

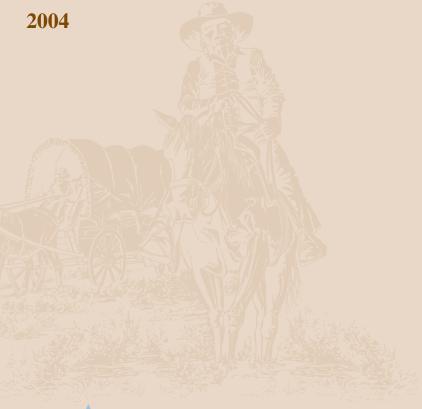
Limited Anniversary Edition Historic Trail Maps

of Eastern Colorado and Northeastern New Mexico

By Glenn R. Scott

Pamphlet to accompany

Scientific Investigations Map 2828 (boxed set)





1879-2004

Limited Anniversary Edition Historic Trail Maps

of Eastern Colorado and Northeastern New Mexico

By Glenn R. Scott

Pamphlet to accompany Scientific Investigations Map 2828 (boxed set)

2004

U.S. Department of the Interior

U.S. Geological Survey



Contents

Foreword	V
About the Author	vi
How the Trail Maps Got Started	1
Introduction to the Historic Trail Maps in Eastern Colorado and Northeastern New Mexico	4
The Colorado Gold Rush	15
The Santa Fe Trail	17
Mexican Land Grants in Colorado and New Mexico	18
Unsolved Problems and Methods of Preparation of the Trail Maps	20
Sources of Information	21
Acknowledgments	22

(Facing Page) Garland City in 1877 or 1878. Drivers have lined up carriages and wagons on the main street. The large building on the left is probably the Perry House. Signs on the street read "Billiard Hall," "Books and Stationery," and "People's Meat Market." Photograph by F.C. Warnky. (Courtesy of Denver Public Library, Western History and Genealogy Department. X-8588)



Foreword

The historic trails that were the primary pathways used by pioneers to open the Western United States tell an incredible story of that migration westward and the development of our Nation. Many of those trails have names that remain familiar today—Santa Fe, Overland, Cherokee, Trappers, Republican Fork, and Smoky Hill Trails. Some of those historic trails have long-since vanished or are now only faintly visible on today's landscape. To preserve this piece of our Nation's history, the USGS has prepared a commemorative set of the historic trail maps published by Glenn Scott over a period of more than 30 years (from 1972 to 2004). The stories told by these maps are rich and replete in the historic marks left on the land by Native Americans, trappers, prospectors, early road builders, and settlers from about the 1820s to about 1900.

Features of the maps include trails used by Native American tribes and trappers before the arrival of European settlers. As the westward movement continued, trading posts, immigrant and prospector trails, stagecoach lines and stage stations, wagon roads, and railroads marked that expansion, and those features are shown on the maps. From the cattle trails and trails over mountain passes to the towns and military camps and forts, the settlement and use of these lands are captured for posterity. Routes taken by prospectors during the great 1859 Gold Rush to the Pikes Peak gold fields are portrayed, as are the world-famous mining camps that followed, including Central City, Blackhawk, Idaho Springs, Georgetown, Fairplay, Aspen, Breckenridge, Leadville, and Cripple Creek. In addition, the routes traversed by early explorers such as Zebulon M. Pike, Stephen H. Long, and John C. Fremont are shown on the maps. The maps reflect the Hispanic and French heritage of much of the region, and the rich history of New Spain, Mexico, and France are imprinted in the names of numerous mountain ranges, prominent peaks, valleys, rivers, and towns.

These maps—and Glenn's dedication to the special picture that historic cartography can present—bring to life the spirit of the Old West for the enjoyment of the casual reader. The extensive and comprehensive research embodied in them makes them vital to scholars of Western history as well. On the occasion of our 125th anniversary in providing science for a changing world, we are pleased to present this special limited-edition set of trail maps that commemorates the rich Western heritage of our Nation and the critical role of cartography in capturing the passage of time and change.

Charles G. Groat Director

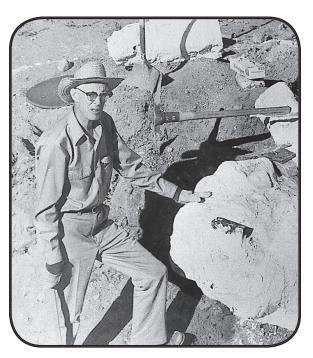
Glenn R. Scott

About the Author

Glenn R. Scott started his 36-year-long USGS career in 1948, when he was hired as a geologist by the Engineering Geology Branch in Denver. Most of his projects were in Colorado and New Mexico, but he also worked in Kansas, Tennessee, and Kentucky. Scott's endeavors include extensive geologic mapping of plains and mountain areas of Colorado and New Mexico, geologic

and coal studies of the San Juan and Raton basins, engineering geology of the Air Force Academy, geology of Chaco Culture National Historical Park, delineating fossil ammonite zones in the Pierre Shale, engineering geology in and around the major city of Pueblo, and studying gemstones and rare minerals in the Pikes Peak region. One of the finest crystals of the mineral Genthelvite—now on display at the Smithsonian Museum—was found by Scott in 1956. Scott and colleague Bill Cobban collected numerous ammonite fossils from the Pierre Shale in Colorado, New Mexico, and Wyoming, enabling them to publish four noteworthy biostratigraphic maps of that formation.

Scott has been a prolific mapper, publishing in excess of fifty 7.5- and 15-minute geologic quadrangle maps, as well as geologic maps of the Raton and Springer 1:100,000-scale quadrangles and the Aztec, La Junta, Pueblo, and Sterling 1:250,000-scale quadrangles. His favorite of his many published maps is *Geologic Map of*



Glenn Scott in 1975 at the excavation site of a Columbian Mammoth he found in the vicinity of Golden, Colorado. (U.S. Geological Survey photograph, photographer unknown.)

the Pueblo $1^{\circ} \times 2^{\circ}$ Quadrangle, South-central Colorado, a USGS map published in 1978. The Pueblo Quadrangle has truly stood the test of time, continuing to serve as a valuable reference for the earth science community. Scott reflects that the Pueblo $1^{\circ} \times 2^{\circ}$ quadrangle mapping project was his most enjoyable and satisfying project, providing opportunities for in-depth study of a geologically rich and notable area.

Among Scott's high-profile book publications is the classic *Quaternary Geology and Geo-morphic History of the Kassler Quadrangle, Colorado*, which has been used as a textbook by college students and professional geologists alike. Even after retirement in 1984, Scott continued to work on various projects and to publish maps and reports as a geologist emeritus for the USGS.

