HISTORIC RESOURCE STUDY OF PULLMAN NATIONAL MONUMENT, Illinois

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MANAGEMENT SUMMARY

This report is a Historic Resource Study (HRS) for Pullman National Monument. It is the third and final report in a series of studies for Pullman NM, including a White Paper¹ and an Archaeological Overview and Assessment.² Michigan Technological University and the National Park Service initiated this work in November 2016 as part of the project entitled "Cooperative Agreement for Work with Pullman National Monument" (Michigan Technological University Proposal #1609078, Task Agreement #P17AC00005). The overall agreement was established within the Cooperative and Joint Venture Agreement of the Great Lakes-Northern Forest Cooperative Ecosystems Studies Unit (NPS #P12AC31164, MTU Master Cooperative Agreement #P12AC31164).

This Historic Resource Study is a Baseline Research Report for Pullman National Monument. This HRS summarizes the historical writings about Pullman, provides context for the significant themes identified in its founding document, collates collections of primary documents and historical resources that are important sources of information on those themes, and recommends questions that will require additional study. These cultural resources include primary historical materials in archives and oral history collections, as well as architectural, archaeological, museum collections, or landscape resources. While this report includes new historical narrative based in original archival research, other sections present synthetic reviews of existing publications. National Park Service staff will use this document and included resources as they make management decisions and design interpretive programming. In addition to this report and its appendices—which are only published digitally—the research team deposited its entire library with the monument staff, including nearly 2,000 references and thousands of pages of digitally-imaged archival documents.

Among the various Baseline Research Reports, National Park Service staff can vary the definition and scope of an HRS in order to meet management needs within a particular park. The HRS should also identify needs for additional special history studies, cultural landscape reports, or other detailed studies needed in order to address themes, resource types, or additional subject matter. Finally, HRS documents may also make recommendations for resource management and interpretation.³

i

¹ Timothy James Scarlett, "White Paper: Designing Best Practice for Industrial Archaeology and Industrial Heritage at Pullman National Monument," (Houghton, MI: Industrial Heritage and Archaeology, Department of Social Sciences, Michigan Technological University, 2017).

² Timothy J. Scarlett and Steven A. Walton, "Archaeological Overview & Assessment: Pullman National Historical Monument, Town of Pullman, Chicago, Illinois," (Lincoln, Nebraska: National Park Service, U.S. Department of the Interior, 2017).

³ U.S. Department of the Interior, "Nps-28: Cultural Resource Management Guideline," (Washington, DC: National Park Service, 1998), 25-26.

Pullman NM needed a synthesis of academic writing about Pullman and a catalog of related cultural and historical resources related to the monument's purpose statement, which includes three charges:⁴

- 1. To preserve the historic resources of Pullman.
- 2. To interpret the industrial history and labor struggles and achievements associated with the Pullman Company, including the rise of and the role of the Brotherhood of Sleeping Car Porters.
- 3. To interpret the history of urban planning and design.

This report begins with a chronological introduction to the major significant events related to Pullman, including the interconnected stories of George M. Pullman, the Pullman Palace Car Company, and the community and town of Pullman in Chicago, Illinois. The second chapter places Pullman into a national context, situating George M. Pullman (and his family) and the Pullman company into contexts of Chicago as a geographic and transportation hub and one of America's premier industrial urban centers, as well as defining the key role that Chicago had played in the evolution of labor relations in the United States. The third chapter details the Pullman Palace Car company's production, operation systems, and technological innovations over time, concluding with a review of competing firms offering luxury transportation in the United States. The fourth examines the town of Pullman, Illinois, as a planned community and paternalistic company town. This review situates Pullman within this history of model towns and the history of urban planning, including discussions of precedent and antecedent examples. Chapters five and six provide detailed discussion of the town's and factory's design and construction, including many of the key designers and managers, and then reviewing the existing conditions of architecture in the community. Chapter seven then examines the trend of mobility within Pullman, examining historical patterns of race, gender, and class as they were lived in the Pullman community. The report concludes with recommendations for additional studies and the development of future research tools.

ii

⁴ "Foundation Document: Pullman National Monument (Draft)," ed. U.S. Department of the Interior (Chicago: Department of the Interior, 2016).

PREFACE AND ACKNOWLDGEMENTS

We must offer our grateful thanks to many people who have helped this research effort during the past four years. It is not possible to strictly separate and isolate assistance that people offered during the Archaeological O&A and this Historic Resource Study, so we will include a combined acknowledgement here, as this report both culminates and concludes the research effort. In expressing our gratitude here, we naturally accept all responsibility for errors or omissions in our final work.

With the National Park Service, we wish to thank Timothy Schilling, our lead contact at the National Park Service's Midwest Archeological Center office. Pullman National Monument's Kathleen Schneider, Superintendent, and Sue Bennett, Chief of Visitor Services and Community Outreach. Both Kathy and Sue supported our efforts and we look forward to future collaborations with Pullman NM staff. We wish Superintendent Schneider the best during her retirement. Many individuals in NPS provided administrative and research support: Dawn Bringelson, Archaeologist and Agreements Technical Representative; Bob Bryson, Associate Regional Director of Cultural Resources and former Center Manager, MWAC; Tim Townsend, Historian, Lincoln Home National Historic Site; and Elizabeth Dean, Administrative Support Assistant, MWAC. Paul Labovitz, Superintendent of Indiana Dunes National Lakeshore, served as acting superintendent while we got the project started.

As a community volunteer, Nathanial Parks acted as a *pro tem* archivist of the Tenneco Papers in the care of the State of Illinois Department of the Interior and dedicated eight intensive hours on a Saturday to help us unstack and restack more than 178 boxes of documents. This allowed us to assess the materials identified in the preliminary inventory and bring just a bit of that amazing collection into this report. While many of the records from the manufacturing division remain to be discovered, this collection is truly a gold mine of information about the Pullman factory operations, filing the historical holes in source material at the Newberry Library and other archives. We are grateful for Mr. Parks' assistance. Once the collection is eventually fully catalogued, these papers will be invaluable to the future history of the Pullman factory complex. We hope the organizations will eventually realize their vision to create an industrial heritage archive for the Lake Calumet region.

We thank the Pullman Museum and the Pullman State Historic Site and Industrial Heritage Archives. David Schultz provided access to buildings and enabled access to the Tenneco Paper Collections. Mr. Schultz was the Site Supervisor for both the Pullman and Douglas Tomb State Historic Sites, Illinois Department of Natural Resources. Martin Tuohoy is the current site supervisor and we look forward future interactions. The professional staff in the Illinois State Historic Preservation Office provided comments at various points during this process. We are grateful for their assistance, including: Rachel Leibowitz, Deputy State Historic Preservation Officer and Division Manager of Historic Preservation; Joe Phillippe, Staff Archaeologist; and Ryan Prehn, Illinois Department of Environmental Quality; During the project, these professionals struggled with the State of Illinois budgetary issues and the reorganization/relocation of their agency to the Illinois Department of Natural Resources. A number of people helped us access the Illinois Inventory of Archaeological Sites (at IDNR) and the related Illinois State Archaeological Survey records (at the University of Illinois Urbana Champlain and the Illinois State Museum): Michael Farkas, GIS and Database Coordinator, Illinois State Archaeological Survey; Jason Kuhlman of the Department of Natural Resources, Office of Mines and Minerals; Erich Schroeder, Associate Curator of the Technology Learning Center, and Michael Wiant, interim Director, both of the

Illinois State Museum. We appreciate everyone's efforts to keep the project on track during difficult times in the state.

During the preparation of this document, we were pleased to have the interest and support of many Pullman community organizations. The research team hopes that this HRS, developed independently of those organizations, will show the clear and compelling importance of the wonderful potential for close collaborations between the National Park Service and these groups. We must offer particular thanks to some of these individuals, including Mike Shymanski of the Historic Pullman Foundation; Dr. Lyn Hughes and David Petersen of the National A. Philip Randolph Pullman Porter Museum; and Paul Petraitis, historian and Pullman resident, "co-curator" of the Pullman History Facebook Group (with Andrew Bullen). We are also grateful to the Historic Pullman Foundation and the Pullman Community Organization.

The professional staff at several archives and libraries were helpful in our work, including Glenn Humphreys, Special Collections Librarian, Librarian Roslyn Mabry, and other staff of the Chicago Public Library. Staff at the Chicago Historical Society Archive Smithsonian Institution, the Library of Congress, and Harvard University's Baker Library all provided assistance. We thank Rene. Blackburn and Tyler Allen for their research assistance. Dr. Blackburn reviewed the Pullman materials in the R.G. Dun & Co. / Dun & Bradstreet Collections in the Baker Library of the Harvard Business School. Mr. Allen visited the Smithsonian and the Library of Congress on our behalf.

Several archivists and librarians deserve special mention for their invaluable help. The Sanborn and Rascher images that we georeferenced into our HGIS were provided courtesy of the Map and Geography Library, Special Collections, University Library, University of Illinois at Urbana-Champlain. Several individuals were tremendous help in this effort, including Jenny Marie Johnson, Associate Professor of Library Administration and Map and Geography Librarian; Krista L. Gray, Archival Operations Reference Specialist, Illinois History and Lincoln Collections; and Rimkus Kyle, Assistant Professor and Preservation Librarian.

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Here at Michigan Tech, a number of colleagues, students, and staff have contributed to this research effort during the past four years. A group of graduate and undergraduate students made essential contributions as research assistants, including Catherine Carra, Cooper Sheldon, Jennifer Rachels, Kyle Parker-Mcglynn. Timothy Scarlett's Industrial Heritage and Industrial Archaeology seminars examined and discussed the challenges of these projects, and participants thus contributed to the recommendations in this report. While many are mentioned elsewhere here, we'd like to recognize

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Our university's Sponsored Programs staff have been essential in facilitating our NPS collaborations and handling the accounting processes. We are indebted to Kim Codere, Manager of Grants and Contracts. In addition, we thank the efforts of Tracy LaPlante, Grants Accounting; Mary Yeo, Manager of Auxiliary Accounting and Banking Operations; Bobbie Dalquist, Manager of Financial Information Systems, and Leslie Turnquist, Billing Coordinator.

A number of railroad museums and collections were important in this study. We are particularly indebted to the volunteer staff of the Illinois State Railway Museum's Pullman Library in Union, Illinois. They spent time with us during which we explored their collection. They are volunteers doing a wonderful job caring for the tremendous collection of Pullman drawings, photographs, and documents transferred from Bombardier. The cataloged and uncatalogued documents at IRM's Pullman Library have great research potential. We thank Ted Anderson, Steve Hile, Nick Kallas, Bob Webber, and others in their organization for both their time and their overall preservation efforts.

We also with to thank Daniel Liedtke, Curator of Collections at the National Railroad Museum in Green Bay. Conley opened the museum's private research library to us. Justin Lambrecht, Education Assistant, continued to facilitate our work. Staff and volunteers from many railroad museums answered our survey and provided other kinds of research reports and we wish to offer particular thanks to the The California State Railway Museum.

Prof. John 'Jack' Brown from the University of Virginia kindly fielded questions and suggested a number of avenues of study that were significant to the HRS research. Rebecca Graff, Lake Forest College, discussed the World's Columbian Exhibition and Chicago archaeology more broadly. Finally, during an otherwise stressful and difficult work time, Dr. Andrew Mueller, Cultural Resource Specialist at HDR/EOC, made the time to sort the site records in the Colorado Office of Archaeology and Historic Preservation (OAHP) to help find the locations of mines and mills that related to George M. Pullman's interests in Colorado.

Abbreviations used in this and previous reports from the Pullman Heritage Project:

AFL American Federation of Labor (sometimes A.F. of L.)
 BSCP Brotherhood of Sleeping Car Porters and Maids

CA&StL Chicago, Alton, & St. Louis railroad

CARE Colored Association of Railroad Employees
 CB&Q Chicago, Burlington & Quincy railroad
 CIO Congress of Industrial Organizations
 DC&MW Detroit Car & Manufacturing Works

IC Illinois Central railroad
 MC Michigan Central railroad
 NHL National Historic Landmark

NPS National Park Service

NRHP National Register of Historic Places

NYCNew York Central railroadPNMPullman National Monument

PORT Protective Order of Railroad TrainmenPPBA Pullman Porter Benefit Association

PPCC
 Pullman Palace Car Company (Previous documents used PPCCo)

PPMPA Pullman Porters and Maids Protective Association

PRR Pennsylvania Railroad

RRCo. Robinson, Russell, and Company

TABLE OF CONTENTS

MANAG	GEMENT SUMMARY	ı
PREFAC	CE AND ACKNOWLDGEMENTS	Ш
Abbrevi	iations used in this and previous reports from the Pullman Heritage Project:	vi
TABLE (OF CONTENTS	VII
LIST OF	FIGURES	XII
LIST OF	TABLES	XVI
СНАРТЕ	ER 1 INTRODUCTION TO THE PULLMAN STORY AND THE HISTORIC RESOURCE STUDY	1
1.A	George M. Pullman, the Pullman Palace Car Company, and Luxurious Travel	2
1.B	Pullman Workers and the town	3
1.C	The Pullman Strike and the Brotherhood of Sleeping Car Porters	6
1.D	Post-War Pullman: Transitions and Preservation	12
CHAPTE	ER 2 PULLMAN IN THE NATIONAL CONTEXT	15
2.A	Chicago's Geographic and Transportation Significance	15
2.B	Chicago's Population Growth	19
2.C	The Story of the Pullman Family	21
2.C.1	George M. Pullman and his Family	21
2.C.2	2 Pullman's Role in the Urbanization and Industrialization of Nineteenth-Century Chicago	36
2.D	Creation of the Town of Pullman as a Reaction to Urbanization and Industrialization	46
2.E	Pullman and Chicago's Place in American Labor History	50
СНАРТЕ	ER 3 HISTORIC OVERVIEW & DEVELOPMENT: PRODUCTION AND OPERATIONS SYSTEMS	63
3.A	Periods for Pullman Palace Car Company and Successors	66

3.A.1	Origins and Buildout (1859-1885)	68
3.A.2	Pullman at the World's Columbian Exposition, 1893	75
3.A.3	The Pullman Strike of 1894	81
3.A.4	Peak Travel	88
3.A.5	Multiple Declines	91
3.A.6	The End of Pullman the Company	95
3.B F	Railroad Passenger Car Technology	95
3.B.1	Wooden Bodies	97
3.B.2	Interlude: The Vestibule Wars	100
3.B.3	Heavyweights: Steel Frames	103
3.B.4	Interlude: Air Conditioning	106
3.B.5	Lightweights: Metal Skins and Stainless Steel	108
3.C (Comparative Car Building Companies	110
3.C.1	Wagner Palace Car Co. (WPC Co.)	111
3.C.2	Mann Boudoir Car Company & Union Palace Car Company	111
3.C.3	Budd	112
3.C.4	American Car & Foundry	113
CHAPTER	R 4 PLANNED COMMUNITIES AND PULLMAN	114
4.A A	A General History of Planned Communities	114
4.B E	uropean Comparative Examples before Pullman	115
4.B.1	Precedent and Philosophy in English Textile Towns	115
4.B.2	English Model Town Planning	117
4.B.3	French Model Town Planning	120
4.C	Comparative Examples in the United States before Pullman	123
4.C.1	Democracy and Manufacturing	123
4.C.2	Industrial Model Towns	124
4.C.3	Paternalism	126

4.C.	4 Industrial Suburbs	127
4.C.	5 Planned Philosophical and Religious Utopias	128
4.D	Pullman's Vision of a Model Town	130
4.D	.1 Pullman's Inspirations	130
4.D	.2 Roots in the Housing Reform Movement	133
4.D	.3 New Approach to Design and Town Planning	136
4.D	.4 Housing and Social Hierarchy	137
4.E	The Town of Pullman	138
4.E.	1 Pullman Community Buildings	138
4.E.	2 Pullman Houses	165
4.E.	3 Construction and Moving In	177
4.E.	4 Additional Housing	182
4.E.	5 Renting and Living in Pullman	185
4.E.	6 Transition to Private Property	186
4.F	Interpreting Pullman's Model Town	188
4.F.	1 Reception	188
4.F.	2 Vernacular Architecture and the Interpretation of Space over Time	190
4.F.	3 Aesthetics and Everyday Experience	193
4.G	Later American Comparative Examples	195
4.G	.1 Inspired by Pullman	196
4.G	.2 Reacting to Pullman	198
СНАРТ	TER 5 TECHNOLOGY SYSTEMS AT PULLMAN	202
5.A	Summaries of Innovations and Developments	203
5.A	1 Town and Factory Infrastructure	203
5.B	Biographical Analyses of Lead Architects, Engineers, and Artisans	205
5.B.	1 Solon Spencer Beman (1853–1914)	206
5.R	2 Irving Kane Pond (1857-1939)	214

5. B	3 Maximillian Hjortsberg (1825-1880)	216
5.B.	4 Thomas Ashley Bissell (1835-1902)	220
5.B.	5 Nathan Franklin Barrett (1845–1919)	222
5.B.	6 Benezette Williams (1844-1914)	226
5.B.	7 Duane Doty (1834/35–1902)	229
5.C	Sociotechnical Systems of the Pullman Experience	231
Chapte	er 6 EXISTING CONDITIONS	241
6.A	Alley Architecture	242
6.B	Post-Company Domestic Architecture North of 106 th Street	244
Chapte	er 7 MOBILITY IN PULLMAN	254
7.A	Interpreting Social Patterns of Race, Gender, and Class in Pullman, IL	254
7.A.	1 1880s–1890s	255
7.A.	2 1907–1919	259
7.A.	3 1920–50s	261
7.A.	4 1960s–2000	265
7.A.	5 Pullman and the American Dream	269
Chapte	er 8 SUMMARY AND RECOMMENDATIONS FOR FUTURE WORK	272
8.A Inc	lustrial Heritage Networks and Routes	273
8.B Sp	ecial Theme Study(ies) on Labor, Race, Civil Rights, and Pullman	276
8.C	Citizen History, Deep Mapping, and Big Data for Industrial Heritage Interpretation.	279
8.E	Porters and African American History.	283
8.E.	1 Pullman porters, "race music," and music heritage sites	283
8.E.:	2 Pullman porters and railroad accidents	285
8.F	Gastronomy, African American Foodways, and Dining Car Cuisine	286
8.G	Ethnographic Overview and Assessment for Pullman and Lake Calumet Region.	288

8.H Pullman and luxury arc	ound the world: the global context	295
8.I Conclusions		296
Works Cited		298
Appendixes (Volume 2)		
Appendix A		A-1
Appendix B		A-19
Appendix C		A-42
Appendix D		A-48
Appendix E		A-55

LIST OF FIGURES

FIGURE 2.1. JOSHUA HATHAWAY, JR., CHICAGO WITH THE SCHOOL SECTION, WABANSIA, AND KINZIE'S ADDITION	16
FIGURE 2.2, "UNITED STATES AND CANADIAN RAILWAYS, APRIL 1, 1861, PART II: CANADA AND THE MIDWESTERN STATES,"	17
FIGURE 2.3. MACHINE FOR REMOVING BUILDINGS, U.S. PATENT NO. 2225, ISSUED AUGUST 21, 1841 TO LEWIS PULLMAN	22
Figure 2.4. Lewis Pullman Family, ca. 1850.	23
FIGURE 2.5. PATENT IMAGE OF PULLMAN'S SLEEPING CAR, PATENTED SEPTEMBER 19, 1865.	25
FIGURE 2.6. GEORGE M. PULLMAN, FROM A DAGUERREOTYPE FROM 1857	26
FIGURE 2.7.GEORGE M. PULLMAN JOURNAL ENTRY, OCTOBER 1860	29
FIGURE 2.9. GEORGE PULLMAN IN AN IMAGE HE MAY HAVE SENT HIS MOTHER	31
FIGURE 2.10. "EAGLE GOLD COMPANY,"	31
FIGURE 2.11. THE PULLMAN HOUSE AS A SERVICE STATION IN THE EARLY 20TH CENTURY.	32
Figure 2.12. Mrs. Pullman with Twin Boys," ca. 1875.	33
FIGURE 2.13. PULLMAN FAMILY, N.D. (LIKELY AT CASTLE REST).	33
FIGURE 2.14. "BALL GOWN"	34
Figure 2.15. Memorandum of Payments to Isham, Lincoln & Beale	35
FIGURE 2.16. VIEW OF AN ENTIRE BLOCK OF BRICK & STONE BUILDINGS IN CHICAGO, BY EDWARD MENDEL 1857	36
FIGURE 2.17. "MARINE BANK BUILDING" LOUIS KURZ FOR JEVNE & ALMINI, 1866-67	37
FIGURE 2.18. "TREMONT HOUSE" LOUIS KURZ FOR JEVNE & ALMINI, LITHOGRAPH, 1866-67	38
FIGURE 2.19. SAMPLE PAGE OF PULLMAN PALACE CAR INVENTORY, 1867	40
FIGURE 2.20. "NATIVITY OF WAGE-EARNERS, SEPT. 15, 1892,"	45
FIGURE 2.21. "DIAGRAM OF KALAMICK LAKE"	46
FIGURE 2.21. "PULLMAN'S PALACE CAR COMPANY ANNUAL MEETING, THURSDAY, OCT. 15, 1885,"	48
FIGURE 2.22. "A SECTION OF THE DINING ROOM, HOTEL FLORENCE"	49
FIGURE 2.23. PULLMAN AS PLATTED AND PARTIALLY BUILT. FROM ATLAS OF HYDE PARK, 1882.	52
FIGURE 2.24. "FRONT ERECTING SHOPS"	53
FIGURE 2.26. "ILLINOIS NATIONAL GUARD ON SOUTH LAWN OF HOTEL FLORENCE, PULLMAN, 1894"	54
FIGURE 2.25. "PULLMAN BAND LEADS A PARADE UP THE HILL ON 111TH STREET." 1892	55

FIGURE 2.27. ILLINOIS NATIONAL GUARD IN FRONT OF ARCADE BUILDING IN PULLMAN DURING RAILROAD STRIK	Œ, 1894
	55
FIGURE 2.28. PULLMAN POPULATION, 1930-2000	57
FIGURE 2.29. DAVID G. SCOTT, "HERE IS THE WORLD'S MOST PREFECT SERVANT"	58
FIGURE 2.30. PORTER HANDING YOUNG WOMAN A GLASS OF WATER, 1905.	60
FIGURE 2.31. A PULLMAN AD FROM THE 1930S.	61
FIGURE 3.1. AMERICAN RAILROAD STATISTICS, 1880–1960.	63
FIGURE 3.3. PULLMAN CO. FINANCIALS, 1875–1950.	65
FIGURE 3.4. CARS OWNED BY PULLMAN CO., 1870–1970.	65
FIGURE 3.5. CARS OWNED AND OPERATED BY PULLMAN, 1867–1926.	66
FIGURE 3.6. PULLMAN COMPANY MERGERS	67
FIGURE 3.7. PULLMAN STREETCAR NO. 15 (LOT 579), C.1895.	76
FIGURE 3.8. HOURS WORKED FOR CERTAIN EMPLOYEES AT PULLMAN, 1893–1894	85
FIGURE 3.10. PULLMAN WWII PRODUCTION.	89
FIGURE 3.9. PULLMAN WWII PRODUCTION. TORKEL KORLING PHOTOGRAPHS IN TENNECO COLLECTION	90
FIGURE 3.11. ADVERTISEMENTS FOR AIRLINE AND TRAIN TRAVEL, 1954	92
FIGURE 3.12. PULLMAN'S ENTRY INTO STREAMLINING, THE TRAIN X, C. 1955.	94
FIGURE 3.13. SCHEMATIC OF THE HUNDREDS OF COMPONENTS ON A TURN-OF-THE-CENTURY WOODEN-BODIED F	
FIGURE 3.14. PULLMAN'S DETROIT SHOPS IN 1884.	99
FIGURE 3.15. "THE PULLMAN VESTIBULE SLEEPING CAR"	100
FIGURE 3.16. WOOD AND STEEL PASSENGER CARS IN SERVICE, 1910–1950.	104
FIGURE 4.1. NEW LANARK, SCOTLAND, FOUNDED IN 1785	115
FIGURE 4.2. WILLIAM LIZARS, H. WARREN, "SALTAIRE," LONDON, 1869	119
FIGURE 4.3. "THE LOWELL OFFERING"	125
FIGURE 4.4. SUNSHINE AND SHADOW IN NEW YORK CITY. 1868	134
FIGURE 4.5. S.S. BEMAN, ARCH., BARRETT LANDSCAPE ARCH.	136
FIGURE 4.6. PULLMAN ARCADE. PULLMAN STATE HISTORIC SITE.	140
FIGURE 4.7. INTERIOR OF THE ARCADE SHOWING MASONRY CONSTRUCTION AND STEEL AND GLASS ATRIUM SPAN	141

FIGURE 4.8. INTERIOR OF THE PULLMAN LIBRARY, C.1883	144
FIGURE 4.9. INTERIOR OF THE THEATER DEMONSTRATES WHAT WOULD HAVE BEEN CALLED MOORISH STYLE THEATER	145
FIGURE 4.10. THE FIRST MARKET HALL C. 1883.	147
FIGURE 4.11. SECOND MARKET HALL, BUILT 1893	147
FIGURE 4.12. BROADHEAD MEAT MARKET, INSIDE THE SECOND MARKET HALL, 1895–1900	149
FIGURE 4.13. GREENSTONE CHURCH (IDENTIFIED AS PRESBYTERIAN), 1880s.	150
FIGURE 4.14. INTERIOR OF THE GREENSTONE CHURCH AFTER 1907.	151
FIGURE 4.15. HOTEL FLORENCE LOOKING NORTHEAST TOWARD THE ADMINISTRATION BUILDING C. 1882	153
FIGURE 4.16. PULLMAN SCHOOL. THE PULLMAN STATE HISTORIC SITE	156
FIGURE 4.17. EDGAR ALLEN POE SCHOOL, C.1905	158
FIGURE 4.18. SECOND PULLMAN SCHOOL, C. 1910	159
FIGURE 4.19. STABLES AND FIRE HOUSE.	161
Figure 4.20. Casino, 1880s.	162
FIGURE 4.22. DETAIL OF ELEVATIONS OF THE FRONT (BOTTOM) AND REAR (TOP) OF FLATS IN BLOCK 16	166
FIGURE 4.23. DETAIL OF FIRST FLOOR PLANS OF 3-ROOM FLATS IN BLOCK 16.	167
FIGURE 4.24. DETAIL OF SECOND FLOOR PLANS SHOWING A 3-ROOM FLAT (RIGHT) AND A 4-ROOM FLAT (LEFT) IN BL	
FIGURE 4.25. DETAIL OF FRONT ELEVATION OF THREE- AND TWO-STORY SINGLE-FAMILY HOUSES DRAWN FOR BLOCK I	R. 170
Figure 4.26. Detail of First Floor plans for three-story (left) and two-story (right) single-family house. Block R	
Figure 4.27. Detail of Second Floor plans for three-story (left) and two-story (right) single-family in Block R	
FIGURE 4.28. DETAIL OF THIRD FLOOR PLANS (INCLUDING SERVANTS ROOM) AND ROOFTOP FOR THREE-STORY (LEFT) TWO-STORY (RIGHT) SINGLE-FAMILY IN BLOCK R.	
Figure 4.29. Elevations and plans for china closets and pantries in the 3-story or "Corner House" (lef and the two-story (right)	
Figure 4.30. Note the sheds at the rear of each lot. Detail of First Floor plans and site plan Block R	176
FIGURE 4.31. DETAILS OF CONSTRUCTION DRAWINGS FOR SHEDS IN BLOCK R.	176
FIGURE 4.32. "FULTON STREET, LOOKING NORTH"	178
FIGURE 4.33 VIEW FROM THE ARCADE BUILDING C. 1883	181

FIGURE 4.34. FOUNDRY COTTAGES, FOREMAN'S BLOCK, BLOCK 37.	183
FIGURE 4.35. THE NORTHWEST END OF BLOCK 27 AT 105 TH STREET	184
FIGURE 4.36. "FORMANS ROW." [SIC] EARLY 1880s,	185
FIGURE 4.37. CHAMPLAIN AVENUE	186
FIGURE 4.38. "MAP OF THE LANDS OF THE PULLMAN LAND ASSOCIATION AND OF THE PULLMAN COMPANY," 1905	188
FIGURE 4.39. COLONIAL REVIVAL-STYLE DOOR SURROUND ADDED TO 11211–13 CHAMPLAIN AVENUE	191
FIGURE 4.40. MODERNE-STYLE DOOR SURROUND ADDED TO 11233 CHAMPLAIN AVENUE	192
FIGURE 4.41. 11260 S. CHAMPLAIN AVE (FORMERLY WATT AVE)	193
FIGURE 4.42. BEMAN DESIGNED IVORYDALE, OHIO FOR PROCTOR & GAMBLE STARTING IN 1883	197
FIGURE 4.43. CONCEPTUAL DRAWING OF WARREN, ARIZONA,	200
FIGURE 5.1. PRELIMINARY INVENTORY OF BUILDINGS BY SOLON S. BEMAN.	208
FIGURE 5.2. GRAND CENTRAL STATION, HARRISON & WELLS, CHICAGO. OPENED 1890; DEMOLISHED 1971	210
FIGURE 5.3. IRVING K. POND	214
FIGURE 5.4. INITIAL PLANS FOR FACTORY LAYOUT AT PULLMAN	218
FIGURE 5.5. IDEALIZED MAP OF PULLMAN.	224
FIGURE 5.6. "PULLMAN SEWERAGE SCREENING TANK AND PRESSURE REGULATING VALVE"	227
FIGURE 5.7. "SEWAGE PUMPING ENGINE FOR THE CITY OF PULLMAN, ILL., USA,"	227
FIGURE 5.8. "SEWAGE AND WATER PUMPING STATION AND WATER TOWER; PULLMAN, ILL."	228
FIGURE 6.1. MAP OF PULLMAN NATIONAL MONUMENT SHOWING THE PHASES OF TOWN CONSTRUCTION	239
FIGURE 6.2. DETAILS OF BLOCK 6 FROM 1887 RASCHER MAP (LEFT) AND 1938 SANBORN MAP (RIGHT)	243
FIGURE 6.3. DETAIL OF 1887 RASCHER MAP SHOWS THAT EVEN THE LOWEST STATUS HOUSING INCLUDED FRAME SHE	
FIGURE 6.4. 1911 RASCHER MAP SHOWING BLOCKS 24–37, BETWEEN 103 RD STREET AND 105 TH STREET	245
FIGURE 6.5. DETAIL OF 1938 AERIAL PHOTOGRAPH OF BLOCKS 24–37, BETWEEN 103^{RD} STREET AND 105^{TH} STREET.	246
FIGURE 6.6. DETAIL OF 1952 AERIAL PHOTOGRAPHY OF BLOCKS 24–37, BETWEEN 103 RD PLACE	247
FIGURE 6.7 . DETAIL OF 1959 AERIAL PHOTOGRAPHY OF BLOCKS $24-37$ BETWEEN 103^{RD} STREET AND 105^{TH} STREET	248
FIGURE 6.8. WORKERS' COTTAGES BUILT ON 104 TH PLACE BEFORE 1911.	249
FIGURE 6.9. CHICAGO BUNGALOWS BUILT ON 104 TH PLACE DURING THE 1920S	250

FIGURE 6.10. DUPLEX HOUSING UNITS BUILT DURING OR RIGHT AFTER WORLD WAR II ON THE SOUTH SIDE OF 105^{TH} STREET	0
FIGURE 6.11. POST-WAR HOUSING BUILT AFTER 1952 ON THE SOUTH SIDE OF 104^{TH} STREET	1
FIGURE 6.12. VARIED COMMERCIAL BUILDINGS FILLED IN THE WEST SIDE OF CORLISS AVE AT 106 TH STREET25	2
FIGURE 7.1. AFRICAN AMERICAN WAITERS IN THE HOTEL FLORENCE	7
FIGURE 7.2. MAP OF LAND VALUES IN 1928 SHOWS HIGHER VALUES IN PULLMAN, KENSINGTON, AND ROSELAND26.	3
FIGURE 7.3. DETAIL SHOWING "NORTH AND SOUTH PULLMAN" AND SURROUNDING AREA IN HOLC MAPS OF 1939 26.	5
FIGURE 7.4. IN 2010, SOUTHERN PULLMAN STANDS OUT IN "THE RACIAL DOT MAP"	5
FIGURE 7.5. CHART SHOWING CHANGING RACIAL DEMOGRAPHICS IN THE PULLMAN NEIGHBORHOOD26	8
FIGURE 8.1: NATIONAL PARK SERVICE SITES RELATED TO PULLMAN NATIONAL MONUMENT	5
FIGURE 8.2: ALBERT SCHARF'S 1901 MAP SHOWING HIS RECONSTRUCTION OF PATHS AND VILLAGES29	1
FIGURE 8.3: DETAIL OF LAKE CALUMET AND PULLMAN AREA OF ALBERT SCHARF'S MAP,	2
FIGURE 8.4: J. HARLEN BRETZ'S MAP SHOWING RESULTS OF THE 1930-1932 SURVEY	3
LIST OF TABLES	
TABLE 3.1. EARNINGS OF CERTAIN EMPLOYEES AT PULLMAN, 1893–94	6
TABLE 4.1. COMPARISON OF AMENITIES AND COSTS FOR 3-ROOM AND 4-ROOM FLATS, AND 2-STORY SINGLE HOUSE 17	1
TABLE 5.1. COST OF OPERATION FOR NINE SLEEPING CARS, OCT. 1885—SEPT. 1886	4

CHAPTER 1

INTRODUCTION TO THE PULLMAN STORY AND THE HISTORIC RESOURCE STUDY

That is the story of this place—that, together, we can do great things that we cannot accomplish alone.... This place, historic Pullman, teaches us we have to keep standing firm and together.

President Barack Obama¹

Pullman's history both intersects and encapsulates many of the most significant stories of the United States of America. Some of those stories are celebratory tales of visionary innovation and creation, sophistication and luxury. Others are sober and painful stories of exclusion and struggle, inequality and violence. The Pullman company touched the lives of millions of people in this country (and around the world) over a century, including those who worked for the company in manufacture and operations; persons who worked to organize, govern, or regulate the company; those that experienced travel and movement about the country via the network the company provided; and those who otherwise participated in the cultural exchanges that surrounded the company's brand. The stories of Pullman are at the center of some topics, such as labor history, urban planning, race relations and civil rights, as well as the histories of mobility and luxury. But the company, town, and people also haunt the background of other stories, such as business and management history; cultural traditions in music, food, and arts; and environmental history. Indeed, Pullman's impact was felt around the world, well beyond those locations in which the company sold train cars or operated service.

When President Barack H. Obama designated Pullman National Monument, he assigned a visionary mission to the National Park Service. Pullman NM shall preserve the historic resources of Pullman, interpret the industrial history and labor struggles and achievements associated with the Pullman Company (including both the Pullman Strike and the Brotherhood of Sleeping Car Porters), and interpret the history of urban planning and design. These charges were published in the monument's Foundation Document, which will guide conservation and preservation work and shape interpretive programing as staff find ways to tell these stories in interconnected and integrated ways.

This Historic Resource Study (HRS) is a Baseline Research Report for Pullman NM. This document summarizes the historical writings about Pullman and provides context for the significant themes identified in its founding document, collates collections of primary documents and historical resources that are important sources of information on those themes, and recommends questions that will require additional study. These cultural resources include primary historical materials in archives and oral

¹ This quote is extracted from President Barack Obama's remarks at the designation of Pullman National Monument, February 19, 2015. Excerpts reprinted in National Park Service, "Positioning Pullman: Collaborative Ideas Workshop for America's Newest National Monument," (Chicago: National Park Service, 2016). Complete text is found https://obamawhitehouse.archives.gov/the-press-office/2015/02/19/presidential-proclamation-pullman-national-monument

² "Foundation Document: Pullman National Monument (Draft)."

history collections, as well as architectural, archaeological, museum collections, or landscape resources. While this report includes new historical narrative based in original archival research, other sections present synthetic reviews of existing publications. National Park Service staff will use this document and included resources as they make management decisions and design interpretive programming. In addition to this report and its appendices, which are published digitally, the research team deposited its entire library with the monument staff, including nearly 2,000 references and hundreds of pages of imaged archival documents.

1.A George M. Pullman, the Pullman Palace Car Company, and Luxurious Travel

George M. Pullman had exceptional skill at bringing together the investment and skilled people necessary to form profitable companies.³ From his youth in upstate New York, Pullman had learned to be a cabinetmaker, worked in retail, and eventually took over and expanded his father's business of raising and moving buildings along the Erie Canal.⁴ Working with his brother, George began to expand that business into Chicago, establishing a reputation for being able to profitably organize large numbers of people to solve complex problems. In his recollection of this period, Pullman attributed his later success to his reputation for pulling off such large-scale changes without disrupting the normal business and activities inside buildings. While moving these buildings, he also undoubtedly developed relationships with the people who owned, operated, and patronized the banks and hotels in downtown Chicago, almost certainly providing him with insights into the relationship between wealthy consumers, ideas of luxury, and the built environment.

