

A NATION TRANSFORMED

**The History & Technology
of the American Railroad**



MUSEUM OF THE AMERICAN RAILROAD

Educational Program Directory 2021

Welcome to the Museum of the American Railroad's 2021 Educational Program Directory

Where History and Technology Collide!

The Museum of the American Railroad is a nearly 60-year-old non-profit cultural arts institution dedicated to sharing the history and technology of railroads and their profound influence on American life and culture. We are pleased to offer this directory of educational programs for the 2021 academic year as a resource to North Texas schools.

The history of the railroad is indelibly woven into the fabric of our nation. The American railroad has touched every aspect of our lives and participated in historical events that have shaped the world. Furthermore, the railroad industry continues to reinvent itself and address many modern transportation challenges through innovative technologies.

The Museum is uniquely positioned to meet the needs of North Texas schools through relevant, meaningful TEKS-based programming that addresses a variety of curriculum requirements. No other museum in the region has the ability to engage and educate students about the social, economic, political, and technological influence of the railroad on American life. Through the use of the Museum's extensive collection of artifacts and archival material, students of all ages receive first-hand instruction and

interpretation of our nation's rich heritage and the evolution of transportation technology through the lens of the railroad.

The Museum currently offers e-trips and on-site programs to 1st through 12th grades, with internship opportunities for college level students. All programs are developed and updated in response to meetings with and valuable feedback from North Texas educators and administrators. In developing these programs, the Museum was able to identify the need for additional instruction and links on several subjects, including economics, agriculture, and logistics. All educational programs meet Texas Essential Knowledge and Skills (TEKS) standards.



The Museum of the American Railroad currently maintains indoor exhibits and Museum Store at TrainTopia inside the Frisco Discovery Center (8004 N. Dallas Pkwy., Frisco, TX 75034). The Museum's collection of locomotives, rail cars, and historic structures is located adjacent to the Frisco Discovery Center. Admission to the collection is only available with a staff member or tour guide during designated times, tours and field trips.

BOOK NOW

To book a Program, call 214-428-0101
or e-mail KMurphy@HistoricTrains.org

Questions Regarding Programs:

For additional information about educational programs and services, contact the Museum's Education Coordinator at 214-428-0101.



Contents

History & Technology Collide	2
Book Now: All Aboard!	3
Greetings: Letters from the Museum's Staff	4
Welcome: Make the Most of Your Visit	5
The Museum's Collection Highlights.....	6
Grow: <i>Field to Factory</i> Economics Program	7
Electrify: <i>Bolts & Jolts</i> STEM Program	8-9
<i>STREAM-Liner</i> Learning Center	10-11
Engage: <i>Thundering Prosperity</i> TX History Program	12-13
Lead: <i>Race, Rights, & the Railroad</i> Civil Rights Program ..	14-15
Manage: <i>Logistics & Supply Chain</i> Economics Program	16
Debate: <i>Taming the Giant</i> Social Studies Program	17
Our Newest Teaching Tool: <i>TrainTopia!</i>	18
From Flag Stop to Fast Track	19
Participate: Programs Beyond the Classroom	20
North Texas Railroad History	21
Thank You: Our Partners and Stakeholders	22

The Museum of the American Railroad is proud to be a member of the National Trust for Historic Preservation, American Alliance of Museums, Texas Association of Museums, and HeritageRail Alliance.



Almost 60 Years of Cultural Arts and Technology Programming in North Texas!

From the CEO

I am pleased to be part of one of the most exciting museum projects in this region. The Museum of the American Railroad is growing by leaps and bounds to serve a broader audience in North Texas. After 50 years in Dallas, we are building a greatly expanded facility at our new home in Frisco, Texas. We are poised to become the premiere museum of rail transportation in the Southwest.



As part of our growth, the Museum has addressed the need for cultural history and technology-based educational programming for area schools. Modern museums have evolved into important educational institutions, satisfying the need and in some cases filling the void for additional programming that gives way to creative thought. We have the unique ability to tell the story of the railroad and its profound impact on American life. But, the story is still unfolding. We also emphasize the role of railroads today and in the future. Our latest educational programs focus on new technologies that enable the railroad industry to provide safe, clean, fuel-efficient transportation in a global market. Our programs also identify and promote career paths in the rail industry.

Culture is the shared identity of the community - multi-dimensional and ever-changing. It is the creative expression of individuals and how they perceive the world. Cultural Arts include cultural expression through the arts, connection to the community through heritage, creative learning and the stories and experiences that make up a vibrant community. -Barry Lord

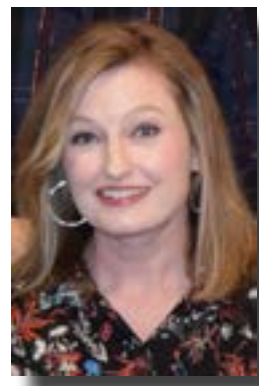
In our recent meetings with educators and curriculum planners, we identified several needs that the Museum is ideally suited to address. The result is an exciting array of programs featured in this guide. The fascinating story of the railroad and its influence on American commerce, industry, agriculture, politics, the spread of cultures, and the landscape is told through these programs. Further, we continue to provide important STEM-based programming along with our newest offerings.