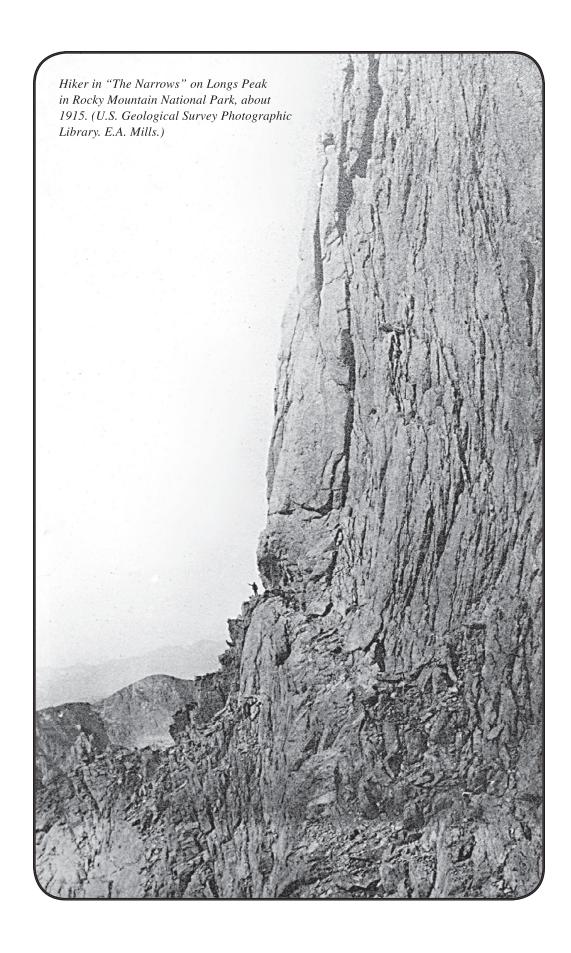
Beginning in 1964, Scott realized that in addition to relating the geologic record there was an entirely different story he also wanted to tell. He was fascinated by the historic trails he encountered during his geology fieldwork—trails used by Native Americans and by pioneers

and prospectors who settled in Colorado and New Mexico. He resolved to document those trails before they forever vanished. Using aerial photographs, long forgotten historical archives, and other historical texts, he located historic trails all over eastern Colorado and northern New Mexico, and in 1972 he published the first of his 11 historic trail maps. His most popular trail map remains the *Historic Trail Map of the Denver 1*° × 2° *Quadrangle, Central Colorado*, published in 1999. Immediately after the map was printed it became a best seller, with sales so brisk the USGS reprinted 5,000 copies within a year of first printing. All the other trail maps, especially the Trinidad, Pueblo, and Greeley $1^{\circ} \times 2^{\circ}$ quadrangles, have also been good sellers, continuing to be in high demand. The newest addition to the collection is the Leadville $1^{\circ} \times 2^{\circ}$ quadrangle. It never ceases to amaze Scott that he is better known for his 11 historic trail maps than he is for his 180+geology publications!

Scott lives in Lakewood, Colo., with his wife of 60 years, Juanita, who is related to the Hawken rifle family. Both were born in Ohio and they met at a church social in another Lakewood, on the shore of Lake Erie, near Cleveland. They are understandably proud of their three children: Jeanne (who has a degree in Sociology and lives on a farm), James (an entomologist), and Kathleen (a wildlife biologist for the U.S. Department of Agriculture). Scott fondly remembers the days when his young children often joined him in the field. Along with Juanita, Scott is an avid genealogist. His interest in the past is also reflected in a collection of Colorado antique bottles acquired some time ago. Scott continues as a long-time volunteer at the Denver Public Library; in 2001, he was honored with the Eleanor Gehres Award for 28 years of volunteer service. In 1984, the U.S. Department of Interior recognized Scott's contributions with a Meritorious Service Award for his many accomplishments at the U.S. Geological Survey. Scott is also a past president of the Colorado Scientific Society. For almost four years during World War II, he served in the U.S. Army Air Force, where he was a photo reconnaissance specialist and an Army Intelligence specialist stationed at Peterson Army Air Field, near Colorado Springs, and at Pueblo Army Air Base.



Glenn Scott in 2003 in front of "Historic trail map of the Trinidad $1^{\circ} \times 2^{\circ}$ quadrangle, southern Colorado." (U.S. Geological Survey photograph by Craig Brunstein.)



Limited Anniversary Edition Historic Trail Maps

of Eastern Colorado and Northeastern New Mexico

By Glenn R. Scott

How the Trail Maps Got Started

From 1948 until 1984, I had been mapping and preparing geologic maps and engineering geology reports about areas where development was contemplated. That mapping was intended to produce not only standard geologic maps but also to discover all potential areas that could cause engineering problems. By 1964, several areas where construction was anticipated had been mapped and the reports had been prepared.

In 1964, Ogden Tweto of the Southern Rocky Mountain Branch of the U.S. Geological Survey asked me if I would be willing to switch from the Engineering Geology Branch to the Southern Rocky Mountain Branch and join the 37th Parallel Mapping Program. The first area suggested for mapping was the La Junta $1^{\circ} \times 2^{\circ}$ quadrangle in the southeastern corner of Colorado.

I began mapping the geology of the La Junta quadrangle in the fall of 1964. Because the geology of several counties in the quadrangle had already been mapped by geologists of the Survey's Ground Water Branch, I was able to nearly finish mapping the entire area by that Christmas. I used aerial photographs to facilitate my mapping, and as I transferred the geologic data from the aerial photographs to a map, I noticed that the photographs contained lines representing old trails or roads. In my spare time, I traced the trail lines with a purple pencil onto the aerial photographs and then transferred them to the map. At the end of the field season, I returned to Denver with two maps—a reconnaissance geologic map and a map showing the old trails and roads in the La Junta quadrangle.

As the mapping season was ending, I had begun to wonder what could be done with such a map and whether it was publishable. I knew that maps showing major trails such as the Santa Fe Trail and the Oregon Trail had been published, but would a map that had "less significant" historic trails win support for publication?



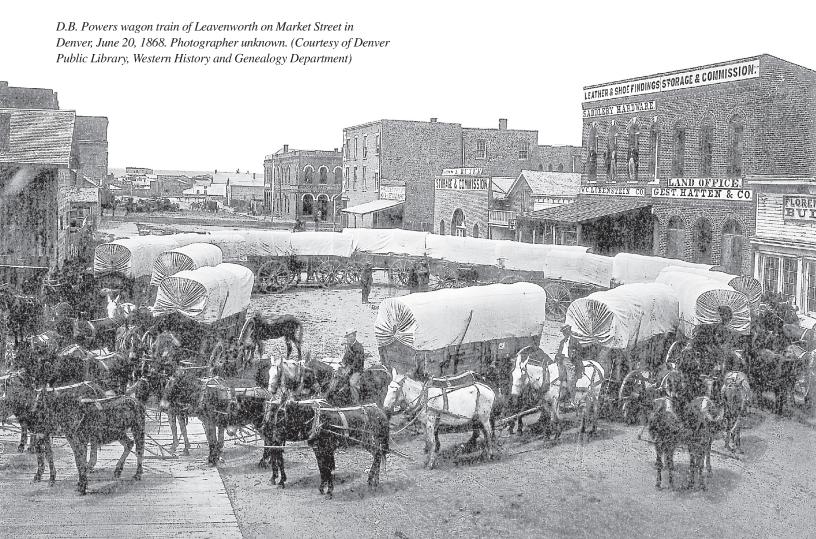
Grays and Torreys Peaks in 1873, Colorado Territory. In 1861, the botanist Charles Parry named the twin peaks after Asa Gray (1810–1888) and John Torrey (1796–1873), two of the leading American botanists of the mid nineteenth century. The distance between the summits of Grays Peak (14,341 feet; left side of photograph) and Torreys Peak (14,336 feet) is almost a mile. The two peaks are about 40 miles west of Denver. (U.S. Geological Survey Photographic Library, W.H. Jackson 1310.)

