# Statement of Significance

## **Glenn Highway**

(The current Glenn Highway is designated as Interstate Highway System and is under the Interstate Exemption [2005] and exempt from consideration as a historic property during Section 106 Review)

Prepared for

Alaska Department of Transportation and Public Facilities

December 2014

DOT&PF Note October 2015: Rept does not address integrity; NRHP eligibility status of non-exempt segments not determined

# **Statement of Significance**

# **Glenn Highway**

(The current Glenn Highway is designated as Interstate Highway System and is under the Interstate Exemption [2005] and exempt from consideration as a historic property during Section 106 Review)

Prepared for Alaska Department of Transportation and Public Facilities



December 2014

## **Table of Contents**

			Page
1.	Intro	Introduction	
2.	Desc	Description of the Road	
3.	Histo	Historic Context	
4.	Significance		12
	А.	Criterion A: Events	12
	В.	Criterion B: Persons	
	C.	Criterion C: Design/Construction	
	D.	Criterion D: Information Potential	15
5.	Reco	ommendation	16

### 1. Introduction

This statement of significance was prepared as a component of the Applied Historic Context of Alaska Roads Project completed in 2012-2014 for the Alaska Department of Transportation and Public Facilities (DOT&PF). The project began with the development of the *Alaska Roads Historic Overview: Applied Historic Context of Alaska's Roads* (Roads Overview) (February 2014) and the *Methodology for Assessing National Register of Historic Places Eligibility* (Roads Methodology) (December 2014).

For the project a select number of roads with potential for individual National Register of Historic Places (National Register) eligibility were identified for evaluation of significance. This study is limited to the evaluation of the road's significance. If a road meets one or more areas of significance, identification of essential physical features and an assessment of integrity needs to be completed to determine National Register eligibility. These statements of significance apply the Roads Methodology and utilize contextual information from the Roads Overview. The Roads Methodology outlines that the entire length of a road should be considered when evaluating significance. The entire length of the road including bypassed segments were considered in the development of this statement of significance.<sup>1</sup>

This report identifies and describes the important historic themes associated with the Glenn Highway. It summarizes these important themes to place the development of the Glenn Highway within an appropriate historic context to evaluate its historical significance.

<sup>&</sup>lt;sup>1</sup> While some Alaskans consider the Tok Cutoff to be an extension of the Glenn Highway, the Alaska DOT&PF does not include the Tok Cutoff as part of the official Glenn Highway designation. For the purposes of this document, the eastern terminus of the Glenn Highway is located at the junction with the Richardson Highway at Glennallen.

## 2. Description of the Road

The Glenn Highway (Alaska Heritage Resources Survey [AHRS] numbers ANC-04068, VAL-00532, and GUL-00427; Coordinated Data System [CDS] number 135000) is approximately 180 miles long and runs east-west from 5<sup>th</sup> Avenue in downtown Anchorage to its junction with the Richardson Highway near Glennallen.<sup>2</sup> The highway is owned by the Alaska DOT&PF and passes through the Municipality of Anchorage, the Matanuska-Susitna Borough, and the Valdez-Cordova Census Area portion of the Unorganized Borough. The highway incorporates a number of earlier road segments constructed in the greater Anchorage area that extended to Palmer in the 1920s and 1930s, when it was known as the Anchorage-Palmer Highway. The final 142-mile portion between Palmer and the Richardson Highway was begun by the Alaska Road Commission (ARC) in 1941 and opened in 1944.<sup>3</sup>

The newly constructed highway is described in the 1943 annual report as having a 24-foot crushed gravel surface, no grades over 7.75 percent, and no curves over 30 degrees.<sup>4</sup> This fell short of the ARC standards established in 1949, which called for a minimum 20-foot asphalt surface and lower maximum grades in all but mountainous topography.<sup>5</sup> At this time the highway, classified as a through road, was improved as part of the large-scale post-World War II initiative to upgrade major routes by correcting alignment in some areas and adding hard surfacing in 1953.<sup>6</sup> Further improvement projects beginning in the 1960s led to the bypassing of several segments, including portions near Palmer, Eklutna, and Mirror Lake.<sup>7</sup> The Glenn Highway is presently a divided 4- to 6-lane expressway that runs from Anchorage northeast to its junction with the Parks Highway. Beyond the junction, the roadway is a two-lane undivided highway. The entire length of the Glenn Highway from Anchorage to Glennallen was incorporated into the Interstate Highway System as part of Interstate A-1 in 1981, although this designation does not include bypassed segments known as the Old Glenn.

