History is also supported in part by a gift from Clara M. Claussen and Frieda H. Claussen in memory of Henry H. Cowie Jr. and by a contribution from the late Reuel D. Harmon.

The Rise and Fall of TCRT's Snelling Shops

JOHN W. DIERS

1907 was a banner year for the electric railway industry. Profits from streetcar systems in large cities and small towns and a nationwide network of electric interurban railways made industry stocks and bonds investment grade and safe for widows and orphans. Thousands of people worked in the industry. Some thirty firms with names like Brill, Pullman, St. Louis Car Company, Niles, Jewett, and Osgood Bradley built streetcars and interurban cars, along with dozens more companies that supplied component parts, traction motors, wheels, controls, and the like. Streetcar and interurban mileage neared its peak. Locally, The Twin City Rapid Transit Company (TCRT) had only recently completed its lines to Lake Minnetonka and opened a large amusement park on Big Island. That year it carried 117 million passengers for a nickel fare and made money on every single one of them. It, also, opened a new shop complex at

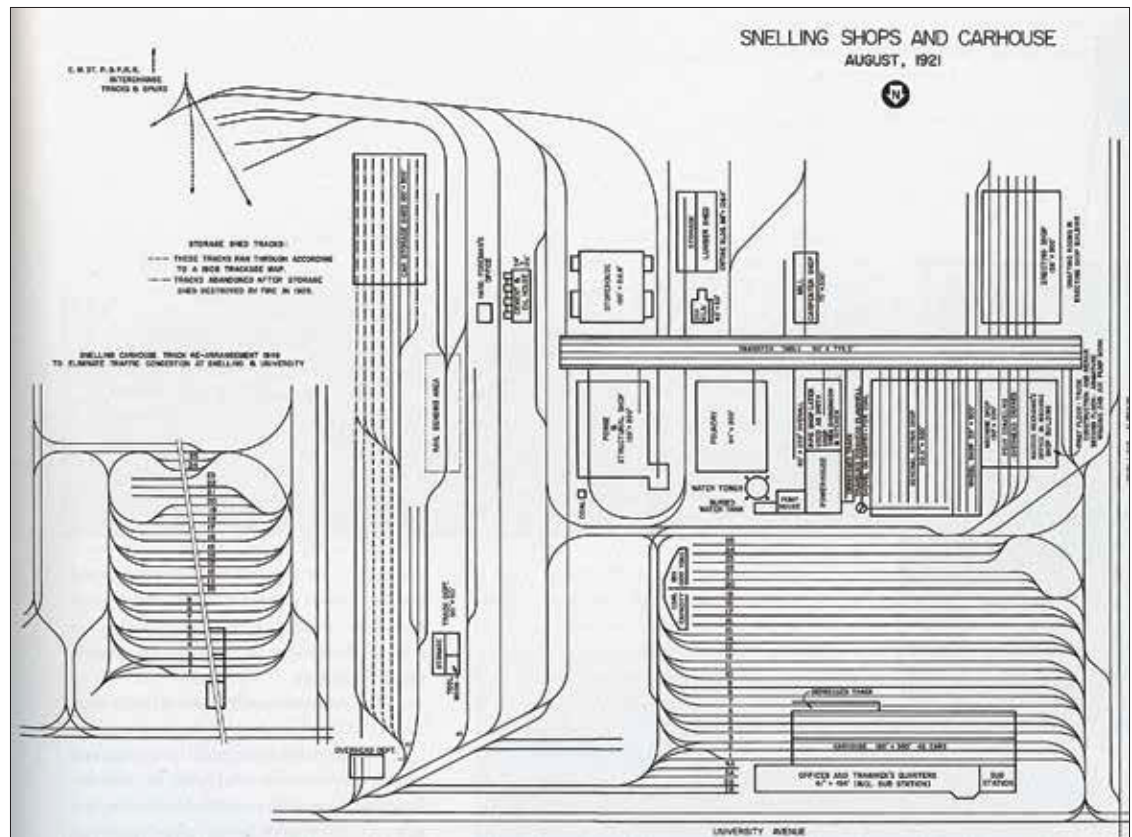
the corner of Snelling and University Avenues in St. Paul, where it would build and repair hundreds of streetcars for the Twin Cities and other systems for the next 47 years.

Investors, who were then pouring millions into the street railway industry, probably gave little notice to a Michigan farm boy turned inventor, named Henry Ford, who built his first automobile, the Quadricycle, in 1893, established the Ford Motor Company in 1903, and began production of the Model T in 1908. Between 1908 and 1927 Ford Motor Company produced some 15 million Model Ts. Twenty seven years later, in 1954, with 1.3 million automobiles in Minnesota, TCRT ran its last streetcar, closed and abandoned the Snelling Shops, and sold most of its land for a parking lot and shopping center. Today, 63 years later, the site awaits its future as a soccer stadium. *Sic transit gloria mundi* thus passes the glory of the world.



