

Paths to Highways

Routes of Exploration, Commerce, and Settlement

*An Exhibit in Conjunction with the
Eleventh Biennial Virginia Garrett Lectures
on the History of Cartography*

September 23, 2018 through February 2, 2019

Special Collections
The University of Texas at Arlington Libraries

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Map 61 (for description see page 38)



Map 66 (for description see page 40)

COVER MAP

(for description, see page 6)

Map of the United States and Mexico, color lithograph on paper, 74 x 90 cm.

New York: published by Johnson & Browning under the direction of Col. Carlos Butterfield, December 1859)

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An Exhibit to Accompany the Eleventh Biennial Virginia Garrett Lectures

Introduction and Acknowledgments

One of many important functions of maps can be the depiction of trails, routes, roads, and highways. Trails may appear bold or almost invisible on a map, depending upon whether the cartographer's aim for such depictions is primary, secondary, or even just an afterthought. The study of how trails either became a part of the landscape as superhighways or were entirely forgotten can begin with old maps. A focus on depictions of trails, routes, roads, and highways as a function of maps also aids in a greater understanding of the maps themselves, their creators, and the history of the times that surrounded them. But one should always keep in mind that maps are often only a small fraction of the tools needed to thoroughly study a trail, road, or highway. In addition to maps and history, personal field surveys and archaeology are often both key to a more comprehensive understanding.

Every two years since 1998 The University of Texas at Arlington Libraries have hosted the Virginia Garrett Lectures on the History of Cartography as well as an accompanying exhibit to promote the use of the University's marvelous cartographic collections by inviting scholars to speak on topics relating to the history of cartography. This year's lectures and exhibit theme, "Paths to Highways: Routes of Exploration, Commerce and Settlement," explore the importance of intercontinental trails and roads in the development of North America. Given our physical location and collecting focus this exhibit naturally gravitates to the "Southwestern Borderlands" with the exception of some cartographic examples depicting Canada, Europe, and the Mediterranean world.

The theme of trails on maps presents special challenges for curators and exhibit planners. Trails often appear on maps as tiny, minute single lines, dotted lines, hashed lines, and bold double lines at the most, making maximum visual impact difficult for the exhibit viewer. For greater visual impact I have added images of

travelers, either on foot or riding, or images of a variety of typical vehicles – all appearing in prints dating from the periods in question. The "best" maps for a particular trail may not be contemporary with the trail at all but may actually date from long after the trail was used. Modern archaeologists and surveyors with historical interests still create trail maps using tools such as metal detectors and GIS to map these more accurately than in the past. The details of trails matter a lot – not really helpful for a solitary curator hoping to provide an overview. As is the case with most maps and perhaps even more so in the case of trail maps, an individual may possess a lot of knowledge about a trail or may be absolutely ignorant of anything at all related. To complicate the challenges further, trail maps – like many maps – can run the entire aesthetic gamut from "ugly" to "attractive" (depending upon highly subjective and arbitrary preferences). Achieving some kind of visual unity for the exhibit therefore becomes quite challenging.

It may be of interest to note that the Virginia Garrett Lectures Planning Committee chose the theme of "trails" before we learned of the similar "trails" exhibit for the Witte Museum in San Antonio created by staff members of the Texas General Land Office in Austin. We believe our lectures and theme will compliment this exhibit with minimal overlap since we have deliberately chosen additional maps that do not deal with Texas but help put Texas in a national and international context. Even so, there should be sufficient local interest in trails such as "the Natchez Trace"; the National Road between Washington, D.C., and New Orleans; the Santa Fe Trail; the Oregon Trail; the California Trail; the Spanish Camino Real between Mexico City and Santa Fe, New Mexico; and the Mexican National Road between Veracruz and Mexico City since all of these have actually played important if ancillary roles in Texas history. The cartographic collections at UTA are by no means confined to Texas, although we rightly have a

local emphasis. Collecting for a diverse university such as UTA demands that we interpret cartographic history broadly in order to involve and engage as many of our faculty, students, and public visitors as possible.

In defining the exhibit's scope, I have given short attention to rivers, waterways, railroads, and even twentieth-century road maps. Each of these deserve their own separate exhibits given the hundreds of maps in our cartographic collections dealing with these types of trails. Limiting this exhibit to intercontinental land trails still yielded hundreds of maps, so I had to establish further limits. The quantity of trail, road, and highway maps in our collections becomes unmanageable by the second half of the nineteenth century and grows exponentially in the twentieth. Therefore, I limited the exhibit by concentrating upon older maps. Interestingly, nearly all maps of the nineteenth-century cattle trails date from the twentieth century and, while quite interesting, selecting them requires a level of detail and expertise that I do not currently possess.

Many people helped make this exhibit and guide possible. Brenda McClurkin, Head of Special Collections, first suggested the "trails" theme for this year's lectures and even came up with the title. Her support for the lectures, the exhibit, and the gallery guide has been unwavering despite countless interruptions that could have derailed us all. Cathy Spitzenberger graciously agreed to proof the gallery guide, and Sara Pezzoni retrieved scan files and formatted them for the gallery guide. Other staff members covered the front reference desk so I could write. UTA student worker Ashley Hood matted and framed items for the exhibit, Candy McCormic designed the banner and panels for the exhibit, UTA student Elizabeth MacGregor also helped read proofs, independent designer Carol Lehman once again helped transform the manuscript into the final product, which was printed by Ed and Cherrie Ferguson of Premiere Printing in Arlington. Despite this long chain of contributors, I take full responsibility for errors and omissions.

- Ben W. Huseman

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Trails, Routes, Roads, and Highways across America

Trails across the North American continent developed from animal migration paths and Native American hunting and migration trails. As Europeans immigrated to the continent and, as in many cases, brought African slaves with them, the use of these paths and trails often grew exponentially. At the same time these newer arrivals often created their own trails, paths, and roads, sometimes mapping them with considerable assistance from Native Americans. At one time the roads and trails of a large portion of North America played important roles in the history and development of three separate republics: the United States (officially recognized in 1783), Mexico (officially independent in 1821), and Texas (which gained its de facto independence in 1836). U.S. annexation of Texas in 1845, the addition to the U.S. of a large portion of formerly Mexican territory after 1848, and the California Gold Rush of 1849 accelerated the development of roads, trails, and the need for railroads not only to bind the rapidly growing United States but also to connect to its neighbors and the rest of the world. After the American Civil War, technological developments and an expanding population drove further growth in transportation routes, trails, roads, and highways. The maps and printed images of the times often recorded many of these paths, trails, routes, roads, and highways, whether existing or proposed, in differing levels of detail and accuracy.

1

Johnson & Browning

Map of the United States and Mexico

Color lithograph on paper, 81 x 97 cm. (New York: Johnson & Browning under the direction of Carlos Butterfield, 1859).

75/6 800629

(see front cover)

International overland mail routes, existing and proposed railroads, trails, and shipping routes throughout the United States, Mexico, Central America and the western Caribbean islands boldly appear on this map. Emphasizing the vast size of the United States and its important relationship to northern Latin America, shipping routes within and along the Gulf of Mexico served by the "United States and Mexican Mail Steamship Line" connect the southern U.S. ports of Mobile, New Orleans, and Galveston with the Yucatan and other parts of Mexico as well as Havana, Cuba. Proposed roads, trails, and railroads throughout the U.S. and particularly overland routes for mail, trade, and emigrants through south, west, and north Texas continue to destinations in Mexico, New Mexico, Arizona, and California. Reflecting the rapidly shifting forces at work in American politics of the time, the map records a number of odd boundaries for the new western territories in addition to the post-Gadsden Purchase boundary with Mexico.

This is the first edition of a map compiled by the New York mapmaking and publishing firm of Johnson & Browning under the direction of General Carlos Butterfield (d.1880), a U.S. and Mexican citizen with a colorful career. Born in upstate New York, he served with the Spanish Army Engineer Corps in Cuba in the early 1840s constructing railroads. After rising to the rank of captain, he went to Mexico in the mid-1840s and was commissioned a colonel, serving as an aide to General Antonio Lopez de Santa Anna and as engineer in chief and constructor general of the Mexican Navy. When released from service during the U.S. War with Mexico, U.S. occupation authorities appointed him alcalde of Veracruz. After the war he resumed his Mexican military career and served in several diplomatic and financial capacities as adviser and courier for U.S. officials in Mexico. Butterfield also became a partner associated with an import-export firm. He acquired Mexican citizenship in 1854 and supported the Ayutla rebellion against Santa Anna by supplying arms.

Butterfield apparently travelled frequently and was in and out of Washington, D.C., and New York. He became involved with the Confederacy and gave financial support to ex-southern President Jefferson Davis' legal defense in 1865. He authored several books on United States-Latin American relations and died of pneumonia in Washington, D.C. on February 14, 1880. Oddly, no evidence as yet has been found of a connection between him and John W. Butterfield (1801-1869), founder of the Butterfield Stage Lines and American Express, who was also from upstate New York.

David Shavit, *The United States in Latin America: A Historical Dictionary* (New York, Westport, Connecticut, and London: Greenwood Press, 1992), pp. 50-51; see Dorothy Sloan, Auction 23, no. 64, https://www.dsloan.com/Auctions/A23/item-butterfield-united_states-1861.html, accessed 8-10-2018.

2

C.P. after Theodore R. Davis

Overland Mail Coach Crossing the Rocky Mountains

Engraving with applied coloring on paper, 38 x 24.5 cm., from *Harper's Weekly* (New York), February 8, 1868, p. 88

Before superhighways and railroads crisscrossed the continents, overland travel was often quite hazardous, and particularly during bad weather. This engraving from the popular New York-based illustrated newspaper *Harper's Weekly* appeared the year before the completion of the first transcontinental railroad in the United States. The image was based upon an original sketch drawn in "Guy's Gulch" (Guy Gulch) on the eastern slope of the Rocky Mountains about thirty miles west of Denver, Colorado by veteran *Harper's* artist Theodore R. Davis (1840-1894). Davis was well-known to *Harper's* readers, having served as a correspondent and illustrator during the Civil War, covering many battles during which he was twice wounded. His western stagecoach tour for the newspaper involved travel on narrow, icy roads, trails and paths and was interrupted by Indian attacks.

See John and Deborah Powers, *Texas Painters, Sculptors & Graphic Artists: A Biographical Dictionary of Artists in Texas before 1942* (Austin, Texas: Woodmont Books, 2000), p 126.

Early Road Maps

Some of the earliest surviving maps show routes, trails, and roads. Whether drawn by ancient Egyptians or the ancient Chinese, the maps helped people find their way to places they wanted to go. Not surprisingly, for example, one of the great surviving early maps showing roads, routes, or itineraries originated with the Romans, known for their great road-building skills. The Peutinger map, a medieval manuscript named for its early sixteenth-century owner, is probably based upon an original Roman map from the fourth century CE. While primarily decorative and commemorative, it nevertheless shows a network of routes throughout the Roman world.

Map historians have categorized road maps into two general types: those that show a single route or itinerary and those that show a network of these roads, trails or routes. In more recent times maps of single routes were arranged in strips or sections. The first printed English road atlas, by John Ogilby, for example, shows strips of single roads or highways that connected the English capital with other important cities around the kingdom – together they demonstrate the power of the English monarchy to unite the surrounding territories.

Incidentally, during medieval times in England, main routes became known as “King’s Highways” and secondary ones as “byways.” The English usually constructed important roads by digging parallel ditches and filling in the middle area with the leftover dirt, thus the elevated roadbed, flanked by ditches, was known and spelled variously as “high way,” “hyway,” or “high-way.”

James R. Akerman and Robert W. Karrow, Jr. *Maps: Finding Our Place in the World* (Chicago and London: The University of Chicago Press, 2007), p. 19-22, 42- ; William Kaszynski, “A Brief History of Roads,” in Kaszynski, *The American Highway: The History and Culture of Roads in the United States* (Jefferson, North Carolina, and London: McFarland & Company, Inc., 2000), p. 11.

3 _____

Tabula Peutingeriana [Stylized Reproduction]

Chromolithograph on paper, 31 x 457 cm., from Konrad Miller, *Die Weltkarte des Castorius genannt die Peutingersche Tafel* (Ravensburg, Germany: O. Maier, 1887), atlas. 31 cm. GA304. C3 M5 atlas Map Rm

Exhibited here is a segment of a late nineteenth-century reproduction of one of the world’s oldest surviving and most important road maps, known as the *Tabula Peutingeriana*. The original parchment scroll map, located in the Austrian National Library in Vienna, is itself a medieval copy dating from the thirteenth century and is believed to be a copy of a possible Roman map dating from the fourth or fifth century A.D. (C.E.). The map shows a schematic representation of the *cursus publicus* or state-run road network throughout the Roman Empire. Although stretched along an east-west axis and not intended as an accurate geographic depiction, it nevertheless includes at least 555 cities, over 3,500 place names, and even notes distances between the principal towns and cities. Unsurprisingly, Rome is in the center. The gray-green color represents waters of the Mediterranean, Adriatic, and other seas, and the red lines represent roads. The famous Roman road system was essential to the Empire, serving multiple purposes including communication, trade, taxes, and military functions. It in turn was heavily influenced by the Persian system of royal mounted couriers.

The *Tabula Peutingeriana* was named for sixteenth-century Augsburg antiquarian Konrad Peutinger and his descendants who had possession of the map for over 200 years. The facsimile on display here – when fully unfolded – is actually approximately 15 feet in length, while the original in Vienna is just over 22 feet long!

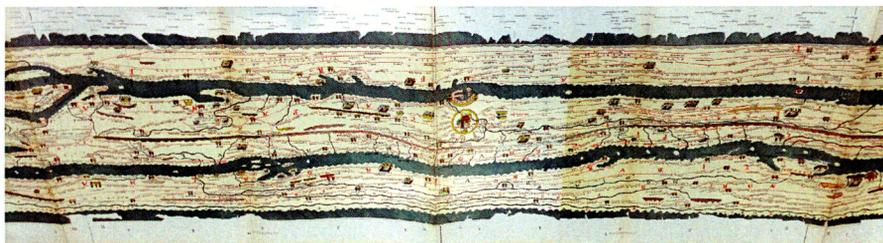
Richard J. A. Talbert, *Rome’s World: The Peutinger Map Reconsidered* (Cambridge, New York, Melbourne, Madrid, etc.: Cambridge University Press, 2010); Emily Abu, *The Medieval Peutinger Map: Imperial Roman Revival in a German Empire* (Cambridge University Press, 2014).

4 _____

John Ogilby

The Road from London to the City of Bristol

Engraving with applied color on paper, 34 x 47 cm. (sheet 38.5 x 47.5 cm., trimmed), from Ogilby, *Britannia, Volume the First: or, an Illustration of the Kingdom of England and Dominion of Wales: By a Geographical and Historical Description of the Principal Roads thereof...* (London: John Ogilby, 1675-1695). 125/13 001056



3

DETAIL

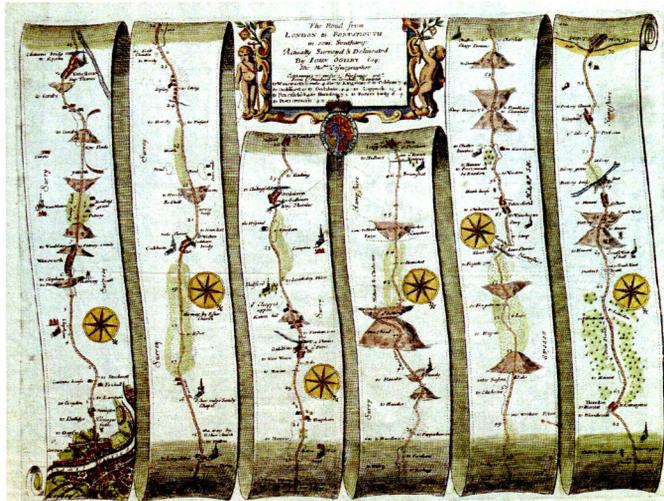
John Ogilby

The Road from London to Portsmouth in com. Southamp

Engraving with applied color on paper, 33 x 44 cm. (sheet 43 x 51 cm.), from Ogilby, *Britannia, Volume the First...* (London: John Ogilby, 1675-1695). 125/13 001059

On display are two original sheets from the first printed road atlas of England and Wales. With *Britannia*, the Scottish-born mapmaker, publisher, translator, entrepreneur and former dancing master and theatre owner John Ogilby (1600-1676) produced one hundred strip maps, adopting the standard English mile to calculate distances between topographical features on a scale of one inch to the mile. By employing a wooden “way-wiser” or pedometer for the initial surveys, Ogilby and his associates managed to ensure remarkable accuracy, although the atlas itself was too heavy and bulky to actually be of much use on the road. Ogilby had a close connection with his patron King Charles II. He composed songs and speeches for the king’s coronation in 1660 and in 1674 was named “His Majesty’s Cosmographer and Geographic Printer.” A 2008 British television series episode hypothesized that Ogilby’s road maps were full of symbolism and intended to facilitate King Charles II’s re-establishment of Catholicism throughout a centralized kingdom.

Laurence Worms and Ashley Baynton-Williams, *British Map Engravers: A Dictionary of Engravers, Lithographers and their Principal Employers to 1850* (London: Rare Book Society, 2011), pp. 498-500. Alan Aluna, “Ogilby’s Britannia Decoded,” accessed 9-9-2018, <https://www.youtube.com/watch?v=C23uLjoT14k>



John Rocque

Carte Generale des Postes de L'Europe dans laquelle on a tracé les Places où la Poste est établie (To the Right Honble George Mantague, Earl of Cardigan... This Map of the Post-Roads of Europe...)

Engraving with applied coloring on paper, mounted on canvas, 86.5 x 91.5 cm. (36 x 34 in.) London: Jean Rocque, 1758.

John Rocque’s map of European Post Roads depicts many of the important roads and highways of western Europe around the middle of the eighteenth century. Following upon the Roman system, post roads in Europe developed during the Early Modern Period into an efficient system or network. Post roads were generally important highways or royal roads, whereby post riders or mail coaches traveled between post houses established in the more important towns. The elaborate rococo cartouche of this map shows various methods of postal delivery: individual riders forming a sort of “pony express,” a double-horse drawn two-wheeled cart for bigger bundles of mail, and the horse-drawn post coach or carriage which not only carried mail but also passengers.



DETAIL

Up until 1775, important roads in France and elsewhere in Europe were generally constructed according to the old Roman methods with various layers of stones of varying sizes, fragments of brick and pottery, fixed with lime and clay mortar – all having a raised surface in the middle for drainage.

Surveyor, mapmaker, engraver, publisher, map and printseller John (Jean) Rocque (ca.1704-1762) was a Huguenot born in either France or Geneva who worked for most of his life in London from at least as early as 1728 with the exception of a few years spent in Dublin during the 1750s.

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Worms and Baynton-Williams, *British Map Engravers* (2011), pp. 559-563; William Kaszynski, “A Brief History of Roads,” in *The American Highway: The History and Culture of Roads in the United States* (Jefferson, North Carolina, and London: McFarland & Company, Inc., 2000), pp. 11, 14.

Printed Maps of Early Explorers' Routes

In most cases the early European explorers were ill-equipped to map the territories they traversed for the first time. Many could barely determine latitude, much less longitude – which was extremely difficult to record accurately before the ready availability of accurate and easily portable instruments such as time pieces. Even modest attempts required skill and training which many of the explorers did not possess. When fairly accurate mapping was possible, the Spanish, for example, did not print their maps but insisted for years on a system of hand-copied manuscript maps that could be carefully guarded to prevent theft by rivals and competitors. Consequently, many of the paths, routes, and trails followed or blazed in southern North America were not recorded on printed maps until many years later, if at all. The French, on the other hand, soon learned to loudly proclaim their “discoveries” in print since even inaccurate mapping and documentation helped establish claim to a territory by precedent and led to scientific advancements as further exploration helped refine the mapping of an area. Also, following coastlines and navigable waterways was the fastest and easiest method of travel at the time, so routes through the Great Lakes and important rivers such as the Ohio and Mississippi were mapped first.

See Mary Sponberg Pedley, *The Commerce of Cartography: Making and Marketing Maps in Eighteenth-Century France and England* (Chicago and London: University of Chicago Press, 2005); Ben W. Huseman, *Enlightenment Mapmakers and the Southwest Borderlands* (Arlington: University of Texas at Arlington Libraries, 2016), pp. 9-10, 14, 16, 23-24.

7

Henri Joutel

Carte Nouvelle de la Louisiane et de la Riviere de Missisipi, decouverte par feu Mr. de la Salle, annees 1681 et 1686, dans l'Amerique Septentrionale...

Engraving on paper, 36 x 39 cm., in Joutel, *Journal Historique du Dernier Voyage que feu M. de la Sale fit dans le Golfe du Mexique...* (Paris: chez Estienne Robinot, 1713), following p. xxxiv.

F1030.5 .J68 1713 SpCo

One of the first printed maps to show a trail in Texas, this map traces the route of the desperate French colonists under René Robert Cavalier, Sieur de La Salle in 1687 as they left Fort St. Louis on the Texas coast to locate a French post established earlier by La Salle in Illinois. The cartographer and author Henri Joutel (ca.1643-ca.1745) was one of La Salle's most loyal expedition members, serving as second in command and leading the loyal faction that continued on to Illinois and New France after disgruntled colonists killed La Salle in east Texas. The upper portion of the map, including the view of Niagara Falls, derived in part from the work of Missionary Father Louis Hennepin, historian of La Salle's first expedition.

For a brief account of Joutel see *Handbook of Texas Online*, Robert S. Weddle, “Joutel, Henri,” accessed September 08, 2018, <http://www.tshaonline.org/handbook/online/articles/fjo77>. Also see Ben W. Huseman, “Territories so Extensive and Fertile” *The Louisiana Purchase* (Dallas, Texas: DeGolyer Library, Southern Methodist University, 2004), p. 1, item 2.

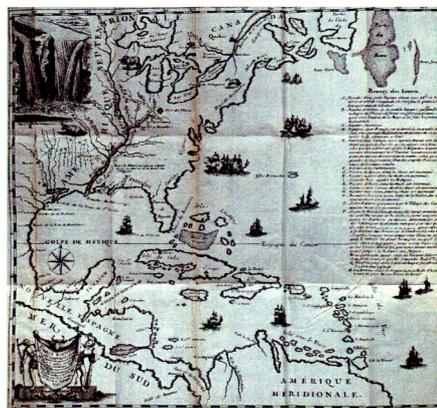
8

Guillaume Delisle (1675-1726) and Claude Delisle (1644-1720)
Carte de la Louisiane et du cours du Mississipi

Engraving with applied color on paper, 49.5 x 66 cm. on sheet 53 x 72 cm. (Paris: Delisle, 1718).

Bin 13/3 220001*

Cartographic historians and map collectors consider the Delisles' map of 1718 one of the most important maps of the eighteenth century. There are quite a number of reasons for this, not only because it was produced by Guillaume Delisle, the most important cartographer of the early eighteenth century and widely copied, but also in part



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because it was one of the first printed maps to attempt to show important exploration routes and trails in what became the southern United States. It was based upon meticulous research in primary sources, captured Spanish maps, and the latest information available sent to France by Father François Lemaire, a foreign missions chaplain at the new French post at Mobile.

A segmented double line winding throughout what became the southeastern U.S. begins with Spanish explorer Hernando De Soto's landing in Florida in 1539 and ends far to the west at the point of his death by fever in 1542 in what became southeastern Arkansas or northwestern Louisiana. Delisle also attempted to show the route of De Soto's successor, Luis de Moscoso Alvarado (1505-1551), from DeSoto's secret burial place in the Mississippi westward past "Cenis" (Hasinai or Caddoan) villages in 1542 into what became northwestern Louisiana and Texas before he back-tracked eastward to the Mississippi River.

Next in chronological order, Delisle depicted "Fort Francois" near Matagorda Bay (here "Baye S Louis ou S Bernard"), established by La Salle in 1685, connected by a double line north to where La Salle was murdered in 1687 continuing on north as "Route de Mr Cavalier in 1687" (Henri Joutel's route) to the junction of the Arkansas River

in the Mississippi. The route of the fourth Spanish expedition led by Alonso De León (ca.1639-1691), Governor of Coahuila, in 1689 in search of LaSalle's colony stretches from Coahuila south of the Rio Grande ("Rio del Norte") to LaSalle's French fort along the Texas coast. Farther east, Delisle shows the Spanish fort at Pensacola (constructed in 1698) and several sites just west along the coast established by the French under Pierre le Moyne d'Iberville beginning in 1699. A double line from Mobile Bay depicts the route of Henri de Tonti (Tonty, ca.1649-1704), an Italian soldier, explorer, and fur trader in French service, and his diplomatic expedition north to the Choctaws ("Chattas") and Chickasaws ("Chicachas") for Iberville in 1702.

More double lines depict the travels of the French trader Louis Juchereau de St. Denis (1674-1744) from Louisiana through Texas in 1713 along what became the "*Camino Real*" (Old San Antonio Road or OSR) to Presidio del Norte or San Juan Baptista ("S Juan Baptst") along the Rio Grande as well as St. Denis' return trip to Louisiana in 1716 by a more northerly route. As scholars have noted, it is perhaps best to think of the *Camino Real* sometimes as a network of trails. For example, there was a "Lower Presidio Road" (*camino pita*) and an "Upper Presidio Road" (*camino en medio*). Lastly, another double line depicts a "route" of Jean-Baptiste Le Moyne de Bienville (1680-1767) who played a major role in securing the French presence at such important sites as Fort Rosalie (Natchez), Natchitoches, New Orleans, and Mobile.

Jack Jackson, *Flags Along the Coast: Charting the Gulf of Mexico, 1519-1759: A Reappraisal* (Dallas: The Book Club of Texas, 1995), pp. 12, 13, *ad passim*; Jack Jackson, *Shooting the Sun: Cartographic Results of Military Activities in Texas, 1689-1829* (2 vols.; Dallas: The Book Club of Texas, 1998), pp. 39-41 *ad passim*; Huseman, *Enlightenment Mapmakers and the Southwest Borderlands* (2016), pp. 14-16; *Handbook of Texas Online*, "Old San Antonio Road," accessed August 11, 2018, <http://www.tshaonline.org/handbook/online/articles/exo04>.

9

Antonio de Alzate y Ramirez

Plano de la Nueva España: en que se señalan los viages que hizo el Capitan Hernan Cortes....

Engraving on paper, 32.5 x 42.5 cm., by Juan Antonio Navarro, from Francisco Antonio de Lorenzana, *Historia de Nueva-España* (México City: printed by Joseph Antonio de Hoyal, 1770). 18/7 89-678

Mexico City Archbishop Francisco Antonio de Lorenzana (1722-1804), scientist and scholar Antonio Alzate y Ramirez (1739-1799), and engraver Juan Antonio Navarro (1742-ca.1809) worked in Mexico City to produce this map for a history of New Spain by the Archbishop. Working with Alzate's 1768 map of New Spain and texts of Cortes' second, third, and fourth letters, along with Lorenzana's commentaries and research, they traced Cortes' route of conquest past the island of Cozumel, around the Yucatan peninsula, to the Rio Grijalva, to Veracruz, and on to the City of Mexico. The road from Veracruz to Mexico City, long used by the Indians before Cortes, apparently became the foundation for Mexico's National Road. Many subsequent English and French writers used Lorenzana's presentation of Cortes' letters as primary sources for their own histories.

See Huseman, *Enlightenment Mapmakers and the Southwest Borderlands* (2016), pp. 28-29 for a more thorough examination of sources on this map.

Bernard and Pierre Marie Francois, Vicomte de Pagès
after José Antonio Alzate y Ramirez

Carte d'une partie de l'Amérique Séptentrionale: qui contient partie de la Nle. Espagne, et de la Louisiane, pour servir aux voyages au tour du monde et vers les deux pôles faits par M. de Pagès; Bernard direxit

Engraving (hand colored) on paper, 31 x 41 cm., from Pierre de Pagès, *Voyages autour du monde* (2 vols.; Paris: Moutard, 1782).

Gift of Virginia Garrett

127/10 00563

Pierre Marie Francois, Vicomte de Pagès (1748-1793), was a French naval officer who crossed what is now Texas and Mexico on the first part of a trip around the world. He claimed his motives were scientific. After his return to France he recorded his memories of the trip in a book, *Voyages autour du monde* (1782). Engraver or publishing agent Bernard probably directed the compilation of the map for Pagès' book based upon the author's recollections and available maps of Mexico. These probably included maps by Nicolas Bellin and Rigobert Bonne and, undoubtedly, Spanish scholar Alzate y Ramirez's 1768 map of New Spain, published in Paris by the *Academie des Sciences*.

The map here shows the route of Pagès' travels between 1767 and 1768: Leaving Santo Domingo (prior to which he had sailed from Rochefort, France), he went to New Orleans and Natchitoches in Spanish L[ouisiana] by way of the Mississippi and Red Rivers. From there he crossed what is now Texas along the *Camino Real* (Old San Antonio Road) and entered into what is present Mexico at Laredo. The map places three missions – Concépcion, San José, and La Espada – along the San Antonio River and the fort or presidio of La Bahia and missions around it along the Guadalupe. From Laredo Pagès passed through Monterrey, Saltillo, Charcas, San Luis Potosí, San Felipe (Guanajuato), Mexico City, Cuernavaca, and Chilpancingo before heading westward on across the Pacific from Acapulco.

Handbook of Texas Online, Marilyn M. Sibley, "Pagès, Pierre Marie François de," accessed June 15, 2016, <http://www.tshaonline.org/handbook/online/articles/fpa09>; Marilyn McAdams Sibley, ed., "Across Texas in 1767: The Travels of Captain Pagès," *Southwestern Historical Quarterly* 70 (April 1967): 593-622; Huseman, *Enlightenment Mapmakers and the Southwest Borderlands* (2016), p. 21; *Connecting Texas: 300 Years of Trails, Rails and Roads: An Exhibit Guide* (Austin: Texas General Land Office, 2018), p. 12 (Entry by Brandice Nelson).



Early American Roads and Trails on Contemporary Maps

The early trails and roads in North America developed from animal migration paths and a network of Indian hunting, trade, and communication routes (whether, for example, Choctaw, Cherokee, Aztec, or Mayan). These often used water routes and included portages, or places where canoes or boats had to be carried overland. The early trails connected water sources, and followed the most level routes and lines of least resistance through mountain passes and shortcuts. In addition, the Spanish, French, and British colonists (including their officials and their armies) regularly drew upon Native American knowledge, precedents, and goodwill to survive and establish control over their territories.

At first the colonial authorities constructed roads to speed the delivery of the mail. Eventually a system of roads developed within each separate colony and connected the major cities of the colonies. For example, in New Spain the Spanish Royal Corps of Engineers, established in 1711, performed civil engineering tasks such as road building, bridge construction, and strengthening and enlarging fortifications around Mexico City and the larger cities in addition to mapping. Many of these roads were mapped by the German scientist, polymath, explorer, and traveler Alexander von Humboldt (1769-1859), who arrived there in 1803. He possessed field survey skills, the best available scientific instruments for his time, and the scholarly intellect to judge the reliability of eyewitness sources for parts of New Spain he could not visit and for roads that he did not personally travel. In the infant U.S. Republic, business-minded citizens with surveying and printing skills such as Henry Filson and Zadok Cramer often filled the need for road maps by publishing works of practical use.

11 _____

Cartographer Unknown

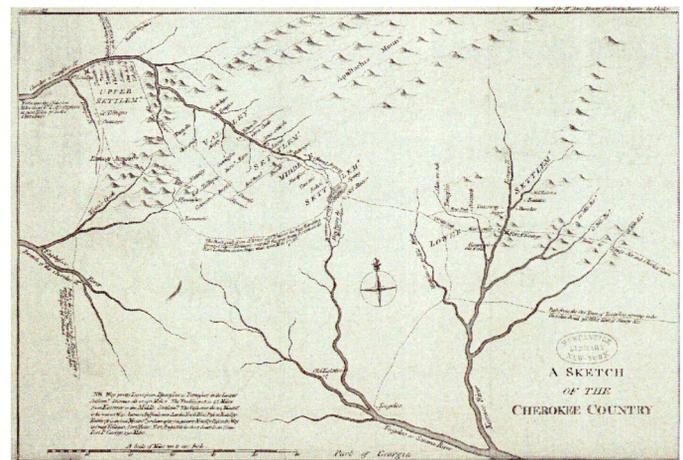
A Sketch of the Cherokee Country

Engraving on paper, 28 x 40.5 cm., by John Lodge, from Thomas Mante, *The History of the Late War in America* (London: 1772).
10 English miles = 1 inch. 20/2 900020

Cherokee paths, trails, settlements, and villages appear on this important early printed map of an area that today includes parts of southeastern Tennessee, northern Georgia, and western South Carolina. London engraver John Lodge (active 1755-1796) produced the map for a history of the Seven Years' War (1756-1763) in America, written by Thomas Mante (ca.1733-ca.1803), an English military officer who had access to original maps of the area. Before the war, in 1753, the British established Fort Prince George on the Keowee River among the Cherokee Lower Settlements to regulate the important trade with the tribe. At the beginning of the war most of the Cherokee allied with the British, particularly as the British constructed Fort Loudoun on the Tennessee River in 1756 to guard against the French and their Indian allies; notwithstanding, misunderstandings and hostilities broke out between the Cherokee and the British colonists from Virginia and the Carolinas, and by 1758 a second war, known as the Anglo-Cherokee War, was underway.

The map shows the principal Cherokee Road or Trading Path stretching east from the Cherokee Lower Settlements and Fort Prince George on the Keowee River at right across the Appalachians to the Upper Settlements (of the "Overhill" Cherokee) and Fort Loudo[u]n on the Tennesse [sic, Tennessee] River at upper left. Just east of the latter fort along the Tennessee River is the important Cherokee village of "Chotée" (Chota) located at the junction of the Cherokee Road, the "Road to Virginia," "Road to Chauanons Town [Shawnee Village] on the Ohio River," and, labeled at lower left, the "Path leading to the Coosaws & the Al[a]bama Fort, a good Level Way, travelling in 7

days from Telliquo by Indians." Toward the center, the map indicates an "Of[e]n Wet Path" and "Best Path" in the Lower Settlements, a "Bad Road" in the Middle Settlements along with the comment that "The Back path from Stecoe old Town is the best Marching Gound. Captn. Demere march'd this way from Keeowee to Fort Loudon in ten Days with 200 Men 1756." The latter is probably a reference to Captain Raymond Demeré (1702-1766), a French Huguenot officer in the British Army who had constructed Fort Loudoun, or his brother Paul Demeré, also a British Army Captain, who replaced his brother as commander of the fort in 1757. By March 1760 the Cherokee cut off supplies reaching Fort Loudoun, blocking the mountain passes, and laying siege. On August 9 Captain Paul Demeré surrendered and abandoned the fort and began the long march back to Fort Prince George with 180 men and their families consisting of 60 women and children. On the Tellico Plains near Great Tellico ("Gr. Telliquo" on the map at the upper left) approximately 700 Cherokees attacked, killing Demeré and two other officers, 23 soldiers, and three women.



They brought the rest as captives to nearby Cherokee villages where some were killed but most, including the Scottish-born militia Captain John Stuart (1718-1779), were ransomed to Virginia and South Carolina. Later, despite their adoption of many “white” ways, the Cherokee were eventually forced to move westward from these lands between 1836 and 1839.

Richard G. Stone, Jr., “Captain Paul Demere at Fort Loudoun, 1757-1760.” *The East Tennessee Historical Society Publications* 41 (1969): 17-32. Worms and Baynton-Williams, *British Map Engravers* (2011), pp. 410-411.