Seeing profitable opportunity in the discomforts of train travel on long journeys, Pullman began experimenting with sleeper car design starting in the late 1850s. He was not alone in this effort, as other companies had formed for similar purposes at that time. Pullman had early design successes, but lacked the capital and influence to start a serious company. When the Civil War started in 1861 and the government assumed control over railroad operations, Pullman spent some time in Colorado, away from his Chicago partners. He set up mining, shipping, and mercantile enterprises in Colorado, further improving his reputation, generating capital, and building more substantial connections with investors in New York. Using his earnings from those activities, Pullman arranged for the manufacture of the *Pioneer*, his first *luxury* sleeping car, in 1864.

George Pullman was clearly influenced by the evolution of hotels in the United States. His early luxury sleeping cars are aptly described as "rolling parlors" because each palace car created an architectural space which in form and function most closely resembled residential parlors. Yet as the types of cars quickly grew to include hotel (1867), dining (1868), parlor (1875), smoking, and drawing room cars, and technologies which allowed people to move between them, Pullman was building a network of moving hotels. Travel hotels have a long history, and by the mid-nineteenth century, luxury hotels had become symbols of urban sophistication and taste. These hotels operated as landmarks of geographic mobility

2

³ For reference, see the offhand comment about George Pullman's understanding that he must rely upon skilled laborers to realize his "embryonic ideas" that on p. 29 of Joseph Husband, *The Story of the Pullman Car* (Chicago: A.C. McClurg & Co., 1917).

⁴ Pullman's early life and business dealings are detailed in Chapter 2.

where travelers mixed with locals, provided mechanisms to facilitate the country's face-to-face personal business relationships that formed the nation's commercial culture, and had even begun offering high-status multi-family residences appointed with hotel services. By this time, resort hotels had evolved as luxury destinations supported by rail travel, while railroad companies had started building networks of hotels along their routes to house, feed, and support both workers and customers. While the company began to market themselves as a moving hotel as early as the 1870s, Pullman would later use this idea to claim that his company should not be regulated as a railroad operator. It is not clear how this evolved in Pullman's early planning, however, as it also remains unclear if or how his success in turn effected the evolution of luxury hotels.

Sometime during the period, 1850-1865, George Pullman and his associates pieced together a vision of an exclusive railroad company, one designed to monopolize luxury travel on the fragmented, competitive rail network of the United States. Pullman incorporated three luxury car companies in 1867, including the Pullman Palace Car Company in Illinois. Pullman would manufacture the cars, but also retain ownership and operate his cars on contract for different rail lines, maintaining direct control over the quality of service and operation (while also collecting the handsome profits). Just twelve years after founding these companies, Pullman began the design and construction of his model town and factory on the outskirts of Chicago which would fully realize his vision for the manufacturing side of the company. That town included the Hotel Florence which architectural historians identify as the quintessential surviving railroad hotel, intended to serve executive business and industrial management functions, operate as a social and recreational hub for visitors, and promote tourism of the model town.⁶

Pullman's trains rapidly established their reputation for quality and luxury. In the 1870s, the company operated in much of the United States and expanded rapidly into Canada, England and parts of Europe, and Mexico, inspiring competition around the world. Pullman's cars were featured in hundreds of travel essays published in newspapers and magazines around the world and Pullman's name became synonymous with first-class travel. By the mid 1910s, one could travel across North America on Pullman trains from Quebec to Vancouver and ultimately to Salina Cruz in Mexico, just 200 miles from Guatemala. With competition from companies like the European *Compagnie Internationale des Wagons-Lits* (CIWL), which operated the famous Orient Express from 1883-1914, Pullman became a global mark of luxury and quality against which other companies were measured.⁷

1.B Pullman Workers and the town

The Pullman company distinguished itself from competitors through quality of the luxury experience. That quality was evidenced in the physical space provided by the palace cars and by the polished service

⁵ See particularly A.K. Sandoval-Strausz, *Hotel: An American History* (New Haven, CT: Yale University Press, 2007).

⁶ Ibid., 92-94.

⁷ A discussion of the CIWL and the connection between George Pullman and Georges Nagelmackers can be found in Charles King, *Midnight at the Pera Palace: The Birth of Modern Istanbul* (New York: W. W. Norton and Company, 2014), 22-24. The Pullman name still evokes ideas of luxury and quality and it is still used in hotels, travel services, and luxury branding.

during the onboard experience, thus by both manufacture and service skills. The car staff was trained to be immaculate, efficient, and professional, from conductors to breakmen, porters and maids, and waiters and barbers. After initial experiments asking white conductors to provide service and then hiring women attendants, Pullman opted exclusively for African-American men to care for his passengers as porters, eventually also adding maids to facilitate the needs of female travelers. Throughout operations, tasks were soon segmented into groups of workers strictly separated by race and gender, while ethnicity or nationality was often a consequence of geography.⁸

Scholars do not know why Pullman made this fateful decision, but setting aside evidence for his reasoning, the repercussions were substantial and clear. In the years following the Civil War, The Pullman Company eventually became the single largest private employer of African Americans in the United States. The company preferred to hire African Americans who were skilled domestics, and initially that meant recruiting formerly-enslaved individuals who were literate and understood service duties. They sought people they could train to follow Pullman procedures, but who already knew how to adopt a deferential and "servile" demeanor toward white passengers, code switching as they moved from North to South on trains.

This racial division of labor meant that the sleeper and other cars of Pullman's trains became unique spaces that allowed extended (albeit unequal) interactions among black and white people at a time when many northern whites had limited exposure to people of African-American ancestry, beyond books and stage shows, while many southern blacks also knew little of northern white societies. At the same time, white southerners traveled the trains in the two decades following the Civil War, through Emancipation and the spread of Jim Crow segregation, suddenly interacting in intimate spaces with educated, literate, articulate, and professional African-American men. For these black men, the position of porter provided a rare opportunity for non-agricultural work earning cash wages, with unequalled ability to travel and see the country. So powerful were these experiences for nineteenth-century Americans, historians and cultural writers observed that white Americans transformed the Pullman porter into an archetypal character in literature, on stage, and eventually, on screen. More than a literary mechanism, the Pullman train's social dynamic allowed northern whites to share in the romance of plantation nostalgia of their southern neighbors, where the Porter became a cheerful, bumbling, and subservient character they knew from ragtime songs and vaudeville shows. It is unclear if George Pullman understood this to be part of his company's service package, but the outcome was the same regardless of intention.9

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⁸ Useful discussion of this process can be found in Jack Santino, Miles of Smiles, Years of Struggle: Stories of Black Pullman Porters (Urbana: University of Illinois Press, 1991). Another powerful analysis in Susan E. Hirsch, After the Strike: A Century of Labor Struggle at Pullman, The Working Class in American History (Urbana: University of Illinois Press, 2003).; and also Jervis Anderson, A. Philip Randolph: A Biographical Portrait (New York: Harcourt Brace and Jovanovich, 1973). These are useful to compare with points about the genuine complexity of George Pullman's actions toward African American men, made the first chapter of Larry Tye, Rising from the Rails: Pullman Porters and the Making of the Black Middle Class, 1 ed. (New York: Henry and Holt Company, LLC, 2004), 1-30.

These stereotypes were of little use to the African Americans themselves, whose lived experiences were very different than most of the elite passengers. While underpaid and overworked in a role that required them to suffer personal indignities and offered no advancement, the porters were highly respected in African-American communities. They used their financial, travel, and educational advantages to spread information about economic opportunities in the industrializing north, inspiring and shaping the Great Migration. They organized their communities; delivered newspapers, magazines, and music recordings along the line; provided support for the education of family members; and invested in businesses. To their family and friends, the porters represented professional work, geographic mobility, and a sophisticated urban and modern life that contrasted with the rural roots many of them shared. These men laid the groundwork to build the African-American middle class.

Pullman porters were not the only African-American men to work for the railroads. Thousands of black men worked a wide range of rail jobs around the country, from doing the service jobs as red caps and porters to laying and maintaining track on section crews, handling freight, and in the south, working as locomotive firemen or breakmen. Yet the railroad trade unions, particularly the "Big Four" Brotherhoods founded in the 1860s and 1870s, all excluded African Americans from membership and actively worked to discourage railroads from hiring black workers. This locked African Americans out of better paying jobs and limited their access to mutual aid insurance and dispute resolution systems, while also excluding those working for Pullman as porters and maids from the protections or leverage provided by union membership. Because the brotherhoods were so focused on protecting the white men and excluding black men who worked in particular categories of jobs, they also excluded carpenters, foundrymen, machinists, painters, seamstresses, and other workers who labored in railroad manufacture and maintenance shops around the country. If these workers were organized, it was into trade unions allied with other shop or factory workers and not railroad brotherhoods that protected operations.

By the late 1870s, George Pullman was successful enough to implement the next stage of his vision. He wanted to build a company town outside of Chicago where he could centralize and expand his manufacturing operations. He envisioned more than a model factory, although he wanted to follow the national trend toward building larger industrial manufactories. Pullman also wanted to create a designed community which would blunt the harsh conditions of capitalism in Chicago, solving labor problems by providing healthy, sanitary, and morally uplifting residences for workers, thus countering what he saw as the moral failure of violent strikes. In his vision, the town would also be profitable for the company and provide a buffer against the fluctuations of demand in the railroad market.

Chicago was growing so quickly in the rush of immigration, urbanization, and industrialization, many workers lived in squalor with inadequate wages, overcrowded and unsafe housing, without effective access to water, sewers, or public transit infrastructure. As a consequence, the city had become a center

5

¹⁰ The largest of the brotherhood were the Brotherhood of Locomotive Engineers, the Order of Railway Conductors of America, the Brotherhood of Locomotive Firement and Enginemen, and the Brotherhood of Railroad Trainmen all of which forbid African-American members into the 1950s and 1960s. See Chapter 1 in Eric Arnesen, *Brotherhoods of Color: Black Railroad Workers and the Struggle for Equality* (Cambridge, MA: Harvard University Press, 2001).

of labor organization. In 1867 there had been a general strike in demand of the 8-hour workday, but the panic of 1873 and the "Long Depression" that followed brought most national union activity to an end for several years. By 1876, about 200 railroads had gone bankrupt or into receivership among the thousands of business that failed. That year, national unemployment hit 14% and wages dropped to 45% of their pre-depression levels.

Then in July of 1877, the Baltimore and Ohio Railroad cut wages for the third time that year. Workers in West Virginia started a work stoppage which rapidly spread along the rail routes, to many major cities and transportation hubs in Maryland, New York, Pennsylvania, Illinois, and Missouri. Peaceful actions by organized labor drew crowds of under- and unemployed people, at times escalating to rioting, burning of locomotives and rolling stock, and battles between strikers and deputized police forces. In Chicago, there had been daily demonstrations and mob activities starting July 23rd that culminated in the Battle of the Viaduct on July 26th. In all, the local toll was 14-30 rioters killed and as many as 100 wounded, and as many as 13 policemen were injured. Nationally, as many as 100 strikers were killed and the rioters did tens of millions of dollars in damage, mostly to railroad property.

Chicago experienced strikes, rallies, and other disruptions every year between 1870 and 1880. The disparity of wealth and the squalid conditions of the poor urban laborers drew national attention and often inspired public sympathies. When the economy turned around in 1879, George Pullman decided to enact his visionary plan to build a healthy workers' village in the suburbs of Chicago, hiring Solon Spenser Beman and Nathan F. Barrett to realize his vision. In a flurry of activity spanning three intense years with a team of engineers and designers, the group collectively created one of the United States' most distinctive experiments in industrial society. Historian Susan Hirsch aptly named this effort Pullman's "Environmental Strategy" for recruiting and managing skilled labor. The town of Pullman, Illinois, became a case study in design and planning, welfare capitalism, and paternalism.

1.C The Pullman Strike and the Brotherhood of Sleeping Car Porters

This report lays out the details of the town and factory in much greater detail. In general terms, there are two important themes to consider from the outset. First, the story of the Pullman town and community are complicated, mixing success and failure in due measure. Often, one's feelings about the worth of the Pullman experiment are grounded in one's individual position and perspective. Second, in hindsight, George Pullman's vision for a profitable design solution to the Gilded Age's social ills was tainted from the start by his choice to reinforce the racial exclusions and divisions used by his company.

After a long period of economic expansion in the United States, and a particularly good one for Pullman and for railroads generally, another economic panic and depression hit in 1893 and lasted until 1897, following immediately on the heels of the company's triumphant participation in the World's Colombian Exhibition (the Chicago World's Fair). Starting in February, the depression that followed the panic would see 500 banks close, 15,000 companies fail, and unemployment in some states ranged from 25%-43%.

The crisis at Pullman began, the story goes, when the company cut wages and hours to compensate for the drop-in orders for new cars. The roots of employee dissatisfaction were much deeper than that. As

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¹¹ Hirsch, *After the Strike: A Century of Labor Struggle at Pullman*. pp. 16-21.

soon as 1885, the skilled workers of Pullman had joined an array of different kinds of craft unions and labor organizations. The workers' organizations found common cause in advocating for the eight-hour work day and in 1886, starting a walkout just after the Haymarket bombing. After being locked out for two weeks, the allied groups decided to return to work. While the strike was technically a failure, it clearly signaled that George Pullman's Environmental Strategy for labor management had the opposite effect of what the designers had intended. The company town's restrictive rules helped to create a collective working-class culture, instead of dissuading people from forming that identity.

As the years passed, the workers in the community watched other changes occurring in shops and factories. Machine-assisted production began to privilege engineers and tool makers over artisans and shifted others into roles as semi-skilled machine operatives. This process was not a simple deskilling at Pullman, as skilled workers sometimes shifted from manufacture into the repair shops, for example, yet the community of workers saw shifts in ethnicity as skilled workers born in northern and western European countries were replaced by southern and eastern European workers. Groups of workers still organized and struck periodically and Pullman employees closely followed the events of the Homestead Strike of 1892 which resulted in the deaths of seven workers and three Pinkerton agents and seriously damaged the credibility of the Amalgamated Association of Iron and Steel Workers.

In 1894, resentment built among Pullman's manufacturing workers after they suffered a series of layoffs and pay cuts, while the company preserved executive salaries and continued to pay stockholders their 8% dividend. The leadership also refused to discount rents for the one third of the workforce that leased their homes from the company. The unfairness gave all the production workers a common grievance and earned them sympathy among the public. After the majority voted to join the newly formed American Railway Union (ARU), their leaders took their demands to the administration where they received a cool reception. ¹² In May, they voted to strike, against the wishes of the ARU's national leadership, and the company promptly locked them out of the car works as they had done in 1886. ¹³

¹² Among the workers, there was some disagreement. Susan Hirsh illustrated this by explaining that the Dutch refused to join the strike until they found themselves locked out of the shops, then the formed into their own local of the ARU, separate from all the other workers. Ibid., 32.

The Pullman Strike has been written about extensively. Excellent works include ibid.; Ralph K. Beebe, The Worker and Social Change: The Pullman Strike of 1894 (Lexington, MA: Heath, 1970); ibid.; Michael Burgan, The Pullman Strike of 1894 (Minneapolis, MN: Compass Point Books, 2008); John R. Chapin, "The Infamous Pullman Strike as Revealed by the Robert Todd Lincoln Collection," Journal of the Illinois State Historical Society 74, no. 3 (1981). Regarding Eugene Debs and the leadership of the ARU, see Jeffrey T Darbee, "Socialist from the Heartland: Eugene V. Debs and the Pullman Strike," Traces of Indiana and midwestern history of Education Quarterly 13, no. 3 (2001); Rosemary Laughlin, The Pullman Strike of 1894: American Labor Comes of Age (Greensboro, NC: Morgan Reynolds, 1999); Almont Lindsey, The Pullman Strike (Chicago: University of Chicago Press, 1942); David Ray Papke, The Pullman Case: The Clash of Labor and Capital in Industrial America, Landmark Law Cases & American Society (Lawrence: University Press of Kansas, 1999); Larry Peterson, "Pullman Strike Pictures: Molding Public Perceptions in the 1890s by New Visual Communications," Labor Heritage 8, no. 4 (1997); Nick Salvatore, Richard Schneirov, and Shelton Stromquist, The Pullman Strike and the

The strike initially had little effect. The company held large cash reserves and lacked urgent orders needing completion. A protracted lockout and action seemed likely. It is interesting to consider that because the ARU had excluded African Americans from membership, the porters and maids were not part of the strike and the car shop workers lost a group that would have been their most powerful ally. The 2,000 porters could have immediately disrupted operations and put significant pressure on the company, but they did not join the strike. When the ARU held their membership meeting in Chicago in late June, the delegates voted to support the strikers at Pullman. Workers around the country, and particularly in the American West, refused to move Pullman cars. The workers at several of Pullman's repair shops struck and were joined by neighboring car shops and rail workers. The local strike quickly became national.

The major disruptions to the rail network quickly drew the federal government into the conflict. Violence and vandalism were widespread. When federal troops became involved in July, the boycott soon collapsed. The local strike continued though the end of August, but as more and more workers returned to their jobs, the effort became futile. Throughout the Pullman company's national network, many striking workers were replaced by new employees while others found employment elsewhere.

The Pullman Strike is a major turning point in American labor history. The failure of the strike destroyed the American Railway Union, but from that experience Eugene Debs and his allies launched the United States Socialist Party in an effort to harness government power to solve problems of inequality. While the company won the strike, the experience destroyed George Pullman's reputation and perhaps his health. The public largely saw him as arrogant, inflexible, and greedy, instead of the enlightened benefactor and visionary he wanted to be. The strike also seemed to confirm the assertions of those who published critiques of Pullman's planned town and George never fully recovered. He died in 1897, the same year the ARU dissolved.

As Pullman's son-in-law Robert Todd Lincoln was named director and then president of the company, prosperity slowly returned amid many changes. The company again began to grow and absorb competitors, transitioning to new management styles amid occasional smaller strikes. By 1907, the Pullman Company had committed to manufacture steel cars and undertook extensive remodeling, expansions, and improvements throughout the shops. The Illinois Supreme Court also ordered the Pullman Palace Car Company to divest itself of all non-industrial properties and while that process started quickly, it took many years to accomplish. The community never fully recovered from the strike and the economic depression. The ever-increasing industrial operations in Pullman and about Lake Calumet had increasingly negative effects upon the environment. The middle class had begun to leave the town after George Pullman's death, as notable persons moved to residences in Hyde Park and Woodlawn. By 1905, some said the city had taken a blighted appearance as new waves of immigrants were moving in. More importantly, as the properties came into private hands and as restrictions on use

Crisis of the 1890s: Essays on Labor and Politics, The Working Class in American History (Urbana: University of Illinois Press, 1999); Richard Schneirov, Shelton Stromquist, and Nick Salvatore, eds., The Pullman Strike and the Crisis of the 1890s: Essays on Labor and Politics (Urbana: University of Illinois Press, 1999); R. Conrad Stein, The Pullman Strike and the Labor Movement in American History, In American History (Berkeley Heights, NJ, USA: Enslow Publishers, 2001).

expired, people began to modify the structures to suit their needs, adapting them into commercial structures or expanding their footprints. In 1908, the first neighborhood preservation organization was founded. The town was changing and the processes at play serve as a microcosm example of the ethnic/racial, economic, and environmental processes at play in Chicago and in urban neighborhoods around the United States. 14 Capitalizing on the shop workers' exclusion of black men and women workers throughout these periods, the Pullman company would continue to use African-American workers as strikebreakers at its shops through the twentieth century.

Concurrent to these changes, Pullman Company's service workers pushed for major improvements to working conditions throughout the national network during this time. African-American railroad workers, including shop, yard, and operations workers, had struggled for decades to organize and improve their working conditions, job security, and pay, dealing with both interpersonal and structural racism, violence, and bigotry. National unions decided to exclude blacks in order to keep solidarity among southern, western, midwestern, and northeastern white workers, despite periodic debate on the subject. African Americans had different views and organized in many different ways to advance their interests and defend themselves against violence and discrimination. The Pullman porters were the single largest group of railroad service workers, all of whom worked for a single company. This meant that their actions automatically had national significance. 15

¹⁴ These are detailed in subsequent chapters, but also see the uncritical and nostalgic take in the final chapter of Stanley Buder, Pullman: An Experiment in Industrial Order and Community Planning, 1880-1930, The Urban Life in America Series (New York: Oxford University Press, 1967).

¹⁵ Several excellent publications cover the history of the Pullman porters, and to a much lesser extent, maids, cooks, waiters, and other onboard and station service workers. These are discussed in more detail in the subsequent chapters, but we direct readers to the excellent histories and oral history publications, including: Arnesen, Brotherhoods of Color: Black Railroad Workers and the Struggle for Equality; Tye, Rising from the Rails: Pullman Porters and the Making of the Black Middle Class; Stanley G. Grizzle, My Name's Not George: The Brotherhood of Sleeping Car Porters in Canada (Toronto: Umbrella Press, 1998); Johnnie F. Kirvin, Hey Boy! Hey George! The Pullman Porter: A Pullman Porter's Story (Los Angeles, CA: BookSurge Publishing, 2010), Biography; Greg LeRoy, "Scandalized, Analyzed, Paternalized, Fraternalized, Nationalized and Company Unionized, but Nowhere near Recognized: Pullman Porters, 1913-1924," ed. Illinois Labor History Society (Chicago: Illinois Labor History Society, 1981); David D. Perata, Those Pullman Blues: An Oral History of the African American Railroad Attendant, vol. 22, Wayne's Oral History (New York, New York: Twavne Publishers, 1996); Robert E. Turner, Memories of a Retired Pullman Porter, 1st ed. (New York: Exposition Press Inc., 1954); Nat Love, Life and Adventures of Nat Love, Better Known in the Cattle Country as Deadwood Dick, 2017 ed. (Wilmington, NC: University of North Carolina Press, 1907), Illustrated Reprint; Melinda Chateauvert, Marching Together: Women of the Brotherhood of Sleeping Car Porters, Women in American History Series and the Working Class in American History (Urbana: University of Illinois Press, 1998); Santino, Miles of Smiles, Years of Struggle: Stories of Black Pullman Porters; Lyn Hughes, An Anthology of Respect: The Pullman Porters National Historic Registry of African American Railroad Employees (Chicago: Hughes-Peterson Publishing, 2009); Frederick McKissack and Patricia McKissack, A Long, Hard Journey: The Story of the Pullman Porter (New York:

When the United States Railroad Administration assumed control over the Pullman Company's operations in 1918, the porters quickly took advantage of federal bureaucracy and policy to petition for and win modest improvements in their wages and conditions. Local groups sent representatives to provide testimony to regulators. This inspired local groups to begin a new wave of unionization, forming into independent brotherhoods at the local level, while the company's leaders responded by increasing their anti-union activities and spying. Pullman's retrenchment meant that the porters' organization efforts were harder than those of cooks, waiters, maids, firemen, yard workers, and other black men and women who worked for other railroads. The Railway Men's International Benevolent Industrial Association (RMIBIA) formed in 1915. This was the first attempt to organize beyond the local scale and craft divisions. During its 10 years of operation, the organization started slowly, but then grew to include 15,000 national members by 1920, and two years later, Chicago was home to 1,200 RMIBIA members organized into seventeen local chapters.

In response to black workers' attempts to unionize and other organizational efforts among the white unions, the Pullman company began to expand its welfare offerings, facilitating the creation of the Pullman Porter Benefit Association (PPBA) to offer insurance for porters, setting up an Employee Representation Plan (ERP), and organizing or allying with "company unions" that could represent workers to management and draw support away from national organizations. The company also began to recruit Filipino men to work as porters, stoking racial fears among African-American workers¹⁶. At the same time, the continual refusal of national white-only railroad trade and labor unions to accept the RMIBIA as an affiliate led to its dissolution in the early 1920s and those locals that remained active were absorbed into other organizations like the Colored Association of Railroad Employees (CARE) and the Protective Order of Railroad Trainmen (PORT).¹⁷

Walker and Company, 1995); Perata, *Those Pullman Blues: An Oral History of the African American Railroad Attendant*, 22; William H. Harris, *Keeping the Faith: A. Philip Randolph, Milton P. Webster, and the Brotherhood of Sleeping Car Porters, 1925-37.*, Blacks in the New World (Urbana, Illinois: University of Illinois Press, 1977); Greg LeRoy, "The Founding Heart of A. Philip Randolph's Union: Milton P. Webster and Chicago's Pullman Porters Organize, 1925-1937," *Labor's Heritage* 3, no. July (1991); Chateauvert, *Marching Together: Women of the Brotherhood of Sleeping Car Porters*; Paula F. Pfeffer, "The Women Behind the Union: Halena Wilson, Rosina Tucker, and the Ladies' Auxiliary to the Brotherhood of Sleeping Car Porters," *Labor History* 36, no. Fall (1995).

¹⁶ Barbara Posadas recorded oral histories of Filipino members of the BSCP in 1979. Her analysis documenting the company's effort to use Filipino men to break the strike, workers with whom the traveling public already knew from ocean steamship, restaurant, and domestic service labor, followed in Barbara M. Posadas, "The Hierarchy of Color and Psychological Adjustment in an Industrial Environment: Filipinos, the Pullman Company, and the Brotherhood of Sleeping Car Porters," ibid.23, no. 3 (1982).

¹⁷ Other factors influence the collapse of the RMIBA, including escalations of direct violence of whites on black rail workers and the hard-driving personality of the organization's president. See Arnesen, *Brotherhoods of Color: Black Railroad Workers and the Struggle for Equality*, 60-65, 70-80.

A. Philip Randolph stepped into the chaos of African-American union organizations during this period. In 1925, he and colleagues founded the Brotherhood of Sleeping Car Porters (BSCP) and started working to build an organization to fill the vacuum left by the dissolution of the RMIBIA. It took a decade of struggle for the leaders to build the organization, but in the end they created the first successful and nationally-significant African-American labor union in the United States, while also transforming the very basis of black union political activity from the narrow class interests of tradesmen into a broad, powerful, and unifying focus on race and civil rights. It was the leaders and activists like Randolph with George Schuyler, C. L. Delums, Helena Wilson, Milton Webster, and allies like Ishmael Flory, who shifted the labor narrative to an explicit critique of structural racism in the United States, *as well as* the link between poor pay, security, and working conditions and the cultural iconography of the servile and clownish negro house slave, the unintelligent or untrustworthy vagabond, and the blackface of minstrel and vaudeville shows. ¹⁸ This sharp focus on the intersections of race and class positioned the BSCP to challenge railroads' use of racial stereotypes to maintain boundaries between white and black workers. BSCP allied with national civil rights organizations, relationships that provided a buffer against dependency on national brotherhoods and labor unions.

The BSCP was a transformational civil rights organization that addressed an array of political, social, and economic concerns in African-American communities of the United States. For nearly fifty years, the Pullman porters had already been leaders in their communities wherever they lived in the United States. Activists began building alliances among porters, maids, dining car cooks and waiters, and others, including men and women in different ways at different times. In the years before and after the union's victories against the Pullman Company, their advocates became engaged in efforts to combat police violence and improve schools, among many different issues and campaigns.

The BSCP's membership levels went up and down along with the union's political successes and failures through the Great Depression. Once Randolph managed to get the BSCP included in the 1934 Amendments to the Railway Labor Act, it came under the purview of the new National Mediation Board and the National Railroad Adjustment Board. The leaders faced an initial challenge in 1935, when the Pullman Porters and Maids Protective Association (PPMPA) formed, a company-friendly union that tried to displace the BSCP leaders as the official voice of the largest group of Pullman's black service workers. In an NMB-administered election, the membership overwhelming chose the BSCP as their representatives. Following a 1937 Supreme Court ruling, the Pullman company finally signed a contract with the BSCP in August of that year.

The victory was a milestone achievement for the BSCP. It raised wages and improved conditions and the African-American press celebrated the landmark moment. At the same time, other African-American railroad trade unions did not meet with similar successes. Even the BSCP was forced to engage in constant fights to gain recognition within national labor organizations like the American Federation of Labor (A.F. of L. or simply AFL) and the Congress of Industrial Organizations (CIO). Within a few years of their initial victory however, A. Philip Randolph organized the March on Washington Movement and pushed for the inclusion of African-American men and women in federal defense jobs at the outbreak of the Second World War (WWII).

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¹⁸ Ibid., 101.

The BSCP prepared a generation of civil rights activists who developed a network and social and political infrastructure that would bear fruit during the civil rights movement of the mid-twentieth century. It is not an exaggeration to say that the Pullman porters were among the most important leaders in building the African-American middle class; nurturing, educating, and empowering those that became leaders in the 1950s and 1960s. While their victories were always partial and imperfect and their labors in turn humiliating and inspiring, local porters became community leaders who (with the BSCP on the national scale) transformed life for African Americans in the United States.

1.D Post-War Pullman: Transitions and Preservation

After an era of manufacturing materials and government administered operations during WWII, the Pullman Company and its workers experienced another fluorescent period that included a round of hiring of porters and onboard staff. While rail travel had peaked in the 1920s, luxury travel in particular declined through the Great Depression and the war years, while both automobile and air travel had begun to cut into the public's demand for long distance luxury train travel. ¹⁹ After the war, people again began to move about the country. Train travel was initially central to the experience through the 1950s, but the expansion of the federal interstate highway network and the passenger air travel infrastructure, along with cultural changes associated with American leisure and commuting patterns, forced the Pullman company slowly and inexorably toward the cessation of operations in 1969. The employees hired in the late 1940s and early 1950s were the last large cohort of staff hired to care for passengers.

Pullman's operations wound down. The company's inventory of cars was all sold off or scrapped, physical property was auctioned, and the intellectual property was snapped up by international railroad and other manufacturing companies. The factories of Pullman in Chicago eventually sat vacant. By 1971, when Amtrak began to assume control of the inter-city rail from twenty different railroad companies, the porters still working on Pullman trains either retired or transferred to the new company. The "Grey Heads," as those who transferred became known, passed on their experiences and culture to the

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At the same time that African Americans were organizing the BSCP, newly established airlines were growing. During the first half of the twentieth century, airline executives experimented with different models of in-flight service, including African-American male porters, white men, Filipino men, and white or African-American women. Leaders eventually settled on young white women as flight attendants as fitting their modern aesthetic compared with the old-fashioned male porters. Airlines subjected these women to a similar code of embodied discipline as that expected of porters, including strictly defined racial, class, linguistic, educational, and marital status exclusions that regulated clothing and body forms, polished and polite demeanor, and issues of sexuality, motherhood, and eventually transgressive sexual access. Race was a central complication for flight attendant unions as activists battled for respectful treatment. Useful discussions include Kathleen M. Barry, Femininity in Flight: A History of Flight Attendants (Durham, NC: Duke University Press, 2007); Louwanda Evans, Cabin Pressure: African American Pilots, Fight Attendants, and Emotional Labor, ed. Joe R. Feagin, Perspectives on Multiracial America Series (Lanham, MD: Rowman & Littlefield Publishers, Inc., 2013); Philip J. Tiemeyer, "Manhood up in the Air: Gender, Sexuality, Corporate Culture, and the Law in Twentieth Century America" (University of Texas at Austin, 2007).

younger employees.²⁰ Meanwhile, Pullman-Standard began to manufacture Superliner bi-level cars for Amtrak. Workers built them in the company's shops in Hammond, Indiana.

Community advocates began to push for historic preservation and a kind of cultural memory work in the town of Pullman as early as the 1900s. After fighting off an urban renewal plan in the 1950s, however, residents organized into the Pullman Community Organization (PCO) and other community groups to resist the creative destruction of redevelopment and to tell the story of the man, the town, and the company. As detailed in the following chapters, over the next several decades, the community sought and won recognition of its historic significance, being identified as a city historic neighborhood, surveyed by the Historic American Engineering Record, listed on the National Register of Historic Places, identified as a state historic site, and eventually earning the status of a national monument. Much research still needs to be done, as recommended in the final chapter of this report.

²⁰ Between 2000 and 2010, Amtrak and many railroad museums made a concerted effort to recognize the role that Pullman Porters played in helping get the service running "Service and Grace Amid a Class Struggle: The Story of the Pullman Porter," Museum of the American Railroad, http://www.museumoftheamericanrailroad.org/Learn/TheLegacyofPullmanPorters.aspx.

Despite nearly a century of advocacy, it was not until the 1990s that individuals and organizations began to collect oral histories of porters, maids, and other service-side employees. The first local museum dedicated to the porters and other African-American workers did not open until 1995, almost exactly 90 years from the onset of historic preservation efforts. Perhaps more than any single fact revealed through this study is this disjuncture between the heritage resources, published research, and public memory in Pullman. The existing stories told in and about this place often sidestep the centrality and interconnectedness of race, class, nationality, and gender to the town's history. This interconnectedness, then, is the true significance of President Obama's defining mission that he assigned to Pullman National Monument. His charge echoed the insightful comment of historian Susan Hirsch which closes this introduction:

I contend that we cannot fully understand either the strike or the Brotherhood in isolation. Nor can we understand why Pullman workers played such critical roles in U.S. history without seeing the strike and the Brotherhood as part of a larger struggle—that between the company and its multiracial, multiethnic, and gendered workforce.²¹

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²¹ Hirsch, *After the Strike: A Century of Labor Struggle at Pullman*, 2.

CHAPTER 2

PULLMAN IN THE NATIONAL CONTEXT

2.A Chicago's Geographic and Transportation Significance

The history of Chicago and the history of Pullman (the man, the company, and the town) intersect at the outset of Chicago's transformation into the industrial center of the American Midwest. As Louis Sullivan noted, Chicago was born of "the prairie, the lake and the portage." ²²

Chicago's development as a center of American industry is inextricably linked to its geographic location and natural environment. Historian William Cronon termed the city "Nature's Metropolis" and argued "no city played a more important role in shaping the landscape and the economy of the midcontinent during the second half of the nineteenth century than Chicago." The future site of Chicago lay in the heart of North America, with the vast Great Plains to the west and the Great Lakes and St. Lawrence Seaway to the East.

Chicago's location along a river connecting to Lake Michigan proved essential to the city's development. Its location, situated between Lake Michigan and the Mississippi, proved as important to pre-industrial water transportation as it would later to railway transit. Before it emerged as the hub of transportation and commerce in the center of industrializing nineteenth century America, Chicago was an important trading outpost. American Indians and, later, Europeans, utilized the site's location on the Chicago River to transport and trade furs.

The river connected Lake Michigan to the Mississippi River, allowing early canoes to travel from the Atlantic Ocean to the Gulf of Mexico.²⁴ American Indians had utilized this river for centuries before the French founded a fur-trading post there in the 1770s and the US Army established Fort Dearborn there in 1803. Between the fort and fur posts, American Indians and Europeans traded corn, flour, animal skins, jewelry, dried meat, fish, and alcohol (among other commodities).²⁵ By 1830, the Potawatomi continued to control the land around the village that would become Chicago, trading with other American Indian groups, as well as French, British, and Americans.²⁶ The US government sought to gain control of the land to sell it. A group of Sac, led by Chief Black Hawk, attempted to reestablish their rights to the land. The Sac were defeated by members of the Illinois militia at the Battle of Bad Axe on

²² Louis H. Sullivan, *The Autobiography of an Idea* (New York: American Institute of Architects, 1926), 319.

²³ William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York: W. W. Norton and Company, 1991), xv.

²⁴ Ibid., 26.

²⁵ Ibid.

²⁶ Ibid., 27.

August 2, 1832.²⁷ Land agents and speculators quickly moved to purchase as much land in Chicago as possible. Land prices rose precipitously as rumors swirled that a canal would be built between Lake Michigan and the Illinois River, with its endpoint at Chicago.²⁸ The real estate market drastically declined



Figure 2.1. Joshua Hathaway, Jr., Chicago with the School Section, Wabansia, and Kinzie's Addition (New York: Peter A. Meisner, 1834). The Newberry Library: VAULT drawer Graff 1817.

²⁷ Ibid. and H. Roger Grant, *The Northwestern: A History of the Chicago & North Western Railway System* (DeKalb: Northern Illinois University Press, 1996), 4.

²⁸ Cronon, Nature's Metropolis: Chicago and the Great West, 27, 63.

in 1837 and most of these early lots of land in Chicago remained empty or uninhabited (see Figure 2.1).²⁹ (The financial crisis that occurred in the United States in 1837 has become known to some as "America's first Great Depression," due to the "spectacular [economic] boom of 1835–1836 and the extraordinary collapse of 1837–1839.")³⁰

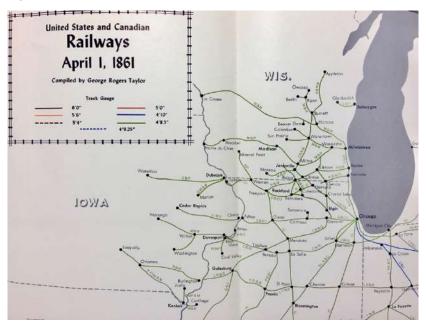


Figure 2.2, "United States and Canadian Railways, April 1, 1861, Part II: Canada and the Midwestern States," from George Rogers Taylor and Irene D. Neu, The American Railroad Network, 1861-1890 (Harvard University Press: Cambridge, Mass., 1956).