We are proud to celebrate the rich history and heritage of the railroad – an industry that is indelibly woven into the fabric of our nation. As a museum, we take our role seriously as an institution that inspires new generations through the lives of the people who built and continue to operate such a grand conveyance.

--Bob LaPrelle

From the Education Department

This year, we have embarked on an altogether new educational journey, adding e-trips and distance learning to our exciting offering of onsite field trips. I have seen our educational outreach grow ten-fold as a result of nurturing and strengthening relationships with other educational institutions. I am so pleased that thousands of students of all ages have visited the Museum of the American Railroad in-person and online, and I'm even more excited to surpass our record of serving the North Texas community in the upcoming academic year!



Rail transportation is the number one component of our national economy, and is more critical now than ever before. Quite simply, trains ship thousands of pounds of products daily that every American uses, be it grain and wheat for the food we eat, oil to run our cars, coal to produce the electricity in our homes, or chemicals and products for basic items we use every day. Further, railways are the most energy efficient way to move mass quantities of these products, and are also leaders in the latest IT-driven safety technologies for freight transportation.

Railways are powered by thousands of employees with fulfilling careers, who all have backgrounds in Science, Technology, Engineering, and Mathematics. The programs offered in this guide cover a wide range of disciplines, which all bring the future of railroads to life for students. Programs include: introductory concepts of how trains bridge the gap from agricultural producer to everyday consumer; an exploration of the evolution of energy types used to power trains; how the explosion of the railroad industry in the late 1800s fostered the growth and prosperity that built Texas; the roles railroads played in growing social tensions in the early and mid-twentieth century during the zenith of continental railroad passenger travel; and an in-depth look the role of railroads in community building throughout Texas and our nation.

Please contact me with questions, comments, or special requests. We can tailor programs to fit your needs or provide e-trip presentations. We are excited to meet you and teach your students this year! --Kellie Murphy

WELCOME
Make the Most of Your Visit!



BOOKING A TOUR

We are pleased to share a vital aspect of American technological history with your students! Please take a few moments to review all information in order to help us make your field trip exceptional. Our Education Staff strive to fulfill your curriculum needs in order to create a meaningful experience for your students. Please contact a member of our Education Staff at 214-428-0101 should you have additional needs. Your program is considered "booked" when you receive a confirmation e-mail or phone call from the Museum's Education Department.

ABOUT YOUR PROGRAM

We are happy to address your questions and reserve space for your students. Educational field trips are based on a minimum of 30 students. Additional admission applies for parents and chaperones. The Museum reserves the right to reschedule a field trip due to inclement weather. We will work closely with you to ensure the program is rescheduled to your next preferred available date. Groups of 60 or more will be divided into smaller groups to ensure students get the best possible program experience. Close-toed shoes are required for the field trip. Weather-appropriate clothing and refillable water bottles are strongly advised.



ABOUT THE MUSEUM

The Museum of the American Railroad maintains indoor exhibits and its Museum Store at *TrainTopia* inside the Frisco Discovery Center (8004 N. Dallas Pkwy., Frisco, TX 75034). The Museum's collection of locomotives, rail cars, and historic structures is located adjacent to the Frisco Discovery Center (6299 N. Cotton Gin Road, Frisco, TX 75034). Educational tours take place inside *TrainTopia* and on the rail car site. Please do not unload buses prior to checking in with the Museum's Education Staff.



CLIMB ABOARD!

- Students Will Tour*:**
- 1914 Santa Fe Railway Parlor-Club Car (Pictured at Left)
 - 1918 Frisco Railway #1625 Steam Locomotive
 - 1923 Dallas Union Terminal Co. #7 Steam Locomotive
 - 1925 Glen Nevis First-Class Pullman Sleeping Car
 - 1927 Santa Fe Railway Caboose
 - 1937 Missouri-Kansas-Texas Dining Car

*Please Note: Due to restoration efforts, every car may not be available during a field trip tour. However, staff will make every effort to make sure all trains are available.

Collection Highlights



THE AGE OF STEAM

Union Pacific “Big Boy” #4018 – Built in 1942. World’s largest steam locomotive, weighing 1.2 million pounds. Operated over Union Pacific’s Transcontinental Main Line until 1957.

ELECTRIFYING

Pennsylvania Railroad GG-1 Electric Locomotive #4903 – Built in 1940. Styled by famous industrial designer Raymond Loewy. Operated between Washington, D.C. and New York’s Pennsylvania Station. Pulled Robert Kennedy’s funeral train in 1968. Retired in 1980 after 40 years of service pulling 100 mph passenger trains, including Amtrak’s Northeast Corridor.

DIESEL UP!

TXI ALCO RSD-1 #8000 – One of the earliest diesel designs, built in 1942 for the New York, Susquehanna & Western Railroad. Requisitioned by the War Department during World War II. Served in U.S. Army 762nd Railroad Battalion on the Trans-Iranian Railway hauling war materials overland into Stalingrad. Repatriated and later sold to TXI Cement & Aggregates serving at their Midlothian, Texas cement plant until 1999.

Union Pacific “Centennial” #6913 – World’s largest diesel-electric locomotive. Built by General Motors’ Electro-Motive Division in 1969 in celebration of the 100th anniversary of the Nation’s first Transcontinental Railroad. 6,600 horsepower, fuel capacity 8,200 gallons. Second only to “Big Boy” in horsepower!