This statement of significance addresses both the current alignment of the Glenn Highway and previous alignments of the highway (now called Old Glenn Highway) that were subsequently bypassed. The general location of these segments are shown on the map illustrating the location of the Glenn Highway in relation to other major features provided on the next page, although not all segments are visible due to the scale.

<sup>5</sup> John R. Noyes, *Report of Operations of the Alaska Road Commission for the Fiscal years 1949, 1950 & 1951* (Juneau, Alaska: Department of the Interior, 1951), *Appendix 8.* 

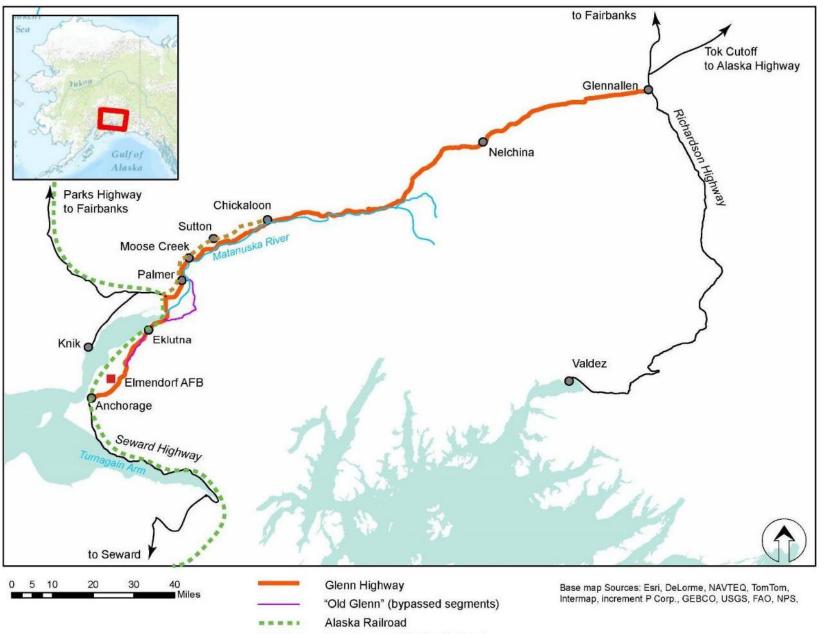
<sup>6</sup> Alaska Road Commission, *ARC Annual Report to the Governor Fiscal Year 1953* (Juneau, Ala.: Alaska Road Commission, 1953), 38.

<sup>7</sup> The DOT&PF's Coordinated Data System lists 14 bypassed sections that range in length from two-tenths of a mile to approximately 18.5 miles.

<sup>&</sup>lt;sup>2</sup> Mileage and termini from the Alaska DOT&PF's CDS database.

<sup>&</sup>lt;sup>3</sup> Alaska Road Commission, *Annual Report, Alaska Road Commission, 1944* (Washington, D.C.: Government Printing Office, 1944), 7.

<sup>&</sup>lt;sup>4</sup> Alaska Road Commission, *Annual Report, Alaska Road Commission, 1943* (Washington, D.C.: Government Printing Office, 1943), 10.



## 3. Historic Context

The Glenn Highway between Anchorage and Glennallen represents several successive phases of transportation development. While early major road-building efforts in the 1910s and 1920s established the Richardson and Steese Highways to serve as a connection between the port of Valdez and interior destinations such as Fairbanks and Circle, Anchorage had no overland access aside from the rail line between Seward and Fairbanks. The Glenn Highway was part of the later wave of highway construction during World War II that included the Alaska Highway and Tok Cutoff. The Glenn Highway incorporated the Anchorage-Palmer Highway, completed in 1937 to connect Anchorage with the Matanuska Valley, providing an alternative to rail transport to move produce to Anchorage from the newly established agricultural colony at Palmer. The completion of the Glenn Highway provided the first vehicular road connection between Anchorage to the rest of the territory and the lower 48 states, although portions of the highway corridor have historically been used by earlier facilities, including foot trails, local wagon roads, the railroad, and a local highway. The Alaska Railroad provided long-distance transport in the corridor between the Matanuska Valley and Anchorage, opening the region to development for coal mining and homesteading in the 1910s and providing a link to Fairbanks.<sup>8</sup> Prior to the railroad, trails and wagon roads developed as early as the turn of the century and served the Anchorage area and Matanuska River Valley, primarily supporting gold and coal mining efforts.

