

ZION NATIONAL PARK ROADS AND BRIDGES
Zion National Park
Springdale vicinity
Washington County
Utah

HAER NO. UT-72

HAER
UTAH
27-SPDA.V,
9-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

REDUCED COPIES OF MEASURED DRAWINGS

HISTORIC AMERICAN ENGINEERING RECORD
P.O. BOX 37127
WASHINGTON, D.C. 20003-7127

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Location: An approximate 465-mile "circle tourism route" is described within Washington, Kane, Iron, and Garfield counties in southwestern Utah and Coconino and Mojave counties in northwestern Arizona. The circle route is enclosed by AZ 67 from North Rim Grand Canyon to US 89A and US 89 north to UT 12 and Bryce Canyon; west along UT 14 to Cedar City, Utah; south along Interstate 15 to UT 9 and UT 59; and east along AZ 389 to Fredonia.

Date of Construction: Dates considered range from the 1860s to the 1950s. Dates for specific highways are contained in the text.

Structure type: Vehicular highways, bridges, associated structures.

Use: Vehicular highways

**Designer/
Engineer/
Builder:** Pioneers; County road departments; Bureau of Public Roads; Utah State Road Commission; National Park Service; Arizona State Road Commission.

Owners: County, state, and federal agencies.

Significance: The development of roads and bridges within Zion National Park and other parks and monuments of southwestern Utah and northwestern Arizona is a direct result of regional tourism promoted by the early railroads, National Park Service, and regional commercial organizations. The circle tourism route, first developed in 1922 and continuing through today, was the organizing force which brought visitors to the regional parks and defined the requirements for early road systems.

Project Information: Documentation of the Zion National Park Roads and Bridges is part of the NPS Roads and Bridges Recording Project, conducted in the summer of 1993 under the co-sponsorship of Zion National Parks and HABS/HAER.

Michael F. Anderson, HAER Historian, August, 1993.

INTRODUCTION

Today's 146,000-acre Zion National Park is carved from the southwestern edge of the American Southwest's great uplift area, the Colorado Plateau. Within the early twentieth century's conservation movement and its resultant Antiquities Act of 1906, President Howard Taft proclaimed this scenic wonderland the eighth of our country's national monuments. Named Mukuntuweap National Monument upon its establishment in 1909, the obscure reserve slumbered through a decade of regional development before awakening in 1919 as a greatly-enlarged Zion National Park, the number one attraction in Utah's circle tourism route.

This history concerns the regional development THAT led to the establishment of a little known monument with a difficult name, and continues with the powerful forces that shaped it into one of our nation's most visited national parks. It is not concerned with the park's general or administrative histories, which have been told elsewhere.¹ Rather, this work attempts to explain the park's development within the contexts of exploration, pioneer settlement, transportation to the park and within the surrounding region, and tourism. Within these contexts, American Indians, early regional travellers, Mormon pioneers, state and federal road builders, and the Union Pacific Railroad assume major roles.

This history considers broadly the region encompassing southwestern Utah and northwestern Arizona; more specifically, Utah's Iron, Washington, Garfield, and Kane counties; and most especially the eastern half of Washington County. The broader region by the 1920s formed what came to be known in 1922 as the circle tourism route--the Union Pacific Railroad's name for the roads leading to the geological attractions at Zion and Bryce Canyon national parks, Cedar Breaks National Monument, and the North Rim of Grand Canyon National Park. The narrower region comprises Zion National Park, nearby communities, and park access roads. Beyond these geographical boundaries, broader concepts of settlement, transportation, and tourism are considered as they effected development in this isolated corner of the Southwest.

¹For an excellent overview history of the region, see Angus Woodbury, *A History of Southern Utah and its National Parks* (Salt Lake City: Utah State Historical Society, 1950). This is a revision and reprint of Woodbury's 1944 article on this topic in the society's publications.

For the best overall administrative and general history of Zion National Park, see Dena S. Markoff, "An Administrative History: Decision-making That Shaped Zion National Park, 1909-1981," a bound manuscript prepared for the Zion Natural History Association by Western Heritage Conservation, Inc., 1982, copies at Zion National Park (ZNP) library and in the park's archives.

Geography/Climate

The environment to a great extent determines this history of men and women who came to settle and much later witnessed development of a national playground. The land and its resources have always dictated the lifestyles, population levels, and--most important to this story--transportation routes of the people who passed and remained. In southwestern Utah the principal determinants are topographic and climatic diversity. Sandstone and volcanic mountain ranges tower to 10,000' and higher, offering timber and watersheds for numerous streams which flow through the semiarid valleys below. Forested as well as slickrock plateaus eroded into fantastic shapes avail summer livestock ranges, yet once posed bewildering challenges to people moving about the region. Below where the land is flat or nearly so, climates ranging from subtropical to semiarid make dry farming risky business, but reward persistent irrigation farmers with lush fields of grain and vegetables and wonderful orchards. The Pine Valley Mountains and Hurricane Cliffs, the Markagunt Plateau and Vermillion Cliffs, the Escalante Desert, Kaibab Plateau, and Arizona Strip--colorful names abound for a magnificent region with imposing transportation barriers.

It is a hard yet beautiful country. In that assessment lies its history. For several thousand years prior to the relative affluence of the early twentieth century, men and women would contend with the former attribute and necessarily disregard the latter. American Indians who knew the land better than others who have come since were--by all accounts, including their own--impoverished, weak, and preyed upon by stronger nations that controlled more amenable territories. European-Americans superimposed a new culture, yet struggled equally for half a century before economic development served up a modicum of prosperity. When these white pioneers arrived it was for good reason a remote region, one of the last explored in the continental United States. Not until they had ensured survival and by doing so constructed roads would they and the rest of the nation look around and note that here was a scenic wonderland.

AMERICAN INDIANS POINT THE WAY

Our region's human history begins with the occupation of successive families, bands, and tribes of American Indians who preceded European-American explorers, settlers, and tourists by several thousand years. Schooled students of early residents and descendent American Indians tell us that nomadic bands first exploited this area surrounding today's Southwestern parks

thousands of years ago. Clues to early regional settlement begin with the Basketmaker Period of the Anasazi Culture circa 200 B.C. and become more plentiful with the onset of the Pueblo periods by A.D. 600. Pueblan Anasazis populated a large segment of the Southwest which included portions of today's Colorado, New Mexico, Arizona, and Utah. They farmed, hunted, collected wild plants, and--upon their departure by A.D. 1300--left hundreds of cliff-dwelling sites strewn with pottery, woven goods, tools, and rock portraits for later generations of Indians and pioneers to ponder. The southwestern edge of the Colorado Plateau marked the western extreme of Anasazi occupation, yet dozens of their ruins found within the Zion National Park area alone attest to their presence and cultural longevity.

An occupational hiatus of no certain duration intervened between the Anasazis' departure and the arrival of Southern Paiute bands. When the first whites came through the territory in the 1770s and 1820s they noted a sizeable population upon the plateaus and within the valleys of northwestern Arizona (the Arizona Strip), eastern Nevada, and southwestern Utah. These people came to be known as the Shivwits, Uinkarets, and Kaibabits of the Arizona Strip; the Comoits of today's Cedar City area; the Tonaquintits along the Santa Clara River; and the Parrusits of the Virgin River valleys. All employed survival strategies focused on food production: hunting of small mammals, reptiles, and birds; collection of plants, roots, and berries; irrigative cultivation of small plots of corn, squash, and beans, wheat, pumpkins, potatoes, and watermelons; and minor trade with stronger neighboring bands of Utes, Navajos, and Mojaves. Despite their poverty, mentioned by nearly all of the first whites to the area and lamented by the people themselves, the Parrusits band alone in the mid-nineteenth century numbered as many as a thousand along the Virgin River west of Zion National Park. The last Parrusit Indian died by 1950.²

Historians of recent years have developed a keen interest in the travel patterns of the first southwestern Americans. For example, it is now recognized that Pueblan peoples at Chaco Canyon in northwestern New Mexico controlled an important travel

²Woodbury, 115-19, 121; George R. Brooks, ed., *The Southwest Expedition of Jedediah S. Smith: His Personal Account of the Journey to California, 1826-1827* (Glendale, CA: Arthur H. Clark Company, 1977), 56-58; Andrew Kall Larson, "Irrigation and Agriculture in Washington County," in Hazel Bradshaw, ed., *Under Dixie Sun: A History of Washington County by Those Who Loved Their Forebears* (Daughters of the Utah Pioneers, Washington County Chapter, 1950), 36.

hub, with partially-paved roads emanating from the canyon into northern Arizona, southwestern Colorado, and other points east and west. Abundant evidence for more recent travel routes is written in many exploration narratives which noted American Indian guides leading the first European-Americans throughout the Southwest. Other examples of mobility are found at Grand Canyon, where nearly all modern trails originated as Anasazi and later Havasupai foot paths. The same can be said of many trails later improved in the region's other national parks. American Indians moved incessantly and knowingly between summer and winter homes, among the locations of regional resources, and to and from their neighbors' lands to raid or trade. The white man's image of tribes fixed to the territories they controlled has always been incorrect, and for hundreds of years has caused unending hardship to America's tribes through our nation's alternating policies of separation, containment, and allotment in severalty.

These ambulatory habits and keen topographical knowledge are attributed to the bands of the larger region and the area immediately surrounding Zion National Park. Ute guides led Dominguez and Escalante nearly the entire distance from eastern Utah to the Utah Lake area. Southern Paiute bands gave them directions through the country immediately west of Zion and back toward their homes in Santa Fe. Jedediah Smith, in his fur trapping odyssey from northern Utah to the Pacific in 1826, interrogated Utes and Southern Paiutes for directions whenever he happened across their paths. Navajos of northwestern Arizona seasonally trekked north and west to raid along the Arizona Strip and in the Zion region. Southern Paiutes moved between the basin deserts and adjacent plateaus in their seasonal search for food and other resources. It is well to remember that a Paiute guided the first white man to Zion Canyon; a Paiute trail lies buried beneath the fading tracks of the first pioneer wagon road to ascend the upper Virgin River Valley; and Paiute foot paths led the first white explorers and settlers up the cliffs of Zion and Parunuweap canyons to the high eastern plateaus.³

Today's motorist glides atop the region's magnificently paved highways which connect near and distant towns as well as points of touring interest. In this transportation environment, it is a long and difficult enough mental leap to envision pioneers driving their wagons along rutted tracks. But the full story includes an earlier chapter of the first people to move through the region whose contributions were many. Although American Indians lacked the technology of later trail and road engineers, and created through use little more than worn paths which quickly

³ Woodbury, 123-25, 147; Brooks, 41, 45-48.

faded along with territorial dominance, their incipient role in "locating" (to borrow a modern engineering term) later important transportation arteries should not be ignored. Also, it is critical within this history to consider that people build to suit their perceived current needs and should not be judged for the simplicity of their creations. Early Americans satisfied their transport needs for centuries over simple trails. The arrival of white men, sedentary communities, and diverse economies would render trails "functionally obsolete," and inaugurate a new era of wagon and automotive roads. These, too, would be judged inadequate by later generations and be replaced by multi-lane earth, gravel, oil-mixed gravel, concrete, and asphalt superhighways.

EUROPEAN-AMERICAN EXPLORERS

The first European-Americans to the Southwest followed in the footsteps of American Indians, but of course were ignorant of well-established travel routes. Some tribes resented the intrusion. Journals of the early Spanish explorations abound with purposeful misdirections--a serious-comic game Indians played on unwelcome strangers to send them out of their territory and into that of their neighbors. Perhaps the most famous of these games was played with Coronado in his 1540-42 expedition to find the seven cities of gold. The many Southwestern tribes did not dissuade him of his goal, rather, they amplified the vision and sent him well into Kansas before he recognized the ruse. Students of American Indian history chuckle at Coronado's expense, but the anecdote is actually atypical of early white-Indian encounters. For the most part, American Indians tried to help the first whites find their way through the land and often guided them to the life-saving water holes as far as their own knowledge carried. Explorers used the topographical knowledge thus gained to make maps which would lead others to settle in the Southwest.

Spanish missionaries Escalante and Dominguez are acknowledged as the first European-Americans to visit southwestern Utah during their 1776-77 expedition to find an overland route from Santa Fe, New Mexico to the Spanish mission at Monterey, California. The fathers found two Ute Indian guides who led the party across Utah and the Wasatch range of mountains as far as Utah Lake. Others led the priests further south to Blackrock Springs in the vicinity of today's Milford, Utah, at which point they abandoned hopes of reaching California and turned to find a way back to Santa Fe. The return route led them southeast past today's Cedar City, from which point the imposing Pine Valley Mountains on the west and Hurricane Fault on the east funneled the party south

along Ash Creek and the future sites of Kanarraville, Pintura, and Toquerville to the tripartite confluence of Ash and LaVerkin creeks and the Virgin River. From this point, the expedition labored several days south searching out a route over the Hurricane Fault before continuing on their difficult journey east across southern Utah and the Arizona Strip toward home.⁴

Escalante and Dominguez encountered Parrusits Indians cultivating crops near today's Toquerville. They acquired unhelpful (or playful) guides near the confluence of the water courses and passed the region with difficulty.⁵ Several possible reasons account for the fathers missing Zion Canyon only 25 miles to the east. First, their mission had been to find a road to California and, failing that, a route which would take them safely home. Moving up the Virgin River to Zion Canyon, even if they had known of the route, would not have served their purpose. Second, the Parrusits considered Zion to be the home of several of their gods, not all of whom were friendly, and it seems unlikely they would have pointed the fathers in that direction even if there had been a helpful route home.⁶ And third, the topography of the region, from the Great Basin's edge south of Kanarraville (the "Black Ridge") to the more level high desert southeast of St. George, encouraged north-south travel with few digressions to the east and west.

No one is known to have retraced or paralleled the Spanish fathers' route until Jedediah Strong Smith passed this way in 1826. Smith left the annual fur rendezvous at Bear River, Utah, on 7 August 1826 with 18 men to hunt for beaver, adventure, and an overland route to the Pacific coast. He crossed the Wasatch range to the Cove Fort area above today's Beaver, Utah, and made the same mistake as Escalante by following the Beaver River into the desert before turning back and following the well-watered route along Ash Creek and the Hurricane Fault to the Virgin River. Smith also encountered Parrusits and found signs of irrigation along the Virgin from LaVerkin Creek down to the Santa Clara River at St. George, but despite the fact that beaver were reportedly plentiful along the Virgin in the mid-nineteenth century, he did not venture upstream toward Zion Canyon.

⁴Woodbury, 123-25; H. Lorenzo Reid, *Brigham Young's Dixie of the Desert: Exploration and Settlement* (Zion Natural History Association, 1964), 13-14.

⁵ Woodbury, 124-26.

⁶ Ibid., 112-13; "Statement of Elijah C. Behunin," transcript, 21 August 1930, Zion Codex, ZNP library.

Instead, he continued downstream along the Virgin River through its narrows to the Muddy River, thence to the Colorado River and Mojave Indian villages north of today's Needles, California. Crossing the Colorado at this point, he continued west to San Bernardino and Los Angeles, thus completing the task of finding a route to the Pacific first attempted by Dominguez and Escalante.⁷

The significance of the explorations of the Spanish missionaries and Jedediah Smith rests with their location of what would develop into the Old Spanish Trail in the years 1829-1848. Soon after Smith's journey, trappers Ewing Young, William Wolfskill, and George C. Yount--Smith contemporaries and acquaintances in the fur trade--made similar trips and passed along the Virgin River on their way to old California. Others followed, until by 1844, U.S. Army Captain John C. Frémont could describe the route as a well-defined trail over which annual caravans moved trade goods west from as far away as St. Louis and returned mules, horses, and Southern Paiute slaves east from California, Nevada, and southern Utah. By that year, however, the trail (well on its way toward "road" status) had bypassed the route down Ash Creek and followed instead a route to the west of the Pine Canyon Mountains though Mountain Meadows to the Virgin River at or beyond the Santa Clara River.⁸

The Old Spanish Trail caravan by 1848 numbered some 200 traders and stretched in a dusty line for more than a mile. Traffic for the first time consisted in that year of men driving wagons as

⁷ Brooks, 56-65; Woodbury, 126-27. Brooks' book is based on the discovery in the 1970s of Jedediah Smith's journal for this trip completed in 1826-27. The journal is printed word-for-word and heavily annotated by Brooks, a Smith scholar, thus it is a definitive and detailed account of Smith's travels in this year. Woodbury, on the other hand, gives a good concise summary of the journey through Utah.

See also "Statement of Elijah C. Behunin" for mention of beaver in the Virgin R. in the 1860s. Mormon pioneer John D. Lee also reported plentiful beaver in the Virgin. It seems odd that Smith and other trappers who followed would not explore the Virgin to its source in their pursuit of skins, and thus discover Zion Canyon.

The Virgin River has several sets of "narrows." Those referred to here are the narrows below St. George where Interstate 15 enters northwestern Arizona.

⁸ Woodbury, 128-30; Reid, 25-42, *passim*. Reid's account of the development of the old Spanish Trail is the best referenced in this study.

well as men on foot or horseback leading pack mules and captives.⁹ The resultant track in 1848 through and along Utah's high deserts, valleys, and rivers must have resembled a typical dirt road of the early twentieth century. This track would be improved when the first wave of European-American settlement washed over the Southwest in the years immediately following.

MORMONS SETTLE SOUTHWESTERN UTAH

First European-American settlement consisted of families of the Church of Jesus Christ of Latter Day Saints (respectfully know as Mormons), and the colonization pattern is unique in United States history. Led by Church President Brigham Young, thousands struck west from Nauvoo, Illinois in the mid-1840s to find land outside the United States where they could escape religious intolerance. They reached the unpromising valley of the Great Salt Lake in 1847 and called it home, but Young immediately sent explorers in all directions to find promising sites for satellite towns. Young envisioned a Mormon State of Deseret, with largely self-sufficient towns linked through internal trade. His followers were to settle the Southwest, establish land rights, and dig in before other European-Americans arrived and tried to usurp the few pleasant valleys and perennial streams available in the arid region. Ultimately, the secular State of Deseret would fail, cut short by the United States government which, ironically, acquired the Southwest from Mexico in 1848. But the religious and cultural state would succeed despite a half century of grueling hardships, and persist through the twentieth century as the region's dominant social, economic, and political force.

Mormon missionaries immediately pressed south and southwest from the Great Salt Lake into the still more arid regions of southern Utah, Nevada, and California. The Spanish and later Mexican governments, which nominally controlled the region for several hundred years, had not established a single settlement along the Old Spanish Trail to connect Santa Fe with the mission at San Gabriel, California--a distance of over 1000 miles. Mormon pioneers in a space of only eight years settled strategic locations all along the trail. By 1856, dozens of towns sprouted south of Salt Lake along the line of the trail including Parowan (1851), Cedar City (1851), and Santa Clara (1854, later site of St. George), Utah; Littlefield, Arizona; Las Vegas, Nevada; and San Bernardino, California (1850). By the same year, men regularly freighted supplies along the route and delivered mail between the latter town and Salt Lake City. Mormon regional

⁹ Ibid., 39-40.

dominance had become so firmly entrenched by 1856 that the name "Old Spanish Trail" passed out of usage, and the route--now a road--became known as the Mormon Trail.¹⁰

The significance of the Old Spanish Trail and Mormon Trail to this history lies in the fact that it brought Mormon explorers into the region that would later encompass the circle tourism route. The Mormon Trail continued to develop through the nineteenth century as an interstate wagon road, but settlement patterns in southern Utah caused a return of most local traffic to the route first located by Escalante, Dominguez, and Smith. Within the short span of a decade, Mormon colonies established along Ash Creek and the Virgin River would ensure the gradual evolution of a permanent road between Salt Lake and St. George, near Utah's southern border with Arizona. In the nineteenth century this road would remain tortuous, even for the rut-tolerant horse-drawn wagons of the time, but by the twentieth century and the onset of the automobile age, it would become Highway 91 and later Interstate 15. Mormon settlement in these same years would also ensure the development of a road connecting this main north-south transportation artery to the towns of the upper Virgin River as far as the great transportation barrier: Zion Canyon.

In December 1849, Mormon explorer and colonizer Parley P. Pratt led a party south from Salt Lake City to explore southern Utah. Pratt's group followed the Mormon Trail as far as the later site of Cedar City, then continued south tracing the path of Smith and the Spanish fathers along Ash Creek and the Virgin River to Santa Clara Creek. Pratt and his men returned to Salt Lake in January 1850 by way of the Mountain Meadows on the west side of the Pine Valley Mountains, thus following two early variations of the Old Spanish Trail. His report of rich iron deposits led Apostle George A. Smith and a colonizing party to settle the town of Parowan (Pah-o-an, an Indian word for "bad water" in reference to the nearby Little Salt Lake) in January 1851. This town became known locally as the "mother community of southern Utah," as settlers from the north arrived and were as quickly dispatched to colonize points further south. By the fall of that year, men from Parowan moved 20 miles south to exploit the rich coal deposits nearby and founded the town of Cedar City.¹¹

¹⁰ Ibid., 45-52; Woodbury, 130-32; Rulon Knell, "The Old Spanish Trail," in Bradshaw, 21-22.

¹¹ Reid, 57-61; "Parowan: Southern Utah's First Settlement," brochure c.1990, published by the town of Parowan, copies available at the Cedar City information center; Woodbury, 136.

John D. Lee, another Mormon explorer and colonizer, made a farther reconnaissance of the Virgin River country in January 1852. Lee's exploring party brought along four wagons when they left Parowan, and following Pratt's route managed to get them as far as the Black Ridge south of Kanarraville. This was the first recorded instance of men trying to move wagons south of Cedar City, and the first of many to be blocked by the ridge of volcanic rock which forms the southern edge of the Great Basin. Lee continued on horseback below the ridge and moved down Ash Creek and the Virgin River to the later site of Santa Clara before returning to Parowan in February 1852. He confirmed Pratt's report of favorable terrain and wrote to Brigham Young of his enthusiasm to settle in the region.¹²

The explorations of Pratt and Lee between 1849 and 1852 illustrate a pattern of Mormon settlement which began in the mid-1840s with the Mormon Battalion's trek across the Southwest during the Mexican-American War. Brigham Young continually sent parties of trusted men to search out settlement sites in unexplored territory. These men were expected to understand the "wasteland settlement strategy," that is, the patriarch's plan to find or create oases in the deserts and subsequently call selected church members with specific skills to establish towns at the most promising sites. Within the overall strategy, Young would often choose distant sites first--like San Bernardino, California--then determine the intervening strategic points where towns serving as way stations would aid in expansion. Once the faithful had established a string of supporting towns, local leaders usually filled arable gaps or expanded laterally into adjacent country. In this manner, the skeleton of the later circle tourism route would be formed by the roads connecting the inhabited dots, with north-south roads tracing the routes of southward expansion and east-west roads usually representing lateral settlement.¹³

¹² Woodbury, 138-41; Reid, 87-88.

¹³ Some east-west routes also represented avenues of expansion. for example, the very early road which ran east from Parowan to Panguitch (later superseded by Highway 14 along a more southerly alignment) led to the settlement of the Sevier and East Fork Virgin rivers corridor, and the east-west route of Jacob Hamblin from Santa Clara all the way east to the Crossing of the Fathers and Lees Ferry opened up development across southern Utah. Nearly half of the region's towns, however, including those which led to Zion Canyon, represented backwaters of the expansive current flowing south to Arizona, California, and Mexico. See Michael F. Anderson, "Joseph City, Arizona: Survival

In pursuit of his vision, Young's standards for judging a site "promising" were decidedly low, and secondary to his settlement strategy. A bit of flat ground with a nearby spring or water course typically sufficed, and if the church explorer found a particular resource of value to Deseret, such as iron or coal, settlers would surely follow. Zealots like Parley Pratt and John D. Lee exploring south from Cedar City shared these standards, or the vision, thus, their reports of the Ash Creek and Virgin River country were favorable and ensured later settlement. Generations of obedient Mormon settlers called to make a living in these places would be expected to confirm their leader's judgments, and they did so despite the difficulties. By the year of Young's death in 1877, more than 350 Mormon towns would be founded in this manner in the American Southwest.