This 1910 view looks east from Snelling Avenue, showing TCRT's machine shop in the foreground and a row of other shop buildings running parallel to the transfer table. The streetcar will move on the transfer table and be shunted to one of the shop buildings. Forty years later, the automobile will make all of this irrelevant. *Photo courtesy of the Minnesota Historical Society.*

This diagram from 1921 shows the physical layout of the Snelling Shops. University Avenue is on the bottom and Snelling Avenue is on the right. It is reproduced by permission from John W. Diers and Aaron Isaacs, *Twin Cities by Trolley: The Streetcar Era in Minneapolis and St. Paul* (2007).



Early street railways used horses and mules, sometimes cable power and small steam locomotives for propulsion. Then, in 1889 in Richmond, Virginia, inventor Frank Sprague tested and introduced the first successful electric streetcar using an underwire current collection system, a wheeled trolley. It caught on, and within a matter of months, transit companies were putting their horses and mules out to pasture and converting to electric power. Electric cars appeared in Minneapolis in December 1889 with the conversion of the 4th Avenue Line. It was immediately followed in February 1890 with electrification of the Grand Avenue Line in St. Paul. All horsecar lines, the steam powered Motor Line, and one of the two cable car lines in St. Paul were gone by 1892. The last cable line on Selby Avenue disappeared in 1898.

The first electric cars in the Twin Cities were small; little more than motorized horse cars. They were faster but had few comforts and lacked passenger carrying capacity. Worse, they weren't standing up to the rigors of Minnesota winters. TCRT bought all of them from various commercial car builders but quickly grew

dissatisfied with their performance and wanted something better. Several years of experimentation and modification finally resulted in an acceptable home built design, and, in 1898, three cars emerged from the Nicollet Shops. One was company president Thomas Lowry's private car. Designed for touring the system and hosting VIPs, it featured an observation room and was furnished with wicker chairs, an upholstered davenport, and a large mahogany table for holding business meetings. Brussels carpet was used throughout. There was a bathroom, and a small kitchen furnished meal service. President William McKinley joined Lowry aboard the car for a tour of the Twin Cities in 1901.

Between 1898 and 1927 a total of 1,362 passenger cars and 69 pieces of non revenue work equipment emerged from TCRT shops. TCRT's home built cars were unique to Minnesota and were a commanding presence on the streets of Minneapolis and St. Paul. They were large, 46 feet long, overall, and 9 feet wide, among the widest in the electric railway industry. They were heavy, typically in the range of 45,000 to 50,000 pounds, although those built for the

suburban lines to Lake Minnetonka and Still water were heavier. Except for a steel under frame, they were of all wood construction. With a seated capacity of approximately 50 people, and 75 or more standees in the aisle and on the rear platform, they could carry upwards of 125 passengers.

Ample windows added to a feeling of spaciousness in these locally manufactured cars. On hot days they were breezy; in winter they were tight and warm. Over the years some cars of the TCRT design were built for, or were sold, to other systems, notably Duluth, Winnipeg, and Seattle. Passengers could board, pay their fare, and take a seat inside, or stand and gossip with the conductor on the rear platform as he made change, punched transfers, called out streets, and chased away the occasional errant youngster who tried to pull the trolley pole off the wire.

Standardization was a problem in the electric railway industry, and TCRT's cars were prime examples. Managers believed each system had its own needs and wanted features in their cars to meet those needs. The industry finally came together in the 1930s on a general design that could be mass produced, but by then buses