12

John Filson

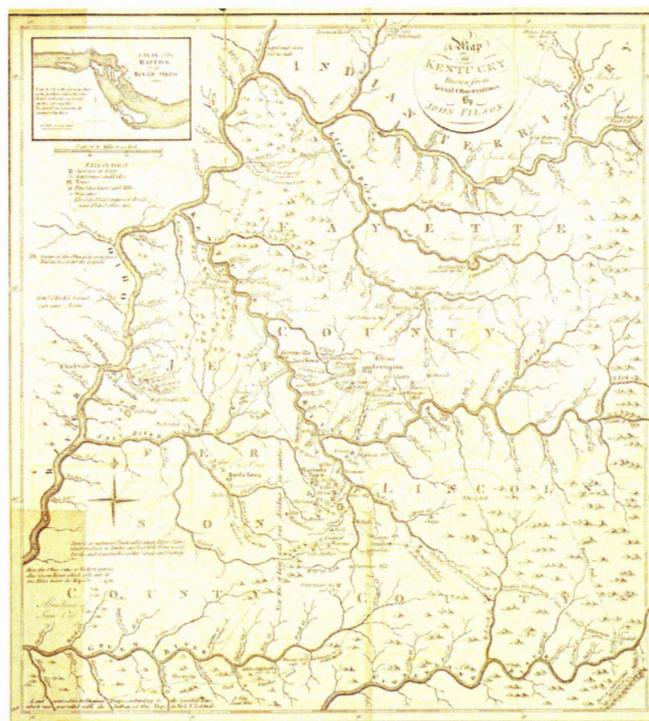
A Map of Kentucky

Engraving on paper, 50.5 x 45.5 cm. (London: John Stockdale, Novr. 23, 1793; first published in Wilmington, Delaware in 1784). 16/5 800167

This celebrated map of Kentucky, first published in 1784, featured old roads, paths and trails “some Clear’d, others not” that long predated European settlement in addition to rivers, creeks, towns, dwelling houses, mills, and wigwams. The “Warriors Path,” and others listed used by Native Americans often followed animal migration paths between “salt springs and licks” (noted throughout the map) where buffalo, deer, and other animals stopped to lick salt and other minerals beneficial to their diets. The “Warriors Path” stretched north from the Cherokee villages (off the map far to the south) and south of the Cumberland Gap and “Flatlick” at lower right up into Shawnee territory and to the “Upper Blue Licks” on the main fork of the Licking River, across the Ohio River, to the upper right where the map notes that the “Mingo Nation live here.” The “Great Wilderness Road,” as it was sometimes called, also stretching from the lower right, was the route taken by Daniel Boone and early Anglo pioneers from the eastern colonies through the Cumberland Gap from North Carolina and Virginia in 1775. During one month that year, Boone and a party of thirty ax men cleared the path through Kentucky for about 209 miles. The road splits with one branch heading more northerly to “Boonsburg” or Boonesboro and another heading further west toward “Harrods Town” or old Fort Harrod. The “Path to Cumberland Settlement” at the bottom of the map should not be confused with the later Cumberland Road, constructed from West Virginia to the Ohio River beginning in 1811.

“Bird’s War Road” along the Licking River near the top center of the map refers to the route used in 1780 by Captain Henry Bird and a mixed force of British Regulars and their Indian allies to attack the American settlements in Kentucky. They seized Riddle’s [sic, Ruddle’s] and Martin’s Stations before Kentucky Militia under General George Rogers Clark returned from their western campaigning by way of “Genl. Clark’s War Road” seen in the upper left, to the right of the inset “Plan of the Rapids in the River Ohio.” A few inches below the map’s title cartouche, located along the main branch of the Licking River, are the inscriptions “the Bluelicks a fine salt spring” where on August 19, 1782, “a bloody battle fought here” refers to the Battle of Bluelicks, one of the last battles of the Revolutionary War where British loyalists and their Indian allies defeated a force of Kentucky militia. Among the dead was Daniel Boone’s son Israel.

Cartographer John Filson (ca.1747-1788) was a Pennsylvania surveyor, schoolmaster, and land speculator. No conclusive record has been found of his military service. After the American Revolution ended in 1783 he acquired lands in Kentucky and moved to Lexington where he continued to teach and survey land claims and wrote *The*



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Discovery, Settlement, and Present State of Kentucky (Wilmington, Delaware, 1784) for which he first compiled this map. The map went through many editions, including the 1793 edition published by John Stockdale, a publisher in London’s Piccadilly area, who included it in Jedediah Morse’s *American Geography: or, a View of the Present Situation of the United States of America* (London, 1794). Filson also acquired part ownership of land on the future site of Cincinnati, Ohio, but mysteriously disappeared in 1788 while with a surveying expedition that was attacked by Shawnee.

Michael Edmonds and the Wisconsin Historical Society, “Filson, John,” *American Journeys*, accessed 9-8-2018, www.americanjourneys.org/aj-125/; Steve Preston, “Our Rich History; John Filson; first Kentucky historian, forgotten Cincinnati founder,” *Northern Kentucky Tribune*, June 18, 2018, <https://www.nkytribune.com/2018/06/our-rich-history-john-filson-first-kentucky-historian-forgotten-cincinnati-founder/>; William Kaskynski, *The American Highway*, p. 15.

13

Aaron Arrowsmith and Alexander Mackenzie

A Map of America, between Latitudes 40 and 70 North and Longitudes 45 and 180 West Exhibiting Mackenzie’s Track from Montreal to Fort Chipewyan & from thence to the North Sea in 1789 & to the West Pacific Ocean in 1793

Engraving on paper, 43.5 x 77 cm., in Mackenzie, *Voyages from Montreal...* (London, 1801).

Sir Alexander Mackenzie (1762-1820) became the first European to cross the North American continent north of Mexico in 1793 – twelve years before United States explorers Lewis and Clark. Mackenzie, a Scotsman, was a partner in the North West Company of Montreal, one of two rival Canadian companies in competition for furs. Like many “Nor’westers,” he often traveled long distances by river, greatly relying upon local Indians for their geographical knowledge and hunting expertise, and upon French voyageurs for canoe-handling

and labor. In 1789 Mackenzie and a small group set out from a fort on Lake Athabasca (in present northeastern Alberta). He followed a river he hoped would take him to the Pacific, but much to his disappointment, learned that it wound up in the Arctic. After a trip to London he was back at Lake Athabasca by 1793 to try again. He set out with another small group that included another Scotsman, Alexander MacKay. They ascended the Peace River into the Canadian Rockies and, after a harrowing crossing, descended the nearly impassable Finlay, Fraser, and Bella Coola Rivers to Dean Channel on the Pacific in present British Columbia. He found no easy water passage to the Pacific.

Aaron Arrowsmith, Sr. (1750-1823), the famous English cartographer, engraver, and map publisher, produced this map and two others for this edition of Mackenzie's *Voyages*. Arrowsmith drew much from Mackenzie's own manuscript maps of his explorations, but he also utilized cartographic information gained from a variety of sources including other fur traders. Mackenzie mistakenly believed that a river he called the "Tacoutche Tesse" ran into the Columbia River, suggesting the possibility of an easier passage farther south. In his book, Mackenzie identified the Columbia as the key to inland trade and communication to the Northwest Coast and thought that the southern border for British North America should run along the 45th parallel, well below the Columbia's mouth. He stressed cooperation between the North West Company, the Hudson's Bay Company, and the East India Company to squeeze the independent American fur traders out of the area. Mackenzie's conclusions helped spur U.S. President Thomas Jefferson to send out the Lewis and Clark expedition of 1804-1806. While Mackenzie's trans-Canada canoe trails were much farther north than most of the areas in this exhibit, his exploits were such that many hoped to emulate him farther south.

See Barry M. Gough, *First Across the Continent: Sir Alexander Mackenzie* (Norman and London: University of Oklahoma Press, 1997); Derek Hayes, *Historical Atlas of Canada*, pp. 136-145; Huseman, "Territories so Extensive and Fertile" *The Louisiana Purchase* (DeGolyer Library, SMU, 2004), pp. 28-29; Huseman, *Charting Chartered Companies*, p. 28, cat. no. 31.

14 _____ After Balduin Möllhausen

Wa-ki-ta-mo-ne and Hunting Party of Ottoe Warriors

Chromolithograph on paper, 13.5 x 22 cm., M. & N. Hanhart Chromo Lith., London, in Möllhausen, *Diary of a Journey from the Mississippi to the Coasts of the Pacific with a United States Government Expedition* (2 vols.; London: Longman, Brown, Green, Longmans & Roberts, 1858), vol. 1, frontispiece.

Prussian traveler, explorer, artist, naturalist, and author Balduin Möllhausen chose this chromolithograph of Native American hunters as the frontispiece of his own best-selling book, rather than a heroic image of himself or other Euro-American explorers. These Otto warrior-hunters rescued him when he was left alone and desperate for six weeks on the plains of Nebraska during the winter of 1851-1852. Partly as a result of this near-death experience, he was one of those rare people who credited such Native American "Good Samaritans" for their depth of knowledge, culture, and expertise. (Even rarer, he recorded their names for posterity). He understood that, differences and hostilities aside, without them Europeans in America would often have had a much more difficult time.

The chromolithograph, based upon a sketch by Möllhausen, depicts his Otto rescuers walking single file on the plains of Nebraska in the dead of winter along the Oregon / California Trail also known as the Platte River Road or the Mormon Trail. As a young trail assistant in the



CHROMOLITHOGRAPH BY M. & N. HANHART CHROMO LITH., LONDON, IN BALDUIN MÖLLHAUSEN, *DIARY OF A JOURNEY FROM THE MISSISSIPPI TO THE COASTS OF THE PACIFIC WITH A UNITED STATES GOVERNMENT EXPEDITION*

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autumn of 1851, Möllhausen had accompanied the wealthy sportsman and naturalist Duke Paul Wilhelm of Württemberg up the trail as far as Fort Laramie before turning back east. The two German adventurers had run into a blizzard on their way back, their horses died, and they were stranded near the junction of Sandy Hill Creek and the Big Blue River. Duke Paul had caught a passing stage coach, leaving young Möllhausen behind and alone to guard their collection of specimens. It was several weeks before this passing band rescued Möllhausen and took him to their village where he soon recuperated from his near fatal ordeal. Möllhausen later returned to Prussia where he was introduced to famed scientist and cultural minister Baron Alexander von Humboldt (1769-1859). He helped send Möllhausen back to the United States on two more expeditions, this time in part funded by the U.S. government and the Prussian Royal Geographical Society. Near the end of his life Möllhausen bequeathed the original watercolor for this print to the royal collections of Kaiser Wilhelm II of Germany, and it today resides in the Museum of Ethnology in Berlin.

See Wilma Otte, Andreas Graf, and Peter Bolz, *Balduin Möllhausen: Eine Preussen bei den Indianern: Aquarelle für Friedrich Wilhelm IV* (Berlin-Brandenburg: Stiftung Preussische Schlösser und Gärten, 1995), particularly pp. 30-31, cat. no. 4; Ben W. Huseman, *Wild River, Timeless Canyons: Balduin Möllhausen's Watercolors of the Colorado* (Fort Worth, Texas: Amon Carter Museum, and Tucson: University of Arizona Press, 1995).

15 _____ Zadok Cramer

The Navigator: Containing Directions for Navigating the Monongahela, Allegheny, Ohio and Mississippi Rivers: with an ample account of these ...

(7th ed., improved and enlarged; Pittsburgh: Cramer, Spear & Eichbaum, 1811). x, 295 p.; 19 cm. *DeGolyer Library, SMU*.

For many years the Mississippi and Ohio Rivers constituted the most important highways in the American interior. Water travel was usually swifter and cheaper than travel overland. *The Navigator* was a guide for river boatmen and went through some twelve popular editions, the first of which was in 1801. Author Zadok Cramer (1773-1813?) was a Pittsburgh bookstore owner, printer, and publisher. After 1806 he included engraved river charts, and then, after 1807, he added an addendum based upon information taken from Patrick Gass, the first member of the Lewis and Clark expedition to get his private journal into print, also published by Cramer.

National Mississippi River Museum & Aquarium, "National Rivers Hall of Fame Inductees: Zadok Cramer," accessed 9-9-2018, <https://www.rivermuseum.com/national-rivers-hall-of-fame-inductees/inductees/zadok-cramer>

Alexander von Humboldt

Physical Section of the Eastern Declivity of the Table Land of New Spain. (Road from Mexico to Veracruz by Puebla & Xalapa)

Engraving on paper, 21.5 x 54 cm., by Wilson Lowry, in Humboldt, *Political Essay on the Kingdom of New Spain*. Trans. from the original French by John Black (5 vols.; London: Longman, Hurst, Rees, Orme, and Brown, 1811), vol. 5. 22 cm.

This map gives an all-in-one cross-sectional view of part of Mexico by elevation along the National Road from Mexico City to Veracruz. The map is a fine example of the many cartographic innovations made by Alexander von Humboldt (1769-1859), the most internationally recognized scientist and explorer of his time. Like many of his maps and charts, it presents a large amount of scientific information, much of which he personally collected on site, in a compact and easy-to-understand visual form. This type of map gained increasing importance during the nineteenth century as canal and railroad construction increased.

Humboldt was widely read, knowledgeable in almost every subject then known, and made important contributions in many fields other than cartography. He achieved particular international acclaim as an authority on the Americas, for, at his own expense and with the permission of the King of Spain, Humboldt traveled extensively in Latin America from 1799 to 1804. He and a companion, Aimée Bonpland, paddled down jungle rivers, climbed mountains and volcanoes, collected natural history specimens, and visited local officials, intellectuals, libraries, archives, and collections in Caracas, Bogotá, Quito, Lima, Mexico City, and Havana.

The time Humboldt spent in Mexico (New Spain) was particularly important for the history of the U.S. borderlands. He first arrived there from Guayaquil in present Ecuador with two companions on March 23, 1803, at Acapulco. After some time there making observations, including determining its correct latitude and longitude, the party continued slowly north overland past Chilpancingo, Mexcala, Taxco, and Cuernavaca to Mexico City. Humboldt used the viceregal capital as a base for several months to make numerous excursions, studies, maps, and contacts before leaving in January 1804 along the National Road via Cholula, Puebla, Jalapa, and the port of Veracruz from which he and his two companions sailed that March. Before returning to Europe, Humboldt stopped in Havana and the United States where he met with President Thomas Jefferson and other U.S. dignitaries and scientists. Back in Europe he published – again primarily at his own expense – over thirty volumes based upon his own scientific research and that of others. As one of the first to systematically describe the Americas from the point of view of the

Scientific Enlightenment, Humboldt focused European attention on the New World. Humboldt's various maps of New Spain, assembled in his *Atlas to Accompany the Political Essay on New Spain* (1811) remained important sources on the area for years, and this map in particular was later utilized by U.S. Army General Winfield Scott and others to plan the invasion of central Mexico during the U.S. War with Mexico of 1846-1848. Knowing elevations as shown on Humboldt's map helped U.S. strategists avoid lengthy campaigns in low-lying areas prone to greater incidences of disease and sickness, although they had not yet isolated mosquitoes as disease carriers.

See Douglas Botting, *Humboldt and the Cosmos* (New York: Harper & Rowe, 1983); Ben W. Huseman, *Revisualizing Western Expansion: A Century of Conflict in Maps, 1800-1900* (Arlington: University of Texas at Arlington Libraries, 2008), pp. 6-8.

F. Friesen after Alexander von Humboldt
after Pedro de Rivera Villalón

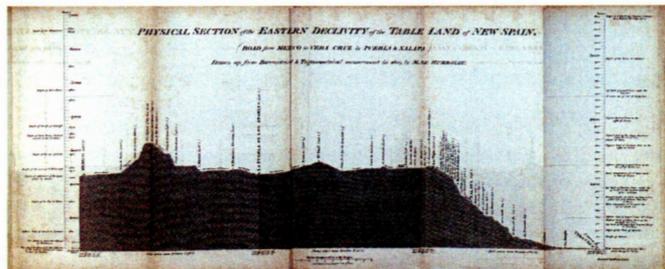
Carte de la route qui mène depuis la capitale de la Nouvelle Espagne jusqu'à S. Fe du Nouveau Mexique: dressée sur les journaux de Don Pedro de Rivera et en partie sur les observations astronomiques de Mr. de Humboldt; dessiné et redigé par F. Friesen à Berlin 1807

Engraving on paper, 50 x 44 cm. by Barrière, lettering by L. Aubert, from Humboldt, *Atlas de la Nouvelle Espagne...* (Paris: Humboldt, 1811). 73/2 400001

An often overlooked sheet in Alexander von Humboldt's atlas of New Spain is the map of the *Camino Real* or royal road from Mexico City to Santa Fe. It was prepared by Humboldt from the journals of Spanish Brigadier General Don Pedro de Rivera Villalón. Since Humboldt, while in New Spain, did not travel any farther north than Guanajuato, he had to rely on pre-existing maps and journals of Spanish officers and engineers in the archives in Mexico City and Spain and use a certain amount of speculation to construct the northern portions of his famous maps of New Spain or Mexico. Rivera Villalón (ca.1664-1744) had conducted the first inspection tour of northern New Spain, riding over eight thousand miles in the years 1724 to 1728. Rivera had been accompanied by the cartographer and military engineer Francisco Álvarez Barreiro (active 1716-1729).

In three separate sections, Humboldt's map shows the route from Mexico City to Durango, the route from Durango to Chihuahua, and the route from Chihuahua to Santa Fe. These routes were frequently traveled by the Spanish and Indians. Humboldt noted where he could employ his own measurements and when he had to rely on those of others. Not surprisingly, Humboldt's own measurements were remarkably accurate, but some of the earlier measurements were off a few degrees. For example, the Spanish engineer's measurements for Presidio del Paso del Norte (today's Juarez, Mexico) placed it too far east and too far north, a problem that was not corrected until the U.S.-Mexico Boundary Survey around 1850.

On Pedro Rivera Villalón see Thomas H. Naylor & Charles W. Polzer, S.J., *Pedro de Rivera and the Military Regulations for Northern New Spain 1724-1729* (Tucson: The University of Arizona Press, 1988) and John L. Kessel, *Spain in the Southwest: A Narrative History* (Norman: University of Oklahoma Press, 2002), pp. 193, 214-216. On Barreiro see Huseman, *Enlightenment Mapmakers and the Southwest Borderlands* (UTA, 2016), p. 25.



The Borderlands and the Roads and Trails of Three Republics

The American War of Independence in 1775-1783, the Mexican War for Independence in 1810-1821, and the Texas War of Independence of 1835-1836 created shifting borders and required new routes, trails, and roads. In addition, old routes, roads, and infrastructure such as bridges had to be constructed and/or maintained. By the early 1800s canals and railroads began supplementing older methods of travel in the United States. All three developing nations needed new maps to depict some of these trails, roads, and highways with varying detail. Some cartographers had actually traveled over many of the roads and trails they depicted, such as Dr. John Robinson (1782-1819), who served as second-in-command on Zebulon Pike's expedition to explore the area of the U.S. border with Spain and later fought against the Spanish with Mexican Republican insurgents. Others, like John Arrowsmith (1790-1873), carefully assembled and compared eyewitness sources in order to produce maps that included many important roads and trails for the first time with as much accuracy as possible.

18

John H. Robinson (1782-1819)

A Map of Mexico, Louisiana, and the Missouri Territory...

Engraving and etching with hand-colored outlines on paper mounted on linen, 171 x 171 cm., engraved by H. Anderson (Philadelphia: Printed and coloured by J. L. Narstin, 1819).

The depiction of roads, trails, and routes is just one of many outstanding features of this large and exceedingly rare wall map, the details of which evoke tales of exploration, international political intrigue and diplomacy, civil unrest, and military struggles in the Southwest Borderlands. The map's cartographer Dr. John Hamilton Robinson (1782-1819) served as the medical officer on the expedition led by Zebulon Pike to explore the southwestern part of the Louisiana Purchase for the United States government in 1806. Like Pike, Robinson was arrested by the Spanish, taken for questioning to Chihuahua, and then escorted to the Louisiana border where he was released in July 1807. Robinson later returned to New Spain in 1812 as U.S. envoy to the Spanish commandant-general of the Internal Provinces. Meanwhile, Robinson increasingly developed a strong dislike for the Spanish and became sympathetic with the Mexican Republican (or insurgent) cause. Back in the U.S., he actively recruited soldiers for the Mexican independence struggle despite U.S. neutrality. Although fully aware of the dangers of filibustering, Robinson in 1815 returned to Mexico and received a commission in the Mexican Republican Army and served with distinction during a time of serious military reversals. Suffering from fevers and bad health he returned once more to the U.S. where shortly before his death in 1819 Robinson compiled this map "...from his own knowledge of the Country in his several voyages thither and also the several Manuscript maps which are now in his possession, drawn by order of the Captain General of the Internal Provinces and the Viceroy of Mexico." It depicts the route of Pike's expedition, noting, for example, where they "first saw the Rocky Mountains" and "Pikes Stokade [sic]" and where they were "met by the Spaniards" (same inscription on Pike's map). Instead of the "Highest Mountain" noted by Pike, Robinson labeled it "Pikes Mountain" for the first time. Near Paso del Norte, Robinson noted: "Excellent wines made here." – an indication of the hospitable treatment that the Spanish afforded their unwelcome American guests.

In the north Robinson included information from the maps of the Lewis and Clark expedition of 1804-1806, showing their routes as well as "Colter's route in 1807" — a reference to Lewis and Clark



expedition member John Colter (ca.1772-1812/13) who was the first white man to report the marvels of today's Yellowstone Park ("Colter's Hell"). East of the Rocky Mountains over the Great Plains Robinson attempted to trace "The Route of the Great Herds of Buffalo." Many of the details along the upper Mississippi River came from a map by Nicolas King based upon Zebulon Pike's earlier reconnaissance of that river in 1805.

In the Southeast Robinson delineated the Natchez Trace in Mississippi as the "Road to Nashville." For many years (until the invention of steamboats and the ability to travel against the strong Mississippi and Ohio River currents), this ancient and rugged Indian pathway, sometimes known as the "Devil's Backbone," received a lot of traffic from travelers and traders returning to their homes and bases upstream. "Genl. Jackson's New Military Road" from Nashville to New Orleans diverted some of this traffic soon after its construction with funds appropriated by Congress in 1816 – a year after General Andrew Jackson defeated the British at the Battle of New Orleans. Robinson also depicted another national route – the "Federal Road to Georgia" from Mobile – passing through Alabama and Georgia into the Carolinas.

Robinson had a keen interest in and was personally familiar with some parts of Spanish Texas and northern New Spain. Along the Red River he shows a “Spanish camp” and the place where “the exploring Party stopped here Commanded by Major Sparks.” This was derived from Nicholas King’s map of the Red River exploring expedition sent by President Thomas Jefferson in 1806. It included surveyor Thomas Freeman, botanist Dr. Peter Custis, and a small military contingent led by Captain Richard Sparks (subsequently promoted). A much larger Spanish military force turned them back before the Americans achieved any of their objectives. Farther west on the “Horse Prairie” Robinson noted the approximate location on a Brazos River tributary where Spanish troops killed the wild horse hunter and filibuster Philip Nolan in 1801. As U.S. envoy in 1812, Robinson had passed through Texas where along the Trinity River he observed the “Republican Army of the North” made up of Mexican rebels and U.S. adventurers led by Bernardo Gutierrez de Lara and Augustus Magee. Shortly after Robinson left them, they were intercepted and besieged for four months at Presidio La Bahia (Goliad) before the Spanish turned their attention toward San Antonio. Robinson incorrectly stated on the map that this siege took place in 1811 and 1812; it actually lasted from November 1812 until February 19, 1813. Later that year, on August 18, Spanish royalists dealt the Republicans a crushing defeat at the Battle of Medina, the location of which Robinson noted on his map just southwest of San Antonio, perhaps the first reference to this on a printed map.

Robinson’s map of course includes the Spanish *camino real* or Old San Antonio Road stretching from Louisiana through Texas and continuing across the Rio Grande to Mission San Juan Baptista (Guerrero, located just southeast of Piedras Negras), Nava, Encinas, Monclova, and Parras. At the wells of Baján along the road between Monclova and Parras, he noted “Republican officers taken [here] in 1811” – a reference to the place where Spanish royalists captured insurgent leaders Father Miguel Hidalgo y Cosillo, Ignacio Allende y Unzaga, and other officers retreating northwards on March 21, 1811. They were soon executed for their cause, leaving a vacuum that Mexican patriots like Dr. Robinson would soon fill.

While in Mexico, Robinson, on more than one occasion, met with Juan Pedro Walker, a U.S.-born surveyor working for the Spanish government. Drawing freely from Walker’s information, Robinson’s map credits a portion of the California coast “as laid down from a map made by don Juan Pedro Walker by order of the Captain General in 1810.” In addition, Robinson’s map traces the travels of the “Venerable Pedro Font” (with the expedition of Juan Bautista Anza) from Sonora to Monterey, California, in 1774-1776, the travels of Padre Francisco Garcés in the years 1775 and 1776 as Indians guided him along the Mohave Trail and the Colorado River.

While Robinson was working on the map, the boundary negotiations between the United States and Spain known as the Adams-Onís Treaty were finalized in February 1819. Robinson’s map shows two boundaries between the countries: the maximum territory claimed by the United States (the green border following the Rio Grande west and north and then heading straight west to the Pacific) and the boundary according to the treaty (the pink boundary following the Red River to the 100th Meridian “west of London,” thence north and along the Arkansas River, and, finally, due west along the 42nd parallel of Latitude to the Pacific). Robinson no doubt intended to call attention to and protest against the large amount of land conceded to Spain. In addition to these boundaries, Robinson also shows the

borders of the Internal Provinces on his map; this district included several northern provinces which at various times were not under the immediate control of the Viceroy of New Spain in Mexico City due to inefficiencies of administration caused by distance.

David E. Narrett, “Liberation and Conquest: John Hamilton Robinson and U.S. Adventurism toward Mexico, 1806-1819.” *Western Historical Quarterly* 40 (2009): 23-50. (full-text through JSTOR); Carl I. Wheat, *Mapping the Trans-Mississippi West*, vol. 2, pp. 69-73, 222, no. 334; Jack Jackson, *Shooting the Sun: Cartographic Results of Military Activities in Texas, 1689-1829* (2 vols.; The Book Club of Texas, 1998), vol. 2, pp. 380-384; Robert Sidney Martin, “The Notorious Doctor Robinson,” in Donna P. Koepp, ed. *Exploration and Mapping of the American West: Selected Essays* (Chicago: Map and Geography Round Table of the American Library Association, Speculum Orbis Press, 1986), pp. 25-50; Dorothy Sloan Rare Books, Mostly Americana, Auction 22 (Austin, Texas: Dorothy Sloan Rare Books, December 11-12, 2009), no. 356; Ben W. Huseman, *The Price of Manifest Destiny: Maps Relating to Wars in the Southwest 1800-1866* (Arlington: University of Texas at Arlington Libraries, 2014), pp. 11-12, cat. no. 15.

19

Andrew T. Goodrich

Map of the Hudson between Sandy Hook & Sandy Hill with the Post Road between New York and Albany

Engraving on paper, 18.5 x 22.5 cm. (New York: A. T. Goodrich and Co., 1820). Marbled paper on cardboard cover, 12 x 19 cm. 130034

Post roads, river towns, forts, and other topographical features may be found in this early guide to travel on the Hudson River by Andrew T. Goodrich, a New York City map publisher and stationer who operated a private lending library.



COVER

For many years the Hudson River remained one of the most important highways into the interior of North America, and it was in large part responsible for the phenomenal growth of New York City, particularly in the years after the War of 1812 in 1815. Travelers, traders, and settlers could take large cargoes cheaply by river using ships, keelboats, canoes, rafts, and, increasingly after 1807, steamboats. At that time, partners Robert Fulton and Robert R. Livingston’s *North River Steamboat of Clermont* made the first of many successful commercial voyages on the River. Battles in the Seven Years War, the American Revolution, and the War of 1812 all emphasized the river’s strategic importance, and it garnered more attention in 1817 when construction began on the Erie Canal, which, when completed in 1825, stretched from Albany on the Hudson to Buffalo on Lake Erie. Combining the Hudson, Erie Canal, and Great Lakes, people and goods could take a much cheaper all-water route deep into the North American interior all the way from the Atlantic Ocean, completely bypassing the St. Lawrence River as well as the slower and more laborious overland routes.

Ronald V. Tooley, *Tooley’s Dictionary of Mapmakers* Rev. ed. Josephine French, Valerie Scott, Mary Alice Lowenthal, eds. (4 vols.; Tring, Hertfordshire, England: Map Collector Publications in association with Richard Arkway, Inc., 1999), vol 2, p. 187; Robert T. Augustyn and Paul E. Cohen, *Manhattan in Maps, 1527-1995* (New York: Rizzoli, 1997), p. 114.

After Stephen H. Long
***Geographical Statistical and Historical Map
 of Arkansas Territory***

Engraving with applied coloring on paper, 43 x 53 cm., by Young & Dellecker, first appearing in Henry C. Carey and Isaac Lea, comp. *A Complete Historical, Chronological, and Geographical American Atlas... to the Year 1822* (Philadelphia: H. C. Carey and I. Lea, 1822). 64/7 2007-355

The confusing routes of several explorations led by U.S. Army Engineer Major Stephen H. Long appear on his map that was first engraved and printed for Henry Carey and Isaac Lea's atlas, published in Philadelphia in 1822. In the first of these expeditions, begun in the summer of 1816, Long made a survey of the Illinois River and its tributaries to Fort Dearborn, eventually the site of Chicago on Lake Michigan. Shown on the map along the Illinois River and at the southern end of Lake Michigan are multiple inscriptions reading "Long's route 1816" and, farther west, a "Proposed National Road" – an idea Long suggested along with canals to connect the big lake with the river in his official report.

In the following years Long explored the Mississippi River to the Falls of St. Anthony (the future site of Minneapolis with the trail denoted as "Long's route 1817"). Long went down the Mississippi River and then up the Arkansas where he helped construct Fort Smith. He soon inspected the Southwest border with New Spain to the Red River beyond Pecan Point (as had the Freeman-Custis expedition) and then returned overland (denoted as "Long's route Dec. 1817") back to the Arkansas. He next passed through the Arkansas Territory and southeastern Missouri to the Mississippi River again ("Long's route 1818").

In the fall of 1818, Long headed back east to get married and also began construction of a new type of shallow-draft steamboat that would accompany a military and scientific expedition up the Missouri to the Yellowstone River. Long's steamboat *The Western Engineer* went into operation in 1819 to navigate the Ohio, Mississippi, and Missouri Rivers. His expedition established a winter quarters at "Engineer Cantonment" – located along the Missouri south of Council Bluffs.

As a result of the 1819 Adams-Onís Treaty concluded with Spain, Long next set out with new orders to explore west to the headwaters of the Platte, Arkansas, and Red Rivers in order to dispel confusion about the new boundaries between the U.S. and New Spain. Long and his men reached the Rocky Mountains that summer and then

split into two groups, one under Captain John R. Bell to follow the Arkansas back eastward and another led by Long himself to follow the Red River. Unfortunately, Long discovered too late that the river he thought was the Red was actually another, the Canadian.

In 1821, Long, having recognized his mistake, produced a large manuscript map employed as the basis for the map in the Carey & Lea Atlas that noted the correct approximate position of the Red River and the boundary. In addition to showing correct state and territorial boundary configurations of the time, the map, most significantly, helped popularize the idea that the American West was an inhospitable desert filled with hostile Indians by labeling the western portion as a "Great Desert" and noting it was "frequented by roving bands of Indians who have no fixed places of residence but roam from place to place in quest of game."

Goetzmann, *Army Exploration*, pp. 35, 39-44; Ralph Ehrenberg, "U.S. Army Military Mapping of the American Southwest during the Nineteenth Century" in Dennis Reinhartz and Gerald Saxon, eds., *Mapping and Empire: Soldier-Engineers on the Southwestern Frontier* (Austin: University of Texas Press, 2005), pp. 88-90; Ehrenberg, "Part Two, Since 1800" in Seymour I. Schwarz and Ehrenberg, *The Mapping of America* (New York: Harry N. Abrams, 1980), pp. 236-237; Huseman, "Territories so Extensive and Fertile" (DeGolyer Library, SMU, 2004), pp. 78-81, nos. 106-109; Huseman, *The Price of Manifest Destiny* (2014), p. 13, cat. no. 16; Wheat, *Mapping the Trans-Mississippi West*, vol. 2, pp. 77-81, 108, 224-226, nos. 343, 347-348, 352, 353.

21

Unknown Cartographer
United States of America

Engraving with applied color on paper, 44 x 54.5 cm., engraved by Benjamin Tanner (Philadelphia: M. Carey and Sons, ca.1821), from C. V. Lavoisne et al. (compilation), *Complete Historical, Chronological, and Geographical Atlas... Enlarged by the Addition of Several New Maps of American History and Geography, Extended to the beginning of the Year 1821* (Philadelphia: M. Carey & Sons, May 22, 1821).
 Gift of Virginia Garrett 133/4 00483 See also G1030.L4 1821

The area now known as the "Great Plains" probably first bore Stephen H. Long's appellation "Great American Desert" for the first time in print on this unattributed map of the United States, probably engraved in Philadelphia by Benjamin Tanner sometime before May 22, 1821 (if the title page of an atlas it appeared in is to be believed).^{*} While the routes of Long's expeditions do not appear, his "Engineer Cantonment" and other details on the Missouri River do, as well as details of a number of other important highways, roads, and trails. In the American South may be seen the Natchez Trace running from Natchez to Nashville intersecting with Jackson's Military Road to New Orleans from Nashville, and the Federal Road from Milledgeville, Georgia, to Mobile. Farther east the "Great Wagon Road" stretches south from Philadelphia through the southeastern states while the Erie Canal may be seen running from Albany to Buffalo.

The early years of the nineteenth century witnessed a growing trade in geographies and atlases produced in the United States. The publishers attempted to update the maps in them regularly with information drawn from a variety of sources, including government surveys, travelers' maps, and competitors – often without credit. This map, for example, derives much of its appearance from John Melish's highly popular U.S. maps of 1816 and 1818. Interestingly, it traces the U.S. boundary with New Spain as a result of the 1819 Adams-Onís Treaty; however, the map shows no trails or roads in the far Southwest. The area required updating almost immediately with the release of this



map as Spain finally recognized Mexico's independence on August 24, 1821. The removal of the words "Vice Royalty" at the bottom of the map would be one of the new updates.

*It is interesting to note that UTA's second "American" edition of C.V. Lavoisne's atlas dated May 22, 1821 contains an exact duplicate of this map; however, title pages are, of course, not always accurate.

22

Jefferson Vail and William G. Williams (attrib.)

Map of Reconnaissance Exhibiting the Country between Washington and New Orleans with the Routes examined in reference to a contemplated National Road between these two cities

Engraving on paper, 51 x 68 cm. [Washington, D.C.: U.S. War Department, 1826], issued separately to accompany United States Board of Internal Improvement, Road from Washington to New Orleans. *Letter from the Secretary of War, Transmitting the Report of the Board of Internal Improvement, Upon the Subject of a National Road, from the City of Washington to New Orleans*, U.S. Serial Set 139, 19th Congress, 1st session, House document 156, p. 1-28.

Shortly after the Louisiana Purchase in 1803, the U.S. Congress' Post Office Committee recognized the need for a road linking Washington, D.C., with New Orleans; however, the issue of federal funding was controversial and the idea was dropped. Even General Jackson's military road from Nashville – vital to the national defense during the War of 1812 – could not be maintained properly, so, by 1826, the Congressional Board of Internal Improvements sought to determine the feasibility of constructing a better road between the nation's capital and New Orleans to cut down on the three to four weeks' time that it took to traverse.

The 1826 "Map of Reconnaissance Exhibiting the country between Washington and New Orleans...in reference to a contemplated National Road..." accompanied a U.S. government report and has been attributed to two young U.S. Army Lieutenants Jefferson Vail (1801/1802-1835), a West Point graduate, and William G. Williams (1801-1846), a Carlisle Military Academy graduate and member of the U.S. Army Corps of Topographical Engineers. Shortly after their graduations in 1824, both officers served on topographical duty and took part in surveys of the area. The engraving itself has been attributed to the famous Philadelphia engraver and publisher Henry S. Tanner (1786-1858). The map illustrates the topography, routes then current, and shows a direct line between the two cities simply as a reference, with longitude readings measured in degrees west from the capital itself. Routes shown include part of General Jackson's Military Road from Nashville, the Federal Road to Fort Stoddard near Mobile, and other roads back running back east.

See Newberry Library, Chicago, *Mapping Movement in American History and Culture*, <https://mappingmovement.newberry.org/item/map-reconnaissance-exhibiting-country-between-washington-and-new-orleans-routes-examined>, accessed 9-8-2018; Alfred E. Lemmon, John T. Magill, and Jason R. Wiese, eds., *Charting Louisiana: Five Hundred Years of Maps* (New Orleans: The Historic New Orleans Collection, 2003), p. 177.

23

After William Bullock, Jr. *Mexican Gentlemen*

Aquatint and etching with applied watercolor on paper, 21.5 x 12.5 cm., by I. Clark, in William Bullock, Sr., *Six Months' Residence and Travels in Mexico...* (London: John Murray, 1824), opp. p. 215. 22.5 cm. *Gift of Jenkins Garrett* F1219 .B23 Garrett



This exquisite hand-colored aquatint and etching shows Mexican men of the upper classes traveling in fine costumes on richly caparisoned horses. Much of travel in Mexico at the time was either by horse, mule, horse- or mule-drawn coaches, and two-wheel carts.

With a few rare exceptions like Humboldt and Pagès, travel in New Spain had been all but impossible for foreigners. However, with Spain's recognition of Mexico's independence in 1821, this "exotic" land suddenly opened up for foreign travelers,

particularly during a short period lasting until 1829. English collector, museum owner/curator, and entrepreneur William Bullock, Sr. (1773-1849), and his son William Bullock, Jr., first traveled to Mexico in 1823 seeking scientific, cultural, and investment opportunities. This was the beginning of a long connection with Mexico for both who also became naturalized citizens. William Sr. soon returned to England and authored a book on his travels while the son, a talented artist, stayed behind sketching. The book, initially printed in an edition of 1,500 copies, was a best seller that did much to promote British interest and investment in the new republic.

