ASSOCIATION OF CANADIAN MAP LIBRARIES AND ARCHIVES

BULLETIN

Trading Card Project: Historical Hamilton Transit Cars

Student Voices

Section Editor: Saman Goudarzi, McMaster University

Author: Esther Kok Student Library Assistant, McMaster University

Keywords: Public transportation, Trains, Transit History, Hamilton, Industrialization, Instrumental Distribution

Abstract

Hamilton Street Railway, the city of Hamilton, Ontario's public transportation system, has a long history. The system was first run by horse-drawn cars, but was electrified in 1892 — around the same time that innovation surrounding electricity transmission came to Hamilton. It consisted of various routes around the city, including the "Belt Line," which connected the east and west ends of the city. The system, along with four interurban lines that went to Burlington, Beamsville, Dundas, and Brantford, were eventually purchased by the utility company, Dominion Power and Transmission. The street railway lasted until 1951, when it was no longer financially responsible to maintain. The author turned images of street cars that were used by Dominion Power and Transmission into trading cards that can be printed, cut out, shared, and traded, with the hope that they will spark excitement for public transportation! The cards can be used as a tool to learn about the history of public transportation in Hamilton, and invite investigation into its future.

NUMERO 175 / HIVER 2025

Background

In October of 2023, some old street railway tracks were paradoxically uncovered on Sherman Ave in Hamilton, Ontario while watermain construction in the area was underway. The relocation and upsizing of these watermains were being undertaken in preparation for the City of Hamilton's new and improved Light-Rail Transit project — a modem iteration of a street railway (VanDongen, 2023). These old tracks belong to the by-gone Sherman Ave portion of the "Belt Line1", an old Hamilton Street Railway route, which is denoted in red on the map below. The "Belt Line" and five other lines across the City with some variation over time (denoted in black) made up the Hamilton Street Railway (HSR). This forgotten rail network carried Hamiltonians across the City and even up the Escarpment between 1874 and 1951.



Out of all the HSR routes, the Belt Line was the last to go. It began on James St, turned right onto Barton Ave, and travelled south along Kenilworth Ave to Main St E, where it turned right again to make its journey westward across the City by connecting to King St E via Sherman Ave (Mills, 1971). When this service was discontinued in 1951, some felt as though it was a long time coming. Other cities across Canada were doing away with their Belt lines, and Hamilton's rickety street railway was not bringing in enough profit to justify the service (Upper Canadian Railway Society Newsletter, 1951). HSR had actually been on the fiscal decline ever since the electrification of its railway in 1892, when it transitioned from horse-drawn cars to electric-powered cars. Electric railways were not as profitable as horse-drawn cars, and the system was fighting to stay above water for many years before busses and trollies progressively replaced streetcar service.

A number of larger companies and a consortium of individuals with controlling shares of HSR attempted to keep the railway afloat, but the final owners before the City (the governing bodies of Canada Coach Lines) had no interest in maintaining the cash-draining railway operations of HSR, and in 1951, the last train (no. 529) ran on the Belt Line for the last time. HSR no. 529 was scrapped the following year, and what remained of the street rails that were not removed were buried under asphalt until their discovery in 2023, more than seventy years later (Mills, 1971).

The history of Hamilton's old street railway is not only indicative of the needs of what was, at the time, a booming population in an industry-forward city; it also points to the major technological innovation that was occurring in the region. The Cataract, an electricity company from Hamilton, Ontario, was the first in Canada to implement Nikola Tesla's alternating current electricity transmission system, allowing the company to transmit electricity from DeCew Falls in Thorold to Hamilton at twice the voltage of previous systems (Mills, 1971). It was greatly due to this 1898 innovation and the cheap electricity it provided that Hamilton earned its name as the "Electric City"! The electricity provided by the Cataract powered Hamilton's street railway system (HSR) and four interurban railway lines, stretching to the neighbouring municipalities of Burlington, Dundas, Brantford, and Beamsville.

