Over the Range
Francaviglia, Richard V.

Published by Utah State University Press

Francaviglia, Richard V.
Over the Range: A History of the Promontory Summit Route of the Pacific Railroad.
Utah State University Press, 2008.
Project MUSE. muse.jhu.edu/book/7312.

⇒ For additional information about this book
https://muse.jhu.edu/book/7312

🔗 For content related to this chapter
https://muse.jhu.edu/related_content?type=book&id=163202
In the Path of History
(1850–1868)

The report of Stansbury’s 1849 expedition, published in 1852, helped the federal government and the Mormons better understand a portion of early Utah Territory. By that time, this area was being eyed as one of many places through which a transcontinental railroad might run. After all, railroad technology had also improved over the last two decades, generating confidence in the idea of a railroad spanning the entire continent. Private business interests had long speculated about such a railroad, and now official interest was growing. Originally slow to act, the United States Congress now took a serious interest in the project. Railroads had proven themselves the most efficient and safest mode of overland travel, and politicians began to get on board, so to speak. By 1852, Congress authorized extensive surveys to determine the best routes for a railroad to reach the Pacific coast. The big question was: Where would this railroad run?

It is here that we should consult maps of the period to better understand how Promontory worked its way into the popular consciousness. During the growing discussion and then debate about where the railroad would run, several interest groups figure prominently. Consider again the Mormons’ interest in bringing a railroad to Utah Territory. Despite President Young’s astute acquisition and use of maps, he could not consult every map containing future railroad routes. Maps, though, were essential. They held the key to how the selection of Promontory as the ultimate meeting point of the first transcontinental railroad would unfold. That drama was part of the broader mapping of the entire West after about 1850.
In the early 1850s, the route that the Pacific Railroad would take was unknown. Asa Whitney’s vision for the railroad to the Pacific showed three destinations on the Pacific coast—San Diego (by way of a southerly route); San Francisco (via a central route); and the Seattle/Puget Sound area (by a northern route). Significantly, Whitney’s route to San Francisco crossed the Wasatch Mountains and dropped into the Great Basin in the immediate vicinity of Great Salt Lake City, as it was then called, and thence westward along the south side of the Great Salt Lake. The topographic profile of this route (fig. 2–1) revealed very easy going for the railroad south of the lake. Even the Springs or Stansbury Mountains could be skirted around their north edge, thus maintaining an easy grade throughout the entire area. Brigham Young assumed the railroad would take this route, but the actual route was far from certain. In fact, the geography of the Interior West was still relatively sketchy, as maps of the period reveal.

The issue of where the railroad should run in the West perplexed the federal government as much as it did entrepreneurs. Given the strong regional interests in the East, it is not surprising that Southerners advocated a southern route, Middle Westerners preferred a direct route to San Francisco through Utah Territory, and people from New England and the Upper Middle West preferred a route to Oregon Territory. In
1853, Congress authorized the Pacific Railroad Surveys, which resulted in six major expeditions. To stimulate the process of surveying and mapping the prospective railroad routes, Congress appropriated $150,000. This enabled the Army’s Corps of Topographical Engineers to conduct the work, which, in addition to surveying, included gathering information on the geology, climate, vegetation, and animal life along the routes. This, of course, was required for reasons other than pure science or aesthetics. Those mineral and biotic resources could encourage mining, farming, and ranching. They could also help support considerable freight and passenger traffic on railroads.

The southernmost Pacific Railroad survey was made along the 32nd and 35th parallels, and the northernmost along the 47th and 49th parallels. These ultimately led to the construction of the Southern Pacific and Santa Fe to the south (ca. 1879–1883) and the Northern Pacific and Great Northern to the north (1876–1886). However, the middle or central route through the West was surveyed along three parallels—the 38th, 39th, and 41st. Those three surveys were crucial in determining the ultimate route, but considerable politicking and maneuvering would occur over about a dozen years before the route of the first transcontinental railroad, through Utah, was finally determined. That may sound like a long time, but as the dates above suggest, the first railroad through Utah and Nevada would be built earliest, and completed in 1869, more than another dozen years before the railroads along the southern and northern routes. Although there would be other last spike ceremonies in the 1880s, none was more important than the first—an honor that would go to Utah Territory.

The main problem was how to integrate the fragmented maps appearing in the varied railroad surveys for that was key to comparing the routes and determining which was best. That, too, would require maps. In his Memoir to accompany the Map of the Territory of the United States from the Mississippi River to the Pacific Ocean [U.S. Serial Set 801], topographer Gouverneur K. Warren identified the need to bring together individual maps from numerous surveys, the goal being to create a single map of the entire American West. This was in 1857, when the individual maps used to create the master map were so diverse, and so fragmentary, that it proved difficult to construct an accurate map. By 1858, however, Warren realized his vision as his map rolled off the presses. Warren hoped that travelers and would-be entrepreneurs would consult his map, and he was not disappointed. Called Map of the Territory of the United States From the Mississippi River to the Pacific Ocean . . . to accompany the Reports for the Explorations for a Railroad Route, it became one of the most popular maps of the period (fig. 2–2).
Like most maps, it relied on multiple sources. The map’s cartouche proclaims that it was “based on surveys and compiled by G. K. Warren, Lieutenant of the Topographical Engineers, and prepared under the direction of Bvt. Major W. H. Emory.” On this map, two routes cross Utah close to the Great Salt Lake. One route—the Hastings Road—heads westward from Great Salt Lake City. This road to California skirted the southern edge of the huge lake, worked its way around the spurs of the mountains, and then headed westward toward Pilot Peak. The second route, called the Emigrant Road, ran north around the lake from the vicinity of Bear River, west around the northern end of the Promontory Mountains, then headed roughly west-southwest on a meandering path until it reached the Humboldt River in present-day Nevada. Like all maps of this period, it is not as accurate as we demand today. Note, for example, that the Salt Lake Cutoff actually crossed into a portion of Idaho to meet the main emigrant road coming out of City of Rocks before reaching Nevada.
Fig. 2–3