In addition to the book, the Bullocks organized what would be termed today a "blockbuster" exhibit of Mexico, both "Ancient" and "Modern," at Egyptian Hall in the Piccadilly section of London, displaying materials and specimens they had collected. The exhibition, which opened on April 8, 1824 and ran until September 1825, was quite successful. William Sr. proved himself a multi-talented promoter, showman, art collector, naturalist, antiquarian, silversmith, jeweler, botanist, and zoologist who even did his own taxidermy for the exhibit, which included a large panorama constructed from William Jr.'s field sketches, original stone, gold, and wooden antiquities and plaster casts of Aztec sculpture, codices, wax figures wearing costumes, stuffed animals, and other delights. Afterwards, most of the exhibit's contents were either sold, dispersed or returned to Mexico.

Hoping to profit from a silver mine William Sr. had purchased in the Temascaltepec district, the Bullocks returned to Mexico in late 1825 along with Catherine and Sybylla (William Sr.'s wife and daughter). They brought with them a Texcoco Indian named Ponce de Leon (who had been a live part of the exhibit), a female servant, ten miners and at least some of their family members, and a single woman. The mine proved unprofitable, and the father left Mexico in 1827. William

Jr. stayed behind, continuing to collect natural history specimens and was said to have died there from yellow fever. The daughter married a mine manager.

See David Y. Allen, "Emerging from Humboldt's Shadow: British Travelers and John Arrowsmith's Maps of Mexico, 1822-1844," *Terrae Incognitae* 50:1 (April 2018): 53-74; Michael P. Costeloe, "William Bullock and the Mexican Connection," *Mexican Studies/Estudios Mexicanos*, Vol. 22, No. 2 (Summer 2006), pp. 275-309. Published by: University of California Press on behalf of the University of California Institute for Mexico and the United States and the Universidad Nacional Autónoma de México. Stable URL: <http://www.jstor.org/stable/10.1525/msem.2006.22.2.275>. Accessed: 18-07-2018 18:26 UTC; E. Baigent, "Bullock, William (bap. 1773, d. 1849), naturalist and antiquary," *Oxford Dictionary of National Biography*. Ed., retrieved 18 Jul. 2018, from <http://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-3923>.

24

After Lady Elizabeth Swinburne Ward [Great Mexican Coach]

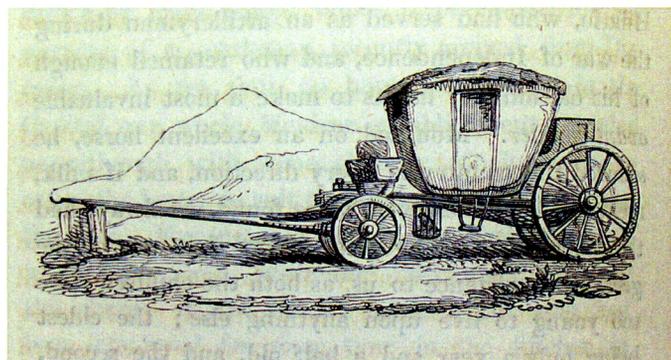
Engraving with etching on paper, 5 x 9 cm., 22 x 13.5 cm. (sheet size), by J. Clark, in Henry George Ward, *Mexico in 1827* (2 vols.; London: Henry Colburn, 1828), vol. 2, p. 404. 22.5 cm.

Gift of Jenkins Garrett

F1213.W25 Garrett

These lithographs illustrating various modes of transportation in Mexico were based upon sketches "taken on the spot; many of them under circumstances which would have discouraged most persons from making the attempt, as fatigue and a burning sun often combined to render it unpleasant" by Mrs. Elizabeth Ward née Swinburne (1798-1882). Her husband, British diplomat Henry George Ward (1797-1860), author of the best-selling book *Mexico in 1827*, had earlier served in Mexico as joint commissioner in Mexico shortly before their marriage in 1824. Mrs. Ward accompanied her husband when he returned there to serve as chargé d'affaires from 1825-1827. Mrs. Ward's artistic accomplishments are all the more remarkable in consideration of the fact that, although she at times had a maid and a servant or two, she was often travelling pregnant with one or, later, two young children in tow. In his book, Henry Ward gave a vivid and realistic account of life and travel in Mexico and wrote in praise of his wife's talents and fortitude. He recorded that often while sketching she would be surrounded by admiring Mexicans and that they would occasionally even offer to hold an umbrella to keep her from baking in the sun.

Ward wrote down some interesting details about this Mexican coach, seen in the engraving based upon his wife's sketch, noting that it was drawn by eight mules, and that he had purchased the whole outfit in Mexico City from "a gentleman recently arrived from Durango." On about a thirty-five mile trip from San Cosmé (a suburban village



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located just south of the capital) to Huehuetoca (located north of the capital), Ward wrote that he and his wife were part of a large cavalcade that included the French Consul General, three other gentlemen, and servants all well mounted and armed with "sabres, guns, and Lassos, all dressed in the leather Ranchero costume," with eight baggage-mules, and as many loose horses... driven by a cook doubling as a mule-driver and other muleteers, and the great Mexican coach containing Mrs. Ward's children, maid, and servants." As to the coach, he described how the Mexicans "...in general drive over, or through every thing, and look excessively surprised when an unfortunate wheel gives way, (as it usually does,) with a crash, after surviving trials which... would make an English coachmaker's hair stand on end to look at." After Ward explained how Mexican coach wheels were constructed and the rocky roads they had to traverse on this and many other trips within the country, he noted that:

"...none of our party ever entered the coach as long as they were able to sit a horse.... Mrs. Ward, far from finding it a relief, endeavoured, from the first, to extend her daily rides until she was enabled to perform nearly the whole distance on horseback: which she so far accomplished that she must, I think, have ridden fourteen hundred miles out of the two thousand, to which the aggregate of our journey may have amounted."*

*Ward, *Mexico in 1827*, vol. II, pp. 404-406

Will Fowler, "First Impressions: Henry George Ward's Mexico in 1827," *Journal of Latin American Studies* 50:2 (May 2018): 265-289.

25

After Lady Elizabeth Swinburne Ward Puente del Rey

Aquatint and etching on paper, 13.5 x 22 cm., by J. Clark, in Henry George Ward, *Mexico in 1827* (2 vols.; London: Henry Colburn, 1828), vol. 1, opp. p. 227. 22.5 cm. *Gift of Jenkins Garrett*

F1213.W25 Garrett

Travel in the early Mexican Republic was facilitated by ancient paths and roads originally blazed and maintained by the Aztecs, Maya, and other tribes, as well as those built by the Spanish. The latter had occasionally constructed fine stone bridges like ones found back in Europe. Mrs. Ward's view of the *Puente del Rey* (King's Bridge) depicts a famous historical landmark known better in later years as the *Puente Nacional* (National Bridge). The bridge, still standing today in the state of Veracruz, was an important piece of colonial infrastructure constructed in the first decade of the nineteenth century. It allowed communication and traffic over the Antigua River along the *camino real* (royal road) between Mexico City and the port of Veracruz. In Elizabeth Ward's view, cargo-laden mules and their driver, an *arriero* (muleteer), are about to cross. Throughout much of the nineteenth



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century similar illustrations of this picturesque view appeared in works about Mexico.

Henry Ward visited all seven British mining ventures in Mexico including Bullock's with whom he was acquainted. He urged British investors to be patient and to try to understand Mexico, its problems, and Mexican culture. He believed British-Mexican relations were worth cultivating, feared U.S. expansion, defended free trade, and thought that Britain had the technical expertise and technology to get Mexico's silver mines working. He was sympathetic to Mexican culture and optimistic of Mexico's future. Unfortunately, shortly after the appearance of his publication Santa Anna's rise to power initiated an era of chaos in Mexican politics.

Will Fowler, "First Impressions: Henry George Ward's Mexico in 1827," *Journal of Latin American Studies* 50:2 (May 2018): 265-289.

26

Sidney Hall

Map of Routes to the Principal Mining Districts in the Central States of Mexico

Engraving on paper, 41 x 56.5 cm., from Henry George Ward, *Mexico in 1827* (2 vols.; London: Henry Colburn, 1828), vol. 2. 64/6 2007-13

After 1821 the newly independent Mexican government could not keep up with the continuing demand for cartographic information. The chaos wrought by the lengthy war for independence had not been conducive for the production of maps, and for years the only detailed maps of Mexico were either hand-drawn manuscripts in use by the armies or maps dating prior to the war. Alexander von Humboldt's maps or derivatives thereof (such as Arrowsmith's map of 1810 that derived from British Royal Navy surveys and knowledge of Humboldt's manuscript maps) had their limitations, particularly for the vast areas north of the valley of Mexico. Earlier Spanish productions were largely manuscript copies residing in the former viceregal archives in Mexico or the royal archives in Madrid and Seville.

British diplomat Henry G. Ward's double-volume book of 1828 contained two maps engraved by London engraver, cartographer, and copperplate printer Sidney Hall (1788?-1831): one, a general map of the nation, and the second, this map of mining routes. Among roads seen in Hall's second map for Ward are connections between Veracruz, Puebla, and Mexico City, between Mexico City and Real del Monte and Tampico, routes from Mexico City to Queretaro, Guanajuato, San Luis Potosi, and Catorce, and from Lake Chapala to Guadalajara, Zacatecas, and Durango. Despite the fact that the map was not geodetically correct and distances not accurately portrayed, the map was a significant contribution to European knowledge of Mexico. Scholar David Allen notes that Ward had carried a copy of Humboldt's map with him and annotated it on his extensive travels. Ward had personally seen many of the places he included on the map during his visits to seven different British mining ventures in Mexico (including that of William Bullock with whom Ward was acquainted). Ward also cited information received from other British travelers including Simon A.G. Bourne, Mark Beaufoy, General Arthur Goodall Wavell (1785-1860), George Francis Lyon, Captain James Vetch, William Glennie, and Captain Frederick William Beechey.

David Y. Allen, "Emerging from Humboldt's Shadow: British Travelers and John Arrowsmith's Maps of Mexico, 1822-1844" *Terrae Incognitae* 50:1 (April 2018): 53-74. Will Fowler, "First Impressions: Henry George Ward's Mexico in 1827," *Journal of Latin American Studies* 50:2 (May 2018): 265-289.

27

John Arrowsmith

Mexico

Engraving with applied color on paper, 49 x 62 cm. London: Arrowsmith, dated 15 Feby. 1832.1:6,650,000, probably from John Arrowsmith, *London Atlas of Universal Geography* (London: Arrowsmith, 1834 or 1838 editions), plate 44. *Gift of Virginia Garrett* 135/1 00895 c. 2

John Arrowsmith's 1832 map of Mexico included a number of the country's important roads for the first time on a printed map. It employed double lines to refer to primary roads, single lines for secondary roads, and dotted lines for paths. The map, a compilation of the latest and best sources available in London, has been called "... arguably the best map of the country published prior to the 1850s."* Much of the information for the roads and trails came from British travelers in Mexico such as diplomat Henry Ward and Royal Navy officers R. W. H. Hardy and Frederick William Beechey.

Hardy (ca.1790-1871), who wrote *Travels in the Interior of Mexico in 1825, 1826, 1827 and 1828* (London: H. Colburn and R. Bentley, 1829), had arrived in Veracruz in 1825 and then traveled overland to Mexico City. From there Hardy had traveled to Mazatlan where he took ship to explore Mexico's Pacific and Gulf of California coasts as far as the Colorado River. He returned to Mexico City through Sonora and Chihuahua. Although Hardy did not always have the best survey instruments available for taking measurements, he had enlisted the aid of his ship's master, William Lindon. In Hardy's book's accompanying *Map of Sonora and the Gulf of California*, engraved by Sidney Hall, Hardy had improved upon Alexander von Humboldt's cartographic depictions of these areas. Beechey (1796-1856), meanwhile, had explored Mexico's Pacific coast line from California south, taking geodetic readings at Mazatlan and San Blas. His experiences were published in *Narrative of a Voyage to the Pacific and Beering's Strait...Performed in His Majesty's Ship Blossom under the Command of Captain F. W. Beechey, R.N.* (Philadelphia: Carey & Lea, 1832).

The Arrowsmith family were generally recognized as the leading English mapmakers of the late 18th and early nineteenth century. John Arrowsmith (1790-1873) was the nephew and eventual successor of the company founder Aaron Arrowsmith, Sr. (1750-1823). Not surprisingly, the base for John's map of Mexico was Aaron Sr.'s map of Mexico of 1810.

*David Y. Allen, "Emerging from Humboldt's Shadow: British Travelers and John Arrowsmith's Maps of Mexico, 1822-1844," in *Terrae Incognitae* 50:1 (April 2018): 53-74; Worms and Baynton-Williams, *British Map Engravers*, pp. 25-29.



Charles Nicholas Hagner, J. W. Smith, William Beckwith, M. H. Stansbury, et al.

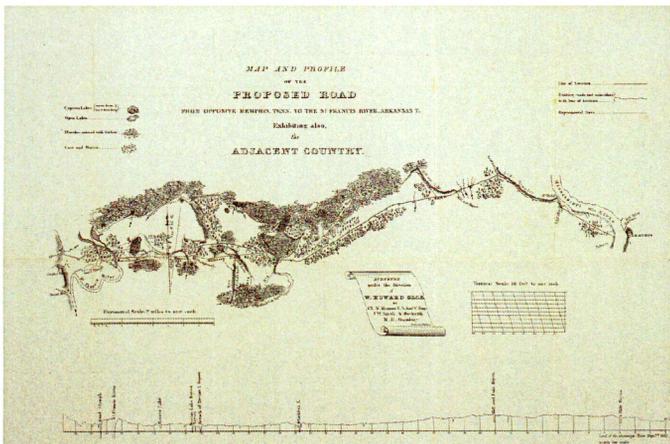
Map and Profile of the Proposed Road from Opposite Memphis, Tenn., to the St. Francis River, Arkansas T. exhibiting also, the adjacent country

Surveyed under the direction of W. Howard U.S.C.E.
Lithograph on paper, 33 x 56.5 cm. (1833). From 23rd Congress, 2nd Session, House Doc. No. 83. *Gift of Virginia Garrett* 17/4 800369

From the time of George Washington, U.S. politicians wanted the U.S. Army's engineers, established as a separate Corps in 1802, to engage in construction projects for civilian as well as military purposes. This included road construction. With the Louisiana Purchase and ongoing western expansion, needs and expectations for government roads to the new territories became a great burden upon the military, which also needed to prepare for future wars. Not until 1838 did Congress create the U.S. Army's Corps of Topographical Engineers as a separate and independent unit within the Army.

This printed government road map first appeared in a document to accompany the proceedings of the U.S. House of Representatives in the early 1830s. It relates to the so-called "Memphis to Little Rock Road" and has symbols depicting "Cypress Lakes," "Open Lakes," "Marshes covered with timber," "Cane and Timber," "Line of location" [for the proposed road], "Existing roads not coinciding with line of location," and "Experimental lines." A vertical profile shows the relative heights of the proposed road. There are separate scales for the map and the vertical profile.

On January 27, 1824, Congress first authorized funds for the construction of a road between Memphis, Tennessee, and Little Rock, which became the second capital of the Arkansas Territory in 1821. Although the road was completed in 1827, it was subject to severe flooding and sometimes impassable for several months each year in the swampy eastern portions of Arkansas. In July 1832 Congress authorized a further \$20,000 which Territorial Governor John Pope used to repair the western part of the road between Little Rock and William Strong's place on the St. Francis River, seen at far left of the map. This map relates to the eastern portion of the road for which Congress appropriated \$100,000 and ordered a new survey, conducted by engineers W. Howard, Charles Nicholas Hagner, W. Beckwith, and M. H. Stansbury, listed on the map itself. The exact identities of all the engineers are a bit difficult. Hagner (d. 1849) of D.C. was later made 2nd lieutenant of the U.S. Army's Corps of Topographical



Engineers when it was created in 1838. W. Beckwith may have been somehow related to E. G. Beckwith (1818-1881), a U.S. Army Topographical Engineer who conducted one of the Pacific Railroad Surveys and later constructed military roads in Nebraska and Kansas. "M. H. Stansbury" is probably none other than Howard Stansbury (1806-1873), a U.S. Army Topographical Engineer famous for his later exploration of Utah.

Based upon the new survey, work began again on the eastern segment of the road in 1834 under the supervision of Lieutenant Alexander H. Bowman. Contracted workers – many of whom became sick in the July heat – had to construct an embankment four feet wide at the top with suitable slopes for the first four miles of the road, using oxen and scrapers. Despite this, the eastern portion of the road continued to suffer flooding for years to come. This segment later served as an important route for Choctaw, Creek (Muscogee), Cherokee, and Chickasaw forced to move westward to Indian Territory and is thus part of the "Trail of Tears."

Mark K. Christ, "Memphis to Little Rock Road," *The Encyclopedia of Arkansas History and Culture*, last updated 6/5/2015 <http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?search=1&entryID=7503&media=print>, accessed 7/21/2018.

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Cartographer Unknown

Map of the States of Mississippi, Louisiana, and the Arkansas Territory

Engraving on paper, 41.8 x 27.5 cm., probably engraved by Fenner, Sears & Co. for Rev. John Howard Hinton, *An Atlas of the United States of North America*. (London: Simpkin & Marshall, and Philadelphia: T. Wardle, 1832). 20/1 900018

The 1803 Louisiana Purchase, the advance of commerce and cotton agriculture, and Indian Removal brought thousands of emigrants and their slaves into the new states of Louisiana (1812), Mississippi (1817), and the Arkansas Territory (created in 1819). A great need for cartographic information resulted, partly fulfilled by new maps by Barthelemy Lafon in 1806, William Darby and John Melish in 1816, and others. This map for an English atlas of the early 1830s was dependent upon these precursors and demonstrates considerable knowledge of the growing road network in the lower Mississippi valley.

The map was probably engraved by Fenner, Sears & Co. of London for *An Atlas of the United States of North America* compiled by Reverend John Howard Hinton (1791-1873), an independent Baptist theologian and historian born in Oxford England, who also compiled *The History and Topography of the United States* (London: Hinton, Simpkin & Marshall, 1832; and Boston: Samuel Walker, 1834; London: J. Dowding, 1842).

Tooley's *Dictionary of Mapmakers*, p. 336; Worms and Baynton-Williams, *British Map Engravers*, pp. 228-229; "Hinton, John Howard," in *Appleton's Cyclopaedia of American Biography* (New York: D. Appleton & Company, 1888), vol. 3, p. 215.

William Norris

Map of the Railroads and Canals Finished, Unfinished and in Contemplation in the United States

Engraving with applied coloring on paper, 60 x 93 cm., 1834, printed by Cammeyer & Clark, for D. K. Minor, ed., *American Railroad Journal, and Advocate for Internal Improvements*. (New York, 1834). 75/8 800651

By 1834 the southern and southwestern portions of the United States clearly lagged behind the rest of the country in the development of railroads and canals as documented in this map by locomotive designer and builder William Norris (1802-1867). The map's key or "explanation" notes canals and railroads "finished," "making" (under construction), "chartered," "contemplated," or "proposed." The Erie Canal, begun in 1817 and completed in 1825, appears on the map, in the vignette below the title, and in profile elevation. (The profile elevation was, by this time, a standard method of depicting road, canal, and railroad projects.) The Erie Canal's immense success in linking the Atlantic Ocean, Hudson River traffic, and the Great Lakes inspired other projects.

Among the many other transportation highways featured on the map and in elevation profiles around it are:

- The Baltimore & Ohio Rail Road (oldest railroad in the U.S., first section opened in 1830 to help Baltimore compete with New York City and its Hudson River/Erie Canal traffic)
- The Columbia Rail Road, Pa. (also known as the Philadelphia & Columbia Rail Road, opened in 1834, connected Philadelphia with the Pennsylvania Canal)
- The Florida Canal (a proposed canal across northern Florida connecting the Atlantic with the Gulf, terminating in Apalachicola Bay)
- The Champlain Canal (connecting Fort Edward on the Hudson River with Lake Champlain, opened in 1823)
- The Dismal Swamp Canal (connecting Chesapeake Bay, Virginia with Albemarle Sound, North Carolina, opened in 1805)
- The Chesapeake & Delaware Canal (connecting Chesapeake Bay with the Delaware River, one of the most expensive projects of the 1830s, with loss of water in the locks a constant problem)
- The Schuylkill Navigation (along the Schuylkill River in Pennsylvania, opened in 1825)
- The Union Canal, Pa. (connecting Philadelphia with the Susquehanna River, running from Reading on the Schuylkill to Middletown on the Susquehanna, opened in 1828)
- The Morris Canal (across northern New Jersey from Newark to Rockaway, opened by 1830, using water-driven inclined planes)
- The Ohio Canal (also known as the Ohio and Erie Canal, opened in 1832, made it possible to go by water from Cleveland on Lake Erie to Portsmouth, on the Ohio River)
- The Pennsylvania Canal (or Pennsylvania Canal system, opened in 1834, made it possible to go from Philadelphia to Pittsburgh by water in 3-5 days)
- The Chesapeake & Ohio Canal (along the Potomac River, intended to connect Chesapeake Bay with the Ohio River, by 1834 ran from Washington, D.C., to Williamsport, Maryland, above Harper's Ferry, the proposed section to Pittsburgh never completed)
- The Massachusetts Rail Road (Boston and Providence Railroad, begun in 1831, not completed until 1835)

Interestingly, already in 1834 tiny Chicago on southern Lake Michigan appears as the eastern terminus of the chartered Illinois & Michigan Rail Road along with a proposed ship canal linking the Great Lakes with the Gulf of Mexico by way of the Illinois and Mississippi Rivers. The preponderance of projects in the northeast and north reflects the area's geographic advantages and growing industrial power.

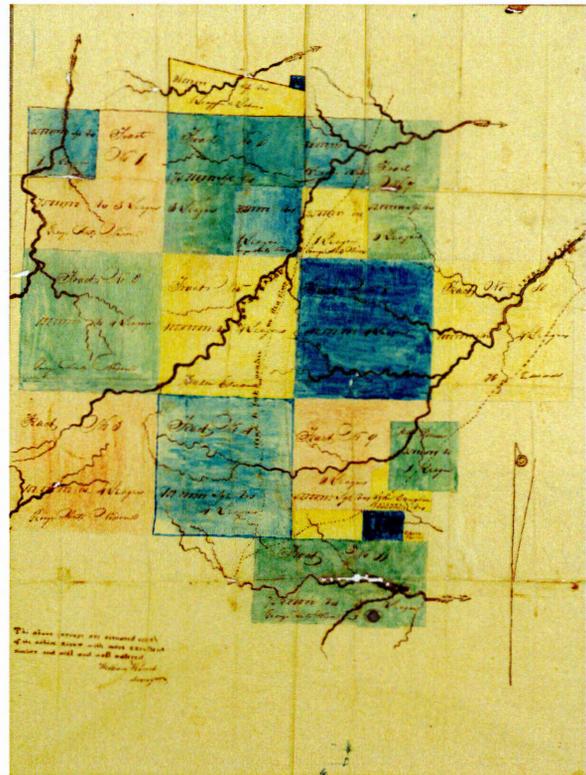
Modelski, *Railroad Maps of North America* (1984), pp. 36-37, no. 18; Ronald E. Shaw, *Canals for a Nation: The Canal Era in the United States 1790-1860* (Lexington: The University Press of Kentucky, 1990); on Norris see <http://www.steamindex.com/people/american.htm#norris>, accessed 7/24/2018; Ben W. Huseman, *Charting Chartered Companies: Concessions to Companies as Mirrored in Maps, 1600-1900* (UTA Libraries Special Collections, 2010), pp. 30-31, cat. no. 34. Thanks to Porsche Schlapper, curator of the Herman T. Pott National Inland Waterways Library, a division of the St. Louis Mercantile Library, University of Missouri, St. Louis, for her reference recommendations.

William Roark

[Map of Surveys Situated South of the Sabine River]

Ink and watercolor on onion skin or tracing paper, 70 x 54 cm., ca. 1835-1836. *George Antonio Nixon Collection* 85/1 00649

This original surveyor's map from the end of the Mexican period in Texas shows lands surveyed for Mexican government land commissioner and Texas land speculator George Antonio Nixon (1781-1843), pioneer and land speculator Haden Edwards (1771-1849), and others. The map was drawn by William Roark (1803-1862), a land surveyor, business owner, and farmer living near Nacogdoches at the time. Roark was a native of Tennessee who had immigrated to Texas in 1834 with his wife, three children, and other family members. The map encompasses an area in east Texas near present



Cherokee Lake, either in present southeast Gregg and/or northern Rusk Counties. Included on the map is a portion of Trammel's Trace described as "Road to lost Prairie on Red River."

Nixon was born in Ireland and immigrated to Charleston, South Carolina, with his parents. After they died, he inherited some money and went west. He married in Tennessee and visited Texas in 1823 with the idea of bringing his family. They all arrived in 1826, and Nixon became a Mexican citizen, settling in San Antonio as a dry goods merchant. As land commissioner in 1834-1835, Nixon became an authority on Mexican land law and granted titles to more than four million acres of land in east Texas – the most prolific operator in that area. His authority extended to the east Texas grants of David G. Burnet, Joseph Vehlein, and Lorenzo de Zavala. Since these empresarios had enlisted the Galveston Bay and Texas Land Company to assist them in bringing colonists to their grants, Nixon was also involved with this company. He supported the Texas Revolution, serving as chairman of the Nacogdoches Committee on Vigilance and Safety, but he may have left Texas during the "Runaway Scrape" (when many Texans fled the advancing Mexican army). After San Jacinto he returned and resettled his family in San Augustine where he became an attorney and continued his land speculations. By 1838 he owned more than half a million acres in Nacogdoches County, making him the largest single landholder there.

See Gary L. Pinkerton, *Trammel's Trace: The First Road to Texas from the North* (College Station: Texas A&M University Press, 2016), especially p. 31, and compare with Nancy Tiller's map of the southern half of Trammel's Trace. On Roark see "A Guide to the William Roark Papers," Daughters of the Republic of Texas Library, San Antonio, Col 911, Texas Archival Resources Online, <https://legacy.lib.utexas.edu/taro/drtsa/00024/drt-00024.html>, accessed 7-25-2018. On Nixon see Lissa Kay Jones, "Open to Speculation: The Life and Times of George Antonio Nixon 1781-1843." M.A. Thesis in History, The University of Texas at Arlington, December, 1985.

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William Roark

[Map of Grants North of Cherokee Crossing on the Sabine River]

Ink and watercolor on onion skin or tracing paper, 70 x 103 cm. (irreg.)
George Antonio Nixon Collection 97/10 00652

Roark's second survey map for Mexican government land commissioner and Texas land speculator George Antonio Nixon shows a portion of northeast Texas, located between the Sabine River and Little Cypress Bayou (or Creek) in present Gregg County. Important early trails depicted include the "Caddo Trace," the "Cherokee Trace," the "Road to Sulphur Fork of the Red River," and the "Caddo Road to Red River." At the bottom of the map is the "Cherokee Crossing" of the Sabine River, probably now located near I-20, south, southwest of Longview. The Cherokee Trace was located west of Trammel's Trace and ran from the vicinity of Nacogdoches north through present Gregg, Upshur, Camp, and Titus counties, crossed the Red River between present Clarksville, Texas, and Fort Towson, Oklahoma. Named for the Cherokee Indians, the trace dated back to at least 1821 and, in fact, may be much older.

Handbook of Texas Online, Laurie E. Jasinski, "Cherokee Trace," accessed July 25, 2018, <http://www.tshaonline.org/handbook/online/articles/exc06>.

After M. Fiske?

Road Through a Cane Brake

Engraving with etching on paper, 8 x 10 cm., engraved by J. T. Hammond, from *A Visit to Texas: Being the Journal of a Traveller through those Parts Most Interesting to American Settlers*. (New York: Goodrich & Wiley, 1834), opp. p. 192. 19.5 cm. *Gift of Jenkins Garrett* F389 .V84 1834 Garrett

Conditions on paths and roads in early Texas, such as Trammel's Trace, could be almost impassable or "impracticable" as seen in this engraving from one of the earliest books on Texas with illustrations based upon eyewitness views. Sometimes attributed to an "M. Fiske" of Mobile, Alabama, the engraving and the accompanying text leave an evocative description of the cane brakes, which, according to the author, "...are common in some parts of Texas. They are tracts of land low and often marshy, overgrown with the long reeds which we know in the Northern States as fishing rods." He attested that "cane brakes occur of great extent.... The largest is that which lines the banks of Caney Creek, and is seventy miles in length." Passing through one, the author avowed that:

"...such a sight I never before witnessed. The frequent passage of men and horses keeps open a narrow path, not wide enough for two mustangs to pass with convenience. The reeds grow to a height of about twenty feet, and are so slender, that having no support directly over the path, they droop a little inward, and so meet and intermingle their tops, forming a complete covering overhead. We rode thus about a quarter of a mile, along a singular avenue, arched overhead, and with the view of the sky shut out. The sight of a large tract, covered with so rank a growth of an annual plant, which rises to such a height, decays and is renewed every twelvemonth, affords a striking impression of the fertility of the soil."

The author had sailed from New Orleans in March 1831 and had arrived in Brazoria along the coast of Texas (then part of Mexico) to examine a large tract of land that he had purchased from the Galveston Bay and Texas Land Company. He travelled extensively in the Mexican Colony. While favorably impressed with the beauty of the scenery, he was critical of the Land Company.

Gary L. Pinkerton, *Trammel's Trace*, pp. 16-17; Thomas W. Streeter, *Bibliography of Texas 1795-1845* Second Edition Revised and Enlarged by Archibald Hanna (Woodbridge, Connecticut: Research Publications, Inc., 1983), p. 328; *Dorothy Sloan Books Auction 22* (Austin, Texas, 2009), no. 188.



John Arrowsmith

Map of Texas compiled from Surveys recorded in the Land Office of Texas and other official Surveys

Engraved transfer lithograph with applied coloring on paper, 62 x 52 cm., London: John Arrowsmith, 1841, from *The London Atlas of Universal Geography* (London: Arrowsmith, 1842). *Gift of Virginia Garrett* 135/3 00574

Working in London, cartographer, engraver, globemaker, lithographer, and publisher Arrowsmith took great pains to compile the best and latest information available on places depicted in his maps, and for him this included information about important routes, paths, and roadways. His 1841 map of Texas, long considered a classic, addresses the subject of routes, paths, and roads with his usual attention to detail. Incorporating superb, clean, and simple engraving and lithography technique with information and features gathered from U.S.-produced maps such as David H. Burr's 1833 map of Texas and Richard S. Hunt & Jesse F. Randel's 1839 Map of Texas compiled from *Surveys in the General Land Office of the Republic*, Arrowsmith added up-to-date information from a variety of reports and travel accounts. In addition to Texan Army General Thomas J. Rusk's 1839 expedition against the Caddos, Cherokees, and Kickapoos out of Clarksville in northeast Texas, Arrowsmith depicted the "Waggon[sic] Road from Santa Fe," the "Road to Red River" and the "Osage Road" through Indian Territory and what would become known as the Texas panhandle. There he referenced the trader, trapper, and explorer Alexander LeGrand, who had purportedly surveyed empresarios Stephen J. Wilson and Richard Exeter's land grant, with the inscription: "This tract of Country explored by Le Grand in 1833 is naturally fertile, well wooded & with a fair proportion of water."

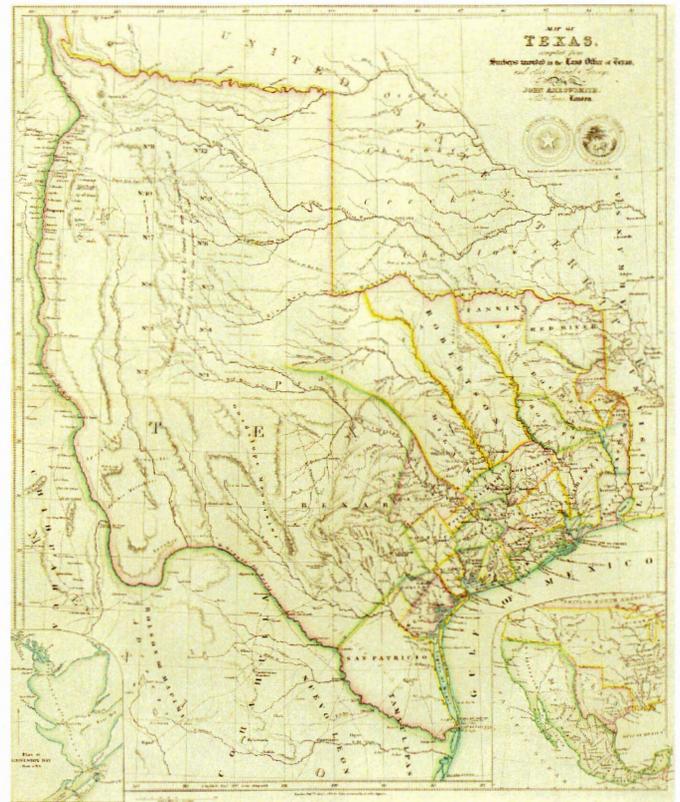
In the lands allotted to the Indians north of the Red River, Arrowsmith noted "Ellsworth's Route." This was a reference to Henry L. Ellsworth, one of several of President Andrew Jackson's Indian commissioners appointed to "study the country, to mark the boundaries, to pacify the warring Indians and, in general to establish order and justice" following the Indian Removal Act of 1830. This expedition, which included Washington Irving, was recounted in his best-seller *A Tour on the Prairies* (1835). Arrowsmith also attempted to show the "Route of the Ranger Colon Many [sic, Column May?] 1833" – probably a reference to the U.S. Mounted Rangers commanded by Colonel Henry Dodge disbanded that year. The next year, they were reorganized as the U.S. Army's First Dragoons, and Arrowsmith shows the "Route of the Dragoons under Col. Dodge [in] 1834," including the "Sick Camp" and "Grave of Genl. [Henry] Leavenworth" recounted in the official report. That expedition included such young notables as Jefferson Davis, Stephen Kearny, the artist George Catlin, and Jesse Chisholm.

In Texas Arrowsmith's labels for Indian trails and roads are quite useful but also somewhat confusing when compared with other maps of the period. This is not surprising since Indian names given by Euro-Americans were notoriously unreliable because tribal misidentification was common. Arrowsmith depicted the "Comanche Trail" running from central Texas east to its intersection with Cherokee Crossing on "Trammel's Trail" and beyond to Louisiana, and this can be confirmed by the large trade in horses sold by the Comanche to the Americans over the years in the growing areas of the

cotton empire of the east in return for manufactured goods and other products. However, what Arrowsmith called "Trammel's Trail" may actually be the "Cherokee Trace" shown on surveyor William Roark's second map (cat. no. 32). Similarly, part of the "Comanche Trail" on Arrowsmith's map east of the Cherokee Crossing may be the "Caddo Road to Red River" labeled on Roark's survey map. Certainly the Caddo had probably blazed this trail before the Comanche. Farther west Arrowsmith drew a "Comanche Road" based upon Hunt & Randel's map of 1839. Whatever Arrowsmith or others called them, these roads and trails reflected Indian trade routes across Texas that had been in place for years.

Arrowsmith's map of Texas appeared not only in his London Atlas but also in William Kennedy's popular travel and guide book *Texas: The Rise, Progress and Prospects of the Republic of Texas* (London, 1841).

Thomas W. Streeter, *Bibliography of Texas 1795-1845* Second Edition Revised and Enlarged by Archibald Hanna (Woodbridge, Connecticut: Research Publications, Inc., 1983), pp. 371, 438, nos. 1120A, 1373.. Raymond Estep, "Le Grand, Alexander," *Handbook of Texas Online*, accessed July 23, 2018, <http://www.tshaonline.org/handbook/online/articles/fle24>. ; Gerald Robert Vizenor, *Fugitive Poses: Native American Indian Scenes of Absence and Presence* (Lincoln: University of Nebraska Press, 1998), p. 218, note 107; Otis E. Young, "The United States Mounted Ranger Battalion, 1832-1833," *The Mississippi Valley Historical Review* 41:3 (December 1954): 453-470, published by Oxford University Press on behalf of Organization of American Historians, Stable <https://www.jstor.org/stable/1897493>, accessed 7/23/2018. Stan Hoig, "Irving, Ellsworth, Latrobe, and Pourtalès Expedition," *The Encyclopedia of Oklahoma History and Culture*, www.okhistory.org (accessed July 23, 2018).



U.S. Territorial Expansion

By the mid-1830s the prospect of cheap and fertile lands in the Oregon Territory, Texas and other areas west of the Mississippi enticed many U.S. citizens and immigrants to head west. In addition, the westward movement of these peoples had already uprooted many eastern Indian tribes who were forced westward into the lands of other Indian nations. The resettlements along this moving frontier saw the popularization of existing trails and the creation of others. These included trails associated with important historical events and popular lore such as the Santa Fe Trail, the Oregon Trail, the California Trail, the Mormon Trail, the Chihuahua Trail, and the Trail of Tears.