The Glenn Highway follows the general route of a trail in use by Euro-Americans by the turn of the century. As part of the 1898 expedition to the Cook Inlet, led by Capt. Edwin Glenn, Lt. Joseph Castner first followed a Native American trail from Knik through the Matanuska Valley on his way to the Tanana River. Gold and coal discoveries at the turn of the century brought prospectors to the area, and Castner's trail evolved into a pack trail from Knik east to Chickaloon. In the early 1910s miners improved the trail to a wagon road as far as Chickaloon and blazed a pack trail east from Chickaloon to Nelchina that functioned as the main transportation route through the Matanuska Valley at the time.<sup>9</sup>

Most of the Matanuska coal fields were withdrawn as a Naval reserve in 1907, and the Navy's interest in the potential fuel source led to the construction of a government-financed rail line to open up the Matanuska Valley.<sup>10</sup> The Alaska Engineering Commission (AEC), in charge of the railroad, established its headquarters and construction material landing area at Ship Creek, later renamed Anchorage, in 1915. The main rail line construction began north towards Fairbanks in 1915, while a spur led east through the Matanuska Valley to reach the mines. The Matanuska branch line reached Chickaloon in 1917, and within a few years mines were established at locations along the rail corridor.<sup>11</sup>

<sup>&</sup>lt;sup>8</sup> Mary Cracraft Bauer, A History of Coal Mining in the Sutton-Chickaloon Area Prior to World War II (Anchorage, Ala.: Alaska Historical Commission, 1985), 5.; Linda Finn Yarborough et al., Results of Cultural Resources Survey of the Proposed Glenn Highway Milepost 53 to 56 Reconstruction Project, Prepared for DOWL HKM, August 2010, 16.

<sup>&</sup>lt;sup>9</sup> Yarborough et al., 14.

<sup>&</sup>lt;sup>10</sup> Charles Holmes and Rolfe Buzzell, *Cultural Resources Survey: The Old Glenn Highway near Palmer, Alaska*, prepared for the Office of History and Archaeology (1987), 4; Bauer, 17.

<sup>&</sup>lt;sup>11</sup> Bauer, 6.

Private companies struggled to profit from their leases, and the AEC soon assumed control of the Eska and Chickaloon mines to provide coal for their own use on the railroad.<sup>12</sup> In the years immediately after World War I, the U.S. Navy returned its attention to the Matanuska coal fields, expanding the operations at the Chickaloon mine.<sup>13</sup> By 1922, however, the Navy had determined the geologic conditions were too difficult and the operations were not economically viable. Electing to convert Navy ships from coal to oil, the Navy closed the Chickaloon mine that year and abandoned further development. The Matanuska rail system also declined, and by 1933 the tracks of the Matanuska spur were dismantled between Sutton and Chickaloon.<sup>14</sup>

The construction of the railroad also opened the area for homesteading during the 1910s and 1920s. The town of Matanuska developed due to its location at the junction of the main rail line and the spur to the coal fields, and other stations were located at Palmer, Moose Creek, and Sutton.<sup>15</sup> Homesteading began in the Matanuska Valley at the turn of the century, but was limited until the U.S. Department of Agriculture established the Matanuska Agricultural Experiment Station in 1915, located near the Matanuska railroad junction and several miles southwest of Palmer. Much of the more level and accessible lands in the valley were homesteaded in the next few years.<sup>16</sup> The large number of workers employed in the construction of the railroad created a growing demand for produce, leading to a brief agricultural boom between 1915 and 1917 that halted abruptly when demand dropped during World War I and many young men enlisted or were drafted and left the territory.<sup>17</sup> The area failed to develop substantially after World War I and the high cost of rail transportation meant that Anchorage and the settlements along the railroad were the only market for agricultural goods.<sup>18</sup> Some homesteaders abandoned their claims in favor of more lucrative work in fishing, trapping, mining, or work on the railroad; as a result, limited agricultural expansion occurred in the Matanuska Valley between 1920 and the early 1930s.<sup>19</sup>

In addition to the railroad, residents in the Matanuska Valley region continued to use trails and wagon roads from Knik to reach Moose Creek and Chickaloon to the east. The trail that had been used to construct the rail line was improved to a wagon road, although east of Chickaloon the route to Nelchina was still an unimproved pack trail.<sup>20</sup> In the Anchorage vicinity, the ARC commenced work on a wagon

<sup>15</sup> W.A. Rockie, *Physical Land Conditions in the Matanuska Valley* (Washington D.C.: U.S. Department of Agriculture, 1946), 16.

<sup>16</sup> W.A. Rockie, "A Picture of Matanuska," *Geographical Review* 32, no.3 (July 1942), 365; Rockie, *Physical Land Conditions in the Matanuska Valley*, 14.