CONNECTING THE SETTLEMENT DOTS

The reports of Pratt and Lee together with the decisions of Brigham Young directed settlement south from Parowan and Cedar City. The discovery by the middle 1850s that southern Utah's subtropical climate favored all manner of orchards, and could produce cotton with a little care, assured an accelerated placement of towns along the Virgin River and the establishment of Utah's "Dixie." Between 1851 and 1863, some twenty or more towns and smaller settlements sprouted from Cedar City south to St. George and from Toquerville east to Zion Canyon. Along the north-south axis which would one day become Highway 91, these included Kanarrville (1861), Harmony (1852, later New Harmony), Bellevue (1858, later Pintura), Harrisburg (1859), Washington (1857), Tonaquint (1854, later Santa Clara), and St. George (1861). Extending east of Anderson's Ranch to Zion Canyon along the route which would become Highway 17 and Highway 9 there were Toquerville (1858), Virgin City (1859), Mountain Dell (1861), Duncan's Retreat (1861), Northrop (1862), Grafton (1859), New Grafton (1862), Adventure (1860), Rockville (1862), Springdale (1862), Shunesburg (1862), and Zion (1862)¹⁴ Other towns later

of a Mormon Settlement in the Little Colorado River Valley, 1876-1884," research paper, 1989, Special Collections, Cline Library, Northern Arizona University, Flagstaff, Arizona and "The Settlement of Pine, Arizona: 1876-1900," 1991, author's possession, for further illustrations of this settlement pattern.

¹⁴ Dates for settlement foundings were obtained from Bradshaw, 117-27, 255, 281, 346, 348, and Woodbury, 143, 145-48. Many of these settlements were at first experimental, consisting of only a few families in many cases. Also, town sites often

filling out the near region and which survive today included Leeds (1867), LaVerkin (c. 1898), and Hurricane (1906).

Nearly half of the above-named settlements and many more not mentioned failed to survive for more than a few years. Most of the problems derived from the establishment of isolated agricultural communities along Southwestern desert streams. Malaria, typhoid, diphtheria, and other waterborne diseases afflicted settlers who drew their culinary water from the river, or from irrigation ditches which incidentally flowed past corrals and pastures. Drinking water from the Virgin River lacked iodine, which added goiter to the list of hardships. The flow of the rivers and streams posed the greatest challenges, however. Early residents often settled too close to the banks and were washed out with the season's first good flood. Floods of 1862 scoured a number of communities from the Virgin River drainage, including old Grafton. Having learned this first lesson, settlers still had to contend annually with an intransigent, silt-laden river which persistently destroyed or circumvented diversion dams and clogged irrigation ditches. These problems along with limited irrigable land crushed some communities, threatened others throughout the late 1800s (especially in the 1850s and 1860s), and kept community populations low well into the twentieth century.¹⁵

With the difficulties these first settlers faced merely to survive, they paid little attention to roads other than to establish crude paths wide enough to allow a wagon to pass. In 1852 and again in 1854, John D. Lee and Brigham Young considered the feasibility of building a road from Cedar City to the Virgin River settlements, but costs to build down the Black Ridge appeared prohibitive. Still, a road of some kind had to be built to serve the settler's needs for communications and supplies. Young sent a young missionary, Nephi Johnson, to scout the upper Virgin Valley in 1858. Later in the year, Johnson along with his brother Seth and seven other men spent a month building a wagon

shifted due to floods or other causes. For example, floods inundated Grafton in 1862 and the inhabitants immediately settled "New" Grafton on higher ground, while residents of Adventure abandoned their town to help found nearby Rockville.

¹⁵ Reid, 107, 116-17. For a good look at the difficulties of irrigation farming in southwestern Utah, see Larsen in Bradshaw, 35-60, *passim*. Mormon colonizers throughout the Southwest faced these same problems along desert streams, and they led to an appalling mortality rate among nascent towns. See also Anderson, "Joseph City, Arizona."

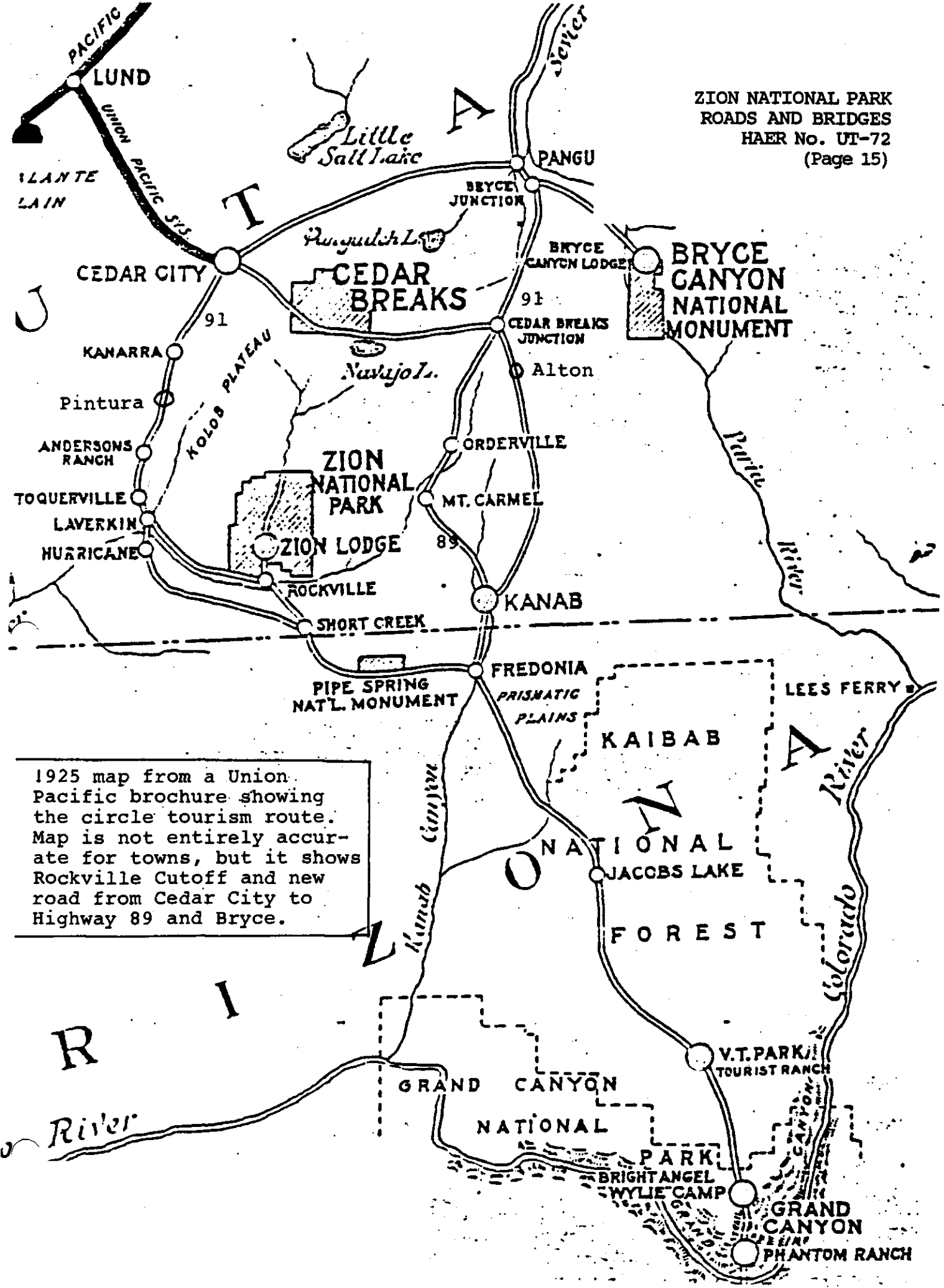
road from Toquerville east over the Hurricane Fault and a few miles farther to the mouth of North Creek, the site of Virgin City. This road was called "Johnson's Twist" or the Johnson Road and served for nearly fifty years as the main thoroughfare over the fault toward Zion Canyon.¹⁶

With the outbreak of the American Civil War in 1861, Brigham Young recognized the advantage of accelerating cotton production in Utah's "Dixie" and called hundreds of followers to reinforce the southern Utah missions. This migration south led to the completion of a "tough road" from Cedar City to Toquerville under the supervision of Washington County's first road supervisor, Peter Shirtz (whose brothers helped Johnson build the Twist). The principal challenge remained the volcanic Black Ridge, which formed cliffs above a deep gorge known as "Peter's Leap" and required wagons to be disassembled and lowered by ropes. Erastus Snow, church leader of the southern settlements, urged nearby townspeople to eliminate this obstacle and the result was the Black Ridge Dugway, a nasty piece of work that still required users to unload their wagons to negotiate parts of it. In combination with Johnson's Twist, the Black Ridge Dugway completed a several-hundred-mile passageway from Salt Lake City to Virgin City. This work was completed in 1862-63, the same years that local residents finished a connecting road from the new settlement at St. George to Toquerville, and others wore wagon ruts from Virgin City to the recently-settled upper Virgin towns of Rockville, Grafton, Springdale, and Shunesburg.¹⁷

As colonists along Ash Creek and the Virgin River painstakingly completed their crude wagon roads, others began to settle in south central Utah and struggle with similar problems of survival and transport. In 1852, John D. Lee and others crossed the topographical barrier from Parowan and Paragonah to the site of Panguitch, then explored the Sevier and East Fork Virgin rivers to the south. Following in Lee's path, Mormon colonists crossed the Markagunt Plateau, struck south, and founded a string of communities along the rivers as far as Kanab. These towns roughly paralleled those south of Cedar City, but were separated by some of the most rugged country in the western United States. Those which have survived include Alton (1865), Glendale (1864), Orderville (1871), Mt. Carmel (1864), and Kanab (1864). Late nineteenth century and early twentieth century travellers along the road connecting these towns described it as one of many

¹⁶ Woodbury, 139, 144, 147-48; Bradshaw, 268; Reid, 101.

¹⁷ Ibid., 101, 127-28; Althea G. Hafen, "Bellevue (Pintura)," in Bradshaw, 357.



1925 map from a Union Pacific brochure showing the circle tourism route. Map is not entirely accurate for towns, but it shows Rockville Cutoff and new road from Cedar City to Highway 89 and Bryce.

variations, often impassable, and nothing more than a "deep-rutted wagon road."¹⁸ The road from Parowan to Panguitch would be superseded along a new alignment farther south and become today's Highway 14, the northern leg of the circle tourism route. The road from Panguitch to Kanab would evolve into Highway 89, the circle's eastern leg.

One last road of considerable importance to the development of southwestern Utah and Zion National Park was located between 1858 and 1860 by Mormon missionary and trailblazer Jacob Hamblin. Brigham Young often called Hamblin, one of the first settlers at Santa Clara in 1854, to explore unknown regions and just as often to work among the Indians and retain their friendship. By the late 1850s he had developed a trail which extended east and west of Pipe Springs, Arizona, a cattle ranch first settled in 1858. To the east, the trail skirted the later sites of Fredonia, Arizona (1884) and Kanab, Utah, then continued along the Vermillion Cliffs across the Paria River at the "red bluffs" to the Crossing of the Fathers on the Colorado River. To the west, the trail passed Short Creek (today's Colorado City) and continued to Virgin City and Toquerville, describing a route that later developed into a road west of Smithsonian Butte and down into the Virgin River Valley (the Rockville Shortcut). A portion of this trail from St. George to Kanab developed into a wagon road by 1871.¹⁹ With broad variations, Hamblin's entire trail a century later would describe Utah Highway 59, Arizona Highway 389, and U.S. Highway 89 as far as Lake Powell.

¹⁸ Adonis Findlay Robinson, ed. and comp., *History of Kane County* (Salt Lake City: Utah Printing Company for Kane County Daughters of Utah Pioneers, 1970), 6-7, 104, 302-03, 420, 445, 457; Woodbury, 141-43; A. Milton Musser, *Deseret Evening News*, 21 September 1870, transcribed in "Correspondence, Fort Kanab, Sept. 10, '70," *Miscellaneous File*, ZNP archives.

¹⁹ Robinson, 99. Jacob Hamblin was the most active and significant of all Mormon explorers, and his influence extended far beyond the borders of southern Utah. Hamblin scouted a variation of his east-west route around the north face of the Kaibab Plateau and down into House Rock Valley on to Lees Ferry, which he located. Lees Ferry would serve as the principal link to Mormon settlement of Arizona and Mexico in the 1870s and 1880s. Hamblin also negotiated the treaty which ended the Navajo wars of 1865-1870, served as missionary to the Southern Paiutes and mediator for wider Mormon-Indian relations which smoothed Mormon settlement in the Southwest, guided John Wesley Powell in his surveys of the arid regions, and assisted Powell's second exploration of the Colorado River.

EARLY REGIONAL ROAD BUILDING AND MAINTENANCE

The roads, trails, and routes connecting southwestern and south central Utah towns served as nothing more than passable thoroughfares throughout the nineteenth century. Still, the roads fit the needs of the time. Horse-drawn wagons rolling along at a few miles per hour required no more than a clear path devoid of large boulders. Grades of 20 percent or more in spots (as along the Black Ridge north of Pintura) might require unloading the wagon and walking the team uphill, or tying a log to the rear as a brake going downhill, but there was nothing to be done about it. Road equipment consisted of picks, shovels, and wagon teams, and only so much could be done to level a grade or smooth a roadway with these tools. Freighters and others who had to be on the road gave themselves plenty of time to get around and expected to do some road building and repair along the way. Most town residents walked, rode a horse, or stayed close to home.

The political nature of road maintenance also kept southern Utah roads in primitive condition for half a century. Interestingly, one of Deseret's first officers, appointed by the legislature of the independent state in 1849, was Surveyor of Highways Joseph L. Heywood. Brigham Young clearly understood the importance of roads, but immediate needs favored improvements in the more populated Salt Lake region and to roads leading east to the industrial states. Still, state leaders passed laws outlining state, county, and city road responsibilities and establishing a system to pay for roads through poll and property taxes by 1851. These laws carried forward to the Utah territorial legislature when the United States absorbed Deseret in 1850. Unfortunately, the territorial treasury had next to nothing in it during the 1850s and politicians allotted less than \$10,000 to road building and maintenance during the entire decade, none of which went to southern Utah. The territory targeted \$224,000 (56 percent of all appropriations) in the 1860s for roads, but all of this too went toward road improvements in the fast-growing Salt Lake area. In the 1870s, the territory spent only \$16,000 for roads and formalized the de facto policy of leaving road building and repairs to the counties and local users.²⁰

On the federal level, the 1850s were great years for western road building as the Congress eagerly sought to explore and develop territories gained from Mexico in 1848 following the Mexican-

²⁰ Ezra C. Knowlton, *History of Highway Development in Utah* (Utah State Road Commission, [1963]), 12-16, 55-57, 73.

American War. Military explorers and engineers like John C. Frémont and Edward Beale combed the West seeking the best transcontinental route. Unfortunately, Utah netted only a \$25,000 grant in 1854 to improve the Mormon Trail and this money also disappeared in the near vicinity of Salt Lake City. The grant represented the only federal road building aid to Utah in the nineteenth century. The federal government generally abandoned the road building business soon after 1860, and antagonisms over polygamy and political autonomy soured relations between Utah and Washington D.C. until the 1890s, which destroyed any hopes of receiving special aid for roads.²¹

Clearly, the only hope of road improvements south of Cedar City, east of St. George, and north of Kanab during the latter half of the nineteenth century rested with the southern counties. By state law, the counties could impose a poll tax: a form of taxation with antecedents in the ancient and coercive Roman Empire whereby the government could require from each able-bodied man one day's labor per year or \$1.50 in lieu of labor. Then as now, it was hard to extract a day's labor from one who had other things to do, and almost no one in the southern communities had cash in those days. Counties did collect a little in property taxes, however, and the territory did contribute very small amounts, so the roads could be maintained in a passable if unimproved condition.²²

Nothing occurred to change this situation in southern Utah until the end of the first decade of the twentieth century, but distant voices of a new, progressive era began to filter into the region by the 1880s. The first of the road dissidents were, oddly enough at first glance, bicyclists, who organized the League of American Wheelmen in 1880. They demanded smoother roads for their weekend biking and were quickly joined by influential purveyors of the horseless carriage who formed the National League of Good Roads in 1892. This league helped spawn the Department of Agriculture's Office of Road Inquiry (1893) which marked the federal government's reentry into the field of road development. This office would evolve into the Office of Public Roads (1905), the Bureau of Public Roads (1919), and today's Federal Highway Administration. The national league of auto enthusiasts also encouraged dozens of state "good roads associations," which lobbied incessantly for road betterment in their states, published road maps, and put up road signs for a

²¹ Ibid., 38-41.

²² Ibid., 15, 19, 70, 78, 83.

growing number of motorists.²³ Nationally, a period of general economic affluence coupled with the onset of mass-produced, relatively inexpensive automobiles portended revolutionary changes for America's road systems.

Despite the early rumblings for better roads in other parts of the nation and growing federal interest, the State of Utah and federal government spent next to nothing on road construction and maintenance in southern Utah between 1890 and 1909. This pattern began to change in 1908, however, when Utah sponsored its first "good roads" rally and Governor William Spry climbed on the bandwagon. Spry became president of the Utah Good Roads Association in 1909, directed another convention the same year, and remained a road booster through the 1910s paying especial attention to the southern part of the state. Also in 1909, Utah formed its first road commission and passed laws which allowed the use of convict labor for road work. A few more years remained for improved transportation to reach southern Utah, but the state clearly had entered the national current.²⁴

MUKUNTUWEAP NATIONAL MONUMENT AND THE PUSH FOR BETTER ROADS, 1909-1920

These conditions and prospects for southern Utah's roads prevailed when President Taft proclaimed the 16,000-acre Mukuntuweap National Monument in 1909 and placed it in the care of the General Land Office. The intent, as with other creations of the 1906 Antiquities Act, was to set aside a scenic yet "worthless" parcel to protect it from despoliation. U.S. Deputy Surveyor Leo A. Snow in 1908 found Zion Canyon to be, in fact, unsurveyable, and in his recommendation that the lands be reserved uttered the requisite phrase that it was "as far as

²³ Ibid., 118; *Arizona Good Roads Association Illustrated Road Maps and Tour Book* (*Arizona Highways Magazine*, 1987; reprint, Prescott, AZ: Arizona Good Roads Association, 1913). The Good Roads publication is a fascinating slice of early twentieth century road "enthusiasm," and an excellent historical source for the roads and road conditions in 1913 Arizona. Unfortunately, the author did not find a similar publication for the State of Utah.

See Truman R. Strobridge, comp., "Preliminary Inventories: Records of the Bureau of Public Roads," a bibliographic guide, National Archives, 1962, for an excellent summary of the BPR's evolution.

²⁴ Knowlton, 122, 126, 130, 135, 141.

known worthless for any agricultural or mining purposes." This sentiment essentially echoed the beliefs of local residents of Springdale and Rockville, who had long used the canyon for marginal grazing, seasonal crop production, and access to the eastern plateau country, but thought little of its commercial value and even less of its scenic attractions. Few interstate travellers hazarded the poor roads to tour the canyon unless they happened to be in the area, and not many more had even heard of this remote section of the southwestern Colorado Plateau much less one attractive canyon within. Too, John Wesley Powell's choice of a dubious and unpronounceable Parrusits Indian name (Mukuntuweap, its meaning long debated) for the canyon and the river running through it did not exactly excite the imaginations of potential tourists.²⁵

If Mukuntuweap was to join the community of national scenic attractions, it needed a lot of work. Access, promotion, and accommodations were the keys to tourism at the turn of the century, and tourism spelled development of early national parks and monuments. In 1909, Mukuntuweap lacked the keys, thus the development. This situation would change dramatically over the next ten years, prompting the U. S. Congress to expand the reserve's boundaries, change its name, and welcome it into the family of national parks. By 1919, when the 16,000-acre Mukuntuweap National Monument had become the 76,800-acre Zion National Park, initial solutions had been found to create a nascent tourist industry. Later developments would build on the early accomplishments of 1911-1917, and promote as well as accommodate tourist expansion.

Early Tourists and Roads

In 1909, near transport and access to Mukuntuweap National Monument remained essentially the same as in the early 1860s--by wagon, horse, or foot over deplorable roads. Not one automobile had ever hazarded the wagon ruts first worn by Nephi and Seth Johnson over the Johnson Twist and by the early settlers to the

²⁵ Acting Secretary of the Interior to the President, cover letter for the monument's proclamation, 1909, Zion Codex, ZNP library; Woodbury, 187-88. Locals in southern Utah had several names for the canyon, including Joseph's Glory, Zion, Not Zion (a geste on Brigham Young's declaration that the canyon was definitely "not Zion'), and Little Zion, but they never referred to it nor to the river as Mukuntuweap. Neither the local Mormon settlers nor the Parrusits Indians could figure out exactly what Powell meant by "Mukuntuweap."

upper Virgin River towns. There are few detailed accounts of tourist trips prior to this year, although locals estimated that perhaps a couple hundred people, most of them from upstate Utah, visited the canyon a few years later in 1912-1913.²⁶ These first visitors exhibited common characteristics found in most early visitors to the national parks and monuments: the patience and perseverance to reach their destination and the time to stay and make the experience worth the trouble.

An example of the perseverance--and the trouble--is found in the account of Wesley King, a member of the Salt Lake Commercial Club, who made the trip by team and buggy with his wife in 1911. King's irritation at the roads matched his appreciation for the scenic splendors along the way to Zion Canyon. King very likely arrived in southern Utah by riding the Denver & Rio Grande Railroad to Marysvale, where he rented his team and buggy for the 135-mile ride to the monument. He approached his destination from the northeast, along the still undeveloped pioneer road through Panguitch and Kanab. Of this portion of the road, he commented:

We lost our way and our tempers getting over the Sahara bordering Kanab [still called "the Sandhills" on today's maps]. A lone sheep herder saved us on the second morning out and we floundered into Kanab over twenty-four hours late, just as Uncle "D" Wooley was starting a posse of Indian scouts after us.²⁷

The Kings hired David Rust, a local good roads booster, to guide them to Mukuntuweap. They approached from the south of the Vermillion Cliffs, through Pipe Springs, and around Smithsonian Butte to the mesas overlooking Rockville. This route around Smithsonian Butte to the mesas above the upper Virgin River Valley dated to Jacob Hamblin's trail of the late 1850s, and had developed into a wagon road of sorts with a steep dugway

²⁶ G. E. Hair, divisional chief of the General Land Office, to the Commissioner of the General Land Office, Washington D.C., letter, 9 May 1914, in "Early History of Zion National Park," *Miscellaneous File*, history boxes, ZNP archives. This letter is also valuable for its description of the monument in the 1911-13 time frame. It is essentially a report similar to the later Superintendents' annual reports. The monument was under the management of the land office in its early years and land office agents visited several times a year while in neighborhood.

²⁷ Woodbury, 188, quoting the *Salt Lake Tribune*, 12 November 1911.

descending to Rockville by the late nineteenth century. In 1911, it was the only practicable way to get to Mukuntuweap National Monument from the east, as the nearest alternate route would have taken them on a long detour to St. George, thence north to Anderson's Ranch and Toquerville, thence east through Virgin to Rockville.²⁸

King enjoyed the monument, but left one parting admonition for the future of southwestern Utah:

Garfield, Wayne and Kane counties are sparsely settled, and until permanent roads are constructed into them, they will remain so. Washington and Iron counties have great natural resources and wonderful possibilities which will blossom into realities only when the transportation problem has been solved. Each county can do little by itself in road building. It is a state problem and must be worked out by our state officials.²⁹

If King and his wife had come to Zion from the northwest, their ride would hardly have been more enjoyable. They would have had two choices to reach the favored jumping off spot at Cedar City. They could have driven the entire way from Salt Lake City along the road which would become Highway 91 a few years later. Even in 1911 it was considered excellent as far as Cedar City (though it was tough to find gasoline) and motorists used it often by that year. Another option most often chosen by out of state visitors involved a ride on the San Pedro, Los Angeles & Salt Lake Railroad as far as Modena, Utah. From Modena, the King's

²⁸ The author explored this old route several times between 1 June and 30 July 1993. It is easily accessed today from Utah Highway 59 by turning north onto the state scenic backway, 8 miles west of Hillside, Utah, and following the well-graded county road which runs easily to the west side of Smithsonian Butte, then in a series of tougher curves and dips to the Old Grafton Road and Rockville. Today's 9-mile road from Highway 59 to Rockville is that which was reconstructed in 1925 as a park access road. Before that year it may have descended to the upper Virgin Valley at Old Grafton, where an old road cut can still be seen ascending the east side of Grafton Mesa. George Wharton James, in his *Utah: Land of Blossoming Valleys* (Boston: The Page Company, 1922), 190-91, notes F. S. Dellenbaugh's account of the road in 1903, where one had to hitch an extra team of horses to be pulled up a dugway to the more level terrain west of the butte.

