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DAISY BRYCEN

Building the New Rapid Transit System of New York City Elsevier
On October 27, 1904, the Interborough Rapid Transit Company opened the first subway in New York City. Running between City Hall and 145th Street at Broadway, the line was greeted with enthusiasm and, in some circles, trepidation. Created under the supervision of Chief Engineer S.L.F. Deyo, the arrival of the IRT foreshadowed the end of the "elevated" transit era on the island of Manhattan. The subway proved such a success that the IRT Co. soon achieved a monopoly on New York public transit. In 1940 the IRT and its rival the BMT were taken over by the City of New York. Today, the IRT subway lines still exist, primarily in Manhattan where they are operated as the "A Division" of the subway. Reprinted here is a special book created by the IRT, recounting the design and construction of the fledgling subway system. Originally created in 1904, it presents the IRT story with a flourish, and with numerous fascinating illustrations and rare photographs.

Secret Subway Twenty-First Century Books

But as it is in no other city on earth, the subway of New York is intimately woven into the fabric and identity of the city itself.

The Creative Destruction of New York City Core Library

A newly discovered cache of magnificent historical photographs. There have been, and will be, other books on the New York City subway system, but none have had access to the wonderful photographic prints from the collections of the New York Transit Museum that are presented in this volume. Made from 8 x 10-inch glass negatives after the turn of the last century, and reproduced here in glorious duotone, over 175 images show the incredible construction techniques and details involved in creating the underground marvel we enjoy today. From "cut and cover" and deep tunneling to sinking under-river tubes and disastrous cave-ins, these photographs are nothing short of awe-inspiring. The book is accompanied by an engaging, illustrated history of the subway system. Published in honor of the New York City subway's centennial, *The City Beneath Us* will fascinate anyone who's ever been amazed by the gigantic undertaking that is New York City transportation. 175 duotone and 40 black-and-white photographs. *Building the New Rapid Transit System of New York City (Classic Reprint)* Fordham Univ Press

This technical work provides a detailed account of the construction of the Harlem River Tubes, an important part of the New York City subway system. Written by engineer Howard Babcock Gates, the book covers topics such as tunneling, excavation, and the use of compressed air in construction. This volume will be of interest to anyone studying the history of engineering or urban development in the United States. This work has been selected by scholars as being culturally important, and is part of the knowledge base of civilization as we know it. This work is in the "public domain in the United States of America, and possibly other nations. Within the United States, you may freely copy and distribute this work, as no entity (individual or corporate) has a copyright on the body of the work. Scholars believe, and we concur, that this work is important enough to be preserved, reproduced, and made generally available to the public. We appreciate your support of the preservation process, and thank you for being an important part of keeping this knowledge alive and relevant.

Subway Style JHU Press

In the late nineteenth century, as cities like Boston and New York grew more congested, the streets became clogged with plodding, horse-drawn carts. When the great blizzard of 1888 crippled the entire northeast, a solution had to be found. Two brothers from one of the nation's great families—Henry Melville Whitney of Boston and William Collins Whitney of New York—pursued the dream of his city digging America's first subway, and the great race was on. The competition between Boston and New York played out in an era not unlike our own, one of economic upheaval, life-changing innovations, class warfare, bitter political tensions, and the question of America's place in the world. The Race Underground is peopled with the famous, like Boss Tweed, Grover Cleveland and Thomas Edison, and the not-so-famous, from brilliant engineers to the countless "sandhogs" who shoveled, hoisted and blasted their way into the earth's crust, sometimes losing their lives in the construction of the tunnels. Doug Most chronicles the science of the subway, looks at the centuries of fears people overcame about traveling underground and tells a story as exciting as any ever ripped from the pages of U.S. history. *The Race Underground* is a great American saga of

two rival American cities, their rich, powerful and sometimes corrupt interests, and an invention that changed the lives of millions.

The Routes Not Taken Black Dog & Leventhal Publishers, Incorporated

"The story of the Second Avenue subway, as it symbolizes New York's inability to modernize its infrastructure and reveals the ingredients necessary to build a twenty-first-century megaproject"--

Under the Sidewalks of New York Princeton Architectural Press

Photographs, line drawings, and narratives record the development of the New York City subway system's rolling stock. A collaborative labor of love by the Metropolitan Transportation Authority and the New York Transit Museum, Gene Sansone's *Evolution of New York City Subways: An Illustrated History of New York City's Transit Cars, 1867-1997*—now available from the Johns Hopkins University Press with a new foreword by Clifton Hood—offers an extensive array of photographs, line drawings, and stories about the city's most treasured railcars. Subway buffs, railfans, students of New York City history, and specialists in the history of technology will appreciate this authoritative account. MTA New York City Transit and Sansone provide a record of the rolling stock that helped make New York City one of the great cities of the world.