<sup>17</sup> Hugh Johnson and Keith Stanton, *Matanuska Valley Memoir* (Palmer, Ala.: Alaska Experiment Station, 1955), 23.

<sup>18</sup> Johnson and Stanton, 26.

<sup>19</sup> Rockie, Physical Land Conditions in the Matanuska Valley, 16-17.

<sup>20</sup> Yarborough et al, 12.

<sup>&</sup>lt;sup>12</sup> Theodore Chapin, *Mining Developments in the Matanuska Coal Fields*, United States Geological Survey Bulletin 712-E, (Washington, D.C.: U.S. Government Printing Office, 1920), 141-142.

<sup>&</sup>lt;sup>13</sup> Bauer, 17-18.

<sup>&</sup>lt;sup>14</sup> Bauer, 18; Douglas Gibson and Stephanie Fox Sterling, *Cultural Resources Survey Along the Glenn Highway, Milepost 60-85, 92-106, and 108-118* (1979), 78; Yarborough et al., 12.

road from Anchorage 5 miles north to Eagle River in 1921.<sup>21</sup> In the mid-1920s the Anchorage Chamber of Commerce began requesting that the road be extended to Matanuska. Although the territorial legislature appropriated funding for construction in the late 1920s, the ARC continued to oppose such a road, arguing that it would compete with the railroad and divert funds from more necessary projects elsewhere in the territory.<sup>22</sup> Despite the opposition, the City of Anchorage itself began work on a road from Anchorage to Eklutna. Utilizing funds from the Public Works Administration (PWA), the ARC assumed responsibility for the Anchorage-Eklutna Road in 1933 and began the task of extending it to Palmer and the Matanuska River.<sup>23</sup>

In 1935 the federal government established the Matanuska Agricultural Colony with its headquarters in Palmer. Under the Federal Emergency Relief Administration (FERA), the project consisted of resettling roughly 200 farm families from the Upper Midwest to the greater Palmer area.<sup>24</sup> The federal government withdrew all remaining government lands in the valley to provide the tracts for the colony.<sup>25</sup> In 1937 the ARC completed work on the Anchorage-Palmer Highway. This included an approximately 20-mile segment of road between Anchorage and Palmer, including the previously unbuilt portion from Eklutna to Palmer constructed with FERA/PWA funds. The sudden influx of population increased the need for an improved road network and the ARC also constructed and improved the local road system linking homesteads with the Anchorage-Palmer Highway "on account of the vast amount of traffic created in getting the colonists located."<sup>26</sup> For those travelling beyond the Anchorage-Palmer area at this time, the railroad remained the only overland link to other ports and population centers.

Road connectivity between Anchorage and the rest of the territory was not achieved until World War II. With the establishment of strategic military facilities at Anchorage, Fairbanks, and along the Alaska Highway in the 1940s, the military required vehicular access between Anchorage and the interior. In 1940, with World War II looming, Gen. Simon Buckner was appointed head of the U.S. Army forces in Alaska. Under his leadership, a buildup of military forces began in the Anchorage area and throughout the territory. Construction at Fort Richardson began in 1940, including the Elmendorf Army Air Corps facilities. Despite new facilities, the movement of troops and supplies to the interior was hampered by the territory's climate and geography. Alaska was mainly supplied by sea, and in 1940 had only two ports

<sup>&</sup>lt;sup>21</sup> Board of Road Commissioners for Alaska, *Annual Report of the Chief of Engineers, 1921. Extract. Report Upon the Construction and Maintenance of Military and Post Roads, Bridges, and Trails, Alaska, Part I (Washington, D.C.: Government Printing Office, 1921) 50; Board of Road Commissioners for Alaska, <i>Annual Report of the Chief of Engineers, 1922. Extract. Report Upon the Construction and Maintenance of Military and Post Roads, Bridges, and Trails, Alaska, Part I (Washington, D.C.: Government Printing Office, 1922), 42.* 

<sup>&</sup>lt;sup>22</sup> Holmes and Buzzell, 7.

<sup>&</sup>lt;sup>23</sup> United States Department of the Interior, *Annual Report of Alaska Road Commission for Year Ending June 30,* 1934 (Washington, D.C.: Government Printing Office, 1934), 10.

<sup>&</sup>lt;sup>24</sup> Clarence Hulley, "A Historical Survey of the Matanuska Valley Settlement in Alaska," *Pacific Northwest Quarterly* (1949), 333.

<sup>&</sup>lt;sup>25</sup> Rockie, *Physical Land Conditions in the Matanuska Valley*, 16.