FIRST-CLASS ALL THE WAY



Pullman Sleeping Car “Glen Nevis” – National Historic Engineering Landmark. Built in 1925, it is the oldest surviving all-steel first-class sleeping car. Provided accommodations on Franklin D. Roosevelt’s funeral train, 1945. Used mainly on New York-Florida routes.

Pullman Business Car “Texland” – Built in 1900. Provided deluxe accommodations and office space for Fort Worth & Denver Railway (Burlington Lines) management. Used by Harry S. Truman during his 1948 Whistle Stop Campaign for Senator of Missouri. *Texland* is the oldest piece in the Museum’s collection and features three deluxe staterooms, formal dining, and rear salon.

Pullman Sleeping Car “Glen Nevis” – Built in 1925. Named after a valley in Scotland (*Glaenn Nibheis* in Gaelic). Provided first-class accommodations on the Chicago-Florida *Orange Blossom Special*. Used on Adlai Stevenson’s Presidential campaign train, 1952. Purchased by Halliburton’s Freightmaster Industries and reconfigured to a computer research & testing car in 1965.

LANDMARK STRUCTURES

Houston & Texas Central Railway Eakin Street Yard Office (Dallas) – Built circa 1900. Displaced by I-30 highway construction and saved from demolition in 1963. Survives as one of the oldest depots in Texas. Recorded Texas Historic Landmark, 1979.

Santa Fe Railway Interlocking Tower 19 – Built in 1903. Controlled the movement of trains at one of Dallas’ busiest railway intersections for 90 years. Listed on the Historic American Engineering Record (TX-22) at the Library of Congress, 1992.

ONLINE RESOURCE



In partnership with the University of North Texas, the Museum’s Burt C. Blanton Collection of Railroad Photographs is accessible online at texashistory.unt.edu

GROW

Field to Factory:

An Economics, History, Government, and Geography Program



In this fun and interactive program, students explore the intersection of basic economic concepts, such as production and consumption with industrialization and urbanization. *Field to Factory* situates students in a time before cars, airplanes, cell phones, and computers, and explores why railroad development was so critical at the time to successfully ship agricultural and farming goods. Using critical thinking and problem-solving skills, students learn how the railroads have met and still meet essential needs of moving raw materials to manufacturing centers, and the final products to distribution.



With industrial and agricultural products as examples, the journey from origin to consumer is traced, including the various jobs associated with producing and moving these goods. Students also develop an understanding of how local railroad stops turned small farming towns into commercial gathering centers, which naturally evolved into urban cities that attracted people by the thousands. Also included in *Field to Factory* is a glimpse at how railroads affected American culture and society. Snapshots of the music, art, and influence on time zones that developed from

life on the railroad are featured as well.

GRADES 1 - 3

TEKS TEXAS ESSENTIAL KNOWLEDGE & SKILLS

1ST GRADE

§113.12 *Social Studies* b2.B, b3.B, b5.A-B, b6.A-B, b7.A-C, b8.A-C, b15.A-C, b16.A-B, b17.A, b17.E
 §112.12 *Science* b5.B, b6.A-C
 §117.106 *Music* b5.B

2ND GRADE

§113.13 *Social Studies* b2.A-B, b4.B, b6.A-B, b9.A-B, b10.A-C, b15.A-B, b17
 §112.13 *Science* b6.A-C
 §117.109 *Music* b5.A-B

3RD GRADE

§113.14 *Social Studies* b1.A, b2.A-B, b3.A-C, b4.A-C, b5.A-B, b7.A, b16
 §112.14 *Science* b6.A-C
 §117.112 *Music* b5.B

Activities and Demonstrations

The *Field to Factory* program running time is approximately two hours. This includes the educational program, walking tour of our historic rail equipment collection, and tour of *TrainTopia*, the Museum’s indoor G-scale model train exhibit.



ELECTRIFY

Bolts & Jolts: All Aboard the Energy Train

A STEM Program on Technological Development, Energy, & Problem Solving

In this highly interactive program, students learn all about energy through the platform of the railroad industry. What better example than the motion of heavy trains to demonstrate the use of energy? Students explore different forms of energy and how they are applied to rail transportation. They include thermal (steam and its expansive properties), hydro-electric, diesel-electric, solar, and the use of magnetism.

In *Bolts & Jolts*, the basic concepts of physics such as gravity and the laws of motion are also covered, including the principle of regenerative braking. Finally, the program presents a magnetically levitated train model and helps students imagine energy possibilities for future rail transportation. This program enables students to compare and contrast the advantages and disadvantages of various forms of energy, how they are applied to the movement of people and goods, and the role of rail in solving future transportation challenges.

Activities and Demonstrations

The *Bolts & Jolts* field trip running time is approximately two hours. This includes the educational program, walking tour of our historic rail equipment collection, and tour of *TrainTopia*, the Museum's indoor G-scale model train exhibit.

Pricing, availability, and times available upon request. All field trips occur at the Museum of the American Railroad.



(LEFT) The Museum's 1940 Raymond Loewy styled GG-1 electric locomotive. It operated between New York and Washington on the Pennsylvania Railroad, and later Amtrak. The locomotive pulled Robert Kennedy's funeral train, 1968.