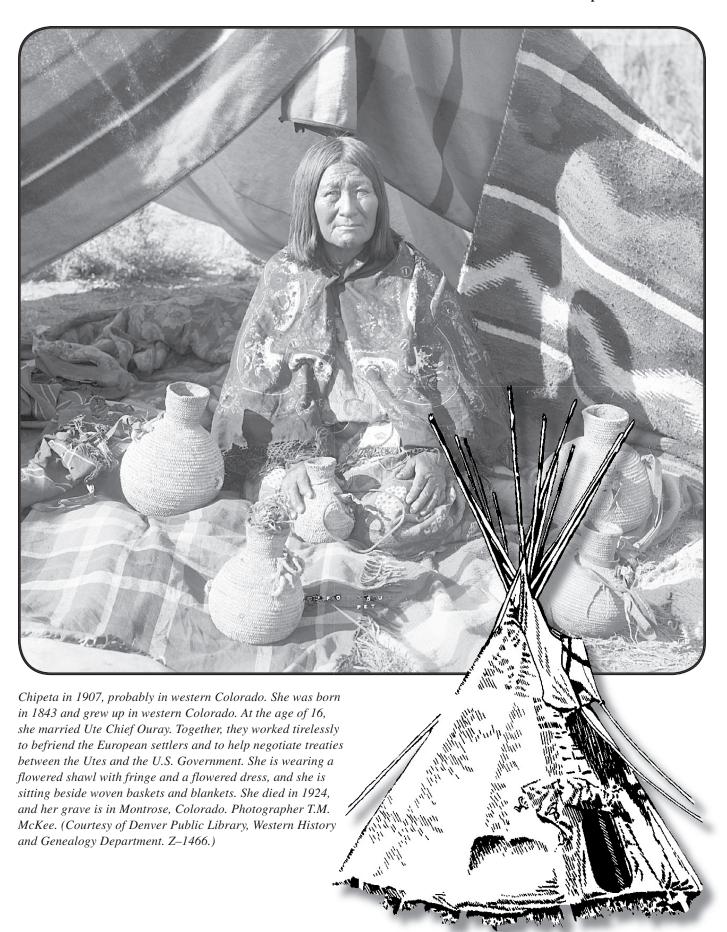
My next move was to ask my supervisors in the Geologic Division the same question. They did not hesitate a bit—and immediately told me to ready the La Junta trail map for publication. This first trail map was in part hand lettered, and some of the lettering on that first map is in my own handwriting!

2 Limited Anniversary Edition of the Historic Trail Maps of Eastern Colorado and Northeastern New Mexico

Now that I knew that others recognized the value of these publications, I started spending some time at home plotting trails and other historic features on the map of the Denver Urban Corridor area. Wallace R. Hansen, a USGS geologist who was in charge of the mapping in the Denver Urban Corridor, saw what I was doing and asked whether I would mind having this new map of the Greater Denver Area as one of the Urban Corridor products. I agreed, and I began pursuing more map detail than before. For instance, I studied the General Land Office land plats of the U.S. Bureau of Land Management, from which I added named trails and roads. I studied Jefferson County and Denver land records and found much new information, which enabled me to determine the dates when many trails, roads, and buildings were started. But most of the information I used came from the Denver Public Library, where I was a volunteer in the Genealogy and Western History Department.

As my work progressed, each area I mapped represented new challenges. Although each trail map appears to be similar to the others, the amount and type of information contained in each map is really quite variable. Most of the maps show railroads, and some of them have information about city trolley lines. The Pueblo trail map contains a list of the scientists who worked in the area. Other trail maps list and locate the military and civilian forts. Many maps name historic road builders and locate old toll roads; this information was extracted from official records in the Colorado Archives. Information about Native American Indian Tribes, their reservations, and the places of historic battles is shown on some of the maps. Several maps show the routes of travel of early explorers and travelers; for instance, the journeys of Major Stephen H. Long, Captain Zebulon Pike, Captain John C. Fremont, General George A. Custer, and Captain William Gunnison are shown on the La Junta, Pueblo, and Sterling maps. The Sterling and Greeley maps include lists of settlers before 1865. The Denver and Leadville maps have information about the historic mining areas, and the Trinidad map has information about the coal mining camps in that area. On the Denver, Trinidad, and Leadville maps, we were fortunate to be able to display numerous historical photographs depicting those areas, thanks to the Denver Public Library, the Colorado Railroad Museum, and the U.S. Geological Survey Photographic Library.





Introduction to the Historic Trail Maps in Eastern Colorado and Northeastern New Mexico

Many of the historic trails in eastern Colorado and northeastern New Mexico were used by Indian Tribes long before European settlers reached the area. In the 1830s and 1840s, when beaver pelts were found to be useful for the manufacture of men's hats, fur trappers rode horses or walked into primitive areas armed with rifles and traps in pursuit of beaver. A market for beaver pelts was

readily available at the four fur-trade posts along the South Platte River south of the present town of Greeley: Fort St. Vrain, Fort Jackson, Fort Vasquez, and Fort Lupton. Fur trappers and traders also sought trade with the Indians, often trading for bison hides. Bison were scattered throughout the lower parts of the mountains, but not in the immense herds that occupied the Great Plains. All in all, buffalo hunting was not a very profitable business in the mountains.

The early routes were established along animal trails or Indian trails and then were later improved by toll road builders or Government road builders. An effort was made to choose level passages; however, very little grading was done, so the horses, mules, or oxen were constantly traveling down into valleys and back up the other side, fording

streams where necessary. Roads considered passable for wagons were graded in places and generally were free from tree stumps, large boulders, and deep ruts. Diaries kept by some early travelers on these roads provide accounts of stages turning over

GREELEY I-2326 Yampa Rii Fort Collins STERLING Boulder **DENVER AREA** DENVER LIMON 1-2468 LEADVILLE DENVER QUAD SIM 2820 Grand **PUEBLO** Colorado Junction LAMAR I-2469 Pueblo ' LA JUNTA TRINIDAD MF-346 COLORADO

> RATON AND SPRINGER I-1641

Index Map showing locations of the Historic Trail Maps.

NEW MEXICO

when traversing steep banks along valleys. Deep streams had to be bridged; shallow streams were forded. Many of the post roads and toll roads listed and shown on the historic trail maps were built quickly and had very rough surfaces compared to the paved and even to the unpaved roads of today. Over the years, many types of vehicles used the primitive roads, ranging from huge freight wagons to Conestoga wagons, Concord stage-coaches, and small delivery wagons. Passenger vehicles also varied considerably in size, from large stagecoaches to surreys, buggies, open spring wagons, or even hand carts, such as those used by the Mormons during their immigration to Utah. Travel

"In the fall I returned to the Indian country, taking my wife with me. We reached the Arkansas about the first of October, 1842, where I erected a trading-post, and opened a successful business. In a very short time I was joined by from fifteen to twenty free trappers, with their families. We all united our labors, and constructed an adobe fort sixty yards square. By the following spring we had grown into quite a little settlement, and we gave it the name Pueblo."

(This early trading post and settlement eventually evolved into the modern city of Pueblo. From "It happened in Colorado" by James A. Crutchfield, published in 1993; originally from "The Life and Adventures of James P. Beckwourth" by James P. Beckwourth.)

on the roads must have been especially difficult after strong rains or heavy snowfall. On mountain roads, heavy snowfall generally shut down all passenger traffic.

Stage lines and stations were established along the major routes between towns and cities. The stages traveled as rapidly as the drivers could get the horses or mules to run. Teams were changed about every 10-15 miles at stations where extra stock were kept in order to provide rested and vigorous animals that could maintain the schedules. These stations were called "swing" stations, but they provided little comfort to the passengers because stops were only long enough to change the teams. About every fourth station was equipped with a kitchen and dining room so that passengers could take meals along the routes. These stations were called "home" stations. Some had beds, but generally the stages did not stop for the night, and passengers had to eat a quick meal, then climb back on and sleep in the coaches as they traveled through the night. Some stations were log cabins; others in drier areas were made of adobe or, rarely, clapboard.



(LEFT) Chief Ouray and his wife Chipeta, probably between 1870 and 1880. He is believed to have been born in 1833 in Taos, New Mexico, where he was raised. At age 18, he moved to Colorado. He became Chief of the Ute Tribe in 1860. Ouray is forever known as a peacemaker, great leader, and for his unwavering friendship with the European settlers. His leadership was credited with saving the lives of many Indians and settlers. He died in 1880 and is buried in Colorado. In 1880, he met with President Rutherford B. Hayes in Washington, D.C., who later called him "the most intellectual man I've ever conversed with." Chief Ouray and Chipeta's enduring legacy is reflected in the schools, towns, and geographic features that bear their names. Photographer J.N. Choate. (Courtesy of Denver Public Library, Western History and Genealogy Department. Z-2726.)



