"On the horizon down the trail, a cloud of yellow dust appears.

into the setting sun as the American flag was carried."

driver's seat so high that it made me dizzy just to look at it."

the thunder of plunging hooves.

...the stagecoach careens into town to the accompaniment of cracking whips the barking of hysterical dogs, the squeak and rattle of the body and harness, and

(Mabel Barbee Lee's remembrance of her childhood impression of a Concord coach in the

....for this is a Concord coach, as familiar as the Colt revolver or an Apache arrow as fa

(From the article, The Concord Coach, by Seymour E. Wheelock, published in Colorado Heritage magazine, volume 4, 1986.)

"The big Concord coach at last lumbered up to the platform. I had never seen such an odd, top-heavy

stage outside of pictures in fairy tales. Its body was closed, with doors and windows on both sides and a

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.

he Trinidad Street Railway was established in 1882 when horsecars began operating in town. By 1888 it had a mile and a half of track,

two cars, and eight mules. In 1891 an additional mile and a half of track was in use, six cars were running, and the mules had been replaced

by 35 horses. The horsecar system was abandoned in 1904, and a new electrical system was installed. On April 28, 1904, the Trinidad

Electric Railway & Gas Company opened with 5 miles of track and five city cars in town and 9 miles of interurban track with three

interurban cars. Trolleys visited the county fairgrounds, East Main Street, a loop line by way of Baca, San Juan, Pine, and Arizona Streets,

and also a line went to Central Park. The interurban line extended out through the countryside to reach Starkville to the south and Sopris to the west. In 1908 the interurban line was extended to Cokedale and additional track was added to the city lines. In 1911, Federal Light &

Traction took over the company and the name then became Trinidad Electric Transmission Railway & Gas Company. By 1920 the

automobile had so greatly reduced the numbers of people riding the streetcars that the company asked for permission to abandon the city

lines. In January 1922 permission was received and in March the local lines were closed. However, the interurban continued for another year

until September 15, 1923, when it too was abandoned. Streetcar fare in town was five cents; interurban fare to the three coal camps was 15

cents. Two cars ran to the coal camps every hour. (Information from Ormes, 1963; Wilkins, 1974; Fletcher, 1995; Ken Fletcher, written

communication, 1999; and other references listed in the "Sources of Information" in the text pamphlet that accompanies this map.)

(LEFT) 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 stagecoach 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. (X-21797)

Geologic Investigations Series I-2745

Prepared in cooperation with The Denver Public Library,

Western History and

Genealogy Department

(BELOW) Unused passenger ticket for a round trip from Ludlow to Trinidad on the Colorado & Southern Railway and a letter from a customer requesting a 55-cent refund for the ticket. Fifty-five cents was a lot of money in those days, especially when you consider that an entire day's wages were less than \$5.00 for most working people. The cost of living at that time was about a twentieth of what it is today. So, 55 cents in

1905 would be worth about \$11 today. Letter and ticket courtesy of

Base from U.S. Geological Survey, 1988 Projection and 10,000-meter grid, zone 13 Universal Transverse Mercator 100,000-foot grid ticks based on Colorado coordinate system, south zone

San Luis Valley Southern Railway (S.L.V.S. Ry.) steam engine number 106 crossing Rattlesnake Gulch near Blanca,

Colorado, in the San Luis Valley. Photograph by Otto Perry, 1953. (OP-15124)

The Ludlow Massacre

In 1913, the United Mine Workers of America (UMWA) attempted to organize the coal miners of John D. Rockefeller's Colorado Fuel and Iron Corporation at Ludlow, Colorado. For some years the UMWA had organized strikes in other coal fields. The workers in the Raton Basin coal field were an organizer. They overcame barriers of language and culture and voted to strike together. Their demands included recognition of their union, a ten percent increase in wages, enforcement of the Colorado eight-hour law, health and safety regulations, and the right to select their own living quarters, eating houses, and doctors. The strike was called on September 23, 1913, after mine operators had refused their demands. Throughout the winter of 1913 and the spring of 1914 striking miners and their families, union officials, organizers, and sympathizers stayed near the mines and established a tent colony which housed some 900 men, women, and children. The union-supported colony warded off strikebreakers and the armed assaults of the Baldwin-Fets Detective Agency. At the request of county officials of Las Animas and Huerfano Counties, Colorado Governor Elias M. Ammons sent units of the Colorado National Guard to the Ludlow area and declared martial law. A military camp was established, and despite the appearance of the National Guard, the miners refused to give up their demands. On the morning of April 20, 1914, guardsmen began firing on the people in the tent village. Five miners and one militiaman were killed and tents were burned. Later it was discovered that a tent dugout was burned that housed two women and 11 children who apparently died of suffocation. The Ludlow Massacre was a public relations fiasco on a national scale for the owners and managers of the C.F. and I. Corporation. The Ludlow massacre was followed by about 10 days of burnings, dynamitings, and murders throughout the coal fields. Finally, Governor Ammons appealed to President Woodrow Wilson for intervention by the United States Army. By April 30, 1914, the Army arrived and replaced the National Guard. Negotiations finally were completed that ended the strike in December 1914. The goals of the miners finally were realized in protected conditions of work, better hours, and higher pay. (Information from references listed in the "Sources of

Information" in the text pamphlet that accompanies this map.)