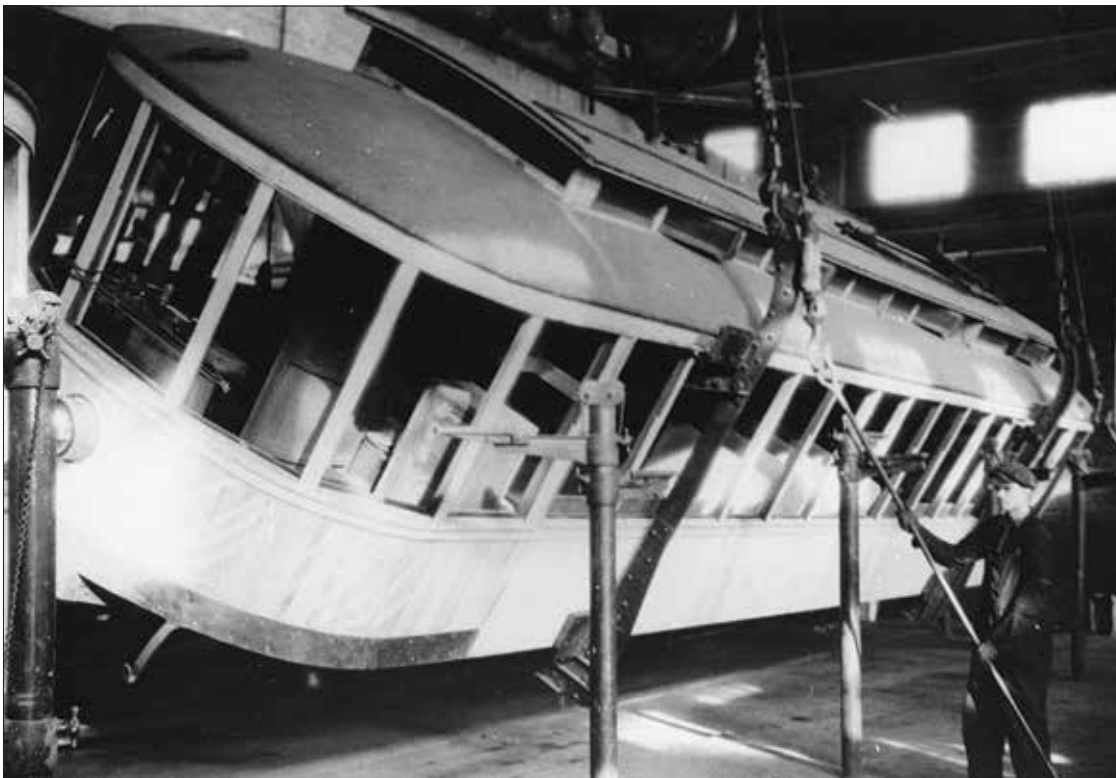
were displacing streetcars in large numbers. This dearth of standardization demanded large, self sufficient, maintenance shops to keep a system set in good repair.

TCRT deservedly prided itself on its shops and the quality of its maintenance programs. Every car in the system was rebuilt every five years. Streetcars built in 1908 were still in service in 1954, the year the buses took over. Of course, whether this made economic sense is another matter. Big shop complexes tied up substantial amounts of capital and required large numbers of skilled employees, all of which added to operating expense at a time when streetcar systems confronted declining ridership and revenues.

The Shops

In 1952, near the end of the streetcar era, TCRT had six streetcar repair shops and operating facilities (car stations). Four were in Minneapolis:

- Nicollet, at 31st and Nicollet Avenue;
- Northside, at 26th and Washington Avenue North;
- East Side, at University Avenue Northeast and 1st Avenue Northeast; and
- Lake Street, at Lake and 22nd Avenue South.



Streetcars came back to the Snelling Shops every five years for a complete overhaul and rebuilding. In 1925 this car, stripped of its electrical and mechanical equipment, rests on its side in the erecting shop awaiting body repairs and repainting. When complete, it will be reunited with its electrical and mechanical equipment, which are being reconditioned in other shop departments. *Photo courtesy of the Minnesota Historical Society.*

There were two in St. Paul:

Duluth, at Duluth Avenue and East 7th Street; and
 Snelling, adjoining the main repair shops, at University and Snelling Avenues.

Nicollet, East Side, and Duluth Avenue were the oldest, dating to before the turn of the twentieth century. The others were built after 1900. Snelling dated from 1907, and Northside and Lake Street opened in 1914 and 1910, respectively. All of them were for car storage; light running repairs; and inspections and cleaning. All heavy work, such as painting, motor and wheel changes, collision repair, and rebuilding, was done at the Snelling Shops.

Nicollet was the system's first general repair shop for electric cars, and a successor to the shops of the steam motor line, Minneapolis Lyndale and Minnetonka Railway, which had been based and had its roundhouse at 31st and Nicollet. A car house was erected on the property in 1891 followed by an erecting shop building in 1898. The erecting shop had the capacity to turn out eight cars per month, which shortly proved inadequate for the needs of the then rapidly growing system.