<sup>&</sup>lt;sup>26</sup> Alaska Road Commission *Annual Report, Alaska Road Commission, 1936* [Juneau, Ala.: Alaska Road Commission, 1936), 7.

outside of the Alaskan Panhandle that were ice-free year-round: Seward and Valdez. Seward was connected to Anchorage and the interior only by the Alaska Railroad, which was inadequate even for peacetime freight quantities.<sup>27</sup> Valdez was linked to Fairbanks by the Richardson Highway, the territory's main highway during this period, but the route was closed to through traffic for eight months out of the year due to winter conditions. Anchorage provided another port connected by rail to the port in Seward, but was only open part of the year due to ice. With an increased defense budget, Buckner received large amounts of equipment at Anchorage, which was the site of the largest military station on the Alaskan mainland.<sup>28</sup> At that time it was not possible to move materials effectively from the port to points inland due to the lack of connecting highways from Anchorage. In order to move cargo inland, it had to be shipped first by river barge and then held until winter, when tractors could haul sleds across frozen ground.<sup>29</sup> Military commanders gave top priority to "the construction of a road connecting Anchorage with the Richardson Highway via the Matanuska" to ensure that troops and materials could move between Anchorage and Fairbanks.<sup>30</sup> The influx of troops in Anchorage, in turn, increased the demand for coal and farm products from the Matanuska Valley.

A congressional appropriation in 1941 provided the ARC with \$1 million for the construction of a highway between Palmer and the Richardson Highway, which would connect to Anchorage via the Anchorage-Palmer Highway.<sup>31</sup> The new road followed a route similar to that of the earlier trail and the abandoned rail bed between Sutton and Chickaloon.<sup>32</sup> The highway opened in 1944, linking Anchorage for the first time to the interior via the Richardson Highway. It also provided connectivity to the lower 48 states by connecting to the recently completed Alaska Highway via the Tok Cutoff. In anticipation of the Glenn's construction, the ARC relocated their Copper River area district headquarters to a location near the future junction of the Glenn and Richardson Highways. Named Glennallen, the camp gradually expanded into a full-scale depot and residential community over the following decade. As a result of its location along the Glenn Highway, approximately a mile west of the junction with the Richardson, and grew as the community served automobile tourists after the Alaska Highway and Tok Cutoff were opened to the public in 1948.<sup>33</sup>

<sup>&</sup>lt;sup>27</sup> Joseph Bykofsky and Harold Larson, *The Transportation Corps: Operations Overseas* (Washington D.C.: Office of the Chief of Military History, Dept. of the Army, 1957), 46-47; Lauren Hummel, "The U.S. Military as a Geographical Agent: The Case of Cold War Alaska," *Geographical Review* (January 2005), 61.

<sup>&</sup>lt;sup>28</sup> Bykofsky and Larson, 47.

<sup>&</sup>lt;sup>29</sup> Brian Garfield, *The Thousand-Mile War: World War II in Alaska and the Aleutians* (Fairbanks, Ala.: University of Alaska Press, 1995), 65.

<sup>&</sup>lt;sup>30</sup> Yarborough et al, 16; Matanuska-Susitna Borough Cultural Resources Division, *1989 Survey of Historic Sites in the Matanuska Coal Field, Alaska*, prepared for Office of History and Archaeology (1989), 26.

<sup>&</sup>lt;sup>31</sup> Alaska Road Commission, *Annual Report, Alaska Road Commission, 1941* (Juneau, Ala.: Alaska Road Commission, 1941), 1.

<sup>&</sup>lt;sup>32</sup> Yarborough et al., 16.

<sup>&</sup>lt;sup>33</sup> Matthew Reckard et al., *Cultural Resources Investigations, Glen Highway MP 172-189 Rehabilitation* (DOT&PF Project No. 60922), prepared for DOWL HKM (2011), 16.

World War II increased demand for coal at least temporarily, nearly doubling the tonnage produced by the Matanuska region in 1941. To augment production, the Alaska Railroad reopened the Eska Mine near Chickaloon in the early 1940s, continuing to operate the mine until 1946 when it closed permanently.<sup>34</sup> Although the railroad continued to transport coal, a 1942 flood at Moose Creek damaged a smaller spur line, and trucks were used to move coal to the rail depot or final destination.<sup>35</sup> In addition to coal, the wartime increase in military personnel in the territory also created new demands for farm products. Earlier, farmers had faced difficulty competing with sources providing produce from the lower 48 states more cheaply.<sup>36</sup> The Matanuska Colony struggled with similar problems in the 1930s, as the relatively small population even in Anchorage still did not provide a large enough demand for their surplus produce. However, the military buildup near Anchorage in the early 1940s created a substantial market, enabling farmers to expand their production and look to commercial rather than subsistence operations.<sup>37</sup> The Matanuska Valley Farmers Cooperating Association continued to operate the colony's dairy, which proved to be one of its more successful ventures and grew into an important source of milk and dairy products for the territory.<sup>38</sup>