After a series of delays due to financial panics and economic downturns, the Illinois and Michigan Canal opened in 1848.³¹ This helped facilitate the increase of the commercial relationship between Chicago and the leading western city of the time, St. Louis.³² That same year, the Galena and Chicago Union railroad connected Chicago to "the chief center of the prosperous lead-mining district of northwestern Illinois and southwestern Wisconsin," via rail.³³ It quickly became clear that rail was the preferred form of transport to and from Chicago. Railroads proved to be more reliable and more efficient than road or

²⁹ Ibid., 30.

³⁰ Alasdair Roberts, *America's First Great Depression: Economic Crisis and Political Disorder* (Ithaca: Cornell University Press, 2012), 13.

³¹ Cronon, Nature's Metropolis: Chicago and the Great West, 64.

³² Liston E. Leyendecker, *Palace Car Prince: A Biography of George Mortimer Pullman* (Niwot, CO: University Press of Colorado, 1992), 30.

³³ Cronon, Nature's Metropolis: Chicago and the Great West, 65.

canal travel in Chicago's climate.³⁴ Thus, Chicago found its place in the national project of railroad-building. While the United States' railway trackage grew from 9,000 to 30,000 miles during the 1850s, Illinois gained 2,500 over that same decade with most of these tracks connecting to Chicago (Figure 2.2).³⁵ By 1858, a journalist noted, "railroads cannot make mines and quarries, and fat soil and bounteous rivers; yet railroads have been the making of Illinois."³⁶

By the second half of the nineteenth century, Chicago had become known as the "gateway to the West." Its geographical location became essential for connecting the "trunk" rail lines of the East with the "fan" rail lines west of the city. The trunk lines east of Chicago were "low-cost, high-volume competitive routes following a tight corridor across the 900 miles to New York." The western "fan" rail lines were "high-cost, low-volume and noncompetitive." In 1877, the presidents of the Chicago and Northwestern and the Chicago, Milwaukee and Saint Paul Railroads explained:

The railways which radiate from Lake Michigan and run like lattice-work throughout the West, gather up business and centering at Chicago pour it by train-loads on to the through lines to the East. The latter have simply to forward it. It is this fortunate condition which gives the New York Central Railroad 16 miles of freight-cars daily. The western roads are feeders; the eastern lines are receivers. The latter are saved the expense of picking up this business by driblets. It comes to them in volumes. Trains follow each other in quick succession, and their constant movement insures economy.³⁸

Through this growing network of railways, Chicago facilitated the development of the grain, lumber, and meat industries in the United States. Chicago grew into a large metropolis as these industries developed and was at the forefront of the urbanization taking place across the United States in the late-nineteenth century.³⁹ By 1919, 400,000 people were employed in the city. Half of the city's workers were engaged in heavy industry, such as iron, steel, garment manufacturing, electrical and agricultural machinery manufacturing, commercial printing, railroading, and meat-packing. The products manufactured in Chicago markets spanned the globe.⁴⁰

³⁴ Grant, The Northwestern: A History of the Chicago & North Western Railway System, 12.

³⁵ George Rogers Taylor and Irene D. Neu, *The American Railroad Network, 1861–1890.* (Cambridge: Harvard University Press, 1956), 2. and Cronon, *Nature's Metropolis: Chicago and the Great West*, 68.

³⁶ Caroline Kirkland, "Illinois in Spring-Time: With a Look at Chicago," *Atlantic Monthly* 1858, 484.

³⁷ Cronon, Nature's Metropolis: Chicago and the Great West, 90.

³⁸ Joseph Nimmo Jr., "First Annual Report on the Internal Commerce of the United States.," (Washington1877), 24.

³⁹ Cronon, Nature's Metropolis: Chicago and the Great West.

⁴⁰ S. Marcus Sarah, "Turn-of-the-Century Industrialization and International Markets," *The Encyclopedia of Chicago* (2005), http://www.encyclopedia.chicagohistory.org/pages/410146.html.

2.B Chicago's Population Growth

As Chicago began to become more connected to the rest of the country through these improvements in transportation, the city's population began to rapidly increase. There were approximately 150 residents in the city in 1832, but by 1848, Chicago's population grew to over 20,000 inhabitants. ⁴¹ By 1860, there were over 109,000 people living in Chicago. ⁴²

Thus, Chicago was at the forefront of an urbanizing United States in the nineteenth century. ⁴³ From 1790 to 1890, the percentage of Americans living in settlements with populations of 8,000 or more increased from 3.35 percent to 29.20 percent. The most dramatic urbanization took place in the final decades of the nineteenth century. The number of cities (classified as areas with populations of 2,500 or more) increased from 663 in 1870 to 1,737 by 1900. The population living in these cities increased from nearly 10 million in 1870 to over 30 million by 1900. Chicago outpaced other industrializing cities of the era, moving from fifth most-populous city in 1870 to second in 1890. Nearly 1.7 million people lived in Chicago in 1900, compared to just fewer than 30,000 in 1850. Between 1885 and 1886 alone, the city added nearly 125,000 inhabitants. ⁴⁴

Chicago became a chief destination for immigrants from outside the United States, as well as migrants from other areas of the United States. Fully half of all of the residents of Chicago were foreign born in 1850, and this portion remained above 40 percent through the rest of the nineteenth century. Eighty percent of the city's population were either immigrants or children with at least one parent born outside the US in 1890. Immigrants from Germany and Ireland made up a significant portion of Chicago's population in the nineteenth century, with 17.73 percent of the city's residents born in Germany and 13.37 percent born in Ireland, according to 1870 census data.

In the early twentieth century, Chicago also became a key destination for the Great Migration of African Americans out of the southern United States. Chicago, and other northern cities, offered both the opportunity for work in the expanding industrial sector, as well as a possible escape from the Jim Crowera South. There were many reasons why African Americans were leaving the South at this time. Although they gained some political influence directly after the Civil War, that power had been largely

⁴¹ Bessie Louise Pierce, A History of Chicago, Volume 1: The Beginning of a City 1673–1848, 3 vols. (New York: Knopf, 1937), 44.

⁴² U.S. Census, "Population of the United States in 1860, Eighth Census," (Washington: Government Printing Office, 1864), 90.

⁴³ Eric H. Monkkonen, *America Becomes Urban: The Development of the U.S. Cities and Towns, 1780–1980* (Berkeley: University of California Press, 1980).

⁴⁴ Carl S. Smith, *Urban Disorder and the Shape of Belief: The Great Chicago Fire, the Haymarket Bomb, and the Model Town of Pullman* (Chicago: University of Chicago Press, 2007), 5.

⁴⁵ Ibid., 303.

⁴⁶ Ibid.

⁴⁷ Ibid.

eroded by Southern whites by the 1890s. Jim Crow laws made segregation and discrimination legal, creating vastly inferior environments (from schools to public transportation) for African Americans in the South. In the North, African Americans were relegated to unskilled, low-paying jobs in the iron and steel industries, especially after American-born or "Americanized" workers began to refuse this type of work. Due to racist and discriminatory hiring practices, many African Americans had difficulty finding work beyond temporary work as strikebreakers during times of labor unrest. With decreased European immigration due to the outbreak of World War I, African American men began to enter industrial labor jobs throughout the city, while African American women were mostly restricted to domestic work. Although African Americans faced challenges in the North as well, it "offered [them] more economic opportunity, more security as a citizen, and a greater freedom as a human being."

Half a million African Americans moved into Northern cities between 1915 and 1919.⁵² Chicago was the final destination for an estimated 50,000 to 70,000, while over 100,000 traveled through the city on their way to other destinations in the North.⁵³ At the height of the Great Migration, the overall black population in Chicago increased from 44,103 in 1910 to 109,458 in 1920, an increase of almost 150 percent in 10 years.⁵⁴ By the early twentieth century, the Illinois Central Railroad connected potential migrants in rural Louisiana, Mississippi, Texas, and Tennessee to Chicago.

Pullman porters helped facilitate this Great Migration by selling copies of the *Chicago Defender* along their train routes throughout the South. ⁵⁵ The *Defender*, a prominent African American newspaper, not only provided valuable information about how to move North, it also actively encouraged African Americans to migrate. ⁵⁶

⁴⁸ Carole Marks, *Farewell—We're Good and Gone: The Great Black Migration* (Bloomington: Indiana University Press, 1989), 16.

⁴⁹ William Julius Wilson, *The Declining Significance of Race: Blacks and Changing American Institutions* (Chicago: University of Chicago Press, 1980), 73.

⁵⁰ James Grossman, "Great Migration," in *The Electronic Encyclopedia of Chicago* (Chicago, IL: Chicago Historical Society, 2005).

⁵¹ Gunnar Myrdal, *An American Dilemma: The Negro Problem and Modern Democracy* (New York: Harper and Row, 1944), 342.

⁵² James R. Grossman, "Blowing the Trumpet: The 'Chicago Defender' and Black Migration During World War I," *Illinois Historical Journal* 78, no. 2 (1985): 82.

⁵³ Ibid., 84.

⁵⁴ Marks, Farewell—We're Good and Gone: The Great Black Migration 122.

⁵⁵ James N. Gregory, *The Southern Diaspora: How the Great Migrations of Black and White Southerners Transformed America* (Chapel Hill: University of North Carolina Press, 2006), 50.

⁵⁶ Ibid., 51-53.

2.C The Story of the Pullman Family

Biographical details of George Mortimer Pullman after his rise to fame, as well as the broad details of his life have generally been known. There are, however, significant gaps in what has previously been discussed, particularly related to the early history of the Pullman Palace Company and the idea and origins of the Town of Pullman.

2.C.1 George M. Pullman and his Family

George Mortimer Pullman was born on March 3, 1831 in Brockton, Chautauqua County, New York, to James Lewis (known as Lewis) and Emily Caroline (Minton) Pullman.⁵⁷ Lewis worked as a farmer until becoming a carpenter, in order to improve the family's finances.⁵⁸ By 1825, he had moved west from his family's home in West Greenwich, Onondaga County, to Auburn, New York. There Lewis married Emily Caroline Milton in 1825.⁵⁹ Emily's family was Presbyterian and Lewis's family was Baptist. After they were married, Lewis went to a revival meeting. After the meeting, Lewis felt quite discouraged about how much the preachers focused on the wrath of God. Lewis and Emily turned to the Universalist Church, just beginning to develop in Portland, New York. George and his siblings were thus raised as Universalists.⁶⁰

While they were in Auburn, the couple welcomed sons Royal Henry, born on June 30, 1826, and Albert Benton, born on October 16, 1828.⁶¹ In 1831, Lewis and Emily purchased a farm, called "Budlong," in Brocton. George was born shortly after.⁶² In 1845, George quit school in order to work for \$40.00 a month in his great-uncle John H. Milton's general store.⁶³ That same year, his parents moved to Albion, NY so that Lewis could work as a carpenter on the Erie Canal.⁶⁴ Lewis had begun working on moving buildings away from the expanding Canal. He created a machine to move buildings on wheels in 1835 and patented his design in 1841 (see Figure 2.3).⁶⁵

⁵⁷ Leyendecker, *Palace Car Prince: A Biography of George Mortimer Pullman*, 11.

⁵⁸ "George Mortimer Pullman," Pullman State Historic Site, http://www.pullman-museum.org/theMan/.

⁵⁹ Leyendecker, *Palace Car Prince: A Biography of George Mortimer Pullman*, 12.

⁶⁰ Ibid.. 15.

⁶¹ Ibid., 12.

⁶² Ibid.

⁶³ Ibid.

⁶⁴ Ibid.

⁶⁵ Ibid., 15.

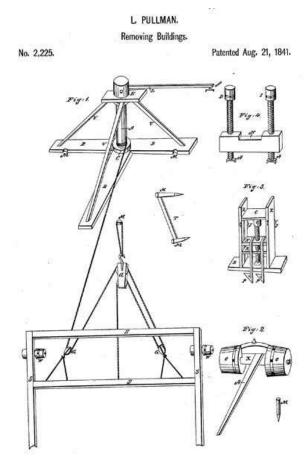


Figure 2.3. Machine for removing buildings, U.S. Patent No. 2225, Issued August 21, 1841 to Lewis Pullman.

George had seven younger siblings, including Frances Carolan (July 2, 1833–October 16, 1834), James Minton (August 21, 1835), William Eaton (May 2, 1837–October 16, 1839), Charles Lewis (April 24, 1841), Helen Augusta (May 11, 1843), Emily "Emma" Caroline (September 25, 1846), and Frank William (May 11, 1848). 66

Royal Henry owned a cabinet-making shop in Albion before becoming a Universalist minister and pastor of the First Universalist Church of Baltimore. He ran for Congress in 1890. Albert Benton worked for George, holding executive positions in the Pullman Palace Car Company, until his death in 1893. George's younger brother, James, was also a Universalist minister, serving as the pastor for a "leading parish in that sect in America," the Universalist Church in Lynn, Massachusetts.⁶⁷ Charles worked as the Pullman Company's contacting agent until September 1894, when he became engaged in "other

⁶⁶ Ibid., 16-19.

⁶⁷ "George Mortimer Pullman," in *Album of Genealogy and Biography, Cook County, Illinois* (Chicago: Calumet Book and Engraving Co., 1896), 231.

business in Chicago."⁶⁸ Frank was assistant US district attorney of New York until his death in 1879. George's younger sister, Helen, married George West of New York and his other sister, Emma, married Dr. William Floorer, chief surgeon of Bellevue Hospital, New York.⁶⁹ According to a *Pullman News* article from 1932, "both daughters married well."⁷⁰

George seems to have moved around quite a bit in the 1840s—1860s, according to a collection of personal letters he wrote to various members of his family. He co-wrote a letter to his parents with his brother, Albert from Westfield in December, 1845. He was back in Albion in October, 1848 and in Detroit in April, 1857. He wrote to his sister from Whitewater in January, 1859 and then to his mother from Grand Rapids later that month. He arrived in Chicago in June, 1859. By June, 1860 he had travelled to St. Louis and St. Joseph on his way to Denver and



Figure 2.4. Lewis Pullman Family, ca. 1850. Top row, left to right: Albert, Henry and James; middle row: Charles, James Lewis, Emily and George; bottom row: Frank, Emma, and Helen. Courtesy the Chicago Historical Society via Liston Edgington Leyendecker, Palace Car Prince: A Biography of George Mortimer Pullman.

Golden City. He returned to Albion in 1861, and to Denver later that same year. 71

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ "Old Daguerreotype Shows Pullman Family Group of 1850," in *The Pullman News* (Chicago: Pullman Co., 1932), 71.

⁷¹ "Letters Written by George M. Pullman," Chicago Historical Society.

When Lewis died in 1853, George became the head of the household as the eldest, unmarried son.⁷² Lewis appears to have left his land and estate in Albion to Royal, Albert, and George. That same year, George and his brothers "sold" a portion of the land and house to their mother Emily, as evidenced by a quit-claim deed filed in November, 1853.⁷³ George appears to have been close to his mother even before the passing of his father. In 1852, he sent her a present "as a token of affection and respect from your son George on the occasion of his twenty first birthday."⁷⁴

George had learned the cabinet-making trade while working for his brother, Royal.⁷⁵ At that time, the Erie Canal was going to be enlarged and George won several bids to raise buildings along the bank of the Canal.⁷⁶ Soon, he turned his full attention to moving buildings, as this work was well-funded by the New York legislature.⁷⁷ He appears to have gone to Detroit in April, 1857, as he sent his mother a letter from there after a "decidedly tedious ride, owing to delay occasioned by the burning of the baggage car containing all our personal effects, so that, you see, we are left in a somewhat destitute condition."⁷⁸ By the time he left for Chicago in 1859, he brought \$6,000 capital with him.⁷⁹

On April 6, 1858, Pullman and his partners contracted with the Galena & Chicago Union Railroad to create sleeping cars that would run between Chicago, Freeport, and Dubuque. Pullman and his team began the process of turning two existing Chicago and Alton day coaches

⁷² "George Mortimer Pullman," *Album of Genealogy and Biography, Cook County, Illinois* (Calumet Book and Engraving Co.: 1896), 231.

⁷³ "Quit-Claim Deed," November 12, 1853, Chicago Historical Society.

⁷⁴ Letter to Emily Pullman, March 3, 1852, Box 1, George M. Pullman Collection, Chicago Historical Society.

⁷⁵ George Mortimer Pullman," *Album of Genealogy and Biography, Cook County, Illinois* (Calumet Book and Engraving Co.: 1896), 231.

⁷⁶ Ibid, 231–232.

⁷⁷ Levendecker, 24.

⁷⁸ Letter to Emily Pullman, April 2, 1857. Letters Written by George M. Pullman From Dec. 14, 1845 to April 5, 1866, Chicago Historical Society.

⁷⁹ Ibid, 232.

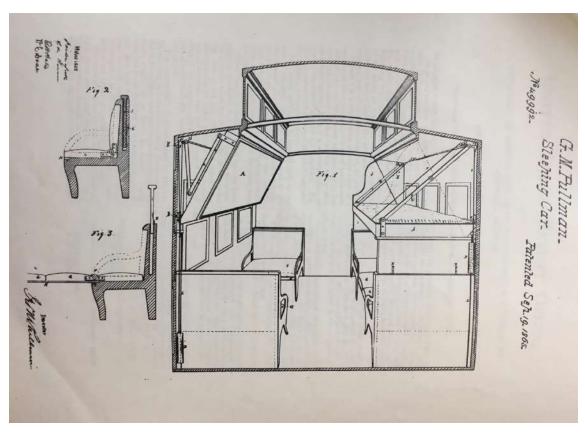


Figure 2.5. Patent image of Pullman's Sleeping Car, patented September 19, 1865. Courtesy Chicago Historical Society.

into

sleeping cars. These became known as cars No. 9 and No. 19. "The backs of the seats were swung together to form the lower berth, while the upper was lowered from the flat roof by means of ropes and pulleys." 80

Shortly after Pullman created the first No. 9 Pullman car, the United States entered the Civil War. The federal government "took over" the Pullman cars and George began to look for new ventures in the meantime. He left Chicago for Denver, Colorado, in June 1860. In a letter to his mother from the middle of his journey in St. Louis, Pullman stated:

If the balance of the route proves as pleasant as my journey from Chicago to this City, I shall have no cause to complain. I left Chicago last evening, availing myself of one of 'Pullman's Elegant Sleeping Cars' and in care of its gentlemanly conductor (W. L. Winton) resigned myself to slumber in which I was undisturbed until we reached Springfield (distant 200 miles) when I was gently reminded by the aforesaid conductor that it was time to get up to breakfast, a hint which I acted upon at once. . . and through the politeness of the engineer allowed a seat on the locomotive where I rode upwards of eighty miles, and can truly say that never before have I enjoyed a ride of that

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⁸⁰ Peter D Vroom, "George M. Pullman and the Colorado Tradition," *Colorado Magazine* 1940, 113.

distance. The evening was beautiful and the route being nearly as a line through a vast expanse of prairie over which we thundered along at what seemed to me to be almost lightning speed. I can assure you the effect was thrilling in the extreme.⁸¹

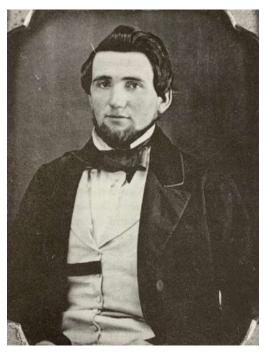


Figure 2.6. George M. Pullman, from a daguerreotype from 1857. Courtesy the Chicago Historical Society.

It is clear from this letter, as well, that George was still providing for his mother and younger siblings. George sent thirty dollars to his mother so she and his siblings could commence their "vacation visits," after his sisters Helen and Emma passed their "examinations." George also made provision for remitting twenty dollars to [his mother's] credit on the first of every month, during his time away. He assured his mother, "so you can make your calculations accordingly and see how large a fund you will have in Bank when I return." (George also paid five dollars for his sister Emma's tuition). Sa

Upon arriving in Denver on July 21, 1860, George wrote to his mother that he planned to take a prospecting team "into the mountains a distance of about 45 miles [and] on my return I shall of course

⁸¹ Letter to Emily Pullman, June 20, 1860. Letters Written by George M. Pullman From Dec. 14, 1845 to April 5, 1866, Chicago Historical Society.

⁸² Ibid.

⁸³ Ibid.

be better posted as to the probable success of the enterprise in which I am engaged."⁸⁴ George seemed unsure of the venture, stating that "the accounts received here from the mines are so conflicting that it is impossible to form a definite opinion . . . at this time."⁸⁵ George was pleased by the "state of society" in Denver as he found it "much better than I supposed [and] there are a great many good families here from the East and more constantly arriving."⁸⁶ He continued, "if the gold mines yield anything like the supply that is now confidently expected this is destined to be a large city and a splendid opportunity is presented to enterprising men with a fair amount of capital to realize a fortune in a few years and at the same time enjoy all the comforts of a pleasant home."⁸⁷ George was not nearly the only "enterprising" man to make a claim on the Colorado gold rush. He told of "occupying a little rough 7 by 9 room containing three beds which are each occupied by two persons and this is one of the best rooms in the house."⁸⁸

On his journey to Denver, George met James E. Lyon of Ogdensburg, New York, and soon agreed to enter into a partnership in freighting and storekeeping in Denver. They formed Lyon, Pullman and Company and included George's friend and business partner, Charles Moore, as a silent partner.⁸⁹

Communication with this family in New York was very important to George. In August, 1860, he wrote his mother:

I have not received a letter of any description from the States in more than two weeks and as I have no doubt but you have written regularly it has occurred to me that possibly the letters I have written lately may not have reached you as there is a great deal of trouble here now concerning the carrying of the mails, which I hope will soon be satisfactorily assuaged so that letters will go and come with some degree of regularity, for it occasions me great anxiety when so long a time lapses that I cannot hear from home or from my business in Chicago. 90

He went on to state he had just got his "Quartz Mill in operation, but have not tested it sufficiently to know yet whether we are likely to make any money with it or not." The underground lottery of mining had not been kind to everyone. George confided in his mother that, "there are a great many men that have been bought machinery here and become discouraged, sold out at a great sacrifice and returned to the States thoroughly disgusted with this whole country . . . [while] other are making some money

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84 Ibid.
85 Ibid.
86 Ibid.
87 Ibid.
88 Ibid.
89 Levendecker, 48.
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⁹⁰ Letter to Emily Pullman, August 20, 1860. Letters Written by George M. Pullman From Dec. 14, 1845 to April 5, 1866, Chicago Historical Society.

though not as much by any means as they had been led to suppose they could previous to leaving home."91

George seemed determined to prove himself a success, despite the difficulties facing him and his fellow prospects. He described a story to his mother, wherein he had "bought one of the largest Steam Engines and portable saw mills with lumbering wagons, blacksmith tools, etc., that has been brought into this country":

I purchased off a company from Oshkosh, Wisconsin consisting of thirty two men that started out with high hopes of making a fortune here, but their courage failed when they got to the foot of the mountains and they began to quarrel among themselves so that it finally became necessary to divide up and sell out. I heard of the "mess," saddled my mule immediately and came down to the scene of action and after remaining with them two days, finally bought them out for about \$1200 less than their machinery cost in the States. And most of them have returned to their homes. I have got the mill into the mountains and shall have it in operation by Thursday of this week. You can judge by what I've written that I keep pretty busy. My mule gave out on my way back home after buying the machinery and left me to go on foot about seven miles in the evening, and through mud and rain. Which I can assure was not particularly agreeable. I got through safe but . . . a mountain road is not the pleasantest place in the world in which to take an evening walk." ⁹²

The quartz mill must have been somewhat successful for George, as he had daguerreotypes made of the mill and cabin there in September 1860.⁹³ That same month, in a letter to his mother, sisters, and "little brother," he indicated that the quartz mine had been in operation for four weeks and "employ[ed] fifteen men and six yoke of cattle."⁹⁴ The mill "require[d] pretty close attention in prospecting for Quartz that has gold in it for there is a very larger proportion of that material that is entirely worthless, and as a consequence there is now only about one mill in ten that pays expenses."⁹⁵

That same month, George recorded in his journal that he had gone to Denver "to see about copper" and paid \$26.75 for "freight on copper." By September, he sold "50# copper . . . for \$200 and 12# for cash,

⁹¹ Letter to Emily Pullman, August 20, 1860. Letters Written by George M. Pullman From Dec. 14, 1845 to April 5, 1866, Chicago Historical Society.

⁹² Letter to Emily Pullman, August 20, 1860. Letters Written by George M. Pullman From Dec. 14, 1845 to April 5, 1866, Chicago Historical Society.

⁹³ George M. Pullman journal, September 25, 1860. Chicago Historical Society.

⁹⁴ Letter to Emily Pullman, September 17, 1860. Letters Written by George M. Pullman From Dec. 14, 1845 to April 5, 1866, Chicago Historical Society.

⁹⁵ Ibid.

⁹⁶ George M. Pullman journal, August, 21, 1860 and August 25, 1860. Chicago Historical Society.

\$50.00."⁹⁷ For most of 1860, George's journal reveals that he was focused on a sawmill he owned, which he visited nearly every day.⁹⁸

George noted feeling ill and headaches fairly frequently in his journal and his letters to his mother. On December 7, 1860, he recorded only "Sick abed all day" in his journal. In a letter to his mother on March 4, 1866, he apologized for not writing the day before, "the anniversary of my birth, but was prevented on account of illness." (He appears to have tried to write to his mother on his birthday every year, as evidenced by other letters). George was "under the doctors' care for two or three days past, but am very much better now so that I shall resume business again tomorrow." A prescription for a mixture to be taken one "teaspoonful in a wine glass of water before each meal," was prescribed by a Dr. Pilsberry on March 9, 1874.

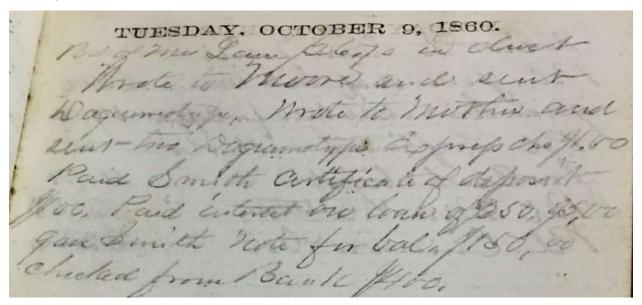


Figure 2.7. George M. Pullman Journal entry, October 1860. Courtesy Chicago Historical Society.

After two years in Colorado, Pullman returned to Chicago with his \$20,000 in capital. It was this capital that he used to build his *Pioneer* car. This was the first sleeping car built entirely by Pullman. ¹⁰²

⁹⁷ George M. Pullman journal, September 3, 1860. Chicago Historical Society.

⁹⁸ George M. Pullman journal, Chicago Historical Society.

⁹⁹ Letter to Emily Pullman, March 4, 1866. Letters Written by George M. Pullman From Dec. 14, 1845 to April 5, 1866, Chicago Historical Society.

¹⁰⁰ Ibid.

¹⁰¹ "Copy of Prescription," March 9, 1874, Box 1, George M. Pullman Collection, Chicago Historical Society.

¹⁰² Vroom, "George M. Pullman and the Colorado Tradition," 115.

From 1862 to 1864, Pullman moved to Central City, Colorado, to "buy ore and outfit miners." ¹⁰³ Although some argued that Pullman first conceived the idea of "two tier berths" for his Palace Cars while he was in Colorado, he had already built 10 cars with upper berths before leaving for Colorado. ¹⁰⁴ By 1864, Pullman was on the board of directors of the Eagle Gold Company, a gold mining company with \$1,000,000 capital. Their mines worked the "celebrated Gold Dirt Lode" in Gilpin County, Colorado" outside of Central City. The Gold Dirt Lode was

considered one of the richest mines in the Territory. The vein has been thoroughly opened and worked to some extent, and about \$150,000 taken out, the ores averaging by the present crude and imperfect mode of working them, \$400 to the core or \$50 to the ton. On Discovery, and claims one and two there have been eleven shafts sunk, from 140 to 170 feet deep each, thus opening the mine sufficiently for an immediate and large production of ore, and fully demonstrating the richness and inexhaustible quantity of the gold bearing rock. While by the present imperfect mode of working, the ores produce only \$400 to the cord, or \$50 per ton, the ores contain by analysis from \$1,500 to \$5,000 per cord, or from \$187 to \$625 per ton. By the improved method of working these ores, new being introduced, the amount of gold obtained will be three or four times greater than by the present mode, without essentially increasing the expense. ¹⁰⁵

[&]quot;George M. Pullman's Colorado Experiences," Letter from Vice-President at Pullman to Ms. Mary Arnold, December 19, 1933. Newberry Library, Pullman Company Records, Series 3, Box 2, Folder 90a.

¹⁰⁴ Ibid.

¹⁰⁵ "The Eagle Gold Company," New York Mining Journal, March 26, 1864, page 2,



Figure 2.9. George Pullman in an image he may have sent his mother and his business partner, Charles Henry Moore, during his time in Colorado. Colorado Historical Society.



Figure 2.10. "Eagle Gold Company,"

Courtesy Chicago Historical Society.

Local lore perpetuated the myth that George got his idea for the sleeping car after witnessing miners' bunks in Colorado well into the twentieth century. A sign "announcing that there George M. Pullman evolved the sleeping car" stood in front of Cold Spring Ranch, between Denver and Golden (see Figure 2.11). ¹⁰⁶

Even as George began to accelerate toward the creation of the Pullman Car Company, he remained close to his family, especially his mother and younger siblings. He wrote to his sister Emma, who was still living at home with their mother and younger brother Francis, while he was in St. Nicholas, New York, in 1864: "How are you and Frankie progressing with your studies this term? I would like right well to drop in upon you and spend this evening, for I feel <u>really lonesome</u> here in this great city and have an intense desire to spend a few hours at least in the society of those I love." 107

¹⁰⁶ Vroom, "George M. Pullman and the Colorado Tradition," 114.

¹⁰⁷ Letter to Emma Pullman, November 3, 1864. Letters Written by George M. Pullman From Dec. 14, 1845 to April 5, 1866, Chicago Historical Society.



Figure 2.11. The Pullman House as a Service Station in the early 20th Century. Courtesy Golden History Museum, City of Golden Collection via http://gardnerhistory.com/pullman/history4.htm.

George began a relationship with Harriett ("Hattie") Sanger sometime in 1865, although "according to family tradition, he met her at a celebration honoring the completion of the first hotel car in 1867." Hattie was the daughter of Mary Catherine McKibben Sanger and James Y. Sanger, "a builder who helped construct railroads in Illinois, Missouri and California." Hattie served as a volunteer during the Civil War, visiting all of the hospitals in Memphis in 1862. Later that year she returned to Chicago to work for the Union Soldiers of the Sanitary Commission. Hattie lived with her family on Wabash Avenue in 1866–1867. That winter her father became ill with what was likely pneumonia due to his exposure to cold and wet conditions as his company (Sanger, Steel and Company) worked on excavating sections of the Illinois and Michigan Canal. George and Hattie's relationship had grown during the spring of 1867 and on June 13, 1867, they were married at James Sanger's bedside. While on their honeymoon in Montreal, they received word that James' condition had worsened. Hattie and George returned to Chicago on July 2 and James died July 3. 113

¹⁰⁸ Leyendecker, 92.

¹⁰⁹ Leyendecker, 92–93.

¹¹⁰ Leyendecker, 93.

¹¹¹ Levendecker, 93.

¹¹² Leyendecker, 94 and *Biographical Sketches of the Leading Men of Chicago, (Chicago, Illinois: Wilson & St. Clair, 1868), 475.*

¹¹³ Leyendecker, 94.

George and Harriett had four children: Florence (August 11, 1868), Harriet (September 17, 1869), and twin sons, George Jr. and Walter Sanger (June 25, 1875). ¹¹⁴ The Pullman children often traveled with their parents, but the twins often remained in Chicago. Both Florence and Harriet enrolled in Miss Brown's School in New York, graduating in 1888 and 1887, respectively. The boys had tutors until they entered St. Marks School in Southborough,



Figure 2.12. Mrs. Pullman with Twin Boys," ca. 1875, Collection of the Industrial Heritage Archives - Pullman State Historic Site (http://www.pullman-museum.org/main/pfp.12.28.07.260.jpg).



Figure 2.13. Pullman family, n.d. (likely at Castle Rest). Carolands Foundation (http://carolands.org/history/#18).

Massachusetts, in 1888 (this move proved initially difficult for the boys and their mother, but they came to enjoy their time at school). In 1889, George Jr. and Walter entered the Dobbs Ferry School in Brooklyn and then attended the Hill School for Boys in Pottstown, Pennsylvania in 1892. Later, they went to the University of Chicago and the Chicago Manual Training School, each for one year. 115

Florence married Frank O. Lowden in 1896. The wedding cost \$4,640.76 and Florence's trousseau was worth \$3,364.81. Harriett graduated from Miss Brown's Fifth Avenue School in New York City in 1889. She married Francis Carolan in 1892 and moved to Burlingame, California. It is likely that Harriett

¹¹⁴ Ihid

¹¹⁵ Leyendecker, 123.

¹¹⁶ Florence Pullman Wedding Expenses, 1896. Newberry Library, Pullman Collection, Series 1, Box 8 Folder 125.

¹¹⁷ "Harriett Pullman Carolan," Carolands Foundation, http://carolands.org/history-extras/harriett-pullman-carolan.

spent quite a bit of time away from Chicago, so a collection of letters from George to his daughter survive in the Chicago Historical Society.



Figure 2.14. "Ball Gown," gift of
Harriet Sanger Pullman Carolan
Schermerhorn, The Metropolitan
Museum of Art,
2009.300.1250a,b
(https://www.metmuseum.org/ar
t/collection/search/155944).

George M. Pullman died in his home at 1739 Prairie Ave. on October 19, 1897. The *Chicago Tribune* reported that "death was caused by an affection of the heart, angina pectoris, which seems to have been recently aggravated by the hot weather of the last few weeks." According to the *Chicago Record*, "while bidding a party of friends good-night late [the night before] Mr. Pullman complained of a slight indisposition, but cheerfully predicted a quick recovery, and retired . . . six hours later he awoke with a groan of pain, staggered from his bed, groped blindly, and then sunk into final unconsciousness, just as the Rev. Charles H. Eaton of New York, a guest, who had been occupying an adjoining room, ran in to the apartment and caught the dying man in his arms." The *Tribune* also reported that "no member of his family was present, Mrs. Pullman being in the East with their son, Sanger W. Pullman." Newspapers from around the country reported on his passing.

¹¹⁸ "George M. Pullman Expired Suddenly," *Chicago Tribune*, October 20, 1897.

¹¹⁹ "G.M. Pullman Gone," Chicago Record, October 20, 1897.

¹²⁰ "George M. Pullman Expired Suddenly," *Chicago Tribune*, October 20, 1897.

Robert Todd Lincoln succeeded George Pullman as the president of the Pullman Company, having previously served as a lawyer for the company.

	Memorandum of payments to	
	Ishem, Lincoln & Beale,	
	In Central Transportation Company Cases.	
June, 1887,	Services in law cases, August, 1886 to April, 1887,	\$ 8,125.00
March, 1888,	Services in law cases, June 1, 1887 to Dec. 31, 1887,	3,450.00
April,1888,	Services from Jan. 1,1888 to March 31, 1888, Conferences with Senator Edmunds, and preparation and argument before Justice Bradley for injunction,	2,750,00
May, 1888,	Services, March 1, 1888, to April 26,1888, preparation	
	of pleas in law case, and for jury trial and trial of case at law,	3,000.00
February, 189	O, Services, May, 1889 to January 1, 1890, - work in matter of restoration of demised property, and also upon argument in Supreme Court to unite two appealed cases,	2,700.00
January, 1892,	Services in Central Transportation Company cases, Law and chancery, U.S. Circuit Court, Penna.) Law and Chancery, U.S. Supreme Court, Jan. 1, 1890 to Jan. 1, 1892,	30,000.00
June, 1893,	Services, January 1,1892 to January 1,1893, in the matter of Cross Bill of C. T. Co.,	5,750.00
June, 1894,	Services during the year 1893, in the matter of the C.T.Co. Cross Bill, and taking testimony thereunder in conjunction with Mr MacVeagh,	1,800.00
June, 1895,	Services during the year 1394, in matters of testimony, C. T. Co. Cross Bill,	7,500.00
	Services from January 1, 1895 to July 1, 1895, in testimony etc., C. T. Co. Cross Bill,	5,000.00
	Services from July 1, 1895 to January 1, 1896, including argument on exceptions to the Master's report preceding final decree,	2,500.00
lpril, 1898,	On Account,	10,000.00
ay 17th, 1899,	Services in full to date,	7 50 600
		125,000.00
	Total,	207,575.00

Figure 2.15. Memorandum of Payments to Isham, Lincoln & Beale, George M. Pullman Collection, Chicago Historical Society.



Figure 2.16. "View of an Entire Block of Brick & Stone Buildings in Chicago, on Lake St. Between Clark & LaSalle Strs. While Being Raised to the New Grade a Height of 4 Feet," by Edward Mendel 1857, Chicago Historical Society.

