Goings On at Seashore -

Obviously as with every other locale on our planet the primary news is the pandemic of coronavirus disease 2019 (COVID-19). A 5 June 2020 museum update from Seashore indicated that the museum remains open under Maine’s Plan to Restart the Economy, and the Guided Outdoor Activities, Museums, and Retail provisions. The following activities to Maine Residents and non-residents who have already completed a 14-day self-quarantine in the State of Maine in June: Trolleys are operating on Wednesdays, Fridays, Saturdays and Sundays with restrictions, Docent-Guided Museum Tours offered on Wednesdays and the weekends. and Self-Guided Museum Tours Offered on Mondays, Tuesdays and Thursdays. The health environment and regulations are changing rapidly enough that I am not going to attempt to provide information beyond that and would recommend you watch for bulletins from Seashore and the Seashore website as to current information for what is occurring.

Do You Recognize ?

Last Month’s Do You Recognize -

Our line of interest was formed in 1897 as a reorganization of the Lincoln Street Railway company, founded in 1881 as the city's first street railway, beginning service by 1883.

Lincoln, Nebraska was founded in 1856 as the village of Lancaster on the wild salt marshes of what was to become a county of the same name. It became the state capital in 1869. The state capitol building was completed in 1932, and is the second tallest capitol in the United States. In the sixteen years between the founding of the street railway and its reorganization, some dozen other streetcar companies were franchised in the city (one operated horsecars until 1906), with Lincoln Traction being the largest. The line was controlled by out-of-state investors, and involved in multiple disputes over taxes, fare increases, and lack of maintenance. In 1905
local interests formed the competing Citizens Railway, largely to pressure our line. Members of the city’s Commercial Club conceived a street railway to be called the Citizens Interurban Railway. Within two years a local firm, Woods Brothers, formed the nearly identically named Citizens Interurban, laid track and in the fall of 1908 opened a line. The following year Citizens Interurban merged with Citizens Interurban Railway, both of which were owned by the Woods Bros.

This tactic was successful to the degree that when the Traction and Citizens merged in 1909 (as the Lincoln Traction Company) former Citizens directors held six of the eleven seats on the new board and only one of the directors was not a city resident. Both the Lincoln Traction and Citizens were dedicated users of the products of the American Car Company. J.G. Brill had acquired American Car in 1904.

In its merged form, the Lincoln Traction Company owned and operated almost all of the streetcars in the city. The company had its own electric generating plant which not only supplied the streetcar lines, but also sold electricity and steam to private customers.

The merger of 1909 was followed by a series of consolidations and abandonments of unprofitable lines leading to the company's most prosperous period in the early 1910s. Plans were developed for the new headquarters with a terminal company organized by the Lincoln Traction Company’s directors to construct the building with a common president of both companies. The building was planned in 1915 and erected in 1916 as headquarters for the
Lincoln Traction Company and also served as the terminal of the Traction Company's various lines.

By 1916 all of the nearly 65 miles of street railway in the city had been consolidated into the Traction Co. The Lincoln Traction Company would be the major street railway company in the city from the 1909 merger until the end of streetcar service in 1943. The First World War brought declining income to the Lincoln Traction Company, followed by labor strife and a violent strike in 1917. The company ran deficits in the early '20s as buses started competing with its streetcars on the suburban lines. The company began to acquire its own buses with a single route in 1926 and by the late 1920s the system was half bus/half streetcar with revenues continuing to decline with just three streetcar lines remained after 1931.

A holding company had taken over the Lincoln Traction Company in 1926, mainly to acquire the power plant, which was split off from the transit operation.

National City Lines acquired the Traction Company in 1942 and renamed the Traction Company as the Lincoln Lines with the last street railway line, a former interurban line, closing on Sept. 2, 1945.
In 1946 the company was operating 66 buses over 66.3 route miles. Most of the streetcar tracks had been removed by federal relief projects in the 1930s.

The Lincoln Traction Company’s power plant was operated and expanded by new owners until it was completely replaced in 1949. In 1971 the “city” Lines name was replaced with “city” Transportation System, which operated until 1989. In 1989 a public transit authority assumed operation.

This Month’s Do You Recognize -

Our street railway began operation in August of 1907 using a small steam switcher and some old coaches borrowed from its owner/operator’s parent Class 1 steam road as the power plant wasn’t ready. Actual electric powered service got underway in December of 1907 with the power plant completed and the arrival of four 40-passenger Woeber Carriage Company double truck trolleys. Two 44 passenger cars from the Jewett Car Company were added at a later date.

The system had three lines branching out from a downtown point. Cars arriving and departing the intersecting point were scheduled, choreographed if you will, to exchange passengers and maneuver past each other by means of a loop at the intersection.