²⁹ *Ibid.*, 189.

could have rented their buggy or taken the stage for the remaining 80 miles to the monument via Enterprise, Pinto, and New Harmony. This option bypassed Cedar City, but by 1916 a favored alternative was to detrain at Lund, Utah, and take an auto stage through Cedar City to Zion Canyon.³⁰

These approaches to Cedar City from the northwest were at least fair by 1911, but all routes led south to the Black Ridge impediment. The wagon road first completed in the early 1860s passed easily down the broad rolling valley south of Cedar City between Kanarraville and New Harmony, but the fun ended at the infamous volcanic ridge. Road crews had very likely worked on the dugway descending the basaltic hill to the lower valley and Pintura in intervening years,³¹ but the narrow, steep grade could not have been improved much. Most early freighters spent the night at Pintura to recover from the experience of descending the dugway or to gird themselves for the next day's ascent. Fifty years after its development, the road still hugged Ash Creek south of Pintura to Anderson's Ranch and Toquerville, then made its serpentine ascent of the Hurricane Fault along the Johnson Twist, topping out several miles east of Virgin. The remaining 20 miles to Springdale followed closely along the Virgin River, which had to be forded in countless places, even in 1911. In effect,³² this last road segment did not exist if the river was in flood.

³⁰ Hair letter, 9 May 1914.

³¹ The author explored the dugway area during June 1993, but did not walk its entire length. The grade is still there, to the east of today's Interstate 15 along Ash Creek and portions can be glimpsed from the interstate travelling north from Pintura.

³² Bradshaw, 357-58; Field observations, July 1993. The author followed portions of the old road along Ash Creek south from Pintura to the point where it leaves the creek and ascends the hills in the vicinity of the old Anderson Ranch northwest of Toquerville. The Anderson Ranch, sometimes referred to as the Echo Farm or Ranch, comprised the parcel of private property surrounding today's exit from Interstate 15. Today, one can follow or approach the old road from the north end of Toquerville along Springs Drive where a collapsed wooden suspension bridge about 1/2 mile up the road spans Ash Creek, but this is speculative. This entire route from Cedar City to Toquerville was replaced by 1925 with a modern surfaced road on the west side of the valley.

Mr. Clinton Isom of Hurricane, in a taped interview with the author, 3 June 1993, kindly pointed out a section of the Johnson

The early road from Springdale into Zion Canyon could be fairly described as more of the above. The earliest wagon road developed soon after the first settlers to Zion, or Little Zion as some called it, built their homes in 1862 near today's lodge. Elijah Behunin, whose father Isaac built the first home in the canyon, noted in 1930 that the old road followed the river from Springdale to the point where the canyon narrowed at the ancient landslide just upstream of today's North Fork Virgin River Bridge. At this point, variations of the road took to the steep talus slopes east of the river. The first grade went over the top of the slope and down to the flat bottom near the lodge site. Behunin and others who lived at Zion used carts made from wagons' rear running gears to make it up the steep grade. Later, they constructed a road segment through the slide area, still on the east side of the river and above today's Floor of the Valley Road but below the top of the talus slope.³³ For the rest of the century few used the road except to access seasonal homes and fields, or to drive cattle and sheep to the old Indian trail at the canyon's bend (today's East Rim Trail at Weeping Rock).

David Flanigan and his family improved the wagon road into Zion Canyon as far as today's Weeping Rock soon after perfecting their cable tramway, which ran from that point up the talus slope and cliff to the top of Cable Mountain on the eastern plateau. Flanigan built the cable system in 1901 to transport lumber from the plateau to the communities along the upper Virgin River, but

Twist above today's road which climbs the Hurricane Fault. The author later walked a portion of it and photographed the grade and one small segment of stacked-stone retaining wall. It was indeed a steep and narrow road, and was bypassed by a new road (not today's) in the 1910s.

The author and HAER team member Laura Culberson attempted to follow the old road from the top of the Johnson Twist to Springdale in June, 1993. We were able to follow much of the road and its many variations as it crossed and recrossed the river, but most of the road is on private land today. Too, later jeep roads obscure the original routes.

Mr. Wesley Dennett of Springdale, in a taped interview with the author 8 July 1993, confirmed the fact that the old wagon road tightly hugged the Virgin River in most places and crossed many times. He believes that the old road ran through Rockville as it does today, but followed property lines within Springdale, thus creating a maze of perpendicular turns through town.

³³ "Statement of Elijah C. Behunin," typescript, 21 August 1930, Zion Codex, ZNP library; Bradshaw, 346-47, 354; Reid, 217-18.

it also served as something of a regional aerial bridge to carry varied supplies, timber, and an occasional person between the Zion Canyon road and the trails above. He and successive owners operated the system and a lumber mill on the plateau until the mid-1920s, and gave the canyon road its principal reason for being until tourists arrived in the late 1910s.³⁴

In 1912, G. E. Hair of the General Land Office wrote that the road into Zion Canyon was

a long established county road, and county officials endeavor to keep same in good repair. Freshets often badly wash this road in sundry places, but road supervisors try to repair as soon as possible and, ordinarily, keep the highway in passable condition.³⁵

Hair added that he allowed county road crews to remove brush from along the road which they used as revetments along the river in attempts to keep the "highway" from being undermined. He thought to add that the roadway culverts and bridges were kept in repair and that the federal government need not spend money on its improvement. It is difficult to understand Hair's praise of the Zion Canyon road when one considers the state of southern Utah's roads at this time, and the unlikelihood that the most remote segment of road within the county would be well-maintained. Just a few years later, other writers would note that the road was poor, "scarcely more than a trail [and] to take an automobile over this road is impossible." Perhaps Hair was interested in presenting a positive portrait of the monument or saving money for the land office. Possibly, he had never driven an automobile, or had entered the monument on horseback.³⁶

³⁴ Bradshaw, 351-52; For a complete historical narrative of the cableworks, see Western Heritage Conservation, Inc., *The Outstanding Wonder: Zion Canyon's Cable Mountain Draw Works* (Zion Natural History Association, 1978).

³⁵ Hair letter, 9 May 1914.

³⁶ Ibid.; G. E. Hair to Commissioner of General Land Office, letter, 10 February 1911, Zion Codex, ZNP library; Howard H. Hayes to R. B. Marshall, Superintendent of National Parks, letter, 3 November 1916, in "Early History of Zion National Park," Miscellaneous File, ZNP archives; T. E. Hunt, Special Agent of the General Land Office, to the Commissioner of the General Land Office, Washington D.C., letter, 12 July 1916, Zion Codex, ZNP library.

Early Automobile Travel

Touring southern Utah by buggy or wagon in the years 1909-1912 was a gruesome enough experience, but touring the region by automobile at this time approached insanity--or exhibitionism. A clear example of the latter trait is found in the 1909 adventure of Edwin Dilworth "Uncle Dee" Wooley, an early Kanab cattleman turned regional tourist promoter by the 1890s. Uncle Dee accompanied John Young (Brigham Young's son), Buffalo Bill Cody, and some English nobility when they toured the North Rim of Grand Canyon in 1891 looking for a site to build a hunting lodge. He later formed the Grand Canyon Transportation Company and with son-in-law David Rust constructed the first trail from the North Rim down to the Colorado River and established Rust's Camp (the progenitor of Phantom Ranch). They also strung a suspension bridge across the river in 1907 to complete the Canyon's second and most popular rim-to-rim trail. He and Rust did everything they could to lobby for better roads and promote tourism to the area, and Wooley's idea to drive an automobile from Salt Lake City to the North Rim of the Grand Canyon typified their vision and efforts.³⁷

In 1909, no maps, no gasoline, and basically no automotive road existed from Provo, Utah, south along the line of today's Highway 89. The original pioneer wagon road which ran along the Sevier and East Fork Virgin rivers had improved little by that year, and residents of the southern towns like Kanab still waited months for freighted supplies to reach them from the north. Undeterred by these difficulties and warnings from everyone he knew, Wooley convinced his nephew, Gordon, to make the trip and they made preparations for the epic journey. They shipped gasoline down to Marysvale by train and cached it along the route at Marysvale, Circleville, Panguitch, Alton, Johnson, Kanab, Ryan, V. T. Park, and Bright Angel Point on the North Rim of Grand Canyon. Wooley made his own map of the route, noting the many gullies, dugways, sand hills, curves, and streams with intervening mileages. Then he sent a party ahead to "fix" the roads in Kane County (east of Zion) by filling potholes, small gullies, and washes; levelling high centers; and digging out rocks. When all was ready, Uncle Dee bade the party good luck and stayed behind.³⁸

Two vehicles set out from Salt Lake City on 26 June 1909, loaded with Gordon Wooley, his wife Ollie, their three sons, daughter, two friends, and a chauffeur. A roadster led the way, crammed

³⁷ Robinson, 185-92.

³⁸ Ibid., 101-102.

with axes, shovels, and other "road equipment" to fix the road ahead. The main party followed in a chauffeur-driven convertible touring car. The Salt Lake to Kanab segment required three days to transit, a distance that today entails a leisurely 6-7 hours. At the sand hills north of Kanab, the expedition crossed a mile-and-a-half section of deep sand by spreading a canvas tarp in front of the vehicles and moving ahead several yards at a time. Just east of Kanab, they crossed a steep wash by spreading straw along the sandy banks and laying the tarp over the straw. Dee Wooley somehow managed to get to Kanab ahead of the motorcade, met his nephew up the road, and came riding into town on the lead auto's hood screaming "I told you so!" The party spent three days at Kanab recuperating from the ordeal, overhauling the vehicles, and giving rides to townsfolk--not a dozen of whom had ever seen an automobile.³⁹

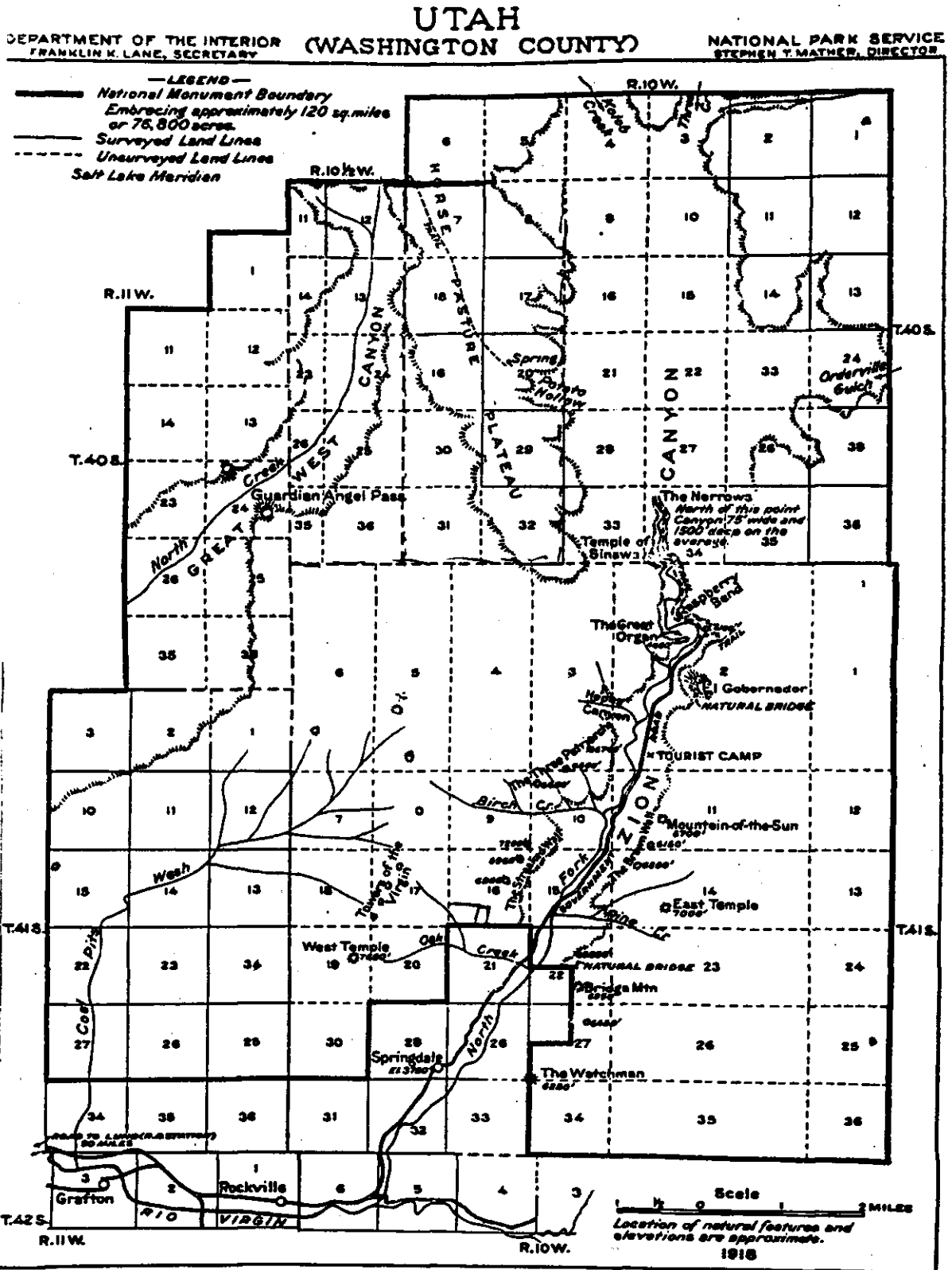
The trip continued from Kanab through Fredonia and on to Ryan, the site of copper mining activity in the early 1900s along the first "road" to the North Rim. This 35-mile stretch required a full day, as parts of it contained no road and the party stopped to build one. The adventurers also ran out of gasoline and had to hunt up a local threshing machine operator who sold them five gallons for a dollar apiece. As a message was sent to Salt Lake City to ship more gasoline down along the route (by rail and stage), the party continued on to the North Rim the next day via V. T. Park (today's DeMotte Park), finishing the first Salt Lake to North Rim automobile trip in a total of five travel days.⁴⁰

The Wooley automotive jaunt of 1909 illustrates a number of points relative to roads and tourism in southern Utah. Foremost is the description of the road which within a few years and with variations thereafter would form U.S. Highway 89, the eastern half of the circle tourism route. In later years the circle would be enlarged to take in new regional parks and roads, but the first would center on Zion National Park and the nearby attractions of Bryce Canyon, Cedar Breaks, and the North Rim of the Grand Canyon. Wooley's experience proved that an automobile could make the trip, but also underlined initial needs for gasoline stations, maps, accommodations, and most especially, better roads.

Between 1911 and 1917, Utah's Governor Spry and U.S. Senator Reed Smoot along with local boosters launched an aggressive program to improve the roads approaching Mukuntuweap National Monument from

³⁹ Ibid., 102-103.

⁴⁰ Ibid., 103.



the west. David Rust led the local effort when he came from his home in Kanab to Hurricane with an idea to use convict labor for road improvements. Rust obtained a pledge of \$8,000 from local communities and commercial clubs, then met with Governor Spry, who offered to provide 40 men, 20 teams, guards, road engineers, and road equipment if the locals would pay for hay and grain. This private-public partnership netted some significant improvements and realignments to the old road north and south of Toquerville (today's Highway 17). The following year local boosters sponsored a good roads convention at Hurricane and committed to making a "passable" road from Cedar City through Hurricane thence east beneath the Vermillion Cliffs to Kanab and on to the North Rim of Grand Canyon. They formed the Grand Canyon Highway Association and operated for six years to improve various road segments with convict labor, but Hurricane boosters had to wait another ten years to see a real road lead east, west, or south from their town.⁴¹

While improvements were being made to the road south of Cedar City and east to Springdale, Senator Reed Smoot with assistance from Acting National Park Service Director Horace Albright managed to get \$15,000 appropriated to build the first automotive road into Mukuntuweap. A 1916 deficiency bill provided these first funds ever to be spent on the monument. Topographical Engineer William O. Tufts surveyed seven miles of Zion Canyon and an Engineer Morgan supervised 20-35 men and 10-20 teams during the winter of 1916-1917 to construct approximately four miles of road from the neighborhood of today's North Fork Virgin River Bridge to a point near Weeping Rock. The remainder of the road

⁴¹ Bradshaw, 414-19; Knowlton, 153. The Town of Hurricane was not laid out until the Hurricane Ditch irrigation canal had been completed to the plateau site in 1904, thus, pioneer roads did not approach it. A road was completed from Hurricane to the north by 1908 which connected to LaVerkin, Toquerville, and the Johnson Twist road. This road spanned the Virgin River near today's hot springs on the 1908 bridge which still stands. This road was pointed out to the author by Mr. Clinton Isom of Hurricane. It was rendered obsolete in 1937 by today's more direct segment of Highway 9 between LaVerkin and Hurricane which bridges the Virgin River Canyon atop the plateau. Most of the older road serves as local Hurricane and LaVerkin city streets and can be followed today, but the 1908 bridge can no longer be crossed. The state highway commission informed the author in July 1993, that both the 1908 bridge and the 1937 bridge are considered functionally obsolete. Locals are looking for funds to save the 1908 structure, while the 1937 bridge may be replaced or made into a one way structure.

to the Virgin narrows would not be built until the 1920s. Morgan's unsurfaced graded-earth road, which was called the Government Road for the years it was in use, required a dugway up the steep eastern slope through the ancient landslide area and hugged the base of the northeast cliffs. Although it little resembled what motorists today call a highway, and seasonal rockslides, washouts, and rutting worked ceaselessly to destroy it, the government road represented the first attempt to accommodate automotive passage into the canyon. Portions can still be seen today east and upslope of the Floor of the Valley Road.⁴²

With the new government road in place within the monument and Governor Spry and local enthusiasts pushing road repairs each year from Cedar City to Springdale, automobile access to Mukuntuweap from the northwest was fairly well-established by 1917. Perhaps in honor of this accomplishment, the road running south from Cedar City through St. George and on toward Los Angeles was dubbed the "Arrowhead Route" in 1916, and some described it as an "excellent auto road." As a succession of early motoring tourists would attest, however, the Arrowhead was not the best of roads in 1917. Some, including Horace Albright and the Parry brothers (automobile stage operators) continued to describe it as "perfectly terrible." The road east of the Hurricane Fault still had to ford the Virgin River in spots and a flood or even a good rain make it impassable in places. But in Utah in the 1910s few roads were hard-surfaced, and anything less than a hard-surfaced road (gravel, at minimum) would not stand up to automobile traffic. In the next decade immediately following the First World War, road building technology would surge

⁴² Horace M. Albright, National Park Service Director, to Mr. Chatelain, memorandum, 4 August 1933, in "Early History of Zion National Park," *Miscellaneous File*, ZNP archives; William O. Tufts, Topographical Engineer, to Stephen T. Mather, letter, 5 January 1917, *Zion Codex*, ZNP archives; John A. Winder to the Department of the Interior, letter with attached map, 10 May 1918, *Zion Codex*, ZNP archives; James, 178, 181.

Although Acting Director Albright secured the cooperation of local residents from driving narrow-tired wagons on the new road except in summer, the earth road was still subject to rutting and corrugation. See Albright's memorandum of 4 August 1933. The government road would require constant repairs each year to keep it passable to automobiles. See Acting NPS Director Arno Cammerer to Walter Ruesch, letters, 8 July 1920, 25 August 1920, *Zion Codex*, ZNP archives and Ruesch's reports to the director, October 1920 and September 1921, *Zion Codex*, ZNP library, for examples of damage from floods and other causes.

forward, federal aid projects would increase, and Utah along with the rest of the nation would go on a road building binge. In 1917 Utah, however, graded-earth roads were a step up and at last sufficient to attract potential park concessionaires.⁴³ At Mukuntuweap, concessionaires meant the railroad from the very beginning.

Early Tourism, the Railroads, and the National Park Service

From the moment crews drove the last spike in the first transcontinental line in 1869, and for three quarters of a century thereafter, railroads and their often flamboyant owners served as the principal boosters of Western national parks. Jay Cooke's Northern Pacific Railroad in 1870-1872 lobbied for the creation of the first western park, Yellowstone, and promoted tourism there by 1886 with hotels and other amenities. The Southern Pacific Railroad in 1890 lobbied for creation of Yosemite, Sequoia, and General Grant national parks in California.⁴⁴ The Atchison, Topeka & Santa Fe in 1901 completed a spur line to the very edge of the South Rim of Grand Canyon and built hotels, camps, and trails for years thereafter. These are just a few of several dozen instances where railroads--loaded with capital and wielding considerable political power--helped create some of the national parks' "crown jewels."⁴⁵

Once created, regional railroads did their best to improve the parks and profit from their existence. The Department of the Interior looked upon the railroads as essential components of the early parks because in the years when Congress appropriated very little money for their maintenance, the railroads often built or improved the access roads, occasionally built roads within park boundaries, and constructed camps, hotels, restaurants, water systems, sewage plants, trails, and other essential facilities.

⁴³ William O. Tufts to R. B. Marshall, letter, 11 November 1916, *Zion Codex*, ZNP library; Albright letter, 4 August 1933; Knowlton, 199-201; Parry Brothers to Marshall, letter, 18 January 1917, *Zion Codex*, ZNP archives.

⁴⁴ Alfred Runte, *Trains of discovery: Western Railroads and the National Parks* (Flagstaff, AZ: Northland Press, 1984, 20-24, 39-40.

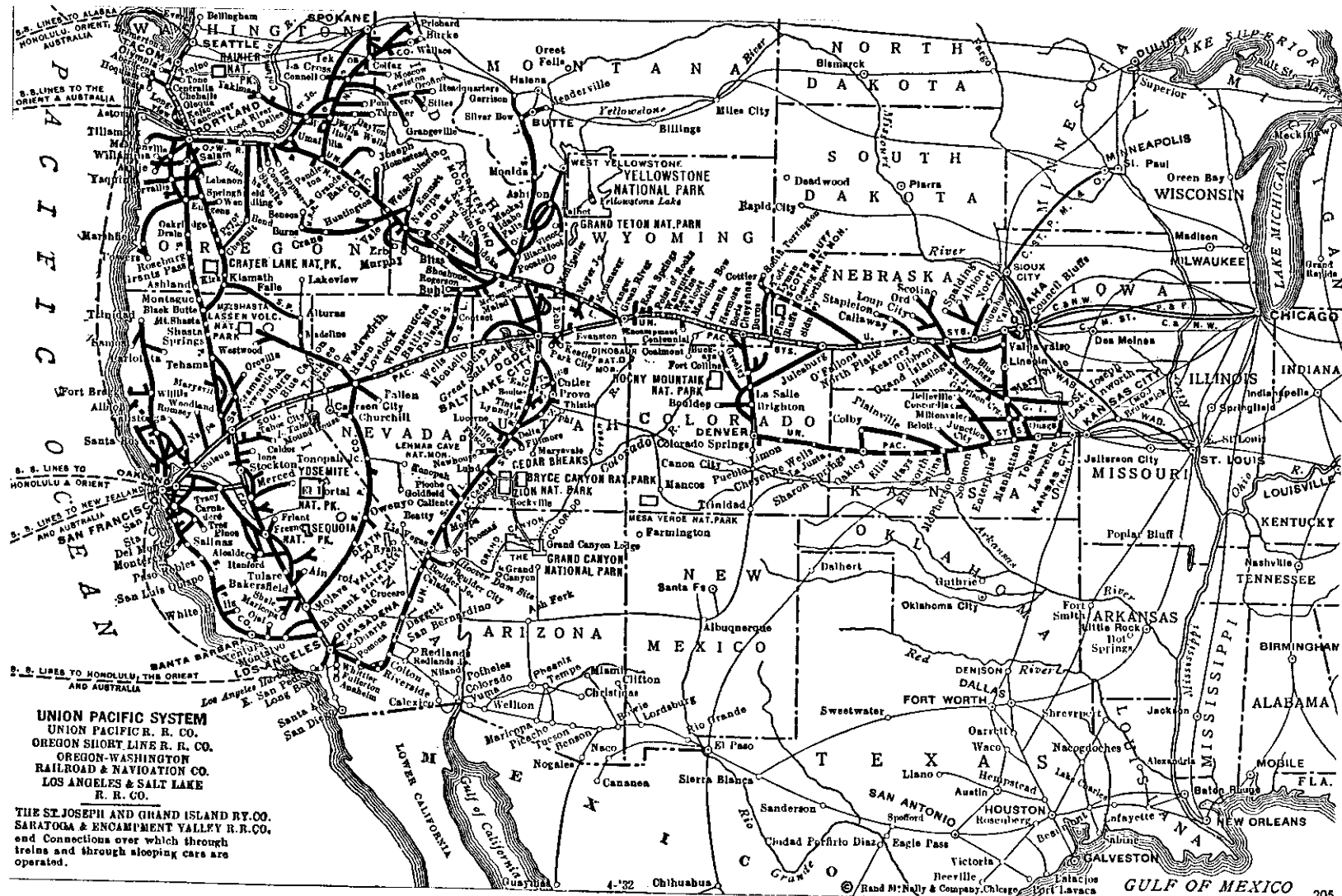
⁴⁵ Michael F. Anderson, "Grand Canyon Historic Roads and Trails," National Register of Historic Places Multiple Property Documentation Form, 1992, Resource Management Office, Grand Canyon National Park.