2.C.2 Pullman's Role in the Urbanization and Industrialization of Nineteenth-Century Chicago

George Pullman's role in Chicago's development begins below-grade—he was responsible for raising the level of the city in order to accommodate a sewage system. Pullman worked to raise several buildings, including the Matteson House, Democratic Building, Jackson Hall, New York House, and J. H. Dunham's store. According to the one biographer, Pullman was "full of the spirit of push and progress which animated Chicago in those days, and did not hesitate to enter upon undertakings of great magnitude." In 1860, he and his business partner raised an entire block of buildings on Lake Street, between Clark and LaSalle. This was the largest building

raising endeavor in the city of Chicago. The buildings weighed 35,000 tons and were 320 feet long. "This was successfully accomplished by the aid of six thousand jackscrews, without interruption to the business conducted in the structures, or the breaking of a single pane of glass or a yard of plaster." ¹²³ The work cost \$17,000 total and the buildings on the block included the Marine Bank building. Pullman and his partners commissioned artist Edward Mendel to create a lithograph of their achievement (see Figure 2.16). According to the 1868 biographical volume, "the business of all these continue almost

¹²¹ Martha T. Briggs and Cynthia H. Peters, ""Pullman Inc." from Dictionary of Leading Chicago Businesses (1820–2000)," in *The Electronic Encyclopedia of Chicago* (Chicago, Illinois: Chicago Historical Society, 2005).

^{122 &}quot;George Mortimer Pullman," 232.

¹²³ Ibid.

unimpeded during the process—a feat, in its class, probably without a parallel in the world."¹²⁴ That same year, Pullman and his partners were commissioned to raise the buildings directly across Lake Street from their earlier effort. After George went to Colorado for a brief period in 1861, his brother



Figure 2.17. "Marine Bank Building" Louis Kurz for Jevne & Almini, 1866-67, Chicago Historical Society.

Albert worked on raising the Tremont House hotel (Figure 2.18).

Even as George was in the midst of raising a full city block of buildings in Chicago, his train-building enterprise seemed to be first in his mind. In his journal entries from 1860, he first recorded the "reports from Car no. 9," and then wrote about the progress with building raising. For example, on January 3, 1860, he wrote, "Weather mild and very pleasant. Car no. 9 reports cash \$8.50, tickets \$1.00. Commenced work on J.H. Dunham's store." As important as car-building was to him, he also seems to have trusted and delegated to his partners. On January 2, 1860, Pullman wrote "received message that

¹²⁴ Biographical Sketches of the Leading Men of Chicago, 472.

¹²⁵ George Mortimer Pullman diary entry, January 3, 1860. George Mortimer Pullman Collection, Chicago Historical Society.

sleeping car no. 19 had run off the track near Bloomington and badly smashed up. Field went down on morning train and I gave him cash \$5.00."126



Figure 2.18. "Tremont House" Louis Kurz for Jevne & Almini, Lithograph, 1866-67, Chicago Historical Society

George Pullman began modifying railroad passenger cars in the 1850s. ¹²⁷ The initial inspiration for Pullman's sleeping cars has been debated, but at least one biographer noted "the idea of the sleeping-car came to him one night while observing his fellow train passengers buying head-rests from a vendor to mitigate the discomfort of an all-night ride." ¹²⁸ Pullman's experience with and interest in travel, the expanding western frontier marketplace, and Chicago's centrality to it, all led to his interest in railcars. ¹²⁹ Pullman and his business partner Ben Field completed their first luxury sleeping car in 1864. ¹³⁰ The *Pioneer* cost \$18,000 to produce, compared to the \$4,000 price tag of the most luxurious train car then

¹²⁶ Ibid.

¹²⁷ Briggs and Peters, ""Pullman Inc." from Dictionary of Leading Chicago Businesses (1820–2000)."

^{128 &}quot;George Mortimer Pullman," 232.

¹²⁹ Leyendecker, *Palace Car Prince: A Biography of George Mortimer Pullman*, 74.

¹³⁰ Ibid., 74-75.

in use.¹³¹ One of Pullman's biographers described the initial reception of Pullman's creation: "the two palace cars . . were regarded by very many as specimens of foolish extravagance, but the people soon found out that he knew better than they what they wanted. The cars were visited by a great many prominent gentlemen, all of whom took considerable interest in examining them, even while decrying them." John W. Brooks, president of the Michigan Central Road, was one of the earliest investors to "appreciate [the cars'] value." In 1865, Pullman contracted for an "exclusive" run of Pullman's sleeping cars on the Michigan Central Railroad for ten years. Pullman soon made similar contracts with the Chicago, Burlington and Quincy Railroad and the Great Western Railway of Canada.

In 1867, the Pullman's Palace Car Company was incorporated in Illinois "with capital of one million dollars." ¹³⁶ The initial investors and members of the board of directors included Pullman, John Crerar, Norman Williams Jr., J. Irving Pearce, S. S. Benjamin, H. E. Sargent, and Robert Harris. ¹³⁷ Pullman became president while Williams served as secretary. On July 27, 1867, the Board of Directors "adopted a resolution. . . for the purpose of taking an inventory to appraise the value of the Sleeping Car property together with all the privileges and franchises under which the said cars now run on the Michigan Central Railroad, the Chicago Burlington and Quincy Railroad, the Great Western Railroad, of Canada, the Chicago Alton and St. Louis Railroad, the Chicago and Great Eastern Railway, and the Chicago and Northwestern Railway." ¹³⁸ What followed was a full inventory of all of the holdings of the Pullman Palace Car Company in 1867 (see example in Figure 2.19).

¹³¹ Contemporary American Biography: Biographical Sketches of Representative Men of the Day, (New York, NY: Atlantic Publishing Co., 1895), 259.

¹³² Biographical Sketches of the Leading Men of Chicago, 473.

¹³³ Ibid.

¹³⁴ Ibid and Leyendecker, *Palace Car Prince: A Biography of George Mortimer Pullman*, 80.

¹³⁵ Ibid.

¹³⁶ Biographical Sketches of the Leading Men of Chicago, 474.

¹³⁷ "Pullman Palace Car, Co. Director's Meeting Minutes & Annual Stockholder's Meeting Minutes, 1867— April 20, 1887," Pullman Company Collection, Secretary & Treasurer Office of the Sec. & Treas. Board of Director's Records, Series 2, Box 1, Folder 2, Vol. 1.

¹³⁸ Ibid.

1 Notel Sceping Car	"The mouth	Box.	26000	4	
1 Notel Steeping Car	1	2.8.00	616		
22 Double Mathueses		22,00	176		
8 dirigle so		1.80	171	60	
52 Pellous		11.00	418		
38 Showkets		10.00	280		
28 Verth Curtains		H50	135		
80 Mindae Do	1 8-1 18		293		
16 arpet - 275.00 x 16 m	acomp		17		1
6 Ruffer Mals 1200 94 Co	eou Mate Vi	40	16		
Harys					
1 Abone	7.1			142	
2 Voilet lases with outy		10.50	21		
2 Whick Brooms		-		244	
1 Fearther Duster	1	.0	14		
/ Dust Plan 60 / Hates	let . 75 / 182	lovel 50	- 1	85	
1 Fire Ooker				40.	
4 Goblets				60	
Mater Pail			7		
14 Metal Spittoons		400	M	4	
2 Step Ladders					
		6.00		*	
Oil Can				70	
2 Spinges		100	2	3	
2 Chamino Akons		No	1		
1 Derew Sniver				37	6
240 Shuts		.900			
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Figure 2.19. Sample page of Pullman Palace Car Inventory, 1867 "Pullman Palace Car, Co. Director's Meeting Minutes & Annual Stockholder's Meeting Minutes, 1867-April 20, 1887," Pullman Company Collection, Secretary & Treasurer Office of the Sec. & Treas. Board of Director's Records, Series 2, Box 1, Folder 2, Vol. 1., pg. 16.

Manufacturing was initially set up in Detroit and Elmira, New York. At about the same time, he organized the Pullman, Kimball & Ramsey Sleeping Car Company, headquartered in Atlanta, and the Pullman Pacific Car Company to run on the Pacific Railroad. ¹³⁹ The company grew to 460 luxury

¹³⁹ Biographical Sketches of the Leading Men of Chicago, 474.

passenger cars in operation by 1877. ¹⁴⁰ The company later claimed to have received quite a bit of notoriety when at least one Pullman car joined the train carrying President Abraham Lincoln's body back to Springfield, Illinois. ¹⁴¹

Decades later, George Pullman would tell the story:

When I came to Chicago, I had a little money I had made in the mining operations at Pike's Peak and a clear conception of how a sleeping car ought to be built. The cars of those days were low and narrow with a curved roof. The monitor-top car, now the universal plan, was then unknown. I think I was the first to hit on the idea in my search for more air space in my proposed cars. I submitted my plan to many railroad men, but all said it was impossible to build and run cars so large. Thus, thrown back on my own resources, I got the use of an old car shop, hired a gang of men and a foreman and began to build a car with my own money. It was larger even than the Pullman car of today, for I foresaw that ample space was a necessity. After much difficulty I succeeded. To construct it I had used up my money, and was in the position of the man with the white elephant. Without a dollar, without influence enough in railroad circles to get a freight car side-tracked, I was the proud passenger of one sleeping car so broad and high that it couldn't run a mile on any road without smashing everything along the line. This was the turning point of my career and good luck tided me over. President Lincoln was assassinated, and his funeral party comprising all dignitaries of the nation, was coming to Chicago. The officials of the Vandalia road, over whose line the party was to enter Chicago, were anxious to make a display and impress the eastern men. They borrowed my car, turned out all their wrecking trains worked day and night pulling up platforms and widening bridges and cuts and in two days had things in such shape that the car could run safely from one end of the road to the other. It did duty as the funeral car, and its description was published throughout the country. The war came to a close and General Grant, the conquering hero, came westward on his triumphal tour. The Michigan Central had to have my car. Again the wrecking gangs did their work, making straight the road to Detroit for my sleeper. So it happened that what was once spoken of as 'the folly of the Pike's Peak lunatic' became the car of the state, observed of all observers; and without effort of my own the value and importance of my invention became established among railroad men and known to the general public. Pullman's Palace Car Company was formed and the work of developing the sleeping car system was begun. 142

¹⁴⁰ Briggs and Peters, ""Pullman Inc." from Dictionary of Leading Chicago Businesses (1820–2000)."

¹⁴¹ Leyendecker, Palace Car Prince: A Biography of George Mortimer Pullman, 77-78. The validity of this story has been debated and there is lack of evidence from contemporary newspapers that this story is accurate.

¹⁴² Interview with George Pullman, (December 1, 1897), Newberry Library Pullman Collection, Series 1, Box8, Folder 11. Again, this interview is published after Pullman's death, and this story about President Lincoln's body being transported back to Illinois in a Pullman car may be fabricated. For

Our research confirmed the findings of railroad historian Charles Long, who noted that press accounts of the period did not mention the *Pioneer* as part of the funeral train, nor do they hint at the frantic modifications to bridges and platforms along the route. It seems that this origin myth story may have originated as a tall tale from George, but Pullman company executives knowingly retold it during the early 20th century until it was repeated by historians and biographers.

By 1868, Pullman was also the "principal owner" of the Eagleton Wire Works in New York, with over one thousand workers employed there. One biographer noted, "the whole of this vast enterprise has been accomplished without any aid except that commanded by Mr. Pullman in his business relations. He had no influential friends, except as he made them by showing that he was working for the benefit of society, and that it would be to their advantage to assist in the labor." 144

As historian Susan Hirsch has argued, Pullman sought to create a monopoly in the sleeping car industry, even as "many railroad officials believed that each railroad should own and operate its own sleeping cars." ¹⁴⁵ In order to achieve this monopoly status, Pullman quickly expanded beyond Chicago. As Chicago was known as the "gateway to the West," this was the ideal location from which to launch his new company into the western market, where the comforts of his cars were most appreciated as the western roads covered the longest distances. ¹⁴⁶ Pullman invested in the reconstruction of southern railroads after the war, thus enabling him to dominate the region's sleeping car industry. The well-established railroads in the east made that region the most difficult for Pullman to break into. ¹⁴⁷

As Pullman's company became more successful, he began to develop and flex his political power. In 1871, President Grant invited George and Harriett to spend a week at the White House. 148 Pullman also received several confidential letters from Horace Porter, Grant's personal secretary. While Grant was still in office, Porter officially became the vice-president of the Pullman Palace Car Company. 149 It was

comparison, see Charles Long, "Pioneer and the Lincoln Funeral Train: How "Honest Abe" Was Used to Create a Corporate Tall Tale," *Railroad History*, no. 186 (2002).; Tye, *Rising from the Rails: Pullman Porters and the Making of the Black Middle Class*.

¹⁴³ Biographical Sketches of the Leading Men of Chicago, 474.

¹⁴⁴ Ibid.

¹⁴⁵ Hirsch, After the Strike: A Century of Labor Struggle at Pullman, 8.

¹⁴⁶ Ibid.

¹⁴⁷ Ibid.

¹⁴⁸ President U. S. Grant to George M. Pullman, November 22, 1871, Box 1, George Pullman Collection, Chicago Historical Society.

[&]quot;Memorandum of agreement made this twenty sixth day of November 1872 between Pullman's Palace Car Company, a corporation of the State of Illinois and General Horace Porter of Harrisburg," Box 1, George Pullman Collection, Chicago Historical Society.

clear that while Porter was working in the White House for President Grant, he was also pressing his position as vice-president of the Pullman Company. On November 17, 1872, Porter wrote to Pullman:

I went to Child's party last evening and was very glad I did. I had a long talk with Thomson, Seatt, Jewett, Kneass, Cassatt, Roberts, Smith and lots of R.R. men. The latter expressed great interest in my connection with the P.P.C. Co. and was exceedingly kind and attentive during the evening. Childs and others expressed great regret at your not being there, but I explained fully your reasons. I had my brother go over the contracts. He started to suggest several changes, but I told him you and I considered the matter closed, and I could not consent to alter a word, unless it was of actual legal importance, or explanatory of the contents of the contracts simply. You will find only a couple of explanatory words added and a useless phrase "more or less" struck out. The words "transfer to" [and] "in trust," are inserted to reference to the securities you put up as collaterals which words my brother says are actually necessary in order to enable the trust company to comply with all conditions of the trust named in our agreement. This, I have no doubt coincides with what you intended the sentence would mean. There was a law in Penn. (since repealed) limiting an option to a brief time. It would be well to inquire whether any such law exists in III. If you would rather have me run out to Chicago now and execute the contacts there, please telegraph me to that effect. 150

In 1879, Pullman received correspondence from J. Sterling Morton, a politician from Nebraska, (written on U. S. Senate stationary) regarding a bill "regulating the Pullman prices for sleeping car accommodations." Morton enclosed "a copy of this stupendous statute on sleeping cars." He assured Pullman "it cannot I think by any chance get through Congress before March 4th, ie, this session." "But what," he cautioned Pullman the "idiots of the next Congress, in their exuberant imbecility, may accomplish no one can foretell." ¹⁵¹ In 1893, President Benjamin Harrison wrote Pullman, a "private" letter stating:

My dear Mr. Pullman, Your telegram favoring Judge Pardee came after I had nominated Judge Jackson to the Supreme Bench. I cannot, in a letter, undertake to explain the situation of things here, or my reasons for making the nomination I did, further than to say that I know Judge Jackson to hold constitutional views more nearly like ours than any Southern democrat I know of, and that he is a man of the highest integrity and the finest sense of what the judicial office implies. In the trial of democrats for election frauds in Tennessee he has shown the most vigorous and honest indignation at such crimes. Sometime when I have an opportunity to talk with you, as I hope to do after getting away from here, I will explain to you somewhat fully the situation in the Senate, which in some degree influenced my decision. You know I am a pretty stalwart republican and I have no doubt you have observed that our republican majority in the

43

¹⁵⁰ Horace Porter to George M. Pullman, November 17, 1872, Box 1, George Pullman Collection, Chicago Historical Society.

¹⁵¹ J. Sterling Morton to George M. Pullman, January 22, 1879, Box 1, George Pullman Collection, Chicago Historical Society.

Senate has not always shown that quality. I am struggling along here to finish my work, very tired and very anxious to be released. I thought, after putting this and one or two other matters behind me I might have a quiet sail to the end, but the Hawaiian question has broken upon us and I suppose I shall not be able to get away even for a day for the rest, the need of which I feel more and more. With kind regards, very truly yours, Benjamin Harrison.¹⁵²

Clearly Pullman was connected to influential individuals throughout the country and the business world. He had a personal account with General Hart L. Stewart in 1871 to 1879, just as his Pullman company began to flourish. He also had an account with a member of the "Field" family by 1890. By 1886, the Pullman Company was selling Palace Cars to other companies, including the New York Central Sleeping Company, for \$13,000 per car with orders of up to twelve cars at a time. ¹⁵³

Due to the company's success, Pullman began construction on a new factory just south of Chicago, where he also created the model town of Pullman to house his workers in this new factory. One contemporary commentator noted, "what Saltair was to England and the Krupp works at Essen are to Germany, so Pullman is to the United States." ¹⁵⁴ They continued, "the town of Pullman, without being in any sense a socialistic enterprise, has been able through its inception and judicious management to do for the workingman far more than socialism has ever even pretended to do. No possible commune could ever have the stability which is an essential part of the organization of Pullman, founded as it is on large capital securely and wisely administered." ¹⁵⁵ There were 9,000 inhabitants in the town by 1885. The town grew to house nearly half of all Pullman employees in the nation by the 1890s. This centerpiece of the Pullman Company's production manufactured 12,000 freight cars and 1,000 passenger cars per year. ¹⁵⁶ The company and the town drew immigrants from around the world to work there (see Figure 2.20). By 1893, the Pullman Palace Car Company also operated repair shops in Wilmington, Delaware, St. Louis, and Ludlow, Kentucky. ¹⁵⁷

¹⁵² President Benjamin Harrison to George M. Pullman, February 3, 1893, Box 1, George Pullman Collection, Chicago Historical Society.

¹⁵³ Letters from Dr. Webb to George M. Pullman, October 7, 1886. Newberry Library, Pullman Collection Series 1, Box 3, Folder 46.

¹⁵⁴ Contemporary American Biography: Biographical Sketches of Representative Men of the Day, 263.

¹⁵⁵ Ibid.

¹⁵⁶ Briggs and Peters, ""Pullman Inc." from Dictionary of Leading Chicago Businesses (1820–2000)."

¹⁵⁷ T.H. Wickes, "The Strike at Pullman: Statements of President Geo. M. Pullman before the U.S. Strike Commission," (Washington: U.S Government Printing Office, 1894), 5.

NATIVITY OF WAGE-EARNERS, SEPT. 15, 1892.

Types.	Countries where born.	Number in each country.	Total of types.
American	.United States	1,796	1,796
	Denmark	89	-,
G	Finland	1	
Scandinavian	Norway	169	
	Sweden	1,163	1,422
	Austria	66	,
German	Bohemia	26	
	Germany	732	824
	Australia	2	
	Canada	264	
British	England	365	
	Scotland	131	
52.00.00	Wales	34	796
Dutch	. Holland	753	753
Irish	.Ireland	402	402
	Belgium	16	
	France		
Latin	Italy	99	
	Spain		
• p 0 '	Switzerland		170
	Asia	14	
4, 4	Africa	3	
	East Indies	2	
All others	Hungary		
All others	Mexico		
	Poland	116	
	Russia	12	
	Greece		161
			6,324

Figure 2.20. "Nativity of Wage-Earners, Sept. 15, 1892," from Mrs. Duane Doty The Town of Pullman, Its Growth with Brief Accounts of Its Industries (T.P. Struhsacker: Pullman, IL, 1893), 35.

Even after the creation of the town of Pullman, George appeared to have managed the company from his offices in downtown Chicago and New York. ¹⁵⁸ Business correspondence appears to have been addressed to him in those locations. In addition, George seems to have relied on reports from others in order to keep up with various aspects of his growing business, as evidenced by daily reports from the Pullman Exhibit at the World's Columbian Exposition in 1893. ¹⁵⁹

¹⁵⁸ See "Correspondence-Miscellaneous, 1884-1892," Office of the President, George M. Pullman Files, Business Papers. Newberry Library.

¹⁵⁹ See "Reports on World's Fair," George M. Pullman Collection, Chicago Historical Society.

2.D Creation of the Town of Pullman as a Reaction to Urbanization and Industrialization

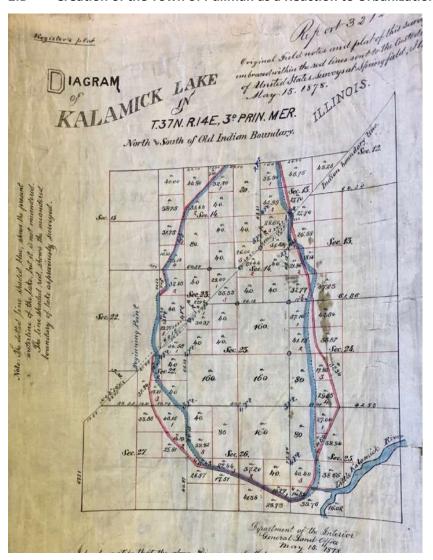


Figure 2.21. "Diagram of Kalamick Lake," Newberry Library, Pullman Collection, Series 7, Box 4 Folder 3.

According to Pullman's obituary in *Railway World*, the idea for the model town of Pullman began after 1880, when "the success of his car company was assured." ¹⁶⁰ Pullman "studied the subject carefully for two or three years, and had visited Europe in search of practical suggestions." ¹⁶¹ Since the Pullman Palace Car Company's charter would not allow the corporation to own "more land than was actually needed for manufacturing purposes . . . Mr. Pullman personally bought 3,500 acres of land near Chicago, and, after deeding to the car company 500 acres on the center of the tract for manufacturing purposes,

¹⁶⁰ "Obituary: George Mortimar Pullman," *Railway World*, October 23, 1897 1897, 1050.

¹⁶¹ Ibid.

he placed the remaining 3,000 acres in the trust for the Pullman Land Association." ¹⁶² He also "took the precaution to restrict the sale of lots, so that no persons or business of an objectionable character could intrude." ¹⁶³ An 1876 survey of the land described it as "marsh and meadow land with a very heavy growth of vegetation. ¹⁶⁴

The creation of the model town of Pullman was also George Pullman's reaction to the urbanization and industrialization taking place in Chicago. "The object in building Pullman," according to George Pullman, himself, "was the establishment of a great manufacturing business on the most substantial basis possible, recognizing . . . that the working people are the most important element which enter into the successful operation of any manufacturing enterprise." ¹⁶⁵ He continued:

We decided to build, in close proximity to the shops, homes for workingmen, of such character and surroundings as would prove so attractive as to cause the best class of mechanics to seek that place for employment in preference to others. We also desired to establish the place on such a basis as would exclude all baneful influences, believing that such a policy would result in the greatest measure of success, both from a commercial point of view, and also, what was equally important, or perhaps of greater importance, in a tendency toward continued elevation and improvement of the condition not only of the working people themselves but of their children growing up about them. ¹⁶⁶

As stated in an 1885 report by the Bureau of Labor, Pullman "commenced with the foundation idea of furnishing his workmen with model homes, and supplying them with abundant work and with good wages, feeling that simply better conditions would make better men and his city would become a permanent benefaction." ¹⁶⁷ As one reporter for the *London Times* exclaimed, "The Pullman town, like the Pullman coach, is a model of neatness and elegance." ¹⁶⁸ A company history boasted that the homes in Pullman were, "much superior to those for any other entire community of workmen." ¹⁶⁹ Each

¹⁶² Ibid.

¹⁶³ Ibid.

Letter from Sam V. Niles to S.S. Burdett, February 3, 1876. Newberry Library, Pullman Collection, Series 7, Box 4 Folder 3.

¹⁶⁵ "The Strike at Pullman: Statements of President Geo. M. Pullman before the U.S. Strike Commission," (Washington: U.S Government Printing Office, 1894), 1.

¹⁶⁶ Ibid., 1-2.

¹⁶⁷ Carroll D. Wright, "The City of Pullman, Illinois," *Report of the Commissioner of Labor Statistics* (1885).

¹⁶⁸ "A Visit to the States," *London Times* (October 24, 1887), reprinted in Bessie Louise Pierce and Joe Lester Norris, *As Others See Chicago: Impressions of Visitors, 1673-1933* (Chicago: University of Chicago Press, 2004), 242.

¹⁶⁹ "Pullman," 1890. Newberry Library, Pullman Collection, Series 7, Box 4, Folder 7.

tenement was connected to municipal water and gas, conveniences that were not yet standard at the time. 170

	No. of Acc't.	Bal. Deposit.	Average per Acc't.
Aug. 1st, '8	34 578	\$ 83,943	\$145 23
	85 625	98,605	157 76
Oct. 13th, '	85 652	108.200	165 95

Figure 2.21. "Pullman's Palace Car Company Annual Meeting, Thursday, Oct. 15, 1885," Daily Inter Ocean (Chicago: October 16, 1885).

At the 1885 Annual Meeting of the Pullman Palace Car Company, George Pullman indicated that the population of his town had grown to 3,752 men, 1,945 women, and 2,906 children, totaling 8,603.¹⁷¹ The average household had approximately six people and two children. The mortality rate was "7 per 1,000 per annum, which is believed to be the lowest death rate in the world." The average rental rate for all of the houses in Pullman was \$3.30 per room, per month. This number included "the better class of houses occupied by officials, merchants, professional and business men." The average monthly rent for "operatives" was \$2.50 per room, and was compared with "the average monthly rental of rooms in neighboring towns, occupied by manufacturing operatives, is about \$2.50 per room." This rate was lower than the \$2.86 per month paid by workers in the "manufacturing towns of Massachusetts," according to the report of the Commissioners of the State Bureaus of Labor Statistics. George added that"the houses in Pullman are built of brick, on broad, paved and shaded streets, with a perfect sewerage and drainage system, and are furnished with all modern conveniences and comforts of gas, water and complete sanitary arrangements." George argued that "the employees at Pullman enjoy a reasonable degree of prosperity, [as] shown by the following statement from the savings department of Pullman Loan and Savings Bank" (Figure 2.21). "It is fair to assume," Pullman continued, "that the gradual increase in savings is, in some degree, attributable to the absence of saloons and other debasing influences, and the general healthful and moral surroundings of the place."

In 1896, the International Hygienic and Pharmaceutical Exposition of Prague named Pullman, Illinois, "the most perfect town in the world." Indeed, the town's orderly layout and homogenous aesthetic seemed the ultimate achievement of that nineteenth-century faith in ambition, planning, and follow-through. Professionalization and credentialing among the building trades created newly-defined experts in the fields of architecture, landscape design, and utilities systems design. Pullman saw the possibilities of bringing together these new experts to help him realize his vision for a model town built at the same time as his factory.

¹⁷⁰ "Pullman," 1890. Newberry Library, Pullman Collection, Series 7, Box 4, Folder 7.

¹⁷¹ This and the following statistics are from "Pullman's Palace Car Company Annual Meeting," *Daily Inter Ocean*, October 16, 1885 1885.

The town of Pullman stood out nationally for being modern in many ways. First, the predominance of brick construction combatted the threat of fire, of particular significance in Chicago, which was still rebuilding its city and reputation after the disastrous blaze of 1871. The utilities in Pullman also set it apart from most parts of the country and certainly from any planned community. Each living unit had running water and access to toilets connected to a specially-built sewer system. Pullman also envisioned his town to be self-sufficient in terms of commercial and service needs. It would have its own stores, schools, and a church. Part of this approach was dictated by necessity, since little surrounded the factory town in 1881. This whole cloth approach, however, set up Pullman as a model in the benefits of preplanning.

Pullman stood out nationally for its emphasis on aesthetics. Nineteenth-century America was a hotbed of debate about the emotional and psychological power of beauty. Pullman's belief that a collective style for the town's buildings—industrial, commercial, and residential—would bring moral uplift to workers at all status levels marked a high-water point in the nineteenth-century belief in the power of beauty. The debates about how much money was worth spending on workers would rage among industrialists and housing reformers for decades, with Pullman standing out as an example to many that from the perspective of company owners and investors, creating beauty for working people would not pay off in the long run.

One aspect of Pullman received almost no commentary at the time, but is critically important in understanding its role nationally and in the development of Chicago: the town of Pullman did not allow African American residents, an exclusion based on employment discrimination as

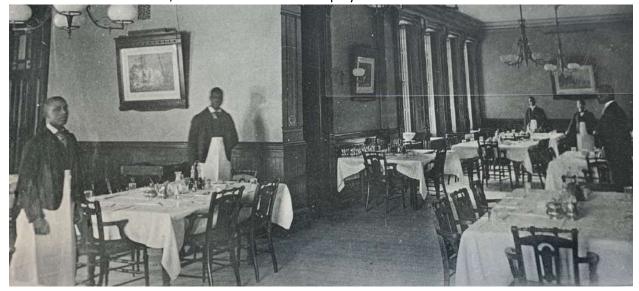


Figure 2.22. "A section of the Dining Room, Hotel Florence. 100 guests can be here accommodated at a time without any effort or discomfort. The service is faultless and in keeping with the surroundings." H.R. Koopman, Pullman: The City of Brick (Roseland, IL: 1893).

much as on housing discrimination, as will be discussed further in later chapters in this report. In Chicago in 1881 the African American population was very low, only 1.1 percent of the overall

population of half a million.¹⁷² Those black Chicagoans tended to live among white residents but did face discrimination in employment and public accommodations.¹⁷³ When Pullman began to rent houses in 1881 with de facto racial exclusion in place, it may have helped set a precedent in the industrializing city, whose white residents in the 1920s employed widespread restrictive covenants to prevent African American "infiltration." ¹⁷⁴ A demographic questionnaire from 1885 estimated the entire African American population of Pullman at ten, all working as waiters in the Hotel Florence. ¹⁷⁵ The neighborhood segregation so well documented in the twentieth century did not begin to become dramatic until the 1910s when the Great Migration gained speed and white animosity took the form of real estate exclusion.

This racial exclusion bears emphasis because the company was creating some of the best jobs for African Americans as porters while simultaneously denying them the housing and all the moral uplift it supposedly bestowed. The fact that this racial exclusion went without comment at the time indicates the degree to which segregation in domestic landscapes dominated expectations in the post-Civil War north.

2.E Pullman and Chicago's Place in American Labor History

Chicago and Pullman are inextricably linked to the history of labor in the United States. This history is punctuated by two specific episodes: the 1894 American Railway Union strike and the 1925 formation of the Brotherhood of Sleeping Car Porters.

The racial segregation of the Pullman workforce is essential to understanding not only the labor history of the Pullman Company, but American labor history more generally. From the company's foundation in 1867, George "segmented" his workforce. "Pullman hired white people for managerial, clerical, and craft work and black people for service work." ¹⁷⁶ This practice of segmenting the workforce along racial lines served to undermine a united working class, in Pullman and beyond.

Pullman's workers began organizing by joining the American Railway Union in 1894, in response to decreased wages and unrelenting rental rate hikes in Pullman housing. The ensuing strike of 1894 forever changed the relationship between workers and management in the United States, as George Pullman's bargain with his workers began to unravel.

After an economic downturn in 1893–1894 (which caused Pullman to close his Detroit shops), George Pullman reduced the wage of some workers, laid off workers, and reduced the work schedules for other

¹⁷² Allen H. Spear, *Black Chicago: The Making of a Negro Ghetto: 1890-1920* (Chicago: The University of Chicago Press, 1967), 12.

¹⁷³ Ibid., 7.

¹⁷⁴ Thomas Lee Philpott, *The Slum and the Ghetto: Neighborhood Deterioration and Middle-Class Reform, Chicago, 1880–1930* (New York, NY: Oxford University Press, 1978).

¹⁷⁵ "Pullman Town: A Demographic Questionnaire, ca. 1885" Historic Pullman Collection, Chicago Public Library

¹⁷⁶ Hirsch, After the Strike: A Century of Labor Struggle at Pullman, 10.

workers.¹⁷⁷ The pay for some Pullman employees was changed from wages to piecework. Workers were further aggravated when Pullman declined to reduce rents in company-owned worker housing.¹⁷⁸ When workers requested that their grievances be submitted to arbitration, George Pullman responded "that no prudent employer could submit to arbitration the question whether he should commit such a piece of business folly." "How could I," he argued, "as president of the Pullman Company, consent to agree that if any body of men not concerned with the interests of the company's shareholders should, as arbitrators, for any reason seeming good to them so decree, I would open the shops, employ workmen at wages greater than their work could be sold for, and continue this ruinous policy indefinitely . . .?" ¹⁷⁹

¹⁷⁷ Wickes, "The Strike at Pullman: Statements of President Geo. M. Pullman before the U.S. Strike Commission," 5-6.

¹⁷⁸ John S. Garner, *The Company Town: Architecture and Society in the Early Industrial Age* (New York, NY: Oxford University Press, 1992), 6-7.

¹⁷⁹ Wickes, "The Strike at Pullman: Statements of President Geo. M. Pullman before the U.S. Strike Commission," 36.

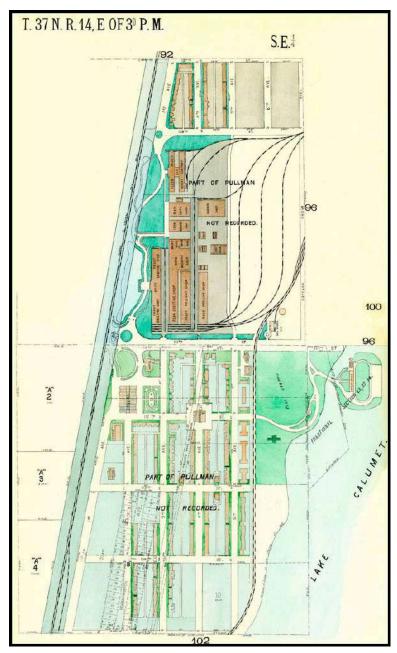


Figure 2.23. Pullman as platted and partially built. From Atlas of Hyde Park, 1882.



Figure 2.24. "Front Erecting Shops," from Mrs. Duane Doty, The Town of Pullman, Its Growth with Brief Accounts of Its Industries (Pullman: T.P. Struhsacker, 1893), 35.

Prior to the strike, George received correspondence from a company spy. On May 11, 1894, he reported, "there is still a great deal of dissatisfaction among the men and they are not at all easy in their own minds as to what best to do." That night several meetings of workers took place, including "a meeting of the Laundry and sewing girls . . . in Room 53, Arcade," and a meeting of "the Carpenters which was held in a room back of the Dew Drop Inn, which is situated a few doors west of Turner Hall." The meetings were "crowded." ¹⁸⁰

By the twentieth century, social commentators weighed in on the reason for Pullman's "failure." Ida Tarbell argued that the town was the victim of "over-paternalism." According to Tarbell, "men want to putter about their homes; Mr. Pullman insisted on doing the putter himself. Women like to hang their clothes in the yard, Mr. Pullman provided the enclosure." Although "Mr. Pullman gave this country a standard for building and landscape gardening which was a revelation to many of us," Tarbell continued, "he gave, also, a valuable lesson in what not to do." 181

¹⁸⁰ "Pullman, Ill. May 11, 1894," Newberry Library, Pullman Collection, Series 1, Box7, Folder 97.

¹⁸¹ Ida M. Tarbell, New Ideals in Business (New York: MacMillan, 1917), 146.



Figure 2.26. "Illinois National Guard on South Lawn of Hotel Florence, Pullman, 1894" Midwest MS Kerr Series 5 Box 6 Folder 124, Charles H. Kerr Company records, 1885-1999, Newberry Library.



Figure 2.25. "Pullman Band Leads a Parade up the Hill on 111th Street," 1892, Chicago Historical Society.



Figure 2.27. Illinois National Guard in Front of Arcade Building in Pullman During Railroad Strike, 1894, Chicago Historical Society.

The strike of 1894 excluded a significant portion of the Pullman workforce: African American porters. Union organizations in many industries, including the railroad industry, were often blatantly racist in their membership practices. The Brotherhood of Locomotive Engineers, the Order of Railway Conductors of America, the Brotherhood of Locomotive Firemen and Enginemen, and the Brotherhood of Railroad Trainmen, created in the 1860s and 1870s, explicitly stated that their members must be "white born, of good moral character, sober and industrious, sound in body and limb, not less than eighteen nor more than forty years of age, and able to read and write the English language." ¹⁸² The American Railway Union adopted similar restrictions when it organized in 1893 "for the purpose of including railway employees born of white parents in one great brotherhood." ¹⁸³

As such, African American workers were not only disconnected from the Pullman strike in 1894, some actually organized against the strikers. One African American newspaper editor stated "the colored have not lost any sleep over the [1894 Pullman] strike." Another newspaper article declared the strike "a white man's war; let him fight it out alone." One group of African American workers in Chicago created the "Anti-Strikers' Railroad Union" in opposition to the American Railway Union's efforts during the strike. Some African American brakemen and firemen maintained the operation of freight trains running out of other locations during the strike, as well. 186

¹⁸² Constitution and General Laws of the Brotherhood of Locomotive Firemen (adopted in September, 1886), in Arnesen, Brotherhoods of Color: Black Railroad Workers and the Struggle for Equality, 28.