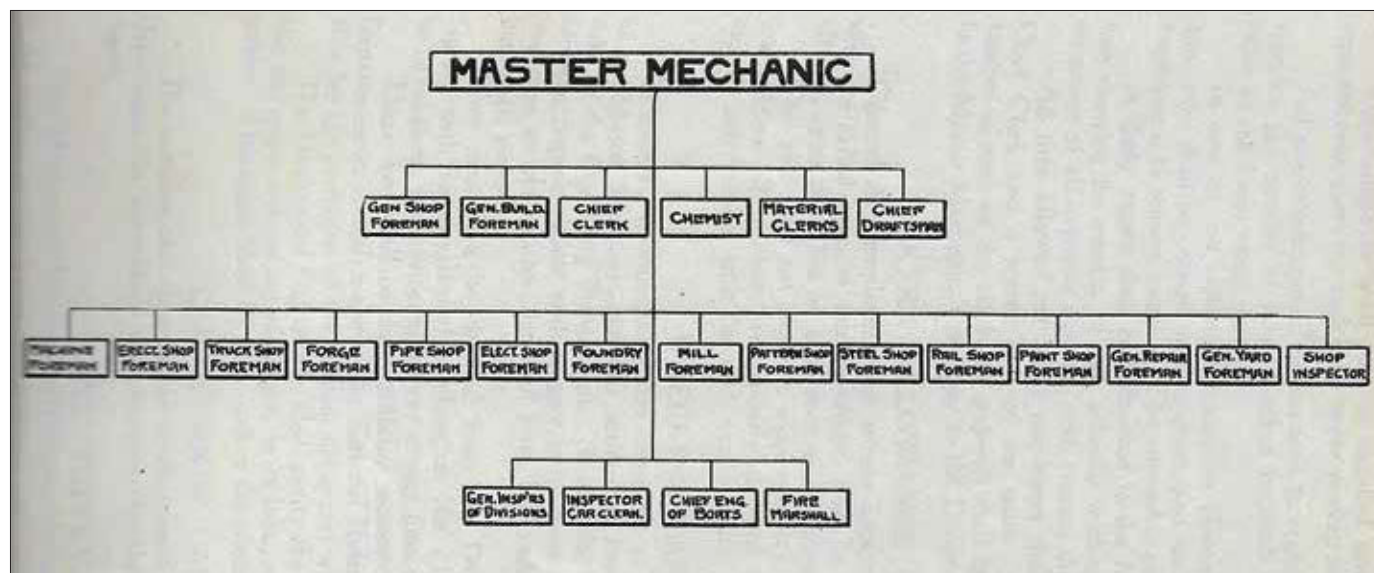
Early in 1902 TCRT began searching for a large tract of land for a new shop facility. It wanted a property centrally located, preferably on an existing streetcar line serving both cities and one with a direct railroad connection. St.

Paul's Midway District was then undergoing industrial development. It was already home to the yards of the Minnesota Transfer Railway and served by three railroads, the Great Northern; the Northern Pacific; and the Chicago, Milwaukee and St. Paul. Sixty acres were available near the intersection of Snelling and University Avenues adjoining the St. Paul Minneapolis streetcar line and the Chicago, Milwaukee and St. Paul Railroad. It was a perfect site. TCRT acquired it in 1904 and began construction in 1905. Twenty of the 60 acres were subsequently sold in 1920 to Montgomery Ward for its retail store and mail order warehouse.

Walter J. Smith was appointed TCRT's Master Mechanic with overall responsibility for streetcar maintenance in 1906. He had previously been with the Duluth Street Railway, which had close business ties with TCRT. Smith was the philosophical and business force behind the Snelling Shops and a major influence on TCRT streetcar design and maintenance practices. He had firm opinions and, like his peers, was against buying anything that could be made in the shops, whether it was a complete streetcar or the parts that went into one. Smith supervised construction of the shops and presided over their operation and is among the many reasons the Snelling facility was long regarded as the best in the industry.

Track laying on what would be the yards and a railroad connection with the Chicago, Milwaukee and St. Paul got underway soon after the property

This is the organization chart for the Mechanical Department at TCRT's Snelling Shops. It displays the hierarchical approach to operations that was common to many businesses, including the railroads. The Master Mechanic when this chart was drawn was Walter J. Smith. The chart is from a 1918 TCRT corporate manual in the collection of John W. Diers.





Looking east, workers relocate tracks and overhead trolley wires in the Snelling storage yard in the summer of 1949. Traffic congestion forced abandonment of the entrance at Snelling and University Avenues and the construction of a new entrance on University east of Snelling. Wire car 72 was built at the Snelling Shops. It and all TCRT work equipment will be scrapped when the shops close six years later. Prior to the construction of Allianz Field, a restaurant stood near this location for many years. *Photo courtesy of the Minnesota Historical Society.*

was acquired. Construction supplies began arriving thereafter. All of the buildings were of cement bricks and concrete blocks, manufactured on the property. By 1906 the erecting shop, powerhouse, blacksmith shop, carpenter shop (mill), and machine shop were substantially completed. The car house (office and trainmen's quarters) were completed in April 1907 with operations transferred from the former Smith Avenue, Selby Avenue, and Midway car houses on June 2, 1907. The latter were then closed and the properties subsequently sold. Interestingly, and as a sidebar, the Midway Carhouse still stands near the intersection of Raymond and University Avenues. Considerably modified and remodeled, it is now in use as an office building.

The Snelling complex expanded over the years. A large car storage shed and a foundry were added in 1908. Other additions included a storehouse (1909), lumber storage shed (1910), general repair shop (1912), forge (1912), cement and oil storage house (1913), and a wheel shop (1925). The last major addition, a large bus repair shop, was built in 1949 in a vacant area between the erecting shop and the carpenter shop. By then several streetcar lines had been converted to buses and more shop space was needed.