As examples, Louis W. Hill's Great Northern Railroad invested \$1.5 Million in tourist facilities at Glacier National Park between 1910 and 1923; and the Fred Harvey Company, a concessioner subsidiary of the Atchison, Topeka & Santa Fe Railroad, invested over \$3 million on Grand Canyon tourism infrastructure in one five year period in the late 1920s and early 1930s. In return, Interior would grant them or their subsidiaries long term (up to twenty years) monopolies on tourist services and allow--in the earliest years, at least--just about any type of development the railroad chose to implement. Since the railroad catered to an affluent clientele with sensitive tastes, Interior had few worries that railroad concessionaires would degrade the park experience.⁴⁶

The railroads made money on tourism, but they also hoped to make money by attracting people to the western parks to visit, knowing that some would decide to stay. Population would mean new towns, ranches, and homes along the rails, and the land--alternate sections at least along many lines--would have to be purchased from those who owned the track. Population also meant economic growth, with more produce, livestock, and people riding the rails. All in all, national parks appeared a sweet deal to railroad magnates, and they were willing to spend big to attract the wealthy out West. At the 1911 National Parks Conference at Yellowstone, railroad executives promised further development of hotels, roads, and trails. In 1915, the Santa Fe and the Union Pacific systems spent \$500,000 to promote the parks at the Panama-Pacific International Exposition in San Francisco. And in 1916, seventeen western railroads collaborated on the National Parks Portfolio (\$43,000), the tool Stephen Mather used in that year to alert 275,000 influential people to the national park system.⁴⁷

⁴⁶ HAER No. MT-67, "Going-To-The-Sun Road, 7; Michael F. Anderson, "North and South Bass Trails Study," manuscript, Resource Management Office, Grand Canyon National Park. At Grand Canyon, the U.S. Forest Service managed the unit until 1919 when it became a national park. The forest service did not take an active role in the reserve's management, rather, it let concessionaires, especially the Fred Harvey Company, pretty much run the tourist business. When the NPS took over in 1919, it immediately favored the railroad concessioner and did what it could to eliminate its competition. Considering the Fred Harvey investment aside park appropriations in these years, it is easy to understand why.

⁴⁷ Runte, 50; Michael Frome, *Regreening the National Parks* (Tucson: University of Arizona Press, 1992), 49.



Extensive Union Pacific System in 1932. (from U.P. Redbook - 1932)

The U.S. Congress established the National Park Service in August 1916 and from the very first a love affair blossomed between the agency and the railroads. Owners of the latter finally had one entity with which to deal for their concession and building concerns. They also knew that the head of the new Service, Stephen Mather, was a successful businessman with marketing experience, a great believer in the railroads' role in promoting the national parks, and an advocate of single monopolistic concessionaires at each park.⁴⁸ Mather had dreams of organizing and expanding the park system and recognized that the railroads had the capital to improve and promote the parks. A more perfect match could not have been imagined.

When Stephen Mather and Horace Albright first began planning for the national park system two years before establishment of the NPS, they proceeded from the fundamental assumption that Congress would act to set aside scenic lands and fund their management only if prodded by constituents. Constituents would not argue for the parks unless they actually got out and experienced them.⁴⁹ Thus, the two-man team which would run the National Park System for nearly twenty years committed themselves to increasing park visitation--by whatever means they could imagine and implement. Immediate needs in 1915 in their estimation were better roads, trails, and accommodations to suit the tastes of upscale (influential) citizens. Their plan for the next 15 years would be severalfold: to embark on multiple mass marketing campaigns and keep them going indefinitely; to push Congress hard for funds to build roads and trails; and to continue to work with the railroads who would provide the accommodations, improve park infrastructures generally, and lead the marketing campaigns through their tourist service departments.⁵⁰

Today, one might look askance at what appeared to be a cozy arrangement between a government agency and powerful businessmen to accomplish a goal not immediately popular among the citizenry. This is exactly the situation that existed between the Park Service, the railroads, and the people, especially in the late 1910s into the 1930s but continuing until the railroads were largely out of the park business by the 1960s. In the late years

⁴⁸ Albright, *The Birth of the National Park Service: The Founding Years, 1913-33* (Salt Lake City, UT: Howe Brothers, 1985), 27, 46.

⁴⁹ *Ibid.*, 18, 26-29, 35, 46.

⁵⁰ *Ibid.*, 71f, 104-105, 264-65.

of the Progressive Era, however, when Americans continued to view successful businessmen as national icons and increasingly sided with the conservation of natural resources, such a relationship seemed natural, even productive. They were willing to be sold on the park idea.

The mitigating factor in this close relationship, one which prevented the parks from becoming national "coney islands," was the team of Mather and Albright. They were honest, hard-working men who harbored a deep determination to protect the natural resources entrusted to them. Their first NPS policy letter of 1918 clearly stated that built structures would "harmonize" with the landscape and that trained landscape architects would be employed to ensure that harmony. The following year, Mather created the NPS landscape engineering and general engineering divisions, and in years thereafter used these tools and park administrators to control growth through the railroad concessionaires.⁵¹ It was indeed an intimate relationship, but it worked immediately and continued to work for decades to develop the parks in an orderly manner, and to bring the tourists in by the tens of millions.

Railroads, concessionaires, and big-time tourism came late to Mukuntuweap National Monument. As illustrated in this history, the reasons for the late "discovery" included the general lack of enthusiasm among local pioneer settlers, the region's remoteness, and poor roads. We can add to this list the circumstance that railroad lines did not pass anywhere near the monument until the early twentieth century. The first transcontinental railroad in the United States passed through northern Utah, but a feeder line running south from the main line barely inched its way south in ensuing decades. The nearest transcontinental line south of the monument lay along the 35th parallel in Northern Arizona by 1883,

⁵¹ Ibid, 70-72; Anderson, "Bass Trails Study". The contention that the NPS mitigated railroad concessionaires' ideas for infrastructure growth is well-illustrated at Grand Canyon National Park in the 1920s. In a study of trail development at Grand Canyon, the author reviewed most of the park's correspondence in these years and noted how well park administrators arbitrated the requests of the Fred Harvey Company and smaller pioneer concessionaires. The NPS would lean over backwards to support the concessionaires, especially Harvey, but firmly controlled the nature and extent of growth. Preservation and use are difficult goals to reconcile, but even in the years when the railroads could spend ten times the amount as the NPS, administrators kept the Service's policy statement foremost in their minds.

but no spurs (then or later) crossed the barrier of Grand Canyon. By 1890, the Utah Central Railway arrived in Salt Lake City from the north, but this was still several hundred miles away from the monument and surrounding scenic wonders. Before 1900, however, the San Pedro, Los Angeles & Salt Lake Railroad began to lay track across the 700-mile wasteland between Los Angeles and Salt Lake City. By 1905, the line stretched across the Escalante Desert with stations at Lund and Modena.⁵² These stations, respectively 95 and 100 miles from Mukuntuweap, would act as jumping off spots for interstate visitation to the monument until 1923 when a spur line to Cedar City shortened the automotive approach to 60 miles.

Sometime before 1915, the Denver & Rio Grande Western Railroad built a main line from Grand Junction, Colorado to Salt Lake City, and ran a spur line called the Sanpete Branch south from Thistle, Utah, to Marysvale, 135 miles from Mukuntuweap. Marysvale would be used for years as an alternate rail approach to the circle of southwestern parks. By 1917, all three stations at Lund, Modena, and Marysvale offered automotive stages to Mukuntuweap and nearby attractions. Since Marysvale rested along the road which would soon become Highway 89, auto stages operated mainly from that station to Bryce Canyon and North Rim of the Grand Canyon which were more easily approached from this road. After the Union Pacific System purchased the Los Angeles & Salt Lake line (about 1921), its concessionaires would serve the entire circle route and supersede the business operating from Marysvale.⁵³

State and Federal Road Builders Join the Effort

The principal forces which led to the creation and later development of Zion National Park began to come together in 1917. These consisted of the railroads and their publicity and tourist departments, which had arrived to within 95 miles of the monument; the National Park Service, which had barely been created but whose assistant director, Horace Albright, took an immediate interest in Mukuntuweap; the "progressive" citizens of southern Utah who, as in all towns, counties, states, and regions, directed local affairs disproportionate to their

⁵² James, 324-27; Union Pacific Railroad, "Zion, Grand Canyon, Bryce Canyon, National Parks," red book brochure, 1932, Union Pacific Railroad Box, ZNP library; H. H. Hays to R. B. Marshall, letter, 3 November 1916, Zion Codex, ZNP library.

⁵³ James, 325.

numbers; the Utah State Road Commission--in place and only awaiting money to begin building truly modern roads; and the Federal Aid Road Act of 1916, which allocated \$75 million over a five-year period to help states build roads over which the mail would be carried.⁵⁴ Within a few years the national Bureau of Public Roads would join the movement to assist with regional road building. Each of these people, acts, and entities would reinforce and in turn use the energy of the others, such that the combined movement formed an irresistible force committed to the creation of modern park infrastructures and the attraction of visitors in droves.

Development at Mukuntuweap started out slowly as the juggernaut began to move. In 1916, visitation to Mukuntuweap was entirely informal with no checking stations, no rangers, no facilities, nowhere to find accommodations anywhere near the monument, poor access roads, and no road within the monument but the old wagon track serving the cable works.⁵⁵ Until that year, visitors came by buggy, wagon, horseback, or afoot; camped anywhere with whatever equipment and food they brought; looked around without benefit of interpretation or developed trails; and then left. It might have described a wilderness experience if it were not for the fields of grain and grazing cattle. Conditions began to change in 1917.

Railroad promotions and the development of tourist facilities led Mukuntuweap National Monument out of its obscurity, and that leadership began in the summer season of 1917 with the first concessioner. With the promise of better approach and monument roads in the wind, several people early in the year applied to the National Park Service for concession permits. Gronway and Chauncey Parry, brothers who operated a hotel and transportation business based in Cedar City, proposed to build a hotel camp at the monument and handle transportation to and from the railroad station at Lund. David Dennett of Rockville also applied to build a hotel, while W. W. Wylie of Yellowstone's "Wylie Way"

⁵⁴ Knowlton, 135, 150-51, 165, 170, 197; "Records of the Bureau of Public Roads."

⁵⁵ T. E. Hunt, General Land Office Agent, to H. Stanley Hinrichs, Chief of Land Office Salt Lake Division, letter, 12 July 1916, *Zion Codex*, ZNP library. Hunt describes the condition of the monument in 1916, and notes there is "no supervision whatsoever exercised over this reservation," that no improvements should be made until a good road is built into the monument, and that the nearest hotels are at Hurricane 25-30 miles away but tourists can sometimes find shelter in local farmhouses.

camp fame and Clinton W. Wylie applied to build a similar camp in the canyon. A. S. Brown applied to run a transportation company similar to that proposed by the Parry brothers, and Ira Millett of Rockville proposed to build a tourist tramway for visitor amusement.⁵⁶

Among the various letters from influential people supporting the proposals, Engineer William Tufts, who was in the monument at the time surveying the government road, suggested that the Wylies could best run a camp while the Parry brothers could best run a transportation company. Tufts and others may have spoken to Wylie and the Parrys about this because in early April 1917 they incorporated the National Park Transportation and Camping Company with W. W. Wylie as president and made joint application for the hotel and transportation concession. Encouraged by the varied recommendations and the apparent financial stability of the joint venture, NPS Acting Director Horace Albright granted the company a five-year concession on 27 April 1917, with an initial annual permit fee of \$100.⁵⁷

⁵⁶ Parry brothers to Marshall, letter, 18 January 1917; David Dennett to the Department of the Interior, letter, 5 February 1917; W. W. Wylie to Franklin K. Lane, Secretary of the Interior, letter, 26 January 1917; Ira Millett to J. J. Morgan [highway engineer], letter, 6 February 1917; Chauncey Parry to Joseph J. Cotter, Department of the Interior, letter, 3 March 1917; Wylie to Albright, letter, 8 April 1917; all in Zion Codex, ZNP library.

The Parrys were car dealers from Salt Lake City who moved to Cedar City c. 1915 where they continued to sell cars. They also ran an auto stage line from Cedar City to St. George, and owned and ran a steam laundry and hotel in Cedar City. See William Tufts memorandum for Albright, [20 January 1917], Zion Codex, ZNP library

⁵⁷ Albright letter, 4 August 1933; Douglas White, General Industrial Agent for the San Pedro, Los Angeles & Salt Lake Railroad, to Hon. Samuel (sic) Mather, 31 January 1917; Senator Reed Smoot to Secretary of the Interior, 5 February 1917; Douglas White to Congressman J. H. Mays, 24 February 1917; William O Tufts, memo, 17 February 1917; William O. Tufts to Horace Albright, memo, [3 March 1917]; Utah State Legislature to Acting Superintendent, Department of the Interior, letter, 3 March 1917; William W. Wylie, Clinton W. Wylie, Gronway Parry, Chauncey Parry to Joseph J. Cotter, 12 April 1917; "Articles of Incorporation of the National Park Transportation and Camping Company" and attached agreement, 14 April 1917; Albright to Wylie, telegram,

The National Park Transportation and Camping Company operated in the monument, later park, from 1917 until 1923 when the railroad stepped in to take a more active role in Zion tourist accommodations. Wylie's facilities during these years consisted of a simple camp which snuggled up against the cliffs in a shady nook near a spring, just south of today's Zion Lodge employee quarters and camp. It resembled those of other early tourist camps at Yellowstone and Grand Canyon prior to the onset of luxury railroad accommodations. Visitors enjoyed clean one-room or two-room tent cabins, kitchen and dining facilities, a public garage, horse rentals, an evening campfire, and daily excursions up the canyon. In 1917, patrons of the package deal paid \$26.50 for an eight-hour auto ride to and from Lund via the Parry brothers' 12-passenger "White Bus," 7-passenger National Touring Car, or one of their two Buick Touring Cars, plus two meals en route at Cedar City, and two nights lodging and five meals at the camp. Visitors who arrived by other means or stayed beyond two nights paid \$3.50 per day, \$21.00 per week. Horses rented for \$3.00 per day, guides for \$4.00 per day, and auto tours of the area could be had for 75 cents per hour. By 1922, rates for the same package deal had risen to \$36.50, daily rates to \$4.50, and weekly rates to \$24.00, while the camp had been marginally improved to include heated wood and canvas tents, hot and cold water, and a central social center.⁵⁸

27 April 1917; Albright to Wylie, telegram, 14 May 1917; all in Zion Codex, ZNP library.

⁵⁸ Wylie and Parry letter, 12 April 1917; Parry letter, 3 March 1917; "Press Excursion Was Big Success," (Cedar City) *Iron County Review* (?), 31 August 1917, copy in Zion Codex, ZNP library; Walter Ruesch to the Director, report, 30 June 1919, Zion Codex, ZNP library; James, 185; "Zion National Park, Utah," typed description of park and rules and regulations, [c. 1922], *Miscellaneous File*, ZNP archives; United States Railroad Administration, "Zion National Monument Utah," brochure, 1919, copy in *Union Pacific Railroad* box, ZNP library.

Initial tourist accommodations at the western parks usually entailed small camps with facilities similar to the Wylie Camp, although the earliest operators employed horse drawn stages from the nearest main road or railroad line to the camps. Prices too are in line with other early concessions and were targeted for the middle economic class. Later railroad hotel facilities would cater to the upper middle class and wealthy. For a comparison to early facilities at Grand Canyon, see Anderson, "South Bass Trail Study."

Although the Wylies and Parrys formed their tourist company with their own funds, each contributing \$5,000 to get the venture going, they proceeded with the blessings and promotional assistance of the Los Angeles & Salt Lake Railroad. Horace Albright in later years remembered that the railroad had initially interested Wylie in bringing his Wylie Way to Mukuntuweap and the North Rim of Grand Canyon, and that Douglas White, passenger agent for the railroad, had travelled to Washington to secure a permit for Wylie's camp. Albright and White made the typical tourist trip from Lund to the monument soon after the camp's establishment in one of the Parry's National Touring cars, then moved on to Salt Lake City to lobby for better access roads with Governor Simon Bamberger. White advertised the monument and Wylie's Camp facilities in 1917 and again the following year, and published an article in early 1917 entitled "Awakening of Zion Canyon" designed to lure tourists to the monument. Tourism was looking up, but the roads, several regional outbreaks of influenza in 1918 and 1919, and America's entry into the First World War kept visitation fairly low until 1920.⁵⁹

⁵⁹ Albright memorandum, 4 August 1933; Parry letter 3 March 1917; Wylie and Parry letter, 12 April 1917; "Articles of Incorporation of the National Park Transportation and Camping Company"; Parry letter, 18 January 1917; Douglas White, "Awakening of Zion Canyon," [February 1917], copy without periodical name in *Zion Codex*, ZNP library; Walter Ruesch to the Director, reports, [9 September 1917] and December 1918, *Zion Codex*, ZNP library; D. S. Spencer, "Zion--Our Newest National Park," *Union Pacific Magazine* (January 1922), 31.

Albright felt sure that the railroad advanced money to the Parrys to purchase touring buses and thought they may have advance Wylie money as well, but all other sources indicate that the Parrys had plenty of their own money and additional backing from friends if needed, and they were willing to spend considerably more than they initially invested. The articles of incorporation and letters at this time do not indicate railroad economic assistance in any way. On the other hand the Parrys acknowledged that the railroad's assistance in other ways was "desirable and necessary," and that the railroad was "willing and anxious" to cooperate.

When Albright and White spoke with Governor Bamberger about improving roads, he jumped to his feet, pounded his desk, and exclaimed "Doug Vite, I build no more roads to rocks!" Clearly Bamberger was not the park road booster that former Governor Spry was.

THE GRAND PUSH TO IMPROVE REGIONAL ROADS, 1922-1932

Western railroads and the NPS initiated the "See America First" program in the 1910s. This was a promotional campaign, aided by the First World War, designed to redirect potential tourists from European destinations to the western parks. Many authors, and especially Southwestern regional booster George Wharton James, wrote full-length books with maps and photographs within the *See America First Series*, which went far to alerting the nation to the West's scenic splendors. By 1922, the series promoter, the Page Company of Boston, had published 14 of these books on many of the western states and Canada. In the same year, James wrote *Utah: The Land of Blossoming Valleys*. This book contained a state map and 56 illustrations. Most of the text and photographs emphasized Mormon contributions to the state, but the touring experience to Zion, Bryce Canyon, and North Rim of the Grand Canyon was sufficient to arouse interest in the emerging circle route.⁶⁰

Another of these booster authors of the *See America First Series*, Thomas Murphy, published *Seven Wonderlands of the American West* in 1925.⁶¹ The first edition had been through five printings, testament to the popularity of travelogues. The second edition included trips to the southwestern parks and monuments. Of value to this history, Murphy recounted his trips along the circle tourism route in the years 1922 and 1925. The contrast between his experiences reveals how much the roads and accommodations had changed in just three short years.

Contrasting Roads in 1922 and 1925

Murphy's 1922 tour began with the standard approach to Zion National Park. He disembarked from the Los Angeles Limited at the Los Angeles & Salt Lake Railroad station at Lund. He then rode in a comfortable touring car the 33 miles to Cedar City over a "newly completed hard road," likely one of the region's first gravel-surfaced roads. Murphy found the town to be a lively and attractive place, but the main streets were still dirt, the "old-

⁶⁰ James, publisher's pages, 169-93, *passim*.

⁶¹ Thomas D. Murphy, *Seven Wonderlands of the American West: Being the Notes of a Traveler Concerning Various Pilgrimages to the Yellowstone National Park, the Yosemite National Park, the Grand Canyon National Park, Zion National Park, Glacier National Park, Crater Lake National Park and the Petrified Forests of Arizona* (Boston: L.C. Page & Company, 1925).

fashioned country-town hotel" and its food only fair, and the facilities generally not conducive to staying the night. He found Chauncey Parry who by this time served as general manager of the Utah-Arizona Parks Transportation Company which operated a fleet of "excellent touring cars." Parry himself drove Murphy and his guest the remaining 60 miles to Zion in a new Buick.⁶² Despite nearly a decade of road improvements, the brand new car, and Parry's driving skills, Murphy found the road still a weak spot in the touring experience, noting that the

Arrowhead Trail, which we followed for thirty miles, is spoken of as a "motor highway,"--but it was stony, rough, dirty and wholly unimproved, and "trail" describes it very well indeed.⁶³

Parry let down the Buick's convertible top once they arrived at Zion, and Murphy, exercising the romanticist literary style to its extreme limits, still could not say enough about the scenic splendors. The trip from Lund had taken all day, and the group went straight to Wylie's camp for the night, a facility he described as "primitive, but fairly comfortable" considering the region.⁶⁴

Murphy wanted to continue on to Bryce. In 1922, that meant a 60-mile return to Cedar City over the same "trail" and an even worse 100-mile segment north and east to Bryce Canyon. The shortcut that led from Rockville past Smithsonian Butte to Pipe Spring and Kanab and thence north had not been noticeably improved since the turn of the century, and in any event, was even longer than the return to Cedar City. Through the efforts of Washington County road crews, the Utah Road Commission, and convict crews, the road through the upper Virgin towns had been improved during the 1910s, and included a connection to Hurricane and up the imposing Hurricane Cliffs to Pipe Spring and beyond, but it was still not a favored path. In fact, no true circle route had developed by 1922 and tourists typically returned to Cedar City before striking out in any other direction. The 120-mile round trip to Zion likely exhausted many travellers and no doubt some chose to turn left at Cedar City to return to Lund and civilized rail travel rather than continuing their vacation.

⁶² Ibid., 199-204.

⁶³ Ibid., 204.

⁶⁴ Ibid., 206-10.

Murphy persisted, however, and the party went on to Bryce Canyon. He described the road north from Cedar City to Parowan and Paragonah as "fair," but of the remaining 100 miles to Bryce,

a meaner, more difficult bit of road would be hard to find.... A series of ditches, ruts, stoney and sandy stretches, rocky fords and steep banks, engaged out driver's attention; nor did I ever see a car piloted more skillfully over such a succession of discouraging obstacles....[We] bumped over more than 100 miles of indescribably bad roads during the day.⁶⁵

The road Murphy described was that which had developed from the explorations of John D. Lee in 1852 and the resultant Mormon settlement road from Paragonah to Panguitch. Never developed for tourism, it was surely a nightmare for anyone in an automobile. At the end of the hard day's drive their accommodations consisted of a "rough, clapboard cabin" 100 yards from the rim, which clearly disappointed Murphy's party.⁶⁶ Returning the next day to Cedar City, he and his companion decided not to tarry and immediately adjourned to Lund for the comfort of a railroad car.