Detail of the Great Salt Lake on Map From Great Salt Lake to the Humboldt Mountains in Explorations and Surveys for a Rail Road Route from the Mississippi River to the Pacific Ocean (1855) shows proposed railroad line running around south edge of the lake.
Other routes could take the traveler to the vicinity of the Great Salt Lake, as shown on the *Sketch Exhibiting the Routes between Fort Laramie and the Great Salt Lake* (fig. 2–3). Based on explorations by John C. Frémont, H. Stansbury, E. G. Beckwith, F. T. Bryan, and F. W. Lander, the map shows existing “routes practicable for wagons” and “routes explored but generally not practicable for wagons without improvement” (shown as hatched lines). The latter was a warning much like those on today’s maps—“suitable for four-wheel drive vehicles only.” As the map shows, there were several wagon roads, in varying condition, to the Wasatch Front from Wyoming. Two reached Salt Lake City from Fort Bridger via Echo Creek. Still another route—the Pacific Wagon Road—was proposed to run from the Green River over Martin’s Pass to the Wasatch Front, where it headed directly west, skirting the northern end of the Promontory Range. On the eastern side of the Great Salt Lake, a series of routes threaded their way down the canyons of the Wasatch or via Ogden’s Hole—a large, amphitheatre-like valley northeast of present-day Ogden (not the same as the village of Ogden Hole shown west of the city). But this map, too, is inaccurate. There were really only three viable wagon roads into Salt Lake City from the east in 1858, two of them were forks of the Echo Canyon route—over Big and Little Mountain to descend Emigration Canyon and the Golden Pass route down Parley’s Canyon—the third was down the Malad and Bear from Fort Hall. These are shown on the map, as is a road through Ogden’s Hole that I do not think existed as a wagon road any farther east than Ogden’s Hole.

When they finally reached the western slopes of the Wasatch Range, travelers had to make a decision that faced anyone wanting to continue traveling westward: How to get around the Great Salt Lake? That huge body of water, beautifully articulated with ripple-like curving lines mirroring the shorelines, reveals a swampy area of marshland at the northeast edge of the lake that would present problems to travelers. On this map, there were only two ways to get around the lake—going southward to the vicinity of Salt Lake City, or going northward. The latter choice required travelers to traverse that large area of marshy land that posed a major obstacle to wagons. By avoiding the marshiest land, the traveler got around the northeastern edge of the Great Salt Lake, then turned westward to face the Promontory Range, which appears on the map as a formidable obstacle, though it is unnamed.4

Brigham Young sought maps that could better inform him about the region, and that included official maps of Utah Territory prepared by the federal government. One impressive map—*Explorations and Surveys for a Rail Road Route from the Mississippi River to the Pacific Ocean—Route Near the 41st Parallel, Map No. 1, From the Valley of the Green River to the*
Over the Range

Great Salt Lake (fig. 2–4)—clearly shows the proposed line running westward as it crosses the Green River in what would later become the state of Wyoming. Then, when the proposed railroad line reaches the Black Fork, it turns southwest to Fort Bridger, and from there, follows a twisting course down Sheep Rock Cañon of the Weber River, by which it reaches the Wasatch Front. At Lower Cañon, however, instead of going toward Ogden City, this proposed rail line turns sharply south, heading toward Salt Lake City. As it reaches the Salt Lake Valley proper, it turns southwestward, crossing the Jordan River and passing the far northwestern edge of the city. This route pleased the Mormons greatly, for the growth of their church depended on good transportation. From there, the proposed railroad runs due southwest. Upon reaching the northern edge of the Oquirrh Mountains, it hugs the southern edge of the Great Salt Lake, then curves northwestward again.\(^5\)

On the second map in this series—From the Great Salt Lake to the Humboldt Mountains (fig. 2–5)—the route around the south end of the Great Salt Lake takes nearly the same course. Past the city, this route heads northwestward to skirt the northern end of the O-Na-Kui (Stansbury) Mountains, runs across the Spring or Lone Rock Valley (now Skull Valley), crosses a pass in the northern Cedar Mountains (or Pah-o-tom Range), heads southwestward into “The Desert,” then goes north to skirt the north end of the Humboldt Mountains before it reaches the Humboldt River.\(^6\) At this time, the route that the transcontinental railroad would follow in this area was not determined. However, the survey’s topographer, E. W. Egloffstein, clearly preferred a route around the southern side of the Great Salt Lake.

The map that accompanied the survey’s report attracted considerable interest. North of the Great Salt Lake on Egloffstein’s map, the Shoshones, or Shoshoneee Indians, are prominent; so is the unnamed [Promontory] mountain range jutting into the Great Salt Lake. Just east of those mountains, the map shows and names Bear River Bay, while Spring Bay and Gunnison Island are indicated north and west of the range. Of transportation routes here, Egloffstein shows only the Emigrant Road. In contrast, the area south of the Great Salt Lake appears to be much more promising for a future transcontinental railroad line. Toward “The Desert”—that forbidding area of salt flats west of the Great Salt Lake, Egloffstein shows the “Proposed Rail Road” route that passed Great Salt Lake City skirting the southern edge of the lake. The railroad’s projected route meanders a bit, then curves southwest where it joins another line on the map. Labeled as a “Route Believed to be Practicable for a Railroad,” it runs even farther south of the lake, rising over the southern spurs of the O-Na-Kui (Stansbury) and the Cedar
Fig. 2–4

Detail from Map 1 From the Valley of Green River to the Great Salt Lake shows projected railroad lines running south of the Great Salt Lake. From Explorations and Surveys for a Rail Road Route from the Mississippi River to the Pacific Ocean (1855).
Over the Range

mountains. At this time, the Mormons had explored alternative routes to California through what was still Indian country—as Egloffstein’s map makes quite clear.