Partial cutaway view of the Museum's Santa Fe F-7A diesel-electric locomotive. Built by General Motors' Electro-Motive Division, 1952.



TEKS TEXAS ESSENTIAL KNOWLEDGE & SKILLS

4TH GRADE

- §112.15 Science b3.A, b3.C, b5.A, b6.A-D
- §126.7 Technology Applications b4.A-B, b4.D, b6.A
- §111.6 Mathematics b1.A-C, b6.A, b8.A

5TH GRADE

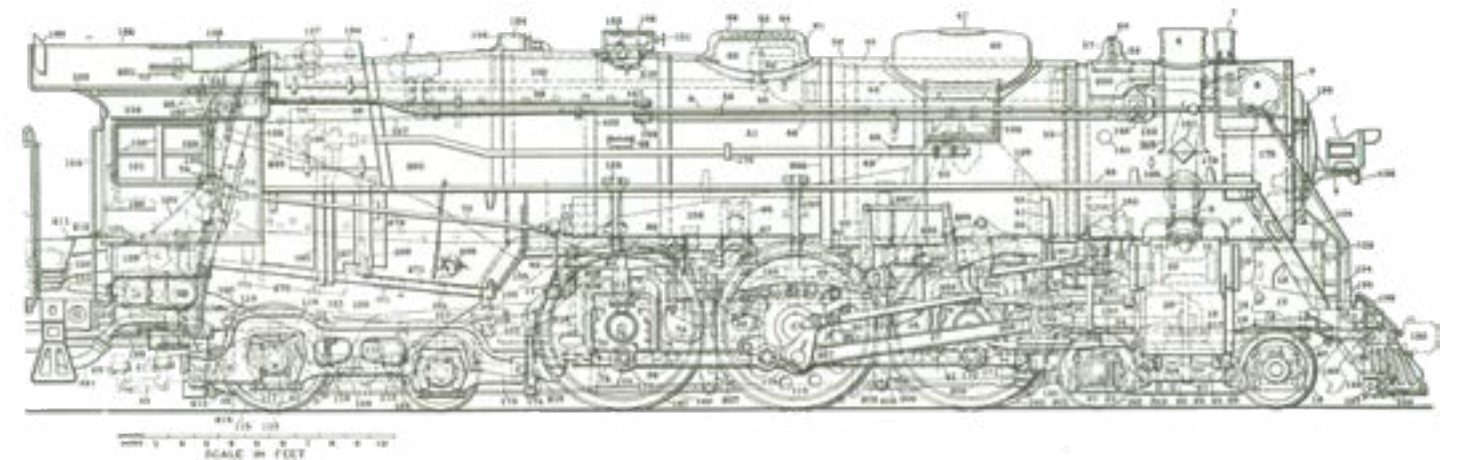
- §112.16 Science b2.B, b6.A-B
- §126.7 Technology Applications b1.A-C, b4.A, b4.D, b6.A
- §111.7 Mathematics b1.A-B

6TH GRADE

- §112.18 Science b3.A, b7, b8.A-C, b9.A-C
- §126.14 Technology Applications c1.C, c4.A, c4.D-F, c6.A, c6.H-I
- §111.26 Mathematics b1.A-B



New technologies employ the use of magnetism to levitate and propel high speed trains. Known as Mag-Lev, this form of rail transportation can safely move passengers at speeds of up to 300mph through a linear induction process.



(ABOVE) New York Central Lines "Hudson" type steam locomotive American Locomotive Company, 1930



Immersion Experience Classrooms...on a Train!

A New Life and a New Purpose for a Timeless Design: Metra's Highliners Arrive in Frisco

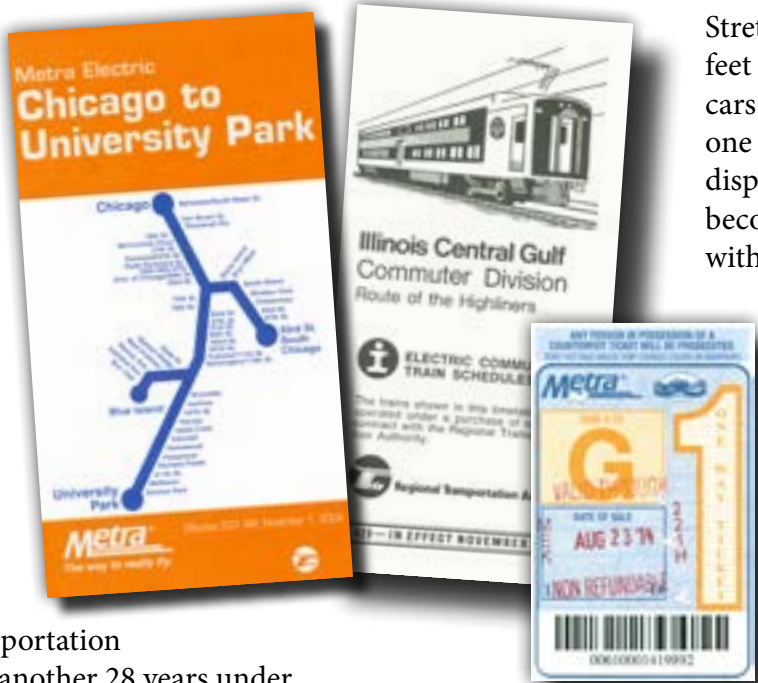
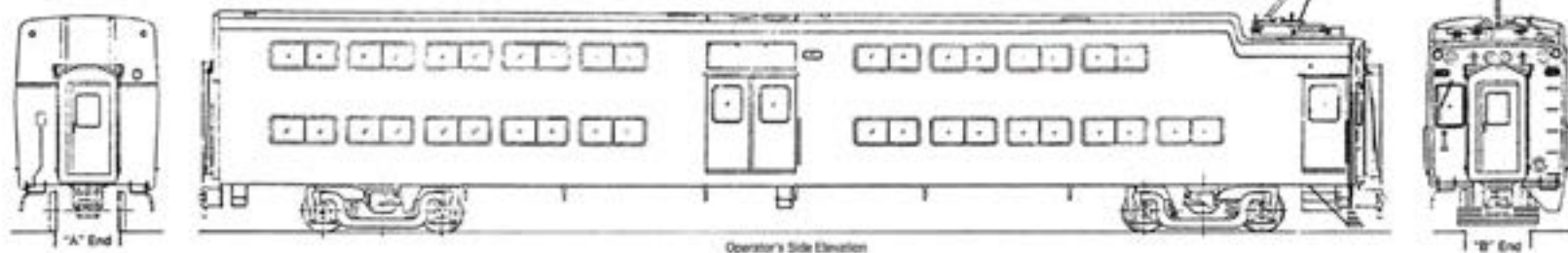