Murphy returned to the Southwest in 1925, not only to see Zion and Bryce Canyon which he fondly recalled, but to add the North Rim of Grand Canyon and Cedar Breaks to his list of touring experiences. Every point of his description emphasized improvements for the touring public which had been made in the intervening three years, and especially improvements to the roads which were in progress as he described a complete circle tourism route.

The initial change entailed a ride along the branch line from Lund to Cedar City, which the Union Pacific--now owners of the Los Angeles & Salt Lake Railroad--constructed in 1923 at a cost of \$1,025,000. This was an improvement in comfort, although not necessarily a convenience, as the party still had to detrain at Lund and wait four hours for the branch line to depart. Once at Cedar City, Murphy found a bustling community alive with excitement over the emerging tourism industry. Main street still choked the visitor with dust, but residents planned to begin paving the streets soon. The most significant improvement for the visitor was the U.P.'s three-story, cream-brick El Escalante Hotel, also completed in 1923 across the street from the station at a cost of \$265,000. It offered the regional visitor an

⁶⁵ Ibid., 220-21.

⁶⁶ Ibid., 223.

elegant overnight stay with excellent food, comfortable lobby, sun porch, ladies parlor, ball room, barber shop, wash rooms, and other amenities. Cedar City remained the jumping off spot for regional tourism, but its improved services invited visitors to spend a restful night coming and going and this became the practice of many.⁶⁷

Murphy found that auto stage transportation to all but the North Rim had been taken over by the U.P., which had purchased forty 11-passenger touring vehicles and established a full schedule of touring packages to Zion, Bryce Canyon, and Cedar Breaks. The Parry brothers--operating now from the El Escalante Hotel--still handled transport to the North Rim of Grand Canyon. Murphy selected the five-day tour and embarked the first morning for Zion. He described the Arrowhead Trail as bad, and the twenty-mile segment from the Black Ridge to Anderson's Ranch as the worst, but also noted that a new road was under construction which would at last bypass the Black Ridge Dugway on the east side of the valley for a more favored route to the west. The state actually was in the process of completing a new road from Cedar City to Toquerville, and had surveyed a new road from Grafton (Rockville area) to the park boundary. By the spring of the following year, fully 48 of the 60 or so miles from Cedar City to the park would be completed to the improved road standards of 1925. Murphy missed the opening of the former improvements by a week, but even so arrived at Zion by noon, a much speedier trip than the 7-8 hour ride of former days.⁶⁸

⁶⁷ Ibid., 200-201, 209; H. M. Adams, Vice President, Union Pacific Railroad Company, to Congressman Louis C. Cramton, letter, 29 December 1924, *Zion Codex*, ZNP library; Union Pacific System, "Zion National Park, Bryce Canyon, Cedar Breaks, Kaibab Forest, North Rim of Grand Canyon," red book brochure, 1925, *Union Pacific Railroad Box*, ZNP library.

⁶⁸ Murphy, 209, 226f; Adams letter, 29 December 1924; ZNP Superintendent's Annual Report, 1925, *Zion Codex*, ZNP library.

The improvements Murphy noted entailed construction of Highway 91, which moved the road to the west and circumvented the Black Ridge and its dugway. Although Interstate 15 replaced Highway 91 in the late 1950s, it can still be driven most of its way from Cedar City to Washington. One remote segment, accessed by taking the Zion NP Kolob visitor center exit, turning west instead of to the visitor center, then turning south on old Hwy 91, leads the motorist within a few miles to the Ash Creek Bridge. This remarkable 200' concrete arch bridge lies among the cottonwoods, unseen from the nearby interstate.

At Zion, Murphy found that a brand new two-story, native pine on rubble masonry Zion Lodge and rustic cabins had replaced Wylie's Camp. The Union Pacific had just completed the new facility for the 1925 season and was still making improvements which would include more native pine and fir cabins, an enlarged kitchen and dining room, and two new lodge wings (completed in the spring of 1926). But already the visitor could look forward to rustic, heated cabins and a fine dining hall and central lobby.⁶⁹

The National Park Service for its part had just completed a new Zion Canyon Road prior to the 1925 season, and now the visitor could motor up to Weeping Rock and on around the Big Bend all the way to the parking lot at the Temple of Sinawava. Thanks to a \$133,000 congressional appropriation of 1923 for the park's roads and trails (its share of a \$7.5 million national park roads & trails bill), the park now had its first true automobile road. Construction progressed from late 1923 to mid-1925, and the nearly \$70,000 cost included a new two-span, steel arch-girder bridge over the North Fork Virgin River (completed in 1924) which replaced the old wooden bridge at the same location. NPS Assistant Engineer George A. Gregory supervised construction of the modern automobile road which boasted a white gravel wearing surface with 2' shoulders of red clay, and wound through Zion Canyon "like a neat ribbon." At the end of the new road, a one-mile walking trail continued to the Virgin Narrows. Park roads by the summer of 1925 had, in fact, reached the farthest extent they would ever attain in Zion Canyon, although road improvements and significant trail construction were still in progress.⁷⁰

1925 represented a banner year for Zion National Park marking the park's emergence from obscurity and initial membership in the network of great western parks. Aside from the frenzy of road, trail, and facility improvements completed in that year, Stephen Mather replaced the park's original custodian and acting

⁶⁹ Murphy, 209, 214-15; Adams letter, 29 December 1924; National Park Service, memorandum for the press, 12 February 1924, *Zion Codex*, ZNP library.

⁷⁰ National Park Service, memorandum for the press, 12 February 1924, ZNP Superintendent's Monthly Narrative, 31 May 1925, and Superintendent's Annual Report, 1925, *Zion Codex*, ZNP library; George A. Gregory to the Director, 8 December 1925, *Zion Codex*, ZNP library; Union Pacific redbook, 1925.

Gregory's letter summarizes problems the NPS encountered with the road contractors during 1923-25 construction, but is also the most detailed account found for the actual construction of the road in these years.

superintendent of eight years, Walter Ruesch, with a man more in concert with Mather's vision of the intelligent and sophisticated visitor interface.⁷¹ The new superintendent, USGS topographical engineer Richard T. Evans, was not present for the park's grand opening on 15 May 1925, however, so it was Walter Ruesch who appropriately handed the symbolic park keys to Utah Governor George H. Dern,⁷² opening a new era for the newly developed Zion National Park.

Visitation would soar from this year forward, leading directly to further road improvements to the circle tourism network of roads and still another new road for Zion in 1931-32--today's Floor of the Valley Road. The famous Zion-Mount Carmel Highway, the engineering marvel of the western states upon its completion in 1930, would represent only one artery in this network, a natural result of the forces at work in the early and mid-1920s. Thomas Murphy missed the festivities of Zion's grand opening, but benefitted from some of the road and facility improvements of the time as he continued his circle tour from Zion in 1925. His next destination was the North Rim of the Grand Canyon, an attraction he had missed in his 1922 trip. His poor luck with roads held as he missed the "Rockville Shortcut," which was under construction

⁷¹ See Mather to Albright, 2 March 1925, *Zion Codex*, ZNP library for Mather's thinking on replacing Ruesch. Mather allowed that Ruesch had done "excellent work with the funds he has had and as chief ranger is a good man but of course he will not do for a permanent superintendent." Mather's decision was perhaps correct considering NPS goals for the new park system. Ruesch had difficulty conforming to the NPS bureaucracy and was not the greatest writer in the world, but he had labored through years of no appropriations to maintain and improve roads and trails in the monument and park, and it seemed he was being shunted aside in 1925.

Ruesch continued to serve Zion as acting superintendent outside the summer tourist season, and as assistant superintendent and chief ranger in later years well into the 1940s until a few years before his death in 1950. See also Ruesch to the Director, letter of resignation, 20 March 1925; Cammerer to Ruesch, 25 March 1925; Ruesch to Cammerer, 2 April 1925; Mather to Cammerer, telegram, 19 April 1925; Mather to Albright, telegram, 22 April 1925; Mather to Ruesch, 4 May 1925; all in *Zion Codex*, ZNP library.

⁷² ZNP Superintendent's Monthly Narrative, 31 May 1925, *Zion Codex*, ZNP library.

as he passed, and also missed the soon to be effected federal aid road project through Springdale and Rockville.⁷³

The Rockville Shortcut, as it was called by many at the time, left Rockville across the 220' steel Parker truss bridge spanning the Virgin River, built for the NPS in 1924 at a cost of \$40,000. The NPS paid for this from the 1923 special appropriation for roads and trails, an interesting example of the Service's desire to have good approach roads and willingness to spend money on structures outside park boundaries. The state road commission completed the 15-mile segment in summer 1925, cutting 30 miles from the drive from Zion to North Rim Grand Canyon by bypassing all towns west of Rockville. This road, which was a new alignment of the old road that had developed since Jacob Hamblin's time, served as the main route to Grand Canyon until 1930 when it was bypassed by the Zion-Mount Carmel Highway. No longer of value to the circle tourism route, the bridge was deeded to Washington County in 1939 by act of Congress and today the road is maintained by the county and the BLM as a "Scenic Backway."⁷⁴

⁷³ ZNP Superintendent's Annual Report, 1926, *Zion Codex*, ZNP library. A federal aid project rebuilt the road from the old south entrance station near today's North Fork Virgin River Bridge to Rockville, a distance of 7 miles, in the Spring of 1926. This is probably when the old Oak Creek Bridge, which today leads into the employee parking lot at the visitor center, was built. The main entrance road bypassed it in 1959-60 when the new visitor center, road, and Oak Creek Bridge were built.

This improvement, in conjunction with the Rockville Shortcut, would provide a smooth ride from the park around toward Pipe Spring National Monument.

⁷⁴ Cammerer to Ruesch, 2 March 1923, *Zion Codex*, ZNP library. This letter has an attachment with the wording of the deficiency bill which allocated \$133,000 to Zion for roads & trails, including \$40,000 for the Rockville Bridge; in his Acting Superintendent's monthly report, 31 January 1925, *Zion Codex*, ZNP library, Walter Ruesch noted that "this bridge is a fine structure, one of the best in the county and probably the best in the southern part of the state." It is truly a unique structure in this part of the state and in excellent condition today for local travel. It still carries the plates of the builder and dedication to the NPS. The bridge is reached by turning south from Highway 9 in Rockville at River Road, which is 200 East street. The road is still of graded gravel and an excellent backway from Zion to Pipe Spring.

See also ZNP Superintendent's monthly reports, 31 May 1925

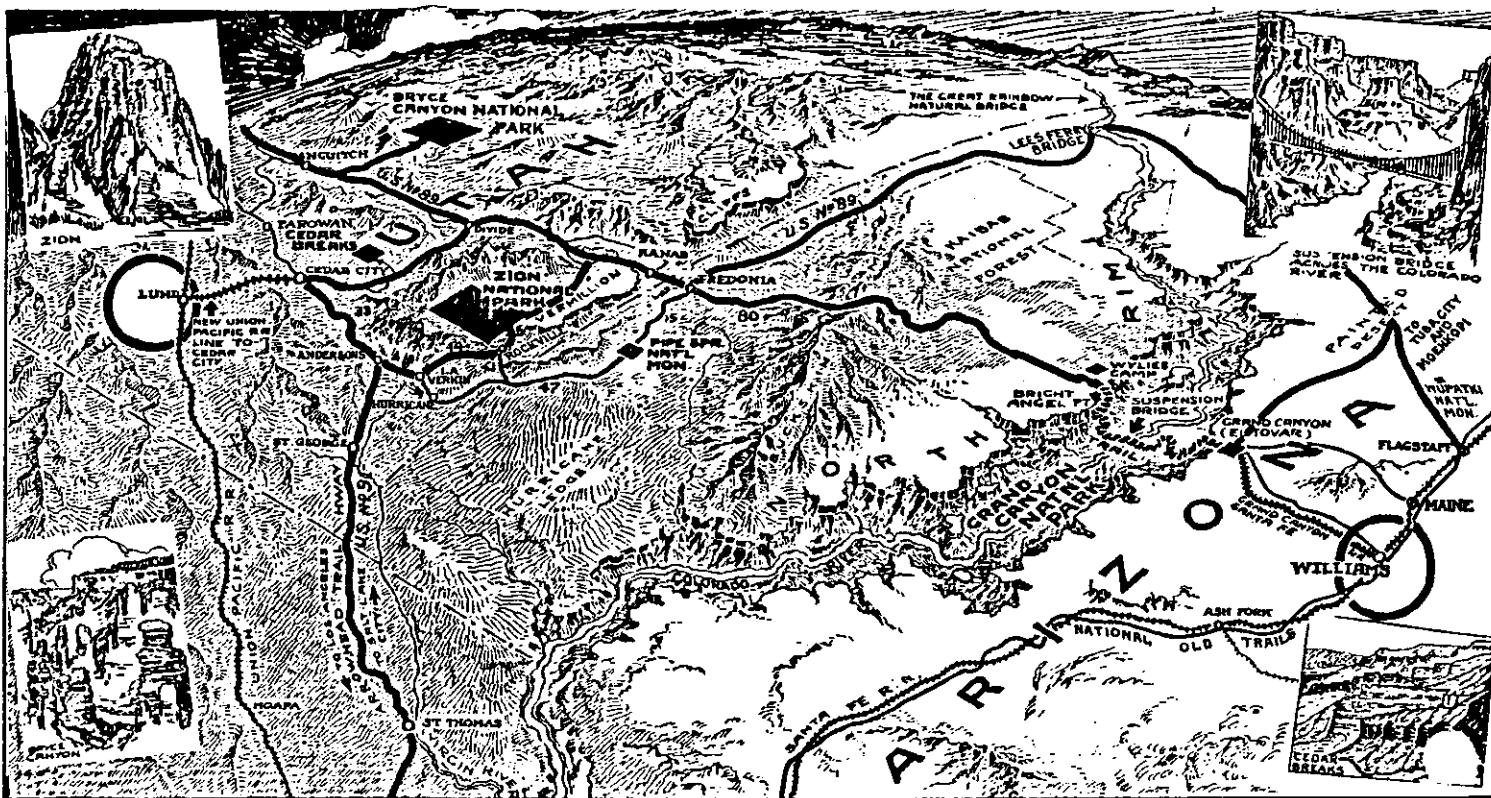
Murphy missed the shortcut's completion, but his return along the 20-mile approach road back to LaVerkin in a brand new Parry brothers' Cadillac would have been a fairly comfortable experience, as the state and county had improved the road since 1922. The county in charge of convict crews had widened the road and eliminated the dangerous crossing of North Creek at Virgin City with an overhead truss steel bridge in 1923. As important, a new county road bypassed the old Johnson Twist over the Hurricane Fault with gentler grades to the town of LaVerkin. Murphy's party from LaVerkin proceeded south along the original road to Hurricane, crossed the Virgin River on the 1908 bridge near the hot springs, and continued up the steep grade to town. This short but steep road from LaVerkin to Hurricane would not be improved until 1937 when the state completed an entirely new "high" road (a continuation of today's Highway 9) and steel arch bridge across the Virgin River Canyon and on to Highway 91.⁷⁵

The road east from Hurricane toward Pipe Spring and Grand Canyon required another tortuous ascent of the Hurricane Fault, one reason why crews were busily at work building the Rockville Shortcut and others would soon construct the Zion-Mount Carmel Highway. Murphy described the ascent simply as a "winding grade," worth the effort for the views obtained of the Hurricane and LaVerkin valleys. The "rough and dusty" road from Hurricane continued along the route first located by Jacob Hamblin, roughly today's Utah Highway 59 and Arizona Highway 389. He and his companions kept their eyes glued to the terrain south of the Vermillion cliffs to espy the verdant patch of green which would mark Pipe Spring, the oasis located by Jacob Hamblin in 1858 and the only dependable water source between Hurricane and Fredonia, Arizona. Once they arrived, he expressed disappointment at the dilapidated Windsor Castle with its "tumble-down and neglected"

and 30 June 1925; ZNP Superintendent's annual report, 1925; and Harry Slattery, Department of the Interior, to the President of the Senate, letter, 10 November 1938; and H.R. 2184, 10 January 1939; all in *Zion Codex*, ZNP library; and Guy D. Edwards, Assistant Engineer, "Engineering Activities at Zion National Park," history boxes, ZNP archives.

See Donal J. Jolley, letter, 21 December 1929, history boxes, ZNP archives, for an account of how local freighters stripped the land bare of trees along the shortcut, using them as brakes tied to the backs of their wagons. They did this to descend an estimated 21 percent grade along the road.

⁷⁵ Murphy, 227; ZNP Superintendent's annual report, 1925, 1926, *Zion Codex*, ZNP library.



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SKETCH MAP OF SOUTHWESTERN UTAH AND GRAND CANYON

By Charles H. Owens

Artist's rendering of the circle tourism route with topographic features. Note the Santa Fe Railroad connections to South Rim. (from National Park Service brochure - 1930)

stone buildings and ruined connecting wall which once formed a masonry fort for local Mormon cattlemen. One or two Mexican families farmed a small plot and sold vegetables to passing motorists. Pipe Spring had become a national monument in 1923 and the NPS planned to restore the site and make other improvements, but the vegetables and good water flowing at 100,000 gallons per day represented the sole visitor services in 1925.⁷⁶

Murphy's Cadillac continued the fifteen miles to Fredonia, Arizona, a small Mormon village with few services other than a gasoline station. Fredonia, only seven miles south of Kanab, represented the southernmost outpost on the way to Grand Canyon by 1925. Travellers from Pipe Spring and points west usually passed through town with barely a glance and stopped at the larger town of Kanab if their destination led north along Highway 89 to Bryce Canyon or the Mormon towns along the way. If their destination lay at the Grand Canyon, Lees Ferry, or south from the ferry to Flagstaff, the gas station at Fredonia could not be ignored. Murphy and his group filled up on 50 cent per gallon gas (because it cost 70 cents at North Rim) and continued on their way toward the hazy gray outline of the Kaibab Plateau.⁷⁷

⁷⁶ Murphy, 227-29; *Southern Utah News*, 11 June 1961. Dee Chamberlain, an auto stage driver for the Utah Parks Company in 1929, 1931, and 1946, recalled in the news article getting stuck in reverse along a sandy section 10 miles from Pipe Springs, and driving in backwards.

The importance of water sources north of Grand Canyon in the Arizona Strip, and their scarcity and control by cattle interests, is documented in R. E. Geary, U.S. Department of Agriculture, District 4, Forest Service, "Report on Lieu Selections, Etc. Within that Part of the State of Arizona Lying North and West of the Colorado River," bound report with map of water sources, 1 March 1915, Kaibab National Forest Supervisor's Station, Williams, Arizona.

⁷⁷ Murphy, 230; Gayneld Mackelprang, "Historical and Community Resources Materials of Fredonia, Arizona," Masters Thesis, Arizona State College at Flagstaff [Northern Arizona University], 1952. Mackelprang notes that by the early 1950s, tourism in Fredonia supported three cafes, two service stations, one garage, three combination garage-service stations, one hotel, three motels, and an airport. These are far more services than exist in the town today. He also notes that the tourism business was critical to the local community, as locals worked as gas station attendants, bell hops, and waitresses at Fredonia, Kanab, Jacob Lake, V. T. Park, and North Rim.

When Gordon Wooley completed the first automobile trip to the North Rim in 1911, he left Fredonia and veered southeast at the edge of town for the Coconino copper works at Ryan, Arizona. This road, if it could be called that in 1911, continued past Big Springs and up the Kaibab Plateau until reaching V. T. (DeMotte) Park. The road, with improvements in subsequent years, is still used by local residents and tourists looking for an alternate scenic route to the western section of Grand Canyon National Park.⁷⁸ By 1925, this road had been bypassed as the major North Rim access by one of dubious quality which ran more directly east to the plateau, generally parallel to today's Highway 89A. Murphy described it as the worst 20-mile segment of the entire trip, and it would remain so until 1939 when it became the last paved section of Highway 89 in its entire length from Banff National Park in Canada south to Hermosillo, Mexico.⁷⁹ Murphy noted that crews worked on a new road bypassing this segment as they passed, but for that day:

we perforce must wallow for many miles as best we could through the powdery, sage-studded sands of the Kanab Desert. It seemed as if every driver, in his desperation, had made a new track, and if we deserted one in hopes of better going it was only to find the other no improvement. On either hand the brick-red furnace-hot sands stretched

⁷⁸ The author has used this road on several occasions to access the Thunder River and North Bass trails. It is identified on national forest maps going back to the 1920s and was used especially by cattlemen and hunters accessing the three hunting camps in the forest. It is prominent on today's Kaibab National Forest maps, but obscured by the maze of forest roads in this area.

For a minimal amount of information on Ryan and other area mines, see McOmie, "The Arizona Strip." See also (Kanab) *Kane County Standard*, 16 March 1923, 23 March 1923, 6 April 1923, 13 April 1923, 20 April 1923, 1 June 1923, 3 August 1923, 17 August 1923, 14 September 1923, 13 October 1923, 20 February 1931, 27 March 1931, 16 October 1931, 1 April 1938, 29 April 1938, 27 May 1938, 10 June 1938, for articles on local road improvements and the tourist industry in general. The newspaper was a tourism booster, and often lamented the poor roads in the area surrounding Kanab and Fredonia.

⁷⁹ *Kane County Standard*, 29 April 1938, 10 June 1938. The state budgeted \$250,000 to pave this last segment in June, 1938, but it appeared that construction would not be complete until sometime in 1939. The editor was referring to a hard bituminous wearing course for the road--asphalt, in other words.

away for miles.... At last a sign of the Automobile Club of Southern California--that good Samaritan of the motorist pilots you through the desert wastes of Utah--announced 'Forest Road One Mile,' and a sigh of relief went up from all concerned.⁸⁰

The U.S. Forest Service had recently completed a road up the Kaibab Plateau and south from the ranger station at Jacob Lake to the North Rim at Bright Angel Point. Murphy's party enjoyed the gravel road's gentle grades and the views back toward Zion and the Vermillion Cliffs. They continued that day to the V. T. Ranch, where they spent the night at the "primitive place with plain log cabins and a central lodge and dining-room...in charge of kindly people who keep it clean and serve excellent meals." The facility, managed by W. S. Rust, consisted of a central dining tent, recreation hall, ten log cabins, and a dormitory.⁸¹

In 1925, Murphy and his companions could have continued east from Jacob Lake to descend the Kaibab Plateau and enter the high desert of the eastern Arizona Strip below the Vermillion Cliffs. A road of sorts existed to Lees Ferry and beyond to the Navajo Indian Reservation villages at Tuba City and Cameron and on to the National Old Trails Highway (later U.S. 66 and Interstate 40) near Flagstaff. By at least one account, this route could be driven in an automobile as early as 1914. These roads were for the most part improvements to the old Mormon "Honeymoon Trail," which Jacob Hamblin pioneered from St. George, Utah, around the north side of the Kaibab Plateau, and down House Rock Valley to Lees Ferry before 1870. Crossing the Colorado River on a cable-assisted ferry by that year, the road continued up the dugway nicknamed "Lee's Backbone," then along the wash beneath the Echo Cliffs to the Mormon mission at Moenkopi. From Moenkopi, one could go on to the Little Colorado settlements at today's Winslow and Joseph City, or veer southwest to Cameron, where the road crossed the Little Colorado River on the Bureau of Indian Affairs' 1911 steel suspension bridge [HAER No. Az-34] and continued to the pass between Sunset Crater and the San Francisco Mountains to Flagstaff. Any variation of this route was long, treacherous, and fairly devoid of automotive services until after 1930, but the latter route through Cameron would become a leg of

⁸⁰ Murphy, 230-31.

⁸¹ Ibid., 231, 233f; Union Pacific redbook, 1925, 38; D. S. Spencer, to Albright, 22 September 1920, Zion Codex, ZNP library.