The Race Underground Rutgers University Press

This book is about the thousands of people who live in the subway, railroad, and sewage tunnels of New York City.

Grand Central's Engineer JHU Press

Derrick (archivist, Bronx County Historical Society) tells the story of what was, at the time, the largest and most expensive single municipal project ever attempted--the 1913 expansion of the New York City Dual System of Rapid Transit. He considers the factors motivating the expansion, the process of its design, the controversies surrounding financing it, and its impact on New York then and today. Appendixes summarize the contracts and related certificates and list the opening dates of Dual System lines. Twenty-four pages of photographs are also included. c. Book News Inc.

The Wheels That Drove New York Fordham Univ Press
Paintings, graffiti, photographs, and public art by Walker Evans, DONDI, Keith Haring, and others are featured in this visual representation of the New York subway system and the art it has inspired throughout the years.

722 Miles Forgotten Books

The first subway line in New York City opened on October 27, 1904. To celebrate the centennial of this event, the Johns Hopkins University Press presents a new edition of Gene Sansone's acclaimed book, *Evolution of New York City Subways*. Produced under the auspices of New York's Metropolitan Transit Authority, this comprehensive account of the rapid transit system's design and engineering history offers an extensive array of photographs, engineering plans, and technical data for nearly every subway car in the New York City system from the days of steam and cable to the present. The product of years of meticulous research in various city archives, this book is organized by type of car, from the 1903-04 wood and steel Composite cars to the R142 cars put into service in 2000. For each car type, Sansone provides a brief narrative history of its design, construction, and service record, followed by detailed schematic drawings and accompanying tables that provide complete technical data, from the average cost per car and passenger capacity to seat and structure material, axle load, and car weight. Sansone also includes a helpful subway glossary from A Car (the end car in a multiple car coupled unit) to Zone (a section of the train to the conductor's left or right side). Subway and train enthusiasts, students of New York City history, and specialists in the history of technology will appreciate this updated and authoritative reference work about one of the twentieth century's greatest urban achievements.

Art and the Subway Createspace Independent Publishing Platform

A fascinating journey into the past—and under the ground—that offers “an insightful look at the what-might-have-beens of urban mass transit” (*The New York Times*). From the day it broke ground by City Hall in 1900, it took about four and half years to build New York's first subway line to West 145th Street in Harlem. Things rarely went that quickly ever again. *The Routes Not Taken* explores the often-dramatic stories behind unbuilt or unfinished subway lines. The city's efforts to expand its underground labyrinth were often met with unexpected obstacles—financial shortfalls, clashing political agendas, battles with community

groups, and more. After discovering a copy of the 1929 subway expansion map, Joseph B. Raskin began his own investigation into the city's underbelly. Here he provides an extensively researched history of the Big Apple's unfinished business. *The Routes Not Taken* sheds light on: *the efforts to expand the Hudson Tubes into a full-fledged subway *the Flushing line, and why it never made it past Flushing *a platform under Brooklyn's Nevins Street station unused for more than a century *the 2nd Avenue line—long the symbol of dashed dreams—deferred countless times since the original plans were presented in 1929 Raskin reveals the personalities involved, explaining why Fiorello H. La Guardia couldn't grasp the importance of subway lines and why Robert Moses found them old and boring. By focusing on unbuilt lines, he illustrates how the existing system is actually a Herculean feat of countless compromises. Filled with illustrations, this is an enduring contribution to the history of transportation and the history of New York City.

New York's Forgotten Substations JHU Press

His photographs and detailed drawings bring these lost treasures to life, while his text tells their story. Anyone interested in the art of industrial America will find this book a delight."--BOOK JACKET.

Tunneling to the Future Kyle Mark Kirschling

Excerpt from *Building the New Rapid Transit System of New York City* It is not generally realized how huge an engineering work it is which is now going forward in the city of New York on extensions of the underground rapid transit railway lines. The best way to compare the relative magnitude of engineering works is to compare the total expenditure involved. The total cost of building and equipping New York's new rapid - transit lines will be in the neighborhood of This is substantially equal to the entire cost of the Panama Canal. It is three times the cost of the New York barge canal. It is a greater amount than the total investment in road and equipment of the Chicago, Milwaukee St. Paul Railway Company, or the Rock Island, or the Chicago North Western, or the Great Northern, or the New York Central Hudson River. The building of underground rapid-transit lines in great cities is comparatively a new development in engineering. New York was not the pioneer in this field. The first underground city railway lines were those in London, operated for many years with steam locomotives. Underground lines operated by electric traction were built in London and Budapest and Boston before the first New York rapid-transit subway was in operation. The development of the system in New York, however, has far exceeded that in any other city of the world. In fact, with the completion of the new extensions the investment in underground rapid-transit lines in New York will probably be as great as that in all the other great cities of the world combined. The building of subways, however, is well recognized to be the next step in rapid-transit development for the congested districts of other large cities. Philadelphia, Chicago, Cleveland, and a number of other American cities have subways under way or projected. The work carried on in New York during the past dozen years, and especially that now in progress, has developed a large amount of experience in street excavation with avoidance to traffic interruption, in the underpinning of Buildings, and in the solution of a hundred different problems in connection with the work of construction which are of general interest to the engineering profession. About the Publisher Forgotten Books publishes hundreds of thousands of rare and classic books. Find more at www.forgottenbooks.com This book is a reproduction of an important historical work. Forgotten Books uses state-of-the-art technology to digitally reconstruct the work, preserving the original format whilst repairing imperfections present in the aged copy. In rare cases, an imperfection in the original, such as a blemish or missing page, may be replicated in our edition. We do, however, repair the vast majority of imperfections successfully; any imperfections that remain are intentionally left to preserve the state of such historical works.