¹⁸³ United States Strike Commission, *Report on the Chicago Strike of June-July, 1894* (Washington: Govt. Print. Off., 1895), XXIII. Also see Arnesen, *Brotherhoods of Color: Black Railroad Workers and the Struggle for Equality*.

¹⁸⁴ Ibid, 29.

¹⁸⁵ Ibid, 29.

¹⁸⁶ Ibid, 30.

Year	Total (and by category)		Foreign Born	Native with foreign parentage	Males per 100 females
1930	6,705 6,634 71	White (98.9%) Other (1.1%)	41.3%	43.3%	123
1960		White (99.9%) Other races (0.1%)	16.2%	1.8%	101
1990	7,367 9 31 518	White (15.2%) Black (78.8%) American Indian (0.1%) Asian/Pacific Islander (0.3%) Other race (5.5%) Hispanic Origin* (8.3%)	6.5%	_	82
2000	7,285 15 21 417 113	White alone (12.0%) Black or African American alone (81.7%) American Indian and Alaska Native alone (0.2%) Asian alone (0.2%) Some other race alone (4.7%) Two or more races (1.3%) Hispanic or Latino* (8.9%)	5.3%	_	82

Figure 2.28. Pullman Population, 1930-2000, From Janice L. Reiff, "Pullman," The Electronic Encyclopedia of Chicago (Chicago Historical Society, 2005).

The formation and recognition of the Brotherhood of Sleeping Car Porters punctuates the other essential moment of Pullman's place in our national labor history. The Pullman Company would go on to become the "single largest employer of African-American labor in the United States," with approximately 6,000 black workers in 1914. ¹⁸⁷ In 1917, Joseph Husband, author of *The Story of the Pullman Car*, claimed the Pullman Company was the "greatest single employer of colored labor in the world." He went on to claim that "trained as a race by years of personal service in various capacities, and by nature adapted faithfully to perform their duties under circumstances which necessitate unfailing good nature, solicitude, and faithfulness, the Pullman porters occupy a unique place in the great fields of employment." ¹⁸⁸ By 1918, journalist Opie Read commented that the presence of the African American railroad porter had been established as "one of the most distinctive institutions of America." ¹⁸⁹

¹⁸⁷ Ibid, 17.

¹⁸⁸ Husband, *The Story of the Pullman Car*, 155.

¹⁸⁹ Opie Read, "Caste of Negro Porters Defies Time and Change," *Chicago Journal*, May 30, 1918 in Arnesen, *Brotherhoods of Color: Black Railroad Workers and the Struggle for Equality*, 17.

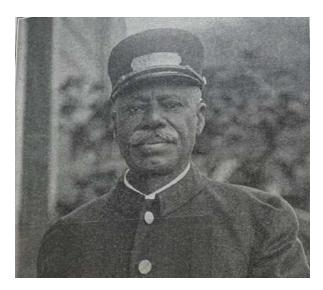


Figure 2.29. David G. Scott, "Here is the World's Most Perfect Servant," Pullman News 2, no. 8 (Dec. 1922), 233.

In establishing African American porters as the face of the Pullman Car, the Pullman Company reflected and enhanced white America's continued "association of servility and race . . . well into the twentieth century." Then Pullman Company president L. S. Hungerford revealed the company's racist preference for Southern African American porters in his statements to the US Commission on Industrial Relations in 1916. He claimed Northern men were not always "of the right caliber." Hungerford stated that the Pullman company maintained representatives in the South to "get men of a desirable class" to work as porters. He argued "the South is the source of the negro . . . You have a bigger field to make selections from . . . [and] I think that the old southern negro is much more acceptable a man on the cars than the younger colored man that is found around the slums of Chicago." According to Hungerford, most Southern African American men hired as porters had previously worked as house servants. "I think the old southern colored man makes the best porter on the car," Hungerford argued, "because he is more adapted to waiting on the passengers and gives them better attention and has a better manner, that is more acceptable to them and more pleasant." 191

In 1922, *The Pullman News* (the company's official newsletter) extolled porter David G. Scott as the "world's most perfect servant." Although Scott "received 476 credit marks and one demerit" in his 45 years of service, he was never promoted to the rank of conductor. ¹⁹²

¹⁹⁰ Ibid.

¹⁹¹ "Final Report and Testimony Submitted to Congress by the Commission on Industrial Relations," ed. Senate (Washington: Government Printing Office, 1916), 9553.

¹⁹² "Here is World's Most Perfect Servant," *The Pullman News* December, 1922 vol. 1, 8, 233.

This connection to plantation nostalgia was not lost on the porters themselves. Porters often passed down their jobs through several generations. "It was like on the plantations," one former porter noted. 193 The porters also worked brutal schedules with lack of sufficient sleep. They typically worked 400 hours per month, or thirteen hours every day, in the Pullman Company's early days. And their wages were "independent of hours or miles accrued, and few porters dared to complain." 194 Although some Pullman employee manuals suggested porters be "off duty from 10pm to 3am," they also needed to be "available at 'important stations' and answer the bell anytime a rider rang." ¹⁹⁵ In addition, the US Railroad Administration found that in 1915, porters made an average of \$34.09 per month, while conductors made \$94.09, car cleaners made \$49.70 and messengers made \$36.46."196 Tips, via shoeshining or exemplary service were the only opportunity for porters to add to their income. The California Railroad Commission investigated the Pullman Company in 1914 and reported what everyone had already known was the case: "The Pullman Company deliberately attempts to pay the employees which it hires from the gratuities given by the public." With tips on the line, porters were often expected to entertain their customers, in addition to performing all of their other duties. One company official justified this by stating porters were members of "a singing race." ¹⁹⁷ Many porters resented this experience and with one even referring to fellow porters who complied as "the monkeys of the service."198

¹⁹³ Tye, Rising from the Rails: Pullman Porters and the Making of the Black Middle Class, 86.

¹⁹⁴ Ibid.

¹⁹⁵ Ibid., 86-87.

¹⁹⁶ Ibid., 88.

¹⁹⁷ Ibid., 93.

¹⁹⁸ Arnesen, Brotherhoods of Color: Black Railroad Workers and the Struggle for Equality, 90.



Figure 2.30. Porter handing young woman a glass of water, 1905. Library of Congress, LC-USZ62-116409.

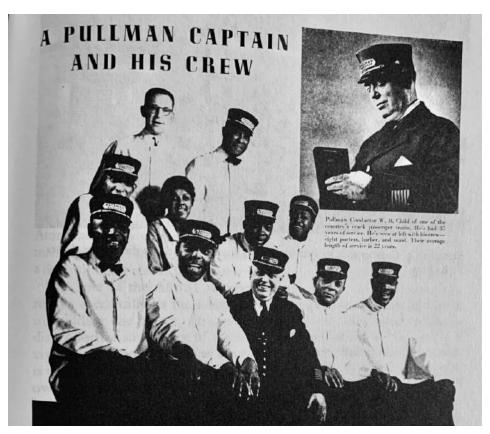


Figure 2.31. A Pullman ad from the 1930s. The white plantation overseer and slaves had now been replaced by the white Pullman conductor and his porters." from David D. Perata, Those Pullman Blues (Lanham, MD: Madison Books, 1999), 163.

This was not the only racial discrimination and harassment the porters faced. In another callback to the planation past, passengers took to calling all porters "George" the name of their so-called "master," and implying that each porter had no self-identity. ¹⁹⁹ In addition, Pullman porters were referred to variously as "boy," "nigger," "uncle," etc. This happened so often, porters had created their own expression to describe the indignity: "being called out of one's name." ²⁰⁰ Even some conductors called porters "'their boys' and could be extremely possessive of and protective toward them when confronted by outsiders." ²⁰¹

¹⁹⁹ Tye, Rising from the Rails: Pullman Porters and the Making of the Black Middle Class, 95.

²⁰⁰ Ibid., 92-94.

²⁰¹ Perata, Those Pullman Blues: An Oral History of the African American Railroad Attendant, 22, xxv.

Then, in 1925, The Brotherhood of Sleeping Car Porters was organized under A. Phillip Randolph, editor of the *Messenger: The Only Radical Negro Magazine in America*. Although the Pullman Company already had an in-house union, Pullman porters like Ashley Totten, Roy Lancaster and William H. Des Verney, knew they needed an independent union. Their earlier attempts at gaining shorter hours and higher wages had been blocked by management. The Pullman Company utilized its donations to religious and civic organizations to prevent community support of the Brotherhood. The company also tried to intimidate porters by trying to usurp the hold they had on their jobs. Immigrants from the Philippines were briefly hired in 1925, shortly after the Brotherhood began organizing. The Brotherhood utilized the press and the support of the Chicago Federation of Labor in their quest to be recognized. After more than a decade of hard-fought battles, the Brotherhood negotiated its very first contract with the Pullman Company on August 25, 1937.

²⁰² Tye, Rising from the Rails: Pullman Porters and the Making of the Black Middle Class, 126.

²⁰³ Ibid., 131.

²⁰⁴ Ibid., 134-35.

²⁰⁵ Ibid., 139.

²⁰⁶ Ibid., 140.

²⁰⁷ Ibid., 162.

CHAPTER 3

HISTORIC OVERVIEW & DEVELOPMENT: PRODUCTION AND OPERATIONS SYSTEMS

The rise and decline of the Pullman Company is an important case study in the development of American industry, but also in the development of America itself. From its rapid growth in the late nineteenth and early twentieth century, to its struggles during the Great Depression and partial resurgence during WWII, the company follows the traditional pattern of industries of the Industrial Revolution. And like other industries, the story of its replacement—in this case by automobiles and airplanes (a story which will not be told in this report)—the story of Pullman can be told by focusing on both growth and on decline.

First, a section on company and industry statistics will help set the stage for the detailed description of the history of the company within the American railroading system from about 1870 to about 1960. Data for the following charts are based on either White's *The American Railroad Passenger Car* or on records in the Pullman Company archives at the Newberry Library. Data is not always consistent and in some cases the average for values reported for any given year or period had to be taken for the sake of presentation, but the overall arc of this disparate data all generally agree.

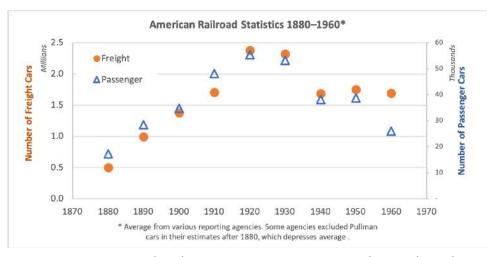


Figure 3.1. American Railroad Statistics, 1880–1960. From John H. White, The American Railway Passenger Car (1988), Appendix B.4

The overall trajectory of American railway traffic is one of steady growth after the Civil War to a peak in the mid-1920s (Figure 3.1). Freight traffic has consistently been about forty times that of passenger traffic and as the chart indicates, this held true until the collapse of the latter in the 1950s in the face of

²⁰⁸ John H. White, *The American Railroad Passenger Car Part 1* (Baltimore: Johns Hopkins University Press, 1988; repr., 3rd edition); *The American Railroad Passenger Car Part 2* (Baltimore: Johns Hopkins University Press, 1988; repr., 3rd edition). White was the curator for transportation at the Smithsonian and nothing has surpassed this magisterial work.

personal automobile and airplane travel. However, American passenger traffic did not collapse precipitously as one might have guessed, or rather, the way railways responded did not directly mirror passenger numbers. Throughout this entire period Pullman had the majority of passenger cars on the rails, although over time their dominance was steadily eroded (Figure 3.2). Notably, the 1947 antitrust breakup of Pullman's monopoly does not seem to be terribly consequential as reflected in these numbers, which are derived from national reports. One presumes that in the statistics for 1950 and 1960, what they are calling "Pullman" cars are in fact Pullman-type cars (probably those previously owned by Pullman, in fact) that were then run by the various railroads. Although traffic started falling off slightly in the mid-1920s, the Great Depression caused a direct downturn of passenger traffic that then also depressed car production. The situation continued and bottomed out in about 1933 with traffic rebounding slowly until 1937, and then remaining flat until the war. As with many sectors of the economy, WWII was a boon to industry and reversed the fortunes of many companies, and railroading was no exception. Both freight and passenger traffic stabilized and in fact increased by 1950, and freight continued to strong thereafter.

Many of these developments are reflected in Pullman's annual earnings reports from the 1870s through about 1950, although these are complicated by corporate reorganizations and reporting conventions (Figure 3.3). Pullman saw strong, even growth from the 1870s until just before 1900, when their earnings started increasing rapidly. Although their assets continued to increase during World War I, their earnings dropped considerably when the federal government nationalized the railroads under the United States Railway Administration (USRA) during and briefly after the war. This only affected railway operations as manufacturers were not directly affected by the USRA. Earnings after WWI kept growing at an even sharper rate until the Great Depression. Unfortunately, the picture of the company's fortunes is muddied by a corporate reorganization in 1927 that changed their basis of income reporting. As a result it appears that their total earnings suddenly dropped from about \$90 million to under \$20 million, even while their passenger traffic continued to increase. It is clear however that their assets kept growing until the Depression hit. Pullman also passed through a watershed year in 1947 when a federal antitrust case (initiated in 1940 and decided against Pullman in 1943) took effect and Pullman chose to sell off its operations division to a consortium of fifty-seven railroads. Throughout the lifespan of the company, Pullman was a consistently good dividend-payer, with only a few downturns during corporate reorganization, the Great Depression, and then as the antitrust consequences took effect.

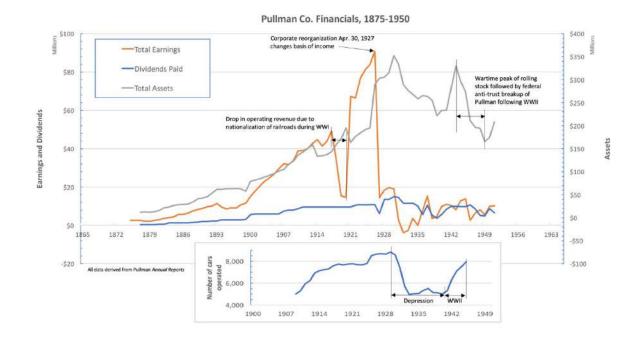


Figure 3.3. Pullman Co. Financials, 1875-1950. Source: Pullman Annual Reports

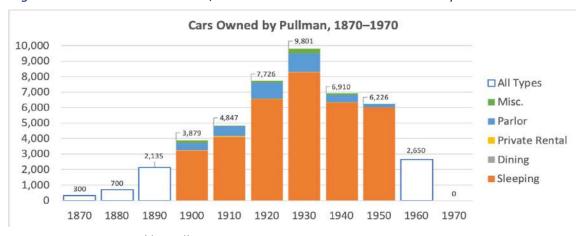


Figure 3.4. Cars Owned by Pullman Co., 1870–1970.

When one looks at the makeup of Pullman cars, it is clear that the majority of their traffic, and thus their profits, were tied to their sleeping cars (Figure 3.4). This is partially due to the fact that considerably more sleeping cars are needed per passenger than other types of cars, such as dining, parlor, or saloon cars. But the clear preponderance of sleeping cars in their company-owned rolling stock during their peak years also helps explain how those cars became the most iconic element of the brand that was Pullman. However, Pullman both owned cars that were run on various railroad lines and operated Pullman Cars that were owned by those railroads. Over time Pullman recognized the value of owning the cars that operated and worked to bring them all into the company wherever they could (Figure 3.5). Until about 1885, Pullman owned all the cars that it operated. For the next decade, it operated more cars than it owned, partially due to competition with other car builders and partially due to their relationship with the railroads. By the mid-1890s, however, the Pullman Company obtained a virtual

monopoly on all sleeper car operations in the country. They entered a decade of considerable growth but by

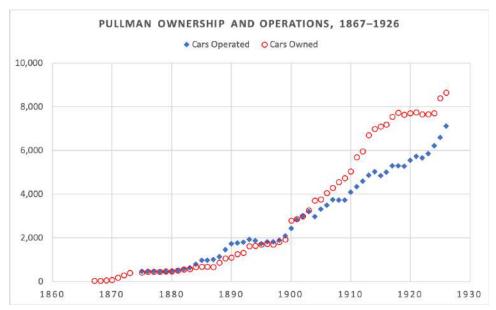


Figure 3.5. Cars Owned and Operated by Pullman, 1867–1926. From Smithsonian NMAH Archive Center acc. 0181.

about 1904 they started owning more cars than they operated. This seems to reflect the fact that they started leasing their cars to railroads, though they retained many of the servicing contracts at their repair depots across the country. It is interesting to note that the gap between cars owned by Pullman and cars operated by Pullman was at its largest just as American passenger rail travel peaked (Figure 3.5). Unfortunately, we do not have data for this statistic after 1926, which happens to be the record year for peacetime traffic for Pullman. World War II not only reversed the declines in regular passenger traffic, surpassing 15 billion riders per year by 1944, but also added another 1.7–12.5 billion passengers by moving troops around the country in special cars above and beyond regular service. (Troop movements for World War I are reflected in regular traffic, so although one can see an uptick in 1919 and 1920, the effect was not nearly as dramatic as it was in World War II.

3.A Periods for Pullman Palace Car Company and Successors

Strictly speaking, the Pullman Company has existed in a number of incarnations throughout its history. This discussion will refer to the Pullman Palace Car Company (PPCC) from its inception to 1899, the Pullman Company from then until 1947 and Pullman-Standard (P-S) thereafter (Figure 3.6). ²⁰⁹ Further, there is no good corporate history of the company (as compared to

The full corporate history is as follows: Field & Pullman 1858-1867; Pullman's Palace Car Co., 1867-1899; Pullman Co., 1899-1927; Pullman Inc., 1927-1930; Pullman-Standard Mfg. Co. (div. of Pullman Inc.), 1930-1947; Pullman-Standard Co., 1947-1969 (And the dates shift slightly for their Worcester, MA plant as well).

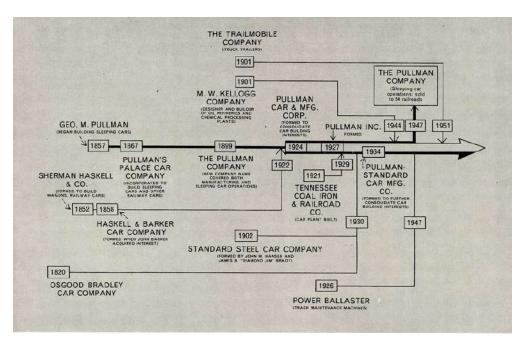


Figure 3.6. Pullman Company Mergers. Courtesy of Pullman Library at Illinois Railway Museum.

biographies of Pullman himself),²¹⁰ though Welsh and Howe do a nice job in a coffee table book fashion.²¹¹ Husband's early panegyric is pure corporate self-promotion (Husband was president of the company at the time) and should be used with caution as a critical source.²¹²

There are, however, a number of assembled timelines that in the aggregate give clear mileposts in the company's history. One company-produced list from 1930 lays out its own internal milestones, while a number of websites have developed their own slightly more critical and contextualized timelines.²¹³ One

²¹⁰ Carroll Rede Harding, *George M. Pullman*, 1831-1897, and the Pullman Company, Newcomen Address (New York: Newcomen Society in North America, 1951); Buder, Pullman: An Experiment in Industrial Order and Community Planning, 1880-1930; Leyendecker, Palace Car Prince: A Biography of George Mortimer Pullman. and there is even a biography for children: Elisabeth P. Myers, George Pullman: Young Sleeping Car Builder (1963).

²¹¹ Joe Welsh and Bill Howes, *Travel by Pullman: A Century of Service* (St. Paul, MN: MBI Publishing, 2004).

²¹² Husband, *The Story of the Pullman Car*. Details can also be gleaned from Buder, *Pullman: An Experiment in Industrial Order and Community Planning, 1880-1930*. Note that corporate history was not his concern.

²¹³ "Many Changes in Pullman Cars since 1858," *Railway Age* 88, no. 20 (1930).; Beberdick, 1997 & 2002 #671;Strack, 2018 #1662}; and "Pullman / Pullman-Standard Research Information," Pullman Library at Illinois Railway Museum, http://www.pullmanlibrary.org/Research.htm.

other important internal document is in the Tenneco Papers that lays out the full interconnections of the various subsidiaries from 1913–1949.²¹⁴

3.A.1 Origins and Buildout (1859-1885)

1859: origins and contracted purchasing

In 1858, George M. Pullman built his first car, the No. 9, for the Chicago & Alton Railroad (C&A) and by the following spring he had fitted out two more old C&A cars as sleeping cars. Despite lore that Pullman invented the sleeper, such cars certainly existed before this time. Pullman may well be credited for inventing a contemporaneous "modern" sleeper that privileged luxury over mere functionality in this class of car.

Although Pullman's conversion cars were well received, he then took a four-year sojourn in Colorado (see Section 2.C), suggesting that making money in the Pike's Peak gold rush was more appealing than the sleeping car business at that time. After the subsequent interruption of the Civil War, Pullman returned to Chicago determined to develop the idea into a business. He and his business partner, Benjamin Field, set up in the car shops of the C&A in Bloomington, Illinois, reportedly spending \$18,000 to build his (new) first car. Weathering a good deal of skepticism that such an undertaking would be profitable, the *Pioneer* debuted in 1865:

The Pullman Palace Car, viewed simply as a stationary miniature palace, would be a wonder of architectural and artistic beauty. But it is a thing of a thousand mechanical devices; a vehicle in a house; a kitchen, dining-room, parlor, office, sleeping room and boudoir, all in one. To have made this alone would have ranked Mr. Pullman as an inventor of world-wide celebrity.²¹⁵

In truth, the car that Pullman and Field built was indeed opulent, but had relatively few novelties to it. They also had a number of cars already in service, so it was neither the first Pullman sleeper, nor a particularly innovative new type of car. The *Pioneer* has also gone down in lore as the car that Pullman not-so-selflessly offered to the government to move President Lincoln's body to Springfield for burial that spring—but that story has been thoroughly disproven and appears to have been entirely fabricated in the 1880s (see Section 2.C.1). ²¹⁶ Even without that element of promotion, George Pullman was already a moderately important man in Chicago, a status that then only increased with time, playing a valuable role in the recovery efforts after the Great Chicago Fire of 1871.

²¹⁴ "Historical Information in Respect to Corporate Organization from March 1, 1913 to December 31, 1949," Tenneco Papers, no. 100033 [=954316].

²¹⁵ Quoted in American Biographical Publishing Co., *The Biographical Dictionary and Portrait Gallery of Representative Men of Chicago, Iowa and the World's Columbian Exposition* (Chicago: American Biographical Pub. Co., 1893), 694.

²¹⁶J.W. Becker and William S. Porter, "The Lincoln Funeral Train," *Journal of the Illinois State Historical Society* 9, no. 3 (1916); Long, "Pioneer and the Lincoln Funeral Train: How "Honest Abe" Was Used to Create a Corporate Tall Tale."; John H. White, "A Pullman Postscript," ibid.

Cars from as early as the 1830s had an upper berth that folded up against the corner of the ceiling during the day and bench seats below that pivoted flat to make a lower berth. A mesh shelf for one's belongings hung above each. When fitted out as beds for the nighttime, each upper and lower pair were then sectioned off from the next and from the corridor by heavy curtains. Pullman and Field did patent a new mechanism for lowering the upper berth using counterweights,²¹⁷ but their real innovation was to make cars of the day as luxurious as possible.

The Palace Car quickly shifted from luxury to necessity: "this mode of travel is not only a necessity, but a preference with the greater part of the American public ... some of whom claim that they rest better than when sleeping in any other situation—even in a pew."²¹⁸ Virtually all long-distance rail lines wanted them on their routes. A case in point is the Michigan Central Railroad. The railroad put Pullman's early cars into service, but at the rate of \$2.00 a ticket, rather than the standard fare of \$1.50. The Michigan Central's president thought that the public would object to higher fares, but Pullman convinced him to let the experiment run to see whether the public was willing to pay more for his cars. In the end, they were so enamored of the better cars that all of the old cars were removed from service, even though the number of Pullman cars was quite limited (incidentally creating an artificial scarcity and the perception of demand due to full bookings). The Michigan Central immediately became the premier Midwestern rail line, forcing rival companies to follow their lead of "superior accommodation at an increased rate."²¹⁹ And so, on February 22, 1867, the Pullman Palace Car Company was organized with a capital stock of \$1,000,000 (about \$17 million today) to meet the demand for Palace Cars across the American rail network. At the time the network was pushing past 40,000 miles so the demand and potential for growth was obvious.

A snapshot of Pullman's nascent empire in 1867 may be had from the list of his assets recorded in the minutes of the first board of directors meeting in 1867. At that time he owned thirty-seven cars with two more being built and two leased from the Michigan Central RR, for total assets of just under

²¹⁷ Ben Field and George M. Pullman, "Improvement in Sleeping-Cars," U.S patent no. 42,182, filed April 5, 1864. In the patent, they refer to "certain improvements in that class of sleeping-cars in which the seats can be converted into a continuous couch, and a second tier of couches is provided by a platform, which is raised to the roof of the car when not used and lowered to a convenient height when it is to be used." This shows that such sleepers were already a recognized class of car. The novel claim of their patent was for "certain novel means for locking the backs when the seats are to be used in their ordinary capacity, and also to a certain novel arrangement for sustaining the upper platform when lowered and to guide it in its up and down motion, and to the combination, with said upper platform, of hinged trap-doors to form partitions throughout the car when the same is to be used for sleeping purposes."

²¹⁸ "A New Sleeping Car," *Engineering* 45 (1888). For a great early comparative source about Pullman's luxury, see "The Luxury of Travel," *Detroit Free Press*, May 22 1866.

²¹⁹ "The Pullman Exhibit at Chicago," *Engineering* 55 (1893).

\$992,000. 220 Of this, \$563,000 were the cars themselves (with another \$76,000 for the fittings) and his six hotel sleeping cars were considerably more valuable at either \$26,000 or \$28,000 per car than his thirty-one regular sleepers, which ranged in value from only \$4,000 to \$22,000 (average and median in the \$12,000s). In browsing each car and its contents, one can see the evolution of his cars. The early cars (lettered C, G, J, etc.) were worth only a couple thousand dollars. The mid-level state and city cars (*Indiana, Missouri, Kalamazoo*, etc.) were worth \$12–17,000. The top-of-the-line hotel sleepers like the *Viceroy* and the *President* were \$28,000 each with another \$4,200 in fittings, linens, and accoutrements. It is also interesting to note that each type of car within a class was typically outfitted exactly as the others, already showing his awareness of the value of standardizing, even if there were only two or three cars of that type. By 1867 he clearly had his system worked out and ready to take off.

1870: PPCC Begins Making its own Cars

Pullman had been running palace and sleeping cars for a decade when he started consolidating. In the late 1860s he gained controlling interest in a number of car builders, making some in effect wholly owned subsidiaries. In 1871 Pullman purchased the Indianapolis & St. Louis Sleeping Coach Co. (founded 1862) and the next year two-thirds of the stock in the Erie & Atlantic Sleeping Coach Co. In doing so, he gained control of the lucrative sleeping car service between Chicago and New York, doing a slight endrun around both the Michigan Central and the New York Central.

Before he built the town of Pullman, George Pullman had contracted with a local car building firm to build cars to his design. Once the demand started growing, he purchased the existing car shop of The Detroit Car & Manufacturing Co. in 1869 (some sources say 1870) which had been incorporated the same year as the PPCC, 1867. The shops stood between St. Aubin Ave. and Dequindre St. (now in the Lafayette Park neighborhood; the area was entirely redeveloped as public housing in the 1960s) and offered a tight but modern car building shop for the PPCC expansion (for more on shop layout, Figure 3.14). Simultaneously, Pullman formed the Pullman-Union Pacific Association in October 1871 (renewed in April 1884 and dissolved in 1898) that agreed to a joint ownership and operation of the Pullman cars on the Union Pacific (UP) roads, moving into a better position with the UP than he had had since 1868 when he had only built cars for them.²²¹

Capitalizing on this enormous success, in the mid-1870s Pullman became president of the New York Loan and Improvement Company, and owned one-third of the stock. This company built the Metropolitan Elevated Railway (begun as the Gilbert Elevated Railway Company) on 2nd and 6th Ave. in New York City. Pullman's fortune and entrée into elite New York circles, which also led to his opulent home on the Jersey Shore, allowed him to bankroll the construction of the town of Pullman. One of the less well studied aspects of the story of George Pullman is where he was and who he knew in the 1870s. The fortunes of the PPCC were quite rosy in that decade, though its corporate history makes the details

²²⁰ PPC Co., Board of Directors Records, minutes for July 31, 1867, Newberry Library, Pullman Company Archives 02/01/02, vol. 1.

²²¹ A related contract was signed in 1889 for the joint ownership of dining cars: owned by the association (so mostly by UP) and operated by Pullman. The association was dissolved in 1895 and most of the dining cars were sold to Union Pacific.

rather opaque between 1867 and 1875. When incorporated in 1867, it seems that all of the initial \$1 million stock offering was snapped up by Chicago railroad magnates, so PPCC did not issue its first annual report until 1875. At that time they had \$2.6 million in revenue and a net profit of just over \$400,000. They held \$1.7 million in assets, of which \$2.3 million was unencumbered for investment. By 1879 that surplus had grown to \$3.7 million, enough to seriously consider the expansion they so desperately needed.

Although George Pullman had direct experience with the New York elevated railway system (and may have made part of his fortune there in the 1870s), PPCC seems to have played relatively little role in the vast expansion of local rail transportation or the light interurban market. They did supply some cars to local Chicago concerns, such as the Lake Street Elevated Railway Company on the south side and the Intramural Railway (later the Metropolitan West Side Elevated Railway Company) in the 1890s. Despite being at the forefront of prototyping aluminum subway trains for Philadelphia in the 1930s (in a competition with Budd), it was not until after World War II that Pullman-Standard was more active in building subway cars for cities such as Cleveland and Boston. 223

It was also clear by the later 1870s that the Detroit shops were running out of space and could not expand, constrained as they were to one square block (a bit more than four acres). The manager of the facility, T.A. Bissell, told a newspaper reporter, "if I knew where there was a foot of space to spare, it would be put to use. We are much crowded, and a great deal of extra work has to be done after regular hours in order to keep up." ²²⁴ It is therefore clear why Pullman needed a new and bigger manufacturing facility. The development of Chicago as the main rail hub for the center of the country, ²²⁵ combined with its ample empty land just beyond the city limits, made the choice of location for his new model city fairly obvious. Furthermore, the adoption of and partnership with the patented Allen paper car wheel, which also led to them building a branch factory in Pullman, catalyzed their expansion and move to Illinois. ²²⁶

For example, in 1878, New York City's Metropolitan line ordered a number of "luxurious extra-fare drawing room cars ... finished in oak and mahogany paneling decorated and the Queen Anne's style, with architectural window cornices, and fitted with red leather seats, tapestry curtains, guilt kerosene chandeliers, and Axeminster carpeting." Unfortunately, riders were unwilling to pay for this luxury on a local elevated train line. P. Harvey Middleton, *Railways and Public Opinion; Eleven Decades* (Chicago: Railway business association, 1941), 166-67.

²²³ Ibid., 30, 36, 100, 78-81, 85-89.

²²⁴ "Pullman's Palace Cars," *Detroit Free Press*, May 16 1880.

²²⁵ David Young, *The Iron Horse and the Windy City: How Railroads Shaped Chicago* (Dekalb, IL: Northern Illinois University Press, 2005); Michael W. Blaszak et al., *Chicago, America's Railroad Capital: The Illustrated History, 1836 to Today* (Minneapolis, MN: Voyageur Press, 2014).

²²⁶ American Biographical Publishing Co., The Biographical Dictionary and Portrait Gallery of Representative Men of Chicago, Iowa and the World's Columbian Exposition, 695; Helena E. Wright, "George Pullman and the Allen Paper Car Wheel," Technology and Culture 33, no. 4 (1992): 763-64.

By the 1870s, the concept of traveling in the Pullman Car had taken such hold in American railroading that Pullman and a number of other firms saw demand for their cars go through the roof. Railroad traffic was also growing exponentially, roughly doubling every decade from 1860 to 1910. ²²⁷ The growth was so dramatic and its economic impact on railroading so profound, that already by 1879, the authorities were investigating how much it cost to build and run such a system, for fear of collusion and profiteering. ²²⁸

By 1880, Pullman was in a position to sue the Baltimore & Ohio (B&O) railroad to prevent them from "preliminarily, provisionally, and perpetually, from directly or indirectly making, constructing, using, vending, delivering, working, or putting into practice, operation, or use, in any wise, counterfeiting or imitating sleeping cars containing or embodying any of the features of construction or improvements to the sleeping cars covered by the patent of the Pullman Palace Car Company." Pullman continued his consolidation in the 1880s, purchasing the Union Palace Car Co. in 1889.

1880: Establishment of Pullman, IL

In 1879 Pullman began acquiring land—quietly, so that the land speculators did not swoop in, buy it before he could, and then resell to him at inflated prices—about twelve miles south of Chicago on the western shore of Lake Calumet. Here he built his manufacturing town from the ground up. Although there were a number of settlements in the area, such as Roselawn to the west, and Kensington Junction to the south, as well as good service with established railways on what would become the town's western border and to the south, the land he purchased was basically flat, empty prairie: a perfect blank slate for his grand experiment. He also bought far more than he initially or even eventually thought he was going to need, both to provide agricultural land for the town as well as a buffer between him and the rest of the world and its potentially harmful social influences.

Ground was broken in May 1880 and the Pullman shops began operation in April 1881, a remarkable achievement, though the buildout of the town continued for the next three years or so. At this time, his Detroit shops were building about two cars a week (114 for the year of 1881). The Chicago shops could build considerably more, though the initial capacity is not certainly known. ²³⁰ By 1883 the company

²²⁷ See Paul H Cootner, "The Role of the Railroads in United States Economic Growth," *The Journal of Economic History* 23, no. 4 (1963); Robert William Fogel, *Railroads and American Economic Growth* (Johns Hopkins Press Baltimore, 1964).

²²⁸ There is a very good snapshot of the sleeper and parlor car Industry in 1879, just before Pullman builds Pullman, in "Pullman Sleepers," *The Inter Ocean*, Feb. 18 1879.

²²⁹ "Pullman Palace Car Suit for Injunction," *The Baltimore Sun,* Sept. 27 1880. The outcome of this suit was not discovered during this research, but it seems to have cowed the B&O into only running Pullman cars.

One writer in 1885 noted that "Exact statistical information of yearly production is very hard to obtain as Pullman Co. is very reticent in this respect," though he noted that in Aug. 1883, 100 freight cars were made in a single 10-hour day. Wilhelm Heinrich Uhland, "Pullman Workers' City," 1884, Newberry Library, Pullman Company Archives 09/00/03, box 2, fol. 113.

employed 7,000 men, operated over 1,000 sleeping, parlor, and hotel cars, and had building and repair shops in Pullman, Detroit, Philadelphia, St. Louis, and Elmira, NY, as well as international operations in Derby in England and in Italy. In 1882–83 (fiscal year ending July 31), the company had revenue of \$4.1 million, the next year \$4.5 million, and \$5.6 million each in both 1884–85 and 1885–86, turning a pure profit in that last year of \$1.16 million.²³¹

One interesting feature of the town is that the five broad avenues that run north-south are named after giants of invention: Stephenson Ave., after George Stephenson (1781–1848) the English mechanical and civil engineer revered as the "Father of Railways" Watt Ave., after James Watt (1736–1819), the Scottish inventor who perfected Thomas Newcomen's steam engine; Fulton Ave., after Robert Fulton (1765–1815), the American inventor of the first commercial steamboat; Morse Ave., after Samuel F.B. Morse (1791–1872), the inventor of the telegraph; and, with no sense of humility at all, Pullman Ave.

By the early 1890s the factories had become, it was claimed, the largest railroad manufacturing interest in the world. The following statistics, widely reported at the time of the World's Columbian Exposition in Chicago, serve to highlight that: capitalized at \$40 million and with \$45 million in assets and property additionally valued at \$60 million; \$12 million in stocks held by 3,246 stockholders, of which 1,800 were institutional trust investors (showing the perceived safety of the investment), which paid reliable and sizable dividends; something like 2,200 (some sources claims more than 2,500) sleeping, parlor, and dining cars (over 700 of those) in service across the country carrying 5.5 million passengers over 187 million rail-miles annually; and employing just short of 14,000 manufacturing and operating workers earning a net sum of \$3,331,527.44 (an average wage of \$610 per person per annum across all employees, when an average annual wage in America ranged from \$450 for laborers, \$1,000 for a cabinetmaker, to \$2,000 for skilled ironworkers). ²³³ The foreign press noted that, "There can be no doubt as to the success of the town of Pullman from a moral, as well as from a financial point of view," noting that it is obvious that it has developed a "superior class of workmen," and that the town bank

²³¹ "Pullman Palace Cars," *Engineering* 40 (1885). See also "Pullman Palace Cars," *Engineering* 42 (1886); "The Arcadian City of Pullman," *Agricultural Review and Journal* 3, no. 1 (1883). Incidentally this also allowed him to weather the 1878 theft of \$150,000 by his secretary, Charles W. Angell.