Assisting with this process were the U.S. Army Engineers and the separate Corps of Topographical Engineers, created in 1838. Both groups explored and mapped trails and constructed roads. While many emigrants set out on these trails (or were forcibly removed in the case of eastern Indians) without much forethought or research, others carefully followed guidebooks and U.S. government reports that had maps of varying detail and accuracy.

Texas annexation in 1845 and the U.S. War with Mexico of 1846-1848 added vast territories to the U.S. at the expense of Mexico and, with the discovery of gold in California in 1848, contributed to a huge migration of peoples. Maps both aided and documented these events and this shift in population.

See Imre Josef Demhardt, "Military Mapping Against All Odds: Topographical Reconnaissance in the United States from the Revolutionary War to the Civil War" in Elri Liebenberg, Imre Josef Demhardt, and Soetkin Vervust, eds., *History of Military Cartography*, 5th International Symposium of the ICA Commission on the History of Cartography, 2014 (Cham, Switzerland: Springer International Publishing, 2016), pp. 251-262; Forest G. Hill, *Roads, Rails & Waterways: The Army Engineers and Early Transportation* (Norman: University of Oklahoma Press, 1957); Frank N. Schubert, ed., *The Nation Builders: A Sesquicentennial History of the Corps of Topographical Engineers 1838-1863* (Fort Belvoir, Virginia: U.S. Army Corps of Engineers, Office of History, 1988); and the classic by William H. Goetzmann, *Army Exploration in the American West, 1803-1863* (Austin: Texas State Historical Association, 1991; first published by Yale University Press, 1959).

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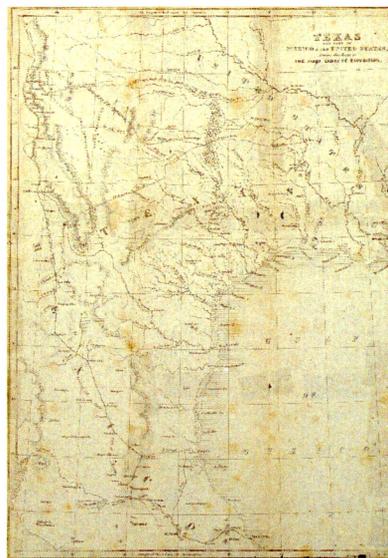
Kemble

Texas and Part of Mexico & the United States Showing the Route of the First Santa Fe Expedition

Engraving, 41.5 x 30.2 cm. (irreg.), from George Wilkins Kendall, *Narrative of the Texan Santa Fe Expedition* (New York: Harper & Bros., 1844), vol. 1, frontispiece. 53/11 92-219

In 1841 Republic of Texas President Mirabeau B. Lamar sent an expedition of Texan commercial traders and merchants to Santa Fe along with some civilian commissioners and a military escort. The expedition members included some names still remembered in Texas history and place names: Colonel William G. Cooke, Tejano patriot Jose Antonio Navarro, Richard F. Brenham, and the New Orleans Picayune journalist and author George Wilkins Kendall (1809-1867). Lamar hoped the expedition could help Texas appropriate some of the lucrative trade that was passing along the Santa Fe Trail and that the commissioners could convince the New Mexicans to join Texas' revolt from the Mexican central government.

Due to inadequate preparation and ignorance of the New Mexicans' resolve to support the Mexican government, the Texans' mission was a complete failure. The Texans brought no maps or scientific instruments to guide them or to record measurements for later work. As they neared their destination, the New Mexicans took them prisoner and sent them south in chains. One positive result was this map which delineates the expedition's route north from Austin into the Cross Timbers and westward, crossing the Chihuahua and Santa Fe trails used by earlier traders. From Santa Fe it documents the route of the prisoners southward, including that of a separated party of prisoners of which the highest ranking was the commissioner Colonel William G. Cooke, deep into Mexico before their release at the port of Veracruz.



The map was one of the first of many to focus on Texas and New Mexico together with a considerable portion of Mexico as far south as Mexico City and Veracruz. Apparently with little first-hand cartographic material available, the map's draftsman and engraver Kemble did an admirable job for publishers Harper & Bros. of New York, compiling it as an illustration to correspondent Kendall's account of the expedition and his captivity in Mexico.

See William B. Taylor and Gerald D. Saxon's introduction to *George Wilkins Kendall, Narrative of the Texan Santa Fe Expedition* (2 vols.; Dallas: DeGolyer Library and William B. Clements Center for Southwestern Studies, 2004 reprint), vol. 1, pp. xiii-xxxvi; Wheat, *Mapping the Trans-Mississippi West*, vol. 2, pp. 188, 264-265, no. 483.

W. Casilear

Incident on the Prairies

Engraved and etched transfer lithograph on paper, 12 x 20 cm., engraved by Jordan & Halpin, printed by R. Miller, in George Wilkins Kendall, *Narrative of the Texan Santa Fe Expedition* (New York: Harper & Bros., 1844 or 1856), vol. 1, opp. p. 124. *Gift of Jenkins Garrett* F390 .K32 Garrett

This illustration from New Orleans Picayune correspondent George Wilkins Kendall's book on the Texan Santa Fe depicts Kendall's initial mode of transportation, which he described as "a neat Jersey waggon [sic], drawn by two mules, and covered so as to protect us from the sun and rain during the long marches." In another part of the text he called it a "Jersey carryall." This was a type of "light, square-box wagon having two seat-boards and a standing top." Sometimes called "Dearborns" since one was used in the field by General Henry Dearborn, this type was sometimes used for U.S. mail service in the West. Artist Casilear was not on the expedition, and his renderings of the wheels are not proportional.

Kendall, *Narrative...*, vol. 1, pp. 72, 85, 351; Mark L. Gardner, *Wagons for the Santa Fe Trade: Wheeled Vehicles and their Makers, 1822-1880* (Albuquerque: University of New Mexico Press, 2000), pp. 113-119.

Josiah Gregg

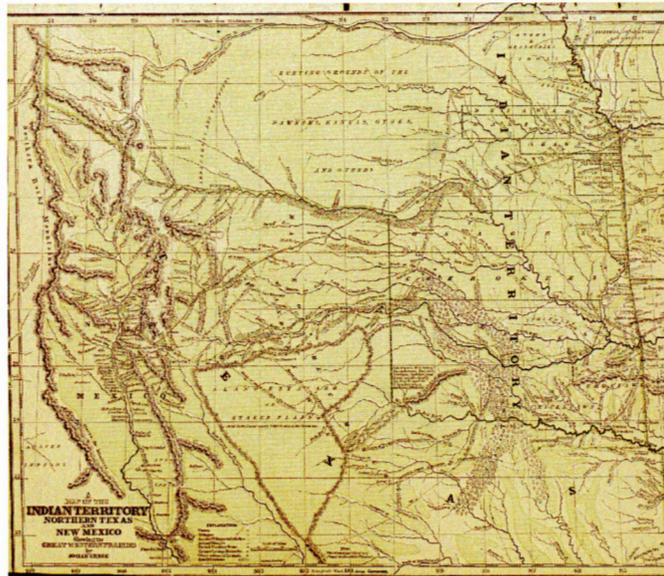
A Map of the Indian Territory, Northern Texas and New Mexico Showing the Great Western Prairies

Color cerograph, 33 x 40 cm., printed by Sidney E. Morse and Samuel Breese, New York, from Josiah Gregg, *Commerce of the Prairies: or, The Journal of a Santa Fe Trader...* (2 vols.; New York: H. G. Langley, 1844).

46/11 83-551a

Missouri-born Santa Fe trader Josiah Gregg (1806-1850) wrote what is considered the best firsthand account of the early merchant-traders in New Mexico. His accompanying map was the best printed map in its time for the depiction of the southwestern prairies. It shows various routes of the Santa Fe and Chihuahua traders, including Gregg's own treks, between and through Missouri, Arkansas, Texas, and Indian Territory. There are, for example, Gregg's Route to Santa Fe 1839, Gregg's route in 1840, and the "Route of the Santa Fe Caravans" (all variations on the Santa Fe Trail). Gregg also compiled information from other maps. For example, there is "La Jornada del Muerto" (i.e., the Journey of Death along the middle Rio Grande in New Mexico dating back to the Spanish era and earlier), the "Route of Capt. Pike," "Capt. Pike's Route in 1806," the "Route of Maj. Long 1820," the "Route of Texan Santa Fe Expedition 1841" including the split with "Route of Col. Cooke's Division" and "Route of main division with wagons," "Capt. Boone in 1843" (sic, a reference to Captain Nathan Boone who was part of the U.S. First Dragoon expedition in 1834), "Route of the Oregon Emigrants" (the Oregon Trail), "Military Road" between Ft. Smith and Ft. Towson, and roads between Chickasaw Depot and Ft. Smith, and from Ft. Smith to Ft. Gibson. The routes of the "Caravan from Chihuahua to Arkansas" in 1839 and back "from Arkansas to Chihuahua" in 1840 are also depicted. Often identified with Missouri physician and prominent merchant Henry C. Connelly, this "Chihuahua Expedition" was a cooperative effort between local officials and merchants in Chihuahua to open a more direct trade with Arkansas that bypassed Santa Fe.

The map carefully denotes towns, settlements, pueblos, forts, trading posts, camps, springs, rivers, creeks, wooded areas such as the Cross Timbers, sandy regions including parts of the Canadian River valley,



mountains and escarpments such as the "Wichita Mts" and the edges of the "Llano Estacado or Staked Plains." The map depicts the ranges and hunting grounds of Indians such as the Comanche, Kiowa, Pawnee, Kanza, Oto, and other peoples. But it also shows lands allotted to more agriculturally settled tribes recently removed from the east such as the Seminole, Cherokee, Osage, Shawnee, Delaware, Choctaw, Chickasaw, and Waco. Even lands allotted to "Half Breeds" turn up on this map, which was printed in two colors by cerography, a new wax engraving transfer process, by the firm of Morse and Breese. The map and Gregg's book went through multiple editions, both in English and German.

Josiah Gregg, *Commerce of the Prairies*, Reprint intro. by Max L. Moorehead, ed., (Norman: University of Oklahoma Press, 1954); Streeter, pp. 473-475, nos. 1502-1502F; Davis, et al., *Going to Texas*, pp. 58-59; John Logan Allen, "Patterns of Promise: Mapping the Plains and Prairies, 1800-1860," in Luebke, Kaye, and Moulton, eds. *Mapping the North American Plains* (Norman: University of Oklahoma Press, 1987), p. 51; Carl I. Wheat, *Mapping the Trans-Mississippi West*, vol. 2, pp. 186-188, 264, no. 482; Goetzmann, *Army Exploration*, pp. 110, 126, 127; Ben W. Huseman, *Revisualizing Westward Expansion: A Century of Conflict in Maps, 1800-1900* (University of Texas at Arlington, 2008), p. 19, no. 16.

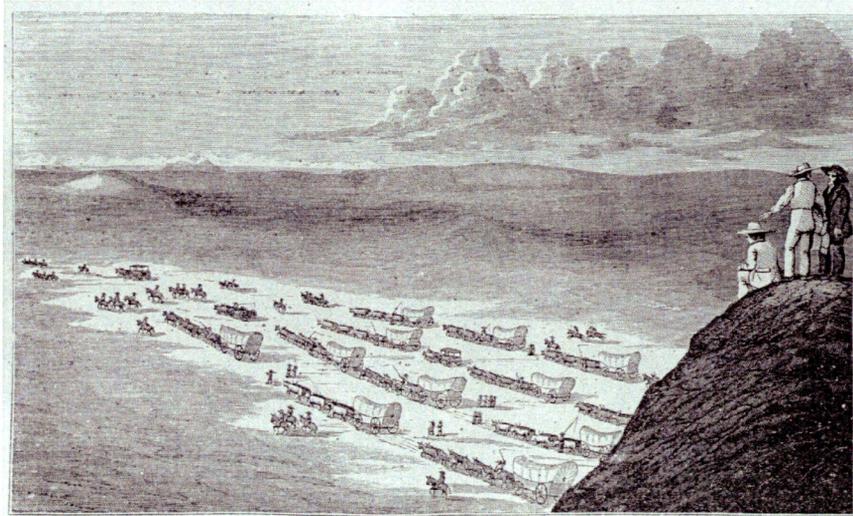
Artist Unknown

March of the Caravan

Engraving on paper, 10 x 15 cm., in Josiah Gregg, *Commerce of the Prairies* (2 vols.; New York: H.G. Langley, 1844), vol. 1, opp. p. 102. 19.5 cm. *Gift of Jenkins Garrett* F800 .G8 Garrett

A deceptively simple and effective illustration, the engraved *March of the Caravan* from Santa Fe trader and historian Josiah Gregg's best-selling classic *Commerce of the Prairies* conveys the grandeur of the Southwestern landscape and the excitement and expectations of the trail. The tiny print could well have inspired Hudson River School painter Albert Bierstadt's large oil on canvas *Emigrants Crossing the Plains* (1867), which, in turn, found later cinematic expression in such movies and westerns as *How the West Was Won* (1962).

Figures on the dark promontory in the foreground offer a sense of scale and contrast to the merging lines of perspective of the departing wagon train.



38

MARCH OF THE CARAVAN.

Although the identity of the artist is unknown, this image and the others from Gregg's book have convincing details that suggest the "truth" and authenticity of an eyewitness. The covered wagons in the middle distance have the curved bodies and outward-canted gates typical of the Conestoga or Pennsylvania type wagons described by Santa Fe traders and others on the western trails. Some are drawn by mules and others by oxen. Interspersed with the Conestogas are a couple of light square-box wagons (Dearborns, carryalls, or Jerseys?), each with thin supports for the flat, standing top. Riders at the front and along the sides of the columns demonstrate the military-style order of the wagon trains.

See Mark L. Gardner, *Wagons for the Santa Fe Trade*, pp. 13-19, 118.

39

E. Didier and A.I. Dick

Indian Alarm on the Cimarron River

Engraving on paper, 10 x 15 cm., in Josiah Gregg, *Commerce of the Prairies* (New York: H.G. Langley, 1844), vol. 2, frontispiece. 19.5 cm. *Gift of Jenkins Garrett* F800.G8 Garrett

Encounters between Anglo or Hispanic travelers and Native Americans along the western trails were often tension-filled in many cases due to a lack of being able to communicate in a common language. In this scene, Gregg's party of Santa Fe traders prepare to receive a much larger band of mounted Plains Indians (from which tribe or tribes they cannot distinguish) along the Cimarron River in present Oklahoma. Gregg recorded that "the more daring" of the traders drew their guns and advanced to meet "the enemy at once, while the timid and cautious took a stand with presented rifle behind the wagons." According to Gregg, the traders even added the impromptu music of a fife and drum which did more to amuse their visitors than frighten them. In this particular incident, expressions of peace were exchanged, Indian women and children showed up, and, despite suspicions on both sides, the traders were allowed to pass on their way.

Gregg, *Commerce of the Prairies*, pp. 74-75.

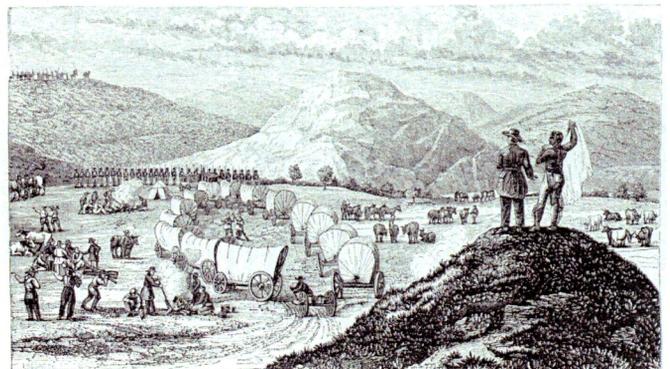
40

Artist Unknown

Lagerplatz [Camping Place]

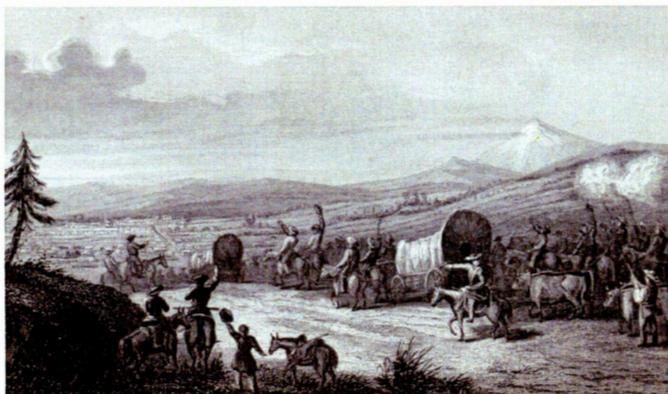
Engraved transfer lithograph on paper, 10 x 15 cm., in Josias Gregg, *Karawanenzüge durch die westlichen Prairien und Wanderungen in Nord-Mejico*. Translated and reworked by M. B. Lindau (2 vols. in 1; Dresden and Leipzig: Arnoldsche Buchhandlung [Arnold Book Dealer], 1845), vol. 2, frontispiece. 19.8 cm. *Gift of Jenkins Garrett* F800.G85 1845b

While on the trail, traders and immigrants travelling in wagon trains would encamp by circling the wagons in a defensive formation. Gregg described an experience and offered this illustration of such a camp about five or six miles from the North Fork of the Canadian River where they were visited by the feared Comanche on June 6, 1839. This image is from a reworked German translation of *Commerce of the Prairies*, titled *Karawanenzüge durch die westlichen Prairien und Wanderungen in Nord-Mejico* literally [*Caravan trains through the western Prairies and Wanderings in Northern Mexico*], published in 1845.



CAMP COMANCHE.

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41

E. Didier and A.L. Dick

Arrival of the Caravan at Santa Fe

Engraving on paper, in Josiah Gregg, *Commerce of the Prairies: or, The Journal of a Santa Fe Trader...* (2 vols.; first published in New York: H. G. Langley, 1844), vol. 1, frontispiece. *Gift of Jenkins Garrett* F800 G8 Garrett

In *Commerce of the Prairies*, Josiah Gregg described the joyous arrival of a trade caravan from Missouri at Santa Fe where he and an advanced party had already arrived five or six days earlier:

...wagon after wagon was seen pouring down the last declivity at about a mile distance from the city. To judge from the clamorous rejoicings of the men, and the state of agreeable excitement which the muleteers seemed to be laboring under, the spectacle must have been as new to them as it had been to me. It was truly a scene for the artist's pencil to revel in. Even the animals seemed to participate I doubt, in short, whether the first sight of the walls of Jerusalem were beheld by the crusaders with much more tumultuous and soul-enrapturing joy.

The arrival produced a great deal of bustle and excitement among the natives....

As noted by wagon expert Mark L. Gardner, the accompanying illustration could not have been produced simply from reading Gregg's text, thus suggesting the author probably personally informed the book's illustrator or may have provided eyewitness sketches to aid in the creative process. The depictions of the Conestoga-style wagons and the view of Santa Fe are just too accurate without this.

Gregg, *Commerce of the Prairies*, pp. 110-111; Gardner, *Wagons for the Santa Fe Trade*, pp. 13-19, 118.

42

John C. Fremont and Charles Preuss

Map to Illustrate an Exploration of the Country, lying between the Missouri River and the Rocky Mountains, on the Line of the Platte and Nebraska River

Lithograph on paper, 36 x 83.5 cm., in Lieut. J. C. Fremont, *A Report on an Exploration of the Country Lying Between the Missouri River and the Rocky Mountains* 27th Congress, 3d Session. Senate, Doc. 243 (Washington, D.C.: U.S. Government, 1843), frontispiece. 23.3 cm. F592 .F81 Map Rm

The large numbers of U.S. emigrants travelling west finally had a reliable guide to the middle portions of the Oregon Trail after Spring 1843 when the U.S. government published this map by the famous "Pathfinder," Lieutenant John C. Fremont (1813-1890), of the U.S. Army's Corps of Topographical Engineers, and his civilian topographical assistant Charles Preuss (1803-1854). The map is based upon material gathered

on Fremont's first expedition of 1842 to survey the Platte River "up to the head of the Sweetwater." The guide for that expedition was the experienced mountain man and guide Kit Carson (1809-1868).

The map extends from the junction of the North and South Platte Rivers at the site of present North Platte, Nebraska, to the Wind River Mountains in present western Wyoming. At the southern tip of these mountains in the map at the upper left may be seen the "South Pass" of the Central Rockies. The pass was the famous gateway to the Far West that served a function for emigrants and travelers similar to the Cumberland Gap in the east. Landmarks listed on the map include Chimney Peak, Fort Laramie, Red Buttes, Goat Island, Independence Rock, and Devil's Gate.

The route was already well-traveled for many years before Fremont's first expedition of 1842. Large-scale western emigration along the trail began in 1841 when groups used it to travel to Oregon and California. It was thus also part of the California Trail. By 1847 the Platte route to South Pass was also part of the Mormon Trail as well, although some groups travelled on the river's northern banks while other groups travelled on the southern side.

The map, largely the work of Preuss, is characteristic of a number of maps associated with Fremont and the Topographical Engineers in that it is based on numerous carefully recorded latitude and longitude measurements and shows only areas observed personally by the mapmakers. As such it represents the new scientific rigor and professionalism of the Topographical Engineers. Fremont's text helped popularize and promote the Oregon and California Trails as did many of his subsequent productions and their accompanying maps, such as the larger *Topographical Map of the Road from Missouri to Oregon...* in VII sections, also published by Congress in 1846.

William H. Goetzmann, *Army Exploration in the American West, 1803-1863* (Austin: Texas State Historical Association, 1991; first published in 1959), pp. 65-108, 116-123; W. Turrentine Jackson, "California Trail," "Mormon Trail," and "Oregon Trail," in Howard Lamar, ed. *The New Encyclopedia of the American West* (New Haven & London: Yale University Press, 1998), pp. 158, 737-738, 834-835; Wheat, *Mapping the Trans-Mississippi West*, vol. 2, pp. 180-182, 258, no. 464; Huseman, *Revisualizing Westward Expansion*, p. 21, cat. no. 18 references the larger Fremont/Preuss Oregon Trail map.

43

Charles Preuss

Central Chain of the Wind River Mountains

Toned lithograph on paper, 13 x 22.5 cm., by E. Weber & Co., in Lieut. J. C. Fremont, *A Report on an Exploration of the Country Lying Between the Missouri River and the Rocky Mountains* 27th Congress, 3d Session. Senate, Doc. 243 (Washington, D.C.: U.S. Government, 1843), frontispiece. 23.3 cm. F592 .F81 Map Rm

Fremont's official report of his Platte River expedition was published by the U.S. government, greatly assisted by the powerful influence of his father-in-law, Missouri Senator Thomas Hart Benton (1782-1858), a great promoter of U.S. western expansion. The report, which included topographical views along with the map, became a model for subsequent government expedition reports. This lithograph was probably based upon a sketch drawn in the field by Fremont's civilian assistant Charles Preuss (1803-1854). Before his years of work as topographer with Fremont, Preuss had worked as a surveyor in Prussia.

See Erwin G. Gudde and Elisabeth K. Gudde, *Exploring with Fremont: The Private Diaries of Charles Preuss, Cartographer for John C. Fremont on his First, Second, and Fourth Expeditions to the Far West* (1968).

S. Augustus Mitchell

*A New Map of Texas Oregon and California
with the Regions Adjoining...*

Engraved transfer color lithograph on paper, 52.5 x 52.5 cm.
(Philadelphia H. N. Burroughs for S. Augustus Mitchell, 1845).
Gift of Virginia Garrett 132/2 00583

One of the leading U.S. commercial mapmakers, Samuel Augustus Mitchell, Sr. (1792-1868) & Co., published this map just before the U.S. War with Mexico of 1846-1848. With the fully extended borders of the newly annexed former Republic of Texas and the Oregon Territory (stretching up to the 54° 40' parallel of North latitude) and the Mexican state of "Upper or New California" colored in bright pink, the map almost screams the United States' "manifest destiny to overspread the continent." Based upon recent U.S. government-published maps, including the 1841 map of Oregon from Wilkes's expedition, the 1844 map of Texas by W. H. Emory, and several maps from Fremont's first expeditions, the Mitchell map here compiles a wealth of useful information for travelers about important trails of the time.

Foremost among the featured trails is the "Oregon route" stretching west from Westport in Missouri all the way to Oregon City on the Willamette. A table inset of the "Emigrant Route from Missouri to Oregon" at lower left gives mileage distances between various river crossings, topographical landmarks, forts, and settlements as well as distance totals to each point. By emphasis the map also suggests the Bellevue, Fort Croghan and Council Bluffs area along the Missouri as the eastern terminus of the route west by way of the Nebraska or Platte River, while Fremont's route to St. Vrain's Fort near Long's Peak in the Rockies offers an alternate route.

Also leading west, southwest from Independence and Westport in Missouri is the "Caravan route to Santa Fe," and west beyond Santa Fe to California by way of "Vegas" and the "Mojave R." is the "Great Spanish Trail from P. Angeles to Santa Fe." Thanks to Fremont's recent explorations of the Great Salt Lake and circuit in the vast eastern portions of Upper California, the map suggests there may be a route connecting the middle Oregon route with the Great Spanish Trail. Note that Fremont's designation "Great Interior Basin of California" appears in large letters.

But that is not all: In the Texas area the map includes the old Spanish roads from Louisiana stretching to the Rio Grande and into Coahuila and Tamaulipas, newer roads connecting the rapidly developing multi-colored counties, while the old Camino Real or Chihuahua Trail leads south from Santa Fe (in Texas!) along the Rio Grande past "Passo del Norte" to Chihuahua. In far northern Oregon the map traces part of "Mackenzie's route" while further south leading through western Oregon from the "Great Falls" and upper reaches of the Missouri River in "Missouri Territory" is "Lewis and Clark's route" to the Columbia River.

With its blatant nationalism, relative accuracy, emphasis upon the Oregon and other routes, and the inclusion of the area of the Great Salt Lake from Fremont's explorations, it is not surprising that the map was widely used. Mormon leader Brigham Young reportedly ordered six copies of the map for his western migration in the winter of 1846. At that time the controversial Mormons were preparing to



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flee from persecution by fellow citizens who did not share or respect their faith and way of life. The map also served as an inset in *Mitchell's Reference and Distance Map of the United States*.

Paul E. Cohen, ed., *Mapping the West: America's Westward Movement* (New York: Rizzoli International Publications, Inc. 2002), pp. 134-135; Wheat, *Mapping the Trans-Mississippi West*, vol. 3, pp. 35, 253-254, no. 520; Francaviglia, *Mapping and Imagination in the Great Basin*, pp. 82-99; Judith A. Tyner, Map 25, in Warren Heckrotte and Julie Sweetkind, eds., *California 49: Forty-Nine Maps of California from the Sixteenth Century to the Present* (San Francisco: California Map Society Occasional Paper No. 6 with The Book Club of California, 1999), pp. 50-51; Goetzmann, *Army Exploration in the American West*, p. 130; Huseman, *Revisualizing Westward Expansion*, p. 21, cat. no. 17.

45

S. Augustus Mitchell & Co. and George Stealey
*Map of Mexico, including Yucatan & Upper California
exhibiting the chief cities and towns, the principal traveling
routes &c. [with secondary] Map of the Principal Roads from
Vera Cruz and Alvarado to the City of Mexico, Including the
Valley of Mexico, Mountains, Plains, Volcanoes, Lakes &c.
Compiled from the latest and best authorities by Geo. Stealey,
Civil Engineer [and] Profile of the Road between Mexico and
Vera Cruz*

Engraved transfer color lithograph on paper, 83 x 60.5 cm.
(Philadelphia: S. Augustus Mitchell, 1847). 77/11 270003

The Mitchell mapmaking firm in Philadelphia produced several different maps showing aspects of the U.S. War with Mexico. This vertically oriented map of Mexico, Yucatan, and Upper California actually consists of four separate maps on one sheet designed to inform the public about the geography of the areas most affected by

the conflict. All four of these maps have roads, trails, or routes on them. The primary general map is brightly colored and shows many of the roads in Mexico delineated much earlier by Arrowsmith in 1832 and by many others since that time. A fine rendering of Texas with its “stovepipe” extension into what is now Wyoming also encompasses Santa Fe and much of the “Trader’s route to Independence, Mo.,” the old “Camino Real” to Chihuahua, and the “Camino Real” or “old San Antonio Road” from Natchitoches to “Presidio del Rio Grande.” A road from Goliad leads south through Refugio to Corpus Christi to Pt. Isabel to Brazos Santiago through the battlefields at Palo Alto and Resaca de la Palma to Matamoras – all points important in the opening and supply phases of U.S. Army General Zachary Taylor’s northern campaign. Further west in Upper California may be seen the coastal road and the “Great Spanish Trail to Santa Fe.” There is nothing as yet indicated from General Kearny’s overland trek to California.

South of the Rio Grande there is more evidence of Taylor’s northern campaign by the emphasis on the road from Matamoras to Camargo, Mier, Seralvo [sic, Serralvo], Marine [sic, Marin], and Monterrey [sic, Monterrey]. Yet more follows with roads from Monterrey to Rinconada, Saltillo, Buena Vista, Agua Nueva, Encarnacion, and beyond. All of these towns were mentioned in reports emanating from Taylor’s campaign in 1846-1847. The old *Camino Real* extending from San Antonio and the Alamo to Presidio del Rio Grande to Monclova to Saltillo was the route followed by General John E. Wool on a march with the largely U.S. Volunteer “Central Division” to reinforce Taylor. Roads from Matamoras and Monterrey lead off to

Tampico where General William Jenkins Worth’s Division of Regulars and, later, Patterson’s Division of Volunteers withdrew in preparation for the invasion of Central Mexico. Even the rendezvous site of Lobos Island appears – an otherwise insignificant location to show on a general map.

Mitchell’s general map also emphasizes (by title and the color yellow) the semi-autonomous Mexican state of Yucatan but includes no roads there. In December 1846 citizens of the city of Campeche had declared their independence from both the administration of nearby Merida and from Mexico, calling for a fully independent Yucatan that would remain unconditionally neutral in the war against the United States.

The inset at upper right shows the “Battle Field of Monterey” with a plan of the city and small lines indicating the “Route of Gen. Worth’s Div[ision]” on the 20th of September 1846 and the “Route of the 1st Div[ision] and Vol[unteer]s” on the 21st. Variations of this plan appeared in illustrated newspapers, reports, and other accounts of the time.

The bottom of the sheet features George Stealey’s *Map of the Principal Roads from Vera Cruz and Alvarado to the City of Mexico, Including the Valley of Mexico, Mountains, Plains, Volcanoes, Lakes &c.* This area encompassed General Winfield Scott’s Central Campaign in Mexico and much of the map and even the idea for the profile elevations below derived from Alexander von Humboldt’s great map of New Spain of 1811. A hand-drawn red line indicates General Scott’s route from Veracruz to the National Bridge, Cerro Gordo, “El Encerno” [sic, El Encerro, one of Santa Anna’s haciendas], Jalapa, Perote, Puebla, to Mexico City. This, the map notes is the “Main Road from Veracruz to Mexico...Stagecoaches run through in 3 days.” (Scott and the U.S. Army had to fight their way over this route in just over six months, from March 9 to September 14, 1847.) Stealey also took care to include the routes of Hernan Cortes’ conquest in 1519, 1520, and 1521, as well as roads from Mexico City to Tampico, Oaxaca, and Acapulco.

It is interesting to note that UTA’s map apparently once belonged to Lieutenant D. T. Van Buren of the 2nd Artillery, according to an inscription on the back. Daniel Thompkins Van Buren (1826-1890) was a New York native and West Point graduate who participated in the final battles for and occupation of Mexico City. He eventually rose to the rank of Brevet Brigadier General for the Union during the Civil War. Van Buren’s ink annotations along the route from Veracruz to Mexico City declare that from the high road near Jalapa, one “Can see the Gulf from here” and note the location of the “Castle” at Perote. Near the decorative Mexican eagle grappling a serpent appears to be Van Buren’s notes about his return to the U.S. at the end of the war: “left Mexico 20th May 1848 / at Vera Cruz 14th June [1848] / [at] N[ew] Orleans 28th June [1848].” Far to the north along the Rio Grande in New Mexico is a handwritten “*Jornada del Muerto*” – perhaps a cryptic reference to the march of the Missouri Volunteers under Colonels A. W. Doniphan or Sterling Price.

Compare UT Arlington maps by Mitchell nos. 00481, 00585; David Rumsey Map Collection, nos. 4594.001, 3119.001, 4652.000; Streeter 3868, 3869; Wheat, Gold 35. On Van Buren, see Heitman, *Historical Register and Dictionary of the United States Army, 1798-1903*, vol. 1, p. 980; Huseman, *Price of Manifest Destiny*, p. 27, cat. no. 50.



The U.S.-Mexico War Maps of Henry Washington Benham (1813-1884)

U.S. Army Topographical Engineer

One of the U.S. Army Topographical Engineers working for General Taylor in northern Mexico before, during, and after the Battle of Buena Vista was Henry W. Benham. Graduating first in the West Point class of 1837, Benham made first lieutenant the following year. When the U.S.-Mexico War began, he was working in the east and was not assigned to join Taylor's army until late 1846. Arriving in Texas in late January 1847, Benham soon headed south and brought up the last wagon train of supplies for Taylor's Army encamped south of Saltillo before the Battle of Buena Vista. Benham was among the engineers who reconnoitered the area around Saltillo before the battle, giving Taylor's second-in-command Brigadier General John E. Wool valuable information about the surrounding terrain. With this knowledge, Wool recommended the excellent defensive position to which Taylor withdrew his troops just in time to meet Santa Anna's army on February 22, 1847. During the battle, Benham commanded an advanced observation post, ran messages to and from Taylor to commanders in various parts of the field, helped shore up U.S. defenses by rallying and positioning troops, and received a slight wound from a ricocheting musketball.

Following the battle, Benham served eighteen more months in Mexico under General Wool. Benham made detailed reconnaissances of the area around and well in advance of the U.S. positions of occupation. He kept personal copies of some of the maps he made at this time, and many of these were passed down through his descendants until they were acquired by UT Arlington in 1995.

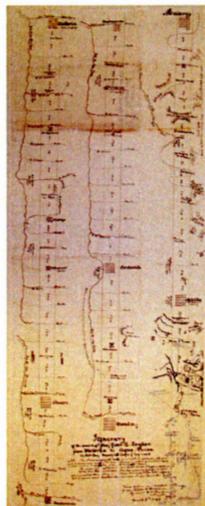
Gerald D. Saxon, "Henry Washington Benham: A U.S. Army Engineer's View of the U.S.-Mexican War," in Dennis Reinhartz and Saxon, eds., *Soldier-Engineers on the Southwestern Frontier* (Austin: University of Texas Press, 2005), pp. 130-155. Shirley R. Rodnitzky, Guide to the Henry W. Benham Family Papers, AR 388, University of Texas at Arlington Libraries Special Collections, March 1997; Huseman, *Price of Manifest Destiny*, p. 25.

46

Henry Washington Benham (1813-1884)
after Joseph K. F. Mansfield (1803-1862)

Itinerary of the March of Maj. Genl. Z. Taylor from Victoria to Agua Nueva

Ink on heavy tracing paper, 74 x 27.5 cm. *Benham Family Papers* AR 388-7-3



On March 5, 1847, following the Battle of Buena Vista, Benham copied this old-format "itinerary" or strip map from his superior officer on General Taylor's staff, Brevet Major Joseph K. F. Mansfield of the U.S. Army Engineers. It records a march of approximately 233 miles from Victoria in Tamaulipas to Agua Nueva in Coahuila that Taylor's forces made in December 1846 before the battle. Not at all concerned with accurate cardinal directions, it depicts cities, towns, and villages, and some hills and landmarks, and records mileage between streams and creeks. Benham notes he extended the itinerary further southeast from Saltillo to Hedionda; however, graphite notations on the lower left of Benham's ink-traced copy extend the itinerary as far south as Mazapil.

Huseman, *Price of Manifest Destiny*, p. 25, cat. no. 45.