(RIGHT) Engraving of the head of a bison. From the 1873 book, "Buffalo Land," by William E. Webb.

"Old-timers never tired of arguing about the number of bison on the Plains.
....But all agreed on the vast numbers they had seen. Herds that took days and weeks to pass a given point; herds that blocked the Trail....Such a herd might be two hundred miles

long, fifty broad.

 $A\ lone\ horseman, finding\ himself\ in\ such\ a\ herd,\ had\ to\ keep\ moving\ all\ night...$

There was always danger, in passing through a vast herd, of starting a stampede, in which wagons and teams might be injured or swept away."

(Excerpts from the book "The Old Santa Fe Trail" by Stanley Vestal, published in 1939.)

6 Limited Anniversary Edition of the Historic Trail Maps of Eastern Colorado and Northeastern New Mexico

Several incentives led to the establishment of stage lines. The principal need was for transportation of people, but almost as important was the transport of freight and mail, which constituted a large part of the profit for the stage companies. Many contractors began transporting freight as soon as roads were built. Stage operators had to submit bids to the Post Office Department for the privilege of carrying the mail, and competition along some stage lines was very keen even though the profit was somewhat meager.

"[Billy] Updike spent most of his life in the box of a stage coach. In the spring of 1860, he was driving for the Western Stage Company in and out of Denver and to Central

...His favorite team was known as the Mountain Maids—five were handsome bays with Mollie, the leader, and Old Joe, the nigh [near] leader. Six finer animals never went into harness. They were fleet, strong, spirited, well trained..."

(Compiled from the Georgetown Courier, October 7, 1913, in "John Gregory Country" by Charles and Mary Ramstetter, 1999.)

Concord stagecoach "No 7 US Mail," the "Cripple Creek stage," drawn by a team of six horses in the high country of Teller County, Colorado. Between 1890 and 1910. Photographer L.C.

McClure. (Courtesy of Denver Public Library, Western History

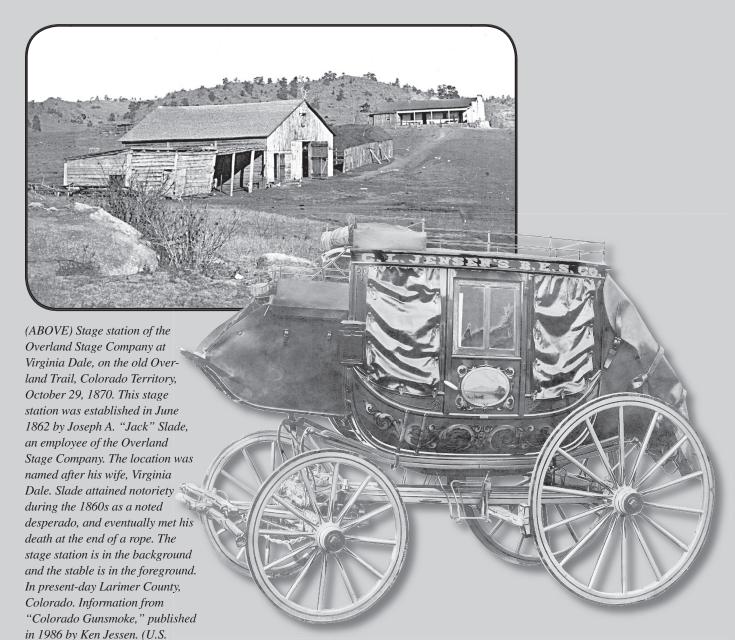
[City].

Although stage routes were established by the mail contractors to haul mail and passengers, traffic along the roads also included freight wagons, immigrant wagon trains, and wagons and saddle horses carrying gold prospectors.

During most of the time the trails were used, travel was rather hazardous. The best known reason is that resident Native Americans were antagonized by the intrusion of European settlers into their native lands, which led them to try to discourage settlement by attacking the intruders. Treaties between the Indian Tribes and the Government were agreed to but were commonly broken either by the Indians or the settlers. In the early years (1858–1863) when there

were fewer travelers into Colorado, there was much less trouble than in the later years (1864–1869), when travel increased. The trouble escalated when the military attempted to prevent the Indians from harassing travelers along the stage lines. To protect travelers along the stage routes, the military fortified and stationed troops at some of the existing stage stations. New forts that had cavalry soldiers also were built along some of the trails. Travelers were forced to travel in groups, and the cavalry controlled the number of wagons in each group and provided escorts to assure their safety from Indian attacks.





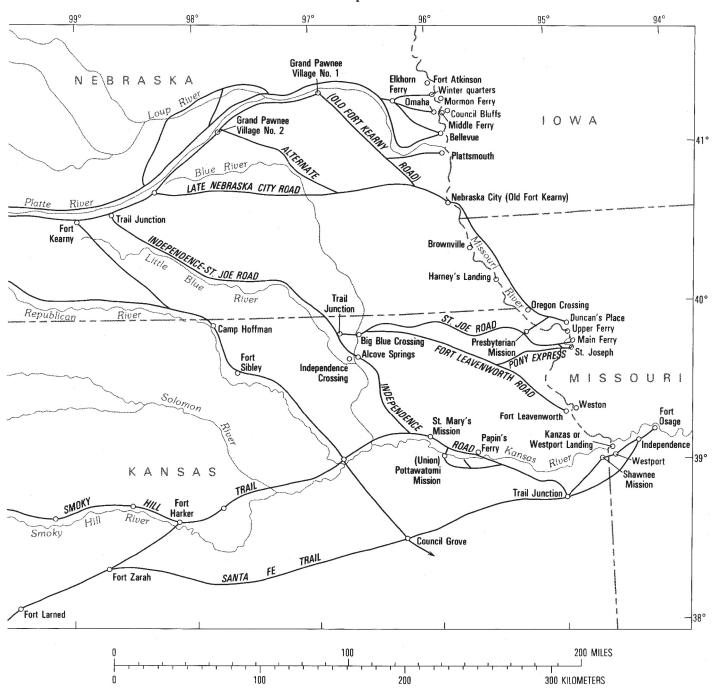
(ABOVE) A brand new Concord stagecoach photographed at the factory of Abbot, Downing, and Company in Concord, New Hampshire. Most of the Concord coaches that were built saw service on the dusty trails throughout the plains and mountains in the western United States. The new stage-coach came with adjustable leather side curtains, leather boot attached to the back of the stage, top deck seat, hand-operated brakes, lamps, and fancy hand-painted ornamental sides. In this view, the shiny leather side curtains are rolled down over the front and back side windows. The "strong box," which contained valuables, was kept under the driver's seat. Passenger's luggage and mail sacks were stowed in the leather boot at the back of the stage. Inside, nine passengers shared three leather-covered seats, and for short distances as many as 10-12 people could ride perched on top of the stage. The coach was beautiful to look at—two hand-rubbed coats of paint were applied, followed by two coats of spar varnish. Photographer unknown. Between 1880 and 1900. (Courtesy of Denver Public Library, Western History and Genealogy Department. X-21797)

Stage travel

Geological Survey Photographic

Library. W.H. Jackson 340.)