Highway 89 and would serve to expand circle tourism into a "Grand Circle" which included northeastern Arizona.⁸²

The third morning found Murphy's party wisely choosing instead to continue to the North Rim, where they drove to Bright Angel Point to gaze across the chasm to the El Tovar Hotel at South Rim before retiring to the Wylie Camp. Mrs. Elizabeth McKee, daughter of William W. Wylie, and her husband ran the camp much as her father had done at Zion until a few years earlier. At this time a "rough, up-and-down, tortuous" road ran some 22 miles to within a couple miles of Cape Royal, and Mr. McKee drove parties out to this point through forest, wildflowers, and

⁸² In Murphy, 241, Mr. McKee of the North Rim Wylie Camp tells a story of a tourist, deceived by the apparent proximity of the El Tovar Hotel to the North Rim, trying to make the trip to South Rim via this route in a Packard automobile. He ran out of gas, water, and food before reaching Lee's Ferry. Hard as it might be to grasp today, there simply was no automobile road from southern Utah into Northern Arizona below Grand Canyon before the 1930s, and those who tried to make it along the old wagon paths were in for an adventure.

Three men working for Arizona Governor George W. P. Hunt made the trip in 1914 from Flagstaff, across Lees Ferry, and westward to Jacob's Lake, Ryan, Fredonia, Kanab, and Pipe Spring. It is a testament to the wilderness character of the country traversed that these men had been sent "with a view, accordingly, of bringing the facts regarding this comparatively unknown region... within the realm of current knowledge." See A. M. McOmie, C. C. Jacobs, and O. C. Bartlett, "The Arizona Strip: Report of Reconnaissance of the Country North of the Grand Canyon," bound special report to the governor (Arizona Board of Control, 1915), Kaibab National Forest Supervisor's Office, Williams, Arizona.

Between 1901 and 1929, prior to construction of the Navajo Bridge across the Colorado River near Lees Ferry and associated road improvements in 1929, residents of Coconino County north of Grand Canyon--such as at Fredonia--who needed to get to the county seat at Flagstaff would hitch a ride with tourists to the North Rim, hike the old trail down Bright Angel Creek to the Colorado River, row across in a punt or later take the suspension bridges across to the Bright Angel Trail, hike up to the South Rim, take the Grand Canyon Railway to Williams, then transfer to the Santa Fe main line for the ride into Flagstaff. Travel was tough in this region before the 1930s. See "Life Story of Emma Isabelle Brooksby Harmon," manuscript autobiography, (c. 1978), historical society archives, Fredonia Library, Fredonia Arizona.

ancient cliff dwellings to the alternate view of the Canyon.⁸³ The evening's activities consisted of dinner in the central dining tent, followed by a roaring bonfire, conversation, and a night's rest in the standard Wylie Way tent cabin. In 1928, the Union Pacific would complete a magnificent hotel at Bright Angel Point in conjunction with the completion of the South Kaibab Trail to Phantom Ranch, but in 1925, accommodations and internal roads at North Rim lagged a bit behind those at Zion. In the morning the party ate well before embarking on the 164-mile trip to Bryce Canyon, only recently set aside as a national monument.⁸⁴

The party retraced its path to Fredonia, and discovered that overnight a ten-mile section of the new highway east of town had been opened, "greatly lessening the discomfort of the run." They stopped at Kanab for lunch at the Highway Hotel, an establishment superseded in 1932 by the Utah Parks Company's Territorial Inn, which operated exclusively for Union Pacific tourists. Two viable roads ran north from Kanab in this year. One followed the pioneer wagon route north through Mount Carmel and along the East Fork Virgin and Sevier rivers to Bryce Canyon. The Gordon Wooley automotive jaunt of 1909 used this road, as did the Kings a few years later. By 1922, a prominent Kanab businessman, Henry Bowman, had contracted with the state to improve it by laying clay and gravel over the infamous sand hills and realigning along more gentle grades. When Murphy's party came through in 1925, the state was again at work improving the segment between Kanab and Glendale, so they took the summertime-only road up Johnson Canyon to the east and through the towns of Johnson and Alton to rejoin the primary route south of Long Valley Junction. This road was of sand and graded dirt, and fortunately in good shape when the party passed.⁸⁵ The remainder of the trip to Bryce Canyon is best expressed by Murphy:

The last ten miles from Bryce Junction to our destination we had travelled on our previous trip, but the road was not the savage trail that bumped over rocks, plunged through sand

⁸³ See "Bryce Parks Need Trails," *Salt Lake City Tribune*, 8 June 1930, which notes that a new park entrance road and road to Cape Royal were surfaced in 1930.

⁸⁴ Murphy, 234-36, 240-41; Mather to Ruesch, letter with attached Senate bill, 15 May 1924, *Zion Codex*, ZNP library.

⁸⁵ Murphy, 242-43; Robinson, 103-106; See *Southern Utah News*, 11 June 1961, for information on the Territorial Inn early circle tours.

and forded creeks. Instead, a perfectly smooth, well-engineered highway ran in graceful curves through the famous Red Canyon [completed by the U.S.F.S. in 1924], permitting us to admire the wonderful [scenery along the way].... At Bryce Canyon we found a handsome new lodge with cabins of the same type as the one we occupied at Zion. The meals served were surprisingly good, all of which goes to prove that the Union Pacific is pursuing the right policy to popularize these Utah wonderlands.⁸⁶

Murphy's party left Bryce Canyon the following afternoon for Cedar Breaks, retracing their path through Red Canyon to "Cedar Breaks Junction" (today's Long Valley Junction) along Highway 89. In 1925, the recently constructed road across the Markagunt Plateau began at this point, but a route favored just the year before began at a point south of Hatch and ran 16 miles southwest to a point where it joined with Murphy's 1925 road two miles west of Aspen Mirror Lake. With reconstruction effected in the late 1930s and early 1950s, this 1925 road became Highway 14. Murphy described it as smooth and well-engineered, running in easy gradients to the turnoff to Cedar Breaks. He might have added that the road surface was alternately paved with white, pink, and red gravel to mimic a land of many colors.⁸⁷ They took the 3-mile spur to the later national monument (1933) for a few-hour tour before continuing on to Cedar City. Murphy described the road down the west side of the plateau:

...in descending the long winding grade to this same plain [at Cedar City] we experienced a real thrill despite our extensive experience with mountain roads. For much of the way it is a narrow shelf cut in the edge of the Markagunt Plateau, writhing ever downward, plunging into wooded nooks above the canyons and again coming out in the bold headlands which offered unparalleled views.... We all but forgot the narrow margin between our wheels and the precipice alongside in our admiration...⁸⁸

At one point the auto stage pulled off to allow a final look at the country to the south across the Pink, White, and Vermillion

⁸⁶ Murphy, 243; H. M. Adams to Louis C. Cramton, 29 December 1924.

⁸⁷ Union Pacific Redbook, 1925, 22; 1924 map showing the circle tourism route, *Miscellaneous File, Publicity folder*, history boxes, ZNP archives.

⁸⁸ Murphy, 247f.

cliffs to the Kaibab Plateau beyond. The stage driver noted that under favorable conditions, one could view the San Francisco Peaks and Navajo Mountain far to the east and south, a view unattainable in today's atmosphere. The final leg of Murphy's five-day journey brought the stage down along Coal Creek Canyon to Cedar City, where Murphy spent a final night at the El Escalante before continuing his railway journey to the East.⁸⁹

This rather long account of Thomas Murphy's five-day journey is revealing for several reasons. First, it describes an early excursion along the circle tourism route which had clearly developed by 1925. Second, in contrast to Murphy's abbreviated trip of 1922, it details the many significant road improvements accomplished in a few short years and the major improvements underway in 1925. In four instances--along the Arrowhead Trail, in passing the Rockville Shortcut, along the desert east of Fredonia, and north of Kanab--Murphy describes road construction in progress. Accommodations, too, are rapidly evolving from the early Wylie Way camps and "tumble-down clapboard cabins" to first class hotels and lodges. All of these developments can be traced to the direct efforts of the Union Pacific Railroad, coincident advances in road building technology, and the funds allotted to roads following the First World War.

The Union Pacific Leads the Way

The Union Pacific, as earlier noted, had backed the Parrys and the Wylies in their 1917 efforts at Zion and had advertised the wonders of Zion through the war years. In January, 1922, Union Pacific general passenger agent D. S. Spencer published the first in a long line of illustrated articles in the *Union Pacific Magazine* targeted to promote tourism along the Union Pacific line. The first article heralded the arrival of the "circle tour" of southwestern Utah parks, a 464-mile package describing perfectly that taken by Murphy 3-1/2 years later. The map accompanying the article also described a road system which would not be in place until 1930, eight years later, and which included the nonexistent Zion-Mount Carmel Highway.⁹⁰ Clearly, the Union

⁸⁹ Murphy, 246-47. The 1923 Union Pacific Railway station is, in 1993, intact and at the northwest corner of Main Street and 200 North. It houses a Godfathers Pizza outlet. The El Escalante used to stand across the street at the southwest corner of the same intersection, where the Sizzler Steak House now resides.

⁹⁰ Spencer article, January 1922.

Pacific had big plans by the end of 1921, and the confidence that it could influence if not dictate the complexion of southern Utah's highway system.

In October, 1922, the *Salt Lake Tribune* published an article laying out the specific developments the Union Pacific planned for southern Utah, including its intent to invest as much as \$5 million to construct railway branches to Cedar City and Fillmore and hotels at the key points along the circle route. The article outlined the July 1922, trip of local and national movers and shakers who would implement this plan. These included Carl R. Gray, president of the Union Pacific; H. M. Adams, vice president; W. S. Basinger, passenger traffic manager; and F. W. Gentsch, superintendent of the U.P.'s hotels and dining car services. Others who went along for the ride and would have an influence on what transpired over the next few years included D. R. Barr, a water engineer studying water requirements along the way; J. P. Mack, assistant engineer of the Los Angeles & Salt Lake line; George E. Goodwin, NPS chief civil engineer; R. E. Geary, chief of lands of the U.S. Forest Service, who would have something to say about developments at Cedar Breaks and Bryce since both were within forest lands; E. Mace, local road engineer; Randall L. Jones, secretary of the Cedar City Commercial Club and perhaps the greatest tourism booster in the State of Utah; and Chauncey Parry, one of the first concessionaires at Zion and a long-time public transportation expert in the region.⁹¹ In mid-1922 this group represented the complete who's who in southwestern national parks and monuments development, lacking only Stephen Mather and Horace Albright, who heartily supported the railroads' efforts.⁹²

The Union Pacific had intentionally held back from investments in southwestern Utah tourism infrastructures until its officials had recognized true federal, state, and county road improvements.⁹³ By 1923, Carl Gray decided that the Park Service and varied governments were serious about improving the roads, so the U.P. began to lay plans for tourism developments over the next 5-7 years. During 1923 and 1924, the railroad invested \$1,397,000-- by Carl Gray's reckoning--to build the branch line to Cedar City, a modern passenger depot, and the El Escalante Hotel along Main

⁹¹ *Salt Lake Tribune*, 16 October 1922.

⁹² Mather to Carl Gray, 11 May 1925, *Zion Codex*, ZNP library.

⁹³ W. S. Basinger to J. B. Ellwood, 31 December 1924, *Zion Codex*, ZNP library.

Street. This amount also included a new water system and lodge at Bryce Canyon. Gray planned to spend another \$1,847,000 by the start of the 1925 tourist season to construct a lodge and new water system at Zion and 30 new cabins at Bryce Canyon, as well as purchase 40 new 11-passenger automobile stages and initiate a \$100,000 national advertising campaign.⁹⁴ This represented a total investment of \$3,244,000 between 1923 and 1925, amounts that compared favorably to those invested by other railways in their own spheres of influence.

The U.P.'s vice president, H. M. Adams, wrote to Congressman Louis C. Cramton 29 December 1924, and in no uncertain terms presented these figures with the strong "request" that the federal government continue to build roads. Adams argued that the U.P.'s improvements were to the benefit of all park visitors, not just those who rode the rails, and expressed a clear understanding that automobile visitation to the parks represented the wave of the future. While commending the work completed to that date, he insinuated that the U.P.'s developments were being held up because the work had not progressed enough. Adams insisted that the road improvements he envisioned--and he enclosed an annotated map to be clear--should constitute a "loop" which would require the routes to be doubled. And he expected that road building would proceed in the "same forceful manner" as it had in 1924. Adams ended his letter with the admission that

This is a direct appeal for your undivided support to the end that the construction of highways may not in any way be discontinued until the work is completed. May we not with confidence count upon you?⁹⁵

The U.P.'s financial investments and efforts delineated in this letter, and the promise of more, no doubt contributed to the frenzied road work noted by Thomas Murphy in 1925.

The Union Pacific and its local tourism subsidiary, the Utah Parks Company, would carry through with its promises to build the tourist industry at the parks and monuments within the circle route. In 1925, it came out with the first edition of what came to be known as its "red book," an annual publication extolling the virtues of the circle route and supplying as much information on schedules, prices, and things to do as any tourist would ever want to know. The U.P. published editions of the red book

⁹⁴ Adams to Louis C. Cramton, 29 December 1924.

⁹⁵ Ibid.

annually at least through 1937 and continued to publish touring brochures into the 1960s.

The red book's format through the years closely followed the first publication in 1925. Detailed descriptions of the wonders to be obtained at Zion, Bryce Canyon, Cedar Breaks, the Kaibab Forest, and North Rim of Grand Canyon were followed by the logistics of getting there, accommodations, things to do, and pricing. In 1925, the U.P. offered two-week tours throughout the summer season from its headquarters in Chicago through the circle of attractions and home. It also offered unlimited stopover privileges for those travelling the Chicago to Pacific Northwest or Yellowstone lines who wanted to detour from Salt Lake City to Cedar City (\$13.75 round trip), or those travelling the Salt Lake City to Los Angeles line who wanted to detour from Lund to Cedar City (\$2.10 round trip). As noted in preceding pages, the Utah Parks Company operated automobile stages to the near circle attractions and the Parrys' Utah & Grand Canyon Transportation Company offered excursions from Bryce Canyon and Zion to the North Rim Grand Canyon. The red book advertised "good roads" along their routes and "fair roads, safe to travel, and undergoing improvement" for the Parrys' routes.⁹⁶

Circle tour options and schedules offered seemingly infinite variations at the various attractions. In 1925, the Utah Parks Company advertised six basic packages ranging from one to five days duration, but these could be intermixed with extended layovers at any point one chose. Rates ranged from \$16.00 for a one day trip to Cedar Breaks with box lunch, to a five-day circle tour of Zion, Pipe Spring, the Kaibab Forest and North Rim Grand Canyon, Bryce Canyon, and Cedar Breaks. The latter trip described exactly that taken by Thomas Murphy for which he would have paid \$86.75, all expenses included. A similar five-day tour operated in the opposite direction, taking in Cedar Breaks and Bryce Canyon first, then Grand Canyon and Zion. Other services included one-way fares for those wanting to go from Cedar City to North Rim Grand Canyon--from which point they could cross the Canyon on foot or mule back and continue their cross country trip via the Grand Canyon Railway and Santa Fe line. The company also offered chauffeur-driven automobile rentals for those who wished to create their own tour route.⁹⁷

The Utah Parks Company also provided "a la carte" service to those not choosing the tour packages. Lodging rates at the El

⁹⁶ Union Pacific Red Book, 1925, 34.

⁹⁷ Ibid., 39-41.

Escalante Hotel in Cedar City cost from \$1.50 per night for a single without bath to \$6.00 per night for a double with bath. Lodging at the rustic cabins in Bryce Canyon and Zion cost \$1.50 per night, or \$5.00 per day American Plan (included 3 meals). Meals could be purchased separately at \$1.00 for breakfast and \$1.25 each for lunch and dinner. The independently-run Wylie Camp at North Rim charged \$1.50 each for meals and tent cabin, and the independently-run V. T. Ranch charged \$1.50 per night for a cabin and \$1.00 for breakfast, \$1.25 each for lunch and dinner, or \$5.00 per day American plan. At Zion and Bryce Canyon, visitors could rent horses and guides by the hour or 8-hour day at prices ranging from \$4.00 to \$12.00 for horse and guide. These rates would increase through the years according to concessioner contracts negotiated with the National Park Service.⁹⁸

Advertisements within the Union Pacific's red books varied little through the 1920s concerning prices and road systems, as they remained basically the same as in 1925. Accommodations continued to improve, however, and in 1928 they added the new Grand Canyon Lodge at Bright Angel Point on the North Rim to the list of fine lodges and hotels. The U.P. was particularly proud of this 56,000-square-foot structure of native sandstone and rough-hewn ponderosa pine. With 66 adjacent cabins, the lodge could sleep 264 guests and offered electric lights, recreation room, lounge, barber shop, 200-person dining room, showers, and other modern luxuries. Also by 1928, the Zion Lodge had expanded to 72 double guest lodges capable of sleeping 288 visitors in keeping with the steady increase in visitation its owners had wrought. Bryce Canyon Lodge capacity also had increased slightly to accommodate 175 visitors, while a "rustic lunch pavilion" and souvenir shop had been added to Cedar Breaks.⁹⁹

Horace Albright, now NPS Director, wrote the introduction to the 1932 Union Pacific red book, and his words expressed the deep inter-relationship between the Service, the parks, concessionaires, and the railroad. Among other phrases praising the railroad's service, Albright added that in his 15 years of constantly travelling for the NPS, he was "*more than convinced that the railroads furnish the most convenient and comfortable mode of transit.*" Albright continued with an endorsement of the railroad's package tours within the parks and noted the partnership in this way:

⁹⁸ Ibid., 1925, 42-43.

⁹⁹ Union Pacific redbook, 1928, 42-45.

The development of travel facilities to and in the National Parks has reached the stage where the railroads, the operators of hotel, transportation, and other facilities within the parks, and the National Park Service of the Federal Government cooperate in insuring visitors the best possible results from a visit to the National Parks in a minimum of time.¹⁰⁰

Clearly by this year, the National Park Service had established the close relationship it had planned nearly twenty years earlier when Albright and Mather committed to expanding visitation to the park. In 1932, it seemed like a dream come true. In subsequent years, the impact of "industrial tourism" developed during these years would change some minds concerning national park visitation.

Completing the Circle

The Union Pacific's 1932 red book contained one more highway on its circle map and a few photographs and words for the engineering marvel which through its persuasion it had helped bring about. The Zion-Mount Carmel Highway, built in 1927-1930 at a cost approaching \$2 million, changed the shape of the circle by inserting an all-weather connection between Highways 89 and 91 through Zion National Park. It cut distances to the various other attractions and supplied new vistas from its switchbacks and windows carved from the mile-long tunnel above Pine Creek Canyon. The new highway also altered tourism patterns by essentially eliminating traffic along the Rockville Cutoff and deleting Pipe Spring National Monument from the circle route.

The Zion-Mount Carmel Highway can be viewed as a culmination of the forces described earlier: the promotional campaigns of the Union Pacific Railroad, the encouragement of the National Park Service and local boosters, and improvements in road building technology along with new sources of highway funding. The former elements of this cooperative effort have been described in preceding pages, and a review of the advancements in road building technology and new sources of funding will complete the illustration.

Road construction and maintenance in southwestern Utah, as described earlier, improved during the 1910s through the efforts of good roads associations and the accommodating Governor Spry, but funding and technology in these years represented little more

¹⁰⁰ Union Pacific redbook, 1932, introduction.

than a continuation of nineteenth-century practice. Road building equipment had not progressed far beyond picks and shovels, thus, realignments to the old pioneer roads did not significantly improve upon grades. The principal form of maintenance still entailed horse-drawn, split-log drags which required the right amount of recent precipitation and experienced drivers to effect a smooth wearing course that would last for more than a few weeks. With occasional water sprinkling for dust abatement, the maintenance program was complete.¹⁰¹

This situation began to change when the 1916 federal aid bill combined with state and local funding began to impact Utah's roads in 1920. Through an accumulation of state road bond issues initiated in 1916, county tax levies, and federal aid projects which had accumulated during the war years, the state road commission found that it had over \$7 million to invest in roads beginning in 1920. Through the persistence of the National Park Service, Union Pacific Railroad, state road commissioner Henry W. Lunt (from Cedar City), and local boosters, some of this money was finally targeted for Utah's southern roads. Other factors contributing to the onset of continuous road building in the early 1920s included a 2½-cent gasoline tax implemented in 1923, a reorganized state road commission under Howard C. Means, and a closer relationship between the state and the Bureau of Public Roads. This latter relationship greatly improved the quality of locations, surveys, specifications, and road building methodologies.¹⁰²

During the early 1920s, Zion National Park's superintendents noted many improvements to roads along the circle tourism route and especially to those leading to the park from LaVerkin. Activity clearly picked up during these years. Larger sections of road were addressed than in former years, and bridges began to make their appearance over sections of the Virgin River and a number of side drainages, replacing the fords of earlier years. Still, the impression given is one of men working to level

¹⁰¹ "The Autobiography of Howard Means," transcript of oral interview, 1947-48, Utah State Historical Society, Salt Lake City, Utah; Knowlton, 153; Laurence Isley Hewes, *American Highway Practice* (New York: John Wiley & Sons, 1942), 1-4.

Hewes notes that most of the country went through the same evolution of road building improvements beginning about 1890. Initial road improvements followed existing rights of way and grades for the most part.

¹⁰² "Autobiography of Howard C. Means"; Knowlton, 211, 215, 217, 226, 229, 232-33.

existing roadways--performing extensive maintenance, in other words--rather than building new grades. These reports begin to note more aggressive projects by 1924 and thereafter through the 1920s.¹⁰³

Richard Evans' first annual report as Zion superintendent in 1925 mentioned two major road projects getting underway in that year--the Rockville Shortcut road and the Arrowhead Trail project, both noted by Thomas Murphy during his mid-1925 trip. These projects entailed entirely new alignments to existing roads. The latter project at last moved the roadway out of Ash Creek Canyon below the Black Ridge, thus bypassing the Black Ridge Dugway, and replaced it with an elevated, all-weather, graded gravel highway. The new highway included two bridges--one of which was a 200' concrete arch bridge over Ash Creek--and an entirely new grade from a few miles south of Kanarraville, around the Black Ridge to the west side of the canyon, and down through Pintura as far as Toquerville. Completed in 1925, this federal aid project represented the first major improvement to this segment of road since 1869. This same alignment was later asphalt-surfaced and became the Highway 91 most local people remember. Most of this road, though replaced in the late 1950s by Interstate 15, can still be followed from Cedar City to Washington and can be recognized for what it is: a modern road with constructed subgrade.¹⁰⁴

The joint state-federal project to rebuild the Arrowhead Trail is representative of the highway projects affecting the circle tourism route and roads within and approaching Zion and Bryce Canyon national parks between 1924 and 1932. For the first time, engineers began to locate roads using standards that considered automotive numbers and types (auto, truck, bus), appropriate grades, traffic speeds and frequency, road curvature, elevation, superelevation, and a host of other criteria. The science of constructing modern roads for automotive traffic was also pushing forward as highway departments learned through a decade or two of experience what types of subsoils and mineral aggregate interacted best to produce a stable road that could stand up to

¹⁰³ An example of the early 1920s work is found in ZNP Superintendent's Annual Report, 1 September 1923, *Zion Codex*, ZNP library. Walter Ruesch notes the state and county together using convicts for several months along the approach road, where the work entailed widening the existing roadway and keeping it in good repair during the summer months.

¹⁰⁴ ZNP Superintendent's Annual Report, 1 September 1925, *Zion Codex*, ZNP library; Knowlton, 236.

heavy automotive traffic. Highway landscaping also became a consideration for road location and construction during these years as the federal government began to allocate funds for this purpose in 1928. By 1935 nearly all 48 states employed landscape engineers.¹⁰⁵

The Utah State Road Commission, reorganized under Howard C. Means, well funded, and now working closely with the expert Bureau of Public Roads on a series of federal aid projects, moved along with the national trend for better highways. The fact that Utah's formula for federal aid required only a 24 percent contribution by the state was a strong inducement to enter into these joint projects. The commission early on experimented with a number of surfaces for Utah's highways, preferring a Portland cement or bituminous surface initially, especially for municipal streets. They settled on gravel surfaces as the medium for country roads by 1924 because the state was pushing to complete intrastate roads, untreated gravel roads could stand up to moderate auto traffic, Utah is blessed with plentiful gravel material, and the counties simply could not come up with their share of the expense of paved roads. An excellent gravel road could be built for \$5,000 per mile, while a cement-surfaced road cost as much as \$30,000 per mile. For these reasons, 1924 marked the beginning of the gravel road construction period in Utah.¹⁰⁶

The state began to experiment with various types of oil-treated gravel roads in the latter part of the decade, including a light gasoline byproduct applied cold, saline solutions such as calcium chloride, and heavier oils. They found the latter to be most effective and completed 28 miles of mixed oil roads in 1927 and more than 300 more miles by 1930. By the latter year, the state considered mixed-oil roads to be the most effective surface for its county roads until they could be replaced with concrete or asphalt, and continued to build these roads into the 1950s for city streets as well as major highways.¹⁰⁷

The construction of the Zion-Mount Carmel Highway (HAER No. UT-39) between 1927 and 1930 illustrated the advances in southern Utah roadbuilding which had occurred since the late 1910s. Reconnaissance and location of a road through the seemingly insurmountable barrier of Zion Canyon represented a cooperative effort by the BPR and state road commission. BPR engineer B. J.