The Glenn Highway's military importance did not diminish at the end of World War II, and it remained an important defense priority as U.S. relations with the Soviet Union began to sour. The Cold War ensured that Alaska would remain a focus for the U.S. military, as the territory was geographically positioned to be the first line of defense in the event of an attack.<sup>39</sup> In the postwar period, the Army was particularly interested in developing new sources of strategic raw materials and supporting and expanding existing facilities and installations at Anchorage and the greater Fairbanks area. In 1947 correspondence with Secretary of the Interior Julius Krug, Secretary of the Army Kenneth C. Royall cautioned that the existing transportation systems in Alaska were not capable of withstanding the level of use that would be required in an emergency. He pointed out that the Alaska Railroad, the only other overland connection between the major military installations at Anchorage and Fairbanks, was limited in capacity and constituted a weak strategic link. Consequently, Royall included the Glenn Highway among the most vital routes for defense, urging they be improved to all-year, all-weather standards.<sup>40</sup> The Glenn Highway linked Elmendorf (headquarters of the Alaskan Air and Joint Services Command) and Fort Richardson (headquarters of the U.S. Army in Alaska) to Fairbanks, site of Ladd Air Force Base and nearby facilities such as Eielson Air Force Base and the Big Delta Air Force Base (now known as Fort Greely), via the

<sup>37</sup> Johnson and Stanton, 57.

<sup>&</sup>lt;sup>34</sup> Rachel Joan Dale and Charles Holmes, *Cultural Resources Reconnaissance Survey of Glenn Highway, MP 35* to *MP 109* - *OHA Report No. 19*, prepared for the Office of History and Archaeology (1990), 24.

<sup>&</sup>lt;sup>35</sup> Robert S. Warfield, *Bituminous coal Deposits of the Matanuska Coalfield, Alaska*, Bureau of Mines, Report of Investigations No. 5950 (Washington D.C.: U.S. Department of the Interior, Bureau of Mines, 1962), 3.

<sup>&</sup>lt;sup>36</sup> Johnson and Stanton, 26.

<sup>&</sup>lt;sup>38</sup> Andrew Higgs et al., *Glenn Highway Mile Posts 34-42 Improvements Project, Cultural Resource Survey and Evaluation*, prepared for Alaska Department of Transportation and Public Facilities (December 2012), 22.

<sup>&</sup>lt;sup>39</sup> Hummel, 48.

<sup>&</sup>lt;sup>40</sup> Claus-M. Naske, *Paving Alaska's Trails* (Lanham, Md.: University Press of America, 1986), 227.

Richardson Highway.<sup>41</sup> Via the Tok Cutoff, the Glenn Highway also connected Anchorage with facilities along the Alaska Highway, including the Tanacross and Northway Army airfields.

In 1948 Congress approved a six-year program of road development that provided over \$125 million in funding, more than three times the total federal appropriations since the ARC was first established in 1905.<sup>42</sup> A primary goal of the six-year plan was the asphalt hard-surfacing of the territory's major highways, including the Glenn. Work to reconstruct and pave the Glenn Highway began in 1949, and by 1951 hard surfacing was complete except for a 16-mile section near Sheep Mountain.<sup>43</sup>

Coal production in the Matanuska Valley remained relatively constant until 1952, when it increased by nearly 50 percent and remained at that level through 1959.<sup>44</sup> This increase grew out of the military buildup at Anchorage and the associated rise in the civilian population of the city, which created an increase in demand for coal to generate heat and electricity. The population of Anchorage increased from roughly 30,000 in 1950 to over 82,000 in 1960.<sup>45</sup> As of 1962 the Anchorage area had three coal-fired power plants: two military and one private.<sup>46</sup> Within a few years, however, both Elmendorf and Fort Richardson's power plants were converted from coal to natural gas. Coupled with the railroad's shift to diesel engines, this contributed to the end of the coal industry in the Matanuska Valley.<sup>47</sup> In 1969 remaining railroad operations ceased on the Matanuska branch line east of Palmer.<sup>48</sup>

The Glenn Highway continued to provide an arterial road for farmers of the Matanuska Valley to transport their goods to market, but the lack of a more extensive local road network appears to have hindered further development beyond the colony lands. A 1955 publication by the Alaska Rural Rehabilitation Corporation noted that little good agricultural land was available in the Matanuska Valley that had access to roads, and the establishment of new farms during this period was minimal.<sup>49</sup> At this time, however, existing farms were continuing to transition to dairying as a major source of income. Under the name "Matanuska Maid," the co-op's dairy continued to be an important source of milk and dairy products.<sup>50</sup> The co-op constructed additional processing and distribution facilities in Anchorage during the mid-1950s,

- <sup>42</sup> Naske, 229.
- 43 Naske, 245.