The Cataract was integrated into a local utility company, Hamilton Electric Light & Power, under the new name, Dominion Power and Transmission (D. P. & T.). D. P. & T. successively purchased each interurban line, HSR, and the terminal station company. The terminal station was located on Catherine Street and served as storage for train cars and an office space. D. P. & T. eventually became a public transportation conglomerate in the Hamilton area (Mills, 1971).

This history and more is synopsized in John M. Mills' "Cataract Traction"— the second volume in a series published in 1971 by the Upper Canadian Railway Society and the Ontario Electric Railway Historical Association. Throughout the book, pictures of some of the train cars used on the street railway and the interurban lines are included. These pictures are sourced from private collections, HSR, the Dundas Historical Society, and Ontario Hydro. D. P. & T.'s fleet is also numbered and listed in the back of the book in the "Roster."

When looking through pictures of the train cars and reading their individual stories, it is clear that each car had its own identity. Some began and ended their lives employed in Hamilton, but others have more complex pasts, as they were purchased second-hand from major cities across the USA. These cars were modified and rebuilt according to needs, changing laws², or, in a few unlucky cases, after a car barn fire in Beamsville in 1919. These events are only a small part of the rich history of public transportation in Hamilton and the train cars that carried Hamiltonians across the city. The author decided to create a set of trading cards to provide an interactive element to this history that emphasizes the individuality of each train car, like baseball cards do for their players.

The Trading Cards

The author used the historical images that appear in Cataract Traction to build a deck of trading cards that give specs and a short description of each car in the D. P. & T. roster. The cards list the car's manufacturer, the year it was built, its dimensions, and the type of controls, motor, and trucks it had. When the information was available, the author also added details on when and where the picture was taken and what year the car was scrapped. Some train cars had multiple

images, and therefore have multiple cards (eg. car no. 606). While the specs in these instances remain the same, the information about where and when the picture was taken differs, adding another layer of rarity to some cards.

All of the cars pictured belonged to D. P. & T. at some point. They are classified into car types (passenger, freight, plough, sweeper, combine, bonder, etc), although for some, the most prominent identifier was their destination. For example, some cars are called 'City' cars. These stayed within Hamilton. 'Interurban' cars travelled on the four interurban lines. The author used either the car type or its destination as the car's name on the cards, following whichever term Mills used in the roster of the cars provided at the back of the book. This name can be found to the right of the car's number on the card. Some other terms that appear are DT and ST- meaning Double Truck and Single Truck respectively. The term 'truck' refers to the structure that attaches the wheels to the car. This term and others used on the cards can be found in the glossary.

In addition to the 67 car cards, the deck also includes five images of the James and Wentworth Street incline railways (discontinued in 1941), and one special card featuring the historic Catherine Street Terminal Station. The reader might notice that the back of the cards also hold significance. An illustration of the City of Hamilton from 1876 can be found on the back of each sheet of cards, creating a puzzle that can be assembled when one has collected the right cards! Each set requires eighteen cards to finish the puzzle. The illustration depicts the city when HSR was still run by horse-drawn cars, which can be seen if you look closely. The original HSR car and horse barn, constructed in 1874, and the "new" station (1876) only a few blocks down can be seen on Stuart Street. What is interesting about this map is that it depicts the rails approaching. but not meeting, the 1876 station. This is because there is a hill on this street, and horses were not able to carry passengers all the way up (Luton, 2018). This illustration is a part of the Lloyd Reeds Map Collection's Digital Archive (Brosius, 1876). Maps such as these, meticulously preserved and digitized, can give readers an understanding of and appreciation for the geography of their City and how it has changed. Map collections, specifically those that carry historic maps, can provide patrons the opportunity to get to know their environment and the histories that surround them. The illustration provides an index to buildings, churches, businesses, hotels, schools, and more. It shows us what public transportation looked like when it was first starting out in Hamilton, and helps readers appreciate the changes it has gone through.

The author notes that there is some uncertainty about the history of these cars. Mills did an excellent job explaining multiple re-numbering schemes of the fleet, changes in the ownership of each line between various companies, changes in the names of the routes, corporate reorganization, abandoned projects, and more. Despite this, this history is still slightly confusing, especially when Mills' accounts contradict others', or when key information about a car is missing. There is also no unit for the weight of the cars. Because of this, the trading cards are not meant to be exactly historically accurate, nor are they meant to be a reference for any further work.