How strongly did maps of the mid 1850s advocate a railroad route around the southern end of the Great Salt Lake rather than around the northern end of the lake near Promontory? On the Skeleton Map Exhibiting the Route Explored by Capt. J. W. Gunnison (fig. 2–6), Egloffstein shows the traverses made with a possible railroad route in mind. The term skeleton here is appropriate, as the map does not show all the details of the topography, only the bare bones, so to speak.

On the map, one route runs into the Utah Valley, then northward toward the Great Salt Lake, where it heads west along the southern shore of the lake. From there, it runs straight west to the Humboldt Mountains, where it heads north into the Humboldt River Valley. The second route, west of the lake, is farther south and unfinished; Captain John W. Gunnison, who explored the area in the early 1850s, advocated this route. Both routes followed a rugged route through the Wasatch Mountains, but the persistence of the latter on maps was a tribute, perhaps, to the memory of Gunnison, who was massacred by Indians near Sevier Lake in 1853. The “proof” of this map was “corrected in [the] office [of the] P[acific].R.R. Surveys Feb. 10, 1855”—and it endorsed a still more southerly route through western Utah. Tellingly, the title of the map, on its verso, is St. Louis, via Great Salt Lake. To Benecia, Cal.—Explorations and Survey for a Pacific R.R. between—1854 Capts. Gunnison and Beckwith, and is boldly labeled “P.R.R. Routes”—that is, projected routes for a Pacific Rail Road—in red.

By the early 1860s, the area north of the Great Salt Lake was also eyed as a possible locale for a railroad line. There was a long precedent for travel here, and, in fact, one of the routes that took travelers westward into Nevada around the north end of the lake was named for Stansbury. An official Map of the Territory and Military Department of Utah (1860) (fig. 2–7) shows Stansbury’s route running west from the Wasatch near Logan toward the Promontory Range, turning south at the base of the Promontory Mountains and running all the way around them by way of Promontory Point. From there, the route runs north along the west side of the Promontory Range, which is indicated by a series of hachure lines.

Stansbury’s route then skirts the northern edge of the Great Salt Lake, runs around the southern edge of the Red Dome Mountains (not shown) and joins up with Hastings’ Road just east of Pilot Peak, where a series of springs revived weary travelers. The federal government prepared many of these maps, but others were by private map
Detail from Great Salt Lake on Map From the Great Salt Lake to the Humboldt Mountains in Explorations and Surveys for a Rail Road Route from the Mississippi River to the Pacific Ocean (1855) shows proposed railroad line running around south edge of the lake.
companies. All recognized the centrality of Salt Lake City, which was both territorial capital (and still is the state capital) and the Mormons’ New Jerusalem—as an 1852 German map called it.

During this period, the Latter-day Saints were honing their own map-making skills though they remained dependent on government maps to show projected railroad routes. They developed industries and sought the most efficient ways to dispatch information and ship goods. To that end, they built telegraph lines that linked them with the rest of the world and provided speedy communication between their far-flung villages. The Mormons’ efforts continued into the 1860s, but other telegraph systems from outside Utah also reached the territory. Thus, the Mormons used a combination of their own and others’ telegraph lines. As president of the Mormon Church, Young expressed an interest in any form of transportation, and this sometimes took an odd turn. An interesting telegraph message revealing Young’s transportation concerns was located recently in the Church Archives: Under the title “Camels —,” the Pacific Telegraph Company dispatch out of Austin, Nevada, on

![Skeleton Map Exhibiting the Route Explored by Captain J. W. Gunnison (1855)](Courtesy of Cartographic and Architectural Records Section, National Archives, College Park)
August 27, 1861, was addressed directly “To the Hon. Brigham Young.” The message noted: “I am informed that the camels are owned by some frenchmen [sic] in Virginia [City] they are now transporting Salt from Humboldt [Nevada] to that place —.” Signed only by “operator,” it was sent “free” to Young—no doubt in response to an earlier inquiry. For his part, President Young had his hands full with many pressing issues, including reorganizing his Saints in Utah to maintain self-sufficiency now that the United States had taken control of the territorial government in Salt Lake City. Federal troops were recalled to participate in the American Civil War in the East but were soon replaced by Patrick Connor and the California Volunteers. That war would help Nevada become the Silver State in 1864 and provide silver to the coffers of the Union, a cause that the Mormons—most of whom were originally Northerners—generally supported, but did not actually engage in because building Zion was their top priority.

Shortly after the start of the Civil War, the Mormons received good news about the Interior West’s position in the national communication
network. On October 24, 1861, H. W. Carpenter, president of the California State Telegraph Company, telegraphed Mormon President Brigham Young with an important message. “That which was so long a hope,” Carpenter began, “is now a reality.” Carpenter was referring to the completion of the Transatlantic Telegraph line from coast to coast. In congratulating Young on this “auspicious event,” Carpenter added, “[m]ay it frame a bond of perpetual union and friendship between the people of Utah and the people of California.”

By this, Carpenter no doubt meant Mormons and non-Mormons.

Another message that same day, sent from San Francisco to Salt Lake City, gave an indication of the events underway. Anticipating the language used later at Promontory Summit, the message of 1861 noted that “[w]e join you in rejoicing over the event of the link between the Pacific & Atlantic—The importance of which will be better realized in the future.” This statement was prophetic in several ways. In a general sense, it recognized the importance of communication in creating the American West as we know it. In particular, the “better realized” part of the telegram meant only one thing: the railroad, which would indeed reach Utah “in the future.” The Mormons, who were a part of this rapidly developing western drama, knew that transportation would facilitate the growth of their church. They were especially familiar with all the railroad routes surveyed in the 1850s; now they craved closure on the issue. The Mormons were interested in the Pacific Railroad Act, which in 1862 authorized the survey and ultimate construction of one transcontinental railroad. The telegraph message about the telegraph system linking East and West hinted at the event that would occur eight years later—the actual joining of the rails in Utah to complete the first transcontinental railroad. In the meantime, however, Carpenter and his crew in California added: “we have just been drinking [to] the health of Prest. Young—with all the Honors.”