For over four decades Chicagoans lived, worked, and played by the comings and goings of these commuter cars. They lived, and in many cases scheduled their lives by the movement of trains on Chicago's Metra Electric District. While the line through south Chicago is busier than ever, the 1970s-era "Highliner" bi-level commuter cars have reached the end of their careers.

The "Highliners" were built by the St. Louis Car Company for the Illinois Central Railroad, original operator of the line between downtown Chicago, University Park, and 93rd Street. The line was conveyed to Metra in 1987 during formation of Chicago's Regional Transportation Authority. The cars served another 28 years under Metra, with an average of 1.4 million miles and 3.2 million passengers each before retirement in 2015. With the generosity and support of Metra, the Museum acquired ten of the cars through a public offering of the retired 166-car fleet. These are the survivors, having escaped the scrapper's torch to tell their stories and provide unique and inspiring space for the presentation of Museum programs.



The cars, officially known as bi-level EMUs (Electric Multiple Unit), have 156 seats each, with 92 on the lower level and 64 seats on the upper level galleries. The term "Highliner" was applied when the first of these cars were delivered in 1971. They are divided into two sections, with center-entry doors. This arrangement makes them ideal for use as immersion experience classrooms.



The Metra cars join the Museum's nationally recognized collection of historic rail cars and locomotives, but more importantly, they will provide inside climate-controlled space for educational programs. Stretching a total of 850 feet in length, the ten cars will be arranged on one of the Museum's display tracks and become a destination within the Museum.

The entire train is now dubbed *Stream-Liner*, drawing on the popular railroad term as an acronym for Science, Technology, Railroading, Engineering, Arts, and Mathematics. Each car will be outfitted according to subject, and create space that enables museum educators to build trust and engage the interest of students quickly, making the most efficient use of their visit.

Two "Highliners" will be preserved in their original configurations. The eight remaining cars will receive modifications to facilitate educational programs, special events, and community activities. In addition to hosting individual instruction by Museum education staff, select cars will receive audio visual enhancements, differentiated digital learning stations, and interactive exhibits. The *Stream-Liner* will be one of the most unique and inspiring places of learning in North Texas. With the help of Metra's Electric Division and BNSF Railway, the Museum of the American Railroad is proud to preserve an important aspect of cultural history and urban life. At the same time, the cars will be repurposed and continue their role in public service.



ENGAGE

GRADES 4 & 7

Thundering Prosperity:

A Lesson in States' Rights, Economics, and Government Regulation

The explosion of railroad construction in the second half of the 1800s ushered both the state of Texas and the nation into a modern, industrial, and urban economy from an agricultural and land-based society. In *Thundering Prosperity*, students will discover how the railroad boom following the Civil War was the primary agent of change for Texas' economy, geography, communities, and overall society. Students will explore how railroad expansion itself started as a burgeoning new industry in Texas in the 1870s, then quickly gave way to exportation of agricultural goods and other forms of commerce in the 1880s. Railroad expansion combined with the shipment of goods such as crops, cotton, grain, oil, and lumber, brought unprecedented wealth and prosperity to the state while also closing the wild Texas frontier.



GC&SF Offices, Dallas, TX ca 1890 - Dallas Public Library Image

Students will interpret historic maps that chronicle the construction of rail lines in Texas and settlement patterns that closely followed those lines. They will discover how railroad conglomerates such as the Houston & Texas Central, the Texas & Pacific, the Missouri-Kansas-Texas, and the Santa Fe united the state. Further, students will gain an understanding of how the placement of these rail lines either made or broke communities: Dozens of new towns were established as

railroads expanded through previously unsettled areas, and some small communities such as Dallas swelled to commercial and industrial sizes while countless others withered and died as the railroads passed them by.