- <sup>46</sup> Warfield, 10.
- <sup>47</sup> Gibson and Sterling, 79.
- <sup>48</sup> Yarborough et al., 14.
- <sup>49</sup> Yarborough et al., 22.

<sup>&</sup>lt;sup>41</sup> U.S. Army Cold Regions Test Center, "History," <u>http://www.crtc.army.mil/history.html</u> (accessed 22 May 2014). Many of these facilities were established during World War II as Army air fields and were subsequently renamed when the Air Force became a separate branch in 1947.

<sup>&</sup>lt;sup>44</sup> Warfield, 9.

<sup>45</sup> Hummel, 53.

<sup>&</sup>lt;sup>50</sup> Morgan Blanchard and Burr Neely, *Cultural Resources Survey for the Glenn Highway Milepost 49 Realignment Project, Palmer, Alaska* (DOT&PF Project No. 50994), prepared for PDC Inc. (2012), 9.

by which time the valley had 39 Grade-A dairy farms and produced 75 percent of the territory's milk.<sup>51</sup> In 1960 the U.S. Army switched to the use of fresh milk; the connection the Glenn Highway provided would likely have facilitated the transport of fluid milk between Palmer and Anchorage to supply this increase in demand.<sup>52</sup> The Matanuska Valley remained an important agricultural region through the 1960s, and by 1967 it produced over 90 percent of Alaska's milk and over 70 percent of its vegetables.<sup>53</sup>

Glennallen continued to develop in the 1950s and 1960s due to its location at the junction of the Glenn and Richardson Highways. Although initial settlement and subsequent physical development of the community was primarily related to the ARC camp nearby, by the late 1950s commercial businesses were located at the junction of the highways and government agencies had established offices in the community.<sup>54</sup> The population did not increase substantially during this period, growing only from 142 to 169 between 1950 and 1960.<sup>55</sup> In the mid-1960s bulk oil plants were located near the junction of the two highways to meet the needs of travelers, and by that time the community had expanded to include a post office and bible college, and was the headquarters for the Copper River Valley schools. The Glenn Highway functioned as the community's "main street" during this period, and physical development continued to occur in a linear fashion along the Glenn Highway between the ARC camp and the junction growth, as the number of inhabitants nearly doubled.<sup>57</sup> In the decade that followed, additional road construction began to branch off from the highway; although earlier buildings were constructed several tiers deep, historic photographs show only minimal spur road development until the early 1970s.<sup>58</sup>

Throughout this period, the Glenn Highway, like many of the state's transportation corridors, provided vehicular access to recreational areas. Recreational hunting and fishing grew along the Glenn Highway corridor, leading to the establishment of lodges, and by the mid-1950s fish hatcheries were developed to stock lakes that were easily accessible from the highway for fishing. By 1953 the recreational access the Glenn Highway provided included vehicular connection to the Army's Rest and Recuperation site at Lake Louise previously accessed by plane.<sup>59</sup>

Military installations continued to develop in Alaska as a result of the ongoing Cold War, and existing facilities in the Anchorage and Fairbanks vicinities were expanded. From the late 1950s through the 1970s the fear of aerial attack by Soviet planes and missiles led to the construction of radar and

<sup>55</sup> U.S. Bureau of Census, Census of Population for 1950, 51-7; U.S. Bureau of Census, Census of Population for 1960, 3-10.

<sup>56</sup> Russell, 8-9.

<sup>57</sup> U.S. Bureau of Census, Census of Population for 1970, 3-11.

<sup>&</sup>lt;sup>51</sup> Blanchard and Neely, 9; Arnold R. Alanen, "Midwesterners in the Matanuska Valley: Colonizing Rural Alaska During the 1930s," *Perspectives in Vernacular Architecture* 8, (2000), 73.

<sup>&</sup>lt;sup>52</sup> Blanchard and Neely, 9.

<sup>&</sup>lt;sup>53</sup> Higgs et al., 24; Alanen, 73.