The figure on page 12, reproduced from the book *Twin Cities by Trolley*, is a drawing of the shop complex as it appeared in the 1920s. The Snelling Carhouse faced University Avenue. It and the adjoining storage yard were home to upward of 200 streetcars and, apart from the shops, some 400 operating employees, motor men, conductors, supervisors and maintenance personnel. TCRT's employment and training department was located in the carhouse. An electrical substation that converted high voltage alternating current from the system's main power plant to 600 volt direct current that powered several nearby streetcar lines was on the west side of the building.

Snelling was a crew base and operating headquarters for the seven streetcar lines assigned entirely, or partially, to it, the two busiest being the St. Paul Minneapolis, interurban line and the Selby Lake. Besides offices for the operating foreman, supervisors, and clerks there was a conductor and trainmen's room with a rest and recreation area, lockers, showers and bathroom facilities. A separate area was set aside as a lunch and locker room for streetcar repairmen, a foreman's office, and a parts room.



Motorman Chris Hagen with his granddaughter stand beside "Inter-campus" streetcar 1302 at the Minneapolis Campus on the last day of service, June 18, 1954. Hagen was retiring. The body of 1302 would be sold and transformed into a chicken coop or storage shed. *Photo courtesy of the Minnesota Historical Society.*

The wires are down and soon the rails will vanish beneath a layer of asphalt. A worker removes a safety island from University Avenue preparatory to street repaving in July 1954. *Photo courtesy of the Minnesota Historical Society.*



At the core of the shop complex was a series of buildings that paralleled Snelling and St. Anthony Avenues south of the 18 track storage yard. The yard could park 224 streetcars that were either assigned to the Snelling Carhouse, or stored awaiting shop work.

The two story machine shop building had a large central bay and work area with three traveling overhead cranes that could lift a streetcar off its trucks for access to the electric traction motors, wheels and axles, and truck frames. Its second floor was used for motor winding, air compressor work, and other small component repairs. The Master Mechanics and maintenance department offices were on the ground floor. A wheel shop for grinding out of profile wheels was next door and adjoining it was an eight track general repair shop that could hold upward of a dozen streetcars for repairs. The erecting shop building was on the far west side of the property, paralleling Snelling Avenue. It had six tracks under roof and a system of overhead cranes for moving car bodies around the building. The shop could fabricate a streetcar body or rehabilitate an existing car. Its second floor was an office area for drafting and related engineering work.

Other buildings included a powerhouse that furnished steam and electric power for the shop complex. A foundry, forge, and a structural shop supplied castings and fabricated steel structural framing, along with a carpenter shop for fabricating seats, windows and window framing, doors, wood framing and structural pieces, and wood wainscoting and paneling. A large building housed out of service streetcars among them company founder Thomas Lowry's private car. Unfortunately the building caught fire and burned in 1925. It was a total loss and never rebuilt. There were several storage buildings for raw materials and supplies and a main central storehouse that was home to the purchasing department, which purchased and provided supplies for every department in the company. Supply cars moved on a regular schedule between the storehouse, the downtown offices in Minneapolis and St. Paul, and the other car barns throughout the system.

The track and overhead departments had two small buildings on the east side of the property. Both were used for office space and storing work



In 1954, forty-two years after it was new and left the Snelling Shops, car 1511 returns to Snelling for its funeral. Once workers finish tipping it on its side, it will be set ablaze. When the immolation is complete, its metal remains will be sold for scrap. In the background is the massive warehouse that was once a part of the Montgomery Ward facilities on University. Photo courtesy of the Minnesota Historical Society.

cars and related equipment. An adjoining open yard was given over to the track department for storage of rail, ties, and paving supplies and the fabrication of switches, special work, and rail bending. It was also used for scrapping surplus streetcars and other rolling stock, and is where all the TCRT streetcars and work equipment made surplus after the bus conversion met their fate.

The Organization

TCRT was a military, hierarchical organization, not unlike the railroads of that era, with well defined roles and responsibilities for each department and employee. The corporate culture was work and those employees who did not meet expectations, or questioned authority, or did not follow orders, got reamed.

A 1918 corporate employee manual expressed it thus:

All reports, recommendations, suggestions, criticisms and other matters affecting or relating to the Company's business shall be brought to the attention of the department head by his subordinates and such head of department will be held responsible for forwarding same to the proper authority for such attention as the importance of same may warrant.

There must be no short circuiting of authority.

The mechanical department, under the direction of the Master Mechanic, was the second largest department in the company. Only the operating department had more employees. At its peak over 500 people worked at the Snelling Shops with additional employees at the car houses, inspecting and cleaning cars, and performing routine preventive maintenance work. TCRT was among the largest employers in the Twin Cities.

A look at the ranks in 1920 at the Snelling Shops would find a range of occupations. Among the skills and specialties were carpenters, electricians, pattern and mold makers, pipe fitters and plumbers, welders and metal workers, painters, machinists, electrical engineers, draftsmen, accountants, storekeepers, recording clerks, timekeepers, even chemists and a materials lab.