Finally, *Thundering Prosperity* explores the role of the state's government and its rights to regulate and promote the railroad as a vital component to Texas' industry and economy. Complex political and economic concepts come to life as students contemplate and debate the issues that set the stage for 21st century modern Texas.

Activities and Demonstrations

The *Thundering Prosperity* field trip running time is approximately two hours. This includes the educational program, walking tour of our historic rail equipment collection, and tour of *TrainTopia*, the Museum's indoor G-scale model train exhibit.

Pricing, availability, and times available upon request. All field trips occur at the Museum of the American Railroad.

TEKS

TEXAS
ESSENTIAL
KNOWLEDGE
& SKILLS

4TH GRADE

§113.15 *Social Studies* b4.A-C, b5.A-B, b7.A-B, b8.A-B, b9.B, b10.A-B, b11.A-B, b11.D, b13.A, b13.C, b20.A-B

7TH GRADE

§113.19 *Social Studies* b1.A-B, b6.B-D, b10.A-B, b11.A-B, b12.A-B, b20.B, b20.E



Mapping exercises are an important component of MAR programming. (Above) Political boundaries by county, including principal rail lines, 1876



(Left) St. Louis - San Francisco "Frisco" Ry. station sign, ca 1950 MAR Collection, on display at the Frisco Heritage Museum

"...while there are many places in Texas where we would like to build some railroads, we cannot do anything so long as the disposition exists that now seems to in Texas." – C. P. Huntington's comments in a November, 1891 letter regarding the political climate towards privately held railroads in Texas.

LEAD

Race, Rights, and the Railroad:

A Lesson on Civil Rights, Labor Unions, and Race Relations on the Railroads

So many important eras, experiences, and historical events can be viewed against the backdrop of the railroad during its century-long dominance of American transportation in the 1800s and 1900s. One critical aspect is the Civil Rights Movement - or as some historians termed it, the era



of countless civil rights movements. In that vein, *Race, Rights, and the Railroad* chronicles, through the lens of the railroad, the struggle of African-Americans to achieve fairness and equality during a period when rail travel was at its peak. One such story is that of the Pullman Porters and their determination to gain respect, improve working conditions, and negotiate fair pay. These efforts gave rise to the Brotherhood of Sleeping Car Porters, the first African-American labor union in the United States.

Race, Rights, and the Railroad follows the story of the Pullman Porter from the

beginning during the Post-Civil War Reconstruction era when George Pullman first staffed his "Pullman Palace Cars," to the eventual passage of the 1964 Civil Rights Act. Significant African-Americans are featured, including A. Philip Randolph, President of the Porters' union; 1960s Civil Rights activists whose employment as Pullman Porters in their younger years sharpened and fine-tuned their awareness of racial and socioeconomic inequalities; and early Black Panther members who traveled by train taking their message throughout the country. NAACP leader Roy Wilkins' ties to Pullman and the White House are also covered. The class struggle aboard Pullman sleeping cars during the first half of the 20th Century is an inspiring story that celebrates the lives of Porters, their families, and the rise of the black middle class.

Activities and Demonstrations

The *Race, Rights, and the Railroad* field trip running time is approximately two hours. This includes the educational program, walking tour of our historic rail equipment collection, and tour of *TrainTopia*, the Museum's indoor G-scale model train exhibit.

Pricing, availability, and times available upon request. All field trips occur at the Museum of the American Railroad.

HIGH SCHOOL

TEKS

TEXAS
ESSENTIAL
KNOWLEDGE
& SKILLS

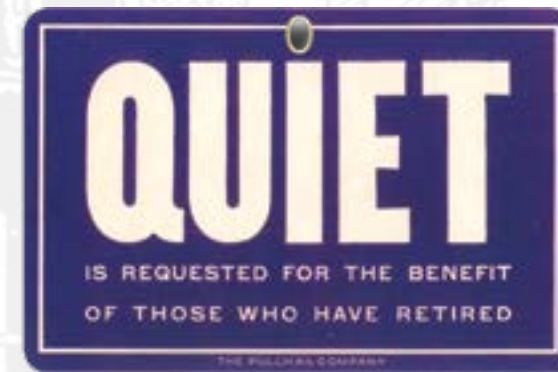
8TH and 9TH GRADES
§113.41 United States History c3.B-C, c9.A-I



Interior of 1925 Pullman Sleeping Car "McQuaig"
Acquired by the Museum of the American Railroad, 1965



Pullman Porter, Chicago Union Station, 1943 - Jack Delano Image



MANAGE

Logistics & Supply Chain Management:

The Art and Science of Moving Materials Efficiently in a World Economy

With the huge increase in manufacturing overseas, demand for distribution logistics professionals has increased in the U.S. In fact, governments and businesses around the world have taken an interest in educating and preparing individuals to enter the logistics workforce. The need for warehouse and distribution centers grows, as does the need for skilled and talented labor to work in these new and exciting positions. The transportation industry has begun working with schools and universities to contribute to this growing demand and to engage the interest of students nationwide. The Museum of the American Railroad has a unique opportunity to work with local universities and key railway industry leaders to provide logistics programming.



LOGISTICS: the management of the flow of things between the point of origin and the point of consumption in order to meet requirements of customers or corporations.