47

Henry Washington Benham

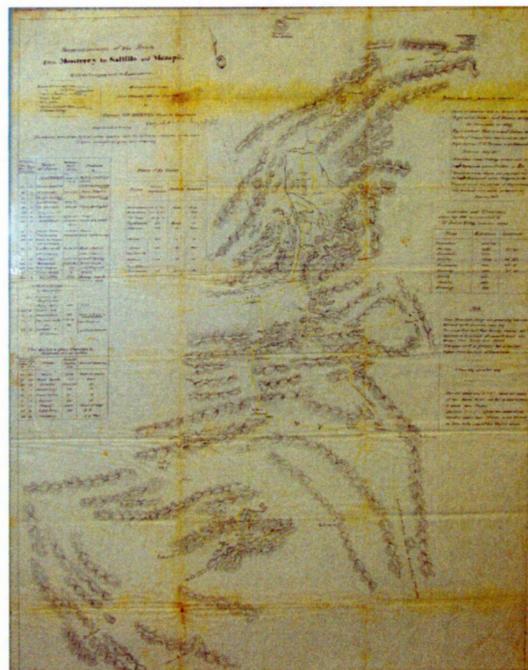
Reconnaissance of the Route from Monterey to Saltillo and Mazapil. With the diverging route to Encarnacion

Surveyed and drawn from February 1847 to May 1847 by Captain H. W. Benham, Corps of Engineers "Orig. sent to Engr Dept"
Black, yellow, and blue ink on waxed cloth, 73 x 61 cm., 1847 Scale 1 in. = 5 miles
Benham Family Papers AR388-7-5

Benham made surveys for this large map beginning in February 1847 (around the time of the Battle of Buena Vista), and he completed it in May, sending his original to the Engineer Department in Washington, D.C. The map records topographical features such as hills, mountains, ravines, water courses, springs, cities, towns, villages, and roads. The map further illustrates the Battle of Buena Vista by showing routes taken by Santa Anna's Army and his cavalry under Brigadier General José Vicente Miñon.

Benham noted that "courses were taken by a prismatic compass and the distances estimated by the width of a horse in going and returning." For latitude and longitude readings Benham credited Santa Fe trader Josiah Gregg, who had accompanied him to the Saltillo area. Tables at left record place names, their "probable population," and the products associated with them along with the distances between them. A key at right helps identify battle sites, only four of which relate to the U.S. War with Mexico. Interestingly, two locations relate to Mexico's War for Independence from Spain, while another refers to a "fight between Mexicans and Indians in 1841," and still another to a "fight between Col. [Samuel W.] Jordan's Texans with the Mexicans in 1842 [sic, 1840]."

Saxon, "Henry Washington Benham: A U.S. Army Engineer's View of the U.S.-Mexican War," in Dennis Reinhartz and Saxon, eds., *Soldier-Engineers on the Southwestern Frontier* (Austin: University of Texas Press, 2005), pp. 130-155; Huseman, *Price of Manifest Destiny*, pp. 25-26, cat. no. 46.



47

John Disturnell

Mapa de los Estados Unidos de Mejico

Engraved transfer color lithograph on paper, 76.5 x 104.5 cm.,
New York: J. Disturnell, 1847 102/1 310048

Capitalizing on the demand for maps of Mexico during the U.S.-Mexico crisis and war, New York publisher John Disturnell first issued an edition of this map in 1846 from a copper plate originally used in 1828 for New York publishers White, Gallaher & White's *Mapa de los Estados Unidos de Mejico*. From an 1845 map by John C. Fremont and Charles Preuss, Disturnell reworked the area of Alta California and the Great Basin. Among other changes, he added some new trails, routes, roads, and railroads and the boundaries of the states of Louisiana, Arkansas and Missouri. Pre-war routes shown include the Oregon Trail, Santa Fe Trail, "Capt. Fremont's Route 1843," "Maj. Long's Route," the Spanish Trail from California to Santa Fe, the Chihuahua Trail or to Santa Fe, plus many roads in Texas and what is still Mexico today.

Article 5 of the 1848 Treaty of Guadalupe Hidalgo ending the U.S. War with Mexico refers to an 1847 version of this map, seen here, which is now commonly called the "Treaty Map." The routes of Generals Taylor, Wool, and Kearney (from Fort Leavenworth as far as Santa Fe) are included (and emphasized with a hand-drawn red line on UTA's copy along with the Oregon Trail and the National Road from Veracruz to Mexico City in the inset at bottom left). Inset in the Gulf of Mexico Disturnell reproduced a map by Captain J. H. Eaton of the 3rd Infantry depicting the battlefields of the lower Rio Grande as well as a chart of the Bay of Veracruz originally produced for French Vice Admiral Baudin during the Franco-Mexican Pastry War of 1838-1839.

In 1937 Colonel Martin Lawrence, Chief of the Library of Congress map division, identified up to 23 versions or "editions" of the map which first began appearing in 1846. UTA owns original examples of Lawrence's so-called "fourth edition" of the map, published by Disturnell in 1846, as well as Lawrence's seventh "Revised Edition," published by Disturnell in the early months of 1847 (seen here, the one that accompanied the American copy of the treaty). Oddly, the Spanish printing of the treaty was accompanied by a separate edition of the map (Lawrence's twelfth, also an original of which is in the UTA cartographic collection).

Lawrence Martin, *Disturnell's Map* (Washington, D.C.: U.S. Government Printing Office, 1937); Wheat, *Mapping the Trans-Mississippi West*, vol. 3, pp. 6, 259, no. 540.



After John Mix Stanley

The Last Day with the Wagons

Lithograph on paper, 17.5 x 12 cm., Lith. by E. Weber & Co., Baltimore, in William H. Emory, *Notes of a Military Reconnoissance, from Fort Leavenworth, in Missouri, to San Diego, in California...* 30th Congress, 1st Session, Executive Doc. No. 7 (Washington, D.C.: Wendell and Van Benthuysen, Printers, 1848), opp. p. 55. 23 cm.

Gift of Jenkins Garrett

F786 .U571 Garrett Bay D

In early June 1846 U.S. Army Brigadier General Stephen W. Kearny set out on the Santa Fe Trail from Fort Leavenworth, Kansas, with the "Army of the West," a force of regular troops supplemented by volunteers. He entered Santa Fe without a fight on August 18, and then struck out for California with a portion of his force on September 25. He first headed south along the Rio Grande, paralleling the Chihuahua Trail, then turned west near Socorro. Unlike the Missouri-Santa Fe and Chihuahua Trails, this western portion of Kearny's march was far less traveled by North Americans, and by early October, they decided to give up their wagons and continue by horse and mule.

Lieutenant William H. Emory of the U.S. Army Corps of Topographical Engineers, who was assigned to Kearny's force, kept notes on the march west and later constructed a very large map (left out of this exhibit because of its size) which was published along with lithographed illustrations after field sketches by John Mix Stanley, a civilian artist who also accompanied them. This lithograph titled "Last Day with the Wagons" shows the difficult terrain. On October 14 Lieutenant Emory reported that "We parted with our wagons, which were sent back.... and in doing so, every man seemed to be greatly relieved.... The viameter [a kind of odometer] for measuring distances, heretofore attached to the wheel of the instrument wagon, was now attached to the wheel of one of the small mounted howitzers." A wheeled howitzer may be seen in the lower right of the lithograph after Stanley's sketch.

Martha A. Sandweiss, Rick Stewart, and Ben W. Huseman, *Eyewitness to War: Prints and Daguerreotypes of the Mexican War, 1846-1848* (Fort Worth, Texas: Amon Carter Museum, and Washington, D.C.: Smithsonian Institution Press, 1989), pp. 47, 53, 143-146, biography, 144, n.2; Ron Tyler, *Prints of the West* (Golden, Colorado: Fulcrum Publishing, 1994), pp. 77-79.

After John Mix Stanley
Mouth of Night Creek

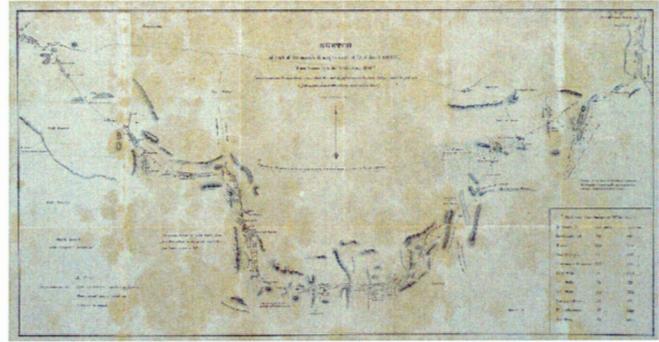
Lithograph on paper, 12 x 17.5 cm., C. B. Graham's Lithography, from William H. Emory, *Notes of a Military Reconnaissance, from Fort Leavenworth, in Missouri, to San Diego, in California...* 30th Congress, 1st Session, Ex. Doc. No. 41 (Washington, D.C.: Wendell and Van Benthuysen, Printers, 1848), opp. p. 61. 23 cm.
Gift of Jenkins Garrett F786 .U57 Garrett Bay D

This lithograph from Stanley's sketch shows Kearny's pack train winding through the mountains of western New Mexico. A wheeled howitzer, probably with the "viameter," like the one described by Emory, is in the foreground.

Incidentally, unknown to Kearny and his men, a hostile force of Californians awaited them at the end of their grueling overland adventure. On December 6 and 7, 1846, at the Battle of San Pascual in what is now southern California, Kearny was seriously wounded and only saved by the decisive action of Lieutenant Emory. Likewise, a force of U.S. sailors and marines from ships anchored off the coast marched to their rescue.

Stanley's official report, seen here, documents the overland march, the Indians, flora, and fauna encountered along the way, and the battle at the end of the march. The government publication soon had an extra use after the war as a guide for travelers to the gold fields of California along the southern overland route.

Dorothy Sloan, *Auction 22 Mostly Americana* (Austin, Texas, 2009), catalog no. 177; for maps connected with Kearny's march also see Huseman, *Price of Manifest Destiny*, pp. 29-30.



Philip St. George Cooke

Sketch of Part of the March & Wagon Road of Lt. Colonel Cooke from Santa Fe to the Pacific Ocean, 1846-7

Lithograph on paper, 30.5 x 58 cm. Lith. of P.S. Duval, Philadelphia, from "Report of Lieut. Col. P. St. George Cooke of his March from Santa Fe, New Mexico, to San Diego, Upper California" appendix in William H. Emory, *Notes of a Military Reconnaissance [sic], from Fort Leavenworth, in Missouri, to San Diego, in California, including part of the Arkansas, Del Norte and Gila Rivers* (30th Cong., 1st Sess., House Ex. Doc. 41, Serial 517; 1848).
 66/8 99-356

When General Kearny left Santa Fe with his "Army of the West" for San Diego in September 1846, he ordered Lieutenant Colonel Philip St. George Cooke to follow by cutting a more southerly road with a baggage train of wagons and a battalion of Mormon Volunteers who were on their way to Santa Fe from Iowa. This lithographed map depicts the road cut by Cooke and his caravan where the route differed from that of Kearny's force. By October 12, 1846, over five hundred Mormons, including some women and children, had arrived in New Mexico, but many were sick and too weak to go any farther. Cooke finally left the Rio Grande in November with 339 men, 5 women, 15 wagons, and a herd of sheep and cattle. Like Kearny's little army, Cooke's caravan experienced great hardships on the journey, and the latter arrived in San Diego on January 20, 1847, a little over a month behind Kearny. Cooke and his force had not done much in wagon-road construction but had instead just searched for a trail west with water holes, grazing areas, and ground smooth and hard enough to keep the wagons from overturning. Nevertheless, Cooke's map was important – Emory incorporated it in his general map. Moreover, Cooke's road became a well-worn emigrant trail and, as a possible railroad route, became a main impetus for the Gadsden Purchase. Even later, parts of the Atchison, Topeka, and Santa Fe Railway and the Southern Pacific Railroad followed much of this wagon road.

W. Turrentine Jackson, *Wagon Roads West: A Study of Federal Road Surveys and Construction in the Trans-Mississippi West* (New Haven and London: Yale University Press, 1965), pp. 17-22; Goetzmann, *Army Exploration in the American West*, pp. 109-116, 127-143, 161, 179, 201; Wheat, *Mapping the Trans-Mississippi West*, vol. 3, pp. 6-8, 249, 260, nos. 505, 544; Traas, *From the Golden Gate to Mexico City*, pp. 73, 84, 85, note 53. Also see Philip St. George Cooke, *The Conquest of New Mexico and California: An Historical and Personal Narrative* (New York: G. P. Putnam's Sons, 1878); Ehrenberg, "U.S. Army Military Mapping of the American Southwest during the Nineteenth Century" in Reinhartz and Saxon, eds., *Mapping and Empire*, pp. 97-98; Huseman, *Revisualizing Westward Expansion* (2008), p. 24, no. 23.

Expansion, Increasing Sectionalism, and Civil War

The 1850s witnessed increasing sectionalism as factions within the United States argued over the expansion of slavery into the new territories. The U.S. Army continued their heavy involvement in the exploration and mapping of these areas in addition to pursuing the sometimes conflicting objectives of protecting settlers and the Native inhabitants. The immense interest in California due to the Gold Rush made the objective of binding the nation together through a trans-continental railroad highly desirable, but determining the location of the route proved highly controversial due to the sectional factions within the nation. Several routes were explored but none finalized before the nation erupted into outright violence, first in Kansas, and later back east, culminating in the horrific American Civil War of 1861-1865. Meanwhile, a government contract for Overland Mail had resulted in a southern route for stagecoaches, wagons, and express riders, while the settlement of Texas and other states and territories and the development and mapping of trails and roads had continued unabated until the war's interruption.

52

Ensign, Thayer and Company

Map of the Gold Region of California Showing the Routes via Chagres and Panama, Cape Horn, & c.

Color lithograph on paper, 61 x 47.5 cm. (opening) on sheet 64.5 x 53 cm. (New York: Ensign & Thayer, 1849), probably from Thomas J. Farnham, *Life, Adventures and Travels in California* (1849) or from the same book under a different title, Thomas J. Farnham, *Pictorial Travels through California and Oregon* (1849). 20/8 120018

In the weeks and months following President Polk's Message to Congress on December 5, 1848, confirming the discovery of gold in California, map publishers rushed to produce California maps and guides to fuel a mushrooming demand from the public. For example, by simply showing few overland routes, this broadside with two maps suggests gold seekers to California use sea route alternatives as much as practicable. Listed first in the text at bottom is the "Route via Chagres and Panama" – a route that saved time and distance, but travelling in a group of ten or more was advised. Second is the "Route by Cape Horn" – "...the most acceptable as far as cost and facilities are concerned, but loss of time balances the difference in the price of passage, &c." The third route recommended was "the cheapest, quickest, and safest" and involved taking a ship to Veracruz, travelling overland via Guadalajara, Tepic, and San Blas to Mazatlan, then either taking another ship or going overland up the coast by mule or horse. However, the text advises "To prevent danger of being attacked by robbers through Mexico, persons should go in parties of 40 or 50 or more."

The general map at right shows sea routes and tracks of great explorers, including Cook, Vancouver, Furneaux, Prouse, and Wilkes. In addition, thin black lines track the Cape Horn route, the Panama route, and another alternative: a ship to Veracruz, thence overland to Acapulco via Mexico City. The map at left was largely taken from Fremont's 1845 map and shows only the "Great Spanish Trail from C. Angeles to Santa Fe" intersecting with "Fremont's Route."

Wheat, *Mapping the Trans-Mississippi West*, vol. 3, pp. 63-91, 277-278, no. 609; Compare with gold rush maps in Huseman, *Revisualizing Westward Expansion*, pp. 27-28, cat. nos. 27 and 28.





53

After F. C. Grist

First View of the Great Salt Lake Valley

Toned lithograph on paper, 13.5 x 21 cm., Akerman Lith., from Stansbury, *Exploration and Survey of the Valley of the Great Salt Lake of Utah, Including a Reconnoissance [sic] of a New Route Throught the Rocky Mountains* (Philadelphia: Lippincott, Grambo & Co., 1852), opp. p. 84. 24 cm. F826. U557 1852

By the end of 1847 more than 2,000 Mormons had arrived in the Great Salt Lake Valley seeking a haven from earlier persecutions in Missouri and Illinois. Many members of the U.S. government eyed the group with suspicion, and in 1849 Captain Howard Stansbury of the U.S. Army's Topographical Bureau was sent west to map the Great Salt Lake basin, visit the new Mormon settlements, and check the emigration routes leading there. His official report, published in 1852, included not only a landmark map of the Great Salt Lake valley but also an evaluation of the emigration routes and the Mormons' progress. An artist with Stansbury made the field sketch for this lithograph showing the Stansbury expedition's "First View of the Great Salt Lake Valley."

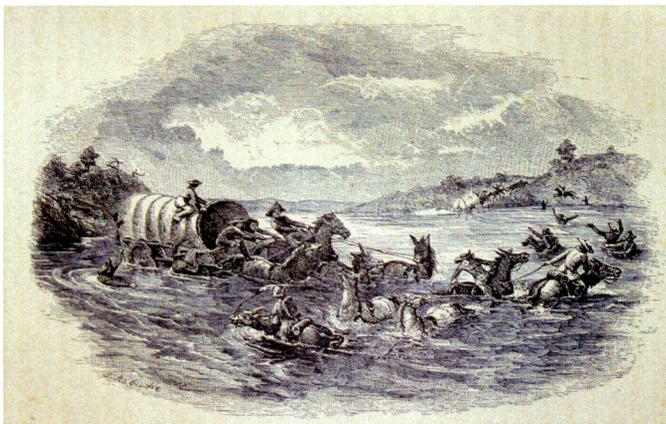
54

After John Russell Bartlett

Crossing the Pecos...

Engraving, from Bartlett, *Personal Narrative of Explorations and Incidents in Texas, New Mexico...* (2 vols.; London: G. Routledge, and New York: D. Appleton, 1854), vol. 2, p. 98. *Gift of Jenkins Garrett* F786 .B285 Garrett

Without proper bridges and infrastructure, river crossings could be dangerous operations for travelers, whether on horse or muleback, or in wagons. While the presence of ferries could be helpful, these too



were not always a solid guarantee of safe crossings. The image here probably depicts the *Horsehead Crossing* of the Pecos, so named for "a long line of horse or mule skulls placed along the bank," according to the first U.S.-Mexico Boundary Commissioner John Russell Bartlett (1805-1886) who helped prepare the illustrations for his book based upon his own field sketches. In the image, some of the mules have lost their footing causing them to panic and endangering the men and the contents of the covered wagon, the wheels of which may have stuck in the mud. The Horsehead Crossing (actually several crossings) was a well-known landmark on the overland trail or Comanche Trail through west Texas, located between present Crane and Pecos counties. In 1858 the Overland Mail Company set up a station on the east bank of the river (Crane County side) a short distance from this location.

On John Russell Bartlett's illustrations see Robert V. Hine, *Bartlett's West: Drawing the Mexican Boundary* (New Haven and London: Yale University Press for the Amon Carter Museum, Fort Worth, 1968), pp. 18 and plate 2, reproducing a graphite and sepia ink wash sketch for the illustration, today located among Bartlett's Papers at the John Carter Brown Library in Providence, Rhode Island. On Horsehead Crossing see Glen Sample Ely, *The Texas Frontier and the Butterfield Overland Mail 1858-1861* (Norman: University of Oklahoma Press and the Summerfield G. Roberts Foundation, Dallas, 2016), pp. 202, 217, 218, 388 n.64, 397 n.6

55

After John Russell Bartlett

Camp in Snow Storm on Delaware Creek, Texas

Toned lithograph, from Bartlett, *Personal Narrative of Explorations and Incidents in Texas, New Mexico...* (2 vols.; London: G. Routledge, and New York: D. Appleton, 1854), opp. p. 112. *Gift of Jenkins Garrett* F786 .B285 Garrett

While on the trail blazed just a few years earlier by Captain Randolph B. Marcy of the U.S. Army's Fifth Infantry, Commissioner Bartlett and his men encountered a Texas "norther." Interestingly, at the time they were encamped on a creek, located out in far west Texas near the New Mexico border, which was probably then named for Captain Marcy's Delaware Indian guide, Black Beaver (1806-1880).

Hine, *Bartlett's West*, plate 3, reproduces Bartlett's graphite and sepia ink wash sketch for this lithograph as well. Original in the Bartlett papers, John Carter Brown Library, Providence, Rhode Island.

56

After John Russell Bartlett

Guadalupe Pass, Sonora

Toned lithograph, from Bartlett, *Personal Narrative of Explorations and Incidents in Texas, New Mexico...* (2 vols. in 1; New York: D. Appleton & Company, 1854), opp. p. 296. *Gift of Jenkins Garrett* F786 .B285 Garrett

Steep and narrow mountain passes made travel difficult, especially with frequent turns and switch-backs. These covered freight wagons in Commissioner Bartlett's expedition are attempting to cross a rugged pass in Sonora. Bartlett described how the animals could only slowly drag the loaded wagons up and downhill with workers "putting a shoulder to the wheels and chocking them at every five or six feet."

Hine, *Bartlett's West*, plate 8, reproduces Bartlett's graphite and sepia ink wash sketch for this lithograph as well. Original in the Bartlett papers, John Carter Brown Library, Providence, Rhode Island.



Ferdinand von Roemer

Topographisch-Geognostische Karte von Texas

Color lithograph on paper, 56.5 x 48.5 cm., by Henry & Cohen, Bonn, from Dr. Ferdinand Roemer, *Texas. Mit Besonderer Rücksicht auf Deutsche Auswanderung und die Physischen Verhältnisse des Landes* (Bonn: Adolph Marcus, 1849). 51/9 2004-697

Dr. Ferdinand von Roemer's 1849 map of Texas contains considerable information about trails and roads in Texas in addition to other topographical, geological, and even botanical details. It is based upon *A New & Correct Map of Texas* by James T. D. Wilson, published by R. W. Fishbourne in New Orleans in 1845, a map based upon Texas General Land Office surveys that is quite rare today. Among the routes, trails, and roads depicted by Roemer's map, but also on Wilson's, are: the route of the Texan expedition to Santa Fe in the year 1841; the Chihuahua Trail; the road between Presidio and Nacogdoches; a number of roads in eastern, central, and south Texas; roads in western Louisiana and Arkansas; and even Preston road through Dallas and Bonham to the Red River. Interestingly, the roads labeled as ferries on the eastern side of Wilson's map („Gaines' Ferry“, „Junker's Ferry“, „Ballou's Ferry“) Von Roemer translates more properly into German as „Fähre“ (or literally „trails“).

Von Roemer (1818-1891), generally recognized today as the father of Texas geology, was a professor of paleontology from a prominent family in Hildesheim (at that time part of the Kingdom of Hanover) who came to Texas in late 1845 at the request of Baron Ottfried Hans von Meusebach, the Commissioner-General in Texas of the Adelsverein (a German Society of Nobles supporting German emigration to Texas). Von Roemer had the recommendations and financial support of members of the Berlin Academy of Sciences, including Baron Alexander von Humboldt and the great geologist and paleontologist Leopold von Buch. Von Roemer's task in Texas was to make a careful survey of the state, particularly focusing upon areas included in the Adelsverein grant. According to most scholars, he not only accomplished this in the eighteen months he spent here, but also his effort made significant contributions to geology, paleontology, and natural history.

Compare Martin & Martin, *Maps of Texas and the Southwest, 1513-1900*, pp. 132-133, plate 35; Samuel Wood Geiser, *Naturalists of the Frontier* (Dallas: SMU Press, 1948), pp. 148-171.

Robert Creuzbauer

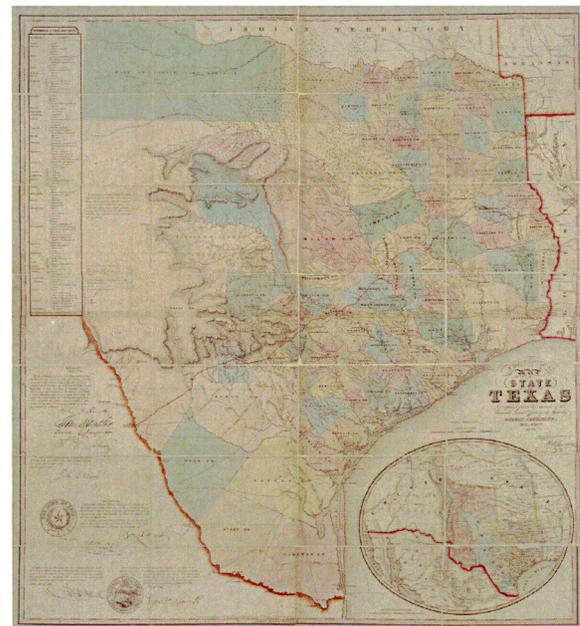
J. DeCordova's Map of the State of Texas Compiled from records of the General Land Office of the State...1849

Engraved transfer color lithograph on paper, 85 x 78.5 cm., mounted on paper, 89.5 x 82.5 cm., engraved by J. M. Atwood, N.Y. (Austin: Jacob De Cordova, 1848). *Gift of Virginia Garrett* 140/9 00588

Texas land agent, promoter, and colonizer Jacob DeCordova (1808-1868) commissioned Texas General Land Office cartographer Robert Creuzbauer (ca.1823-after 1910) to produce this map “from records of the General Land Office...” Among the trails it delineates are three important roads between San Antonio and Presidio del Rio on the Rio Grande: the “Upper” road, the “Lower or old” road, and, to the north of them both, “Woll[']s Road.” The latter referred to a smuggler's trail entering San Antonio from the hills to the west of the town used by the French-born Mexican General Adrian Woll for his surprise raid on San Antonio in 1842. (Although Woll's men only held the town for a week, they managed to slip back into Mexico with a number of Texan prisoners.)

The small inset map includes the “Caravan Route from Arkansas 1840” to Paso del Norte – a reference to the return journey of a group of Mexican traders from Chihuahua who had come up the trail the year before. The inset also shows “Gen[era]l. Kearny's Route [in] 1846” from Missouri to Santa Fe.

DeCordova's map was a masterpiece of promotion because it updated and further refined the basic composition of Richard S. Hunt and Jesse F. Randel's 1845 map of Texas. Like Hunt & Randel's map, the DeCordova/Creuzbauer production has facsimile signature endorsements and an inset showing Texas' grandiose boundary claims. However, while Hunt & Randel's has endorsements from the Texas Secretary of State, the editor of the Houston *Telegraph*, the Texas General Land Commissioner, and the Texas Consul General in New York, DeCordova obtained the facsimile endorsements of similar officials plus the arguably more famous Texas pioneer heroes, soldiers, and politicians Thomas J. Rusk, Sam Houston, and John C. Hays. Reportedly Sam Houston even praised the map on the floor of the



U.S. Senate, calling it “the most correct and authentic map of Texas ever compiled.” DeCordova issued revised editions until 1861.

Robert S. Martin, “United States Army Mapping in Texas, 1848-50” in Dennis Reinhartz and Charles C. Colley, eds., *The Mapping of the American Southwest* (College Station: Texas A&M, 1987), p. 39; Martin and Martin, *Maps of Texas and the Southwest*, pp. 39, 140-141; Walter W. Ristow, *American Maps and Mapmakers: Commercial Cartography in the Nineteenth Century* (Detroit: Wayne State University Press, 1985), pp. 459-460; Henry Taliaferro, *Cartographic Sources in the Rosenberg Library* (Galveston, Texas: Rosenberg Library; and College Station: Texas A&M University Press, 1998), pp. 15, 129-130, cat. no. 295A; Dorothy Sloan Books Auction 25 abstracts (2018), accessed 9-9-2018, <https://www.dsloan.com/cms/auction/25/item/map-decordova-texas-1849>.

59

Joseph E. Johnston et al.

Reconnoissances [sic] of routes from San Antonio De Bexar to El Paso Del Norte, & cc., & cc. / by Bvt. Lt. Col. J.E. Johnston, T. Eng'rs., Lt. W.f. Smith, Lt. F.T. Bryan, Lt. N.H. Michler, including the reconnoissance of Lt. W.H.C. Whiting, U.S. Eng'n. 1849

Color lithograph on paper, 64 x 93.5 cm., folds to 19 x 11 cm. (Phila.: P.S. Duval's Lith. Steam Press, 1850), Scale ½ in. = 10 miles, from: United States Army Corps of Topographical Engineers. *Reports of the Secretary of War, with reconnoissances of routes from San Antonio to El Paso. by Brevet Lt. Col. J. E. Johnston; Lieutenant W. F. Smith; Lieutenant F. T. Bryan; Lieutenant N. H. Michler; and Captain S. G. French, of Q'rmaster's Dep't. ... and the report of Lieutenant W. H. C. Whiting's reconnoissances of the western frontier of Texas.* Washington, D.C. : Printed at the Union Office, 1850. (United States. Congress. (31st, 1st session : 1849-1850) Senate. Exec. doc.; no. 64) 80/5 2003-332 or 2003-352

Following the U.S. War with Mexico, the Army reconnoitered, located and established trails, and conducted scientific surveys in order to defend and consolidate the new state of Texas and the newly acquired territories and facilitate travel and communications. This large, minutely-detailed, lithographed folding map is a compilation of several surveys made in 1849 at the orders of General William Jenkins Worth. Gen. Worth briefly commanded the Eighth Military District, comprising Texas, before dying of cholera in San Antonio on May 7 that year. The surveys were led by U.S. Army Topographical Engineers Brevet Colonel Joseph E. Johnston (the future Confederate General) and Lieutenants W. F. Smith, F. T. Bryan, N. H. Michler, and W. H. C. Whiting.

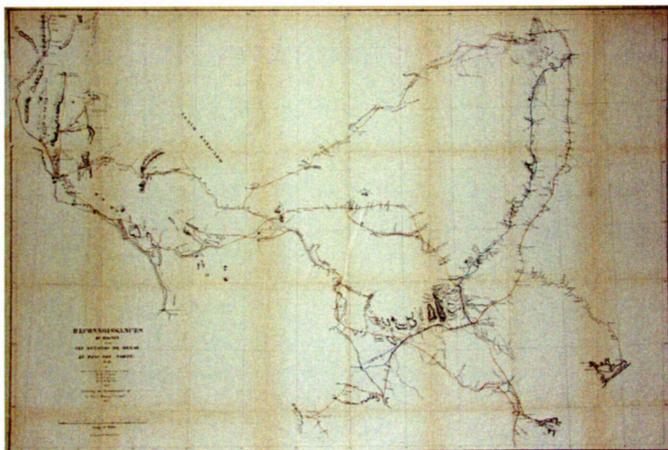
The compiled map included only topographical features directly observed by the U.S. military surveyors themselves. It stretches from

Corpus Christi, Matagorda Bay, to Preston and Fort Washita in present Oklahoma and from the Rio Grande valley in western Texas and New Mexico east to Matagorda Bay. Of particular interest to the military was the so-called “Upper Road” first blazed earlier that year by the federal Indian Agent for Texas, Robert S. Neighbors, and former Ranger, John S. “Rip” Ford, together with Indian guides. This led from the head of the Concho River (near present San Angelo and located at the center of the map) west across the Pecos at Horsehead Crossing, then past the Davis Mountains and Carizzo Pass (near present Van Horn, Texas) to El Paso. Also that year Captain Randolph B. Marcy guided by a Comanche named Manuel and the Delaware Black Beaver had cut east from Dona Ana past the Hueco Tanks and Guadalupe Mountains to Delaware Creek and the Pecos River. Marcy's route, barely acknowledged on this map, then heads east, northeast from the Pecos to the “Big Springs” of the Colorado River to the Red River in the north.

Another route of interest was the “Lower Road,” discovered by Whiting and Smith, leading from San Antonio past the Rio Frio west to the San Pedro then up the Pecos near Horsehead Crossing and then over the present Fort Davis area and along the Rio Grande to El Paso. A blue line stretches from the Rio Grande in the south to Preston on the Red River in the north, connecting newly-established Forts Duncan (near present Eagle Pass), Inge (near present Uvalde), Lincoln (camp), Martin Scott (near Fredericksburg), Croghan (near Burnet), Gates (near present Gatesville), and Worth. (This is believed to be the first printed map to show Fort Worth, established on June 6, 1849). These forts protected the settlements along the north-south road just to the east.

Originally, the earlier north-south road to the east developed along an earlier line of trading posts, forts, and settlements established during the Republic of Texas. This eastern road stretched from San Antonio through New Braunfels, San Marcos, Manchac's Spring, Austin, Waco Village, Navarro, Dallas, to Preston and Fort Washita in Indian Territory which roughly corresponds to parts of today's U.S. Interstate 35 and Highway 75. Portions from Austin north to Fort English (near present Bonham) and Fort Towson in Indian Territory were known as Cooke's Military Road (blazed in 1840-1841 by Republic of Texas Army Colonel William Gordon Cooke), but after trader Holland Coffee developed the town of Preston (now under Lake Texhoma) on the Red River, the portion from Dallas (established in 1841) north became known as “Preston Road” (completed in 1843).

Robert S. Martin, “United States Army Mapping in Texas, 1848-50” in Reinhartz and Colley, eds., *The Mapping of the American Southwest*, pp. 37-56. The Texas map is likely the first to show the location of Fort Worth (see Crossroads of Empire Amon Carter Museum exhibit June 12-July 26, 1981); Goetzmann, *Army Exploration*, pp. 225-239; Wheat, *Mapping the Trans-Mississippi West*, vol. 3, pp. 6, 296, no. 677; Davis et al., *Going to Texas*, pp. 60-61, plate 37; Carol Roark, “Preston Road: A Highway for the New Republic in 1843,” *Legacies: A History Journal for Dallas and North Central Texas* (Fall 2013): 8-11; Huseman, *The Price of Manifest Destiny*, p. 32, cat. no. 64.



59

Randolph B. Marcy

Topographical Map of the Road from Fort Smith, Arks. To Santa Fe, N.M. and from Dona Ana N.M. to Fort Smith Made by order of Bvt. Brig. Genl. M. Arbuckle, U.S.A.

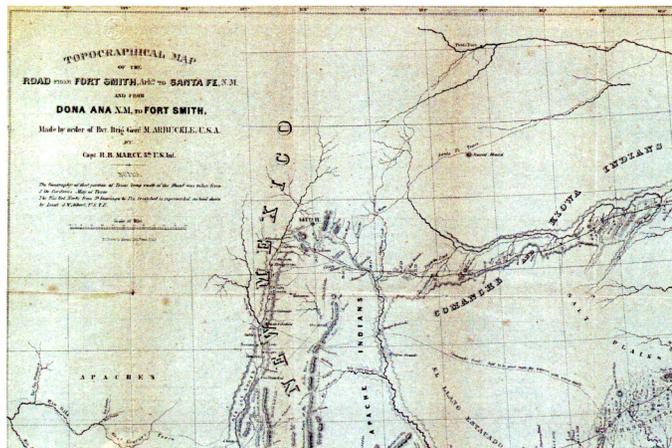
Lithograph on paper, 39 x 72 cm., (Washington, D.C.: U.S. Government, 1850).

64/3 1051

On April 4, 1849 Captain Randolph B. Marcy of the U.S. Army's Fifth Infantry headed a westward expedition out of Fort Smith, Arkansas, with the stated purposes of finding and mapping a route to Santa Fe and at the same time escorting a large party of emigrants (mostly goldseekers) headed to California. He was accompanied by Lieutenant James Hervey Simpson of the U.S. Army's Corps of Topographical Engineers. Simpson produced a map in four sections that depicted the route to Santa Fe, while Marcy created this smaller map that showed not only this route, but also the valley of the upper Rio Grande and a different and more southerly return route by way of the middle Pecos River in west Texas. Equipped with a viameter and surveyor's chain, they took compass bearings each mile and noted the magnetic variation approximately every two hundred miles. Some of the outbound route, parallel to the Canadian River (and through the Texas panhandle), had already been mapped by U.S. Army Topographer Lieutenants James William Abert and William G. Peck during the U.S.-Mexico War. In addition, Abert and Peck had also mapped the upper Rio Grande Valley.

On the return journey Marcy was ably guided by a Comanche Indian named Manuel who had assisted Josiah Gregg and Delaware guide Black Beaver who had earlier served as guide on the outbound expedition. Instead of heading back the way they had come, the Indians took a shortcut, heading east from Dona Ana. The expedition found water in several locations east of El Paso (Hueco or Waco Tanks, Delaware Creek), struck the middle Pecos River and located and mapped the site of "Big Spring" (now Big Spring, Texas) along the Comanche Trail before striking out east, northeast across the headwaters of the Colorado, Brazos, and Trinity Rivers for Preston on the Red River. Marcy's new route soon became very popular: It was approximated by the routes of the Butterfield stage in 1858 and the Texas and Pacific Railroad constructed in the late 1870s and early 1880s.

Wheat, *Mapping the Trans-Mississippi West*, vol. 3, pp. 10-14.



DETAIL

U.S. Army Bureau of Topographical Engineers

Map of Texas and Part of New Mexico compiled in the Bureau of Topographical Engrs. Chiefly for Military Purposes

Lithograph on paper, 86 x 94 cm. "Lithog. Of Ritchie & Dunnovant" and "Printed at H.F. Walling's Map Establishment, 90 Fulton St. New York (Washington, D.C.: U.S. War Department, 1857).