The trolley line’s initial operator was an electric interurban railroad based in the state capital some 59 miles to the south. The owner’s primary interurban route of 30 miles opened in 1908 and operated until 1926 from the state capital to a community that had originally been settled as a gold mining community and later the home of the state university some 50 miles
to the northwest of the capital. The local street railway operation of our interest was not so successful from the interurban’s view. The system struggled from the start and light ridership made the operation untenable for a private operator and operations of our line were abruptly abandoned on a July night in 1918. A major cause of the closure, as with many systems owned by steam roads, was that in 1917 as part of the war effort the Federal Railroad Administration took control of the steam road but not the subsidiary electrics which were left to their own minimal financial resources to stay afloat.

After the July 1918 closure there was a brief experiment with a bus equipped with flanged wheels. The White Motor Company proposed operating a 30 day trial with one of their buses equipped in such a manner. The ride was rough, loud, and smelled plus the poor roadbed resulted in many derailments with damage to the bus. Consequently the experiment was both unpopular and short lived.

The experience of the past eleven years had tempered any desire by any other operator to take over and the system was not in the best condition as the owners had foreseen the end for sometime. The rolling stock was felt not worth repairing and the track and overhead needed major rehabilitation. A proposal was floated to have the city buy the system and restore service. The proposal was approved by the city council and in early 1919 a public vote confirmed the purchase and a “city name” Municipal Railway was formed. The Woeber-built rolling stock was not part of the transaction.

Four new Birney cars (Nos. 20-23) were ordered from the American Car Company. These arrived in late May 1919 and service started within a couple of weeks. A 5th Birney (No. 24) came from Cincinnati Car Company in 1920 and two second-hand Birneys built by American
Car Company in 1922 were acquired from Cheyenne Electric in 1924 becoming Nos. 25 and 26. Around the end of the Second World War saw two more second-hand Birneys arrive from Virginia Electric Power replacing cars 24 and 25. Service varied from a 10 minute headway in peak times and 20 minutes at others.

By the late 1940s a bus line had been granted a franchise in the city, in some places, directly in competition with the city-owned trolley system and wanted to establish a city-wide system. As trolleys suffered major failures a bus was substituted and in early 1951 a six month trial replacement of the trolleys by busses was approved by the city council. The end came in late June 1951 when the last car was operated on the system. In late 1952 voters approved the actual removal of the system infrastructure from their city. At its closure the line was the last operating trolley system in the state.

A Municipal Railway Society, a 501c 3 entity, was formed in 1980 to complete the restoration of Car 21, restore a 1.5-mile portion of the line, and work with the public and city. Work on car 21 took seven years, while line restoration took almost five years. Rides on the restored trolley are now offered primarily on Spring and Summer weekends.

Library Committee

The Library Committee did not meet in February due to power outages from the windstorm and the Library Committee did not meet in March, April or May due to public health recommendations for COVID19. The meetings are now postponed indefinitely.

Issues still on the agenda include:

- Elections for 2020/2021: We have one opening on our slate. Please contact Karen Dooks if you are willing to run.
- Electrical work in the Conference Room.
Concerns regarding the Curatorial Collections Management Policy as they relate to the Library.

Our community partner York County Community College is also closed due to the COVID-19 pandemic.

The Library Committee’s meetings followed by a Workshop on Saturdays (10AM - 2 PM) are cancelled.

Saturday - Workshops only (10AM - 2 PM) are cancelled
The Wednesday Evening Workshops Are Cancelled

For further information/questions concerning the Library please contact Amber Tatnall (ATatnall@yccc.edu) or Karen Dooks (781 799-5868).

By Karen Dooks, Chair

Links:

More than 1000 of the images are accessible online = https://digitalmaine.com/trolley_images/

Facebook page = https://www.facebook.com/groups/44932548777/

Seashore Library On-Line Resources -

A library resources page originally developed by Amber Tatnall dealing with useful and interesting resource material including among other things links to some three decades of the Street Railway Journal and the Electric Railway Journal on line is located at:

http://virtual.yccc.edu/seashoreTrolley

or this handy tinyurl works as well: http://tinyurl.com/zwhndoe

The Library continues to upload material to the various sections of DigitalMaine - The DigitalMaine Repository is a partnership of the Maine State Library, Maine State Archives and community institutions around the state.

The uploads to the new documents area are quite fascinating as they allow you to literally leaf through the documents.

https://digitalmaine.com/trolley_museum/
https://digitalmaine.com/trolley_blueprints/
https://digitalmaine.com/trolley_images/
https://digitalmaine.com/trolley_documents/
A question of locale -

In last month’s Miscellany Section we looked at The Battery Cars of the Third Avenue Railway. One image was of battery car No. 1196 - part of an order of 50 battery cars delivered by J.G. Brill to Third Avenue in 1911: No’s. 1152 - 1186 [18’ 6”], and No’s. 1187 - 1201 [18’].