Coal mining in southern Colorado started about 1864. However, very limited amounts of coal were mined as early as 1861, when the first wagon load was shipped out by Kroenig (Forrest and others, 1998). The earliest mines were at Starkville and Engleville near Trinidad and the Walsen, Robinson, and Cameron mines near Walsenburg. Between 1887 and 1893 new mines were opened at Sopris, Berwind, Rouse, Hastings, Santa Clara, Forbes Canyon, Pictou, Peerless, and Brodhead. Branch lines and spurs of the Colorado and Southern and the Denver and Rio Grande Railroads were built to the new mines. The coal deposits along the Purgatoire River were made accessible by the Colorado and Wyoming Railroad, and mines were then opened at Primero, Tercio, and other sites. The northern part of the coal field was opened by the extension of the Walsenburg-Pictou branch of the D. & R.G. to Strong, Tioga, Pinon, Sunnyside, and other mines. Richardson (1910, p. 437) considered the mining conditions in the Trinidad quadrangle to be quite favorable. The climate was equable, the water supply was ample, timber was available, and the coal beds were readily accessible and easily worked. However, over the years since Richardson wrote about the coal industry, other energy sources have become more popular, and the cost of extracting underground coal has become much higher than the cost of open-pit extraction. In addition, labor problems caused many of the mines to close down. As a result, all of the coal mines in the Trinidad and Walsenburg fields are now closed. The last mine to close was the Golden Eagle mine (formerly the Maxwell mine) which opened in 1976, but closed on Friday, April 19, 1996. It formerly was owned and operated by the Colorado

Fuel and Iron Corporation. Coal deposits crop out from the headwaters area of the Purgatoire River eastward to Trinidad, then northwestward past Walsenburg. The majority of the old mines are along this trend. Most of the coal mines had small settlements associated with them. These settlements were connected to each other by roads, and later some were connected by railroads, which facilitated hauling coal to market. The communities had waterworks, sanitary facilities, electric lights, and other amenities of that time. In addition, each community had churches, schools, and clubhouses. Some of these communities are still active and have post offices and schools. (Information from

Two young coal miners driving an ore train at one of the Primero coal mines in Las Animas County. Photographer unknown. Between 1900 and 1920. (X-63176)

CONTOUR INTERVAL 100 METERS SUPPLEMENTARY CONTOUR INTERVAL 50 METERS (To convert meters to feet, multiply by 3.2808)

1927 North American Datum and National Geodetic Vertical Datum of 1929 (ABOVE) Note from striking coal miners to Undersheriff Jack McQuarrie in Walsenburg during the Ludlow coal-mine strike. Note written in 1913 or 1914. (X-60379) (RIGHT) A protest march of men, women, and children in Trinidad in 1913 or 1914 in support of striking United Mine Workers coal miners during the strike against the Colorado Fuel and Iron Corporation. Photographer unknown. (X-60493)

(ABOVE) Horseback rider among the giant sand dunes that are now part of Great Sand Dunes National

Monument, which was established in 1932 by President Herbert Hoover. High peaks of the Sangre De Cristo

(RIGHT) View of the great sand dunes and Sangre de Cristo Mountains in 1903 before establishment of Great

Mountains are in the background. Photograph by G.L. Beam, between 1913 and 1920. (GB-7509)

Sand Dunes National Monument. (U.S. Geological Survey Photographic Library, C.E. Siebenthal 57.)

Mexican Land Grants

1988 magnetic declination from true north varies from

11.5° easterly for the center of the west edge to

10.5° easterly for the center of the east edge

Entrance to the Luis Maria Baca No. 4

Wolle, 1942. (X-5540)

See figure 3 (pages 33-37 in the accompanying pamphlet)

in the coal-producing region of the Trinidad quadrangle

for a detailed map of the many coal-mining camps

Grant, near Crestone, in the San Luis Valley, Colorado. Photograph by M.S.