103/4 2005-1338

(see page 2)

The U.S. War Department published this highly detailed map of Texas in limited numbers "chiefly for military purposes" in 1857. It shows trails, roads, forts, and topographical details such as water sources, hills, ridges, and mountains. The map was compiled from recent and older Army explorations and surveys, most of which were conducted by officers of the Army's Bureau of Topographical Engineers. These "authorities" are listed at lower left and their routes and trails are noted on the map itself. Some of the most recent included "Military Surveys and Reconnaissances" by Lieutenant Colonel Joseph E. Johnston, Topographical Engineers Lieutenants F. T. Bryan, Martin L. Smith, W. F. Smith, and Nathaniel Michler "up to 1851" (thus incorporating information from their newer work produced after the printed map of 1849/1850, cat. no. 59), Major Willam H. Emory's "Map of the Rio del Norte Section..." of the U.S. Mexico-Boundary survey (1857), Lieutenant Amiel W. Whipple's U.S. Pacific Railroad Survey "up to 1856," Lieutenant J. N. Moore's map of a portion of New Mexico (1857), and Captain Randolph B. Marcy's maps for his exploration of the Red River (1852). Many of the soldier's trails, paths, and roads connected newly established forts in west and south Texas (Forts or Camps Mason, Belknap, Phantom Hill, Chadbourne, Concho, McKavett, Terrett, Clarke, Duncan, and Hudson), eastern New Mexico (Forts Stanton, Craig, and Thorn), as well as older forts in Texas and Indian Territory.

The Topographical Engineers compiling the map also incorporated information from the U.S. Army's surveys made during the U.S. War with Mexico of 1846-1848 and for the earlier U.S. boundary with the Republic of Texas (1840) as well as sketches for the U.S. Coast Survey (1850s) and DeCordova's (and Creuzbauer's) map of Texas based upon surveys for the Texas General Land Office (1849, cat. no. 58, and later editions). This formidable list of sources together with more accurate geodetic coordinate readings, listed along with the "authorities" or officers that took those measurements in a table at lower right, meant that for the first time the shape of Texas boundaries appear fully comparable with those commonly recognized today.

Martin & Martin, *Maps of Texas and the Southwest, 1513-1900* (1984, 1995), pp. 152-153, plate 45 reproduced the more common 1880 edition of this map for the *Atlas to Accompany the Official Records of the Union and Confederate Armies...* (Washington, 1880). At that time they were apparently unaware of the existence of the rare 1857 printed and published edition of the map; David Rumsay Map Collection, no.5141.000, <http://www.davidrumsey.com/maps2197.html>, accessed 8-13-2018. On Henry Francis Walling, see Ristow, *American Maps and Mapmakers*, pp. 327-338.

Artist Unknown [William M. Cary?]

An Army Train Crossing the Plains

Engraved stereotype on paper, 25 x 37 cm., from *Harper's Weekly* vol. 2 (April 6, 1858), p. 264. OS224

From the time of Lewis and Clark until decades after the Civil War, the U.S. government sent out hundreds of expeditions of various size to explore, reconnoiter, and enforce policies in the trans-Mississippi American West. These consisted of not only officers and troops but also civilians, including teamsters, laborers, scientists, and artists. This engraving from the popular illustrated newspaper *Harper's Weekly*, published in New York in April 1858, depicts a scene from one of the largest of these expeditions: the Utah Expedition of 1857-1858 commanded by Colonel Albert Sidney Johnston (1803-1862) of Texas (in response to growing tensions then between the U.S. government and Utah Territorial Governor Brigham Young and his Mormon settlers). Travelling up the Oregon and Mormon Trails, Johnston's expedition amounted to nearly a third of the size of the whole U.S. Army at the time.

The *Harper's Weekly* editors published this and two other scenes of "The War in Utah" declaring that:

"They may be relied upon as faithful representations of the scenes they purport to depict... if there be a precedent for the march of an army, completely equipped, and provided with the multifarious and cumbrous appliances of modern warfare, crossing a desert of one thousand miles in extent, we do not recall it. In the foreground will be seen a bullock-wagon, with the animals in better condition than they are likely to have been when they reached the end of their journey. The size of the wagon will enable the reader to judge of the labor which they will have to perform before they earn a few days of rest. On the other side, a couple of officers are discussing the road to be pursued. Mounted men are seen galloping out of the line of march, here and there, to race their horses, or to observe some unusual phenomenon on the prairie. The train itself, several miles long, may be traced like a river undulating through the plain until it loses itself under the horizon, or is concealed from view by the smoke of the fire at which a portion of the last breakfast was cooked."*

Interestingly, Brigham Young declared martial law, sealed Utah's borders, and mobilized the "Nauvoo Legion" – a force estimated to be even larger than Johnston's. The Mormons put up all sorts of obstacles and Johnston faced winter weather, Mormon harassment, the desertion of hundreds of troops, the loss of scores of supply wagons and numerous animals through starvation, exhaustion, and exposure. Although largely resolved without bloodshed (with the notable exceptions of the earlier persecutions and the Mountain Meadows Massacre that precipitated the whole affair), the so-called "Mormon War" had serious repercussions that still re-surface from time to time in U.S. history.

**Harper's Weekly*, April 24, 1858, pp. 265-266; William P. Mackinnon, "Utah Expedition of 1857-58, or Utah War," in Howard R. Lamar, ed., *The New Encyclopedia of the American West* (New Haven & London: Yale University Press, 1998), pp. 1149-1151. See also Will Bagley, *Blood of the Prophets: Brigham Young and the Mountain Meadows Massacre* (Norman: University of Oklahoma Press, 2004).



62

63

After an Unknown Photographer

Overland Mail Starting from San Francisco for the East – From a Photograph

Stereotyped wood engraving on paper, 18.9 x 24.5 cm., from *Harper's Weekly*, Dec. 11, 1858

This image from *Harper's Weekly*, re-drawn from a photograph, shows an early run of the Overland Mail stagecoach leaving San Francisco in 1858. The *Harper's* image here shows a six-horse Concord-style stagecoach with a distinct curved body style, such as the ones seen in most Hollywood Westerns.

When first inaugurated in the fall of 1858, another coach left simultaneously that day back east headed west. After continual requests, the U.S. Congress had authorized overland mail service to the west coast in March 1857, for, prior to this, the mail had only been carried by ship. President James Buchanan's postmaster general, Aaron Brown, had awarded the government subsidy and contract to a joint stock company, known as the Overland Mail Company, headed by John Butterfield of Utica, New York. Butterfield and another company director, William G. Fargo, had earlier experience in the business as founders (with Henry Wells) of the American Express Company, an overland mail service out of upstate New York with connections in the Midwest.

Somewhat controversially given the sectionalism of the time, Postmaster General Brown, a Tennessee southerner, had dictated that the line run from two starting points in the Midwest, St. Louis and Memphis, and then converge on Fort Smith, Arkansas. From there it would take a southerly route through Preston, El Paso, Tucson, and Yuma to Los Angeles and then head north to San Francisco. The service was semiweekly or twice a week, operating four-horse coaches, and required numerous well-stocked stations or military forts at regular intervals of approximately ten miles each all along the way (Texas alone would have more than 50 of these).

See Ely, *The Texas Frontier and the Butterfield Overland Mail 1858-1861*, especially pp. 13-21.

Artist Unknown

Overland Mail – Changing Stage-Coach for Celerity Wagon

Stereotyped wood engraving on paper, 17 x 24.5 cm., paper size 40.5 x 27.5 cm., from *Frank Leslie's Illustrated Newspaper*, October 23, 1858.

When driving in Texas, the heavier Concord-style stagecoach, with its curved body, seen at right in the engraving from Leslie's Illustrated Newspaper, proved impracticable. It was exchanged for the "celerity wagon" or "mud wagon" seen at left. With its canvas top, this lighter wagon was easier for the animals – whether mules or horses -- to pull through the mud and dust of Texas' bad roads. Interestingly, the heavier Concord wagons, originally developed in Concord, New Hampshire, were actually much lighter than European coaches, and this was probably an indication that American infrastructure still had a long way to go before it surpassed that of many places in the Old World.

See Ely, *The Texas Frontier and the Butterfield Overland Mail 1858-1861*, especially pp. 15-16, 20-21.

S. A. Mitchell, Jr. et al.

No. 12 Map of the State of Texas

Engraved transfer color lithograph on paper, by J. H. Young, probably from *Mitchell's School and Family Atlas* (New York: S. A. Mitchell, Jr., 1859). *Gift of Virginia Garrett* 125/8 00036 or 125/4 00019

This 1859 commercially published map of Texas, shows the "Overland Mail Route" as well as the Santa Fe Trail through the Texas panhandle. However, as historian Glen Ely points out, the route ran on the east side of the Pecos, not the west side, as shown on the map. While showing additional Texas counties and increasing accuracy over earlier productions thanks to government surveys, the cartographer or printers nevertheless failed to show the panhandle's eastern border beginning at the 100th Meridian on the main map.

See Ely, *The Texas Frontier and the Butterfield Overland Mail, 1858-1861*, p. 4.



J. H. Young

Map of the State of Texas from the Latest Authorities

Engraved transfer color lithograph on paper, 34 x 41 cm., engraved by J. L. Hazzard (Philadelphia: Charles DeSilver, 1859). Copyright 1856. Plate 25. *Gift of Virginia Garrett*

00027 125/6

(see page 2)

Commercial mapmakers in the United States quickly incorporated information from U.S. government and state surveys. As they updated the maps in their atlases, their new maps also reflected the development of railroads, which in Texas, at least, began in earnest in the late 1850s. This small but finely detailed map, with a copyright of 1856, added new information up to 1859. Railroads shown "completed, in Part" include: the Buffalo Bayou, Brazos, and Colorado (Texas' first railroad, opened in 1853); the Texas Central; the Houston Tap; and the Galveston, Houston and Henderson, which also appears on the inset Map of Galveston Bay at lower left. Railroads shown "in Progress" include: the Mexican Gulf and Henderson; the San Antonio and Mexican Gulf; the Southern Pacific; the Washington County; and the Sabine and Galveston Bay. Also shown are the Galveston Bridge and Galveston Canal. The more familiar roads and trails on the map include "Capt. Marcy's Road from Ft. Smith to Dona Ana 960 m.," the Chihuahua or Connelly's Trail (including Fort Leaton, established in 1850), the Upper Presidio Road, the Lower Presidio Road, and the Laredo Road. Exceptionally well depicted is the lengthy "Comanche War Trail" with an interesting note about the "Grand Indian Crossing" over the Rio Grande near Boquillas Canyon in the Big Bend area of Texas. The panhandle inset at upper left has the Fort Smith to Santa Fe trail marked as being 820 miles in length.

Gouverneur K. Warren (1830-1882), Edwin Freyhold, Friedrich W. von Egloffstein, et al.

Map of the Territory of the United States from the Mississippi to the Pacific Ocean

Lithograph with hand coloring on paper mounted on canvas, 111 x 121 cm., folds to 28 x 20.5 cm. within marbled green cardboard case, 28.5 x 21 cm., (Washington, D.C. United States War Department, 1857).

Gift of Virginia Garrett

131 00602

U.S. Army Topographical Engineer Lieutenant Gouverneur K. Warren's map of the trans-Mississippi west is considered one of the great cartographic accomplishments of the nineteenth century. It was a synthesis of the most important maps of the area from about 1810 to 1857. Warren (1830-1882), later a Brigadier General and hero of the Battle of Gettysburg, constructed the map over a period of four years and wrote an approximately 100-page "Memoir" to accompany it. He consulted the maps of virtually every U.S. government-sponsored expedition in the west, from Lewis and Clark in 1804-1806 to the more recent exploring expeditions for the U.S. Pacific Railroad Surveys and the U.S.-Mexico Boundary Surveys. Warren also included their survey routes on his map and noted existing U.S. Army forts or posts. The combined map helped the government authorities then determine areas needing further exploration. For example, a vast stretch of the southern Utah Territory is labeled "Unexplored." By the time the map was published in 1857 new expeditions were already on their way there.

This example is divided by military districts, uses red flags or guidons to emphasize the U.S. Army's forts or posts, and is hand-colored in delicate shades of yellow, pink, and blue to show vast stretches of

territory still largely dominated by specific Native American tribes. Military planners could have used this example to plot their next campaigns or to determine possible locations for new forts.

It is important to note that despite its large size, Warren's map does not show as much detail as the almost equally large U.S. Army Topographical Engineers' Map of Texas (cat. no. 61), which had less area to portray.

Gouverneur K. Warren, "Memoir to Accompany the Map of the Territory of the United States from the Mississippi River to the Pacific Ocean..." in *Explorations and Surveys for a Railroad Route from the Mississippi River to the Pacific Ocean* (12 vols.; Washington, D.C.: U.S. War Department, 1855-1860), vol. 11, pp. 7-115; Huseman, *The Price of Manifest Destiny*, p. 33, cat. no. 67.

68

After Carl Gustav von Iwonski
Bivouac of Confederate Troops on Las Moras, Texas,
with Stolen U.S. Wagons, etc...

Stereotyped wood engraving on paper, 25 x 37 cm. (mat opening), from *Harper's Weekly* (New York), June 15, 1861. 83-772

This engraving from *Harper's Weekly* shows Texas State troops in open rebellion with confiscated U.S. government wagons encamped on Las Moras Creek in southwest Texas (not far from present Brackettville). This was probably along one of the trade roads (i.e., also smuggling trails) into Mexico. It was based upon an eyewitness sketch by Carl Gustav Iwonski (1830-1912), a native of Silesia in Prussia (now part of Poland) who had arrived in Texas in 1845 with the Adelsverein colonists led by Prince Carl von Solms Braunsfels. According to inscriptions on the original drawing, now in the collections of the Library of Congress, Iwonski's graphite and brown wash sketch was signed and dated 1861 and it was "the first war sketch rec[eive]d by Harpers Following the surrender of Gen[era]l Twiggs." (Twiggs, it will be recalled, surrendered U.S. troops to the Confederates in San Antonio on February 16, 1861.) Iwonski had attended school and taken drawing and painting lessons in Breslau before he came to Texas. He was on leave of absence from San Antonio's German-English school where he taught drawing when he sketched this scene. It does not show his fellow southerners in a complimentary light, and after the war, Iwonski served as Bexar County treasurer during Reconstruction.

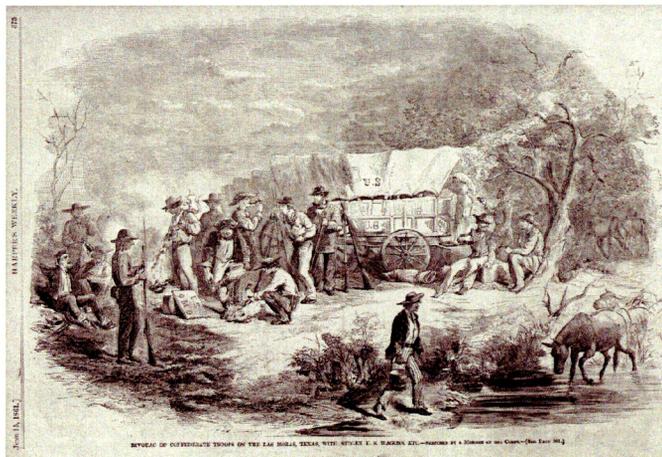
See Patrick McGuire, *Iwonski in Texas: Painter and Citizen* (San Antonio Museum Association with the cooperation of The University of Texas at San Antonio Institute of Texan Cultures, 1976), pp. 76, 78, no. 83 and 84.

69

James T. Lloyd
Lloyd's Map of the Southern States ...

Engraved transfer photolithograph with applied coloring on paper, 96.5 x 133 cm. (New York, Louisville, and London: J. T. Lloyd, 1861). From the *Henry W. Benham Family Collection* AR388-7-14, Drawer 104

In the first year of the war, James T. Lloyd of London and New York published an update of his 1859 railroad map of the United States, a large "\$100,000 Topographical Map of the State of Virginia," and this one, which, according to his own text on the back, had been already "...started one year ago, long before the present troubles began. It was drawn from actual surveys made by southern surveyors, and the only reliable Map of the Southern States now offered to the people..." Lloyd had a tendency to fill much of the available spaces on his maps – both front and back – with hyperbolic text to enhance and promote his own maps, criticize his competitors, and, on occasion, to record



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irrelevant commentary. Moreover, while his map did have some of the latest information on railroads as he claimed, it was not particularly good for its coverage of other types of roads and trails. For example, Lloyd's map accurately shows the completed and projected railroads for the states, including Texas, as of 1861. However, there are no trails or roads depicted in any of the areas beyond the counties that appear in color.

At least some of his information on Texas was of poor quality and already out of date. For example, he located two forts in the southern panhandle (Forts McKavett and Terrett) when they were actually hundreds of miles south and had been abandoned in 1859 and 1854, respectively. The county configurations, which here are hand colored and supposedly up-to-date for Virginia and Missouri, do not include the Texas counties created in 1860.

Richard W. Stephenson, *Civil War Maps: An Annotated List of Maps and Atlases in the Library of Congress* (2nd ed., Washington, D.C.: Library of Congress, 1989), p. 35; Earl B. McElfresh, *Maps and Mapmakers of the Civil War* (New York: Harry N. Abrams, Inc. in association with the History Book Club, 1999), p.16; Huseman, *The Price of Manifest Destiny*, p. 40, cat. no. 83.

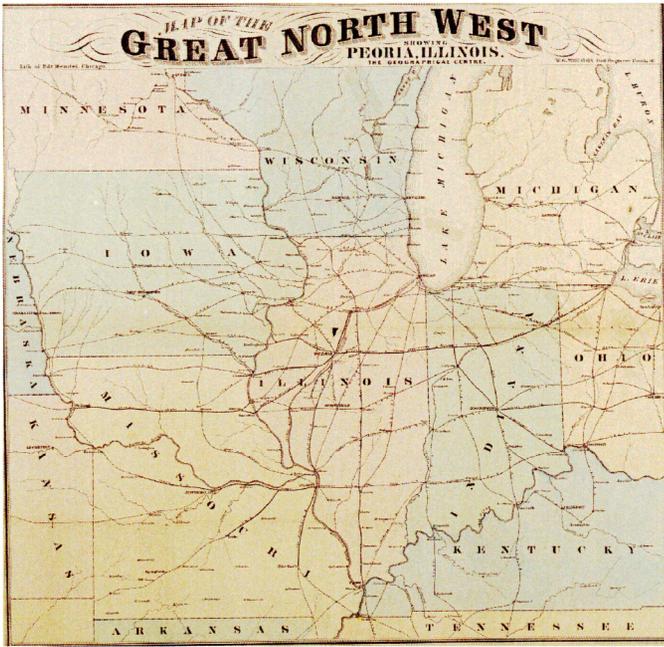
70

W. G. Wheaton
Map of the Great North West Showing Peoria, Illinois,
the Geographical Centre

Color lithograph on paper, 59 x 61.5 cm. Lith. of Edw. Mendel, Chicago (Peoria, Illinois: W. G. Wheaton, 1861). 73/6 700025

As far back as 1680 when LaSalle, Father Hennepin and other Frenchmen constructed Fort Crevecoeur on the east bank of the Illinois River, people perceived the strategic geographical importance of the area of Peoria, Illinois (the site of Fort Crevecoeur became a suburb of Peoria). By the time of the U.S. Civil War, numerous railroads were already completed there or projected, as seen in this rare map printed in the neighboring rival town of Chicago. For examples, there were the Logansport, Peoria & Burlington, the Peoria & Hannibal, and the Mississippi & Wabash railroads, just to mention a few. The geographical advantages and the growing industrial wealth of the area were obvious to travelers and the educated. The importance of railroads became even more apparent during the war, as much of the Union's military success depended upon moving vast quantities of troops and supplies as quickly as possible. Wheaton's map, with its spider-like network of railroads leading to the town or city of focus, can be seen as a precursor to hundreds of booster maps produced after the war that used roads or trails to emphasize their point.

70



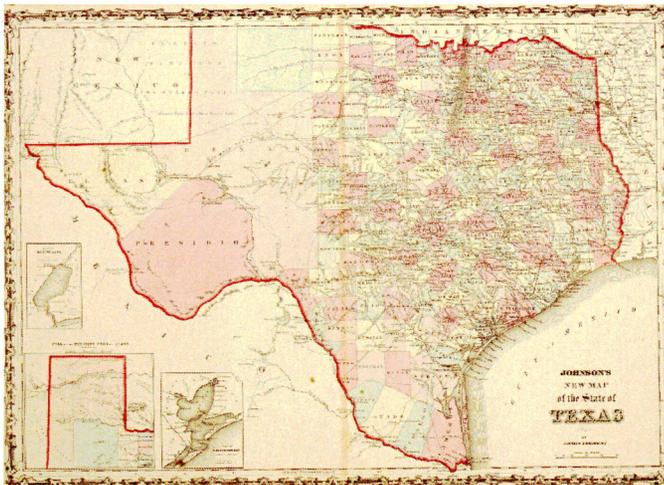
71

Johnson & Browning

Johnson's New Map of the State of Texas

Engraved transfer color lithograph on paper, 44 x 61.5 cm. (New York: Johnson & Browning, 1859-1862). *Gift of Virginia Garrett* 134/7 00784

During the Civil War, the commercial mapmakers back in the northeast obviously had difficulty obtaining updated cartographic information about the lands in the south and particularly the southwest. Except for the failed Confederate invasion of New Mexico, the war required the transfer of resources back east and along the Texas coast where the military threat was greatest. Johnson & Browning's map depicts the "U.S. Mail Route" through north central and west Texas, although this transcontinental service was suspended at the beginning of the war or rather moved to a more



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northerly route that did not involve any of the seceding states. A couple of dark black lines may show an alternate route for the mail or a projected railroad running from Preston and Bird's Fort west to El Paso; when these hand-drawn lines were added on top of the printed map is not indicated. The map again details the "Upper Presidio del Rio Grande Road," the "Lower or Old Presidio del Rio Grande Road." Interestingly, some pre-war forts and military stations still appear on the map. Camp Lancaster (established 1855) and Camp Hudson (established 1857) along the Pecos were both abandoned in March 1861, but Walter P. Lane's Texas Rangers soon occupied Fort Lancaster. While the map notes "Ft. Ewell Rifles Military Station" (established 1853) along the Laredo Road in south Texas, the station was abandoned in 1854.

72

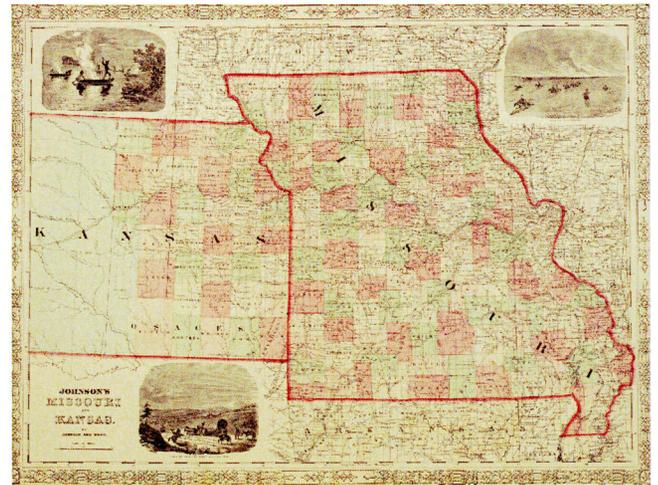
Johnson & Ward

Johnson's Missouri and Kansas

Engraved transfer color lithograph on paper, 45 x 59.5 cm. (New York: Johnson & Ward, 1862). 7/1 200020

Virtually nothing on this 1862 commercial map indicates the terrible violence that had recently taken place in these two states. There are, however, a lot of roads and even new railroads indicated. For example, the map shows the first railroad to cross Missouri: the Hannibal & St. Joseph (completed in February 1859) in the northern part of that state. It brought the first letter for the Pony Express heading west to California in 1861. All three vignette images predate the war: The transfer engraving at the bottom of the map showing "Santa Fe from the Great Missouri Trail" originated with Josiah Gregg's *Commerce of the Prairies*, first published in 1844 (cat. no. 41).

By January 29, 1861, "Bleeding Kansas" entered the Union as a free state despite the objections of many southern sympathizers in the neighboring slave state of Missouri. Long before the attack on Fort Sumter in April 1861, a state of guerrilla war already existed here between free-staters and abolitionists on one side and southern sympathizers who had wanted to influence the voting necessary to determine Kansas' orientation on the slave issue required by the Kansas-Nebraska Act of 1854.



72

New Trails, Indian Wars, and More Maps

People continued moving into the trans-Mississippi West even as the American Civil War raged on. The discovery of pockets of gold in Colorado (1858) and Montana (1863) increased traffic of peoples along trails and roads leading directly through the last available hunting grounds of western plains tribes such as the Cheyenne, Dakota, and Sioux. This in turn led to violence, more warfare, and atrocities such as the Sand Creek Massacre of 1864. Following the Civil War, efforts to bring Native Americans into government-run reservations fell to the U.S. Army which was also responsible for enforcing Reconstruction in southern states such as Texas. Maps and images of the time reflect these events and often offer rich primary source materials for historians.

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O. B. Gunn and D. T. Mitchell

Kansas Annual Register's New Map of Kansas and the Gold Mines Embracing all the Public Surveys up to 1864

Color lithograph on paper, 68 x 69 cm., by Wm. Schuchman, lith., Pittsburgh, Pa. (Lawrence, Kansas: D. T. Mitchell, 1864). 74/5 800163

This historic 1864 map of Kansas includes many trails, routes, and roads for emigrants and goldseekers. The map exhibits the familiar grid pattern of the township and range survey system adopted by the U.S. General Land Office. Locations for these offices in the area are listed near the title along with one of the map's compilers, the surveyor D. T. Mitchell of Lawrence, Kansas. A year earlier, on August 21, 1863, a Confederate guerrilla group led by William Quantrill had attacked this town which was known for its pro-union "Jayhawkers" who had earlier terrorized pro-southern western Missouri. "Quantrill's Raiders" burned and looted much of the town, killing an estimated 150 people. The map's publishers obviously wanted to put this terror behind them by attracting continued development.

Interestingly, the map also has as much relevance for the history of Colorado as it does for that of Kansas. The inset map at bottom includes important "Routes from the Missouri River to the Kansas Gold Mines," and these actually lead west to the Colorado gold mines – although the word "Colorado" does not even appear on the map! The inset map shows the boundaries of the Kansas Territory, created in 1854 by the Kansas-Nebraska Act, which originally stretched all the way to the crest of the Rocky Mountains. In September 1858 news of gold discoveries in the northwestern portion of the Kansas Territory triggered the Pike's Peak Gold Rush and an influx of immigrants to the area. Mining towns like Montana City, Denver City, and Auraria (all seen at far upper left in the inset map) sprang up. Locals created the extralegal and unrecognized Territory of Jefferson on October 24, 1859 but this culminated with the creation of the Colorado Territory on February 28, 1861. Meanwhile, on January 29, 1861 the eastern portion of the Territory of Kansas, seen in the main map, entered the union as the free state of Kansas.

The routes to the gold mines drive directly through the "Great Plains" and the "Buffalo Range" and include the "Route from Missouri River to Gold Region via Santa Fe Road," a "Proposed Central Route to the Gold Region," and the "Southern Route to the Gold Region." Located along the latter route in present eastern Colorado are the town of Pueblo, "Bent's old Fort," and "Bent's new Fort" (established by the Bent family of Missouri traders in the 1830s and 1853, respectively), and, ominously, "Sand Creek." There, on November 29, 1864, U.S. Army Colonel John Chivington and U.S. Cavalry Volunteers from Colorado attacked and destroyed an Arapaho and Cheyenne village



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consisting mostly of women and children in what was known to posterity as "the Sand Creek Massacre." This was part of the Cheyenne-Arapaho War of 1864-1865 that grew out of the terrible conditions in Indian lands where the rapid development of these roads and such railroads as the "Hannibal & St. Joseph R.R.," and the "Proposed Parkville & Grand River R.R." brought about increasing conflict with the Native Americans who wanted to maintain their traditional way of life and hunting grounds.

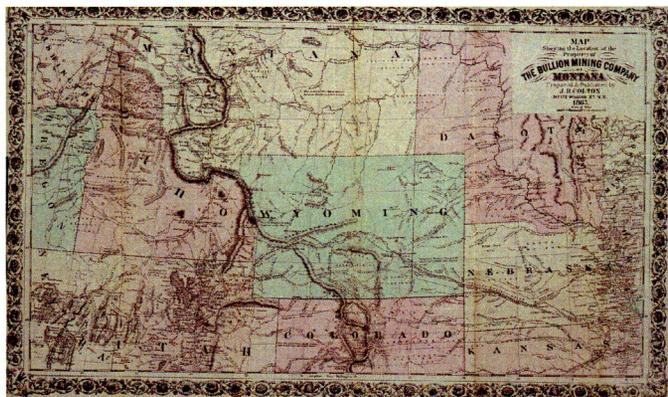
74

J. H. Colton Company

Map Showing the Location of the Property of the Bullion Mining Company of Montana

Color lithograph on paper, 40.5 x 67.5 cm. (New York: J. H. Colton, 1865). 16/9 800234

This Colton map stretches from the state of Kansas and the Nebraska and Dakota territories (created in 1854 and 1861, respectively) in the east to the eastern portions of the states of Oregon and Nevada (both admitted to the union in 1859 and 1864, respectively) and the eastern portion of the Washington Territory (created in 1853) in the west. It shows the Wyoming Territory (first named in 1865 and a temporary



government created) and most of the Idaho and Montana territories (officially created in 1863 and May 1864, respectively, out of part of the existing Idaho Territory) as well as portions of the Colorado and Utah territories. Colton produced the map ostensibly to show “the location and property of the Bullion Mining Company” in the southwestern portion of the Montana Territory (where may be seen the first territorial capital at Bannock and the burgeoning boom town of “Virginia” or Virginia City). However, there is a great deal more on the map than this, including dozens of important trails, exploration routes, and roads, both existing and proposed.

Among the trails and routes shown are the “Great Route to California and Oregon via South Pass,” the “Proposed Route of the Pacific R.R.,” the exploration routes of Major Long, Fremont, G. K. Warren, Frederick W. Lander, and “Mullan’s Wagon Road from Walla Walla to Ft. Benton” – a reference to the first wagon road across the Rocky Mountains to the inland of the Pacific Northwest, constructed in 1859-1860 by U.S. Army troops under the command of Lieutenant John Mullan. Leading to the Valley of Great Salt Lake are the “Overland Mail Route” (the central route initiated in 1861 after the beginning of the Civil War and the shutdown of Butterfield’s southern route to avoid possible areas of conflict) and the “Pony Express Mail Route” (a short-lived overland operation from April 1860 to October 1861 that carried mail from the Atlantic to the Pacific coasts in about ten days).

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After Anthony (Anton) R. Roessler (1826-1893)
[Copy of Engineer’s Office, Department of the Gulf, Map No. 59. Texas. Prepared by Order of Maj. Gen. N. P. Banks under Direction of Capt. P.C. Hains, U.S. Engr. & Chief Engr., Dept. of the Gulf, April 1865

Diazotype or blueline cyanotype on paper, 96 x 61.5 cm., 102 x 66.5 cm. (sheet), ca. 1927. Originally drawn on stone by Helmuth Holtz (1833-1915) and Baron Ludwig von Reizenstein (1826-1885) in New Orleans in 1865. 139/10 2013-268

During the U.S. Civil War, federal forces sorely needed up-to-date information about Texas should they eventually conquer or re-occupy it. In February 1865 they received a windfall when Austro-Hungarian-born civil engineer Anthony (Anton) R. Roessler mysteriously arrived behind federal lines in Louisiana. Up to this time he had been working for the Confederates in Texas as a draftsman and clerk in charge of the Texas State Military Board’s unsuccessful cannon foundry in Austin. Before the war he had worked as an assistant and

draftsman on the first Geological and Agricultural Survey of Texas under chief geologist Benjamin F. Shumard. In short, Roessler had the knowledge and capability to divulge considerable information about Texas’ conditions, geography, and strategic resources. He was soon working in New Orleans as an assistant engineer alongside Reizenstein, who was another former Confederate, and Helmuth Holtz, a Union Navy veteran who had earlier survived the destruction of the U.S. gunboat *Westfield* in the Battle of Galveston.

Their map, seen here in a well-worn 1927 copy, gives many more details about roads, road conditions, and availability of horse fodder, timber, and other strategic resources than were available on commercial maps of the time. For examples, east of Austin is a “Sandy Road, difficult for artillery” and around the “ordnance depot” at Marshall the “Country rolling, Supplies plentiful, Corn, Cotton” although “Beef Scarce.” The information is not just the sort that could be found in a guide to Texas. Much of it is very specific. For example, “San Antonio city is surrounded North and East by hills of a uniform height from 60 to 70’; its fortifications are worthless. San Antonio Riv. is in the City fordable below Kud Lew’s [illeg.] Mill, depth 3 ft. and in the Rears of Mrs. Schmidts and Hufmeyers residences and Galaghers Garden – depth one ft.; whereby the Main and the Military Plazas are accessible by way of Vance’s Residence.” Such is intelligence and advice for Union military planners: “Columbia, Harrisburg and Sabine Pass are important and favorable localities to hold, excellent places to direct Military operations. Houston the key of Texas is easily accessible from either of these points. Mouth of Brazos River is weakly defended.”

In addition to such military details, there is an incredible amount of information about obscure roads, proposed roads, or roads connecting towns that no longer exist. For examples, the towns of “Alton P.O.” in Denton County, Danville in Montgomery County, and Springfield in Limestone County all were at the center of several crossroads but can no longer be found on most maps today. In most cases, major roads now go around them. The “Memphis, El Paso & Pacific Proposed R. R.” through north Texas was never built as planned but the Texas & Pacific finally completed a similar line between Fort Worth and Texarkana in 1880.



No original copy of this April 1865 map – “compiled & drawn by A. R. Roessler... drawn on stone by B[aron Ludwig] von Reizenstein & H[elmut] Holtz” and “printed by W. Probert” -- has been found, but it must have been part of the series of maps prepared in the U.S. Army’s Engineer’s Office, Department of the Gulf in New Orleans. The only apparent addition to the copy map since 1865 is the note at the lower right: “This is the original map used by General George A. Custer during his tour of duty in Texas.” A better description might be “A Union Invasion Map of Texas.”

The map may indeed have served Union forces occupying Texas following the war. The perplexing scarcity of extant copies could be due to a number of reasons. Perhaps it remained “secret,” or, possibly, Roessler had copies destroyed to prevent his fellow Texans not of the Republican persuasion from knowing the extent of his federal service.

There are several short sketches of Roessler’s life. See James Patrick McGuire, *The Hungarian Texans* (San Antonio: University of Texas, Institute for Texan Cultures, 1993), pp. 154-156, 282; *Handbook of Texas Online*, Keith Young, “Roessler, Anton R.,” accessed April 15, 2009, <http://www.tshaonline.org/handbook/online/articles/RR/fro56.html>; Keith Young, “The Roessler Maps,” *Texas Journal of Science* 17 (March 1965): 28-45; Samuel Wood Geiser, “Men of Science in Texas,” *Field & Laboratory* 26-27 (1958-1959): 187-188; Katherine R. Goodwin, “A. R. Roessler and the First Geological Survey of Texas,” <http://www.texashistoricalfoundation.org/map.htm>, accessed August 16, 2009; Llerena Friend, in her introduction to M. K. Kellogg, *M. K. Kellogg’s Texas Journal, 1872* (Austin and London: University of Texas Press, 1967), pp. 6-14, was the first to provide some of the most important details; On Reizenstein see Baron Ludwig von Reizenstein, *The Mysteries of New Orleans*, Steven Rowan, trans. and ed. (Baltimore: Johns Hopkins University Press, 2002), pp. xiii; on Helmuth Holtz see *Handbook of Texas Online*, Ben W. Huseman, “Holtz, Helmuth Heinrich Dietrich,” accessed September 10, 2018, <http://www.tshaonline.org/handbook/online/articles/fhoas>; Huseman, *The Price of Manifest Destiny*, p. 43, cat. no. 91.

76

Alfred R. Waud after Theodore R. Davis

On the Plains – Indians Attacking Butterfield’s Overland Dispatch Coach

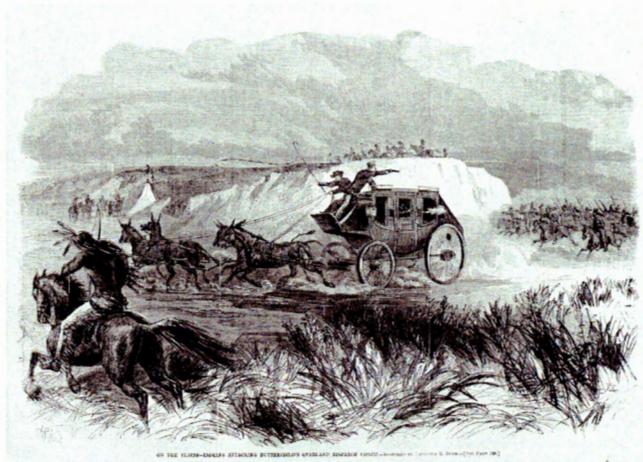
Stereotyped wood engraving on paper, 25.5 x 37 cm., from *Harper’s Weekly*, April 21, 1866, p. 248. OS224

Stagecoaches and their stations along the roads and trails were tempting targets for hostile Indians during the periodic frontier wars and when food, supplies, and water were scarce. In November 1865 – approximately a year after the Sand Creek Massacre (alluded to in cat. no. 74) – *Harper’s Weekly* artist-correspondent Theodore R. Davis, took the Overland Mail stagecoach out of Atchison, Kansas, headed for Denver. Two hundred fifty miles out Davis and his fellow passengers were riding in a Concord style coach pulled by four mules along the route near the Smoky Hill River when they realized “... that Indians were more plenty than usual along the route.” Next, the discovery of bodies of murdered men who had been tortured along the route put them on their guard, and they received a small U.S. Army escort. Davis wrote:

We had nearly reached a station known as Smoky Hill Spring when we discovered a party of fully sixty Indians within short pistol-shot of the coach. Our escort had reached the station and dismounted, leaving our little party to fight the affair out alone, which we did in the most determined style – arrows and pistol-balls penetrating the coach every moment, strange to say, without anything more serious resulting than a couple of arrow scratches!