When one recalls that Brigham Young was said to be fond of an occasional stout lager—in moderation, of course—this statement was not as irreverent as it sounds today.

That this message was sent by telegraph is a reminder that communication and transportation work hand in hand. Invented in the 1830s, the telegraph consisted of three basic components—a transmitter connected to a receiver by wires carrying a low-voltage electric current. The receiver was originally a needle that pointed to particular letters; however, Morse code, with its familiar dots and dashes, proved that an arrangement of clicks was a faster way to receive messages over the wire. By 1858, the first transatlantic telegraph cable was laid, while in the American West, the telegraph’s arrival soon thereafter helped spell the end of the fabled Pony Express. Although seemingly separate from railroads, the
telegraph was essential to their operations because it enabled messages regarding train movements to be sent in advance of the trains. In fact, the Pacific Railroad Act called for a telegraph and railroad system to be built simultaneously. In effect, then, the telegraph helped to lay the groundwork for the railroads’ arrival, and the device would be indispensable for their efficient operation.

Brigham Young not only encouraged the development of telegraph lines linking Mormon communities, but he also continued to emphasize the importance of a railroad connection with the outside world. Consider another telegram: In September 1862, church official Heber C. Kimball and Samuel H. Weber telegraphed Mr. E. Creighton, superintendent of the Pacific Telegraph Company in Chicago, on behalf of President Young. In that message, the Mormons informed Creighton that “we take pleasure in informing you that the telegraphic reports of the Proceedings of the Pacific railroad Convention now in session in Chicago, are perused here with deep interest.” Never shy about suggesting a route through Utah for such a railroad, they added, “[w]e trust that the Pacific Railroad maybe located on the route that will bring the greatest good to the greatest number & that the work may be speedily accomplished.” At that time, Mormon Utah was the most populous location between the Colorado goldfields and the Pacific coast, so the Saints’ appeal mentioning population must have resonated with Creighton. However, in order to leave absolutely no doubt as to where the line should run, Kimball and Weber persuasively concluded that “Utah will doubtless, when opportunity offers, add deed to words in so great and useful an enterprize.”

Brigham Young’s interest in railroads ran quite high, and through a rather remarkable series of events, the Mormon Church would become closely allied with one of the two railroads that ultimately drove the golden spike at Promontory Summit. Having considerable experience with the route from the East to Utah due to the nearly constant migration of Latter-day Saints via handcarts and wagons since 1847, Young knew the route well. Although Young had many LDS associates in northern California, he apparently never envisioned the Saints controlling that area, which was beyond the boundaries of the Mormon state of Deseret.

The American Civil War intervened at a crucial time, and it affected activities in Utah in many ways. First, it necessitated the return of troops in Utah Territory to the eastern states, where much of the war took place. However, the federal government recognized the strategic nature of Utah, and soon re-established a presence here when Fort Douglas opened at Salt Lake City in 1862. Most important, the Union cause
and ultimate victory in the war ensured the selection of a central route, rather than a southern route through New Mexico and Arizona. The war had helped military personnel gain considerable surveying skills, as well as experience in building and running railroads. After the war, former military personnel looking for employment often found a ready market for their skills working for the railroads. Many proved perfect for the job. Seasoned by extensive field experience, used to discipline and teamwork, and able to conceptualize western topography as a battleground waiting to be taken, the military topographers tended to work quickly and accurately.

In June of 1862, about a year after the Civil War began, Congress passed several bills, among them the Homestead Act, the creation of the Agriculture Department, and the Pacific Railroad Act. All of these, especially the latter, had an impact on northwestern Utah. The Pacific Railroad Act was a long time in development and represented closure on several issues that were on the minds of legislators (and their constituents) and business interests. The railroads would receive subsidies of cash and land as an incentive to invest in such a risky endeavor. The act was, as railroad historian Wallace D. Farnham put it, “moderately useful to the private groups that sponsored it and ineffective, or worse, for ‘the great national road.’” And yet, with its subsequent amendments that further encouraged private interests, the act achieved its purpose of stimulating railroad development. Farnham was no idealist about what really transpired. Writing on the centennial of the act, he concluded that it was “the act of a democracy of abundance and license, wholly consistent with laws that gave valuable lands to citizens who had trespassed upon them, that eased restraints upon bankers who had no funds, that took from Indians land demanded by voters, and that bestowed bankruptcy and stay [that is, enduring] privilege[sic] upon impecunious citizens.”

As the two actors in the drama of building the transcontinental railroad, the Union Pacific and Central Pacific Railroads deserve a formal introduction here. Although we tend to think of the nation—and hence the railroads—as expanding westward, the Central Pacific was actually the result of mergers involving California’s earliest railroad, the Sacramento Valley, begun in 1852 and completed in 1856. Well before the Civil War (1861–1865), the “Big Four”—Collis P. Huntington, Charles Crocker, Mark Hopkins, and Leland Stanford (an oversimplification, as Crocker’s brother was also involved)—recognized California’s need for a railroad linking the Golden State with the eastern United States and incorporated the Central Pacific in 1861. As this suggests, the railroad was a private, entrepreneurial effort.
By contrast, the United States Congress chartered the Union Pacific in 1862. With the nation at war with itself, Congress now recognized the need to connect the East Coast and West Coast; the result would be a stronger economy and greater national security. As an incentive, Congress provided subsidies to the Union Pacific and its slightly older western counterpart. The passage of the Pacific Railroad Act assured a central route. That route symbolized the Union’s belief that the nation would be reunified after the war. As painted in broad brushstrokes on a map of the nation, the Union Pacific would run from Council Bluffs and Omaha on the Missouri River westward to an as-yet-undetermined meeting point with the Central Pacific. Both roads were to receive land adjacent to their rights of way, as well as cash bonuses, for railroad construction. The Central Pacific, which would build eastward from California, began construction in January of 1863. The Union Pacific began its construction two years later, in 1865, as the war ended. The Central Pacific’s earlier start was explained by the fact that it was the first kid on the block, but that kid had a tougher job as it elected to build over the formidable Sierra Nevada mountain range in California.