When searching for additional data outside of Cataract Traction, the author also used the TrainWeb forum, Hamilton Transit History (most of which consolidated the information already found in Cataract Traction). This web page is exclusively published and operated by Tom Luton, a local historian. It is thanks to the work of John M. Mills, Tom Luton, and many others that this project is possible and that the memory of this railway system can be retained — important especially now, as the City is moving into a new era of transportation with the Light-Rail Transit project. It is the author's hope that Hamiltonians will use these cards to learn about the history here and perhaps will prompt reflection on and investigation into the future of public transportation in our city.

How to Use the Trading Cards

These trading cards can be printed, cut out, shared, and compared. For best results, print doublesided. The author hopes that readers will use these cards to learn about trains and transit history in Hamilton, trade with their friends, and build the puzzles to reveal the completed illustration! These cards can be used to spark excitement about public transportation and its rich history, both in Hamilton and across Canada.

According to James Wertsch, instrumental distribution is one way that memory is conveyed across a group. This involves the work of tools (written records, archives, memorabilia, etc) to evoke memory from a group (Wertsch, 2002). One example of a tool of instrumental distribution is the City's 2024 HSR 150 exhibit at its Visitor Experience Centre. The exhibit shows information about HSR's past through images, props, and interactive elements— allowing visitors to learn about HSR's history in a way that invokes curiosity and appreciation for the system and the hard work that made it possible.

Through tools such as trading cards, monuments, and the City of Hamilton's HSR 150 exhibit, citizens can learn about what public transportation was, who it has been for, and how it has transformed to meet the needs of our population over time in order to understand why it is important to have a well funded and well planned public transportation system. Trading cards with historic train cars can show Hamiltonians that our transit system is evolving and growing, as are our transportation needs. To be able to see the bigger picture of our transit system, we need to look into the past to see where we have been. As we move into a new era of public transportation in Hamilton with the Metrolinx LRT, we have the unique opportunity to investigate our past to contextualize our future.

Glossary

Types of Cars* (in order of appearance)

*Some of the train cars can be classified by multiple terms. For example, we can assume that passenger trains were either open or closed, however, "closed" is listed as a type of car. I followed what the original roster from Cataract Traction named each car.

Rotary Plow	A rotary plow is a snow clearing device where the rotary engine drives a wheel attached to the front of the train car, blowing snow off of the tracks (Ingenium, 2015).
Sweeper	These were motors with a round brush at the front and back of the car that was rotated by the motor (Stahl, 2024).
Passenger	A train car which carries passengers (Wikipedia, 2024)
Line Car	"Line Car" is a colloquial term for a train car that can be used for freight by multiple companies.

NUMERO 175 / HIVER 2025

Open	Open train cars have no walls, and are boarded through the sides, where the conductor would walk along the edges to collect fares. Because of the risk of injury, they were outlawed in Ontario in 1915 (Luton, 2015).
Closed	Closed street cars have all walls and are only boarded through the door (Luton, 2015).
Combine	A combine is both a passenger and freight car (Wikipedia, 2024).
Bonder	Rail bonders are construction cars that are used to join sections of rail (Lionel, 2015)
Dump Motor	This is a type of car which can dump materials via an air valve (Trains, 2002).
Work Motor	This is a type of car that is designed to maintain and repair the tracks (CSX, 2024).
Interurban	These trains travelled between cities.
Suburban	These trains travelled within the city, meant to bring people from suburbs of Hamilton to the central city.
Freight	Freight cars carry goods from place to place.
City	City cars are named for their routes. Cars with the name "City" predominantly ran throughout Hamilton.
Plow	Much like a sweeper, a plow pushes snow off of the tracks.

Terms that appear on the cards

DT	Double Truck
ST	Single Truck
SE	Single Engine
DE	Double Engine
Built	This could be the company who constructed it or the city in which it was constructed, and the year it was built.
Truck	This is the structure on the bottom of a train car that attaches the axels to the car.