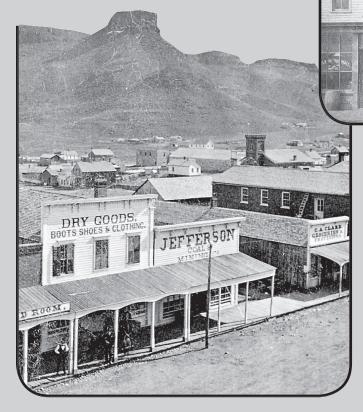
8 Limited Anniversary Edition of the Historic Trail Maps of Eastern Colorado and Northeastern New Mexico TO FORT LARAMIE 105° 104° 103° Ancient Bluff Ruins Court House Rock Ash Hollow Battlefield odgepole NEBRASKA Creek COUNCIL BLUFFS ROAD Ash Hollow California 41 Upper California Crossing River Midd Upper Ford Ford Lowe Ford Fort Sedgwick Old Harlow's Ranche Platte Old Julesburg Lower California McPherson (Camp Cottonwood) ORECON Crossing Lillian Springs Ranche Fort Valley Station Frenchman Greeley Latham Station OVERLAND Fremont's Orchard American Ranche Creek REPUBLICAN FORK TRAIL Beaver Creek Fort St. Vrain Fort Vasquez Fort Jackson Fort Lupton Fort Republican Morgan 40° Rock Creek Benkelman _C stage station Pierson's DENVER Living Spring stage station Kiowa stage station Arikaree REPUBLICAN Fountain COTTONWOOD KANSAS 39° GROVE ROUTE OF BUTTERFIELD OVERLAND DESPATCH COLORADO SMOKY HILL TRAIL Colorado Fort Smoky Wallace City River Pueblo SANTA FE TRAIL Fort Wise 38°



(ABOVE AND FACING PAGE) Regional map showing the Overland, Mormon, Smoky Hill, Santa Fe, Cherokee, Trappers, Republican Fork, and Oregon Trails and their many branches. The route of the Oregon Trail is from Mattes (1969), and its route is described in detail by Franzwa (1972). The route of the Smoky Hill Trail is from Long (1947). Unlabeled location circles are stage stations.

(LEFT FACING PAGE) Weary pioneers pose beside their conestoga wagon train sometime between about 1880 and 1890. Location and photographer unknown. (Courtesy of Denver Public Library, Western History and Genealogy Department. Z-308) Whereas on the plains the only sources of water for travelers were from scarce springs, ephemeral water holes, and a few ephemeral streams, in the mountains there were many streams, springs, and small lakes. Many of the trails followed a creek directly up to a mountain pass and then descended along a different stream on the other side. Nearly all of the water in the streams and springs was cold, clear, and drinkable. Some springs even gave forth hot water, such as the famous hot springs at Glenwood Springs, Colorado.

(BELOW) False-front buildings with covered boardwalks along Washington Avenue in Golden in 1872. Castle Rock and South Table Mountain in background. Photographer unknown. (Courtesy of Denver Public Library, Western History and Genealogy Department. X-10008)



(BELOW) Trinidad in 1867. Looking east on Main Street from Beech Street. The walls of some of the buildings are constructed of adobe brick. Photograph by O.E. Aultman. (Courtesy of Denver Public Library, Western History and Genealogy Department. X-1875)

(ABOVE) Businesses on Harrison Avenue in Leadville in 1882. Photographer unknown. (Courtesy of Denver Public Library, Western History and Genealogy Department. X-379)

Westward movement and settlement was encouraged by the Homestead Act of 1862. Many persons displaced by the Civil War moved onto the newly opened land even though the resident Indians were still a potential threat. However, by the time of completion of General Land Office surveys in the 1880s, many of the Tribes had already moved out of the area. Much of the land became safe for settlement and small towns sprang up, generally spaced no more than 10 miles apart—about the distance a team and wagon could travel to town and back in a day. Roads were built to connect the new communities and to provide access to the major trails. Finally, railroads arrived to the frontier, first to the major cities on the plains in the early 1870s and then extending into the mountains to

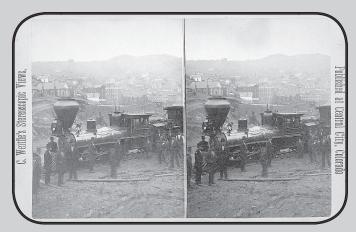


mining towns and

other mountain

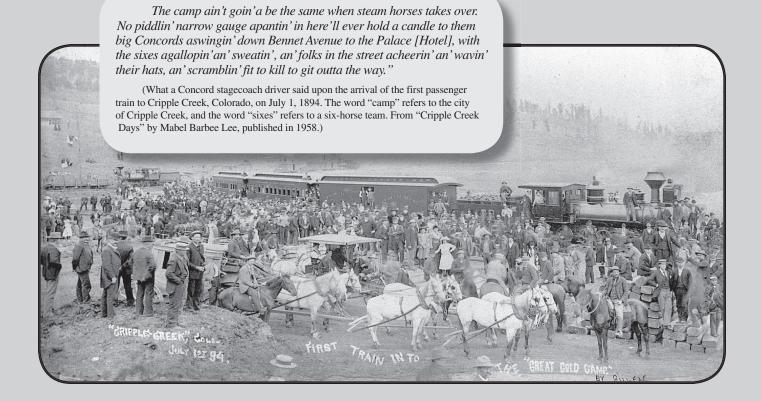
(ABOVE RIGHT) Arrival of the first passenger train of the Colorado Central Railroad in Central City, Colorado, on May 20, 1878. At the front of the steam locomotive are a cowcatcher, oil-burning headlamp, large "balloon" smoke stack, and bell. Further back near the cab is a steam-powered train whistle. Photographer Charles Weitfle. (Stereo photographic pair courtesy of Denver Public Library, Western History and Genealogy Department. Z–3389.)

(BELOW RIGHT) Denver and Rio Grande Railroad "Scenic Line of the World" excursion train. Passengers are in an open-top observation car under the "Hanging Bridge" in the Royal Gorge, near Canon City, in 1905. Photographer G.L. Beam. (Courtesy of Denver Public Library, Western History and Genealogy Department. GB–7599.)