The image and its location information came from a collection donated to Seashore by a well known collector many years ago and was attributed as supplied by an equally well known photographer. The location was noted on the image as “No. 1196 on Flatbush Ave Ext Pending Installation of Electrics on B&NR. Retired 6-11-27”

Rail historian and author Jack May exchanged some comments relative to the battery car piece and had a question relative to the image of No. 1196 as shown above. Specifically he questioned the cited location of “Flatbush Ave Ext”. After doing in-depth research on the location he passed his notes to traction historians Jim Greller and Henry Raudenbush for their opinion. They concurred that the location should be noted as "TARS 1196 Gold Street near Fulton Street."

Mr. May was so kind as to copy me with his analysis in reaching this conclusion:

The rails on Flatbush Avenue Extension belonged to the 3-cent line and went into service on December 14, 1912. Prior to that its line ran only from one end of the bridge to the other (starting on September 4, 1912).

The Brooklyn & North River, partly owned by the Third Avenue, but operated by it, opened on November 13, 1912 between the Manhattan end of the bridge and Gold and Fulton Streets in Brooklyn via Jay, Willoughby and Gold to Fulton Street, which was about a month before the tracks were completed on Flatbush Avenue Extension.

Thus our assumption that the photo is at Fulton and Gold meets up perfectly with the dates above.

The reason the B&NR continued running to Gold Street even after December 14, 1912, when the 3-cent line was extended via Flatbush Avenue Extension to Fulton Street could be that the 3-cent line did not want battery cars running on its electrified
Brooklyn trackage, or possibly that it took some time for the B&NR to gain trackage rights.

On February 9, 1913, the B&NR extended its line westward along New York Railways trackage on Canal Street to the west side, and replaced the battery cars with regular Third Avenue units, equipped with both poles and plows, using a plow pit at Canal and Bayard Streets in Manhattan. Thus the photo could have been taken at any time between November 13, 1912 and February 9, 1913, a period of only just under three months.

The B&NR did not begin running over the 3-cent trackage to its terminal until December 11, 1913.

This analysis appears sound and I have no other information beyond the notation in the collection. Assuming the Gold Street near Fulton Street location to be correct the background beyond TARS 1196 would be the intersection of Gold Street, Dekalb Avenue, and Fulton Street with the elevated structure in the background being the Fulton Street Line. For those interested in Brooklyn geography the Gold and Fulton terminal point was about two blocks west of the of Flatbush Avenue Extension.

Jack May’s efforts in researching the image location and providing the information to me is most appreciated. Thanks!

A Flash From The Past -

Recently when researching some material on the SOAC cars I came across a scan (4 pages of 44) from a short lived US DOT publication (1971 - 1972) called Highway and Urban Mass Transportation. The cover photograph was of the ceremony at the Pueblo Test Center for the rollout of the SOAC cars, now many years resident at the Seashore Trolley Museum, and the lead story was about the opening of the high speed rapid transit test track at DOT's High Speed Ground Test Center at Pueblo, CO.

The site, 21 miles northeast of Pueblo, Colorado, is still owned by the US Department of Transportation and is operated and maintained by the Transportation Technology Center, Inc. (TTCI), a subsidiary of the Association of American Railroads (AAR), under a care, custody, and control contract with the Federal Railroad Administration.

In 1972 when the following article was written DOT’s Transportation Systems Center of Cambridge, Mass. (now the Volpe National Transportation Systems Center), was the Urban Mass Transportation Administration’s (UMTA) systems manager for the design and development of the urban rail testing facilities and for the rail vehicle test programs to be conducted at the HSGTC and on operating rapid transit properties. Beginning in 1982 the test facility’s operation was transferred to AAR and ultimately its TTCI subsidiary. Anyway I hope you find this brief peak into the intermediate past interesting.
HIGHWAY AND URBAN MASS TRANSPORTATION

WINTER 1972

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COVER PHOTO—Ceremonies October 12 marked the roll out of the State-of-the-Art Transit car at the High Speed Ground Test Center, Pueblo, Colorado. Story on page 1.

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U.S. DEPARTMENT OF TRANSPORTATION, John A. Volpe, Secretary

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UMTA Facilities at the High Speed Ground Test Center

By Administrator Carlos C. Villarreal, UMTA

The Urban Mass Transportation Administration (UMTA), in pursuit of its goals to achieve improved ground transportation in urban areas through the application of new technology to existing systems and the development of new systems, has completed a high speed rapid transit test track and initiated construction of a test guideway for the Urban Tracked Air Cushion Vehicle (UTACV).