In *Logistics & Supply Chain Management*, students will be introduced to the logistics world. As the program progresses, students will be exposed to the increasing difficulty of logistics modules and challenges. This program is tailored to middle school ages and provides

challenging logistics work modules as well as interactive presentations developed by professionals in the field.

Activities and Demonstrations

The *Logistics & Supply Chain Management* field trip running time is approximately two hours. This includes the educational program, walking tour of our historic rail equipment collection, and tour of *TrainTopia*, the Museum's indoor G-scale model train exhibit.

Pricing, availability, and times available upon request. All field trips occur at the Museum of the American Railroad.

6TH GRADE

§113.18 *Social Studies* b3.A-B, b4.A-B, b6.A-C, b22

7TH GRADE

§113.19 *Social Studies* b8.A-B, b9.A-B, b10.C-D, b11.A, b12.A-C, b13.A, b21.A-B, b22.A, b23

8TH GRADE

§113.20 *Social Studies* b12.A, b27.B-C, b29.A-C, b29.H, b31
§112.20 *Science* b6.A-C

GRADES 6 - 8

TEKS TEXAS ESSENTIAL KNOWLEDGE & SKILLS

DEBATE

Taming the Giant:

A Lesson in History, Economics, Government, Legislation, and Regulation

In *Taming the Giant*, students examine important legislation that has affected the rail industry since its inception in America. Students also debate the age old question of public versus private enterprise. Beginning with the Pacific Railroad Act of 1862, which was signed into law by Abraham Lincoln, students gain an understanding of government interaction with big business.

Following the Civil War, railroads expanded rapidly across the burgeoning nation. Along with expansion came great fortunes to their owners and investors. The result was an industry that was the first to see government intervention in the form of regulation. This program examines the principles

"...how [have] the railroad companies for many years in succession been able to prevent State control and pursue a policy so detrimental to the best interests of the public?"

– William Larrabee's *The Railroad Question*, 1893

of public policy, focusing on early legislation that created the Interstate Commerce Commission (ICC)

– the oldest regulatory agency in the United States. The program follows the history and practical application of regulation under the ICC, which was ultimately eliminated by the Staggers Act of 1980.

Following the elimination of the ICC in 1995 and deregulation, the railroad industry rebounded with a greater competitive advantage over other shipping modes. In *Taming the Giant*, students examine how railroad companies responded with significant reinvestment in infrastructure. The resurgence of railroads and their importance in the global transportation network through intermodal containerization and bulk commodities is a case study in today's post-regulatory environment.

"...an all-in wager on the economic future of the United States – Warren Buffett commenting on Berkshire Hathaway's acquisition of BNSF Railway, 2009

Activities and Demonstrations

The *Taming the Giant* field trip running time is approximately two hours. This includes the educational program,

walking tour of our historic rail equipment collection, and tour of *TrainTopia*, the Museum's indoor G-scale model train exhibit.

Pricing, availability, and times available upon request. All field trips occur at the Museum of the American Railroad.

TEKS TEXAS ESSENTIAL KNOWLEDGE & SKILLS

11TH and 12TH GRADES

§113.41 *United States History* c3.B-C, c15.A-C, c16.A
§113.44 *United States Government* c2.A-B



GRADES 11 - 12

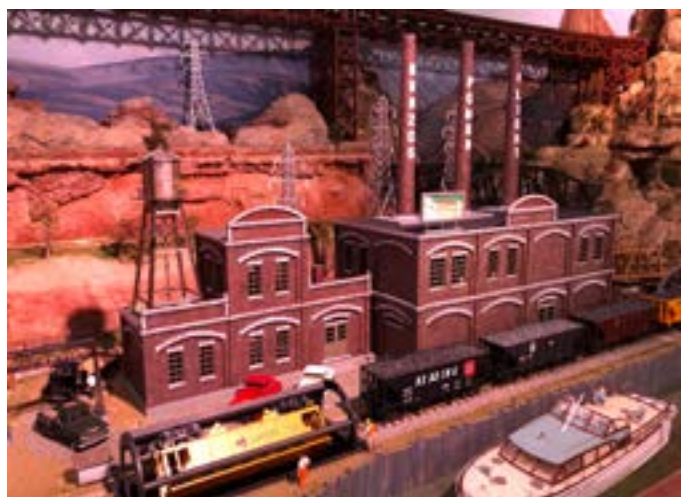


A Gift of the Sanders Family
Presented by Amanda and Brint Ryan

Our Newest Teaching Tool

Imagine a miniature world where trains connect cities and towns with rural America. Imagine a miniature world where trains traverse some of the most beautiful scenery in the American Southwest.

Imagine a miniature world where a mid-century downtown Dallas stretches out to the vastness of West Texas, the high desert of New Mexico, to the majestic mountain peaks of Colorado – all in one place!



Such a place exists at the Museum of the American Railroad's *TrainTopia* exhibit within the Frisco Discovery Center. The 3,000 sq. ft. operating model train exhibit is a wonder of precision model making and technology. But beyond the entertainment value is an important educational component that weaves railroads into the fabric of our landscape and the exciting story of American commerce.

The *TrainTopia* exhibit is an option for all school tours that visit the Museum. Opened in 2018, it is a favorite among elementary level students & teachers,

and is included with the five-station onsite field trip experience. A gift of the Steve Sanders family of Dallas, the million-dollar miniature world of trains is a must-see for all grades.