²³² One wag, however, noted that Pullman and Westinghouse (of railcar air break fame [1869] before his electric fame [1880s–]) were by that time more famous Georges than Stephenson in terms of railway travel. "The Pullman Exhibit at Chicago."

American Biographical Publishing Co., *The Biographical Dictionary and Portrait Gallery of Representative Men of Chicago, Iowa and the World's Columbian Exposition*, 695; Hubert Howe Bancroft, *The Book of the Fair; an Historical and Descriptive Presentation of the World's Science, Art, and Industry, Viewed through the Columbian Exposition at Chicago in 1893*, 5 vols. (Chicago: The Bancroft Company, 1893), 552; "The Pullman Exhibit at Chicago." Wage estimate derived from Bureau of Labor Statistics, *History of Wages in the United States from Colonial Times to 1928* (Washington, DC: U.S. G.P.O., 1934).: in 1890 male laborers earned \$1.50–2.00 per day (p. 258); cabinet-makers \$2.50-4.00 a day (p. 457); highly-skilled rollers and catchers in dangerous iron mills \$4.00–4.50 and about \$7.20 a day, respectively (pp. 242, 242). Historical wage statistics for car-builders do not appear in this volume until after 1908.

had 2,000 accounts with an average savings of \$316, "sufficient proof of the economic solidity of the undertaking." ²³⁴

Pullman was designed to be a moral town and for Pullman and many at the time, that meant a dry town. As one commentator said, "even that strange invention of man in his estate of sin and misery, the saloon, is subjected to the eternal fitness of things, and, inasmuch as a community, however large, needs no saloon at all, that is the number laid out by the thoughtful architect and built by the founder. It receives its due proportion of time and money," namely none. ²³⁵ This is not as uncharacteristic for late nineteenth-century America as it may seem. One wag put it, "Pullman is to be a temperance town; it being evidently considered that when workmen are privileged to dwell in Queen Anne houses with Gothic roofs, beer and bourbon become indeed superfluous." ²³⁶ One Mme. Grandin had noticed the curious phenomenon while travelling in America in 1893 where she saw workmen building the Columbian Exposition, noting that they needed "to fill out a number of forms and … obtain many different authorizations" if they wanted to bring beer for lunch: "The temperance regime is respected in America. During a three- or four-day train trip, it is sometimes not possible to purchase wine or any drink other than water for periods of twenty-four hours or longer while crossing part of the temperance zone. In France, such a law would cause an outcry." ²³⁷

One other European wrote a report about Pullman, and his essay highlights how "American" the experiment really was. Wilhelm Heinrich Uhland (1840-1907), a German engineer and patent attorney in Leipzig, described the town as "an example of what advantages can be obtained through coordinated planning of construction and through a central management of the City." Mainly he saw the economies of scale and noted that, "No doubt, this is the first time that one lone architect made a layout symmetric with the scientific principles of a whole town." He framed the whole experiment in contemporaneous European experiments in communal living and socialist political movements, yet concluded that,

So far, the experience of the Workers City of Pullman has proved to be an income producing as well as a truly philanthropical undertaking. Above all, the healthy and pleasant surroundings under which the workers live not only increases their efficiency, but also, in accordance with statistical comparisons, decreases the death rate. It must, however, be understood that the material advancement of the individual depends on his skill and hard work. The wages here are not higher or lower than in other establishments. For the lazy and incapable worker, the social problems remain unresolved. They live in the most crowded, cheapest, and poorest houses, but their living quarters are still better than that of the poor in New York City, without receiving

²³⁴ "The Pullman Exhibit at Chicago," 737.

²³⁵ American Biographical Publishing Co., *The Biographical Dictionary and Portrait Gallery of Representative Men of Chicago, Iowa and the World's Columbian Exposition*, 695.

²³⁶ "The Town of 'Pullman'," *Engineering* 38 (1882).

²³⁷ Madame Léon Grandin, *A Parisienne in Chicago: Impressions of the World's Columbian Exposition* (Urbana: University of Illinois Press, 2010), 42. She did add, "I, however, am far from condemning this practice, as alcoholism plagues all large cities and can never be battled energetically enough."

welfare benefits from the city, while the capable and dependable worker is under all circumstances provided with satisfactory wages.

That said, and with further praise that overall the workers tended to like working and living at Pullman, Uhland recognized that the factory town, "no matter how mild and humanitarian it might be," breeds jealousies and resentment. Workers do not appreciate the constraints of the paternalism, and the constraint on them (including even limiting freedom of the press in town) "is directly opposed to the absolute independence of the American people, who value their independence more than the comfortable peace under a well-organized but despotic management."²³⁸

For more on the town of Pullman, see Sections 4.D-F.

3.A.2 Pullman at the World's Columbian Exposition, 1893

Just a decade after George Pullman constructed his model town, the World's Fair came to town. Such an opportunity was not to be missed to show off his achievement. At that time, and before the 1894 strike would color perceptions for all, Pullman's cars were generally seen as premier modes of travel the world over, and people coming to the Fair would be quite pleased to see his products as well as his town. At the Exposition itself, the company exhibited two complete trains with locomotives and eight passenger cars each (by comparison, the Wagner Co. had only five) in the annex to the Transportation Building that they shared with "a vast collection of American cars locomotives and railway appliances of every possible description." They also installed an exhibit with a 30' x 80' scale model of the town itself, "for the many who are curious to know the plans and accomplishment of this practical example of a perfect city."239 Pullman himself also ultimately subscribed \$100,000 to help bankroll the Fair, though in the initial phases of planning he had offered "a large sum" to locate the Fair "in the neighborhood of the town which owes to him its existence; but this was more than twelve miles from the business quarter of Chicago."²⁴⁰ Incidentally, S.S. Beman, the architect of Pullman, designed a number of the Exposition buildings and the PPCC was also the exhibitor with the largest number of incandescent lights, 287, on their train displays, mainly in their trains (they were followed next by the Wagner Palace Car Co., and the Pennsylvania Rail Road [PRR] and New York Central [NYC]).²⁴¹

Wilhelm Heinrich Uhland, "Pullman Workers' City," 1884, Newberry Library, Pullman Company Archives 09/00/03, box 2, fol. 113, which is a translation of Wilhem Uhland, "Pullmans Arbeiterstadt," Vom Fels zum Meer 2 (1885). The translator is unknown and it is unlikely that Uhland visited Chicago himself. For more on Uhland, see Jan-Peter Domschke and Hansgeorg Hofmann, "Der Beitrag Von Wilhelm Heinrich Uhland (1840-1907) Zur Anerkennung Des Ingenieurberufes in Der Industriegesellschaft," Sächsische Heimatblätter: Zeitschrift für sächsische Geschichte, Denkmalpflege, Natur und Umwelt 62, no. 4 (2016). This sheds no light on whether Uhland may have visited Pullman.

²³⁹ In one publication published before the fair, the model was expected to be 35x100 ft.

²⁴⁰ Bancroft, *The Book of the Fair*, 966, 51. For a general description of the Pullman display, see Bancroft, 551-554.

²⁴¹ The Religious Herald, *Picturesque Chicago and Guide to the World's Fair* (Hartford: D.S. Moseley, 1893), 294; Trumbull White and William Igleheart, *The World's Columbian Exposition, Chicago, 1893*



Figure 3.7. Pullman streetcar no. 15 (lot 579), c.1895. Source: promotional photo card in author's [SW] collection to be donated to the Pullman State Historical Society.

The train exhibits "afford[ed the] opportunity of saying that the three finest complete trains of cars ever built are to be seen on exhibition." ²⁴² They consisted of "a Vestibuled Limited [Express] Train consisting of baggage and smoking room, dining room compartments, sleeping rooms and observation parlor, [and] a Vestibuled [Day] Train consisting of postal car, passenger coach, and parlor car." ²⁴³ They also

(Boston: J.K. Hastings, 1893), 275; "The Pullman Exhibit at Chicago."; James Dredge, *A Record of the Transportation Exhibits at the World's Columbian Exposition of 1893* (New York: John Wiley and Sons, 1894), 101 and esp. 385-403, with many diagrams of exhibited items. His manager at the fair actually noted that they had trouble keeping the lights on because Westinghouse frequently turned off their generators early each evening.

²⁴² Moses P. Handy, ed. *The Official Directory of the World's Columbian Exposition, May 1st to Oct. 30th,* 1893. A Reference Book. (Chicago: W.B. Conkey Company, 1893), 781.

²⁴³ These cars are nicely illustrated in John C. Wait and R.H. Soule, *The Car-Builder's Dictionary: An Illustrated Vocabulary of Terms Which Designate American Railroad Cars, Their Parts, Attachments,*

exhibited a replica of Pullman and Fields' original car No. 9,²⁴⁴ two six-wheel trucks, a Patton motor car,²⁴⁵ four street cars (perhaps like that in Figure 3.7) with variations like central- or end- entrances and one with an upper deck. At the Exposition they also introduced what came to be known as the "Columbian deck-ceiling": a sort of tongue-and-groove decking for the ceiling that was installed in a longitudinal elliptical vault with cross-vaults (groins) to rows of elliptical arch windows along both sides of a clerestory roofline. ²⁴⁶ This arrangement let in a great deal of light to the carriage and gave the car a high, airy feel, with prominent ribs in the main vault that often had relatively novel electric lightbulbs on them, brightly lighting the car at night.

The company built several special cars for the Exposition, both for display and to transport fairgoers to the Fair, which would later be reconverted into ordinary passenger cars. Train lines advertised special "World's Fair Lines" to Chicago, with "all ... equipment of the latest improved Pullman construction." Although one would expect that these "extraordinary" cars might be made of the best materials, T.H. Wickes, the second vice-president of Pullman Company, amusingly proposed that the cars be fitted up with "material removed from our standards cars which have been remodeled from time to time," whatever might then be on hand. This included "upper berths and fixtures, seat ends, seats and backs, head boards and trimmings, curtain rods and brackets, coat and hat pedestals, wash stands, and tanks" – in other words, virtually everything but new upholstery and carpeting. Wickes was not particularly concerned about the styling of the carriages, noting that they might use No. 79 washstands, but No. 30 or No. 31 models might do, "or any other that may be suitable for the space." The car trucks and wheels, too, could be more or less whatever was on hand. An estimate sheet for "Output of cars for World's Fair travel" shows that they initially thought they could get as many as 310 cars ready (at both Pullman and

and Details of Construction (New York: The Railroad Gazette, 1895), fig. 106–11, 17, 22–23, 26–28, 31–34, and 87–93. And for their vestibules, see fig. 2424 and 2423 [sic: 2425].

²⁴⁴ Leyendecker, *Palace Car Prince: A Biography of George Mortimer Pullman*, 38.

The Patton Motor Company of Chicago manufactured small electric street cars used as feeders to main streetcar lines. An early version of what we would call a 'hybrid' vehicle, they used a gasoline engine to drive a dynamo that charged batteries and drove the motor wheels. The system also used an early form of regenerative breaking to charge the batteries. The motor and transmission system was patented by William H. Patton in 1890 ("Motor for Street-Cars," U.S. patent no. 434,993). The car shown in the Pullman display was a double-decked streetcar "finished in dark mahogany" and it is possible that it or another Patton was running on the streets of Pullman at the time ("Street Railway Exhibits at the World's Fair," *The Street Railway Journal* 9, no. 7 (1893): 435; Dredge, *A Record of the Transportation Exhibits at the World's Columbian Exposition of 1893*, 73; Barney N. Smith, "The Patton Motor Car," *Railroad History* 129 (1973).).

²⁴⁶ Wait and Soule, *The Car-Builder's Dictionary*, 32. The effect was much like a monitor roof in factory buildings of the day.

²⁴⁷ Advertisement for the "Monon Route" of the Louisville, New Albany, & Chicago RR in Handy, *The Official Directory of the World's Columbian Exposition, May 1st to Oct. 30th, 1893. A Reference Book.*, 638.

Detroit), though by February of 1894, even with some standard sleepers they apparently only prepared 271 cars. ²⁴⁸

George Pullman seems to have received daily or near-daily reports from his manager on the ground at the Fair, Mr. Fritsch.²⁴⁹ Overall the exhibit went smoothly and was very well received, despite the heat in the building (Fritsch was sympathetic to his staff and did not make them stay inside cars for more than an hour at a time), with as many as 6,000 people visiting the trains in a day. Many grandees visited, including various of the international commissioners, the president of the PRR, and even Cornelius Vanderbilt (a competitor to Pullman at the time who had come to the Fair in his own private car, berthed at the terminal there; he was given a private tour and was apparently well impressed and also visited the Pullman office at the fairgrounds to presumably talk about orders). Fritsch often escorted notable personages to Pullman town to stay at the Hotel Florence. He reported on judges' whims on giving awards, the profits made on donations for music and food at their display (apparently individual exhibitors could set up concession stands, at least on their theme days – "railroad day," in this case), as well as his distribution of over 300 copies of *The Story of Pullman* pamphlet in 30 minutes one day.²⁵⁰

The Story of Pullman pamphlet, an unabashed piece of public relations for the company, extolled the virtues of the cars, and to a lesser extent the town. But in the pamphlet they²⁵¹ also took the opportunity to respond to critics of the town.²⁵² It reminded Fair visitors that "A frequent source of error seems to lie in a failure to grasp the fundamental fact that it is upon solid *quid pro quo* business principles that the whole fabric is reared." Arguing that from sound business principles "self-sustaining strength," "benefits to humanity," and the general good is "made self-renewing and self-perpetuating," the pamphlet bristles that most critiques of the town are those of "irrelevant fields of philanthropy" that seem to think that Pullman thought his workmen were "weaklings to whom things are to be given." In fact, "the [true] meaning of Pullman" is fundamentally a business principle:

The better the man, the more valuable he is to himself, just in that proportion is he better and more valuable to his employer; on this simple business theory an attempt

²⁴⁸ T.H. Wickes to W.H. Fry, 27 May 1891 [copy, forwarded to GMP on the same day], in "World's Fair Travel – Car Construction 1891-1892," Newberry Library, Pullman Company Archives 01/01/01, box 7, fol. 105.

²⁴⁹ "Reports on the World's Fair Exhibit, 1893," Chicago Historical Society, George M. Pullman Papers, box 2.

²⁵⁰ Pullman Company, "The Story of Pullman," (Chicago: Publisher not identified, 1893), 31-33. (Copies in the Chicago History Center, Pullman Company Archives, box 10, folder 15).

²⁵¹ That is, the company, for we do not know who wrote the pamphlet. It may well have been Duane Doty, town supervisor, but it could just as easily have been the head office; it does refer to Mr. Pullman in the third person, so it is less likely that he had a direct hand in it, though it is possible.

²⁵² See Richard T. Ely, "Pullman: A Social Study," *Harper's New Monthly Magazine* 70 (1885). A number of other reviews had been more positive: "The Town of 'Pullman'."; "The Arcadian City of Pullman."; "An Industrial City.—Pullman, III," *Scientific American* 50, no. 18 (1884).

has been made to surround the workingmen in Pullman with such influences as would most tend to bring out the highest and best there was in them.

Pullman in fact assumed that the "men are the best type of American workmen, who stand solidly and firmly on their own feet, and will work out valuable and well-rounded lives just in proportion to their opportunities." The town, then was rather a capital investment to "give them better conditions than they could get elsewhere, but to give those conditions at prices wholly within their power to pay; and yet sufficient to return a moderate interest on the investment, and so sustain it and make it enduring."

Given that, it is interesting that in addition, a number of residents of Pullman had independent exhibits at the Columbian Exposition: R.N. Allen exhibited his patent streetcar wheels (the Allen paper wheel); C.O. Allen Co. and W.H. Wellman exhibited a model of combination coach dining car and sleeper; Gustav Bruegger, a Swiss emigrant, had a historical exhibit in the Individual Foreign Exhibit section; and Eugenie McLean showed an oil painting of "A Head" and a painted tapestry in the Women's Building. ²⁵³ So perhaps, in a way, Pullman city was attracting "men [and women] of the best type."

The model of the town of Pullman, constructed under S.S. Beman's direct supervision, showing every building at about 1:100 scale, attracted great admiration at the Fair. As described at the time, the model showed the factory complex and the nearly 1,800 houses and other public structures, all "models of elegance and good taste in architectural designs, and provided with every modern convenience and appliance requisite to comfort and sanitary completeness. Improvements are constantly being made," and by that time (1893) noting that "nearly eight million dollars [had] been expended in bringing the place to its present state of completeness." ²⁵⁵

Pullman was expecting that the model town would reinforce the positive image that this same hagiographer of him had of the experiment:

²⁵³ Handy, The Official Directory of the World's Columbian Exposition, May 1st to Oct. 30th, 1893. A Reference Book., 7: [3], 15, 11, 7, 1061, 62. capitalization as in original and Dredge, A Record of the Transportation Exhibits at the World's Columbian Exposition of 1893, 685.

The pamphlet continued to defend the experiment: "During the eleven years that the town has been in existence, the Pullman workingman has developed into a distinct type—distinct in appearance, in tidiness of dress, in fact in all the external indications of self-respect. Not only as compared with the majority of men in similar walks of life do they show in their clearer complexions and brighter eyes the sanitary effects of the cleanliness and the abundance of pure air and sunlight in which they live, but there is in their bearing and personal demeanor what seems to be a distinct reflection of the general atmosphere of order and artistic taste which permeates the entire town." It further claimed that Pullman workers were 40% better "in evidences of thrift and refinement and in all the outward indications of a wholesome habit of life" than any others in the country, which explained why they were "universally in demand and sought after" by other employers. Pullman Company, "The Story of Pullman," 33.

²⁵⁵ American Biographical Publishing Co., *The Biographical Dictionary and Portrait Gallery of Representative Men of Chicago, Iowa and the World's Columbian Exposition*, 694.

The social, moral and intellectual character of the place is greatly superior to that of the average industrial town. Taken all in all, it is a most remarkable illustration of practical philanthropy, and the wonderful success that has attended the enterprise from its inception verifies the theory of its originator and promoter: "That beauty and culture have an economical value, and that the working classes are capable of appreciating and appropriating the highest ministries of excellence and art.²⁵⁶

The model display may also have slightly backfired, however, as it elicited a long digression on the whole project in one publication on the Transportation Building:

Though it is one of the fundamental rules of the city that no houses or land shall be sold within the Pullman domain, it is the case that out of 2,200 workmen employed at the car factories, 1,000 own their houses on the borders of the town. It is worth noting, too, that a strip of land, perhaps half a mile wide, surrounds a part of Pullman; this belongs to the company, but is not built upon, as it is desired to hold the surrounding suburbs of Chicago at a distance, and to maintain the rigid order of temperance, to which Pullman undoubtedly owes a large part of its success, by keeping drinking saloons at arm's length. The laws of Pullman are strangely autocratic for a republican country, and are viewed with great disfavour by many people outside its limits—a sentiment that may be easily understood. But there is no gainsaying the fact that commercially it is a vast success; that the workmen are of a better class, with better homes and more money in the savings bank than any similar number of workmen elsewhere; that they live in better houses, work more cheerfully, and earn more wages than in any community where the agitator is allowed to set his foot and organise trade unions. There is no possible compulsion to go to, or to remain at, Pullman, but there is always competition for employment there, and it is a remarkable fact that during the busy times at Jackson Park [i.e., building the Columbian Exposition grounds], where more money could be earned, none of the Pullman workmen were tempted to leave. ... Probably the sleeping car business is the only industry in the United States that could have created and maintained a flourishing industrial town; but it is evident that so long as the hotel branch of the company's business can fill the shops at Pullman, so long must this interesting place continue to flourish and increase.²⁵⁷

On the other hand, a Parisian visitor to the Exposition, Mme. Grandin, went down to Pullman itself and observed that George had furnished the "well-paved streets that are swept and bordered with houses, several churches, schools, and even a theater In the manner of a true feudal lord." She walked back that comment a paragraph later: "Thanks to the liberal ideas of its owner, Pullman City is a model city. Let me quickly say that Mr. Pullman does not administer his lands with a feudal firmness. He only

²⁵⁶ Ibid., 694-95.

²⁵⁷ Dredge, A Record of the Transportation Exhibits at the World's Columbian Exposition of 1893, 73. The reference to "hotel branch" refers to the company's operating the sleeping cars across the country's rail network.

dreams of making the inhabitants who work in his factories as happy as possible." ²⁵⁸ Thus, the distinctly premodern overtones of this supposedly modern experiment were not lost on this European visitor.

Other publications rather more fawningly declared that the town was "unquestionably one of the greatest attractions Chicago has to offer her visitors," stating that,

Pullman to-day presents the most advanced and improved example of city construction which the world has seen and it is carefully studied for its suggestive value by men of science capitalists, economists, and students of social science throughout the world.²⁵⁹

Visitors to the Fair found the Pullman exhibit on the grounds enjoyable, but it seems to be a bit of lore that they could also take a special Pullman train from the fairgrounds' depot directly to Pullman to tour the works and town. ²⁶⁰ There is no mention of such excursions in the Exposition literature of the day, and no obvious advertisements for such trains in the local papers. It is true that luminaries were given exclusive tours of the Exposition and the town and stayed at the Hotel Florence, and other visitors could visit the works with the proper credentials. Mme. Grandin noted that "a simple letter suffices to get permission to visit the immense factory." Once there, presumably on the regular commuter train along Cottage Grove Ave., "one can stroll through the factory and ask the workers questions. They respond politely, all the while continuing their work." ²⁶¹ So the works were open to visitors, but not through regular excursions from the fair as it seems to have been believed. By the end of the Exposition, Pullman had shown the world the great success of his paternalistic and profitable town, but this success was about to be tested.

3.A.3 The Pullman Strike of 1894

In 1894 the Great Pullman Strike brought the great enterprise of Palace Car construction and the operation of its national Pullman car service on many rail lines to a standstill. The strike took the wind out of the sails of the claim only a year earlier that,

In brief, the Pullman enterprise is a vast object-lesson. It has demonstrated man's capacity to improve and to appreciate improvements. It has shown that success may result from corporate action which is alike free from default, foreclosure or wreckage of any sort. It has illustrated the helpful combination of capital and labor, without strife or stultification, upon lines of mutual recognition. ²⁶²

In 1893, the national economy went into a slump, with credit contracting and depositors making runs on banks across the nation. The sharp contraction ultimately became known as the Panic of 1893. It lasted

²⁵⁸ Grandin, A Parisienne in Chicago: Impressions of the World's Columbian Exposition, 118-19.

²⁵⁹ The Religious Herald, *Picturesque Chicago and Guide to the World's Fair*, 156.

²⁶⁰ This may be a confusion with the *Exposition Flyer*, a special 20-hour New York—Chicago limited train put on specially for the fair by the New Your Central, although, ironically, the *Flyer* was equipped with Wagner cars! (Welsh and Howes, *Travel by Pullman: A Century of Service*, 30.)

²⁶¹ Grandin, A Parisienne in Chicago: Impressions of the World's Columbian Exposition, 119.

²⁶² Pullman Company, "The Story of Pullman," 34-35.

four years and saw tens of thousands of businesses and hundreds of banks fail. Unemployment rates peaked as high as 25% in Pennsylvania and 43% in Michigan. As with all businesses, the Pullman company experienced a considerable decline in orders which resulted in its workers' income to also decline by an average of nearly 30% according to contemporary reports. This was specifically true for the skilled tradesmen in the factory who were paid by the hour per specific job rather than a set wage for a certain number of hours per week²⁶³ Many of these skilled workers, lived in Pullman houses in the town, and their rents did not decrease. It was therefore these highly paid workers whose fortunes were squeezed. Trapped in what they saw as an unfair system, with their employer decreasing their wages while at the same time maintaining their rents, they brought labor organizers to their cause. To be fair, the problem was that their employer and their landlord was the same company. Typically, it is not your landlord's problem to be concerned with fluctuations in your income, but in this case Pullman (the landlord) was clearly insensitive to what Pullman (the employer) was doing. This was made worse in that all along Pullman had boasted that his town was not only for the moral uplift of its residents, his workers, but also itself a profitable enterprise.

Over the course of three months (May 10 – August 2, though typically the strike proper is said to have occurred in June and July), 125,000 railway workers brought traffic to a standstill in twenty-seven states of the Union: "The suspension of transportation at Chicago paralyzed a vast distributive center, and imposed many hardships and much loss upon the great number of people whose manufacturing and business operations, employment, travel, and necessary supplies depend upon and demand regular transportation service to, from, and through Chicago." ²⁶⁴ Under the command of General Nelson A. Miles, head of the US Army's Department of the East and who had until this time been in charge of Indian fighting in the West (he claimed credit for capturing both Chief Joseph and Geronimo), over 14,000 federal troops, state militia, local police and deputized marshals and sheriffs struggled to maintain order that summer. But, as the strike report put it, "when the depression of 1893 came, morally calling for mutual concessions as to wages, rents, etc., ... a very wealthy and unyielding corporation" chose to take out that financial pain on "a multitude of employees of comparatively excellent character and skill, but without local attachments or any interested responsibility in the town, its business, tenements, or surroundings." ²⁶⁵

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²⁶³ Timesheets of the day were tied to individual car orders and show workers logging hours, *e.g.*, two hours installing trim on card no. 3244 one day, one-hour upholstering seats for car no. 3188, another 15 hours over the biweekly pay period assembling the frame for another car, and so on. These skilled men should be contrasted to general employees in the Pullman company, such as central office staff or town employees for things like the farm or the greenhouse for the brickworks, who were paid a set either daily or monthly wage for a set number of days on a biweekly schedule. These latter workers were not particularly affected by the decline in car orders.

²⁶⁴ United States Strike Commission, *Report on the Chicago Strike of June-July, 1894*, xviii. For the Pullman part of the story, see xxxii–xxxix. For recommended secondary sources, see David Ray Papke, *The Pullman Case: The Clash of Labor and Capital in Industrial America* (Lawrence, KS: University Press of Kansas, 1999); Stein, *The Pullman Strike and the Labor Movement in American History*.

²⁶⁵ Pullman Company, "The Story of Pullman," xxii-xxiii.

Pullman released a statement to the press on May 10 that seemed set to avert the strike by offering to open the company books to show that he was not squeezing his employees while still making strong profits, ²⁶⁶ but by June tensions flared. In the face of the Panic and the economic plight of Pullman's skilled workers, Eugene V. Debs and the American Railway Union (ARU, which had interestingly been founded for unskilled railway workers) attempted to unionize all Pullman workers. This was slightly problematic because the ARU's own mandate was to serve "persons employed in railway service," not manufacturing. The PPCC had no interest in letting its workers unionize because of the wide reach of the Pullman network. At the same time, the ARU actually recommended against Pullman workers striking. Nonetheless, other unions across the country rallied to their cause. Debs, a fiery orator, whipped up sentiment and by the end of June what could have been a local strike in south Chicago turned into a national rail strike. With little progress in the unionization effort, by early July around 10,000 railway workers had converged on south Chicago and the gathering turned into vandalism. Hundreds of railcars and switching yards were vandalized and burned (estimates put the total damage for the strike at something like \$80 million), prompting President Grover Cleveland to claim that the strike was disrupting the US mail service. This and the general oversight that the federal government exercises over all interstate commerce gave him the legal justification to send in federal troops. He did so over Illinois Governor John Peter Altgeld's protests. Altgeld feared that the federal troops would insight further violence, which as it turns out, was correct. Over the next month, a series of clashes ensued, ultimately leading to thirty dead strikers in Chicago and perhaps another forty across the national rail network that summer.²⁶⁷

Before the strike started, it seemed to outside observers that the town was a roaring success. One Parisian visitor noted in her travel journal that workers were happy and content. ²⁶⁸ The journal *Engineering* from the UK waxed poetic on the great success of the experiment:

Mr. Pullman may well be proud of his vast enterprise, and especially proud of the benefits he has conferred upon thousands of his working fellow-countrymen. ... The story of the town of Pullman is but a repetition on a large scale of the building of the first Pullman car. The same fundamental solidity of the structure, the same faith in the intrinsic commercial value of the beautiful, which entered into the one, entered into the other. Indeed, this same logical unity of purpose and allegiance to fundamental

²⁶⁶ In fact, annual reports show profits of \$4.0 million in 1893 (year ending June 31), \$2.3 million in 1894, and \$1.4 million for 1895, so while the Panic of 1893 did cut into his business, he was hardly in the red. The strike report claimed he had nearly \$25 million stocked away in "undivided profits" (xxi).

²⁶⁷ John R. Commons and et al., *History of Labour in the United States* (New York: Macmillan, 1918), 2: 502. As far as we are aware, there is no more modern source on casualties in U.S. labor history, and we were led to this source by Wikipedia. The U.S. Strike Commission report (n. 264, above, xviii) relates 12 deaths, 515 local arrests for "murder, arson, burglary, assault, intimidation, riot, inciting to riot, and lesser crimes," and then 190 federal arrests, of whom 71 were indicted.

²⁶⁸ Grandin, A Parisienne in Chicago: Impressions of the World's Columbian Exposition, 119. Discussed visiting Pullman in October 1893. Either the Panic had not yet fully affected the workers at Pullman by this time or the company made sure that they still maintained a façade of contentment.

conviction, which is manifest to all, the great fabric reared through many years of labour, is the dominant, the most impressive feature of the achievement. At every step, more over, the convictions upon which Mr. Pullman has acted, and the faith to which he has held, have been vindicated, and more than that, they have either actually wrought, or have had in them the germs of radical benefit. ... [T]he town of Pullman along the new lines gives a hope of bettering the relations of capital and labour. The issue of this last is a question of the future, but it is at least a legitimate subject for speculation, whether what the car wrought in one direction, with all its attendant and lasting benefits to humanity, may not on some sort of broader scale, and with benefits to humanity even more far-reaching and enduring, be repeated in the great field where the town of Pullman now stands, as the advanced guard of a new departure and a new idea. 269

The Pullman dwellings were indeed quite profitable to the Pullman Company. Already from July 1883 to the following July, the town's population had grown from 6,685 to 8,329 and the town brought in a net income of \$207,000 (the car shops in the same year made a total profit of \$303,000). ²⁷⁰ A decade later, in the year leading up to the strike, the company had invested just under \$70,000 in maintenance and superintendence, but had made over \$205,000 in rents, a net profit of over \$136,000. This represented a return of 6.31% on their investment in the dwellings to date of \$2.16 million. Given their net \$3.5 million investment in the whole town to that point (for the dwellings plus arcade, market, church, school, streets, and parks), this still represented an annual rate of return of 3.82%. ²⁷¹

²⁶⁹ "The Pullman Exhibit at Chicago," 737. The sub-head reads, "Works Run at a Loss," and "Plant Operated Only to Keep Men Employed" (both claims were patently untrue).

²⁷⁰ "Pullman Palace Cars," *Engineering* 38 (1884).

²⁷¹ "Revenue from Dwellings, Year Ending July 31st, 1894," Newberry Library, Pullman Company Archives, 01/01/01, box 7, fol. 101, Town of Pullman – Revenue from Dwellings, 1894. Further against much sympathy for the company, with the success of business for the World's Fair, the company had issued 50,000 shares of stock which were rapidly gobbled up and then in May 1893 they had expanded their capital stock issue by 20%—one month before the stock market crashed. So they were sitting on considerable new capital while their shareholders partly lost their shirts. Leyendecker, *Palace Car Prince: A Biography of George Mortimer Pullman*, 220.

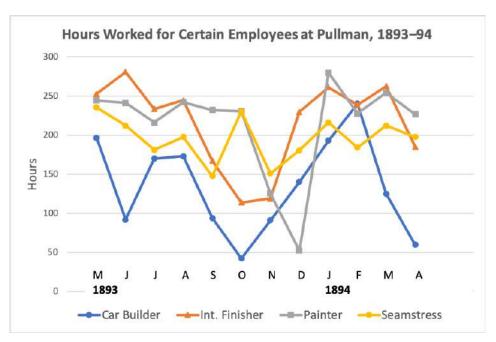


Figure 3.8. Hours worked for Certain Employees at Pullman, 1893–1894.

But in the twelve months from May 1893 to April 1894, workers were thrown into uncertainty in terms of their work hours and wages. As the Strike Commission recorded, depending on which job one held at Pullman, one's hours could be slashed to less than 20% of their peak, with pay falling to as little as 12% of their best month in that period (Table 3.1 and Fig. 3.8). The car builders fared the worst, losing the greatest number of hours and thus pay, while seamstresses were less idled than other workers; interior finishers and painters were in between. It appears that work fell off most rapidly for the car builders and interior finishers in September and October, with the painters' work holding out about a month longer but then

Table 3.1. Earnings of Certain Employees at Pullman, 1893-94.

_	Car Builder		Interior Finisher		Painter		Seamstress	
	Hours	Wages	Hours	Wages	Hours	Wages	Hours	Wages
May 1893	196.50	\$ 47.42	252.75	\$ 78.00	244.25	\$ 65.66	235.50	\$ 39.85
June	92.00	\$ 21.00	280.50	\$ 96.85	241.25	\$ 65.28	212.25	\$ 31.24
July	170.00	\$ 38.75	233.25	\$ 69.12	216.00	\$ 57.05	181.00	\$ 27.72
Aug.	173.00	\$ 36.91	244.50	\$ 62.75	242.00	\$65.14	197.75	\$ 30.18
Sept.	94.00	\$ 21.50	167.25	\$ 44.77	232.00	\$ 62.62	147.75	\$ 23.90
Oct.	42.25	\$ 7.39	114.00	\$ 26.92	230.75	\$ 62.04	230.25	\$ 34.62
Nov.	91.00	\$ 20.51	119.00	\$ 29.05	125.25	\$ 32.58	151.00	\$ 24.39
Dec.	140.25	\$ 18.37	229.75	\$ 47.85	52.50	\$ 12.52	180.25	\$ 28.18
Jan. 1894	192.75	\$ 34.00	261.00	\$ 49.30	279.75	\$ 66.84	216.00	\$ 34.21
Feb.	240.00	\$ 60.00	238.50	\$ 44.95	227.75	\$51.69	184.00	\$ 25.47
Mar.	125.00	\$ 30.80	262.50	\$ 51.53	254.00	\$51.12	212.00	\$ 24.92
Apr.	60.00	\$ 9.00	185.25	\$ 37.77	226.50	\$ 48.65	197.50	\$ 22.14

Source: U.S. Strike Commission, Report on the Chicago Strike of June-July, 1894 (Washington: GPO, 1895), xxxiv.

falling off sharply. Painters' and interior finishers' work rebounded by January and held somewhat steady into the spring, while car builders' work grew steadily from a nadir in October to a peak in February, but then plummeted again for the next two months. In terms of an overall average monthly wage over that year span, car builders were most severely hit, losing overall something like 52% of their wages. Interior finishers lost something like 45%, seamstresses 27%, and painters only 20%—though it is worth noting how extremely volatile pay was during this time for all these workers.²⁷²

The strike, however, ended all that. As a result of the action, in which the workers and unions prevailed, a federal court decision forced the PPCC to divest itself from the town and rental units. Opinions ranged from defending the right of any landowner to make a reasonable profit on his holdings (and a 6% annual return was not seen as unreasonable at the time) to an argument that the whole town should be leveled because it was "a crime against the commonwealth and an insult to humanity," and that to annex this "feudal city" to the city of Chicago would be unconstitutional.²⁷³

²⁷² The table is on United States Strike Commission, *Report on the Chicago Strike of June-July, 1894*, xxxiv.

²⁷³ Ibid., 676.

The legacy of the strike is well-studied, and one is best directed to the standard literature on it, starting with the federal investigation²⁷⁴ and then a number of contemporary²⁷⁵ and modern studies.²⁷⁶

While the labor history of subsequent unionization attempts at the Pullman factory or in its operations division on the rails across the country is not yet written (and is beyond the scope of this report), it is worth noting that George Pullman and successive company leaders were managers of the type that tried continually to stave off unionization by offering better benefits. By 1914, the company had a pension

²⁷⁴ George Mortimer Pullman, T. H. Wickes, and Pullman Company, The Strike at Pullman. Statements of President Geo. M. Pullman and Second Vice-President T.H. Wickes, before the U.S. Strike Commission. Also Published Statements of the Company During the Continuance of the Strike (1894); United States Strike Commission, Report on the Chicago Strike of June-July, 1894. In the later extensive report, the testimony of the Pullman residents and the PPC Co. on pp. 416-68 and 468-641 is most enlightening and occasionally darkly entertaining.

Most importantly in our estimation are Thomas Burke Grant, "Pullman and Its Lessons," *The American Journal of Politics* 5, no. 2 (1894). and A.P. Winston, "The Significance of the Pullman Strike," *Journal of Political Economy* 9, no. 4 (1901). But see the various opinions: William H. Carwardine, *The Pullman Strike*, Unity Library 36 (Chicago: Charles H. Kerr, 1894); Joseph Nimmo, *The Insurrection of June and July 1894, Growing out of the Pullman Strike at Chicago, Ill. An Address Delivered before the National Statistical Association at the Columbian University, Washington, D.C., October 9th, 1894. By Joseph Nimmo, Jr., Ll. D (Washington, DC: Age printing Company, 1894); W.J. Ashley, <i>The Railroad Strike of 1894. The Statements of the Pullman Company and the Report of the Commission, Together with an Analysis of the Issues*, Publications of the Church Social Union (Cambridge: The Church social union, 1895); Charles King, *A Tame Surrender, a Story of the Chicago Strike*, The Lotus Library (Philadelphia: J.B. Lippincott company, 1896).