These two test facilities are a significant part of the U.S. Department of Transportation's High Speed Ground Test Center (HSGTC) in Pueblo, Colorado. These facilities will be used to test and evaluate new vehicles and new subsystems to determine their performance, safety, reliability, rider comfort, operational and maintenance characteristics and costs. UMTA also is working at Pueblo with the Federal Railroad Administration (FRA), in the design and construction of both the necessary service and maintenance facilities for vehicles and guideways and a Rail Dynamics Laboratory for research on rail-wheel interaction.

Rapid Transit Test Track

The urban rapid transit test track, which will be used in the evaluation and performance testing of urban rail vehicles and their subsystems, consists of a 9.12 mile closed oval, of which 2.41 miles were completed in August 1971, and the remaining 6.71 miles were completed in September 1972. The track is designed for sustained vehicle speeds of 80-miles-per-hour. The closed oval consists of six sections of track of different types of construction and different stiffnesses, each representative of rapid transit track presently in use. Three sections employ 119-pound continuous welded rail (CWR) on prestressed, monolithic concrete ties (Gerwick RT-7) at three different tie spacings. A fourth section employs 119-pound CWR on wood ties. The

Secretary of Transportation John A. Volpe speaks at ceremonies October 12 marking completion of the 9-mile track, roll out of the SOAC vehicle, and ground breaking for the Urban TACV guideway.
fifth section utilizes 100-pound CWR on wood ties, while the sixth has 100-pound rail with six-hole bar joint construction. A 4,200-foot tangent section at zero grade will be used for conducting standard performance tests such as acceleration, deceleration, and dynamic braking on transit vehicles so that actual performance can be compared to design performance. A 7,000-foot section at 0.7% grade and a 4,200-foot section at 1.5 percent grade allows similar tests to be made on grades.

The oval test track contains eight locations where instrumentation embedded in the track structure will provide data concerning track performance. The data to be obtained includes loading and load distribution beneath the tie and at various points in the ballast, subbase, and soil; vibration and acceleration in the subbase, and deflections in the rail-tie-ballast-subbase soil structure.

Plans for future construction include: a tight turn loop of 150-foot radius for investigating the phenomenon of wheel squeal, and means of reducing it; a section of track containing known perturbations in alignment, profile and gauge, for the dual purpose of evaluating and testing vehicle suspension systems and calibrating diagnostic instrumentation being developed for automatic, high-speed measurement and evaluation of track condition; and new types of construction, such as rail on concrete slab, which show promise of providing reduced track maintenance costs.

The diagnostic instrumentation can be utilized at normal transit operating speeds, and will be made available to the transit industry for measurement of track parameters. It is anticipated that this instrumentation will aid in pinpointing potential trouble spots, leading to improved safety and decreased maintenance costs.

The test track has been designed with a conventional contact, or "third rail," on the inside of the test oval, and will be energized initially at 600 volts, direct current. Provision has been made for later electrification of the track for use with other energy sources such as three-phase alternating current.

Power is being supplied to the track at 600 volts from a General Electric U-30C, 3,000 H.P. locomotive parked on a siding, supplemented by two stationary diesel engine alternator-rectifier units.

When permanent power becomes available at the site, the track will be energized by two or more substations containing 2,500 KW modular rectifier units. The direct current output voltage will be adjustable to cover the range of voltages encountered in transit systems—450 to 1,250 volts. In addition, the substations will be able to "profile" the voltage applied to the contact rail so that vehicles under test will receive a constant voltage, regardless of their position on the test track.

UTACV Guideway

The UTACV guideway will be a closed loop, 10.5 miles long, and will be used for testing a prototype tracked air cushion vehicle. The vehicle, which rides on a cushion of air and receives electrical power from wayside contact rails, will operate at top speeds of 150 to 170-miles-per-hour. Urban TACV's show promise for high-speed, line haul applications, such as linking airports with downtown urban areas.

The TACV guideway is in the form of an inverted "T" and is made of a flat concrete slab with a 33-inch high center rail, which serves the dual purpose of providing horizontal guidance, or restraint, for the vehicle and acting as the reaction rail for the linear induction motor which propels the vehicle. Three phase alternating power is supplied to the vehicle through a specially-designed sliding contactor which is attached to the vehicle by a pantograph. The power rails are mounted at

Secretary of Transportation Volpe and other officials inspect the interior of the State-of-the-Art Transit car.
Main Line - Availability

If you are not on our direct distribution list and would like to be please drop a note to TheMainLine@ramsdell.com.

Ed Ramsdell, Editor

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