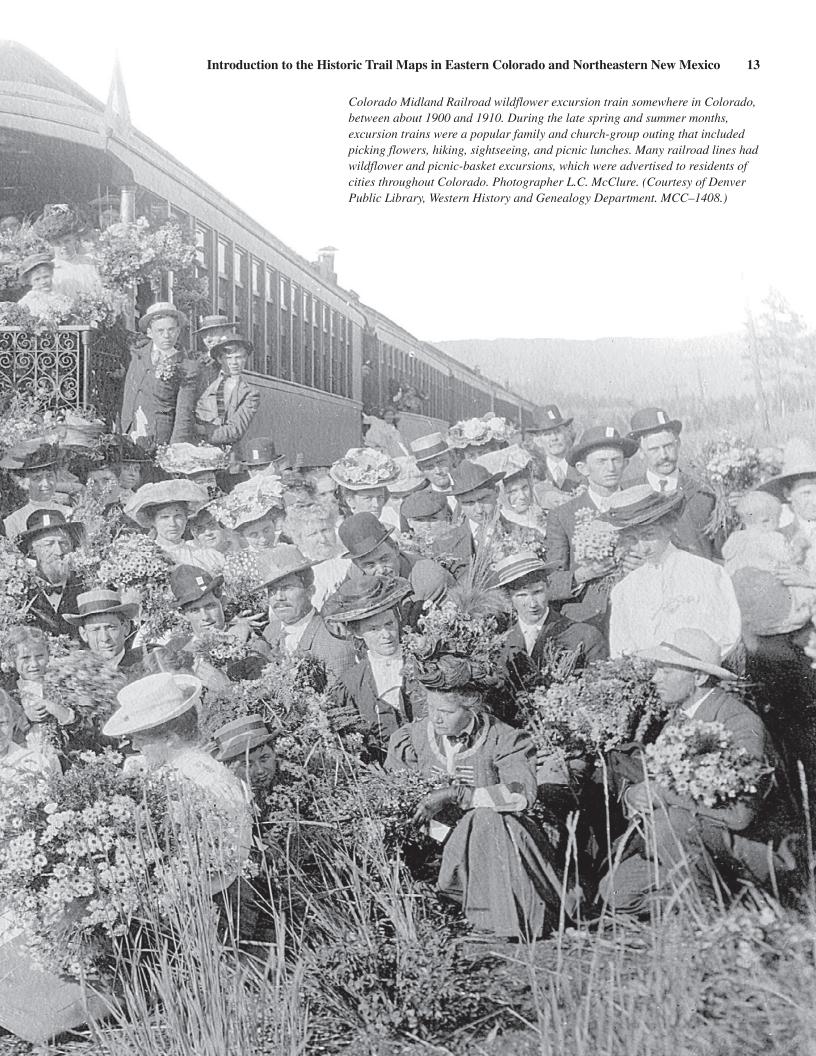


(BELOW) Citizens of Cripple Creek, Colorado, celebrating the arrival of the first passenger train on July 1, 1894. This Florence and Cripple Creek Railroad train consists of leased Denver and Rio Grande Railroad locomotive No. 39 (the "Chama"), a baggage car, and two passenger coaches. The young girl in white (left hand on hip) near the center of the photograph is Mabel Barbee Lee, author of "Cripple Creek Days." A Concord stagecoach and "sixes" (six-horse team) and a buggy are also visible in the photograph. Photographer W.J. Gillen. (Courtesy of Denver Public Library, Western History and Genealogy Department. Z–5485.)







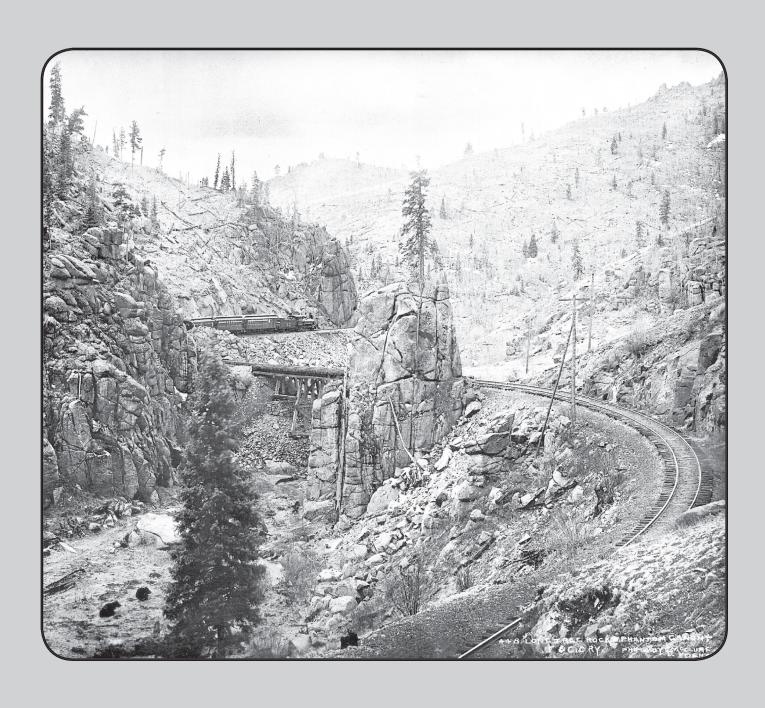


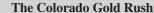
14 Limited Anniversary Edition of the Historic Trail Maps of Eastern Colorado and Northeastern New Mexico

After settlements were established, a system for the distribution of mail became formalized. The first mail routes in the west were called Star Routes. Prospective carriers had to bid for mail routes that had been publicly advertised. Contractors had to provide their own transport and other equipment to deliver the United States Mail; however, they were also permitted to carry freight, passengers, and express.

Before the Star Routes were established, mail, freight, and express had been delivered by the stage companies. According to McCullough (1998), upon arrival of the mail, the carrier would empty the mail sacks into a large wooden box and those expecting mail would sort out their own letters. Mail might be delivered only once a week or even less often.

(BELOW) Florence and Cripple Creek Railroad narrow-gauge passenger train, consisting of steam locomotive No. 12 and three passenger cars. The train is in Phantom Canyon between Florence and Cripple Creek sometime between 1894 and 1915. A prominent rock formation (with the tree on top) in the center of the photograph is called "Lone Tree Rock." Over the lifetime of this line, several severe summer cloudbursts caused walls of water to rush down the narrow canyon, taking out much of the track and wood trestles, which caused the line to be closed for extended periods. Photographer L.C. McClure. (Courtesy of Denver Public Library, Western History and Genealogy Department. MCC-448.)





Miner panning for gold west of Denver. He swirls sediment and water in his gold pan. Between 1890 and 1910. Photographer L.C. McClure. (Courtesy of Denver Public Library, Western History and Genealogy Department. MCC-1918)

The Colorado Gold Rush

In the 1850s, gold was found at several places near present-day Denver. In 1858, news of the strikes brought scores of people to the area seeking fame and fortune. The gold they found on the plains near future Denver was in small patches along the streams and was very fine, and each deposit was soon exhausted. The prospectors looked for placer gold in streams from the Pikes Peak area northward to the Wyoming border, but they failed to find any really profitable deposits east of the mountains. Nevertheless, when fall came and winter was approaching, several parties stubbornly refused to leave and stayed the winter of 1858–1859 near the confluence of

present-day Cherry Creek and the South Platte River. They named their rapidly growing small communities Auraria, St. Charles City, and Montana City. Most newcomers brought few provisions with them, so within a short time even staple foods were in short supply. A hundred pound sack of flour cost \$20 if it could be found. Bacon, coffee, and sugar sold for 50 cents a pound. About the only source of food was wild game, such as bison, antelope, and mule deer. As time elapsed, hunters had to go farther from camp every day to find game. Also, after the ground froze, placer mining became almost impossible.



Engraving of a prospector and his burro. From "Harper's Weekly," 1876.

In 1858, there were almost 300 people in the three new towns and too few cabins to house them all. Only a few cabins had fireplaces and people either took turns in the warm cabins or slept around campfires outdoors. They also cooked all food outdoors. The discomfort and the difficulty of getting food decreased their interest in gold. Fortunately, on Christmas Eve 1858, Richens Lacy Wootton, a friend of William Bent and Kit Carson, showed up with a wagon he had driven from Taos, New Mexico, loaded with flour, sugar, bacon, dried apples, and bags of coffee. Soon the goods were unloaded into one of the cabins, and a store was started. Trades for such goods were made throughout the community. Of greatest interest were the three barrels of "Taos Lightning" included in the shipment: FREE DRINKS FOR ALL!

The next spring, because of the lack of new gold finds, many discouraged gold seekers gave up and started their long journey back East to civilization. However, larger and more profitable gold deposits were found by George A. Jackson at present-day Idaho Springs on January 7, 1859 (kept secret until spring), and by John H. Gregory at present-day Blackhawk on May 6, 1859. News of these new and more profitable strikes spread like wildfire. Soon thousands of fortune seekers started to Colorado from all over the country and from overseas. Thus, the Gold Rush of 1859 began, and an estimated 50,000–100,000 gold seekers flooded the area in 1859–1860. The search for gold then spread across most of Colorado. In the following decades, many deposits of gold, silver, and other valuable minerals were found in a mineral belt that extends from the San Juan Mountains northeast to Boulder (Dorset, 1970).

Miners in the early years recovered mostly placer gold using equipment such as gold pans, sluice boxes, and rockers. Placer gold was found as flakes, grains, and nuggets, mostly in gravel and sand deposits in the beds of creeks and rivers. Because of the scarcity of coins and currency in the gold camps, miners bought trade goods using the gold they found. However, the fineness (purity) of the gold varied, depending upon where it was found and how it was purified. In 1861, in an attempt to fix a value on the miner's gold, the merchants of Central City set the value of placer gold from Clear Creek at \$17 an ounce, that from Russell Gulch at \$16 an ounce, and poorly processed gold at \$12 an ounce (Ubbelohde, 1988).