Both railroads had different personalities too. As the child of capitalists from California’s Gold Rush country, the Central Pacific seemed more risk-oriented. It was certainly apt to employ mining-like techniques to assault the granitic Sierra Nevada with pickaxes and gunpowder. Ton for ton, Central Pacific probably built more mileage through granite—including tunnels—than any other railroad. Central Pacific also pioneered the use of non-white labor, notably the Chinese, who both fascinated and disgusted European Americans. Additionally, Central Pacific management was closely linked to the Comstock Silver Rush in Nevada that occurred in the early 1860s. To some, it seemed that Central Pacific’s route over Donner Summit was calculated to bring it as close to Virginia City as possible—and why not? That silver-producing area was a major economic force in the American West. For its part, the Union Pacific was more eastern in its demeanor. As the child of a governmental action that offered incentives, its management was a bit more bureaucratic than Central Pacific’s. The Union Pacific looked eastward, and it was prone to hire Irish-American workers. Union Pacific was a granger—that is, agriculturally-oriented—railroad, though its extensive coal lands in Wyoming positioned it to become a major user and producer of black diamonds, as coal was commonly called at this time.

We also need to put these two railroads in the context of geopolitics. With the onset of the Civil War, the nation was nearly torn in two, but even during that conflict, the Union was resolved to not only build the Pacific Railroad, but to build it in a location that could unite the country.
and the West. Logically, the central route was advocated by President Lincoln, and mandated by Congress, to run from the Missouri River at Council Bluffs to the new capital of California at Sacramento, and ultimately, beyond to the San Francisco Bay area. The *central* in the name Central Pacific was significant. As one of the participants in a central route, the railroad would occupy a central position that could help unify the entire westward-moving nation after the war. Similarly, the symbolism of the word *union* in Union Pacific meant that the line would help unify the nation as well as belong to a union of regional interests by building westward into the Intermountain West. Other studies have covered the creation and early development of both the Central Pacific and the Union Pacific Railroads. However, we need to keep in mind that Central Pacific as a corporation formed in the West to achieve part of the national goal, as well as view Union Pacific as its *eastern* counterpart that would do much the same thing. We should also remember that the two railroads would bring somewhat different corporate philosophies together—or rather face-to-face—in their mutual goal of spanning the West with an iron road. Ultimately, both railroads would put Promontory on the map.

From the perspective of Promontory, the role of these two railroads in politics *within* the Intermountain West is especially interesting. If it is likely that the close gold and silver rush connections of financiers in California and Nevada helped shape the thinking of Central Pacific Railroad’s entrepreneurs, including the Big Four, then it is also likely that their association with easy riches put off Brigham Young. Understandably, Young developed a very close relationship with the Omaha-based Union Pacific rather than the Central Pacific, based out of Sacramento and San Francisco. At this time, Utahns and Californians had little regard for each other, and it is not surprising that the Central Pacific and the Mormons had little to do with each other, at least at first. By contrast, the attention showered on Young by the Union Pacific was noteworthy. On September 9, 1863, the Union Pacific contacted Young by telegraph, informing him that they were “about making Union Pacific a board of directors for a permanent organization.” The railroad then asked Young a question that must have delighted the Mormon leader: “[W]ill you serve as one of the said board?” When the Union Pacific reported that they “[b]roke ground today amid great rejoicing—Cannon flags banquets speeches & illumination of [the] City” of Omaha, they telegraphed Young that “Nebraska shakes hands with Utah In the great national undertaking—Your name will be Toasted—at the banquet tonight.” Young must have felt an added sense of appreciation and accomplishment at this recognition.
The Mormons also had a much closer relationship to the Union Pacific for another, more down-to-earth, reason: the railroad needed help in grading its line, and the Mormons could provide it. The Union Pacific seems to have been very shrewd in this matter. Inasmuch as the railroad agreed to pay the Saints to configure its grade, it played on Young’s relatively weak position: he needed money as much or more than the railroad did. This meant that, in effect, the Union Pacific could barter with Young. This arrangement, while at times disconcerting to Young, actually played to his hand because the Union Pacific was the most direct route to get European Mormon converts into Utah. Then, too, the Union Pacific knew that Young envisioned developing rail lines elsewhere in Utah, and would entice him to take rails and equipment in lieu of funds. The Union Pacific also paid Young in company stock, which explains the fact that the Mormon Church ultimately became one of the major stockholders in the Union Pacific. Rather than do what most business leaders might have done—sue the Union Pacific for failure to pay—Young brilliantly parlayed this arrangement to the Mormons’ lasting advantage. Young’s patience proved wise as he received many lasting benefits by, in effect, becoming a creditor to this westward-building railroad.

Upon its arrival in Utah in early 1868, the Union Pacific contracted the Mormons to grade its right of way. Brigham Young insisted on this arrangement; rather than employing the Mormon workers individually, the Union Pacific contracted with Young and the Church officials. The Deseret Evening News of May 21, 1868, reported that “. . . there is money for the job for those who are industrious and prudent . . . .” This call for workers came at a good time for both the Church and the workers because “at the present time . . . there is such a scarcity of money and a consequent slackness of labor.” Two days later, Young reported on his contract with the Union Pacific as “a God-send.” Young observed that “[t]here is much indebtedness among the people, and the Territory is drained of money,” adding that “this contract affords opportunity for turning labor into that money, with which those here can pay each other and import needed machinery, and such useful articles as we cannot yet produce. . . .” As a letter in the Millennial Star put it, by earning money for railroad construction, the Mormons could “keep the money so earned in the midst of Israel.”