²⁷⁶ The following is a sampling of the literature; Almont Lindsey, "Paternalism and the Pullman Strike," The American Historical Review 44, no. 2 (1939); The Pullman Strike; Donald L. McMurry, "The Legal Ancestry of the Pullman Strike Injunctions," Industrial and Labor Relations Review 14, no. 2 (1961); Beebe, The Worker and Social Change: The Pullman Strike of 1894; Gerald G. Eggert, "The Great Pullman Strike," American History Illustrated 6, no. 1 (1971); Harry Jebsen, Jr., "The Role of Blue Island in the Pullman Strike of 1894," Journal of the Illinois State Historical Society 67, no. 3 (1974); William W. Ray, "Crusade or Civil War? The Pullman Strike in California," California History 58, no. 1 (1979); Chapin, "The Infamous Pullman Strike as Revealed by the Robert Todd Lincoln Collection."; Matthew C. Lee, "Onward Christian Soldiers: The Social Gospel and the Pullman Strike," Chicago History 20, no. 1/2 (1991); Jonathan Bassett, "The Pullman Strike of 1894," OAH Magazine of History 11, no. 2 (1997); Laughlin, The Pullman Strike of 1894: American Labor Comes of Age; Salvatore, Schneirov, and Stromquist, The Pullman Strike and the Crisis of the 1890s: Essays on Labor and Politics; Darbee, "Socialist from the Heartland: Eugene V. Debs and the Pullman Strike."; Stein, The Pullman Strike and the Labor Movement in American History; Hirsch, After the Strike: A Century of Labor Struggle at Pullman; Burgan, The Pullman Strike of 1894; Almont Lindsey, The Pullman Strike: The Story of a Unique Experiment and of a Great Labor Upheaval (Chicago and London: University of Chicago Press, 2010).

plan, by 1922 a life insurance plan, and by 1929 a group insurance plan (just in time for the Great Depression, which certainly did not help the company). Under F.L. Simmons in 1920, Pullman created an Industrial Relations Department, which formed in-house "unions" to keep national railway and service unions at bay. The Brotherhood of Sleeping Car Porters did not make headway at organizing the Pullman Porters until 1934, when the New Deal Railway Labor Act prohibited companies from impeding union organization and operation.

3.A.4 Peak Travel

The pinnacle of Pullman dominance can be easily bookmarked by the dates 1899 and 1927. In the former year, Pullman bought out the last of its major competitors in car building, the Wagner Corporation. Also in 1899, PPCC achieved monopoly status operating sleeper coaches on long distance routes in the United States (though they had in fact a near monopoly from the time of George Pullman's death in 1897) and in 1900 reincorporated itself as The Pullman Company.

At the end of WWI, in 1919, and for the first three months of 1920, the Pullman Company was operated by the United States Railway Administration (USRA), though this does not seem to have affected the manufacturing side very significantly, other than 8,000 cars that the USRA ordered from Pullman (The USRA ordered 100,000 cars nationwide). Then in 1924 Pullman quite consciously separated its carbuilding operations from its car-servicing operations (including repair) in Pullman itself by consolidating all car building (trains, trollies, interurbans and auto bodies, which it expected to take off) into the Pullman Car & Manufacturing Company. This eventually necessitated a corporate reorganization in June 1927 that saw The Pullman Company reorganized as Pullman, Incorporated (Standard Steel Car Co. was also folded into Pullman Inc. in 1929, though the name change to Pullman-Standard would come later in 1934).

When the Depression hit, it caused a decrease in passenger and especially freight traffic, and most certainly a near collapse in car orders, but the Pullman service was by this time a monopoly for sleeper car service on American railroads and had become indispensable for cross-country and even intercity travel. Faced with a collapse of both rail travel and especially new car orders, the Pullman Company partly worked to update its existing cars with things like air-conditioning (see Section 3.B.4) and promoting new, modern streamlined travel to keep itself financially viable. In 1934 Pullman Car & Manufacturing Company and some of the other Pullman, Inc. subsidiaries merged with Standard Steel Car Company to form the Pullman-Standard Car Manufacturing Company.

The Depression affected both the top and the bottom of the socioeconomic ladder quite severely, and stock tropes of bankers who "lost it all in the crash" as well as dispossessed rural poor hit simultaneously by the collapse of prices and the Dust Bowl fill our collective national consciousness. However, it did not entirely throttle the disposable income of the middle and upper-middle classes that were the principle

88

²⁷⁷ There is apparently no consolidated correspondence with Pullman (*i.e.*, sorted by company) in the records of the USRA (RG 14) at the National Archives in Washington, DC. It would take a strategic hunt to find those that would undoubtedly be scattered in the 1,829 cubic feet of records generated by that agency between 1917 and 1938.

Pullman patron. Still, Pullman had to push harder to convince potential riders to travel.²⁷⁸ They also had to operate around a number of the major rail lines in the country operating under bankruptcy protections throughout the 1930s. Pullman was losing money steadily through the decade, and to make matters worse, it had to capitulate to the railroads' demands to shift from the image of the heavyweight luxury car to the lightweight coach. At the same time, railroads began exploring the enticing possibility of internal-combustion (eventually diesel) locomotives, which by the mid-1930s were looking like they could provide greater power (though again, helping argue for lightweight cars) and continuous operation (because they did not need watering and coaling stops) with far less pollution (smokeabatement laws were being passed in numerous cities at this time).²⁷⁹

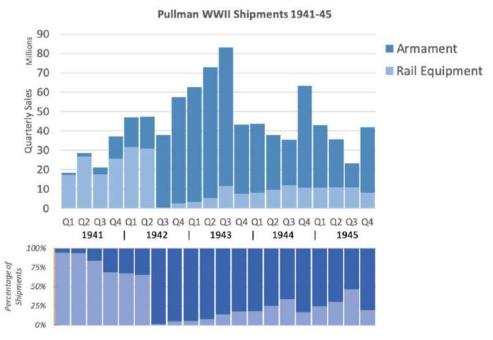


Figure 3.10. Pullman WWII Production.

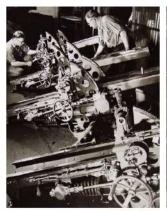
World War II, however, looked like it would save the company, and for the duration of the war, that was true. Passenger traffic picked up across the country, and the added demand for troop transport on top of that saw ridership nearly triple between 1940 and 1944. More importantly in Pullman itself, and other Pullman shops around the country, wartime orders replenished their bottom line. Initial orders came in 1941 and 1942 for tens of millions of dollars in railway equipment, but by the third quarter of 1942 orders for at least twice as much per quarter came in for armaments (Figures 3.9 and 3.10). After Victory

89

²⁷⁸ One amusing example is a Pullman district storekeeper in Memphis who had "Ride PULLMAN (SLEEPING) CARS. **Reduced Rates**" (emphasis in the original, using colors) painted on the back of the spare tire cover at the back of his personal automobile. "This Employee Advertises Pullman Service on His Auto," *The Pullman News*, Jan. 1933.

²⁷⁹ Arthur Tayler, *Illustrated History of North American Railroads: From 1830 to the Present Day* (Edison, NJ: Chartwell Books, 1996), 126-27.

over Japan (V-J) Day in 1945, orders were canceled, shops had to retool for an uncertain future of rail car production, and by 1950 the writing was on the wall.







L to R: Pullman workers assemble field gun chassis; put final touches on a M4 Sherman tank; and test and finish artillery shells, probably all at the Pullman Michigan city plant. Source: Torkel Korling photographs, nos. A-22, A-33, and A-3, Tenneco Collection, acc. 593708.

Figure 3.9. Pullman WWII Production. Torkel Korling photographs in Tenneco Collection.

By the mid-twentieth century, Pullman reservation bureaus were spread around the country and along the lines that operated with Pullman cars that dealt with the sleepers parallel to the regular ticketing and scheduling of the rail line itself. By the early 1950s their fifty-six operating locations were connected by a dedicated "manual tape teletypewriter" system installed by AT&T ("manual" in this case refers to the fact that the teletapes would print out at a regional bureau, but then an operator would need to feed that tape back into a tape reader to send it to the right local office). They had bureaus in Chicago and Los Angeles, for example, that included a two-way printing telegraph services between these bureaus and the Santa Fe Rail Road offices in New York, and the telecommunication systems were specially designed to meet the complex scheduling demands for sleeper cars originating and interconnecting between more than a dozen main cities east of the Mississippi River (and all the stops in between).²⁸⁰

From the 1920s through the 1950s, Pullman also tried at times to get into some parallel manufacturing lines, exclusive of the wartime work it did manufacturing tanks and artillery shells, among other things. ²⁸¹ Between 1919 and 1936 Pullman made tens of thousands of all-metal automobile bodies at their 104th and Erickson Ave. shops for various automobile companies, including Packard, Willys-

²⁸⁰ S. Kip Farrington, *Railroading from the Rear End* (New York: Coward-McCann, 1946), 158; "The Pullman Company," *Long Lines* 34, no. 7 (1955).

²⁸¹ For example, in 1919, Pullman received a \$2 million order for 50,000 Edison Co. phonograph cabinets, which it built to high standards in an underused shop at 103rd and Maryland in North Pullman. "Pullman Palace Car Co. Builds Edison Cabinets," *The Music Trades*, Sept. 20 1919; "Wm. Maxwell Enthusiastic over Pullman Production," *The Music Trades*, Nov. 8 1919. A want ad in the *Chicago Tribune* asked for "Cabinet Makers – On Phonograph Cabinets; good wages and working conditions; steady work. Apply Pullman Car Works" (Dec. 11, 1919, p. 25).

Overland (later known for Jeep), and lesser-known ones like Moon, Peerless, and Velie. ²⁸² Their skill at pressed steel frame members and panels in railcars transferred nicely into the early era of all-metal auto bodies and the push for standardization in railcars also then affected the nascent closed-top car bodies. In fact, it would appear from a 1924 showing of their new Packard design that they were consciously working hard to develop the all-metal body both as a style and for the high efficiency manufacturing process for the industry. ²⁸³ The peak of their work in this area was concentrated in the period from 1922 to 1925. They sold off the auto body division to Budd in 1930 as they acquired the Standard Steel Car Company in 1929 in what became Pullman-Standard in 1934. Their Worcester, MA plant (the Osgood Bradley Car Company, acquired in 1930, and a subsidiary of the Standard Steel Car Corporation) also built about 2,300 trolley busses (i.e., rubber-wheeled busses drawing power from overhead wires) between 1932 and 1952 (They had been building streetcars and interurbans at their Calumet shops since 1891. See Figure 3.7). Their fame also led to their building Adm. Richard Byrd's snow cruiser, *Arctic Explorer* in 1939, at the time the largest road vehicle ever manufactured. ²⁸⁴ Pullman even made trailers for a brief time under the Trailmobile brand after they acquired that independent company in 1951.

3.A.5 Multiple Declines

World War II was both the savior and the hangman of Pullman Corporation. It partly saved the company in that the necessity of moving goods, troops, and civilian personnel around the country to meet the wartime pressures caused travel to spike, pushing the company's Depression-era balance sheet back into the black. The government and the train lines were also grudgingly happy with Pullman's monopoly fleet of passenger cars that could always be shifted around the country as needed. However, the antitrust view was that without any competition on long distance lines, Pullman was set to abuse its position. An antitrust suit against them was filed as early as 1940, though it was put on hold through most of the war. As soon as the war seemed to be ending, however, the suit was revivified and on April 20, 1943 the US District Court for the Eastern District of Pennsylvania ruled on *United States v. Pullman Co.* that regardless of the circumstances under which "competitors were all absorbed," Pullman did use its business practices to violate the Sherman Anti-Trust Act of 1890. The court therefore proposed separating the Pullman Company that operated the sleepers from the Pullman-Standard Car

²⁸² Mark Theobald to Coachbuilt, 2015, http://www.coachbuilt.com/bui/p/pullman/pullman.htm. Theobald contains a substantial but somewhat undigested compilation of Pullman Co. autobody-related news articles.

²⁸³ J.E. Schipper, "Chicago Salon Shows Present Trends in Body Design," *Automotive Industries* 50, no. 6 (1924).[cited in Theobald] noted that Pullman exhibited an "all-steel model built in accordance with railroad practice," and that the "limousine" type auto (where the chauffeur was in an exposed front seat in front of the closed passenger compartment) would be replaced with this "berline type" ("a limousine having the driver's seat entirely enclosed"; we now call it 'sedan' style) that Pullman was developing, though the company did not invent it.

²⁸⁴ "The Arctic Explorer," Pullman State Historic Site, http://www.pullman-museum.org/theCompany/arcticExplorer.html.

Manufacturing Company as the "simplest method of accomplishing" a resolution to the suit.²⁸⁵ In doing so, the court decreed that railroads had the right to buy Pullman cars rather than only entering into a lease arrangement in which Pullman retained ownership of them. Pullman additionally had to provide through service to any railroad requesting it, Pullman had to operate cars by other builders (in effect only Budd), railroads could operate their own sleepers, and Pullman could no longer engage in "exclusive dealing" with the railroads.

The Interstate Commerce Commission mandated that by the end of 1947, Pullman had to divest itself of either its car building or its operations arm. Choosing to maintain the former, Pullman was broken up as a near monopoly passenger car company for long-haul trains, and its 4,700 cars and 20,000 employees were reorganized to be run by a consortium of 59 train companies. The car building operations in Illinois and Michigan, as well as repair and rehabilitation shops around the country remained in operation. For the next two decades, Pullman-Standard was "just" a car builder—admittedly, the most powerful in America, though facing increasing competition from Budd and from American Car and Foundry (ACF). At the end of 1968, Pullman-Standard was out of business as a railroad manufacturer. Pullman cars, now under the control of the railroad consortium continued for another decade, though even by the late 1950s, lines like the PRR and New York Central put its own parlor cars and sleepers on the line. Incidentally, 1958 was the same year as the first commercial jetliner flight.



Figure 3.11. Advertisements for airline and train travel, both from the October 1954 issue of National Geographic magazine.

²⁸⁵ The legal reference for it is 50 F. Supp. 123, 126, 137 (E.D. Pa. 1943), and the text of the decision is at https://law.justia.com/cases/federal/district-courts/FSupp/50/123/2181766/. Although the breakup is noted in American business history, it is only the ninth-largest and is not widely studied in antitrust historiography; see George Bittlingmayer, "Antitrust and Business Activity: The First Quarter Century," *The Business History Review* 70, no. 3 (1996).

Soon after World War II, the passenger car started making a serious dent in passenger railway traffic. For example, in 1956 Pullman was forced to raise passenger fares by 5% for first and coach class, and by 7.5% for parlor and sleeping cars. This response was more a response to the rise of the personal automobile than the airlines, but at least United Air Lines, also based in Chicago, took advantage of it. They released a sales bulletin that noted to their agents that this development "is extremely important to all travelers and, as such, it is vitally important that we take full advantage of it." They were concerned that although they had some advantage at the time in coach travel, the new price differential might allow them to start to "introduce the speed and luxury of air travel ... for the budget minded." The head office made it clear that it was the job of the sales agents to "tell him [the traveler] about it" (emphasis in original). The various rail passenger associations complained directly to the president of United, noting that direct comparisons of costs between competing products by mentioning the competitor's rates was really "hitting below the belt" and "a new low." It is not clear whether United directed its agents to continue the tactic, but by this time the pressures from air and automobile were clearly driving some rail routes into a "non-profit" status (only buoyed by feeder lines that kept people in the system) and it would not be long before air travel would indeed come to dominate the longdistance sector.²⁸⁶ For the next decade, the two industries waged an advertising war for the hearts and pocketbooks of American travelers (Figure 3.11).

One response was that the Pullman Corporation, under G.W. Bohannon (president) and A.E. Greco (manager of PR), pushed out a series of articles in numerous publications under the "Hotel on Wheels" campaign and then, once published, pushed out reprints to numerous people of influence around the country. Touting their 100,000 beds on 4,000 sleeping cars in constant motion around the country, Pullman emphasized that their cars could provide through journeys, even on different rail lines, allowing passengers to travel great distances without transfer. Their trains served as "fine hotels—on wheels" and included porters for luggage and valet service, room service, and "soft pillows for daytime relaxation." Inadvertently admitting that they were, on average, only at one-third capacity on any given night, the company emphasized its role as a concessionaire to determine where, when, and in what quantities Pullman cars operated on the train lines. This they thought would assure riders that if the train line was happy to have the cars on the line, the service must necessarily be superior (ignoring, however, that there were few to no competing concessionaires on most lines). 287

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²⁸⁶ "Advertising - Miscellaneous, 1956-1958," Newberry Library, Pullman Company Archives 09/01/01, box 1, fol. 1. By the 1960s, it appears that the ICC system was rigged against passenger train travel, and certainly federal infrastructure spending after WWII favored automobiles and air travel over train. Dominick Pisano, *The Airplane in American Culture* (Ann Arbor: University of Michigan Press, 2003); Stanley Berge, "Why Kill the Passenger Train?," *Journal of Marketing* 28, no. 1 (1964).

²⁸⁷ Ronald Schiller, "Hotel on Wheels," *Dun's Review*, Apr. 1952., 1957 #1460 The Schiller piece also later ran in *Reader's Digest*, though a letter of Apr. 16, 1952 from Greco confirms that in fact *Reader's Digest* people wrote it and "planted" (his quotation marks) in *Dun's Review* so that they could later reprint it (Newberry Library, Pullman Company Archives 09/00/01, box 1, folder 9, Articles on Pullman Cars – Correspondence, 1952–1954). Pullman also provided drafted speeches for their



Figure 3.12. Pullman's entry into streamlining, the Train X, c. 1955. Pullman-Standard Co. brochure.

Railroads started looking for ways to simultaneously increase speeds and reduce operating costs so that ticket prices could drop to attract more riders. The most promising approach to this problem was to create lightweight, low center of gravity trains which would require less power (and thus fuel) to pull them, and could take curves at higher speeds (thus decreasing travel time and labor costs). Numerous train corporations designed trains for this initiative and the Aerotrain and Talgo are perhaps the most well-known, mainly because they were stylish even though neither were considered acceptable for general service. Pullman's entry into this competition was known as the Pullman Train X (Figure 3.12), designed in the early 1950s and placed into operation in 1956 and 1957 on only two rail lines. Their operation last only until 1958, though a modified evolution of it became the Turbo train in 1967.

On one hand the mantra of "progress" helped reinforce air travel and the personal automobile after World War II, but social forces contributed as well. Federal transportation policy in the 1950s was shifting towards both of those newer forms of transport, with less investment in rail. Railroads and rail planners recognized that freight was still principally going to be shipped by rail (the rise of the semi

representatives to give to local civic groups around the country (*e.g.*, Newberry Library, Pullman Company Archives 09/00/03, box 2, fol. 108, "Pullman—The World's Largest Hotel on Wheels," Jan. 1954) and publicity photos to outlets to advertise the utility of train travel (Marion Noyes, "Handbook—You Make Travel Reservations," *Today's Secretary*1955.).

²⁸⁸ For the overall missed opportunity of the US to develop high speed rail, see Joshua Rogers, "The Great Train Robbery: How Statutory Construction May Have Derailed an American High Speed Rail System," *University of Illinois Journal of Law, Technology & Policy* 2011, no. 1 (2011). For the European "Aerotrain" which was actually innovative, see Vincent Guigueno, "Building a High-Speed Society: France and the Aérotrain, 1962-1974," *Technology and Culture* 49, no. 1 (2008).

tractor-trailer on the interstate highway system was dimly glimpsed in 1950, and was only coming into its own in the 1960s), but it was clear that passenger transportation was on the decline. A conference on the future of rail transportation was held in 1961, and included numerous papers on technology in railroads, as well as papers like, "Is Nationalization of Common Carriers Inevitable?", "The Possibilities of Automation in the Railroad Industry", or "The Railroads, the Laws, and the New Congress." Of particular interest here, however are two papers: "Sociological Barriers to Technological Change" by William Haber, and "Technological Change in the Future of Passenger Traffic" by John D. Loftis. ²⁸⁹

3.A.6 The End of Pullman the Company

The Pullman Company operations ceased at midnight on December 31, 1968. This corporate behemoth, which only a few decades before had been hailed as the "World's Greatest Hotel" and had hauled tens of millions of passengers each year—100,000 every night by some accounts—ceased as a manufacturing company, though its holdings lived on in other companies and financial entities for another decade or so until final ceasing to exist in 1981. The town of Pullman, of course, lived on, though in private hands after the post-1894 sell-off of the houses and land (see Section 4.E.6). Many Pullman cars still survive in railway museums to this day to give a sense of the golden age of luxury rail travel (see Appendix B).

Amtrak was incorporated upon the bones of the various failed railroad lines to provide, in theory, a unified rail transportation network throughout the continental United States. It was created as well in response to the rail lines arguing that they should be relieved of their unprofitable interstate commerce requirement to carry passengers as well as freight (which is profitable, indeed). Taking over at "the nadir of the U.S. passenger-rail business," Amtrak has struggled to run without massive losses since that time, though it may be seeing the change of pulling even in the near future.²⁹⁰

3.B Railroad Passenger Car Technology

With the decline of rail in the face of air travel and automobile ownership since the 1950s, today trains in America are synonymous with hauling freight. And while it is true that historically there were always something like 30 to 45 freight cars for every passenger car (see Figure 3.1), from the very beginning railroads were seen as a crucial passenger transportation technology. Passenger car development, though far less appealing than that of engines and even of cabooses, therefore plays a prominent role in the story of the development of railcar technology. Thus from here on, any reference to railcars refers implicitly to passenger cars unless otherwise explicitly indicated.

Pullman, the name synonymous with the sleeper, rode the great wave of railcar technology as one of the world's largest railcar companies and the most recognized. The sleeping car, however, was not

²⁸⁹ In Robert S. Nelson and Johnson. Edward M., eds., *Technological Change and the Future of the Railways* (Evanston, IL: Transportation Center at Northwestern University, 1961), 83-97 and 169-84, respectively.

²⁹⁰ Ted Mann, "Amtrak Has Lost Money for Decades. A Former Airline Ceo Thinks He Can Fix It," *Wall Street Journal*, July 6 2019. In general, see James McCommons, *Waiting on a Train: The Embattled Future of Passenger Rail Service* (White River Junction, VT: Chelsea Green Pub. Co., 2009).

George M. Pullman's invention. Some trains as early as the late 1830s had bunks for sleeping, but only at night, and often only used while parked in a siding. In 1854 Henry B. Myer received the first patent for convertible seats that became bunkbeds and two years later, T.T. Woodruff patented the more modern form of facing bench seats that converted to beds. ²⁹¹ With the 1854 patent of F.R. Myer (no relation to Henry) and F.H. Furniss, the Rock Island Rail Road began running a sleeper in 1858 and would do so for nearly two decades before signing an association agreement and effectively becoming a subsidiary of Pullman.

The story goes that Pullman was riding on one of Woodruff's cars in 1858 from Buffalo to Chicago and realized he could improve on the design and began running some converted day carriages on the Chicago and Alton (C&A) Railroad the next year. Then in 1864 he built his *Pioneer* at the C&A shops for \$18,000. At almost the same time, a wagon maker named Webster Wagner embarked on a similar process of (re)inventing the sleeping coach from his Wagner Palace Car Company (originally the New York Central Sleeping Car Company, founded in 1858) car shops in Buffalo.²⁹² The Wagner and Pullman companies would be rivals for the next four decades until Wagner became a subsidiary of Pullman on January 1, 1900.

Most railroad histories are organized around the type of traction engine that drew the train and far more attention is paid to the locomotives and cabooses than to passenger cars. The age of early engines giving way to multiple-bogie locomotives identified by their wheel pattern²⁹³ and then a focus on the power plant (steam leading to diesel) is useful for one type of train history, it is not so useful for understanding passenger car evolution. Further, studies of specific car builders and of car-building shops

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²⁹¹ Henry B. Myer, "Mode of converting the backs of car-seats into beds or lounges," patent no. 11,699, Sept. 19, 1854 and Theodore T. Woodruff, "Improvement in railroad-car seas and couches," no. 16,159, Dec. 2, 1856. August Mencken, *The Railroad Passenger Car; an Illustrated History of the First Hundred Years, with Accounts by Contemporary Passengers* (Baltimore: Johns Hopkins Press, 2000), 57–59. Myer's name is often misspelled as Meyer, and the date 1858 is frequently erroneously all over the Internet. Woodruff was from Alton, IL, just upriver from St. Louis and put his first cars in service on the St. Louis, Alton and Terre Haute Railway, but built his first car in Watertown, NY, and put it into service on the New York Central between Albany and Buffalo by 1856 and then founded the Central Transportation Company with the assistance of Andrew Carnegie and J. Edgar Thompson, the president of the Pennsylvania Railroad.

²⁹² Frank J. Bramhall, "Luxury in American Railway Travel," *Cassier's Magazine* 15, no. 2 (1898); Robert S. Farnsworth, *The Grand Western Railroad Game: The History of the Chicago, Rock Island, & Pacific Railroads* (Pittsburg, Pennsylvania: Dorrance Publishing Co., 2017), 267. Henry B. Myers, "Mode of converting the backs of car-seats into beds or lounges," Patent no. 11,699, Sept. 19, 1854; F.R. Myers and F.H. Furniss, "Improvements in Couches for Railroad Cars," Patent no. 21,436, Sept. 7, 1858.

²⁹³ This is typically given using the "Whyte notation" from 1900 that gives the number of leading, traction, and following wheels, such as the 2-8-0 Consolidation type locomotive.

are remarkably limited in the literature.²⁹⁴ Even general studies of machine shops and organization from a work (as compared to management) perspective are uncommon, particularly in the formative period for Pullman.²⁹⁵

Although the changes in passenger car technology in some ways track the changes in locomotive technology, the two evolved independently of one another. Similarly, the relation between Pullman as car builder and the various rail lines also evolved over time. Rail lines might buy Pullman cars outright, Pullman might operate cars under their ownership coupled to a rail line's locomotive (and other cars), and from the late 1920s through the 1950s, Pullman operated all-Pullman trains on major routes for all the big lines: B&O, PRR, NYC, and others.²⁹⁶

From the beginning of Pullman's production in 1859 with the first car for the Chicago & Alton Railroad, cars were termed Palace Cars but this also corresponds with the period of wooden framed cars, which extends to 1910. From 1910-1931, steel became the base for standardized and modernized passenger cars, and from 1934 onwards there were the so-called lightweight cars designed for speed and weight savings.

3.B.1 Wooden Bodies

The earliest passenger cars were, like carriages and wagons before them, made of as much wood as possible, for it was plentiful and easy to work, while wrought iron and especially steel were expensive and difficult to work. And although it was recognized early on that wooden carriages were weak and quite dangerous in collisions, they persisted for over fifty years. The era of wooden cars has been studied at length by Lucius Beebe in terms of the opulence of interior decoration and by John H. White for both passenger and freight cars, and it is to their volumes readers are directed for much greater detail than could be marshalled here.²⁹⁷

²⁹⁴ E.g., James E. Watters, "The Regulation of Railroad Technology between 1860 and 1920 and Its Effect on the New England Carbuilding Industry" (Clark University, 1989).

²⁹⁵ Although too early for our needs, see John H. White, "The Alexandria, Va., Shops of the U.S. Military Railroads," *Railroad History* 212 (2015). And see more generally David Stephen Unger, "A Place of Work: The Geography of an Early Nineteenth Century Machine Shop" (Harvard University, 2013). Such studies are more common after about 1910 when Taylorism makes it a field in its own right.

²⁹⁶ Bob Johnston, Joe Welsh, and Mike Schafer, *The Art of the Streamliner* (New York: Metro Books, 2001), 50.

Most importantly, White, The American Railroad Passenger Car Part 1, 2-115. but then also Lucius Morris Beebe, Mr. Pullman's Elegant Palace Car: The Railway Carriage That Established a New Dimension of Luxury and Entered the National Lexicon as a Symbol of Splendor. (New York: Doubleday, 1961); Lucius Morris Beebe and Charles Clegg, The Trains We Rode, 2 vols. (New York: Promontory Press, 1990); John H. White, The American Railroad Freight Car: From the Wood-Car Era to the Coming of Steel (Baltimore: Johns Hopkins University Press, 1993).

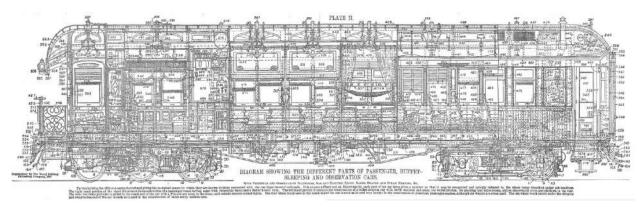


Figure 3.13. Schematic of the hundreds of components on a turn-of-the-century wooden-bodied Pullman. Source: Marshall M. Kirkman, The Science of Railways (1902), pl 2.

The earliest wooden cars had substantial timber underframes, on top of which the complex house of the carriage sat (Figure 3.13). As weight reduction became a priority early on, designers figured out how to turn the sides of each carriage into a load-bearing truss system that supported the car, rather than the underframe. This then allowed the trucks to move further towards the ends of the carriage and for developments in suspension and shock absorption (too detailed to go into here), all of which led to smoother and more stable rides.

What this meant in practice for Pullman in the early years, is that a railroad car manufacturing shop was largely a union of a blacksmith shop and foundry support rods, and a much larger carpentry and joinery shop for the woodworking. Pullman initially used the car making shops of Chicago & Alton RR in Bloomington. Although we have not researched these shops, a good sense of the tradition in this type of car building before the construction of Pullman, IL can be gleaned from looking at the company's Detroit shops (Figure 3.14). There, the work was divided into separate units within the two buildings. The majority of components for the car would begin to be shaped in the central area of the north building. This building included the planning and sawing mill on the first floor, a sawing shop on the second, and a general woodworking shop on the third (notice that woodworking continues on the second and third floor over the metal shops as well). This is somewhat counterintuitive, as it would be expected that more finished components would move upwards in the factory building. Surely Pullman was constrained by the tight quarters in Detroit, but this does run counter to the early-twentieth-century design of factories where raw materials were initially received on the top floor. As they were fabricated, components descended by gravity to final assembly on the ground.

²⁹⁸ Tayler, *Illustrated History of North American Railroads: From 1830 to the Present Day,* 61. the telltale sign of these cars are the long diagonal wrought iron bars under the sides of the car between the trucks.

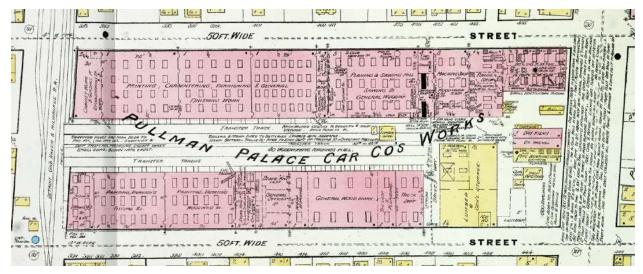


Figure 3.14. Pullman's Detroit Shops in 1884. Sanborn Fire Insurance Map from Detroit, Wayne County, Michigan. Vol. 2, sheet 60 [detail]. Original from the Library of Congress.

The early Pullman system at Detroit may represent the survival of a nineteenth-century production system in multi-story factories. ²⁹⁹ The small lumber storage in the southeast corner of the lot and the dry kilns along the eastern fence suggest that wood was brought in from yards elsewhere as needed and was also kiln dried as needed. Metalworking in the forge shop and machine shop in the north east corner of the building prepared things like tie rods and fittings to be delivered to the assembly areas. The truck department, which built up the four wheel trucks on which every car rode, was located at the eastern end of the south-western building and was a largely independent unit within any car building firm The wheels and springs were typically purchased from another firm; in the case of Pullman, the Allen Paper Car Wheel Company supplied wheels to them, and when Pullman built his new factory in Chicago, Allen also built a large shop adjacent.

Railway car building in this period was very much a custom manufacturing process, done at individual stations where each car sat for a number of days to weeks. Materials were brought to it that were needed in that step and it was in no way an assembly line process. When it came to assembling individual cars, a pair of trucks were moved to an assembly bay and most of the car was built up on top of them. Once the car was structurally integral, mostly complete, and fitted out with its major internal components such as walls, it was then moved to the painting shops for overall exterior (and, if applicable, interior, though in this period that would have been rare) painting. Once dry (or perhaps even before, depending on backlogs), it was then moved to yet another bay for installation of movables such as seats and births and cabinetry, and final trimming out with upholstery and everything from latches and handles to wash basins and pull cords.

²⁹⁹ Lindy Biggs, *The Rational Factory: Architecture, Technology, and Work in America's Age of Mass Production*, ed. Philip B. Scranton, Studies in Industry and Society (Baltimore: The John Hopkins University Press, 1996), 108-17. and for example William Floyd Hunt, *Handling Material in Factories*, Factory Management Course and Service (New York: Industrial extension institute, 1922).

Cars were moved between various assembly bays by using the transfer table (in the Detroit plan labeled as a "transfer track"). The largest bays are in the section of the south building labeled "General woodwork", which makes sense, as it was here that the larger wooden members would need to be moved about and assembled into a car frame. More room around each set of trucks would make that easier. When each car was then moved across to the northern building for "printing, carpentry, varnishing, and the general finishing work" the bays were somewhat narrower. It was similar in the southern building in the shops for painting, varnishing, fitting, etc. (It is unclear why there is a separate section for "oiling, varnishing, etc.").

The era of the wooden car saw both incredibly utilitarian wooden clapboard boxes and elaborately carved mahogany dens of opulence placed upon trucks and run over the rails. Although Pullman made his name with the latter, a great many boxcars for freight and relatively utilitarian parlor cars also came out of his shops. The records at the Newberry Library probably has enough information for a diligent researcher to determine which part of that production really paid the bills, even if all the attention was paid to the Palace Cars.

3.B.2 Interlude: The Vestibule Wars

In the later 1880s, a new but important development was added to railroad passenger cars: the vestibule (Figure 3.15). Seemingly an obvious improvement to enclose the porches at either end of the car and connect one to the next, the difficulty was engineering a connection between cars that would seal the vestibules together and still allow for the independent horizontal and vertical movement of each car as it rounded corners or navigated uneven tracks. This innovation has been called "the last

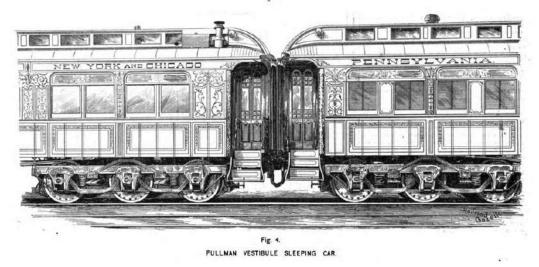


Figure 3.15. "The Pullman Vestibule Sleeping Car," Railroad Gazette, Nov. 23 1888, p. 767.

major innovation needed to assure the success ... of the concept of the land-based traveling hotel."300

James D. Porterfield, Dining by Rail: The History and the Recipes of America's Golden Age of Railroad Cuisine (New York: St. Martin's Griffin, 1998), 47; Mencken, The Railroad Passenger Car; an Illustrated History of the First Hundred Years, with Accounts by Contemporary Passengers, 32-35.

) The first part of this problem was finally and effectively solved by Henry H. Sessions, general manager, and his team at the Pullman Company in Chicago. Only a retrospective problem, it was like many technological solutions. Once introduced, people wondered how they had lived without it beforehand. As early as the 1830s, railroads had infrequently worked on ways of connecting cars that allowed for passage from one car to the next without being exposed to the elements and to flying cinders from the engine, but only US and UK postal sorting cars had made significant use of such innovation.³⁰¹ Sessions' solution was to invent a sort of spring-loaded door frame that projected beyond the end of each car that would mate with a similar frame on the next car, in order "to diminish the racking effect upon a carbody, due to its momentum when it is suddenly brought from a state of motion to a state of rest [and] to diminish the tendency to a swaying or oscillating movement ... developed whenever a train is running at high speed upon an ordinary railroad-track." 302 Sessions specifically claimed that the "vestibule feature is no [sic] part of the present invention" as his frames could as easily be attached to cars with vestibule, open platforms, or even cars without platforms. However, by more tightly coupling each car to the next and reducing the overall sway of the carriages, the spring-loaded frame, when easily sided with a flexible bellows material, incidentally created the continuous tunnel to keep the passengers out of the elements that had been desired all along.