As early as 1859 and continuing into the early 1860s, "hard-rock" lode deposits of gold were discovered in the Gregory (Central City and Blackhawk area), Georgetown, and Idaho Springs districts. Vertical and inclined shafts and horizontal tunnels were driven hundreds of feet into the solid rock of these deposits using only hand tools and blasting powder. In many mines, steam engines provided power for hoisting ore rock and waste rock out of the mines and for running heavy stamp mills that pulverized the ore to release the gold.

The Santa Fe Trail

Immediately after independence from Spain in 1821, Mexico opened up her markets to trade with the outside world, especially the United States. The main thoroughfare between the two countries was the Santa Fe Trail, the

first and perhaps most famous of the trails into the Far West. It was also the most long-lived of the trails, in use from 1821 until 1880. From Independence, Missouri, the trail wound its way over nearly a thousand miles of endless grasslands and rugged mountains to Santa Fe. For nearly 60 years, wagon trains, pack mules, and ox carts carried the goods of commerce from the United States to Mexico and the frontier. And on the return trip to the States they were laden with gold and silver from Mexico and beaver pelts and buffalo robes from the frontier. In 1987, the Santa Fe Trail was designated a National Historic Trail.

At the age of fifteen, he had left his family home in Kentucky...thence toward the Rocky Mountains...He finally reached Westport Landing at Independence, Missouri, head of the fate-laden Santa Fe Trail. His next objective was Bent's Fort on the Arkansas River.

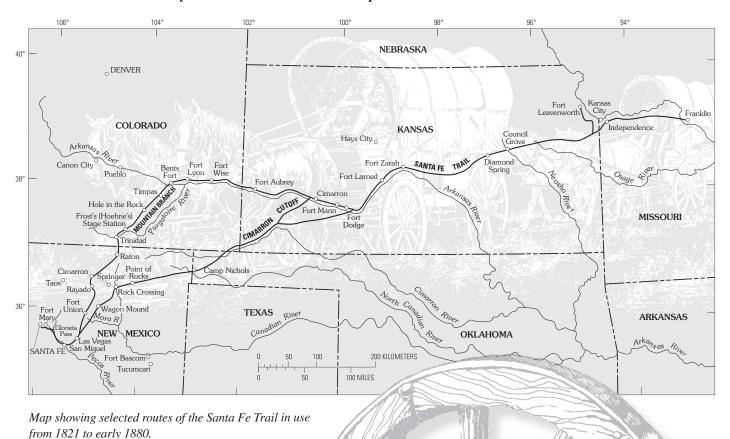
...The time was to come when [Uncle] Dick Wooten... would build a toll-gate in Raton Pass as closely identified with the Santa Fe Trail and the 'Opening of the West' as Bent's Fort itself...

...The Raton Pass had been one of the dreaded hazards of the Santa Fe Trail. The bones of draft animals—oxen, horses, and mules—bleached along its tortuous curves. With prodigious labor, Uncle Dick built a zigzag wagon road up and over the northern face of the escarpment. The Territorial Governments of both Colorado and New Mexico granted him a franchise to operate a toll-road."

(In 1865, Dick Wooten built an adobe house and a toll gate at the foot of the grade on the north [present-day Colorado] side of Raton Pass, near Trinidad. From the toll gate, the Mountain Branch of the Santa Fe Trail wound its way over the pass, down the steep southern side of the pass [in present-day New Mexico], and on to the future site of Raton and then to the historic town of Cimarron. The toll road he built was 27 miles long; before the road was built, the route was in very bad condition, and it took wagons 5 days to travel the 27 miles. From "The Best of the West" by Tony Hillerman, published in 1991, and the Raton and Springer trail map in this boxed set.)

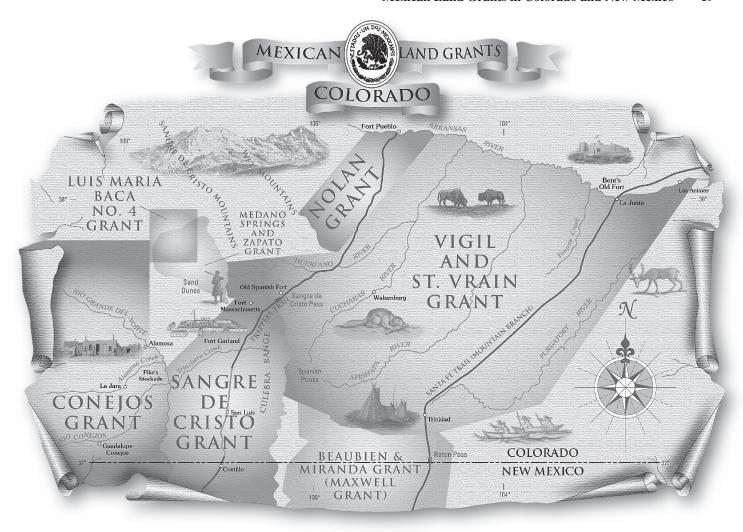
A wagon train of covered wagons pulled by oxen sometime between 1870 and 1880. Stopped for midday rest and refreshment. Location and photographer unknown. (Courtesy of Denver Public Library, Western History and Genealogy Department. X-21874)





Mexican Land Grants in Colorado and New Mexico

In the 1830s, the Mexican government was concerned about threats from Texas to acquire the land between the Arkansas River and the Rio Grande, so they began to consider filling up that region with settlers. They were also interested in protecting their northern border along the Arkansas River. Consequently, the governor of New Mexico (then part of the Mexican Republic) was authorized to establish colonies and grants in those northern areas. Grants of land were awarded to petitioners who would bring cultivation and settlement to the lands. The grants were meant to induce people to live in what was then northern Mexico (now part of the United States—including present-day New Mexico and southern Colorado), which at that time was occupied sparsely, almost solely by Indians. By colonizing the area, Mexico's claims to the area would be protected from the Texas and American acquisitiveness. But



Map showing the extent of the Mexican Land Grants in what is now southern Colorado and northern New Mexico, as of June 21, 1860. Before 1836, the area encompassing what is now the southwestern U.S. (Texas, New Mexico, southern Colorado, Arizona, southern Nevada, and southern California) belonged to Mexico. Texas won its independence from Mexico in 1836 and was annexed by President James Polk as the 28th State of the United States in 1845. After the war between the United States and Mexico in 1846, what is now New Mexico, southern Colorado, Arizona, southern Nevada, and southern California became United States territory. However, the treaty of Guadalupe Hidalgo (1848), which was agreed to by the United States and Mexico, guaranteed former Mexican citizens their own property rights in these areas, and, after adjudication, the United States Congress confirmed 13 land grants on June 21, 1860. Five of those grants are in what is now Colorado and northern New Mexico, and they are shown on this figure. Two other grant requests, the Conejos and Medano Springs Grant and Zapato Grant are also shown but were never confirmed. (Most of the Land Grant boundaries are from the undated map, "The Mexican Land Grants," by Herschel Lee.)

before the Mexican colonization could fully take place, the United States annexed the Texas Republic in March 1845. The expected war between Mexico and the United States started in 1846, and the United States soon took over the land that had been set aside for land grants by the Mexican government. By this time, 197 private land grants had been awarded. After being acquired by the United States, these lands took on special value. Because the treaty of Guadalupe Hidalgo (1848), which was agreed to by the United

States and Mexico, guaranteed to Mexican citizens their own property rights, it became necessary that all claims to land be adjudicated and their extent and boundaries fixed by the United States. Congress confirmed 13 grants on June 21, 1860.