The New York City Subway System Legare Street Press

More than 250 extraordinary photographs—including both newly commissioned color photographs and period images from the New York Transit Museum archives—chronicle one hundred years of architectural and design history from the New York City subway system, including everything from the interiors of t

Last Subway NYU Press

"New York wouldn't be New York without the subway. This one-time engineering marvel that united and expanded the city has been a cultural touchstone for the last 114 years. Somehow though, there has never been a book that celebrates the subway from the scars it left on the city's fabric to the romantic fantasies it unleashed. Subway will convey a sense of wonder and fun about the world's largest transit system. The book will include a

complete, concise history of the subway beginning with the technical obstacles and corruption that impeded plans for an underground rail line in the late 1800s, and the visionary and sometimes wacky schemes put forward in that era for subterranean and elevated transport. It will also tell how additional lines were built and how three independent subway systems were merged, creating the mishmash of numbered and lettered lines we have today. Interspersed throughout will be sidebars and stand-alone sections including profiles of characters that helped make the subway what it is (including the mostly forgotten August Belmont Jr., a flamboyant financier who bankrolled the first subway); graphics and imagery showing the evolution of subway cars, tokens and MetroCards, graffiti, and even subway etiquette ads; how the subway has been characterized in movies, television, and music; a look at abandoned cars and stations and more. Packed with compelling stories, fascinating facts and anecdotes, vivid portraits of the people who made the subway and those who saved it, all supplemented with engrossing imagery and a dynamic design, *Subway* will be a visual feast and must-have gift book, perfect for any coffee table"--

The Construction of the Harlem River Tubes, a Portion of the Subway System in New York City Chicago Review Press *Includes pictures *Includes accounts of the construction of the competing lines and their unification *Includes online resources and a bibliography for further reading *Includes a table of contents "In New York, you've got Donald Trump, Woody Allen, a crack addict and a regular Joe, and they're all on the same subway car." - Ethan Hawke Of all the great cities in the world, few personify their country like New York City. As America's largest city and best known immigration gateway into the country, NYC represents the beauty, diversity and sheer strength of the United States, a global financial center that has enticed people chasing the "American Dream" for centuries. One of the most significant needs of a growing civilization is an efficient transportation system, and by the time the burgeoning New York City had reached the latter half of the 19th century, the waterways and narrow streets were no longer sufficient to get people from one part of the city to another. Something new was needed, and in a place where real estate was already at a premium, building above ground was not an economically efficient option. As such, the leaders of the city commissioned companies to explore the world under the busy streets, and to build a rail system that would allow people to move quickly below the feet of those walking above. First one company and then another rose to the challenge, and the first decade of the 20th century found the city with one of the best subway systems in the nation. As the city grew, so did the companies, and they continued to dig like human gophers into more expansive areas. Perhaps not surprisingly, barely anything went smoothly, and for every mile of track put down, there was at least another mile of red tape that had to be cut through. There were also accidents and tragedies both big and small, but the subway continued to expand. Eventually, city officials decided that such a large undertaking, one on which the city had grown dependent, could not be left in private hands, so the city ultimately took control of the system and made it part of a larger public transportation system in 1940. This proved to be good in the long run, but in the

short run caused quite a stir, as old lines were closed and new ones opened. Moreover, as middle-class people began to own automobiles and to drive back and forth to the suburbs each day, the subway fell into disrepute, becoming a seedy place that was considered dangerous for all but the bravest citizens. That might have been the end of the enterprise, had it not been for a serious program of renovation and security that brought the underground train system safely into the 21st century. The subway survived not only its own downfall but the terror that gripped the city on September 11, 2001, and today it is once again considered the way to get around by New Yorkers in the know. Just as notably, the size and scope of the subway brings the city's residents and workers together, a sentiment David Rakoff captured only half in jest: "Deprived of the opportunity to judge one another by the cars we drive, New Yorkers, thrown together daily on mass transit, form silent opinions based on our choices of subway reading. Just by glimpsing the cover staring back at us, we can reach the pinnacle of carnal desire or the depths of hatred. Soul mate or mortal enemy." *The New York City Subway: The History of America's Largest and Most Famous Subway System* looks at the construction and history of one of the world's biggest and busiest public transportation systems. Along with pictures of important people, places, and events, you will learn about the New York City subway like never before.