The scheduled workday and workweek at the Snelling Shops in 1916 was ten hours per weekday and Saturday, except during the summer months when the shops closed at noon. There were six paid holidays. Office employees, managers, and supervisors earned two weeks of paid vacation after one year of service. Others were granted vacation time according to the needs of the company and at the discretion of their department head.

The company set wages, hours, working conditions, and benefits. In 1934 unionization

An undated 1920s aerial photo of TCRT's Snelling Shops looking southeast. The intersection of Snelling and University Avenues is at the bottom. In the 1950s, all the TCRT buildings and Montgomery Ward's facility (upper left) were razed and the Midway Shopping Center occupied this site. *Photo courtesy of the Minnesota Streetcar Museum.*



came to TCRT when nonsupervisory employees came into the bargaining unit of Local 1005 of the Amalgamated Association of Street, Electric Railway, and Motor Coach Employees (since 1964 the Amalgamated Transit Union). The union brought much needed changes in wages, hours, and working conditions for employees

New Designs

By mid July 1917, TCRT had 1,100 home built streetcars in service on Twin Cities streets. Meanwhile the industry, responding to early automobile competition and growing concerns about operating costs, was turning to lightweight models and standardized features that required less electric power, were easier on track, and needed just one crew member to collect fares and operate the car. One popular version was the Birney named after its inventor Charles O. Birney, an engineer. Unfortunately, the Birney was noisy and rough riding, worse than the early buses of that era. It promoted automobile competition as effectively as paved roads and buying on credit. The best that could be

said is that the Birney provided convenient transportation to the nearest Ford dealership.

Master Mechanic Smith wanted none of this and introduced a lightweight streetcar of improved design that was as large as TCRT's then standard cars, could carry the same number of passengers, and operate singly or be paired with another car of the same design and run as a two car train. Three sets were built between 1916 and 1926 with 25 single cars built in 1927 and 1928.

Regrettably, the lightweight design was not altogether successful and the cars gained a bad reputation among motormen more accustomed to the rapid acceleration and hard braking characteristics of the heavier standard cars. Motor men complained the lower horsepower electric motors lacked power and were unresponsive. They disliked the band brakes which were slippery on wet tracks and caused skids, at tening wheels, which then had to be changed creating more work for shop forces. Because the motors on these cars were only two to three inches above the pavement, the cars could not go through standing water or deep snow lest moisture get into the motors, shorting them out.

Despite its shortcomings, Smith's design attracted the interest of several investors, who proposed to build and sell it to other systems and compete with the Birney design. TCRT's management wasn't enthusiastic, being aware of the early problems and believing it unwise to invest corporate funds in production when much development work remained. Undiscouraged, the backers of Smith's design incorporated the Lightweight Noiseless Streetcar Company with offices in Chicago. Its president, A. L. Drum, was a consulting engineer whose firm A. L. Drum and Company, did considerable work for TCRT. Lacking its own facilities, the company negotiated a contract with TCRT subsidiary, The Transit Supply Company, for production of the cars at the Snelling Shops. Between 1924 and 1927, the Lightweight Noiseless Streetcar Company won orders and built 93 cars for Chicago; Grand Rapids, Michigan; Duluth, Minnesota; Chattanooga and Nashville, Tennessee; and Evansville, Indiana—all of them at the Snelling Shops. After 1927 the electric railway industry, already in decline from automobile competition began turning increasingly from streetcars to buses. The orders dried up and the Lightweight Noiseless Streetcar Company quietly went out of business.

Rehabilitation and Rebuilding Programs

The eclipse of the Lightweight Noiseless Streetcar Company did little to slow the workload. Snelling kept right on going with a rehabilitation program that rotated cars in heavy service through the shops every 18 months and every four to five years for those in lighter service. In 1913 the policy was to keep an average of 30 cars in the shops at any one time with an average of 15 cars per month undergoing complete rehabilitation.

It was a thorough process. Arriving cars were placed on an outside receiving track where all removable parts such as seats, seat frames, doors, windows and window sashes, shades, and trim were stripped and sent to the appropriate shop. Motor and brake connections were loosened and the car run on the transfer table and shifted to the erecting shop where the motors, controls, trucks, air compressor and related brake hardware were removed from the car body and sent to the appropriate shop for

repair and rehabilitation. The car body was then tipped on its side for a thorough inspection. Rotten wood parts, rusted framing, and worn electrical wiring were removed and replaced. The interior and exterior and the roof were inspected and repairs made and the car given a complete re-finishing and painting inside and out. It was then reassembled and tested and returned to its home car barn. In a few years and after several hundred thousand miles and hours of operation, the car would return to Snelling and the cycle would repeat itself. The program went on for almost 50 years.