Wagon boss and his team drivers at a camp somewhere on the Great Plains, 1870. (Stereo photographic pair from U.S. Geological Survey Photographic Library. W.H. Jackson 1675.)

Unsolved Problems and Methods of Preparation of the Trail Maps

Locations of some stage stations, road ranches (the popular name for stage stations that offered food, livestock, and lodging in the 1860s), and ghost towns are not well known, because there are few detailed maps or descriptions of the exact locations of these features. Most of the available early maps were very generalized and lacked a surveyed grid. Even after the General Land Office township grid became available, cultural features were located differently on many of the published maps. Some place names listed in the toll road charters could not be located or accurately placed by me on the trail maps. In addition, many of the trails and features, such as stage stations, were abandoned before the land was surveyed and before counties were organized, so these features cannot be found on the land plats or on county deed records. After the stage lines were abandoned, the station buildings were almost immediately torn down and scavenged as material for constructing buildings elsewhere. However, some of the trails in Colorado and New Mexico could easily be traced on aerial photographs. Using standard photogrammetric methods, such trails were accurately plotted onto the final trail maps.

The most reliable sources for accurately identifying and locating the trails are aerial photographs, the original General Land Office (GLO) land plats, and the early GLO surveyor's field notes that were prepared only a few years after the trails were in use. Railroads were located from many excellent published maps, railroad time tables, and books. The names and locations of towns were obtained from old maps, gazetteers, postal guides, and the earliest site localities in the official applications for the establishment of Post Offices. The correct locations for many towns were obtained from U.S. Postal Service site maps; however, some towns did not have site maps, so accurate locations of those towns cannot be assured. In addition, the locations of Post Offices have changed over the years. Published articles about events along the historic trails on the maps were a great help in preparing the maps. Hundreds of U.S. Geological Survey aerial photographs taken mostly in the 1950s of the mineral and coal mining areas were examined with a stereoscope to locate railroads, mining settlements, and some of the trails; in addition, trails plotted from the land plats were searched for on the aerial photographs. Many segments of the trails are still detectable on the aerial photographs because some areas were never plowed. Very little use of some of the trails was made after the middle of the 19th century. The locations of the trails, railroads, stage stations, towns, and other features were transferred to scalestable mylar base maps for final publication in the trail maps. Locations of many cultural features varied on the source maps I used, and the exact locations of some features were difficult to determine; therefore, those features may not be accurately located on the trail maps.

Sources of Information

Hundreds of books and articles and published and unpublished maps were examined to obtain information for the trail maps. Those sources of information are listed on the individual historic trail maps. The sources of information I used for this pamphlet are also shown on the historic trail maps in this boxed set.



Acknowledgments

This commemorative boxed set would not have been possible without the support, encouragement, and enthusiasm of Randall G. Updike and *Diane N. Wells* (U.S. Geological Survey Central Regional Executive for Geology and Associate Regional Executive for Geology, respectively) and Terry D'Erchia (Chief, U.S. Geological Survey Central Publications Group). The design and production of the boxed set has been a cooperative effort involving the U.S. Geological Survey Central Region Geology and Geography Disciplines and the Office of the Central Regional Director. For their tireless and enthusiastic collective efforts, I am grateful to the following people in those offices: *Tom* Casadevall (Central Regional Director), Terry D'Erchia, Jan Simmons, Carol Quesenberry, Craig Brunstein, Ron Lofton (Acting Chief of Information Services), Randy Schumann, Pat Schassburger, Doug Thompson, Gene Jackson, Jim Brokaw, Ed Swibas, Debbie Sokol, Jim Hoffman, Gayle Dumonceaux, Amanda Hill, and Bill Sowers. I also thank the Denver Public Library, Western History and Genealogy Department, and the U.S. Geological Survey Photographic Library for permission to use the photographs reproduced in this pamphlet.

I would also like to add my thanks to the following U.S. Geological Survey managers for their unwavering support of the last three trail maps I published (Denver, Trinidad, and Leadville): *Diane N. Wells* (Associate Regional Executive for Geology), *Tom Fouch* (former Central Regional Executive for Geology), *Randall G. Updike* (Central Regional Executive for Geology), and *Elly Brouwers* (former Associate Regional Executive for Geology).

Craig Brunstein has been my editor for the last six trail maps, and I thank him for his painstaking work and for successfully lobbying for blue drainage features on the maps, suggesting that photographs be added to the layouts, and for suggesting that *Carol Quesenberry* design and lay out the maps. Carol's beautiful layouts and original drawings have made the last three trail maps and the boxed set surpass my loftiest expectations. Craig provided the spark that ignited creation of this boxed set and spent many hours editing and partly writing the pamphlet text. His excitement and enthusiasm for the maps is equaled only by his outstanding skill and expertise in preparing them. I also thank Terry D'Erchia; her expert review improved this pamphlet text.

I am also grateful to the following people who have worked on some of the trail maps over the years: *Tom Loesch*, *Ginger Scott*, *Alice and Joe Springfield*, *Hank Williams*, *Ve Sable*, and *John Preisendorf*.

The trail maps in this boxed set were prepared principally at the request of the librarians in the Western History and Genealogy Department of the Denver Public Library; other researchers of early immigration trails and of Colorado history have also requested and encouraged the preparation of these historic trail maps. Most of the research was done in the Western History Department of the Denver Public Library. Its comprehensive collection of maps and books about the history of the Western United States was the primary source for most of the information. For their kind help, I thank the department personnel, especially Philip J. Panum, map specialist. The official records of Colorado that are preserved in the Colorado Archives provided almost all of the information about toll roads in the area. After I had searched Archive records for many days, I fortunately was offered the loan of the research notes of the late *Paul D. Harrison*, *Sr.*, that contained his records of all toll roads in Colorado. The Colorado Historical Society Library helped solve some special problems. I am indebeted to Bill Bauer for providing information about Post Offices. Postal site location applications were studied at the Denver Regional Office of the National Archives and at the local office of the U.S. Bureau of Land Management (BLM). Also, the General Land Office plats were studied at the National Archives office on the Denver Federal Center. Both the General

Land Office plats and surveyor's field notes were examined at the U.S. Bureau of Land Management Colorado State Office. I benefited greatly from the assistance of the BLM staff, especially BLM historian Andrew J. Senti, who is a veritable font of knowledge regarding BLM records and maps. I am indebted to the U.S. Geological Survey Denver Library staff, who gave access to early topographic and geologic maps and field records of early geological surveys; these materials permitted me to more accurately locate many features on the maps. They also helped me in many other ways and kindly provided numerous historical photographs. Staff at the U.S. Geological Survey Rocky Mountain Mapping Center helped me to study a small part of their immense coverage of their low-altitude aerial photographs. Kenton Forrest and Charles Albi of the Colorado Railroad Museum were extremely helpful in regard to reviewing, correcting, and providing information concerning railroads. I am very grateful to Kenton for compiling the list of railroads in the Leadville quadrangle.

John Wesley Powell in conference with Ute Indians, about 1871. Powell was a great friend of Native Americans, working tirelessly for their fair treatment and on their behalf. During the 1860s, he led scientific explorations throughout Colorado and climbed both Pikes Peak and Longs Peak. He grew up in an abolitionist family, and he was a Civil War veteran, college professor, and Director of the U.S. Geological Survey for 3 years. He also helped establish the National Geographic Society and the Geological Society of America. (U.S. Geological Survey Photographic Library, J.K. Hillers 1018.)



All historical photographs, sketches, and engravings are clearly referenced so that viewers can readily review the originals in the source institutions. A few of the illustrations have enhancements that are meant to complement the overall publication design. We are careful not to alter the context of these wonderful visions of an era but, rather, to use them to evoke a sense of time and place.

Edited by *Craig Brunstein*Pamphlet design, box design, layout, and original drawings by *Carol Quesenberry*