National Monument and Preserve

hese fascinating dunes occupy about 40 square miles of the eastern part of the San Luis Valley where they extend about 10 miles north to south against the western edge of the Sangre de Cristo Mountains between Mosca Pass and Music Pass. The fine sand in the dunes has been piled up to a maximum depth of over 700 feet, making them the tallest sand dunes in North America. The major source of the sand is the broad alluvial fan deposited by the Rio Grande, which brings sediment out of the San Juan Mountains and deposits it in the San Luis Valley. Prevailing westerly winds pick up sand from the alluvial fan, but are unable to lift the sand over the Sangre de Cristo Mountains, so it is dropped in the great dunes at the foot of the range. Johnson (1967) described seven different types of dunes that resulted from different processes that operated in different places within the dune field. Over time, the apparent net movement of the dunes has been very slow to the northeast. Deposition of sand in the dunes started about 15,000 years ago and continues today. (Information from Johnson, 1967.)

railroads, see books about railroads listed in the "Sources of Information" ----- CATTLE TRAIL

railroads are shown in brown. Abbreviations of railroad names are explained in the pamphlet. Abbreviation "N.G." indicates narrow gauge. For more details about

HAILROAD—Date shows beginning or duration of operation. Currently operating

EXPLANATION

TRAIL OR ROAD—Dashed where approximately located; queried where inferred. Dates of use shown for some trails and roads. Routes plotted from General Land

TOWN OR OTHER CULTURAL FEATURE—Approximately located; showing approximate date of founding of a town or establishment of a post office, not generally the date of the first person to arrive. Alternate town names and dates are in parentheses. Many newer town names are shown in brown. Locations of towns shown on previously published maps vary widely, and some locations shown here may be inaccurate. Abbreviations used: P.O. = Post Office; Alt. = Altitude; Jct. =

roads date from the 1820's to 1880's

Junction; Co. = Company; No. = Number

TOPOGRAPHIC OR OTHER FEATURE

Office (GLO) land plats, early maps, or aerial photographs. Most trail or road names are from original sources such as land plats. Some shorter trail and road segments on the GLO land plats were omitted here to avoid cluttering the map excessively. Some trails and roads are terminated or their continuation is queried where their destination was not shown on original source materials. Locally, parts of the early trails are adjusted to better fit modern courses of streams. Trails and

Index Map Showing Location of

the Trinidad Quadrangle (Brown) and other Published Historic Trail Maps

The following table comprises the "necessaries" for a trip across the plains. There are a great many other articles that could be enumerated under the head of "luxuries," which we do not deem necessary to publish. The following is intended for a six months' outfit for four men. 1,00 | 2 small Tin Buckets,.... 75 feet of Rope, 12,00 | 3 Sheets Iron, Long Tom, Hand Saw and Drawing 1 Dutch Oven for baking

1 Shingling Hatchet, 10 fbs Cut and Wro't Nails

For Tents, see advertisement of Gilbert, Hubbard & Co. For Hardware, see advertisement of Larrabee & North. For Guns, Pistols and Firearms, see advertisement of Chas. A. Eaton.

he Mexican government in the 1830's was concerned about threats from Texas to acquire the land between the interested in protecting their northern border along the Arkansas River, so they authorized the governor of New Mexico to establish colonies and grants in those northern areas. They awarded grants of land to petitioners who would bring cultivation and settlement to the lands. At one time a few individuals and practically all of what are now the southeastern Colorado counties of Alamosa, Archuleta, Bent, Conejos, Costilla, Huerfano, Las Animas, Otero, Pueblo, Rio Grande, and Saguache were involved in the land grants. The grants were made by Mexican Governor Don Facundo Melagres or by Manuel Armijo of New Mexico in order to induce people to live in what was then northern Mexico, which at that time was occupied sparsely, but almost solely by Indians. By colonizing the area, Mexico's claims to the area would be protected from the Texas and American acquisitiveness. But before the colonization could fully take place, the United States had annexed the Texas Republic in March 1845. Also the war between Mexico and the United States started in May 1846 and the United States soon took over the land that had been set aside for land grants.

There were originally 197 private land grants. The titles to these lands came from special grants from the government of Mexico. After being acquired by the United States these lands took on special value, and because the treaty of Guadalupe Hidalgo (1848) 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. At least partly in Colorado were the Beaubien and Miranda Grant (the Maxwell Grant), the Conejos Grant (not confirmed), the Nolan Grant, the Luis Maria Baca No. 4 Grant, the Medano Springs and Zapato Grant (not confirmed), the Sangre de Cristo Grant, and the Vigil and St. Vrain Grant. (Information from references listed in the "Sources of Information" in the text pamphlet that accompanies this map.)