Muzzleloader was an industry term describing streetcars with one common entrance and exit, usually at the rear. In 1917 all of TCRT's home built cars were muzzleloaders. It was an inefficient arrangement. With cars stopping every block, passengers at the front of the car had to work their way to the rear, past standees, and exit, while other passengers were trying to board. Congestion at the rear was a problem and it slowed operations. Often passengers needed change from the conductor or had to ask for, or turn in, a transfer, or had a question. The car couldn't move until the motorman got the proper signal from the conductor. If this happened downtown at the height of the rush hour, there might be several cars waiting in line at the loading zone. One car with a heavy load could delay them and disrupt schedules.

The solution? Add a front exit.

From 1920 through 1924, Snelling Shops rebuilt 526 cars with front exits. Another sixty-four cars were rebuilt in 1928. These came to be known as gate cars because they retained the boarding gates and semi-enclosed rear platform but had an exit only door at the front of the car. Most of this modification work was done in the course of the regular car rehabilitation program.

238 million people boarded Twin Cities streetcars in 1920. It was the all-time peak, never to be repeated, year for transit ridership in Minneapolis and St. Paul, and, with the exception of a brief postwar spurt to 201 million in 1946, this number of riders never returned. The automobile, of course, had lured many riders away, but the 1929 market crash and the Great Depression that followed as contributed to the decline. In 1933 TCRT recorded 100 million riders on the cars, a decline of about 58% in 13 years.

TCRT had to cut costs and the obvious target became operating employees specifically, conductors. For economic reasons combining the jobs of conductor and motorman was already well underway in other transit systems. TCRT made its decision in 1930. City governments in Minneapolis and St. Paul opposed the move, as did employees citing safety concerns and the ability of a single employee to be conductor and motorman, but the economic need was irrefutable, given the drastic loss of business.

TCRT compromised and retained conductors on its most heavily used lines, but it also began a work program of converting its cars to one man or two man operation. The project began in 1931 and continued through 1942 at the Snelling Shops as gate cars came due for rehabilitation. A total of 527 cars were converted. Work involved replacing the rear gates with large folding double stream doors completely enclosing the rear platform. The single front exit door became a double stream door. All doors were equipped with a safety device, a sensitive edge that sounded an alarm and automatically caused both doors to open if anything, like a person, became wedged between them. The motorman's controls were given dead man safety features,

and a backup control box was installed on the rear platform that permitted the motorman to turn the car around at a wye without assistance from a conductor. Other changes were made to the heating systems. Some cars received all electric heat. The conductor's station was retained at the rear of the car for use on lines where passenger loading justified a conductor, in which case passengers boarded at the rear and exited at the front. With one man operation, all boarding and fare collection took place at the front.

Transition and Change

TCRT earned \$1,203,276 on revenues of \$16,320,684 in 1946. Its management was confident it could retain the riders it had won during the gas and tire rationing of World War II. Anticipating that future, it ordered a comprehensive study of its operations by Gilman and Company, a national transportation engineering and accounting firm. The Gilman Report recommended modest improvements to the rail system together with a plan to gradually convert most of the system to bus operations over a span of 10-15 years. There was no mention of new streetcars in the report. TCRT management had great confidence in the streetcar, however, and believed it had a place in future operations. That belief was supported by the Gilman Report's modestly optimistic ridership projections.

At the beginning of the postwar era, the streetcar remained far superior in overall comfort and passenger carrying capacity to the diesel bus, especially the 141 new PCC cars (Presidents Conference Car) TCRT bought after the war. These streetcars, the result of an industry wide standardization design, development program during the 1930s, were sleek and modern. They offered high top speed and rapid acceleration and passenger comfort. They were the predecessors of the light rail cars that, today, run on University Avenue between Minneapolis and St. Paul and to Minneapolis St. Paul International Airport and the Mall of America. Unfortunately, after the war it didn't really matter because ridership projections proved wrong as returning GI's bought more and more automobiles and began driving them to the suburbs. From 205 million riders in 1946 and earnings of \$1.2 million, TCRT posted a loss of almost \$800,000 in 1949 on 165 million riders. It was catastrophic

When this aerial photo was taken of the intersection of Snelling and University, the site had two property owners. Recently the Minnesota United Football Club successfully negotiated for control of the property so that it can demolish the shopping center and build a soccer stadium. Photo courtesy of the City of Saint Paul.



and the riders never returned. Shareholders panicked, and a proxy war brought on a new board of directors and a new management that pledged pro tability and buses. The streetcar rehabilitation program was closed down and shops employees furloughed.

In the 1949 annual report, new company President Charles Green, a former director of the TCRT who had made his money wholesaling appliances to the military during World War II and knew little about street railways, prophetically told shareholders. It is recognized that the rendering of courteous, rapid and convenient service to the public, which provides the company's revenues, is the first essential of a local mass transportation company. However, it is self evident that this important public service cannot be provided by a private industry on a basis, which results in a financial loss to the owners.