¹⁰⁵ Hewes, 53-54, 195-97, 273-82 passim.

¹⁰⁶ Ibid., 316-17; Knowlton, 241-42.

¹⁰⁷ Ibid., 268-72.

Finch and State engineer Means first explored the region in 1923. The task was so formidable that it took nearly four years and several locations before a practical route could be staked and specifications drawn for construction. The Bureau of Public Roads coordinated the design of the highway with the National Park Service and the state road commission, and later supervised the complicated, multi-sectional project from initial estimates and contract bids through final construction. In the end, estimates deviated from actual costs by only \$5,000 on a project costing nearly \$1.5 million. For its part, the State of Utah completed a 16.5-mile connecting federal aid project from Zion's eastern boundary across the slickrock plateau to Mt. Carmel Junction at a cost of more than \$400,000, one of the most expensive and formidable projects undertaken by the state up to that time.¹⁰⁸

Three major contractors worked on the 25-mile Zion-Mount Carmel Highway: the Nevada Contracting Company of Fallon, Nevada (major NPS contractor), Raleigh-Lang Construction Company of Springville, Utah (major state contractor), and the Reynolds-Ely Construction Company, also of Springville (major bridges). These companies brought the latest in engineering technology and equipment to the task, as well as the skill to bore a 1.06-mile tunnel through solid Navajo Sandstone and emerge at the other end only a few inches from the planned point. In contrast to the hand tools and wagons of less than two decades prior, these road builders brought jackhammers, power drills, Erie air shovels, 3-5 yard Mack trucks, mucking machines, and the compressors, motors, steam pumps, and electrical power required to run them. Only with this kind of earth and rock-moving equipment could road builders construct the cuts and fills required to produce highways of consistent, gentle grades through rugged terrain.

The Zion-Mount Carmel Highway has changed since its completion more than sixty years ago. The original oil-mixed gravel (for the switchbacks) and selected material (for the east side) wearing surfaces--standards at the time--were replaced with asphalt and have been maintained with chip sealing since completion. The original concrete wearing surface within the tunnel--state of the art in 1930 and rare in Utah at that time--still serves, however. Wherever possible, the roadway has been widened and two original bridges were recently replaced. Still, it has held up remarkably well considering that use has increased from a few thousand vehicles per year at its completion to nearly a million per year by 1993. That it continues to serve on its

¹⁰⁸ Ibid., 288-90. Details of costs and construction taken from HAER No. UT-39 report.

original grade is a tribute to roadbuilding technology achieved by the late 1920s.

SIGNIFICANCE/CONCLUSIONS

Southwestern Utah's circle tourism route has changed surprisingly little since the completion of the Zion-Mount Carmel Highway. In the near region, Highway 14 assumed its current form through major reconstruction in the 1930s and 1950s. Highway 91 was replaced by Interstate 15 along the same path beginning in the late 1950s. Other original circle roads have been improved as well, though all retain their original routes or at least their original purposes since the settlement days of the 1850s. In the larger region, commercial boosters today describe a "Grand Circle" of southwestern attractions, some of which--such as Lake Powell--trace their principal access origins to the developmental factors considered in this history.

The elements involved in the evolution of parks and monuments of southwestern Utah and the development of a circle tourism route illustrate a pattern of development common to other regions of the West. In our region of study, Southern Paiute Indians pointed the way to established travel routes and thus influenced later settlement locations and transportation arteries. Paiute guides directed the first whites to the upper Virgin River Valley and their trails led them up the canyon walls within Mukuntuweap and Parunuweap canyons. Certain aspects of their lifestyles such as use of native plants likely helped the first white settlers in small ways to weather initial hardships. The American Indian element described in this history is common to Western settlement and significant if often underestimated.

Some form of white settlement at or near the western national parks and monuments most often precedes their development and this region's history is one example of that rule. There are, however, unique aspects of settlement illustrated in this history--all related to colonization by the Church of Jesus Christ of Latter Day Saints. First, the residents of the towns founded by initial settlers to the Zion and Bryce regions came for reasons other than tourism development and were slow to pick up on the economic opportunities thus availed. Even today, very few of these towns, populated to great extent by pioneer descendants, are equipped for the greater than three million annual visitors to the region. This contrasts to western parks such as Grand Canyon and Mount Rainier where men like William W. Bass and James Longmire first approached the later park lands and intentionally developed tourist accommodations.

On the other hand, Mormon pioneers are responsible for laying out the original roads which--with the single exception of the Zion-Mount Carmel Highway--represented the farthest extent of roads within the circle tourism route. Later highways would simply improve on roads already located by regional residents. This too contrasts with other western parks as nascent road development patterns usually resulted from initial tourist development followed by purposeful access by state and county road builders urged on by the National Park Service. The latter pattern emerges at Zion and Bryce Canyon, but at a later time and only to improve (with the one noted exception) existing roads. The Mormon influence on the development of roads surrounding our southwestern national parks deserves further study as the patterns at Zion and Bryce are likely illustrative of transportation developments throughout Utah, northern Arizona, and perhaps surrounding areas. George Wharton James has written that there would be no Utah without the Mormon people. This is untrue, of course, but Utah, its development, and its national playgrounds would certainly be different if other than Mormons had first settled its arid lands.

The development of tourism deliberately fostered by the Union Pacific Railroad and National Park Service has been compared to larger western patterns within this history. Development at Zion and surrounding parks is certainly representative of that in other regions, and the success achieved--if it can be measured by the number of annual visitors--surely helps illustrate the successful combination of these historical elements. The role played by the Bureau of Public Roads and the Utah State Road Commission in keeping roads up to NPS and U.P. standards has also been explored. The BPR's involvement in the construction of the Zion-Mount Carmel Highway is illustrative of that agency's role in western park roads after an agreement in 1925 initiated a special road building relationship with the NPS. An interesting topic for further research would entail comparisons between the Utah State Road Commission's relationship with the BPR in building park access roads and similar arrangements in other western states.

This history ends with the development of Zion and other regional parks and monuments in 1930-32, by which years most of today's major regional roads were in place. The purpose was to explain Zion's development, particularly its road development, within contexts of exploration, settlement, transportation, and tourism--all of which were fairly well-defined if not fully developed by those years. It is useful in closing to return to one concept introduced at the beginning--that transportation arteries are built to suit current needs and constantly evolve. Today's circle tourism route faces problems because access roads designed

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to bring the crowds in droves--in place, effective, and sufficient--have worked all too well. Park roads, however, are designed for slow speeds, leisurely enjoyment, and far fewer people and are now inadequate. It will be interesting to see if the NPS in combination with road builders, capitalists, and local boosters will find new structural solutions, or will begin in some way to limit visitation to the national parks and monuments.

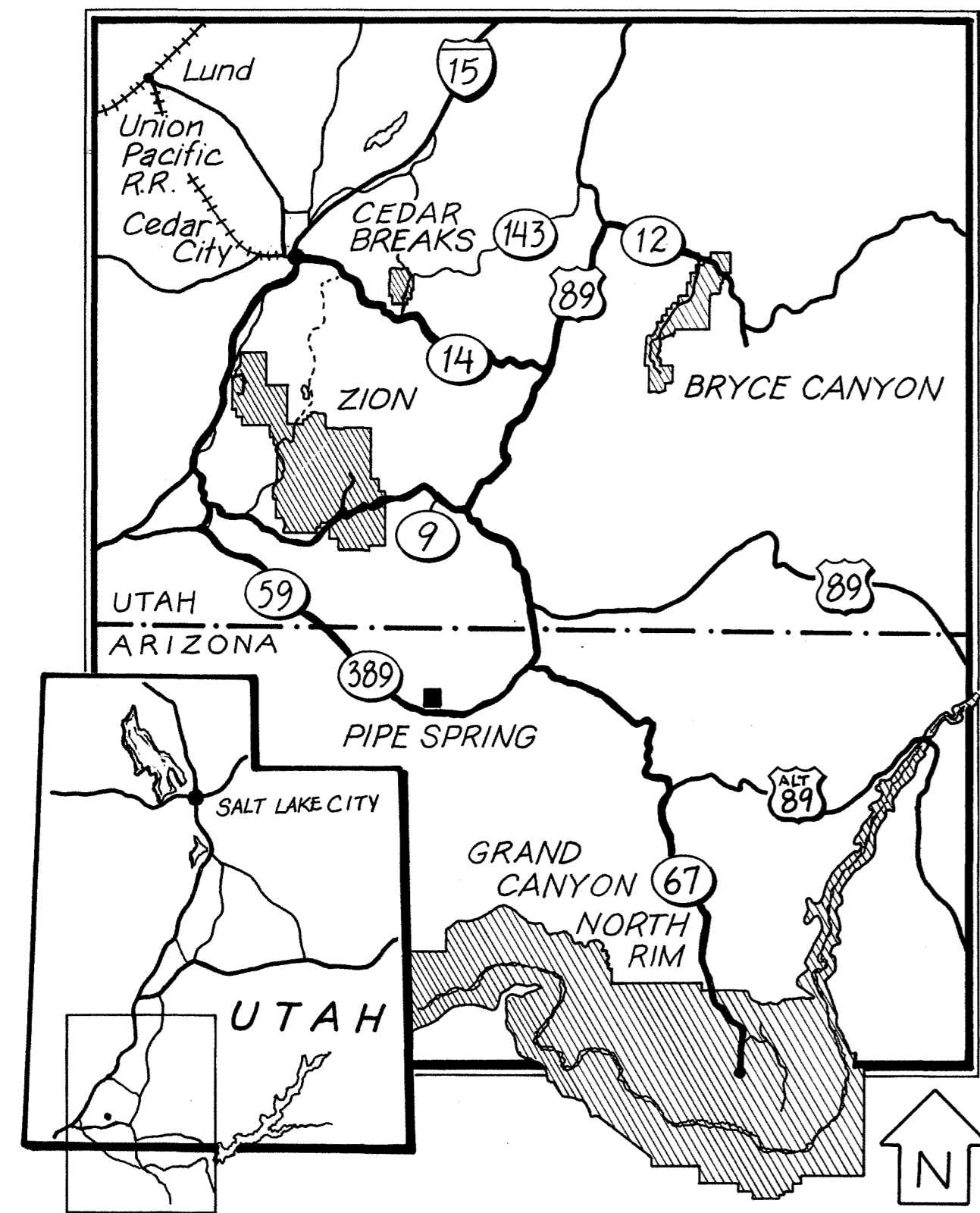
ADDENDUM TO
ZION NATIONAL PARK ROADS AND BRIDGES
Zion National Park
Springdale Vicinity
Washington County
Utah

HAER No. UT-72

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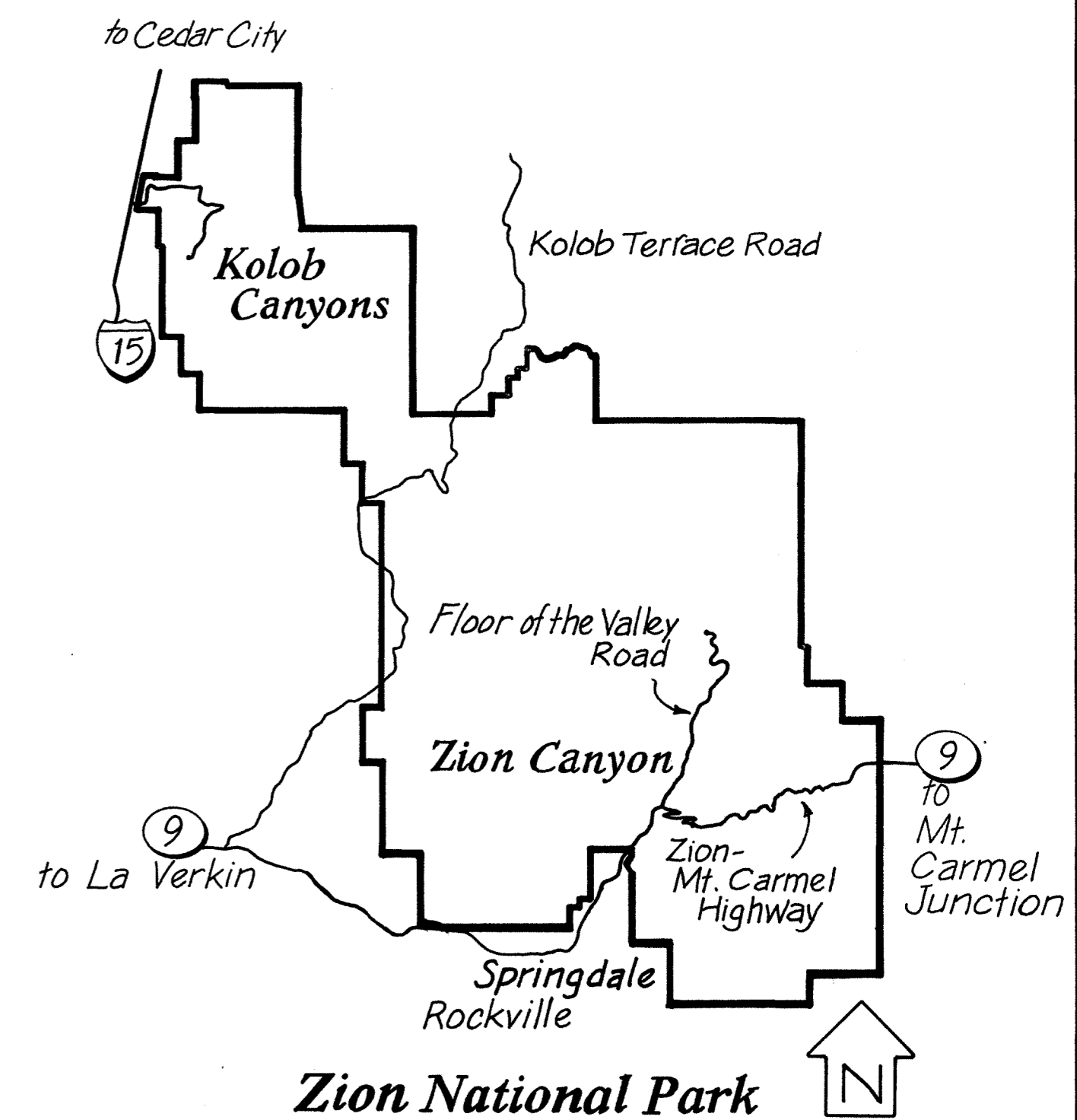
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ZION

ROADS & BRIDGES

ZION NATIONAL PARK, UTAH



Zion National Park, encompassing 229 square miles of southern Utah wilderness, contains many natural wonders found only in this region of the country. Deep canyons twist between high plateaus, testifying to the patient strength of erosion. Petrified forests, rivers, waterfalls, and wildlife are surrounded by varied and spectacular rock formations, including one of the world's largest natural arches--Kolob Arch, spanning 310 feet.

The area was relatively isolated until the first settlers entered the area in 1858, founding Virgin City, Utah, located south of Zion Canyon. Mormon pioneers developed rough wagon roads between small settlements, frequently following trails first established by Native American residents and Spanish explorers. The uniqueness of the park area was soon recognized, leading to the creation of Mukuntuweap National Monument in 1909 (later changed to Zion National Park in 1919).

The first automobiles to travel into Zion National Park followed a road constructed in 1917 with a \$15,000 special appropriation, extending four miles from the south entrance to Weeping Rock. In 1925, a longer "Government Road" replaced it. The gravel-surfaced highway ran 7.5 miles from the south entrance to the Temple of Sinawava and cost \$70,000. This road was replaced in 1932 with today's Floor of the Valley Road, which now carries nearly a million vehicles per year through Zion Canyon.

Further refinements of the existing road systems into and surrounding Zion were not begun until 1920, when an aggressive road building campaign was initiated, spearheaded by the Union Pacific Railroad in conjunction with the National Park Service, Utah Road Commission, and Bureau of Public Roads. The Union Pacific sought to connect Zion, Bryce Canyon, Cedar Breaks, and the North Rim of the Grand Canyon with a series of roads creating a "circle" or loop tour. Visitors could

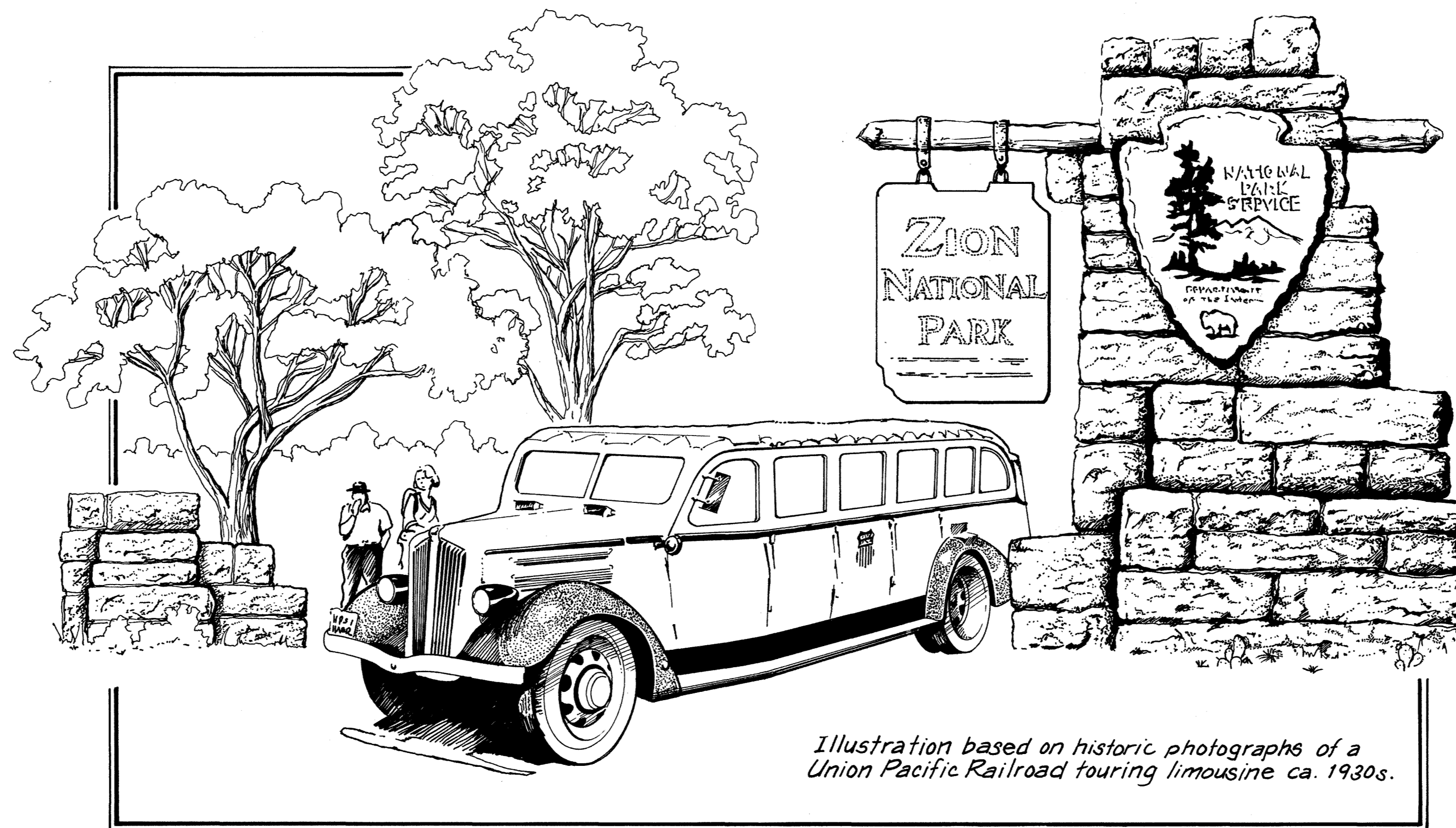


Illustration based on historic photographs of a Union Pacific Railroad touring limousine ca. 1930s.

This project is part of the Historic American Engineering Record (HAER), a long-range program to document historically significant engineering and industrial works in the United States. The HAER program is administered by the Historic American Buildings Survey/Historic American Engineering Record Division (HABS/HAER) of the National Park Service, U.S. Department of the Interior. The Zion Roads and Bridges Recording Project was cosponsored during the summer of 1993 by HAER under the general direction of Dr. Robert J. Kapsch, Chief; the National Park Service Roads Program, John Gingles, Manager; and by Zion National Park, Donald Falvey, Superintendent.

The field work, measured drawings, historical reports, and photographs were prepared under the direction of Project Leaders Eric DeLony, Chief of HAER, and Todd A. Croteau, HAER Staff Architect. The recording team consisted of Todd A. Croteau, field supervisor; Architectural technicians Laura J. Culberson and Christopher Payne. Historical reports were prepared by project historians Michael Anderson, Christine Madrid, and Richard H. Quin. Formal large-format photography was done by Brian Grogan.

access the area by train into Cedar City, Utah, board a large touring limousine, visit the parks and stay at lodges run by a subsidiary of the Union Pacific. Completion of an adequate road system was the key to the long-range plans developed by the corporation.

During this time, State engineer Howard Means and Bureau of Public Roads Engineers B.J. Finch and R.R. Mitchell located and surveyed a 25-mile long route which would travel through Zion National Park, meeting with Highway 89 near Mount Carmel. Completion of this route was essential to the Union Pacific's overall plan to increase tourism in the area. The NPS allotted \$1,500,000 to construct the initial 8.5-mile segment of the road from the North Fork Virgin River, up the talus slopes of Pine Creek canyon through seven switchbacks, into the cliffs themselves with a 5,613-foot long tunnel and on to the park's east boundary. Two bridges were included in the construction, North Fork Virgin River and Pine Creek bridges, both constructed in a rustic style harmonious with the natural environment of each structures individual setting.

The remainder of the road, east of the tunnel, was finished by the State of Utah as a federal aid project at a cost of over \$400,000, including the Co-op and Clear Creek bridges (replaced in 1993). With the completion of the Zion National Park road system, tourists (with the Union Pacific or otherwise) were able to visit parks within the circle tour loop on an interconnected, modern system of highways. Although the Union Pacific plans for the area were successful, they became short-lived, as more and more Americans sought to explore the wilderness regions of Utah and Arizona with the flexibility and privacy of their own personal vehicles. Today, nearly 3,000,000 visitors travel through Zion National Park yearly to stand in wonder beneath its massive sandstone monoliths and meander among the valley's lush canopy of cottonwoods and ashes.