The Indians, beaten off, were joined by parties that seemed to come from every bluff. Thinking to drive us from the shelter of the station, which we by this time had reached, they set fire to the tall grass to the windward of us...”*

(Davis and all the rest survived without anyone being killed or wounded. After the station received further military re-enforcements later that night, the Indians withdrew.) Interestingly, Davis’ story and illustration were widely circulated throughout the United States and



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Europe. Subsequently, countless artists, novelists, and film-makers repeated such scenes and it became part of western lore.

*Theodore R. Davis, “Journeying on the Plains,” *Harper’s Weekly* 10:474 (January 27, 1866): 57-58; “On the Plains” *Harper’s Weekly* 10:486 (April 21, 1866): 248-250. Ely, *The Texas Frontier and the Overland Stage, 1858-1861*, pp. 92ff cites documentation on Indian attacks on the Overland Stage in Texas during the years just prior to this. On Davis and Waud see Powers, *Texas Painters, Sculptors & Graphic Artists*, pp. 126, 542-543.

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Frederic Remington
Pursuing the Indians

Halftone photoengraving on paper, 15.5 x 21 cm., in General Nelson A. Miles, *Personal Recollections and Observations...* (Chicago and New York: The Werner Company, 1896), p. 269. 25 cm. E83.866 M64

Canton, New York born painter, illustrator, sculptor, writer, artist-correspondent Frederic Remington (1861-1909) produced this illustration for his longtime friend, General Nelson Miles (1839-1925). By the time of its publication in 1896, Miles was the Commanding General of the U.S. Army, and Remington was one of the most popular artists in America. General Miles was a veteran of the U.S. Civil War and the U.S. Indian Wars – for the latter he had served in virtually all of the later campaigns, from Texas, New Mexico, and Arizona to Montana in the north. Remington specialized in subjects related to the frontier, the military, horses in action, and the heroic actions of “men with the bark on.” This particular illustration shows U.S. Army Infantry and their supply wagons pursuing Sioux Indians in Montana in October 1876, but it is generic enough in subject to be used to illustrate any number of western Indian campaigns. In such pursuits the soldiers often blazed their own trails and roads.

Remington worked for years as an illustrator for *Harper’s Weekly*, *Harper’s Monthly*, and *Colliers* periodicals. He travelled extensively in the west, often as a guest of various officers in the U.S. Army, but he generally finalized his field sketches back in his studio and home in New York. Two years after this publication, General Miles, still serving as Commanding General of the U.S. Army, played a major role in the Spanish-American War (for example, he personally



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commanded the invasion of Puerto Rico). Remington went to Cuba to cover the war as energetically as he had the earlier Indian Wars but soon became disillusioned of it.

Peter H. Hassrick, ed. *Frederic Remington: A Catalogue Raisonne II* (Norman: University of Oklahoma Press, 2016), p. 578, no. 2055, records that Remington's original oil *grisaille* or black and white painting on canvas (168.6 x 101.6 cm.) for this illustration was still held by art dealer James Graham & Son in New York at the time of publication in 2016. For a quick summary of Remington's life and career, see Powers, *Texas Painters, Sculptors & Graphic Artists*, pp. 424-425.

78

Lieut. William H. Beck

Map of Scouting Expeditions from Camps at the Chinati Mountains from Jan 12th to May 12th 1880 under the direction of Captains L. H. Carpenter and C.D. Viele, 10th U.S. Cavalry

Ink on waxed linen, 40 x 33 cm., 1880.
Gift of John Martin Davis, Jr. 50/1 2004-97

This extraordinary manuscript map from 1880 depicts roads and trails in the Trans-Pecos or greater "Big Bend" area of west Texas scouted by the U.S. Army's 10th Cavalry, better known as the "Buffalo Soldiers." The regiment was composed of black enlisted men commanded by Colonel Benjamin H. Grierson and other white officers - with the notable exception of Lieutenant Henry O. Flipper, the first black man to graduate from West Point. The map covers the terrain scouted and mapped during the U.S. Army's 1879-1880 campaign against the Apache chief Victorio and his small guerrilla band of followers who were raiding back and forth across the Rio Grande in New Mexico, Texas, and the Mexican state of Chihuahua. The map was a personal copy drawn during the campaign by its creator Lieutenant William Henry Beck (1842-1911) "under the direction of Captains [Louis] H. Carpenter and C. D. Viele" - all of the 10th Cavalry. A note at the bottom of the map keys roads as double lines in black ink and "Trails by Scouting parties from Camps at Chinatis" as dotted lines in red ink.

Grierson had his men carefully map the Trans-Pecos and guard key water holes (water holes are noted on the map, along with camps, mountains, and other topographical features) in order to prevent the Apaches from slipping in and out of the area undetected. The strategy worked. Later that summer engagements at Tinaja de las Palmas (or Quitman Canyon on July 30), near Alamo Springs (August 3, 1880), and Rattlesnake Springs (August 6, 1880) forced Victorio and his followers back into Mexico. Tracked by soldiers of the Mexican Army under Colonel Joaquin Terrazas, Victorio was killed at the Battle of Tres Castillos fought October 14-15, 1880. This effectively ended the threat to west Texas.

For more information see Katherine R. Goodwin, "Fort Davis Campaign Map Returns to Texas," *The Compass Rose* 18:2 (Fall 2004): 6-7. John M. Carroll, ed., *The Black Military Experience in the American West* (New York: Liveright, 1971). William H. Leckie, *The Buffalo Soldiers: A Narrative of the Negro Cavalry in the West* (Norman: University of Oklahoma Press, 1967). William H. and Shirley A. Leckie, *Unlikely Warriors: General Benjamin H. Grierson and His Family* (Norman: University of Oklahoma Press, 1984). *Handbook of Texas Online*, William H. Leckie, "Tenth United States Cavalry," accessed August 22, 2018, <http://www.tshaonline.org/handbook/online/articles/qlt01>. On Beck see <http://www.arlingtoncemetery.net/whbeck.htm>, accessed August 22, 2018.



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Railroads and Cattle Trails

Railroad construction resumed at an increasing rate following the interruption of the U.S. Civil War. With a renewed emphasis upon national unity, the nation's leaders recognized that resurrecting the pre-war dream of connecting the country by railways was one of the ways to achieve this. At first most investment money concentrated around central and northern routes since many in power saw little need to reward the South for its rebellion. Some cash-strapped Texans, however, with their cotton-slave economy in ruins, came up with an innovative idea to drive surplus Texas beef cattle to the nearest railheads in the east and north where the cattle could be shipped in railway cars anywhere the railroad connected.

By the 1870s railroad construction was booming again – even in Texas – and, with the exception of the financial panic of 1873, it continued into the next century. This powerful technology brought immense changes. For example, if railroad construction bypassed towns or settlements they could be economically ruined. Map publishers such as Rand, McNally & Co. of Chicago sought lucrative railroad company contracts for maps that promoted railroad use, emigration, and development. In many cases, American atlas publishers updated their maps from year to year simply by documenting the extension of new railroad lines, often ignoring the underfunded standard roads and trails necessary to connect rural localities with railroads. Ironically, although artist correspondents from northeastern-based illustrated newspapers discovered the fascination of the growing cattle industry, the contemporary mapmakers and map publishers tended to ignore the ephemeral cattle trails that rapidly shifted as railroads extended their lines.

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A. R. Waud

A Drove of Texas Cattle Crossing a Stream

Stereotyped wood engraving on paper, 25 x 38 cm., from *Harper's Weekly*, October 19, 1867, p. 665.

London-born illustrator, painter, and artist-correspondent Alfred R. Waud (1828-1891) gained fame covering the American Civil War for *Harper's Weekly*. After the war, while on a tour of the southern states for the magazine/newspaper, he crossed over the Sabine into Texas and may have witnessed and drawn such a scene firsthand. The illustration here, possibly “the first Western cattle drive illustration... in the national illustrated press,” accompanied an article published on October 19, 1867, titled “Texas Cattle Raising” which contained the following brief description:

... Vast numbers of these cattle are driven on foot to the Mississippi, and after crossing it, into the interior of the cotton States. Our illustration ... shows a drove of them crossing a stream. A drove of five hundred cattle is usually accompanied by a dozen men, drivers, cooks, etc., mounted upon mustang ponies, a wild set, who plunge in and out of rivers, or rush in among stampeded in the most reckless way...

Much subsequent “western art” and many film and television “westerns” derived inspiration from the initial efforts to portray cowboy life by the artist-correspondents for periodicals like *Harper's Weekly* and *Frank Leslie's Illustrated*.

See Robert Taft, *Artists and Illustrators of the Old West* (New York: Charles Scribner's Sons, 1953), pp. 54-62; Powers, *Texas Painters, Sculptors & Graphic Artists*, pp. 542-543.



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Paul Frenzeny and Jules Tavernier

The Texas Cattle Trade

Stereotyped wood engraving on paper, 37 x 51 cm., from *Harper's Weekly* [Supplement], May 2, 1874.

Taking advantage of faster and more convenient travel to many places by railroad, in 1873 New York-based *Harper's Weekly* sent a dynamic team of expatriate artists of French origin on a coast-to-coast sketching tour in search of subject matter to cover for the popular newspaper. Both were veterans of the recent Franco-Prussian War of 1870-1871. Paul Frenzeny (1840-ca.1902) was the son of an exiled Hungarian nobleman and had also served in the French cavalry during the Second French Intervention in Mexico. He generally sketched the figures and foreground matter. Jules Tavernier (1844-1889) had earlier studied art and exhibited in the Paris Salons of the 1860s. He primarily worked on the background and overall

Haasis & Lubrecht

The American Union Railroad Map of the United States, British Possessions, West Indies, Mexico, and Central America

Chromolithograph on paper, 95 x 129 cm.

(New York: Haasis & Lubrecht, 1871).

98/12 700006 or 98/6 700049 Image is from Library of Congress

1872 map but is nearly identical to ours.

By 1871, when the New York publishers Haasis & Lubrecht produced this large, bold, and colorful folding map, the first transcontinental railroad was already in operation, having been completed just two years earlier. (The Central Pacific Railroad, building east from Sacramento, and the Union Pacific, building west from Omaha, Nebraska, met at Promontory Summit, Utah, on May 10, 1869). Oddly, only the Central Pacific is labeled on the map, and there is no key or list of railroads; nevertheless, many of the first transcontinental railroad's actual stops are depicted along the solid line. The line of the Kansas Pacific Railway, running west from Kansas City is shown as completed to Denver, having arrived there in August 1870 where it linked up with the recently completed Denver Pacific Railway that linked the whole line with the Union Pacific at Cheyenne, Wyoming. A number of proposed railroads also appear on the map, shown by reticulated lines. These include the important Northern Pacific and Southern Pacific, to mention only a couple.

The Haasis & Lubrecht railroad map, issued in 1870, 1871, and 1872 editions, had a number of interesting features intended to attract purchasers. The stylish cartouche employs an exuberant tri-colored font for the title mixed with other fonts reminiscent of the attention-drawing broadsides advertising circuses, musical and theater performances in the Victorian or "Gilded Age" of boosterism. The image of an American-type 2-4-0 wood-burning locomotive arriving at, or departing from, an eastern, northern, or midwestern city or town, the vignettes of sail- and steamships, and the large landscape panorama at the top of the map adds to the map's attraction for buyers.

Arguably, perhaps more practical is the inclusion at the lower left of the "Time and Distance Table between Washington and the Principal Places in North and Central America." This highlights a problem that confronted the railroads over vast distances. To run efficiently, the railroads had to establish a better control of time and soon proposed the system of "time zones" employed today. Finally, the pictorial panorama with the railroad running through it at the top of the map conveys a sense of the expanse of the nation and the optimistic sense that the new technology of the railroad or "machine in the garden" would succeed in uniting the two coasts and the country's differences after the terrible Civil War.

Tooley's *Dictionary of Mapmakers*, vol. 2, p. 241.

Asher & Adams'

Texas [Eastern Half]

Color lithograph on paper, 58 x 41.5 cm. (New York: Asher & Adams, copyright 1871), probably from *New Commercial, Topographical, and Statistical... Atlas of the United States* (2 vols.; New York: Asher & Adams, 1873), vol. 1, pp. 55-56.

62/5 2005-466

Increasingly during the late nineteenth century, commercial mapmakers ignored overland trails and focused solely upon railways. Issuing atlases in new editions each year, the atlas publishers tried to

composition of each illustration. Together they travelled to the Neosho River Valley of Kansas and Fort Gibson in Indian Territory in August 1873, then to Denison, Texas, in September 1873 on the newly completed Missouri, Kansas & Texas Railway (the M.K.T. or "Katy"). They visited a north Texas cattle ranch and struck out on horseback over the Plains, part of the time accompanying a cattle drive back through Indian Territory to Wichita, Kansas.

On this part of the tour and later in October, Frenzeny & Tavernier sketched many of the scenes published in the double-page *Harper's Weekly* Supplement sheet titled "The Texas Cattle Trade." These included many aspects of the trade: "Branding," "On the Trail," a "Rodeo, or Rounding Up Cattle," "Cutting Out," "In Camp," "Halting Place on the Ninnescah River," "Wichita," "Shipping for the Eastern Markets," and the cowboy's return home in "Ho, for Texas!" Their scenes and ideas undoubtedly benefited from the association they had at this time with Liverpool native and local Topeka, Kansas artist and musician "Professor" Henry Worrall (1825-1902) who was then working on illustrations for cattleman and entrepreneur Joseph G. McCoy's book *Historic Sketches of the Cattle Trade of the West and Southwest* (1874).

Claudine Chalmers, *Chronicle of the West for Harper's: Coast to Coast with Frenzeny & Tavernier in 1873-1874* (Norman: University of Oklahoma Press, 2013). Taft, *Artists and Illustrators of the Old West*, pp. 94-128, 314-329; Powers, *Texas Painters, Sculptors & Graphic Artists*, pp.179, 504.

After an Unknown Cartographer

The Best and Shortest Cattle Trail from Texas

Photolithograph on paper (Branding Iron Press, 1974 facsimile); adapted from original lithograph, printed by the Kansas City Litho. Co., in *Guide Map of the Great Texas Cattle Trail from Red River Crossing to the Old Reliable Kansas Pacific Railway* (Kansas City, Missouri: published by the Kansas Pacific Railway, 1874; first printed in 1872).

F596 .S65 1874

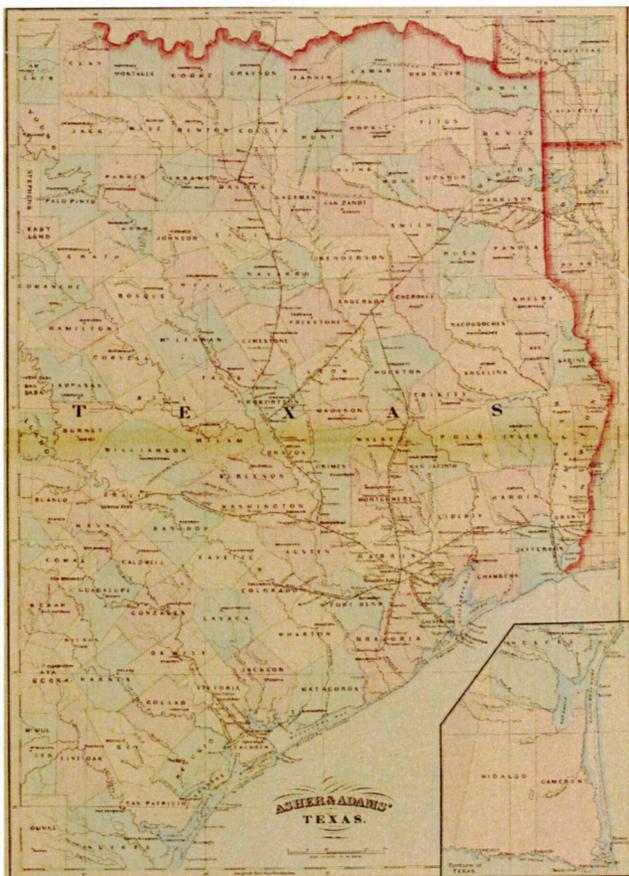
Ironically, while printed images of cowboys and the cattle trade date to the end of the Civil War and earlier, very few maps showing cattle trails survive from the era itself. This facsimile reproduces one of the extremely rare ones, originally a production of the Kansas Pacific Railway. There are scores of maps produced in the twentieth century purporting to show the cattle trail routes, some well researched, but many others not so.

An original of the 1872 edition of this map, belonging to Ted & Sharon Lusher, The Lusher Collection, Austin, Texas, was exhibited at the Witte Museum for the Texas General Land Office, *Connecting Texas: 300 Years of Trails, Rails & Roads*, pp. 48-49.



update the maps by showing the progress of railroad construction in addition to adding new towns and political boundaries. This map by New York atlas publishers Asher & Adams shows the state of eastern and southern Texas railroads and counties with minimized topography shortly before the financial panic of 1873.* These railroads include: 1) the Buffalo Bayou, Brazos & Colorado Railway (chartered in 1850, portions of which constituted Texas' first operating railroad by 1853, and completed as far as Columbus by 1867); 2) the Galveston, Houston & Henderson Railroad (chartered 1853, completed to Houston before the Civil War); 3) the Brazoria & Houston Tap R.R. or Houston Tap & Brazoria Railway (chartered 1856, largely completed before the Civil War, but seriously deteriorated by 1870); 4) the Houston & Texas Central Railway to Dallas (chartered in 1848, completed to Dallas by 1872); 5) the Western Branch of this to "Austin City" (completed in 1871); 6) the Waco Tap (chartered 1866, completed 1872); 7) the Houston & Gr. Northern Railroad (chartered 1866, completed to Trinity by 1872); 8) the Texas & New Orleans Railroad (chartered 1856, operating between Houston and Beaumont in 1867 but soon portions were discontinued due to lack of funds); 9) the northern transcontinental branch of the Texas & Pacific Railway (chartered in 1871 and completed between Texarkana and Clarksville in 1872); and, 10) the southern branch or Southern Pacific Railway (originally chartered as the Texas Western Railway in 1852 and not related to the more famous California-based Southern Pacific from Shreveport, Louisiana, completed to just beyond Longview, Gregg County, across the Sabine River to Smith County in 1872).

*UTA Special Collections has a version of the full atlas, dated 1872, vols. 1 & 2 (SpCo Oversize 1003) with an earlier version of this map that shows the Houston & Texas Central R.R. only as far north as Groesbeck in Limestone County; Ristow, *American Maps and Mapmakers*, p. 441.



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M. Whilldin

A Description of Western Texas [Galveston, Harrisburg and San Antonio R. R. Immigrants Guide to Western Texas]

(Galveston, Texas: Galveston, Harrisburg & San Antonio Railway Company, printed at "The News" Steam Book & Job Office, 1876). 19 x 12 cm. F391 .G18 SpCo

Galveston newspaper editor M. Whilldin's well-illustrated *Immigrants' Guide* is an example of a genre of ephemera widely published by railroad companies to encourage people to use their railroads. It contains a colorful chromolithographed county map of central Texas indicating the "Sun Set Route" of the Galveston Harrisburg & San Antonio Railway and thirty-two delightful lithographs of picturesque cities, towns, bridges, and landscapes along the route. The G.H. & S.A. Railway was a new name given to the old Buffalo Bayou, Brazos and Colorado Railway Company in 1870. It reached San Antonio in February 1877 and was later acquired by the Southern Pacific Railway Company of California, which also adopted its "Sunset Route" slogan for the whole route between New Orleans and Los Angeles.

George C. Werner, "Galveston Harrisburg and San Antonio Railway," *The Handbook of Texas Online*, <http://www.tshaonline.org/handbook/online/articles/eqg06>, accessed August 24, 2018; Dorothy Sloan Books Auction 23 (2018), cat. no. 156, accessed 9-10-2018, <https://www.dsloan.com/Auctions/A23/item-galveston-whilldin-description-1876.html>; Huseman, *Charting Chartered Companies*, p. 46, cat. no. 56.

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Post Route Map of the State of Texas: with adjacent parts of Louisiana, Arkansas, Indian Territory and of the Republic of Mexico

Designed and constructed under the orders of D.M. Key by W.L. Nicholson. paper, mounted on linen, 107 x 145 cm., folds to 37 x 38 cm. (Washington, D.C.: Post Office Department, ca.1878-1880). 41 130043

Railroads served the people located near their tracks, but there were many rural places the railroads did not reach. Early roads in Texas were built and maintained by the counties with the county commissioners' courts having the power to choose routes and construct them. The U.S. Post Office desperately needed better roads, but the federal government did not have the funds or the power to construct them.



85

William M. Bradley & Bro.

Railroad Map of the United States, Showing the Through Lines of Communication from the Atlantic to the Pacific, Together with the Various Steamship Lines along the Seaboard

Color lithograph on paper, copyright 1884, in Mitchell's *New General Atlas* (Philadelphia: Wm. M. Bradley & Bro., 1885), pp. 10-11. G1019 .M51 1885

This excellent map from one of the later editions of Mitchell's *New General Atlas* clearly demonstrates the growth of railroads in the United States by 1884/1885. Now, in addition to the Union and Central Pacific Railroad and Kansas Pacific lines, there are the Southern Pacific and the Northern Pacific railroads which were both completed in 1883. Shown in red, in addition to the railroad lines, are the longitudinal meridians dividing the country into Eastern, Central, Mountain, and Pacific time zones, a system adopted by the railroads that same year, 1883. Incidentally, some of the time problems growing out of railroad construction led to the adoption of the Greenwich Meridian as the international standard for 0 degrees longitude at the International Meridian Conference held at Washington, D.C., in 1884. Nevertheless, this map still employs the old national U.S. standard meridian of 0 degrees at Washington, D.C.

86

After B. B. Paddock

Map - showing - the Geographical location of Fort-Worth, Tex., and Rail-Roads

Chromolithograph on paper, 24 x 32 cm., by Ketterlinus, Philadelphia, in Ed. J. Smith, *The Capitalist; or, The City of Fort Worth. A Parody on the Mikado*. (Fort Worth, Texas: Fort Worth Board of Trade, 1888). 26 cm. Gift of Jenkins Garrett F394 .F7 S55 Garrett

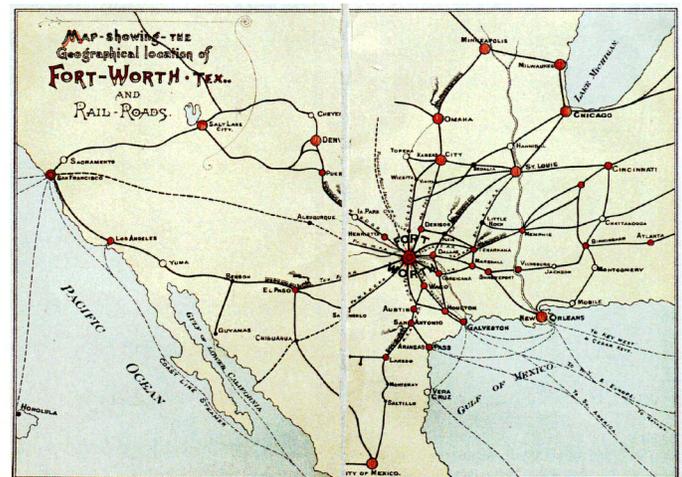
During the nineteenth century, small towns desperately competed for railroads because, if they were bypassed during the construction phase, it often meant economic decline and even death for the town. This almost happened to Fort Worth when, due to the international financial panic of 1873, the Texas & Pacific Railway, building from the east, temporarily stopped construction after reaching nearby Dallas that year. However, Fort Worth *Democrat* newspaper publisher and editor B. B. Paddock (1844-1922), a recent immigrant from

Mississippi, and his fellow citizens refused to give up. Paddock tirelessly promoted Texas, Tarrant County, and his adopted town in the national press, worked to see that construction continued on the Texas & Pacific as well as to secure other railways for the growing city, including the Fort Worth and Rio Grande Railway (chartered in 1885) for which he served as president. One of Paddock's most famous creations was his so-called "Tarantula Map" of which this chromolithograph is one of the best contemporary printed representations.

Paddock sketched the map as early as 1873, when a crudely executed and simple hand-drawn version appeared in the *Democrat*. He apparently drew a number of these for anyone who would listen to him share his vision for the city.* The chromolithographed version here from 1888 shows Fort Worth as the hub of the Texas & Pacific, the Houston & Texas Central, the Gulf, Colorado & Santa Fe, the Fort Worth & Rio Grande, the Fort Worth & Denver, the Missouri, Kansas & Texas and other railroads. It boasts Fort Worth's recent selection as "the headquarters of a railway postal division" and appeared in a promotional and libretto of a "madcap" parody written by Ed. J. Smith specifically about Fort Worth based upon Englishmen W.S. Gilbert & Arthur Sullivan's then wildly popular satirical operetta *The Mikado*.

Among other projects, Paddock also promoted the Texas Spring Palace (a short-lived exposition and exhibit building in Fort Worth constructed entirely from Texas products), published the *Fort Worth Gazette*, wrote a four-volume *History of Texas: Fort Worth and the Texas Northwest Edition* (1922), and eventually served four terms as the city's mayor. His beloved city eventually became the headquarters for today's Burlington Northern Santa Fe, operating "one of the largest freight railroad networks in North America, with 32,500 miles of rail across the western two-thirds of the United States."

*We recently became aware of an original hand-drawn "Tarantula Map" by Paddock in the Hubert Howe Bancroft papers at the Bancroft Library of The University of California, Berkeley. See Jill Carlson Jackson, "Along came a spider: Visions and realities of railroad development in Fort Worth, Texas, 1873-1923. A Cartographic Approach." The University of Texas at Arlington M.A. Thesis, 1996, ProQuest Dissertations Publishing, 1996, 1386432. Patricia L. Duncan, "Paddock, Boardman Buckley," *Handbook of Texas Online*, accessed August 24, 2018, <http://www.tshaonline.org/handbook/online/articles/fpa03>.



Technological Developments, Roads, Highways and Nostalgia in Maps and Images

Toward the end of the nineteenth century many Americans welcomed the conveniences brought about by new technologies while at the same time decrying the ever-increasing rate of advances. They also pondered “the passing of the frontier,” honoring the sacrifices made by previous generations while often looking at the past through nostalgic lenses. As soon as repeating rifles helped decimate the last of the buffalo herds and the last Indians were forced into government-run reservations with the aid of these and other such inventions as railroads and telegraphs, people began to reflect with a certain amount of regret upon what it all had meant.

At first, bicycles and then automobiles began to share the roads and trails with horses, mules, wagons, and carriages creating a need for better roads and signs and maps to mark them. Next came powered flight. Tied to the automobile and the airplane were industries such as oil, rubber, road and airfield construction. Oil not only provided the fuel and lubricants for the ubiquitous new internal combustion engines but also in many cases part of the material for paving. The introduction of mass-produced automobiles around 1908 highlighted the need for more highways, for uniform standards and regulations, for gas stations, tourist camps, motels, and restaurants. These changes radically transformed the landscape and further fueled a need for maps as well as a growing nostalgia for the past evidenced by the development of historical tourism.

The map publishing business changed to support this. Oil and rubber companies encouraged the use of gasoline and tires by commissioning maps that they distributed free of charge at service stations. Map companies that had earlier concentrated on railroad map production now expanded and others grew up to focus solely upon road, highway, and tourist maps. Maps promoted historical tourism, showing old trails and old roads, while movies and advertisements romanticized the Old West and the heroic pioneers. Many of the old trails and roads were incorporated into new superhighways while some were abandoned for later rediscovery. Old maps and images may still aid in that process and help us come to a clearer understanding of the past and the present.

William Kaszynski, *The American Highway: The History and Culture of Roads in the United States* (Jefferson, North Carolina, and London: McFarland & Company, Inc., 2000), pp. 19-136.

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Millroy & Hayes

Route of the Mormon Pioneers from Nauvoo to Great Salt Lake Feb'y 1846-July 1847

Chromolithograph on paper, 22 x 69 cm., by Denver Lith. Co., (Salt Lake City: New Wilson European Hotel, 1899). 64/10 2008-497

This 1899 Salt Lake City hotel advertisement and brochure promoted a form of pilgrimage tourism/historical tourism increasingly popular in the following century. One could follow the “Route of the Mormon Pioneers from Nauvoo to Great Salt Lake” and then stay in the comfort of a modern hotel, equipped with gas lighting and heating. The black dots along the trail in the map represent campsites reportedly recorded in the journals of Mormon elder Orson Pratt, who traveled with Brigham Young and a small detachment of 147 pioneers who first arrived in the Salt Lake Valley in July 1847. Although printed by the Denver Lithographing Company of Denver, Colorado, the map’s creators and publishers were John J. Millroy and John M. Hayes, who advertised themselves as “Map and Atlas Publishers” in the Salt Lake City city directory for 1899. Their address was at the “Wey Hotel,” which was another name for the Wilson Hotel European Hotel, which was also advertised as “The Home for the Tourist” on the map’s verso. Other information on the back included “Places of Interest” within Salt Lake City, information about the Mormon Church and Organization, the climate, a synopsis of that

first trip and all the names of the 148 pioneers (including Brigham Young and elder Pratt), some Mormon church history, and the “Articles of Faith of the Church of Jesus Christ of Latter-Day Saints.”

Rebecca Onion, “A Late 19th-century Day-by-Day Commemorative Map of the Mormon Journey West,” Blog, accessed August 25, 2018.

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Frederic Remington

The Tortoise and the Hare

Halftone photolithograph on paper, 41 x 55 cm., in Owen Wister, intro., *Done in the Open: Drawings by Frederic Remington* (New York: P. F. Collier & Son, 1902). 42 cm. NC 975.5 R45 A38 1903

Frederic Remington’s illustration “The Tortoise and the Hare” for a poem, probably by Owen Wister, emphasized the tension between modern technology, modernity, and the nostalgia for old ways, methods, and technologies of the past. It was not an isolated example of such tension but a common phenomenon that seems to grow as technological advancements accelerate. Incidentally, beginning with velocipedes around 1869, bicycle designs improved considerably in the late nineteenth and early twentieth centuries as more and more people took up the new technology. Forming bicycle clubs, they often became strong advocates for using state and local funds for road



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improvements. They also started the “Good Roads” movement for all-weather hard-surfaced streets and roads.

Interestingly, Remington’s original monochromatic grisaille painting for this illustration – a 27 x 40 in. canvas also known under the title “Right of the Road” – *An Encounter on a Rocky Mountain Trail* – was part of Fort Worth media entrepreneur and businessman Amon G. Carter’s personal collection and is today housed in the Amon Carter Museum. Carter passionately collected the art of Remington and Charles M. Russell – two of the most famous artists associated with the American West – as part of his effort to help Fort Worth live up to its slogan: “Where the West Begins.”

Correspondence with Amon Carter Museum staff members Jonathan Frembling and Heather Creamer, August 27, 2018, sharing past exhibit label text.

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The “Marlboro” advertising staff of the Philip Morris Corporation *The Great Trails of the Old West and the Men Who Rode Them*

Color halftone photolithograph on paper, 61 x 49.5 cm. (Philip Morris Incorporated, 1975).

Many maps reflect an interest in or nostalgia for the past by attempting to reconstruct historical trails no longer existing. This is particularly true of the popular genre of “cattle trail maps,” the overwhelming majority of which were produced well into the twentieth-century – years after the last cow went up a trail. It is also important to note that as the business of historical tourism expanded in the twentieth century and the popularity of movie and television westerns experienced a boom, it appeared that every city and town in Texas and Oklahoma wanted to claim they were on a cattle trail. In this 1975 pictorial map showing cattle trails leading out of Texas, the advertising staff of the Philip Morris Corporation hoped to mine the persistent interest in cattle trails by associating them with their lucrative “Marlboro” brand of cigarettes. From 1954 until 1999 the corporation used the brilliant “Marlboro Man” advertising campaign figure first conceived in 1954 by the Chicago advertising executive and “Mad Man” Leo Burnett (1891-1971). The maps’ producers graciously included the following credit line: “For their kind help with facts and graphics, Marlboro thanks the following: The National Cowboy Hall of Fame, Oklahoma City, Oklahoma; The Huffman Pictures, Miles City, Montana; Western History Collections, University of Oklahoma Library; State Historical Society of Colorado.”

Wikipedia, “Marlboro Man,” accessed 9-5-2018, https://en.wikipedia.org/wiki/Marlboro_Man; Wikipedia, “Leo Burnett,” accessed 9-5-2018, https://en.wikipedia.org/wiki/Leo_Burnett

[Barney R. Holland, Sam White, and Lem Scarborough with Stoddard-Dayton Model 48 Saybrook Touring Car, Courthouse Square, Weatherford, Parker County, Texas]

10007187

“No. 1 Hwy., West Texas,” or “Straddling one of the Numerous High Centers near Sierra Blanca, Texas.” [Holland, White, and Scarborough 1912 Road Trip]

10007199

“Camping in Wyoming” [Holland, White, and Scarborough 1912 Road Trip]

10007190

“West Texas” or “Sudden Dip in Nevada that had to be negotiated very cautiously” [Holland, White, and Scarborough 1912 Road Trip]

10007189

“California” [Sam White and Barney R. Holland in Stoddard-Dayton Model 48 Saybrook Touring Car on a Road in California]

10007188

“Gila River near San Carlos Indian Reservation” [Arizona, near Coolidge Dam, on Holland, White and Scarborough 1912 Road Trip]

10007201

Team of Horses Pulling Car out of Mud in Northern Sonora, Mexico (Holland, White, and Scarborough 1912 Road Trip)

10007192

“Getting Ready for Drive to Yuma” [Harnessing Car to Horse Team]

10007196

[Making Repairs to the Car, Holland, White, and Scarborough 1912 Road Trip]

10007198

[Travelling Over Rutted and Rough Terrain, Holland, White, and Scarborough 1912 Road Trip]

10007193

“Near Lordsburgh New Mexico Highway #80 [Holland, White, and Scarborough 1912 Road Trip]

10007200

Copy scans from original photographs, 1912. Overland Automobile Scrapbook, Bowie and Holland Family Papers, 1886-1990. 2012-38.

Automobiles developed in the late nineteenth century as bicycle makers, inventors, blacksmiths, and backyard mechanics began to experiment with the new internal combustion engine. By the early twentieth century, automobiles were gradually replacing railroads as the favored mode of transportation for many. With Henry Ford’s introduction of the mass-produced Model T in 1908, automobiles became affordable for the masses and cars were everywhere. However, road conditions did not match the availability of cars in the early years. In 1912 three young Texans – Barney R. Holland and Sam White of Weatherford and Lem Scarborough of Austin – made a



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safe and successful automobile road trip from Weatherford in Parker County to the West Coast and back, covering an estimated 6,500 miles at a “leisurely” pace. Given the conditions on the highways, roads, and trails of the day and the fact they did not always stay on the main highways, this proved an extraordinary adventure. The automobile, a “Stoddard-Dayton 48 Saybrook model” touring car (an expensive high-quality car manufactured by the Dayton Motor Car Company of Dayton, Ohio) was loaded down with extra water, oil, gasoline, camping equipment, tire inner tubes, and clothing for all kinds of weather. Gas stations and hotels did not exist for much of their way, and they had to fix flats frequently, using a total of “six tire cases.”

According to a contemporary article in an auto magazine, the car belonged to Sam White who drove the whole way and returned it to Weatherford “in splendid condition.” The outbound trip took them from Weatherford through Abilene, Snyder, and north through the Texas and Oklahoma panhandles, eastern and central Colorado, west through southern Wyoming, northern Utah, and Nevada. They encountered heavy rains, bad roads, mud, a four-hour snowstorm, deserts and sand on much of this portion of the trip. While driving in California, to San Francisco and then to Los Angeles and San Diego, they remarked about the “good roads” and even “a beautiful highway.” On the return trip, however, they took a southerly route through southern California, southern Arizona, southern New Mexico, El Paso, and west Texas. This proved to be the worst part of the trip because, unfortunately, instead of taking the more usually travelled route, they dipped south to Calixico where the car stuck in sand. Enduring extremes of heat by day and cold by night, they had to walk eight miles to a place called “Los Cuevos” to take a train to Yuma to hire a Mexican to take them and a team and wagon to go back and pull the car out of its trap and then pull it 30 miles to Yuma, Arizona, where they returned to the somewhat better roads.