TrainTopia is artistry and craftsmanship in motion. But, beyond the awe-inspiring landscape is an interactive, operating example of how railroads move raw materials and agricultural products to manufacturing centers and food processing facilities. From oil fields to refineries, and from mines to mills, *TrainTopia* tells the story of railroads, resources, and our economy. It is a first-hand, three-dimensional experience that teaches the field to factory role of railroads, as well as moving people on intercity trains. **Book your tour today!**



ALL GRADES

From Flag Stop to Fast Track

The origins of Frisco: a Railroad, a Town, and a Bright Future



The story of Frisco is one of hundreds of tales of small town America. Towns prospered or withered by the coming of the railroad. Frisco's story is representative of America's growth from rural outposts to urban centers and the connectivity between the two.

The City of Frisco owes its name and its beginnings to the railroad. The new town was a result of a series of events dating back to the Civil War era. The nation had endured a long and bitter war that divided its people and all but halted its growth west – including the progression of the railroad. Following the conflict, railroads were the growth industry, much like technology is today. New areas were settled and great sums of money were made as railroads raced to build lines out ahead of an ever-expanding nation.



Back in 1900, surveyors and civil engineers for the Saint Louis & San Francisco Railway were laying out a new line from the Oklahoma border to Dallas. Just a few steps from the Museum, they determined that nearby Stewart Creek would be an ideal water source for thirsty steam locomotives traveling the new route.

Upon the line's completion two years later, trains would regularly stop at this point to replenish water which was essential to the production of steam. Not missing an opportunity for commerce, the railroad took advantage of pausing trains by building a depot and plating a town. Frisco was born – the name borrowed from the railroad itself. It was a nickname for the Saint Louis & San Francisco line that eventually became a household word. The new town was poised to take full advantage of transporting passengers and freight over the Nation's vast and still growing rail network. The nearby town of Lebanon literally pulled up stakes and moved to the new community, leaving little behind.



Today, Frisco is still a railroad town. Trains operated by BNSF (which acquired the Frisco Railway in 1980) still serve the city. While steam engines were replaced with diesel-electric locomotives in the mid-1950s, the rumble of trains still punctuates the comings and goings of daily life. Much of the City's railroad heritage is celebrated in public art, cultural districts, and parks. And of course, Frisco is now home to the Museum of the American Railroad, one of the foremost collections of railroad history and artifacts in the Nation.



PARTICIPATE

BEYOND THE CLASSROOM



SUMMER TOURS

Summer programs are available for students of all ages, including walking tours of the Museum's historic rolling stock collection and indoor presentations at *TrainTopia* inside the Frisco Discovery Center. Group tours are available for daycares, Parks & Rec programs, home school groups, scout troops, and private schools.

Cultural history, science, and technology subjects

provide enriching and entertaining activities for children and parents seeking a positive outlet for summertime energy!

MUSEUM INTERNSHIPS

The Museum continues a 20-year tradition of providing internships for high school seniors and universities, including graduate programs. Students experience the field of public history first-hand, as well as museum administration, collections care, education, special events planning & management, and community involvement. Museum staff will work with local ISD and university administrators to provide a tailored experience for students. Please contact us if a student at your school or your child would like more information.



Mindbender Academy, Frisco Education Foundation

SPECIAL PROGRAMS

The Museum partners with Texas Woman's University's History & Government Department to lead week-long "Maymester" study trips to Chicago. Titled *The Age of Industrialization*, the college credit course provides an immersion experience for students at some of Chicago's richest cultural and historical sites. Included are visits to the preserved town of Pullman, IL, Union Stockyards, Gary Steelworks, the Kohler plant and company town, Hull House, and historic architecture walking tours.



History begins here! Share this exciting story of growth and prosperity in North Texas with your students.

"...my trip was not in vain, Dallas is a bright young town, full of promise."

THE BACKSTORY

These words were recorded in a letter by an early traveler upon his arrival in Dallas. His journey was by train. The year was 1873. The railroad had just reached Dallas from Houston a year earlier. This burgeoning town would soon become the intersection of the first east-west line due to skillful maneuvering by local politicians. The arrival of these two major rail lines set the stage for an unprecedented period of growth, ultimately making North Texas the center for commerce in the Southwest – unheard of for a region without a major river or seaport!

As the early railroads continued construction north and west of Dallas,



Dallas Union Depot, circa 1912. Pre-dating Union Station, this structure was at the center of activity during Dallas' formative years - Dallas Public Library Image



"Zephyrs" at Dallas Union Terminal, circa 1950



The Trinity Railway Express (TRE) connects Dallas and Fort Worth, providing commuter rail service between the region's largest cities

towns sprang up along the lines as a result of the need to replenish steam locomotives with water and connect cotton growers with the national market. Our thriving suburbs owe their early existence to the rail lines that crisscrossed the region, which offered opportunistic proximity. In many cases, the very existence of these communities are a result of the railroad.

Their names come from the owners, promoters, and managers of these early railroad companies – names such as Denison, Richardson, Allen, Anna and Melissa. Finally, Frisco, one of the fastest growing cities in the U.S., takes its name from the St. Louis-San Francisco Railroad Company that platted a town next to a water stop when the line built from Indian Territory to Dallas in 1902.

Museum of the American Railroad Our Community of Giving



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