The record suggests that Brigham Young hoped to use the available Mormon labor as an incentive to get the line built to Salt Lake City. As early as April 25, 1864, Union Pacific correspondence reveals that the railroad’s survey to Great Salt Lake City from Green River had a Mormon connection. The Union Pacific board of directors
Over the Range

noted that “President Young has volunteered to furnish your party and Transportation for your work.”\(^{21}\)

Truth be told, Young favored the Union Pacific for yet another reason. He was apprehensive about the Central Pacific. When the church mentioned that Utah should be on the route of the transcontinental railroad, the Saints actually meant that the railroad should go through Salt Lake City. Many observers, including the Mormons, figured that the Pacific railroad would come straight across the desert west of Salt Lake City and run directly into the Mormon city, which was also the territorial capital. That, of course, would have put, and kept, Promontory out of the picture. One of the unresolved items, however, was where the railroad would tackle the rugged Wasatch Range. By the early 1860s, the railroad surveyors had determined that a route through the mountains near Ogden would be most practicable. Rather than having much to do with Promontory, the topography of the Wasatch Range was the issue. Weber Canyon, east of Ogden, was the best way through the Wasatch Mountains. Although Ogden was situated almost fifty miles north of Salt Lake City and the Pacific Railroad was now determined to build through Weber Canyon, this was fine with the Mormons, who understood that the steep narrow canyons east of Salt Lake City were not practicable for railroad routes. Understanding this, the Saints figured that the railroad would simply curve south from Ogden, run to Salt Lake City, and then head directly west.

At this time, many road and railroad surveyors had military training, and many military and ex-military personnel used their considerable expertise to develop the railroads. Veterans also readily found work in railroad survey projects. One of these former officers was the legendary Grenville Dodge. As the chief engineer of the Union Pacific, Dodge had a similar vision of preparing a highly accurate map that would facilitate the building of the railroad. As Dodge somewhat immodestly put it to General Easton on January 14 of 1866: “I have about completed the map I have been so long in the making, and it is probably the best that has ever been gotten Union Pacific of the country embraced in my command.” According to Dodge, this map (fig. 2–8) showed as much detail as possible: “It has all the roads, mountains, rivers, military posts, mining districts, & c. with all the distances.”\(^{22}\)

Dodge later reflected on the political context in which he created this map. He noted that “[t]he Government had gotten so economical”—his word for cheap—“that they did not even want to pay for a map but as soon as they saw the map they were not only willing to pay for the copies I asked for, but they had to print a very large number of them—every
officer of the Government wanted them.” As Dodge bragged: “They were the standard maps for all the country west of the Missouri, to the California State line until that country was mapped from Government surveys.” In other words, Dodge’s map did what Warren’s map had done about a decade earlier. As a cartographic historian recently observed, “There can be little doubt that the 1866 Dodge map . . . is a critical synthetic map in the tradition of the 1857 Warren map.”

Let us take a closer look at Dodge’s map in regard to possible railroad routes in the vicinity of the Great Salt Lake for it can help us understand how contested the selection of a route west of the Wasatch Range would become. At first glance, Dodge’s map seems to only show existing mail routes traversed by horse-drawn wagons. Listed first in the table showing distances is the Overland Mail Route. This route begins at Fort Leavenworth, travels west through numerous forts to Great Salt Lake City (1206 miles), continues around the southern edge of the lake westward into Nevada, over the Humboldt Mountains, then southwest, as the Overland Mail Route did, all the way to California. In addition to these two roads running west from Salt Lake City—one north of the Great Salt Lake and one south of it, Dodge’s map also shows “Stansbury’s Route” as a red line consisting of dashes. Looking more closely, however, one can also barely make out dashed lines penciled in as a seeming afterthought by Dodge. In reality, these seemingly insignificant unnamed dashed lines are the most important, for they indicate possible routes of the transcontinental railroads. Tellingly, one runs westward from Salt Lake City to the Humboldt River, the other runs north from Ogden City, then westward over the Promontory Range, continuing generally southwest (directly under the words “Stansbury’s Route”) to the Humboldt River. Whereas one line would serve Salt Lake City, the other would miss it by well over fifty miles. Naturally, the former line most pleased Brigham Young, who envisioned Great Salt Lake City astride that more southerly line. Ultimately, however, Congress selected the path that partly followed Stansbury’s route as the route of the Pacific Railroad—a decision that finally put Promontory on the map.

By the mid-1860s, it was widely known that the Central Pacific would build across north central Nevada following the Humboldt River, and that the Union Pacific would follow Nebraska’s Platte River on its way toward Utah Territory. However, speculation was running high about just where the two lines would meet. In 1864, C. H. Lubrecht & Co. of New York published *The American Continent Topographical and Railroad Map* (fig. 2–9). As with many such maps of this period, it clearly shows the “Proposed Central Pacific R.R.” running southwest from Wyoming directly into Salt Lake City, then west-northwest to Nevada after skirting
Fig. 2–8
Detail of a portion of the Intermountain West on map by Grenville Dodge showing roads and projected railroad routes (1866).
the southern edge of the Great Salt Lake. On this map, the only indication of a travel route near Promontory is “Lander’s Cut Off” which traverses the area north of the Promontory Mountains, then reaches City of Rocks in southern Idaho. In its December 9, 1865, issue, The Pittsburgh Gazette featured an article on “The Union Pacific Railroad” in which it noted the vagueness of the route—especially that portion across the eastern Great Basin. As the Gazette put it, “. . . parties of engineers have been engaged in surveying the Spanish Fork and the country west from Salt Lake to the valley of the Humboldt. . . .” among other areas. However, it quickly added that, “No choice of the line across this wide stretch of territory has been determined on [sic] as yet; but the determination is to find the one offering the largest advantages.”