Interborough Rapid Transit St. Martin's Press

The New York City Subway System has been carrying passengers for more than a century. Engineering the NYC Subway System explores how designers drew up plans for the subway, how workers built the underground system in one of the world's busiest cities, and how commuters still rely on its hundreds of trains today. Easy-to-read text, vivid images, and helpful back matter give readers a clear look at this subject. Features include a table of contents, infographics, a glossary, additional resources, and an index. Aligned to Common Core Standards and correlated to state standards.

[New York Subways](#) Springer Science & Business Media

Few people have had as profound an impact on the history of New York City as William J. Wilgus. As chief engineer of the New York Central Railroad, Wilgus conceived the Grand Central Terminal, the city's magnificent monument to America's Railway Age. Kurt C. Schlichting here examines the remarkable career of this innovator, revealing how his tireless work moving people and goods over and under Manhattan Island's surrounding waterways forever changed New York's bustling transportation system. After his herculean efforts on behalf of Grand Central, the most complicated construction project in New York's history, Wilgus turned to solving the city's transportation quandary: Manhattan—the financial, commercial, and cultural hub of the United States in the twentieth century—was separated from the mainland by two major rivers to the west and east, a deep-water estuary to the south, and the Harlem River to the north. Wilgus believed that railroads and mass transportation provided the answer to New York City's complicated geography. His ingenious ideas included a freight subway linking rail facilities in New Jersey with manufacturers and shippers in Manhattan, a freight and passenger tunnel connecting Staten Island and Brooklyn, and a belt railway interconnecting sixteen private railroads serving the metropolitan area. Schlichting's deep passion for Wilgus and his

engineering achievements are evident in the pages of this fascinating work. Wilgus was a true pioneer, and Schlichting ensures that his brilliant contributions to New York City's transportation system will not be forgotten. Praise for Schlichting's Grand Central Terminal "Grand Central Terminal is celebrated for its Beaux-Arts style, but Kurt C. Schlichting looks behind the facade to see the hidden engineering marvels."—New York Times Book Review "His study peels away our contemporary expectations and experiences and reveals the layers of history and acts of men that served as the foundation for this great structure."—H-Urban, H-Net Review "The most detailed account yet of one of the most important events in the history of 20th-century architecture, railroad development, and city building."—Choice "In his detailed accounts of the fiscal, stylistic, and engineering decisions that went into the creation of . . . Grand Central Terminal, Schlichting clearly shows both how energetic and talented all of the people involved were and how dramatically they altered this central portion of New York City."—Journal of the Society of Architectural Historians "Able to tell the story of the New York rail system's most active and visible symbol: the architectural and engineering masterpiece, with its grand public concourse, in the heart of Midtown."—New Scientist **City Beneath Us** Oxford University Press

As Metro stretches to Tysons Corner and beyond, this paperback edition features a new preface from the author. Drivers in the nation's capital face a host of hazards: high-speed traffic circles, presidential motorcades, jaywalking tourists, and bewildering signs that send unsuspecting motorists from the Lincoln Memorial into suburban Virginia in less than two minutes. And parking? Don't bet on it unless you're in the fast lane of the Capital Beltway during rush hour. Little wonder, then, that so many residents and visitors rely on the Washington Metro, the 106-mile rapid transit system that serves the District of Columbia and its inner suburbs. In the first comprehensive history of the Metro, Zachary M. Schrag tells the story of the Great Society Subway from its earliest rumblings to the present day, from Arlington to College Park, Eisenhower to Marion Barry. Unlike the pre-World War II rail systems of New York, Chicago, and Philadelphia, the Metro was built at a time when most American families already owned cars, and when most American cities had dedicated themselves to freeways, not subways. Why did the nation's capital take a different path? What were the consequences of that decision? Using extensive archival research as well as oral history, Schrag argues that the Metro can be understood only in the political context from which it was born: the Great Society liberalism of the Kennedy, Johnson, and Nixon administrations. The Metro emerged from a period when Americans believed in public investments suited to the grandeur and dignity of the world's richest nation. The Metro was built not merely to move commuters, but in the words of Lyndon Johnson, to create "a place where the city of man serves not only the needs of the body and the demands of commerce but the desire for beauty and the hunger for community." Schrag scrutinizes the project from its earliest days, including general planning, routes, station architecture, funding decisions, land-use impacts, and the behavior of Metro riders. The story of the Great Society Subway sheds light on the development of metropolitan Washington, postwar urban policy, and the promises and limits of rail transit in American cities.