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Fred A. Jones and Bert Firmin
State of Texas Sectional Map Dallas and Tarrant Counties
Sheet No.1

Color lithograph on paper, 34.5 x 50.5 cm. (Dallas, Texas: Fred A. Jones, 1915).

(see back cover)

This map details paved roads, partially improved roads, railroads and electric interurban lines in Dallas and Tarrant Counties as of 1915. The map’s compiler was consulting and construction engineer Fred

A. Jones (1875-1928). He and his company were among the leading contractors in the Southwestern U.S. between 1906 and 1930. He played a major role in the development of the interurban railroad and water systems of North Texas, and he supervised the construction of such buildings as the original Dallas Country Club, Dallas Hall at SMU, the Dallas Municipal Building, the Southland Building, White Rock Lake and Wastewater Purification Plant, and the Texas Farm and Ranch Building. Bert Firmin was a draftsman who worked for Jones and for the Missouri, Kansas and Texas (Katy) Railroad.

In addition to roads and railroads, the map shows a number of interesting details. Listed on the right side are statistics for each county as of 1910 and 1915 including population, steam and electric railroad mileage, mileage of improved highways (paved and well graded), number of autos (as of January 1, 1915, Dallas County had 6,500 and Tarrant 5,500), and -- since both counties were still largely rural -- the number of farms and the amount of cotton produced. Depicted on the map itself are recently built water reservoirs such as Bachman Lake and White Rock Lake in Dallas and North Lake in Tarrant. There are also numerous small towns that grew into large DFW Metroplex cities and suburbs such as Hurst, Euless, Bedford, Grapevine, Arlington, Benbrook, Birdville, Keller, Watauga, Saginaw, Azle, Everman, Ken[ne]dale, Crowley, and Mansfield in Tarrant County and Grand Prairie, Coppell, Irving, Carrollton, Farmers Branch, Addison, Richardson, Garland, Highland Park, Sachse, Rowlett, Mesquite, Duncanville, DeSoto, Wilmer, Hutchins, Lancaster, and Seagoville in Dallas County. Likewise, there are places that have subsequently almost or entirely dropped off the map including Avondale, Haslet, Dido, Calef, Hodge, Moselle, Primrose, Enon, Red Rock in Tarrant County and Estelle, Sowers, Letot, Eagle Ford, Jim Town, Hale, Cain, Wheatland, Lisbon, Scyene, Elam, Rylie, Kleburg, Lawson, Fisher, Reinhardt, New Hope, Housely, Audelia, Kirkland Park, and Alpha in Dallas County. Along the Trinity River southeast of Dallas there are locks and dams. There is also evidence of a thriving social and entertainment scene with such places as River Crest Country Club in Fort Worth and the “Dallas G & C Club,” “Auto Club,” “Dallas Club Lake,” “Fins and Feathers Club Lake,” and “Trinity Rod & Gun Club.”

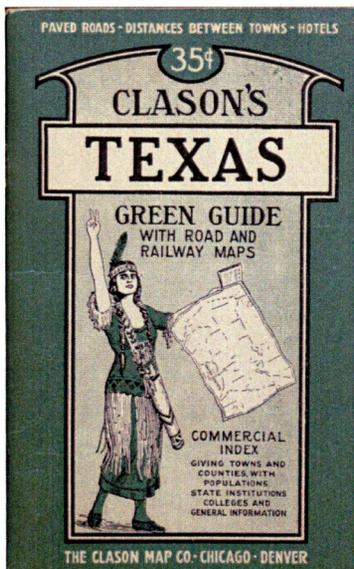
Finding Aid, Dallas Municipal Building and Fred A. Jones Company Bankruptcy, 1913, Dallas Municipal Archives, Collection 1991-048. *M.K. and T. Employees Magazine*, vol. 5 (1917), p. 676.

George S. Clason et al.

Clason's Road Map of Texas Showing Paved Roads, All Weather Roads and Other Thoroughfares

Color lithograph on paper, 58 x 42 cm. (Denver and Chicago: Clason Map Co., 1930), from *Clason's Texas Green Guide with Road and Railway Maps*. (Denver and Chicago: Clason Map Co., ca.1930). 94/12 2007-159

This road map from 1930/1931 reflects the steady growth of roads and highways in Texas and a large part of Oklahoma. Solid red lines on the map indicate paved U.S. Highways, segmented lines are all-weather U.S. Highways. Similarly, solid black lines indicate paved state roads, segmented black lines indicate all-weather state highways. U.S. Highway numbers appear within shields, state highway numbers within circles. Towns and cities are shown as smaller circles between which are numbers indicating mileage distances. At that time there was still a preponderance of unpaved roads or "other thoroughfares," indicated by the numerous double lines. Such symbols became increasingly standardized in the road map business in the twentieth century to the point that people could easily read such maps no matter where they originated nor what geography they purported to show.



The Clason Map Company began operations in Denver around 1903 and was advertised as such in the Denver city directories by 1905. The company's founder George Samuel Clason (1874-1957) was born in Louisiana, Pike County, Missouri. His family moved to Lincoln, Nebraska, and he attended the University of Nebraska and served as a volunteer with the rank of private in the Spanish-American War of 1898. By 1901 Clason was working as a draughtsman in Denver, Colorado, and by 1904 advertised himself as specializing in county and mining maps. In 1906 the

Clason Map Company, under his management, began to produce city maps for Denver and Colorado Springs and a "Travelers' Guide Map of Colorado." Beginning in 1908, these 25 cent pocket maps had green covers, and Clason developed a whole series that included other states. By 1920 they were published formally as "The Green Guide Series." Beginning in 1923, Clason also began publishing one of the first American automobile road atlases, sometimes under titles including the words "Motor Atlas" and "Touring Atlas." He was so successful that in 1926 he wrote the first of his inspirational pamphlets on thrift and personal wealth management as a series of sayings by the ancient Babylonians. Although the Clason Map Company ceased publishing the Green Guides in 1931 and the company went bankrupt during the Great Depression, Clason's book *The Richest Man in*

Babylon became a huge best-seller, still published today in dozens of languages worldwide.

See Mark Greaves and Carl Liedholm, The Clason Map Co. Road Map & Atlas Site, Michigan State University, <https://lib.msu.edu/exhibits/map/clason/>, accessed 8-29-2018; Carl Liedholm, "Clason's Green Guides," *Road Map Collectors Association The Legend* 50 (Spring 2011): 1, 9-11 *Find A Grave, database and images*, "George Samuel Clason (7 Nov 1874-7 Apr 1957)" memorial no. 16972844, accessed 29 August 2018, citing Golden Gate National Cemetery, San Bruno, San Mateo County, California, USA, maintained by C. J. Kirkpatrick (contributor 46873204).

Official Auto Trails Map of the United States, Featuring Tourist Camp Sites

Verso:

Aviation Map of the United States, Featuring Landing Fields

Compiled for the National Aeronautic Association by the United States Tourist Information Bureau, Inc. 66 x 104 cm. (Chicago, Illinois: Rand McNally & Company; and Waterloo, Iowa: The United States Touring Information Bureau, Inc., 1923).

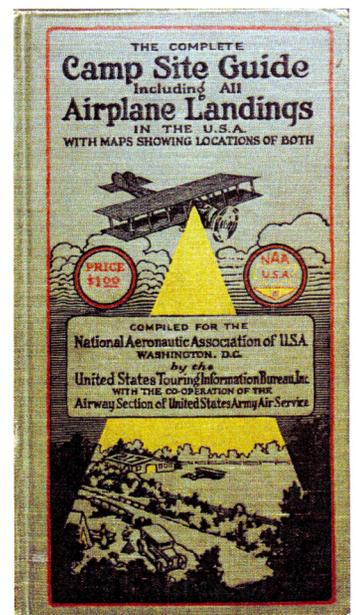
[accompanied with]

The Complete Camp Site Guide and Latest Highway Map of U.S.A. Together with Official Directory of Aeroplane Landing Fields

Compiled by the National Aeronautic Association of the U.S.A. by the United States Touring Information Bureau, Inc. with the Co-operation of the Airway Section of the United States Army Air Service 1923 Edition (Waterloo, Iowa: The United States Touring Information Bureau, Inc., 1923). 2017-524

By 1923 the growth of private and commercial aviation, the spread of automobiles, and the development of tourism in the United States was such that the National Aeronautic Association, the National Tourism Information Bureau, and the Rand McNally & Company map publishing company of Chicago cooperated in the production of this map. This also included another map on the back side and an accompanying guide to camp sites, automobile trails, roads, highways, and "aeroplane landing fields."

The map here shows a jumble of trails or marked roads, paved roads, and main automobile roads with camping sites noted by red dots. At right and at bottom are markings for several of the hundreds of "marked trails" that crisscrossed the country at the time. Often painted on trees, fence posts, and other kinds of objects, these colored stripes and symbols became so confusing by the early 1920s that a new standardized highway numbering system was adopted in 1926. Among the marked trails in Texas are the Bankhead Highway, one of the earliest transcontinental highways that also included portions of the Dixie Overland Highway, much of which included what was later U.S. 80 and what is now I-30.



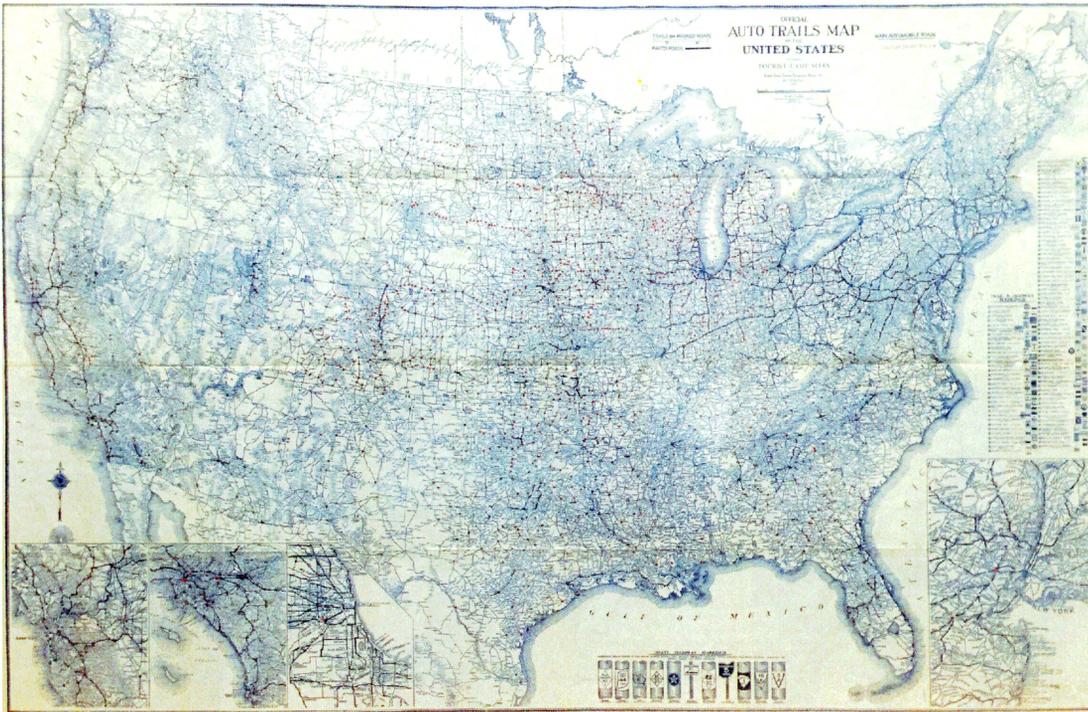
Texas State Highway Department in cooperation with the U.S. Department of Commerce Bureau of Public Roads and State-Wide Highway Planning Survey

General Highway Map Collin County Texas

Photolithograph on paper (Austin: Texas State Highway Department, 1951, revised to 1952).

This is a fine example of a "General Highway Map" produced in the 1950s by the Texas State Highway Department in cooperation with the U.S. Department of Commerce Bureau of Public Roads and State-Wide Planning Survey. It also shows the formerly largely rural nature of what is currently one of the fastest growing areas in the state and nation. At the time, Plano, located in the southwest part of the county, at lower left, had a population of 2,126 (as of the 2010 census 259,841) and the town of Frisco, in the far western portion, had a population

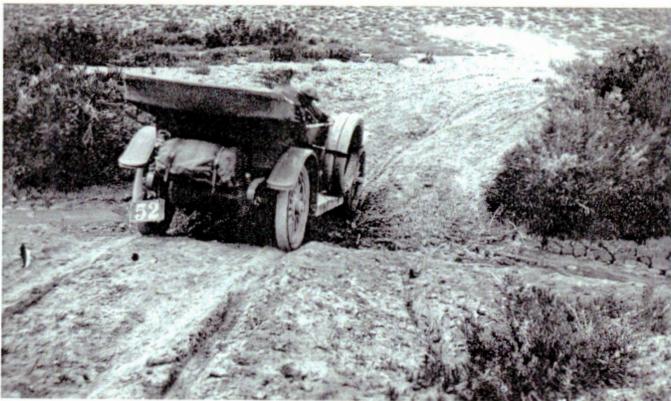
of just 736 (current estimate is 178,471). An extensive legend at right includes over ninety diverse symbols of such efficiency of design that printing required no color other than black ink, thus saving considerably on production costs at that time. For examples, the map differentiates between private railroads, private roads, primitive roads, bladed earth roads, graded and drained roads, soil surfaced roads, metal surfaced roads, bituminous surfaced roads, paved roads, divided highways, federal aid roads, federal aid secondary roads, U.S. Highways, state highways, state highway-park roads, state highway loops or spurs, farm or ranch-to-market roads. It also includes symbols for various types of bridges, oil pipe lines, gas pipe lines, transmission lines, ditches or canals, and dams with roads, just to mention a few. Allen, located just north of Plano on U.S. Highway 75, as of May 2018, had a population of 101,566, but at this time only got a tiny circle and an inset at the upper left.



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Image 63 (for description see page 39)



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Select Bibliography

- Agnew, Brad.** *Fort Gibson: Terminal on the Trail of Tears.* Norman: University of Oklahoma Press, 1980.
- Akerman, James R. and Robert W. Karrow, Jr.** *Maps: Finding Our Place in the World.* Chicago and London: The University of Chicago Press, 2007.
- Beers, Henry P.** "A History of the U.S. Topographical Engineers, 1813-1863." 2 pts. *The Military Engineer* 34 (Jun 1942): pp. 287-91 & (Jul 1942): pp. 348-52, online at <http://www.topogs.org/History.htm>, accessed July 2014.
- Cohen, Paul E., ed.** *Mapping the West: America's Westward Movement 1524-1890.* New York: Rizzoli, 2002.
- Daniels, Jonathan.** *The Devil's Backbone: The Story of the Natchez Trace.* New York: McGraw-Hill Book Company, 1971; first published 1962.
- Davis, Marty, et al.** *Going to Texas: Five Centuries of Texas Maps.* Fort Worth: Texas Christian University Press, 2007.
- Demhardt, Imre Josef.** "Military Mapping Against All Odds: Topographical Reconnaissance in the United States from the Revolutionary War to the Civil War" in Elri Liebenberg, Imre Josef Demhardt, and Soetkin Vervust, eds., *History of Military Cartography*, 5th International Symposium of the ICA Commission on the *History of Cartography*, 2014 (Cham, Switzerland: Springer International Publishing, 2016), pp. 251-262.
- Dorothy Sloan Rare Books** Auction 22, 2009; Auction 23, 2013; <https://www.dsloan.com/cms/>, accessed August 2018.
- Egan, Ferol.** *The Eldorado Trail: The Story of the Gold Rush Routes across Mexico.* New York, Toronto, and London: McGraw-Hill Book Company, 1970.
- Eidenbach, Peter L.** *An Atlas of Historic New Mexico Maps, 1550-1941.* Albuquerque: University of New Mexico Press, 2012.
- Ely, Glen Sample.** *The Texas Frontier and the Butterfield Overland Mail 1858-1861.* Norman: University of Oklahoma Press and the Summerfield G. Roberts Foundation, Dallas, 2016.
- Faulk, Odie B.** *Destiny Road: The Gila Trail and the Opening of the Southwest.* New York: Oxford University Press, 1973.
- Foreman, Grant.** *Indian Removal: The Emigration of the Five Civilized Tribes of Indians.* Norman: University of Oklahoma Press, 1932.
- Francaviglia, Richard.** *Mapping and Imagination in the Great Basin, A Cartographic History.* Reno and Las Vegas: University of Nevada Press, 2005.
- Gard, Wayne.** *The Chisholm Trail.* Norman: University of Oklahoma Press, 1954.
- Gardner, Mark L.** *Wagons for the Santa Fe Trade: Wheeled Vehicles and their Makers 1822-1880.* Albuquerque: University of New Mexico Press, 2000.
- Goetzmann, William H.** *Army Exploration in the American West, 1803-1863.* New Haven: Yale University Press, 1959.
- Hague, Harlan.** *The Road to California: The Search for a Southern Overland Route, 1540-1848.* Glendale, California: The Arthur H. Clark Company, 1978.
- Hill, William E.** *The Mormon Trail: Yesterday and Today.* Logan: Utah State University Press, 1996.
- Huseman, Ben W.** *Charting Chartered Companies: Concessions to Companies as Mirrored in Maps, 1600-1900. An Exhibition in Conjunction with the 2010 Virginia Garrett Lectures on the History of Cartography.* Arlington: University of Texas at Arlington Library Special Collections, 2010.
- Huseman, Ben W.** *Enlightenment Mapmakers and the Southwest Borderlands. Treasures from the Virginia Garrett Cartographic Library. An Exhibit in Conjunction with the Tenth Biennial Virginia Garrett Lectures on the History of Cartography.* Arlington: University of Texas at Arlington Libraries Special Collections, 2016.
- Huseman, Ben W.** *The Price of Manifest Destiny: Maps Relating to Wars in the Southwest Borderlands, 1800-1866. An Exhibit in Conjunction with the Ninth Biennial Virginia Garrett Biennial Lectures on the History of Cartography October 1, 2014 through February 7, 2015.* Arlington: The University of Texas at Arlington Libraries Special Collections, 2014.
- Huseman, Ben W.** *Revisualizing Westward Expansion: A Century of Conflict in Maps, 1800-1900. An Exhibition in Conjunction with the 2008 Virginia Garrett Biennial Lectures on the History of Cartography August 25, 2008 thru January 3, 2009.* Arlington: The University of Texas at Arlington Library, 2008.
- Huseman, Ben W.** "Territories so Extensive and Fertile," *The Louisiana Purchase: A Bicentennial Exhibition Catalogue of Books, Maps & Prints drawn from the collections of the DeGolyer Library October 2003-February 2004.* Dallas: DeGolyer Library, Southern Methodist University, 2004.
- Jackson, Jack.** *Flags Along the Coast: Charting the Gulf of Mexico, 1519-1759: A Reappraisal.* Austin: The Book Club of Texas, 1995.
- Jackson, Jack.** *Shooting the Sun: Cartographic Results of Military Activities in Texas, 1689-1829.* 2 vols.; Austin: The Book Club of Texas and Wind River Press, 1998.
- Kaszynski, William.** *The American Highway: The History and Culture of Roads in the United States.* Jefferson, North Carolina, and London: McFarland & Company, Inc., 2000.

- Koepp, Donna P.**, ed. *Exploration and Mapping of the American West*. Chicago: Speculum Orbis Press for the Map and Geography Round Table of the American Library Association, 1986.
- Kraisinger, Gary and Margaret**. *The Western Cattle Trail 1874-1897. Its Rise, Collapse, and Revival*. Newton, Kansas: Mennonite Press, Inc., for Gary and Margaret Kraisinger, 2004.
- Lamar, Howard R.**, ed. *The New Encyclopedia of the American West*. New Haven: Yale University Press, 1998.
- Lavender, David**. *Westward Vision: The Oregon Trail*. New York, Toronto, London: McGraw-Hill Book Company, Inc., 1962.
- Lemmon, Alfred E., John T. Magill, and Jason R. Wiese**, eds., *Charting Louisiana: Five Hundred Years of Maps*. New Orleans: Historic New Orleans Collection, 2003.
- Levy, Philip**. *Fellow Travelers: Indians and Europeans Contesting the Early American Trail*. Gainesville: University Press of Florida, 2007.
- Library of Congress**. *American Memory. Map Collections*. Washington, D.C.: Library of Congress. <http://memory.loc.gov/ammem/browse/ListSome.php?category=Maps>, accessed June-September 2018.
- Luebke, Frederick C., Frances W. Kaye, and Gary E. Moulton**, eds. *Mapping the North American Plains*. Norman, OK, and London: University of Oklahoma Press; Lincoln: Center for Great Plains Studies, University of Nebraska, 1987.
- McElfresh, Earl B**. *Maps and Mapmakers of the Civil War*. New York: Harry N. Abrams, Inc. in association with the History Book Club, 1999.
- Martin, James C., and Robert Sidney Martin**. *Maps of Texas and the Southwest, 1513-1900*. Austin: Texas State Historical Association, 1999, originally published 1984.
- Martin, Robert Sidney**. "United States Army Mapping in Texas, 1848-50," in Dennis Reinhartz and Charles C. Colley, eds. *The Mapping of the American Southwest*. College Station: Texas A&M University Press for The University of Texas at Arlington, 1987, pp. 37-56.
- Modelski, Andrew M**. *Railroad Maps of North America: The First Hundred Years*. Washington, D.C.: Library of Congress, 1984.
- Pedley, Mary Sponberg**. *The Commerce of Cartography: Making and Marketing Maps in Eighteenth-Century France and England*. Chicago and London: University of Chicago Press, 2005.
- Powers, John, and Deborah Powers**. *Texas Painters, Sculptors & Graphic Artists: A Biographical Dictionary of Artists in Texas before 1942*. Austin, Texas: Woodmont Books, 2000.
- Reinhartz, Dennis, and Gerald Saxon**, eds. *Mapping and Empire: Soldier-Engineers on the Southwestern Frontier*. Austin: University of Texas Press, 2005.
- Riesenberg, Jr., Felix**. *The Golden Road: The Story of California's Spanish Mission Trail*. New York, Toronto, London: McGraw-Hill Book Company, Inc, 1962.
- Ristow, Walter W**. *American Maps and Mapmakers: Commercial Cartography in the Nineteenth Century*. Detroit: Wayne State University Press, 1985.
- Rittenhouse, Jack D**. *The Santa Fe Trail: A Historical Bibliography*. Albuquerque: University of New Mexico Press, 1971.
- Rumer, Thomas A**. *The Wagon Trains of '44: A Comparative View of the Individual Caravans in the Emigration of 1844 to Oregon*. Spokane, Washington: The Arthur H. Clark Company, 1990.
- Rumsey, David**. *David Rumsey Map Collection*, <http://www.davidrumsey.com/>, accessed June-September 2018.
- Schubert, Frank N**. *Vanguard of Expansion: Army Engineers in the Trans-Mississippi West, 1819-1879*. Washington, D.C.: U.S. Army Corps of Engineers, 1980.
- Schubert, Frank N.**, ed., *The Nation Builders: A Sesquicentennial History of the Corps of Topographical Engineers, 1838-1863*. Washington, D.C.: U.S. Army Corps of Engineers, 1988.
- Schulten, Susan**. *Mapping the Nation: History and Cartography in Nineteenth-Century America*. Chicago and London: The University of Chicago Press, 2012.
- Stephanson, Anders**. *Manifest Destiny: American Expansion and the Empire of Right*. New York: Hill and Wright, 1995.
- Stephenson, Richard W**. *Civil War Maps: An Annotated List of Maps and Atlases in the Library of Congress*. 2nd ed. Washington, D.C.: Library of Congress, 1989.
- Stegner, Wallace**. *Gathering of Zion: The Story of the Mormon Trail*. New York, London, and Toronto: McGraw-Hill Book Company, 1964.
- Stewart, George R**. *The California Trail: An Epic with Many Heroes*. New York, Toronto, London: McGraw-Hill Book Company, Inc., 1962.
- Streeter, Thomas W**. *Bibliography of Texas, 1795-1845*. 2nd ed., rev. and enlarged by Archibald Hanna with a Guide to the Microfilm Collection. Reprint Edition. Woodbridge, Connecticut: Research Publications, Inc., 1983.
- Swift, Roy L., and Leavitt Corning, Jr**. *Three Roads to Chihuahua: The Great Wagon Roads that Opened the Southwest, 1823-1883*. Austin, Texas: Eakin Press, 1988.
- Taliaferro, Henry G**. *Cartographic Sources in the Rosenberg Library*. Ed. by Jane A. Kenamore and Uli Haller. Galveston: Rosenberg Library, and College Station: Texas A&M Press, 1988.
- Texas General Land Office**. *Connecting Texas: 300 Years of Trails, Rails & Roads. An Exhibit Guide*. Austin, Texas: Texas General Land Office, 2018.

Texas State Historical Association. *The Handbook of Texas Online: A Digital Gateway to Texas History.* <http://www.tshaonline.org/handbook/online>, accessed June-August 2018.

Tooley, Ronald V. *Tooley's Dictionary of Mapmakers.* Rev. ed. Josephine French, Valerie Scott, Mary Alice Lowenthal, eds. 4 vols. Tring, Hertfordshire, England: Map Collector Publications in association with Richard Arkway, Inc., 1999.

Torget, Andrew J. *Seeds of Empire: Cotton, Slavery, and the Transformation of the Borderlands, 1800-1850.* Chapel Hill: University of North Carolina Press, 2015.

Townley, John M. *The Trail West: A Bibliography-Index to Western American Trails, 1841-1869.* Reno, Nevada: Jamison Station Press, 1988.

Traas, Adrian George. *From the Golden Gate to Mexico City: The U.S. Army Topographical Engineers in the Mexican War, 1846-1848.* Washington, D.C.: Office of History, Corps of Engineers and Center for Military History, U.S. Army, 1997.

Tyler, Ron. *Prints of the American West: Prints from the Library of Congress.* Golden, Colorado: Fulcrum Publishing, 1994.

Unruh, Jr., John D. *The Plains Across: The Overland Emigrants and the Trans-Mississippi West, 1840-60.* Urbana, Chicago, and London: University of Illinois Press, 1979.

Wagner, Henry R., and Charles L. Camp. *The Plains & the Rockies: A Critical Bibliography of Exploration, Adventure and Travel in the American West, 1800-1865.* 4th ed., rev., enlarged and ed. by Robert H. Becker. San Francisco: John Howell-Books, 1982.

Wheat, Carl I. *Mapping the Trans-Mississippi West 1540-1861.* 6 vols. San Francisco: The Institute of Historical Cartography, 1957-1963.

Wikipedia, www.wikipedia.org, accessed May-September 2018.

Worms, Laurence, and Ashley Baynton-Williams. *British Map Engravers: A Dictionary of Engravers, Lithographers and their Principal Employers to 1850.* London: Rare Book Society, 2011.

Past Virginia Garrett Lectures

2016 • November 11-12

Tenth Biennial Virginia Garrett Lectures
on the History of Cartography

Profiles in Cartography:

Mapmakers and the Greater Southwest

Held in conjunction with the Texas Map Society's fall meeting. Speakers included Gabriel Martinez-Serna, Jason R. Wiese, Russell M. Lawson, Richard Francaviglia, Ben Huseman, Dennis Reinhartz, Royd Riddell, and Mylynka Kilgore Cardona. Followed by the North Texas Rare Book, Paper, and Map Show on November 13.

2014 • October 16-17

Ninth Biennial Virginia Garrett Biennial Lectures
on the History of Cartography

The Price of Manifest Destiny:

War and American Expansion, 1800-1865

Speakers included David Narrett, Imre Demhardt, Jimmy L. Bryan, Steven Woodworth, Alex Hidalgo, Donald S. Frazier, and Susan Schulten. Held in conjunction with the Rocky Mountain Map Society and the Texas Map Society. Followed by the Map Fair of the West on October 18.

2012 • October 5

Eighth Biennial Virginia Garrett Lectures
on the History of Cartography

Pearls of the Antilles: Maps of Caribbean Islands

Speakers included David Buisseret, Max Edelson, John D. Garrigus, S. Blair Hedges, and Daniel Hopkins. Held in conjunction with the Texas Map Society's fall meeting on October 6.

2010 • October 8

Seventh Biennial Virginia Garrett Lectures
on the History of Cartography

Charting the Cartography of Companies:

Company Mapping, 1600-1900

Speakers included Kees Zandvliet, Carlos A. Schwantes, Jack Nisbet, Imre Josef Demhardt, and Ben Huseman. Held in conjunction with the fall meetings of the Texas Map Society and the International Cartographic Association's Commission on the History of Cartography October 9-13.

2008 • October 3

Sixth Biennial Virginia Garrett Lectures
on the History of Cartography

Revisualizing Westward Expansion:

A Century of Conflict, 1800-1900

Speakers included John Logan Allen, Samuel Truett, Ronald Grimm, Paul D. McDermott, John R. Hebert, and Ben Huseman. Held in conjunction with the Philip Lee Phillips Society supporting the Library of Congress's Geography and Map Division and the Texas Map Society's fall meeting on October 4. Accompanying exhibitions at the Amon Carter Museum of Fort Worth and the UT Arlington Virginia Garrett Cartographic History Library.

2006 • October 6

Fifth Biennial Virginia Garrett Lectures
on the History of Cartography

Mapping the Sacred:

Belief and Religion in the History of Cartography

Speakers included Rehav Rubin, Klara Bonsack Kelly, Harris Francis, Karen C. Pinto, Richard Francaviglia, and Catherine Delano-Smith. Held in conjunction with the Texas Map Society's fall meeting on October 7.

2004 • October 1

Fourth Biennial Virginia Garrett Lectures
on the History of Cartography

Mapmaker's Vision, Beholder's Eyes: The Art of Maps

Speakers included Dennis Reinhartz, Patricia Gilmartin, Denis Cosgrove, Lucia Nuti, and David Woodward. Held in conjunction with the Texas Map Society's fall meeting on October 2.

2002 • October 4

Third Biennial Virginia Garrett Lectures
on the History of Cartography

The Third Coast:

Mapping the Gulf of Mexico and the Caribbean Sea

Speakers included David Buisseret, J. Barto Arnold, Louis De Vorse, Jack Jackson, Robert Weddle, Dennis Reinhartz, and Richard Francaviglia. Held in conjunction with the Philip Lee Phillips Society supporting the Library of Congress's Geography and Map Division and the Texas Map Society's fall meeting on October 5.

2000 • October 6

Second Biennial Virginia Garrett Lectures
on the History of Cartography

Maps and Popular Culture

Speakers included James Akerman, Tom Conley, Richard Francaviglia, Mark Monmonier, and Dennis Reinhartz. Held in conjunction with the Texas Map Society's fall meeting on October 7.

1998 • October 2

First Biennial Virginia Garrett Lectures
on the History of Cartography

Mapping and Empire:

Soldier-Engineers on the Southwestern Frontier

Speakers included David Buisseret, W. Michael Mathes, Dennis Reinhartz, Paula Rebert, Gerald Saxon, and Ralph Ehrenberg. Held in conjunction with the Texas Map Society's fall meeting on October 3.

To access previous gallery guides go to:

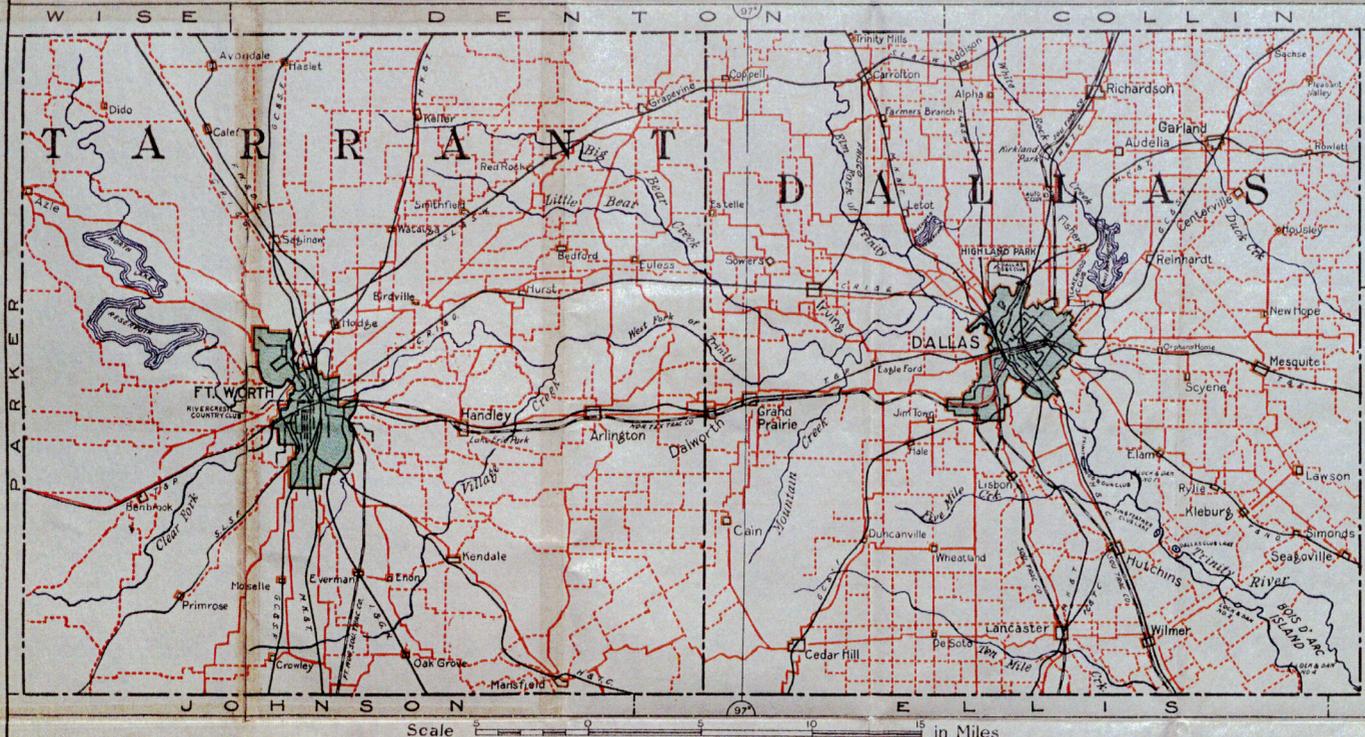
<https://rc.library.uta.edu/uta-ir/handle/10106/25572>



Texas
 First Settled at San Antonio, 1692
 Admitted as a State, Dec. 29, 1845
 Area
 Land, 262,398 Square Miles
 Water, 3,498
 Population,
 Last Census, 3,896,542
 Capital, Austin

Sectional Map
STATE OF TEXAS
 DALLAS and TARRANT COUNTIES
 Sheet No. 1

Compiled By
 Fred A. Jones
 Consulting Engineer,
 Dallas.



Legend
 Paved Roads
 Partially Improved Roads
 Railroads
 Electric Lines
 Towns

Dallas County

Area	900 Sq. mi.
Assessed Value 1913	\$ 129,550,350.
Population 1910	135,748
Population 1915 (estimated)	175,000
Railroad mileage: steam	301.29
electric	133
Improved Highways: paved	470 mi.
well graded	1200 mi.
Acres assessed 1913	565,770
Cotton Production 1912	32,301 Bales
No. Farms (1910) 5289: Per Cent Cultivated	65%
No Autos	Jan. 1, 1915 6500
County Seat	Dallas
Population 1910	92,104
Population 1915 (estimated)	120,000
Altitude	466
Electric Railways	77.5 mi.
Paving	167 mi.
Other Towns	Population
Lancaster	1400
Hutchins	650
Garland	850
Richardson	400
Carrollton	300
Farmers Branch	300
Wilmer	250
Cedar Hill	450
Duncanville	325
Kleburg	300
Irving	500

Tarrant County

Area	900 Sq. mi.
Assessed Value	\$ 97,696,872
Population 1910	108,572
Population 1915 (estimated)	130,000
Railroad mileage: steam	287.71
electric	101
Improved Highways: paved	500 mi.
well graded	450 mi.
Acres assessed 1913	529,209
Cotton Production 1912	48,885 Bales
No. Farms (1910) 3582: Per Cent Cultivated	47%
No Autos	Jan. 1, 1915 5500
County Seat	Fort Worth
Population 1910	73,312
Population 1915 (estimated)	85,000
Altitude	670
Electric Railways	70.6 mi.
Paving	60 mi.
Other Towns	Population
Arlington	2500
Graperine	1200
Mansfield	800

Bert Firmin, Del.

Map 91 (for description see page 54)