NUMERO 175 / HIVER 2025

	Control type	This refers to the type of system used to control the train car.			
	Motor	This refers to the type of motor that the train car had.			
Сотр	Companies and Other Acronyms				
	D.P. & T.	Dominion Power and Transmission Co.			
	H & D	Hamilton & Dundas			
	H. G. & B.	Hamilton, Grimsby & Beamsville			
	H. R. E. R.	Hamilton Radial Electric Railway			
	B. & H. E. R.	Brantford and Hamilton Electric Railway			
	HSR	Hamilton Street Railway			
	LRT	Light Rail Transit is a type of transportation system that runs on a separated lane on city roads, powered by light rail vehicles similar to street train cars (Metrolinx, 2022).			
	GRT	Grand Trunk Railway			
	CCL	Canadian Coach Lines			
	GTTA	Greater Toronto Transportation Authority, currently known as Metrolinx			
Other terminology					
	Integrated	The process of one company acquiring another and merging their operations.			
	City	When capitalised, the City refers to the governing bodies of Hamilton, eg, City council and Mayor.			
	Province	When capitalised, the Province refers to the governing bodies of Ontario, eg. the Ministry of Transportation and the Premier			
	Ontario Hydro	The publicly owned electricity utility in the Province of Ontario. Previously named the Hydro-Electric Power Commission of Ontario.			

NUMERO 175 / HIVER 2025

Terminal A terminal is the central location at which buses or other automobiles/trains may park and load. Currently, Hamilton's primary bus terminal is the Frank A. Cooke/ McNab Street Terminal Station.
Franchise A franchise is a corporate entity that distributes its symbology and trademark amongst private companies who pay a fee to belong to such an entity.

References

"Amtrak Rail Bonder." *Lionel.com*, 2015, <u>https://www.lionel.com/products/amtrak-rail-bonder-6-</u>28400/

"Beltline." *Merriam-Webster.com Dictionary,* Merriam-Webster, <u>https://www.merriam-webster.com/dictionary/beltline</u>

"Combine car." Wikipedia, https://en.wikipedia.org/wiki/Combine car Accessed 23 July 2024

Hamilton Street Railway: Burlington Route Abandoned and End of Belt Line Near. 61 ed., February 1951. Charles Cooper's Railway Pages, Upper Canadian Railway Society Newsletter, https://railwaypages.com/upper-canada-railway-society-ucrs-and-its-publications

Luton, Tom. "Hamilton Transit History." *TrainWebs*, 2001-2024, <u>http://www.trainweb.org/hamtransithist/</u>

Metrolinx. "What is LRT? Light rail transit explained." *Metrolinx*, 3 June 2022, https://www.metrolinx.com/en/discover/what-is-lrt-light-rail-transit-explained

Mills, John M. Cataract Traction. vol. 2, Canadian Traction Publications, 1971.

"Passenger railroad car." *Wikipedia*, <u>https://en.wikipedia.org/wiki/Passenger_railroad_car</u>. Accessed 23 July 2024.

"Rotary Snowplough | The Channel." *Ingenium*, 12 November 2015, <u>https://ingeniumcanada.org/channel/innovation/rotary-snowplough</u> Accessed 23 July 2024.

"Railroad Dictionary." *Railroad Dictionary - CSX.com*, <u>https://www.csx.com/index.cfm/about-us/company-overview/railroad-dictionary/?i=W</u> Accessed 23 July 2024.

Stahl, Randy. "Trolley Snow Sleepers - Trains Magazine - Trains News Wire, Railroad News, Railroad Industry News, Web Cams, and Forms." *Trains.com*, <u>https://cs.trains.com/trn/f/742/t/286435.aspx</u> Accessed 23 July 2024.

Van Dongen, Matthew. "LRT route dig unearths Hamilton's street railway past." *Hamilton Spectator*, 24 October 2023.

Wertsch, James V. Voices of collective remembering. Cambridge University Press, 2002.

zugmann. "Air dump valve on every car?" *Trains*, 2002, <u>https://cs.trains.co</u>