Despite increasing mention of “Promontory” as a place through which the Pacific Railroad would pass, many observers still considered Salt Lake City the most logical choice. For example, an interesting map in Samuel Bowles’s popular travel book Across the Continent (1865) clearly shows the “Route of Central Pacific R.R.” coming down the Wasatch Front near Salt Lake City and running around the south shore of the lake,
thence to the Humboldt River in the recently created state of Nevada. This, of course, was the route that the Mormons preferred.

After considerable fieldwork and other calculations, however, engineer Samuel Reed recommended that the Union Pacific railroad go around the north end of the lake. Still, that recommendation needed to be based on the kind of solid surveying that Union Pacific’s chief engineer demanded. Accordingly, Reed’s general initial survey was supplemented by a more detailed survey of the route over Promontory Summit. To Reed, the Promontory Mountains were not insurmountable even by the Union Pacific standards that favored relatively low grades. This proved a revelation. More important, though, was the fact that the Central Pacific heard about Reed’s reconnaissance and was galvanized into surveying Promontory. After all, the quicker the Central Pacific surveyed, graded, and laid track across the Great Basin, the quicker it could get into, and beyond, the Wasatch Mountains. The railroads’ reasoning was simple: the farther they got, the more lucrative the payments by Congress would be. Central Pacific surveyors were the first to successfully survey a specific route over the Promontory Range in 1867 under the direction of Samuel Skerry Montague, topographical engineer. Central Pacific surveyor Butler Ives moved eastward and located a feasible way over the Promontory Range at an “inclined pass” that would later be called Promontory Summit. For its part, Union Pacific had much the same goal, namely, to build as far west as possible, hopefully across much of the Great Basin—certainly to the Humboldt River. The trick was to survey as much of the route as possible and get it graded quickly.

On other maps of the period 1866–67, Promontory Summit was soon clearly shown as the chosen route. Consider, for example, [W. J.] Keeler’s *Map of the U. S. Territories [and] Pacific R.R. Routes Mineral Lands and Indian Reservations 1867* (fig. 2–10). It shows the C.P.R.R. line running over the route that would ultimately be used. Keeler’s work reminds us how powerful a map can be. A map not only shows what exists but can also influence what will exist in the future. Keeler soon published this information to a nation anxious to see the Pacific Railroad become a reality. In 1867, the public glimpsed the route of the Pacific Railroad on Keeler’s *National Map of the Territory of the United States from the Mississippi River to the Pacific Ocean*. This map was “Compiled from authorized explorations of Pacific Rail Road Routes, Public Surveys, and other reliable data from the Departments of the Government at Washington, D.C.” On Keeler’s popular map, the Pacific Railroad’s two major components—Central Pacific and Union Pacific—are shown in the standard ladder symbol, that is, as twin parallel lines containing equally spaced lines crossing them at right angles. A closer reading of the map reveals that
Over the Range

this railroad symbol, colored in blue for added emphasis, indicates “Rail Roads in Progress” while the bolder symbol featuring alternate “rungs” of the ladder symbol in black, and over-colored in red, indicates “Rail Roads completed.” By the time the weather warmed in June of 1867, Butler Ives had returned, surveyed much of the area for the Central Pacific, and effectively mapped the route over Promontory Summit.

On Keeler’s 1867 *National Map of the Territory of the United States from the Mississippi River to the Pacific Ocean*, the route of the Central Pacific is shown as running around the north end of the Great Salt Lake and across an unnamed mountain range indicated by the familiar hachures. Derived from the French word *hacher* (to chop up or hash something), these straight lines symbolized the downhill slope of the mountainsides. The range they depict is, of course, the Promontory Mountains. To the east of these mountains, the line curves south to Ogden, where it then heads east into Weber Canyon and beyond Ft. Bridger into “Dakota Territory” (the western portion of which would become part of Wyoming in 1868). Only in the vicinity of Sulphur Creek and Bridger Pass, which lie far out in Wyoming, is the name “Union Pacific” indicated on Keeler’s
map. Significantly, Keeler names each railroad twice. He likely assumed that their meeting point would be about halfway between Sacramento and Omaha—perhaps near the Green River in today’s Wyoming.\(^3\) That would have put the Central Pacific well into territory that Union Pacific assumed to be its own.

The year 1868 was crucial for both railroads—and for Promontory. On Keeler’s map, the blue lines were speculative in at least two senses. They indicated the selected route generally, although slight deviations in the actual route could, and would, occur. Moreover, the question of exactly where the railroads would meet was still unknown. That two-hundred-plus-mile stretch of railroad over both the Promontory Range and the Wasatch Range was not indicated as belonging to any particular railroad, and with good reason: The actual point at which they would meet was not only undetermined but also hotly debated.

Before long, many voiced opposition to the route west of Salt Lake City, including the railroads themselves. The unthinkable had materialized: Ogden, rather than Salt Lake City, would be the only Utah city on the Pacific Railroad. A route that would bypass Utah’s economic and spiritual center in favor of Ogden would be nothing less than a snub to both the Mormons and the territorial capital. One could understand why the Central Pacific favored a route that bypassed Salt Lake City, for they did not have a close relationship with the Latter-day Saints. For its part, though, the Union Pacific had to face a reality despite their closeness to the Mormons. Despite the fact that it would miss Salt Lake City, a route through Nevada’s Humboldt River Valley connecting with Weber Canyon would be the shortest possible. That route, however, would not run at the lowest elevation along the edge of the Great Salt Lake, but rather over that pass or “saddle” in the rugged Promontory Mountains northwest of Ogden. The Mormons were unsuccessful in lobbying for a change in the northern routing which, although straightest for the railroad, would be less advantageous to the Saints’ interests.