DELINEATED BY: Todd A. Croteau, 1993

ZION NATIONAL PARK
ROADS AND BRIDGES RECORDING PROJECT
UNITED STATES DEPARTMENT OF THE INTERIOR

SPRINGDALE VICINITY

ZION NATIONAL PARK ROADS AND BRIDGES

UTAH

SHEET 1 of 2

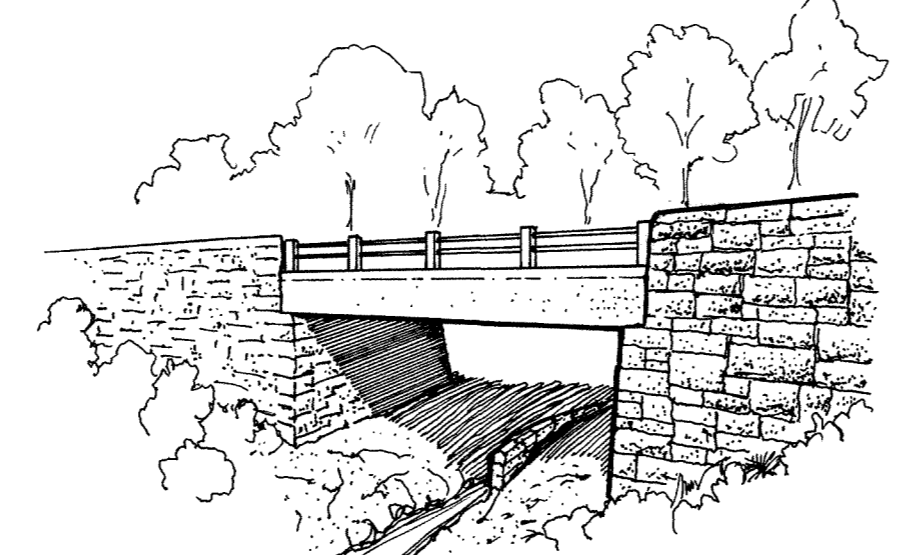
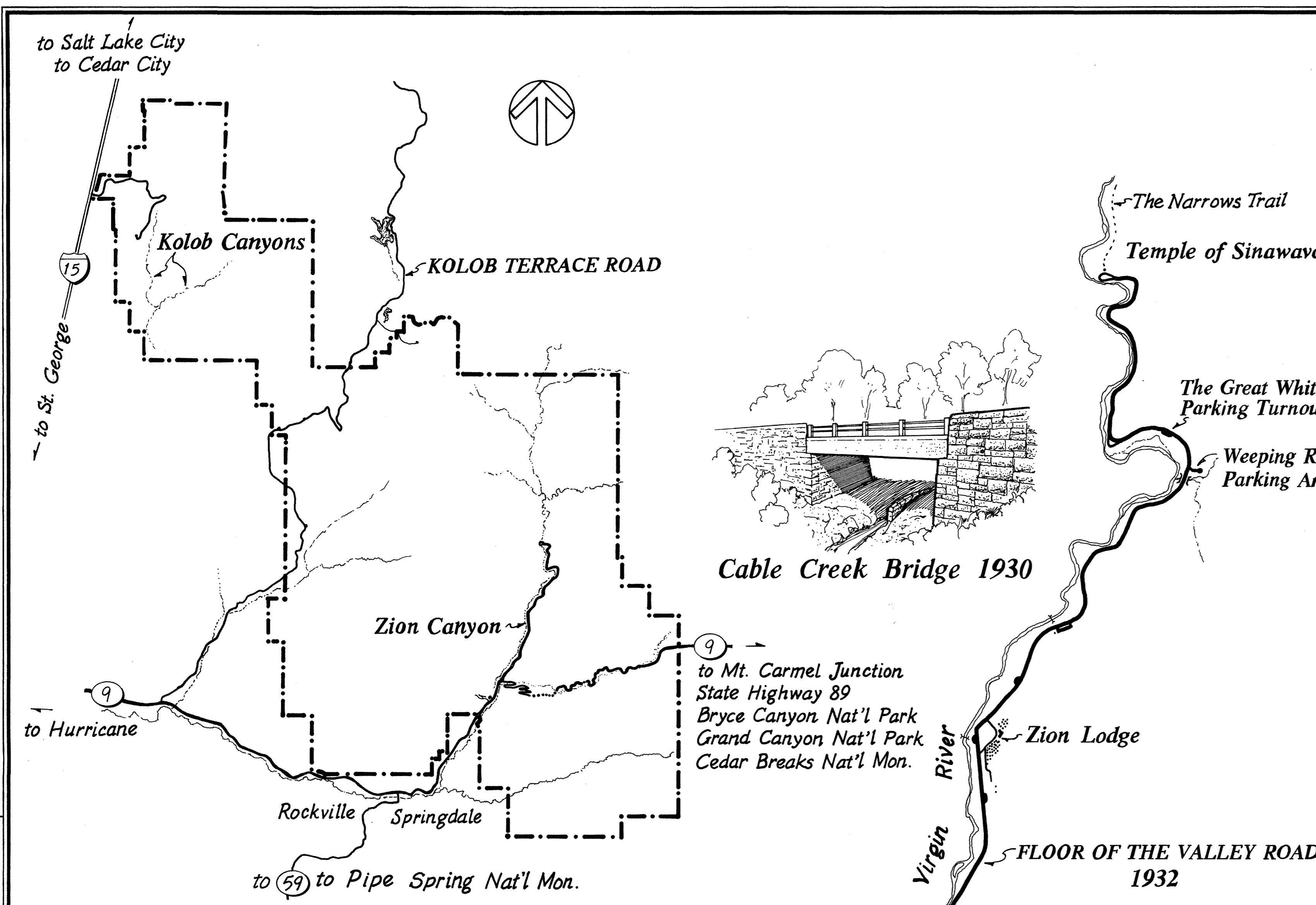
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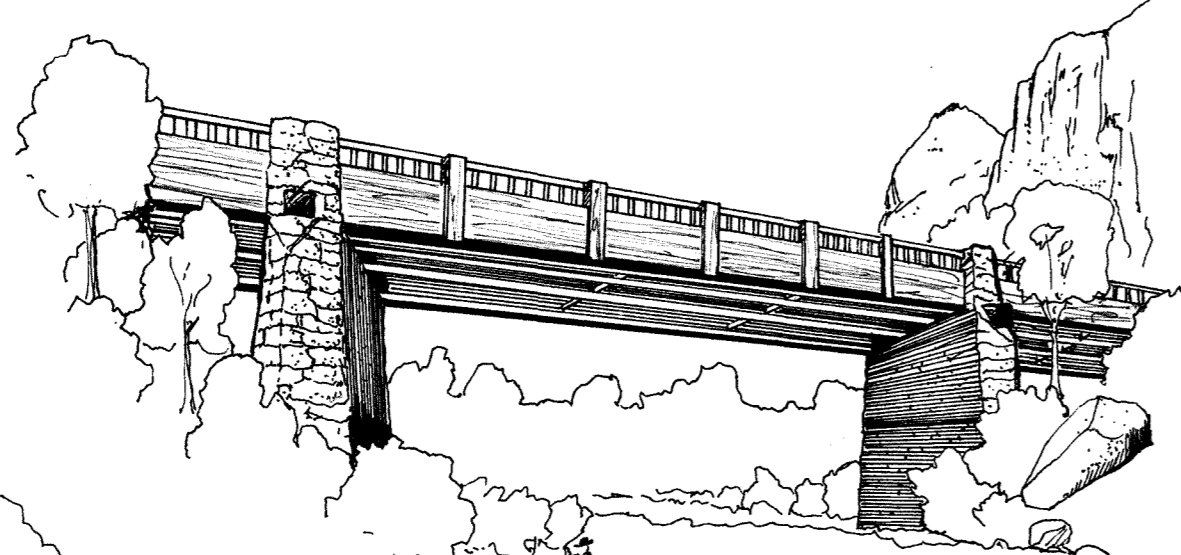
ZION NATIONAL PARK ROADS & BRIDGES

Road-Related Structures Documented by HABS/HAER

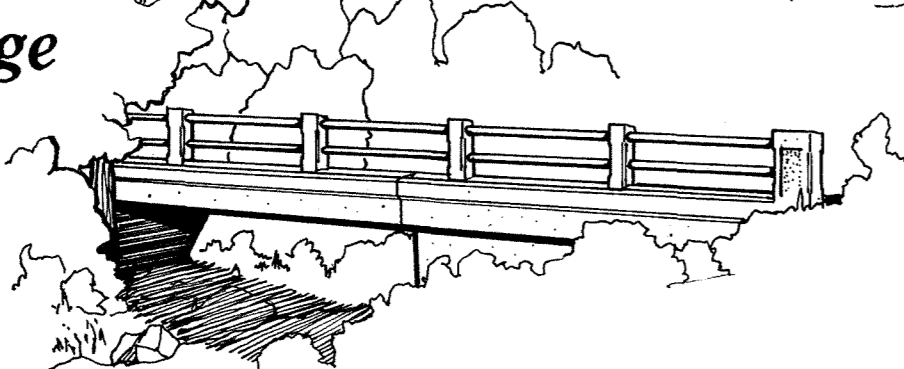
HABS/HAER No.	Structure
HAER UT-72	Zion National Park Roads and Bridges (Overview)
HAER UT-72-A	Zion National Park Roads and Bridges, South Entrance Sign
HAER UT-72-B	Zion National Park Roads and Bridges, Oak Creek Bridge
HAER UT-39	Zion-Mt. Carmel Highway
HAER UT-39-A	Zion-Mt. Carmel Highway, Long Tunnel
HAER UT-39-B	Zion-Mt. Carmel Highway, Pine Creek Bridge
HAER UT-39-C	Zion-Mt. Carmel Highway, North Fork Virgin River Bridge
HAER UT-39-D	Zion-Mt. Carmel Highway, Co-op Creek Bridge
HAER UT-39-E	Zion-Mt. Carmel Highway, Clear Creek Bridge
HAER UT-39-G	Zion-Mt. Carmel Highway, East Entrance Checking Station
HAER UT-39-H	Zion-Mt. Carmel Highway, Short Tunnel
HAER UT-39-I	Zion-Mt. Carmel Highway, East Entrance Sign
HAER UT-39-J	Zion-Mt. Carmel Highway, Upper Pine Creek Bridge
HAER UT-73	Floor of the Valley Road (Zion Canyon Scenic Drive)
HAER UT-73-A	Floor of the Valley Road, Cable Creek Bridge
HABS UT-108-G	Zion Entrance Checking Station (South)
HABS UT-108-I	Zion East Entrance Sign
HABS UT-108-K	Zion Stone Quarry
HAER UT-74	Rockville Parker Truss Bridge, 1924
HAER UT-75	Virgin River Arch Truss Bridge, 1939
HAER UT-76	Virgin River Warren Truss Bridge, 1911



Cable Creek Bridge 1930



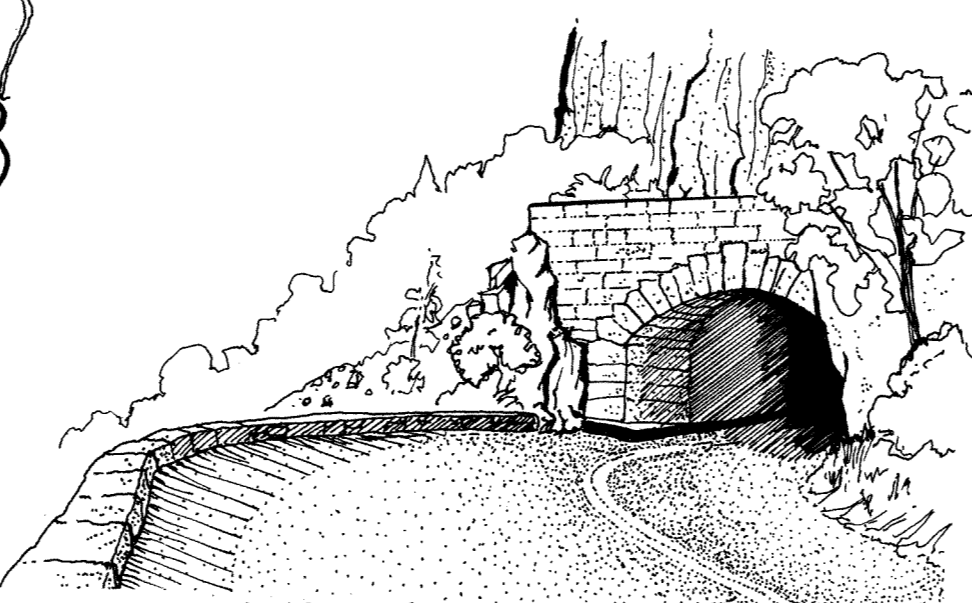
North Fork Virgin River Bridge 1930



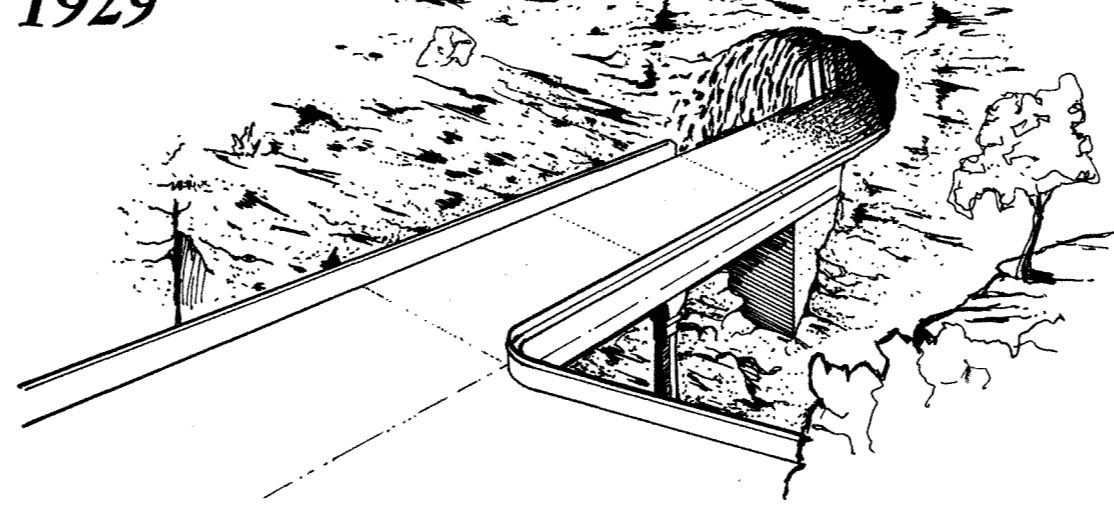
Oak Creek Bridge 1926



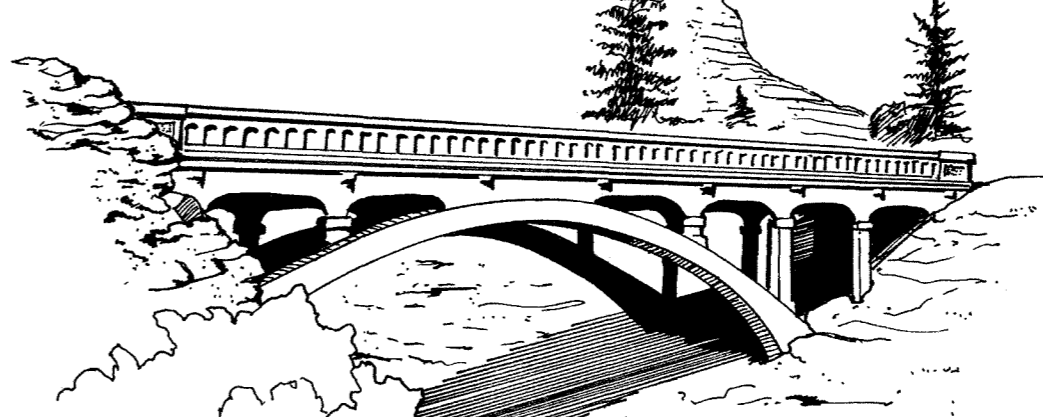
Pine Creek Bridge 1930



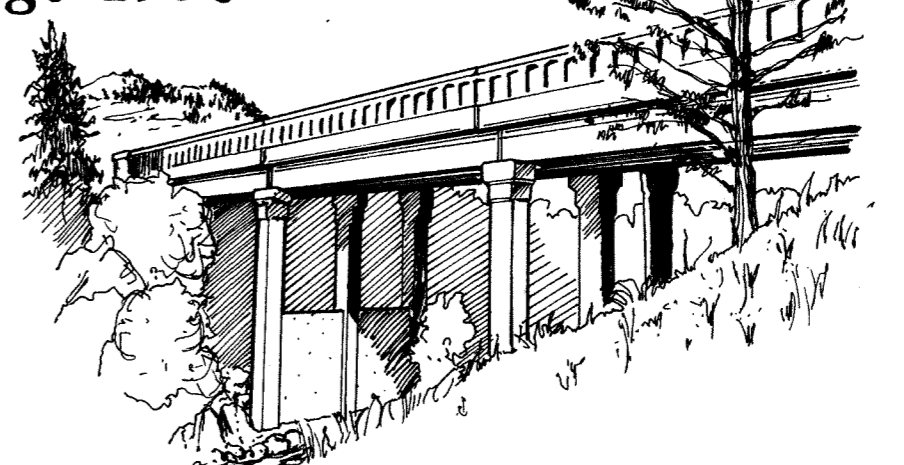
West Portal 1929
Zion-Mt. Carmel Highway Tunnel



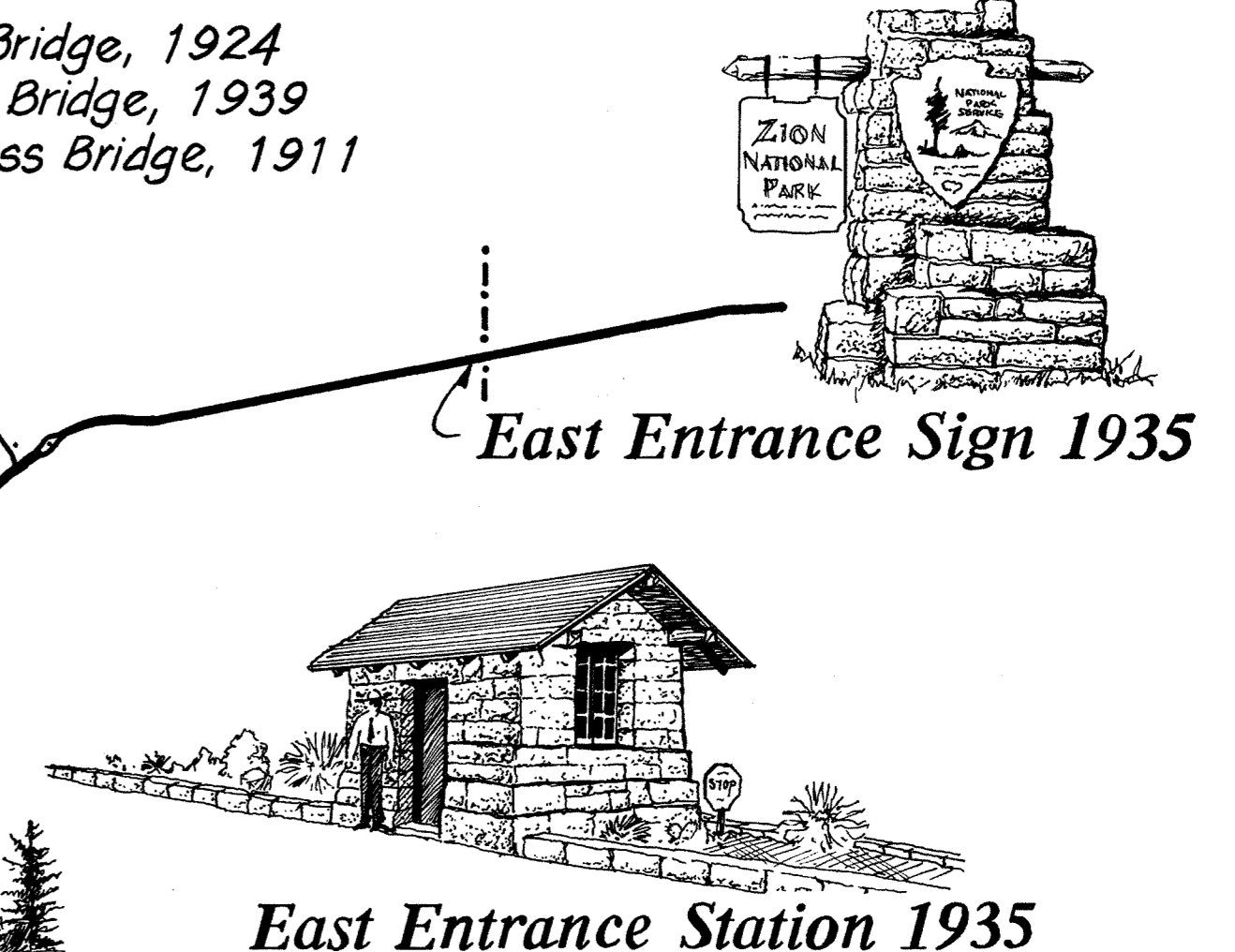
Upper Pine Creek Bridge At East Portal 1929



Clear Creek Bridge 1930



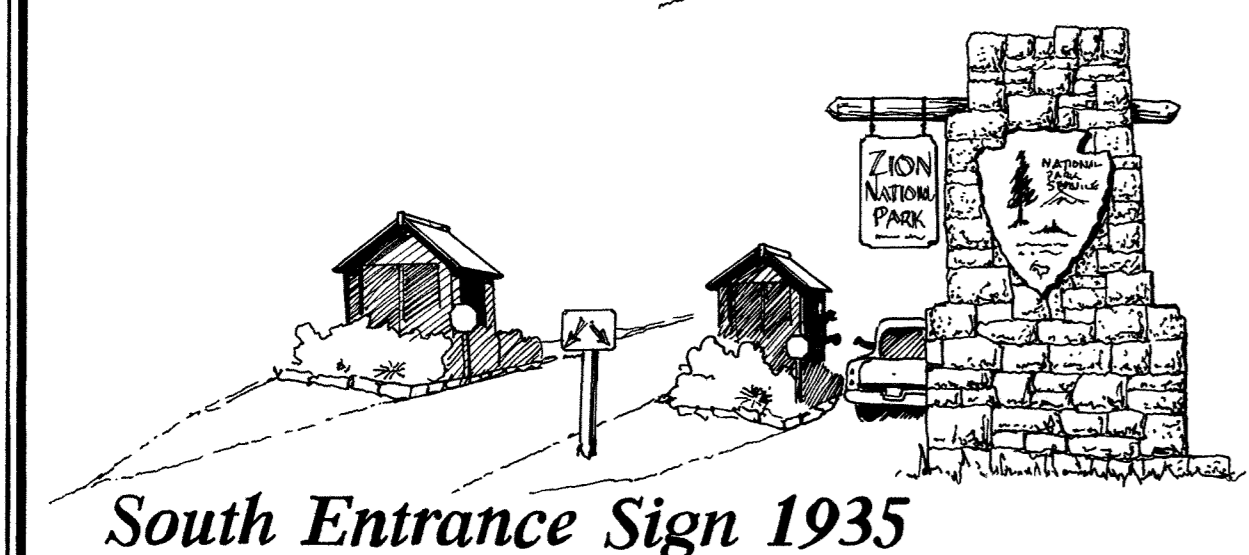
Co-op Creek Bridge 1929



East Entrance Station 1935



East Entrance Sign 1935



South Entrance Sign 1935

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HISTORIC AMERICAN ENGINEERING RECORD

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ZION NATIONAL PARK ROADS AND BRIDGES
Zion National Park
Springdale vicinity
Washington County
Utah

HAER No. UT-72

Brian C. Grogan, photographer, summer 1993

- UT-72-1 APPROACHING ZION FROM THE WEST ON UTAH HIGHWAY 9; OLD MATHER ROAD VISIBLE TO RIGHT OF MODERN HIGHWAY
- UT-72-2 APPROACHING ZION FROM THE WEST FOLLOWING THE VIRGIN RIVER VALLEY. OLD MATHER ROAD VISIBLE IN RIGHT BACKGROUND
- UT-72-3 SMITHSONIAN BUTTE ROAD APPROACH TO ZION VISIBLE IN CENTER BACKGROUND, VIEW FACING SOUTH
- UT-72-4 VIEW ALONG OLD MATHER ROAD
- UT-72-5 VIEW FROM SMITHSONIAN BUTTE FACING NORTH ALONG OLD ROAD
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UT-72-1 to UT-72-6 were previously transmitted to the Library of Congress.

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All color xeroxes were made from a duplicate color transparency.

Brian C. Grogan, photographer, summer 1993.

UT-72-7 APPROACHING ZION FROM THE WEST FOLLOWING THE VIRGIN RIVER VALLEY. OLD MATHER ROAD VISIBLE IN RIGHT BACKGROUND.



HAER No. UT. 72-1





PHOTO NO. 01-122



HAER NO. UT-723

HAER NO. VT-72-4





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