The first cars made with Session's airlocks rolled out in April 1887, trialed on the Illinois Central, and then debuted on the New York & Chicago Limited service of the PRR. The amenity was an instant success, and for a brief time, a "vestibule train" was synonymous with a luxury service, throughout the cars filled with "buffet[s], writing desks, [a] library and cabinets," and with "carpets throughout of the richest Wilton make [a high-end English woven rug], wrought in attractive designs," leading to a "general effect of the decorations and furniture [that was] not only highly luxurious but pleasing to the most refined and fastidious taste." 303 The cars had electrical lighting and were introduced just as steam heating of cars for winter travel appeared (Pullman would later be a leader in air-conditioned cars in the 1930s; see Section 3.B.4), further increasing passenger comfort. By the summer of 1887, a "vestibule craze" had swept the industry and other lines were forced to convert their existing cars or order new ones from Pullman or his competitors (who worked hard to get around Sessions' patent). The B&O, for example, advertised to its customers that by August it promised to have all its best cars outfitted with vestibules within sixty days. 304

³⁰¹ "The First Vestibule Train in the World," *The Railroad Car Journal* 2, no. 1 (1891); "Vestibules, Platform Canopies and Hoods," *Railway Gazette*, Mar. 2 1894; ibid., 449–51.

³⁰² Henry Howard Sessions, Assignor to the Pullman's Palace Car Company, "Railroad-Car," patent no. 373,098, Nov. 15, 1887.

³⁰³ "The Pullman Vestibule Sleeping Car," *Railroad Gazette*, Nov. 23 1888, 767.

³⁰⁴ Farnsworth, *The Grand Western Railroad Game: The History of the Chicago, Rock Island, & Pacific Railroads*, 265–67.

Between 1888 and 1892 vestibule car building expanded across the entire railway industry. A series of patents were filed for vestibules, 305 numerous railroads added vestibule cars built by firms other than Pullman to their lines, to which Pullman initiated a series of patent infringement suits. 306 The first big test case was *Pullman v. Boston & Albany RR* in 1890, which held largely in Pullman's favor. 307 But in 1892, Sessions' original Pullman patent was voided by a challenge from T.A. Bissell at the Wagner Company (but formerly of the Pullman Company; see Section 5.B.4), and the railcar builders became free to add spring-loaded bellows vestibules and vestibule hardware as they saw fit. 308 The vestibule became standard on most cars by the early 1890s, just as steel frames came into service, and so it had to be adapted to their characteristic features. Sessions, still at Pullman, attacked the problem and by mid-1896 had two patents covering the situation. 309

³⁰⁵ See for example, George M. Pullman, "Vestibule-Connection for Railway-Cars," patent no. 403,137, May 14, 1889; but then also, from all over the country: Thomas E. Thompson, "Vestibule-Car," patent no. 394,313, Dec. 11, 1888; Newell P. Cowell "Vestibule-Car," patents no. 394,339, Dec. 1, 1888 and no. 394,340, Dec. 11, 1888; Arthur G. Leonard, "Vestibuled Railroad-Car," patent no. 414,228, Nov. 5, 1889; Thomas W. Moore, "Vestibule-Car," patent no. 417,496, Dec. 17, 1889; Jacob N. Barr, "Railway-Car," patents No. 421,375, Feb. 18, 1890 and no. 429,834, June 10,1890; John J. Kirkham, "Vestibule Car," patent no. 439,523, Oct. 28,1890; Thomas E. Thompson, "Vestibule-Car," patent no. 394,313, Dec. 11, 1888; Henry M. Jones, "Vestibule-Car," patent no. 448,186, Mar. 10, 1891; Charles S. Smith, "Vestibule Car," patent no. 451,227, Apr. 28, 1891; August Feine, Carl Koch, and August Miller, "Vestibule Hood for Cars," patent no. 454,996, June 30, 1891; James Kent Griffin, "Vestibule Car," patent no. 455,427, July 7, 1891; Arthur J. Barber, "Car-Vestibule and Step Therefore," patent no. 461,156, Oct. 13, 1891; Samuel W. Tanner, "Vestibule-Car," patent no. 461,927, Oct. 27, 1891; Arthur M. Kittredge and John Kirby, Jr., "Vestibule Connection for Cars," patent no. 474,796, May 10, 1892; James F. McElroy, "Vestibule for Cars," patent no. 474,966, May 17, 1892; Edward L. Perry, "Vestibule for Cars," patent no. 455,427, Aug. 15, 1893, and so on. See also "The First Vestibule Train in the World," 19.

³⁰⁶ E.g., "The Vestibule Cars. The Pullman Company Suing the New-York Central," *New York Times*, Dec. 19 1887.

³⁰⁷ E.g., "Pullman's Palace Car Company V. Boston and Albany Railroad Company Et Al.," *Decisions of the Commissioner of Patents and of the United States Courts in Patent and Trade-mark and Copyright Cases* (1890). And also see "The Legal Controversy over the Vestibule Patents," *The Railroad Car Journal* 2, no. 3 (1891); "The Legal Controversy over the Vestibule Patents. Ii.," *The Railroad Car Journal* 2, no. 4 (1892).

³⁰⁸ "The Vestibule Patents," *The Railway and Corporation Law Journal* 8 (1890).

³⁰⁹ Patents no. 562,343. "Railway-Car" (June 18, 1896) and 575,994, "Metallic Platform and Buffer for Railway-Cars" (Jan. 26, 1897). Farnsworth, *The Grand Western Railroad Game: The History of the Chicago, Rock Island, & Pacific Railroads*, 297.

3.B.3 Heavyweights: Steel Frames

The desire for an all-metal car was seen as far back as the 1840s, and at various times, inventors experimented with tin sheathing, an overhead truss from which the passenger compartments were suspended, or custom-built ornate wrought iron carriages. In the 1850s, two notable patents appeared which proposed an iron frame with sheet iron panels to create a fully iron car (shades of the race towards naval ironclads to come), and a number of railroads apparently built them, but the idea never caught on.³¹⁰ For the next half century numerous other inventors kept trying various ideas for metal bodies. John Roebling of Brooklyn Bridge fame proposed one model and T.A. Bissell, who had worked for Pullman in the 1870s and early 1880s, developed a steel framing system for the platform of steel cars that used Z-beams rather than Pullman's I-beams.³¹¹ However, it was not until the end of the century that a truly viable steel body entered the market. The era of the steel frame then went through an overlapping era of steel frame with a wooden skin and then fully steel-bodied constriction before streamlining and lightweight metal bodies took over after 1930.³¹²

Warren is also noted for having invented the modern swiveling office chair with a central spring ("deemed immoral because it was too comfortable"[!]; see Diane Mary Shewchuk, "Thomas E. Warren, the American Chair Company and the Centripetal Spring Chair" (Fashion Institute of Technology, 1993).) and two other patents for railway car and seat design. La Mothe also patented passenger car seats (nos. 1794, July 14, 1857 and 138,899, May 13, 1873), "Improved metallic framing for ships and other navigable vessels" (no. 37,236, Dec. 23, 1862), an "Improved mode of lubricating car-axles" (no.43,033, June 7, 1864), and two for metallic car platforms (nos. 170,480, Nov. 30, 1875 and 185,446, Dec.19, 1876). Then in a later flurry of patenting: a metallic bedstead and lounge (no. 264,7l1, Sept.19,1882); two for "Improvements in metallic cars" (105,699, July 26, 1870 and 198,631, Dec. 25, 1877) and a second "Metallic frame for railway cars" (no. 368,343, Aug. 16, 1887); a "Metallic platform for railway-cars" (no. 390,026, Sept. 25, 1888); three for railway car trucks (nos. 402,167 – 402,169, all on Apr. 30,1889) and one for a railway car spring (no. 385,061, June 26, 1888); and three patents for iron building construction ("Iron building frame," no. 11,809, Oct. 17, 1854; "Construction of buildings," no. 71, 185, Nov. 19, 1867; and "metallic building," no. 43.364, July 1, 1890). He also patented a fountain pen (no. 47,432, Apr. 25, 1865).

Thomas E. Warren, "Improvement in iron car-bodies," patent no.10,142, Oct. 18, 1853 and Bernard J. LaMothe, "Improvement in railroad-cars", no. 10,721, Apr. 4, 1854. Mencken, *The Railroad Passenger Car; an Illustrated History of the First Hundred Years, with Accounts by Contemporary Passengers*, 36-41.

³¹¹ Farnsworth, The Grand Western Railroad Game: The History of the Chicago, Rock Island, & Pacific Railroads, 297.

³¹² White, *The American Railroad Passenger Car Part 1*, 116-57.

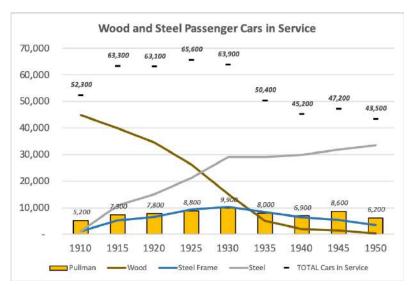


Figure 3.16. Wood and Steel Passenger Cars in Service, 1910–1950. Source: John White, American Passenger Car (1988), table 2.1.

By 1900, over eighty railroads were using steel-platformed cars. This was partly due to the longstanding desire for safer, more solid cars, but it was also the new availability of ductile steels to form ribs, coupled with the availability of riveting and later welding techniques that made steel cars viable both economically and in terms of labor. The transition ultimately happened quite quickly. In 1890 virtually all cars were still wood and then steel platforms with wooden bodies came in very rapidly (Figure 3.16). The first all-steel sleepers were manufactured in 1907 and by 1910 most railroads were already rapidly phasing out their wooden-bodied cars (either all-wood or steel platforms). In 1915 about 75% of new rolling stock was steel-framed with wooden panel interior and not a single wooden-bodied car was made in America. At the same time one-third of all Pullman cars were already all steel. 313

Starting in about 1907, Pullman began developing a steel frame for its cars to make them stronger and, counterintuitively, proportionally lighter even while the cars grew in size. Pullman entered the steel era by building a new, all-metal fabrication shop by expanding the south wing of the original buildings and by 1910 was turning out dozens of metal cars per year. By 1930, 80% of Pullman cars were steel and five years later they all were (strictly speaking, 0.8% were steel underbody and the new aluminum skin bodies, but regardless, wood was gone). This was also when standardization of the car frames—whether parlor, sleeper, baggage or specialty—took over and henceforth all character of a given car was in the

104

³¹³ Ibid., table 2.1; George Gibbs, "Origins of the Steel Passenger Car," *Railroad History*, no. 138 (1978); Farnsworth, *The Grand Western Railroad Game: The History of the Chicago, Rock Island, & Pacific Railroads*, 297; Graham Romeyn Taylor, *Satellite Cities: A Study of Industrial Suburbs* (New York: D. Appleton, 1915), 43. Taylor notes that only 15% were all steel and it would have been more "but for the difficulty experienced in heating them while in service."

internal divisions of the car and in its windows, doors, and paint scheme.³¹⁴ This growth ushered in the age of the giant railroads, with locomotives over 500 tons and trains that could be miles long (though that was admittedly rare).³¹⁵ Between the *Jamestown* in 1907 and the *Dreamland* in 1958 (built by Budd), Pullman built and operated thousands of heavyweights in all sorts of configurations.³¹⁶ Although this was the era of the heavyweight cars (as compared to the welded steel and aluminum cars that were to come), Pullman engineers were quite good at being efficient and managed to bring the weight of one of these cars down by 15% to only sixty-eight tons per car.

Steel platform cars and all-steel cars were stronger and proportionally lighter than wooden cars. The former meant that the life of a car was considerably extended and the safety of passengers was increased, especially when the wooden bodies that became so many flying shards of matchsticks in severe collisions were replaced with steel skins. The latter meant that the cost to haul railcars decreased (fuel costs are proportional to total weight hauled) and that more load, whether a longer passenger train or a heavier total freight load, could be hauled by the same locomotives. Consequently, trains became longer and faster, getting more people to their destination, more safely, and sooner.

But the changeover had some profound impacts on the production side as well. Not only was the car manufacturer now far more dependent upon the steel mill and steel trusts than on the sawmill, as one critic put it in 1915, "The advent of the steel car threw wood-carving, cabinetmaking and many other skilled crafts on the scrapheap and substituted metal work demanding distinctly shorter training." That, combined with powered labor-saving machinery meant that between 1885 and 1915, the proportion of skilled workers at Pullman dropped by a third (from roughly 75% to 50%) and unskilled and semi-skilled workers increased by a factor of two (from 25% unskilled to about 25% each for unskilled and semi-skilled), while production increased.

Although the twentieth century brought widespread mass production techniques, including the moving assembly line forever identified with Henry Ford, steel passenger car production remained a custom station process, albeit at a large scale. Because every railroad wanted a distinctive set of cars on its line, the production process had to retain elements of nineteenth-century manufacture, including customization where standardization might have made sense.

Arrival of the steel frame prompted a considerable shift in the skill set required at the Pullman shops. Wooden frames were the domain of joiners and cabinetmakers, while steel cars demanded riveters. It was thought by the company officials that the skilled tradesmen would simply shift their work to the

³¹⁴ Theobald Field & Pullman, [Etc.].

 $^{^{315}}$ In the early 1940s, the "Big Boy" steam locomotives of the Union Pacific could tow 4,000 tons up a 4.6% grade or a 650-car, 27,000-ton freight train nearly (33,000 feet = 6% miles) long.

³¹⁶ For an attempt to catalogue "every Pullman-owned or operated heavyweight and lightweight passenger car throughout its service life, [to] enable the railroad modeler and historian to know what any car looked like and how it was equipped, from delivery until it left Pullman control," see *The Pullman Project* at http://www.pullmanproject.com.

³¹⁷ Taylor, Satellite Cities: A Study of Industrial Suburbs, 42-43.

new material (and in fact, they claimed so), but, like many shifts of technology within an industry, the older craftsmen left for not wanting to work in the new material and were replaced by new tradesmen who could or would work in it. As it turns out, there was also an ethnic (or as they saw it, racial) component to the shift. Many of the accomplished joiners were Dutch and had considerable roots in Roseland, the older village just west of Pullman.³¹⁸ When the steel riveting jobs began going to Slavs (it is not clear if they were new immigrants or had been in Chicago for some time), as many as 200 of the Dutch left Pullman's employ. Claiming that the older employees could not "stand the racket," they ceded their jobs to Slavs (who "don't seem to have any nerves" that the noise would jangle), and besides, "no white man would now want to work in some departments of the shops." The policies of Pullman towards ethnicities in the factory and town as well as changing criteria by which new immigrants became white could indeed be studied in microcosm within the Pullman shops.³²⁰

3.B.4 Interlude: Air Conditioning

One of the great concerns in rail travel is the comfort of passengers. Heating had been included in passenger cars from as early as the 1850s. Initially each car had a potbellied stove, but early on systems were developed where air was drawn in by the movement of the cars, passed across a coal- or wood-fired heater in a service chamber at the end of each car and then distributed through ceiling ducts. Radiators utilizing steam from the locomotive appeared in the 1880s. Yestibules helped to solve this in one way by connecting one car to the next so that passengers did not have to go outside in freezing temperatures or rain or experience the air blast when moving between cars. But the vestibule did not solve the problem of overheating cars in the summer. While one could always open the window to a ready breeze, the problem was that in the era before the diesel-electric locomotive, it also opened the compartment to coal smoke and cinders. Railroads partially tried to alleviate this bother by coupling baggage and service cars immediately behind the locomotive, thus placing passenger cars near the rear where smoke was more diffused. But the problem still persisted.

Modern methods of what we now call air conditioning had been developed in 1902 by Willis Carrier in Buffalo, but for the next quarter century, the cooling plants were far too cumbersome and expensive to install aboard a train. Public spaces and especially theaters had begun to install them by the 1920s and the public got a taste for perfect 70 degree comfort year-round. In 1929, Pullman installed an experimental air-conditioning system using ice as the coolant in its twelve-cabin sleeper *McNair*, though the onset of the Depression slowed the construction and rehab of cars with air conditioning. Still, air conditioning became a major area of investigation by numerous rail lines in the 1930s, and in that period Pullman developed the Pullman Mechanical (PM) System that used a brine tank to chill air passing over it. Freon also became commercially available in the early 1930s and this allowed air-conditioning machinery to become considerably smaller and more efficient. It may seem strange today, but the

³¹⁸ Marie K. Rowlands, *Down an Indian Trail in 1849: The Story of Roseland* (Palos Heights, IL: Dutch Heritage Center, Trinity Christian College, 1987).

³¹⁹ Taylor, Satellite Cities: A Study of Industrial Suburbs, 44.

³²⁰ Brent Staples, "Opinion: How Italians Became 'White'," New York Times, Oct. 12 2019.

³²¹ Tayler, Illustrated History of North American Railroads: From 1830 to the Present Day, 59.

public was actually not immediately sold on air conditioning in trains because it necessitated cars with windows fixed shut. Fresh air was seen as a cure for all ills, and to be bottled up in a hermetically sealed steel tube was less than palatable to many people. In addition, air conditioning failures were not uncommon, and the sealed metal tubes could quickly become very hot. Even this early moderate-distance airplane flights were also starting negatively impact train business and the new industry missed no opportunity to note that air travel was both faster and cooler than an un-air-conditioned train. On trains, the promise of comfort quickly surpassed any qualms, and by May 1932, the New York to Chicago Capitol Limited advertised itself as the first all-air-conditioned, all-Pullman train.

Throughout the 1930s, various railroads are credited with developments in air conditioning, though in many cases it was the car builders who both developed and perfected, not to mention manufactured and tested, these systems. Railways, still trading on the idea of their services to businessmen as *hotels de luxe*, capitalized on the idea of climate control to promote train travel. In most cases, the railroads first air-conditioned the dining cars, and then worked on solutions to the parlor and then sleeping cars. The Aitchison, Topeka & Santa Fe, for example, introduced its air-conditioned dining car in February 1930 and marketed it to businessmen who could make the trek across the Mojave Desert at a cool 68 degrees (and also have their cigar smoke drawn out "as if by magic"). In cities, air conditioning was sold to the masses in movie theaters, but Pullman targeted "the [business]man who was in a position to buy it for the masses." By the later 1930s it was rare to find any long-distance train that was not mostly, if not entirely, climate controlled. This was partially accomplished by reorienting its large, skilled workforce that had been heavily idled by the reduction of orders during the Depression into retrofitting and rebuilding older cars with air-conditioning units. These heavyweights had originally been built with various types of heating units, so it was often a matter of custom design and fitting the new systems to each old car.

By 1950, Pullman had developed numerous air-conditioning systems which were in service in 5,500 cars on over six dozen rail lines. These included diesel-electric, electro-mechanical, "ice actuated", plain mechanical and brine-activated mechanical, and steam ejector systems, as well as a mechanical system by Frigidaire, a Waukesha propane gas system, and yet another by the York corporation.³²⁴

³²² A similar comparison that highlights the class aspect of this development is that in 1930, a newspaper article noted that "A Pullman or a day coach in mid-summer may ... be cooler than an outside cabin on an ocean liner" ("Railroad Trains Make Own Climate," *St. Joseph Gazette*, June 15 1930.).

³²³ Marsha Ackermann, *Cool Comfort: America's Romance with Air-Conditioning* (Smithsonian Books, 2010), 57-61.

J.J. Nolan and The Pullman Company, "List of Standard and Tourist Cars," in *Passenger Traffic Dept.* (Chicago1950); "Air Conditioning . . . A Vital Part of Our Service," *The Pullman News*, Apr. 1953. See Pullman Richmond Shops, "Richmond Pullman: Air Conditioning Program," http://www.pullmanshops.com/1934_AC.htm. and Thomas C. Madden, "The Pullman Project: Air Conditioning Topics," http://www.pullmanproject.com/AC.htm. for a number of promised vignettes on AC developments on trains. Ammonia systems, used in building air-conditioning, turned out to be too dangerous for passenger trains.

3.B.5 Lightweights: Metal Skins and Stainless Steel

The last evolution of passenger railcars in the Pullman era came when designers realized that the skin of the car could serve as an integral part of the structure rather than merely being applied to the surface. While even tongue-and-groove paneling on a wooden frame stiffened the overall cars, throughout the wooden and steel-frame eras it was assumed that the frame itself should provide the majority of the strength of the car and the exterior skin and interior panels were merely hung on the frame. An initial step was simply corrugating the metal panels on the steel frame to stiffen the car, but eventually designers realized that the walls of the carriage could be made integral as the frame, somewhat like corrugated cardboard boxes, resulting in greater strength with less material and thus less weight.

The manufacturing process for a single car was, by the 1940s, an exceedingly complex job. It was calculated that an average twelve-car train required 900 separate drawings for parts. A complete itemized description of everything for that train would take something like 675,000 words. Each side of a car was formed of fifteen separate pieces with hundreds of corrugated stiffeners welded to them. Pullman-Standard developed a 45-ton spot welder operated by a "magic eye" that could make 1,400 welds per minute. A total of twenty-eight stainless steel sheets were formed over a frame as the traveling bridge made 8,000 spot welds while simultaneously seaming sheets together to form a continuous 85-foot roof for each car. Once these and the ends of the car had been prefabricated, the shop would "lay down the car":

A mammoth crane picks up the completed body structure, swinging it over the tops of other cars being assembled, and sets it on temporary wheels for movement about the 135-acre plant to various operations locations. Joiners, trimmers, electricians, painters, and other skilled craftsmen swarm over the car, converting it finally into a completed passenger carrying unit, capable of carrying passengers at Century speed in the utmost comfort and luxury. 325

The production at that process mixed the large-scale industrial use of jigs and fixtures, along with mammoth machinery to fabricate parts, but still merged it with hand craftsmanship to make "decorative masterpieces."

Despite the scale and complexity of each car, as well as the great number of cars turned out each year by Pullman, each car effectively remained a custom job. Each railroad wanted its own layout and detailing, and even if the dozen or so cars of a branded train line looked the same from the outside, each one had a different function, interior layout, and amenities.

Pullman also manufactured its light weight trains using a great deal of aluminum. Although some of the earliest production use of aluminum was too lighten the weight of trains (J.P. Morgan had introduced lightweight passenger cars on the New Haven, New York, & Hartford Railroad that used aluminum seats as early as 1894) aluminum only became a viable structural material in the early twentieth century. Henry Ford had developed his iconic 4-AT "Tin goose" trimotor, an all-metal plane, in 1925, but it was only with the development of aluminum alloy rolled sheets in the 1920s and especially during World War II (tied to aircraft skin production), that the material became a widely available, viable train-

108

³²⁵ S. Kip Farrington, *Railroads of Today* (New York: Coward-McCann, 1949), 32-33.

construction material. In something of a return to old heavyweight construction methods, the car frames were formed from riveted girders, but now made of aluminum alloys. Inside the car, Pullman made use of aluminum in sheets for the walls, frames for the windows, and vestibule doors. They also used new modern materials like Prestwood (a forerunner of particle board) and Plymetal (metal-faced plywood) for internal doors and tables, resorting to stainless steel only where there was a likelihood of denting or water splashing. Even with the underframe of each car still being made of high-strength steel, and cast steel trucks, the aluminum superstructure and skin saved about two and a half tons of weight per car. 326

A side note on streamlining

The most identifiable evolution of trains to the non-specialist is the arrival of streamlining in the 1930s, which added an aerodynamic skin of metal to existing chassis. That change, however, encouraged Pullman and other car manufacturers to rethink how they built the cars themselves and to integrate the skins as the structural member of the car itself. Although the resistance of the wind as an impediment to train speed and fuel efficiency was long understood (the first patent to this effect had been taken out in the 1860s), 327 it was not until the 1930s that railroads and car builders started seriously adapting the shape of their cars to minimize drag.

The world's first streamliner was the Union Pacific's M-10000, built by Pullman in Chicago and delivered to the road in February 1934. Although only a 204-foot long, 3-unit train, the cars included a 60-seat coach and 56-seat coach buffet with the galley buffet tucked in the bulbous end of the rear car, all drawn by a noteworthy 600 horsepower distillate-engine locomotive (also a great innovation). The cars shared wheel trucks at their junctions that were not interchangeable with other rolling stock, so the streamline trains were much more single, semi-permanent units than an amalgamation of components. This feature later receded so that cars could more easily be added or removed from a trainset. These lightweight and fast trains (110 miles per hour on the straightway and averaging over 60 miles per hour with stops) were constructed using a tubular aluminum space frame with Duralumin skin. The M-10000 was also the first train with a notable paint scheme, in this case "leaf brown" and "Armour yellow" with the latter for safety because with higher speed trains, grade-crossing collisions were becoming alarmingly more common. The M-10000 had evolved from William Bushnell Stout's *Railplane* built by Pullman-Standard in 1932 and had had its shape refined in a wind tunnel at the University of Michigan, giving it low drag but a slightly awkward (from the point of view of interior design) 'fish-belly' cross

³²⁶ Ibid., 144-45.

S.R. Cathrop took out a patent in 1865 that regarded "the whole train as an aerial ship" and modeled "its whole surface in accordance with the principles so successfully applied to ship building" (actually more like submarine-building, although that had itself barely been invented (e.g., the CSS Hunley during the Civil War), as Cathrop noted that "the railway-train is wholly immersed in the fluid through which it is passing"). He also realized that minimizing the air running under the train by means of skirts and air dams would both reduce drag and increased down-force on the rails, thus increasing traction. "Improvement in Construction of Railway Train and Cars," U.S. patent no. 49,227, Aug. 8, 1865; Brian Solomon, Streamliners: Locomotives and Trains in the Age of Speed and Style (Minneapolis, MN: Voyageur Press, 2015), 13-14.

section, wider in the waist and tapering to the roof and with a lower profile by eighteen to twenty-four inches than contemporaneous trains.³²⁸

By the mid-1930s, car builders like Pullman were working with notable industrial designers like Raymond Lowey and Herbert Dreyfuss to create cars with modern, aesthetic features. The Pennsylvania Railroad (PRR) had hired Lowey to "streamstyle" its locomotives in 1934 and their Pullman-built *Broadway Limited* trains (identical to and coordinated with the New York Central's new cars for the 20th Century Limited in order to standardize production in the shops) would follow that style. In this case, Pullman-Standard retained ownership of the combined production of 114 cars and leased them to the PRR and NYC for operation. 329

3.C Comparative Car Building Companies

It is worth emphasizing again that George Pullman neither invented nor initially revolutionized anything in sleeping car design, except for making it extremely opulent. That said, by the turn of the twentieth century the company effectively owned the American long-distance train market, particularly for sleepers. In order to evaluate the Pullman Palace Car Company (PPCC), Pullman Incorporated, and Pullman-Standard, they must be measured against their competitors in each period. In short, while PPCC was not the first in the game in terms of car builders, Pullman Inc. came to dominate the field by the end of the nineteenth century, and then started to face competition even at its peak just before the Great Depression. Although that hammered all railway car builders and Pullman-Standard was the industry leader when formed in 1934, , it was others, namely Budd and ACF that emerged more successfully after World War II.

Histories of specific car building companies have generally not been a priority for railway historians, who prefer to focus their attention on the rail lines and locomotives themselves. In fact, as we are learning in compiling our list of surviving Pullman cars (Appendix B), it turns out that museums that hold cars are often not even clear on which maker built a given car in their collections. The preamble to the Pullman story in terms of wooden car building has already been amply told by John White. Briefly, the most salient competition history is that in 1856, two years before Pullman began doing anything with railroads, the R.T. Woodruff Co. was formed and began doing just that: building sleeper cars, both opulent and functional. While Pullman was in Colorado, the Central Transportation Co. was formed by a merger of Woodruff and E.C. Knight in 1862. They controlled the Eastern routes and most sleeping-car patents, introduced Silver Palace Cars in 1866 and became the largest sleeping-car company in the country. There were other car builders like Wagner in Buffalo, NY and Jackson & Sharpe in Wilmington,

³²⁸ Johnston, Welsh, and Schafer, *The Art of the Streamliner*, 11-15; Solomon, *Streamliners: Locomotives and Trains in the Age of Speed and Style*, 32-37; Harold E. Ranks and W.W. Kratville, *The Union Pacific Streamliners* (USA: Kratville Publications, 1974). Stout had previously worked for Ford and designed the Trimotor.

³²⁹ Johnston, Welsh, and Schafer, *The Art of the Streamliner*, 43-45.

³³⁰ White, *The American Railroad Passenger Car Part 1*, Chapter 1. There is also a very good and growing selection of car company histories by the Mid-Continent Railway Museum, online at https://www.midcontinent.org/rollingstock/builders/.

DE that were important for late nineteenth-century American car building, although they were both, in the end, bought out by Pullman and became just one of their shops across the country.

3.C.1 Wagner Palace Car Co. (WPC Co.)

Wagner was for many years a major competitor to Pullman. Although the company by this same name dates to 1886, it has its origins in the rapid development of sleeping cars right after the Civil War with the 1866 incorporation of the New York Central Sleeping Car Co., formed by Cornelius Vanderbilt and Webster Wagner (1817-1882). As Pullman entered the market a considerable rivalry with Vanderbilt developed, with Wagner obviously providing cars to his lines and Pullman to his competitors. Despite an initial agreement to use Pullman patent berths on Wagner cars in the early 1870s, as contracts with rail lines were made and expired, tensions developed. Although there does not seem to have been the concept of exclusive contracts of car maker with car lines, in some cases it worked out that way, partly because Vanderbilt demanded complete control over his contractors. Vanderbilt's operation of the Chicago & Northwestern is a case in point: he made an alliance with WPC Co. specifically to try to thwart Pullman's expansion in the 1890s. Pullman responded with patent infringement lawsuits that dragged on for years (and which Pullman ultimately lost). Wagner had been elected to the New York State House in 1872, promoting his and Vanderbilt's interests in that state, but was killed in a rear-end collision in one of his own drawing room cars in 1882. When Vanderbilt died seven years later, WPC Co. sold out to Pullman and the Wagner shops became Pullman's Buffalo shops. The competition did, however, spur car design innovations as each company tried to out-do the other. For example, the C&NW's The North Western Limited, The Short Line Limited, and the Vestibuled Limited (see Section 3.B.2 on the 'vestibule war') included bright solarium lounge cars that would prefigure the idea that eventually led to domeliners in the twentieth century.331

3.C.2 Mann Boudoir Car Company & Union Palace Car Company

After the Civil War, William D'Alton Mann (1839-1920; perhaps a civil engineer and who incidentally commanded the 7th Michigan Cavalry under Gen. Armstrong Custer at the Battle of Gettysburg) moved (as a carpetbagger) to Mobile, AL and developed a sleeping car that was an early rival to Pullman. In 1872 Mann received a patent for compartmentalizing passenger cars for long-haul cars to "promote the comfort and convenience of passengers." It proposed internal double walls to make whatever convenient partitions were desired, and which also featured descending bed platforms that retracted to the ceiling when not in use (the sash weights were ingeniously hidden in the partition walls) as well as the possibility of a toilet and wash basin in each compartment. ³³² Six years later, Mann followed with a patent that codified a number of interior design features that we would today associate with a European

John H. White, Jr., "Mann, William D. (1839-1920)," in Encyclopedia of North American Railroads, ed. William D. Middleton, George M. Smerk, and Roberta L. Diehl (Bloomington, IN: Indiana University Press, 2007); Beebe and Clegg, The Trains We Rode, 514; Mid-Continent Railway Museum, "Wagner Palace Car Company," Mid-Continent Railway Museum, https://www.midcontinent.org/rollingstock/builders/wagner.htm.

³³² William D. Mann, "Improvements in Compartment-Cars for Railways," U.S. patent no. 122,622, Jan. 9, 1872.

sleeper car: the side-aisle layout with transverse bench seats that converted into berths. This design, however, put separate men's and women's communal toilet and wash room at either end of the car. 333

Mann spent the 1870s in Europe (which is why European coaches still tend to have a side rather than central passage in each car) and when he returned to the US, chartered the Mann Boudoir Car Company (MBCC) in 1883. The company apparently operated at a loss for its first five years because Pullman already had a strong lock on the major transcontinental lines and so the MBCC was restricted to smaller, East Coast lines. Although the public liked the design, railroads were reluctant to purchase Mann cars rather than Pullman cars as they held fewer passengers in each car and thus generated less revenue. ³³⁴ In 1888 Job H. Jackson of Jackson & Sharp ³³⁵ chartered the Union Palace Car Co. (UPCC) and took control of both MBCC and the Woodruff Sleeping & Parlor Coach Company. Jackson was already in the management of that firm which had been started with the Woodruff brothers were forced out of their Central Transportation Co. by Pullman. In early 1889 they managed to secure contracts to operate a few more than three dozen cars on 5,000 miles (they claimed 15,000) of railroad in the eastern half of the country. This was so startling to and threatened Pullman that within two months he had bought the UPCC for \$2.5 million. ³³⁶

3.C.3 Budd

The Budd Co. arose just before World War I as an all-metal car builder. Edward G. Budd (1870-1946) had come up through the machine shops and then studied engineering in the 1880s. In the 1890s he worked for Pullman on an early all-metal design for the Pennsylvania Rail Road. By 1908 Budd pioneered pressed steel for railcar interiors and produced the first steel interiors for Pullman's first several thousand steel sleepers. Although he got his start in railroads, in 1912 he founded the company in Philadelphia that bore his full name (with a reincorporation as just Budd Co. in 1932) to build pressed metal steel frames for automobiles. He convinced the Dodge brothers to take the chance on an all-metal open touring car in 1916. Within eight years, all-metal *closed* bodies were dominant, with Budd in the forefront of their development. His success in automobiles was also paralleled in rail cars, with Budd at the forefront of all-metal construction methods with which Pullman had to catch up. They were, for example, early

³³³ William D. Mann, "Improvements in Sleeping-Cars," U.S. patent no. 198,991, Jan. 8, 1878.

³³⁴ In general, see Andy Logan, *The Man Who Robbed the Robber Barons*, 1st ed. (New York: W.W. Norton, 1965). More specifically, White, *The American Railroad Passenger Car Part* 1, 227-30.

³³⁵ A rival car builder out of Wilmington, DE founded in 1869, but which severely contracted during the panics of the 1870s, though it won a "Centennial Award" at the 1876 Exposition and a gold medal at the 1881 Cotton International Exposition in Atlanta for its luxury cars and "elegance in design and superior workmanship." Its business then boomed by 1880 to be able to claim in 1882 to be the largest passenger car manufacturer in the country.

See White, "Mann, William D. (1839-1920)."; John H. White, "Railroad Car Builders of the United States," *Railroad History*, no. 138 (1978). and *Builders of Wooden Railway Cars*: "Mann Boudoir Car Company,", "Jackson & Sharp," and "Woodruff—Central Transportation," at Mid-Continent Railway Museum, online at https://www.midcontinent.org/rollingstock/builders/mannboudoircar.htm, /jacksonsharp1.htm, /woodruff-central_transportation.htm, all accessed 10 June 2019.

leaders in the 1930s of stainless steel fabrication for train cars, with their most famous being the *Pioneer Zephyr* for the CB&Q RR in 1934, as well as the first all-stainless amphibious seaplane in 1930. Budd was also the developer of the shotwelding process for joining stainless steel panels without a seam. Budd's revolutionary developments in construction and styling of streamliners faced an uphill battle against railroads and Pullman Inc. in the 1930s. Incidentally, they were also the manufacturer of the original "Bazooka" in WWII. Budd Co. lasted until the late 1970s. 337

3.C.4 American Car & Foundry

Formed as the brainchild of William Keely Bixby (1857-1931) through the consolidation of thirteen existing car builders located in nine states from Missouri to New York, the American Car & Foundry Company came into being in New York City in 1899. It remained in business until 1954, when it became ACF Industries, which still continues today. The consolidated company started at the very end of the wooden-car era quite specifically to head off the challenge of the consolidation of Pullman and Wagner (the former having already absorbed Mann), and quickly developed strong capacity in steel cars. They had developed all-metal cars as early as 1910 and by early 1920s they had sixteen plants in nine states. The ACF is most important here not so much as evidence of the stiff competition that Pullman faced in the twentieth century from other steel car builders, but rather to show that by 1899 Pullman was such a juggernaut that all small car builders across the country had to band together or fail entirely. 338

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³³⁷ Michael E. Zega, "Budd Co. (Edward G. Budd Manufacturing Co.)," in *Encyclopedia of North American Railroads*, ed. William D. Middleton, George M. Smerk, and Roberta L. Diehl (Bloomington, IN: Indiana University Press, 2007); Budd Co., *Edward G. Budd (1870-1946): "Father of the Streamliners" and the Budd Company* (New York: Newcomen Society in North America, 1950). and from various online entries about Edward Budd and Budd Co. The major repository of Budd Co. documents is at the Hagley Museum and Library in Wilmington, DE: see *Budd Company historical file* (1914-1993, bulk 1929-1982), acc. 2411, 2 lin. ft.; *Budd Company legal documents* (1926-1965), acc. 2557, 1.25 lin. ft.; and *Budd Company photographs* (1912-1990s), acc. 1999.228, 10 lin. ft.

³³⁸ Mid-Continent Railway Museum, "American Car & Foundry Company," Mid-Continent Railway Museum, https://www.midcontinent.org/rollingstock/builders/amercar&foundry1.htm. The museum notes that the only company history is mainly just a photo album: Edward S. Kaminski, *American Car & Foundry Company 1899-1999* (Berkeley, CA: Signature Press, 1999).