Green's statement was a prelude to the eventual public takeover and operation of the Twin Cities transit system in 1971, but it, also, ushered in the management team led by Minneapolis lawyer, Fred A. Ossanna. As has been well documented, Ossanna subsequently converted the system to buses but profited personally, and illegally, from the conversion program. He and the others involved were later convicted in federal court and sent to prison.

Buses began arriving in large numbers in 1952. Conversion of the St. Paul system was mostly complete by the end of that year with the entire system to follow by June 19, 1954. Snelling's final work involved the overhaul of the new PCC cars that were to be sold to other systems and the scrapping of the remaining streetcars and work equipment. Many of these cars were sold as bodies for reuse as lake cabins or chicken coops. Then in mid July 1954 all electric power from the main power plant was turned off in the yards and shops and the buildings were razed. The storehouse, the erecting shop, and the carpenter shop survived. The storehouse was rented out as a warehouse building for several years, but it was torn down by the Metropolitan Transit Commission in 1973 to make room for employee parking. The erecting shop and carpenter shop became part of a new bus garage and bus overhaul shop, which, in turn, was demolished in 2003, not quite a century after the Snelling Shops opened. The site is now redeveloped with the construction of a soccer stadium.

John W. Diers is a writer historian and the author of two books, Twin Cities by Trolley and St. Paul Union Depot. A contributor to historical journals, including Ramsey County History, Mr. Diers is a retired transit system manager and a member of RCHS's Editorial Board.

SUGGESTIONS FOR FURTHER READING

- Debra Brill, *History of the J.G. Brill Company* (Bloomington, Ind.: Indiana University Press, 2001).
- Lawrence A. Brough, *The Electric Pullman: A History of the Niles Car & Manufacturing Company* (Bloomington, Ind.: Indiana University Press, 2013).
- and James H. Graebner, *From Small Town to Downtown: A History of the Jewett Car Company 1893-1919* (Bloomington, Ind.: Indiana University Press, 2004).
- Stephen P. Carlson and Fred W. Schneider III, *PCC: The Car That Fought Back* (Glendale, Calif.: Interurban Press, 1981).
- John W. Diers and Aaron Isaacs, *Twin Cities by Trolley: The Streetcar Era in Minneapolis and St. Paul* (Minneapolis: University of Minnesota Press, 2007).
- Roger H. Grant, *Electric Interurbans and the American People* (Bloomington, Ind.: Indiana University Press, 2016).
- George W. Hilton and John F. Due, *The Electric Interurban Railways in America* (Stanford, Calif.: Stanford University Press, 2000).
- William D. Middleton, *The Time of the Trolley* (Milwaukee, Wis.: Kalmbach Publishing Company, 1975).
- and William D. Middleton III, *Frank Julian Sprague: Electrical Inventor and Engineer* (Bloomington, Ind.: Indiana University Press, 2009).
- Larry Millett, *Lost Twin Cities* (St. Paul: Minnesota Historical Society Press, 1992).
- William A. Millikan, *A Union Against Unions: The Minneapolis Citizens Alliance and Its Fight Against Organized Labor, 1903-1947* (St. Paul: Minnesota Historical Society Press, 2001).
- Craig R. Semsel, *Built to Move Millions: Streetcar Building in Ohio* (Bloomington, Ind.: Indiana University Press, 2008).
- Andrew D. Young and Eugene F. Provenzo Jr., *The History of the St. Louis Car Company, Quality Shops* (San Diego, Calif.: Howell North Books, 1981).



Comparing and contrasting nineteenth-century pioneer and Dakota lifeways is at the core of the Gibbs Farm mission. Gender roles defined life for both cultures, but while Dakota women relied on traditional ways, pioneer women lived at a time filled with new inventions.

Pictured on the top left is a *psin* (wild rice) winnowing basket fashioned from birch bark, made and used by Dakota women for centuries in the final stage of winnowing rice. On the bottom left is a newfangled device called a Lazy Daisy that women like Jane Gibbs used to churn butter because it was much faster than a simple wooden-dash churn.

Participants in the 2018 *Investigate MN!* program not only learned about these objects, they also used them and tasted the foods associated with them.

The psin winnowing basket is a reproduction; the Lazy Daisy is an original. Photos by Mollie Spillman. Both objects are reproduced by permission from the collections of the Ramsey County Historical Society.

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The Minnesota United Football Club expects Allianz Field, its new soccer stadium, to open for play in early 2019. The capacity of this soccer-specific facility is more than 19,000. This aerial photo from August 2018 shows that much of the exterior of the stadium has been completed on the site that was once the TCRT's Snelling Avenue repair facility. University Avenue and the nearby station on Metro Transit's Green Line can be seen on the right. Snelling Avenue runs north-south on the far side of the stadium. In the distance is the Minneapolis skyline. *Photo courtesy of the M. A. Mortenson Company.*