If the Mormons had had their way, Promontory would never have become a household word. By March 30, 1868, however, the handwriting was on the wall regarding the route’s selection. Union Pacific’s Grenville Dodge wrote J. Blickensderfer directing him to “put parties on location north and south of [the] lake when they can be freed from work east of Lake.” He then soberly added, “But everything indicates that for Grades, distances, water, work, and to avoid the Desert on Mud Flats the north line is best.” At this time, mention was made of Promontory Point, which was virtually due west of Ogden and seemed like a feature the railroad could curve around. To reach it, the railroad would have to take a snaking route north to the base of the Promontory
Range, then south around Monument Point, then north again to curve around the northwest edge of the lake. That, however, was easier said than done. As surveyors discovered, the chief problem with Promontory Point was getting there: it would require pilings across a portion of the lake, on a fill.\textsuperscript{31} Still, evidence suggests that Union Pacific hoped to go around the northern end of the Great Salt Lake at lake level, in effect hugging the north shore rather than going over the range. That was the route mapped by Stansbury (fig. 2–7), and it was almost perfectly level. Dodge’s 1866 map (fig. 2–8) has a route right across Bear River Bay to Promontory Point, yet another indication of Union Pacific’s penchant for a water-level route wherever possible.

Yet, the decision to build the railroad in the vicinity of Promontory—the exact route was far from certain at that time—still seemed rather counterintuitive. Railroads not only like to traverse straight and level lines, but they also know that serving population centers can be quite lucrative. Both the Central Pacific and the Union Pacific recognized the desirability of serving Salt Lake City, and both had surveyed a southern route. However, even though it meant missing the biggest city in the entire region and receiving less in subsidies that the government would pay per mile of railroad constructed, the math always worked out in favor of the northern route. As Dodge put it in August of 1868, the route north of the Great Salt Lake “was shorter by 76 miles, had less ascent and descent, less elevation to overcome, less curvature, and the total cost was $2,500,000 less.” With the Bear River and perhaps Blue Creek in mind, Dodge also claimed that the resources adjacent to the northern route were better, with “more running water, more timber, and better land for agriculture and grazing.” To lessen the disappointment to Young and the Mormons, presumably, Dodge stated that the Union Pacific planned to build a branchline south to Salt Lake City.\textsuperscript{32} As an astute political leader, Young saw the handwriting on the wall. Still, he continued to advocate the southern route for months thereafter—even when it was a lost cause.

With the northern route chosen by both railroads, the exact line over Promontory Summit was still uncertain. After all, several northern options were possible. One route might run around the far northern edge of the Promontory Range. Although this would offer a more level route, it would add considerable mileage. Then, again, one might run the line around the southern edge of the Promontory Range, in effect skirting the lakeshore and touching that now-important landmark, Promontory Point. Although that route would follow the old Stansbury route and be a “water level” route, it would also add considerable mileage, and, as we have seen, present construction obstacles. Lastly, one
could go over the range. By tackling the fairly rugged eastern slopes of
the Promontory Mountains, one could cut out a 2.21 percent grade for
the railroad, gain the pass at the summit, and then engineer the right of
way down the western slope of the range, reaching Monument Point on
a more reasonable 1.6 percent grade. This would be the shortest, and
best, route.

As late as September 5, 1868, as both railroads were building toward
Utah, Young was unsure about which route would be traversed. He did
know that Salt Lake City would have a railroad—even if he had to build
it himself. On that date he telegraphed “all the Bishops south of the city”
a message imploring them “to send me all the help you possibly can, as
quick as possible, to work on the railroad.” The reason for the urgency,
Young stated, was that “[w]e wish to rush it through to Monument Point,
or to this city.” Leaving little doubt as to his seriousness, Young noted
that “[i]f the teams which have lately come in with the immigration will
go to work, I will employ them right away.” How well would Young pay the
work teams? Anticipating this question, perhaps, he concluded, “[t]he
pay will be sure, and in money at liberal rates.” When Young ordered the
telegraph operators to send the message “immediately,” he was already
envisioning a web of rail lines in Utah, but had his hands full with other
matters. The church was growing rapidly but facing economic pressures
as it needed to develop coal and iron mines. Missionary activity had rap-
idly expanded throughout Europe and from Hawaii to the far islands of
the Pacific and even Australia. The church needed the money that the
railroad labor would yield, for they had suffered setbacks with locusts
and grasshoppers in the spring and summer of 1868. Indigenous to
the Great Basin, the locusts had seriously damaged the Saints’ crops
just as they had soon after the Mormons settled Utah, leading them
to the “miracle” of seagulls’ intervention. Now, however, the problem
was a full-scale invasion of flying locusts—grasshoppers that became
migratory and voracious. Of the locust invasion in Utah, Union Pacific’s
Samuel B. Reed wrote to his wife Jennie on June 14, 1868, noting that
“Grass Hoppers distroying thousands of acers [sic] of grain Mormons
wage war upon them drive them into water ditches then as they pass
over some full prepared for the purpose they catch them in sacks and
baskets and thus incredible as it may seem destroy them by the thou-
sands of bushels. . . .” Then, too, political pressure mounted against
polygamy and an increasing number of Mormon patriarchs began to
fret about federal authorities who would prosecute violators. However,
Young and his church officials could only control so much outside of
Utah. One of those uncertainties was the exact route that the railroad
would take within Utah Territory. That route would be determined in
boardrooms far distant from Utah. The result of those deliberations was that Promontory, rather than Salt Lake City, was destined to be on the transcontinental railroad. To understand how Promontory became the most celebrated location in the West in 1869, we need to closely consult the maps wielded by the railroads themselves.