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, Arizona, southern California, and southern Colorado) belonged to Mexico. In what is now Colorado, the San Luis Valley and points farther west as well as land south of the Arkansas River belonged to Mexico. Texas won its independence from Mexico in 1836, and was then 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, Arizona, southern California, and southern Colorado became United States territory, However, the treaty of Guadalupe Hidalgo in 1848 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 they are shown on this figure. Two other grant requests, the Conejos Grant and Medano Springs and Zapato Grant are shown but were never confirmed. Map scale is approximately 1 inch to 20 miles. (Most of the land grant boundaries are from the

Any use of trade names in this publication is for descriptive purposes only and does not imply For sale by U.S. Geological Survey Information Services Box 25286, Federal Center, Denver, CO 80225 This map is also available as a PDF file at http://geology.cr.usgs.gov Photographic credits: Photographs are courtesy of the Denver Public Library, Western History and Genealogy Department.

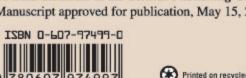
undated map, "The Mexican Land Grants," by Herschel Lee.)

The photographer (where known) and

are shown at the end of each caption.

Denver Public Library call number for each photograph

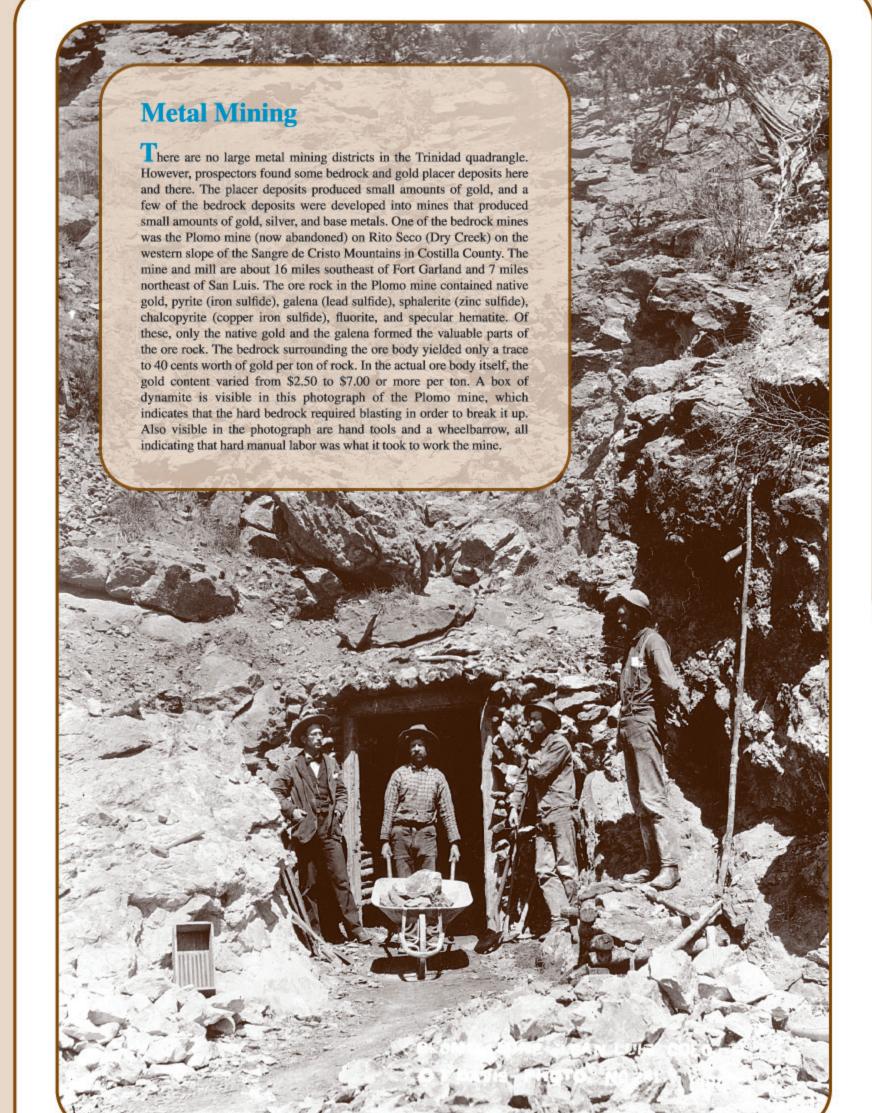
Historical data compiled by Glenn R. Scott in 1999-2001 Publication design and digital layout by Carol Quesenberry Original drawings by Carol Quesenberry Edited by F. Craig Brunstein Digital cartography by Springfield and Springfield Pamphlet layout and design by Carol Quesenberry assistance from members of the Central Publishing Group Manuscript approved for publication, May 15, 2001







TRINIDAD, SOPRIS AND STARKVILLE.



Four miners, one pushing a wheelbarrow full of dump rock, pose near the entrance to the Plomo gold mine on Rito Seco Creek near San Luis

in the San Luis Valley. A box of dynamite, hammer, shovel, and miner's picks are also visible. Photograph by O.T. Davis, 1894. (X-61720)