<sup>&</sup>lt;sup>54</sup> Amy Russell, Determinations of Eligibility in Conjunction with DOT&PF Project Glenn Highway Milepost 172-189 Rehabilitation (July 2011), 8.

<sup>&</sup>lt;sup>58</sup> Steve McCutcheon, McCutcheon Collection, Anchorage Museum, B1990.14.5.TV.065, 11, 17, 22, 27.

<sup>&</sup>lt;sup>59</sup> Matanuska-Susitna Borough Planning Department, Comprehensive Plan, Lake Louise, (November 1998), 13-14.

microwave-based early warning systems and antiballistic missile installations.<sup>60</sup> These included the Nike Hercules sites around Anchorage and a White Alice communication station at Glennallen.<sup>61</sup> The ongoing military presence in the Anchorage vicinity, coupled with the construction of the Alaska pipeline in the late 1970s, continued to increase the population of the greater Anchorage area. This, in turn, contributed to the decline of dairy farming in recent decades as real estate prices climbed and farmers in the Matanuska Valley began to subdivide their lands for residential developments in the outskirts of Anchorage.<sup>62</sup> Although Anchorage remains a market for vegetables grown in the Matanuska Valley, today the majority of Alaska's dairy and other crops are produced elsewhere.<sup>63</sup>

The ARC and its successor organizations have continued to upgrade the Glenn Highway since the 1950s. In addition to resurfacing, their efforts have constructed a number of realignments and bypasses, including the Fort Richardson Arterial in 1953-1954, which routed traffic around the base.<sup>64</sup> A bypass begun in 1963 relocated the Glenn to the opposite side of the Matanuska River, bypassing the portion of southbound from Palmer and along the south bank of the Knik River.<sup>65</sup> The bypassed portions of the former alignment of the Glenn Highway were renamed the Old Glenn Highway; the segment near Palmer continues to serve residents in the area between the Knik and Matanuska Rivers. In 1969 another project reconstructed the portion of the Glenn Highway immediately north of Anchorage, bypassing 9.6 miles of the original highway through the communities of Eagle River and Chugiak. This segment, still in use, is also known as the Old Glenn Highway.<sup>66</sup> In 1974 the Alaska DOT&PF expanded capacity in north Anchorage by adding additional lanes to the Glenn Highway to provide improved traffic flow in the city.<sup>67</sup> The Glenn Highway remained the only highway connection between Anchorage and the rest of the Alaskan highway system until 1971, when the George Parks Highway was completed, substantially reducing the travel time between Anchorage and Fairbanks.<sup>68</sup> In 1981 the length of the Glenn Highway between Anchorage and Glennallen was incorporated into the Interstate Highway System as Interstate A-1, although older bypassed sections were not included in this designation.<sup>69</sup> The highway was designated a State Scenic Byway in 2000, and a National Scenic Byway in 2003.

<sup>&</sup>lt;sup>60</sup> Joint Base Elmendorf-Richardson, "Military History in Alaska, 1867-2000," <u>http://www.jber.af.mil/library/factsheets/factsheet.asp?id=5304</u> (accessed 19 May 2014).

<sup>&</sup>lt;sup>61</sup> Reckard et al, 18.

<sup>&</sup>lt;sup>62</sup> Blanchard and Neely, 11.

<sup>63</sup> Alanen, 73.

<sup>&</sup>lt;sup>64</sup> Alaska Road Commission, ARC Annual Report to the Governor Fiscal Year 1953, 19.

<sup>&</sup>lt;sup>65</sup> Don L. Irwin, *The Colorful Matanuska Valley* (N.p.: n.p., 1968), 104.

<sup>&</sup>lt;sup>66</sup> Cultural Resource Consultants LLC, *Cultural Resources Investigation for a Proposed Upgrade of the Old Glenn Highway Between Birchwood Loop and Ski Road*, prepared for CRW Engineering Group, LLC, Anchorage, Alaska (April 2009), 29-30.

<sup>&</sup>lt;sup>67</sup> Fred Pratt, "Council Slates Action on Highway," *Fairbanks Daily News-Miner*, 24 September 1973; "Road Bids Asked," *Fairbanks Daily News-Miner*, 31 January 1974.

<sup>&</sup>lt;sup>68</sup> Mead & Hunt, Inc., *Alaska Roads Historic Overview: Applied Historic Context of Alaska's Roads*, prepared for Alaska Department of Transportation and Public Facilities (February 2014), 114.

<sup>&</sup>lt;sup>69</sup> State of Alaska, Department of Transportation and Public Facilities, *State Transportation Policy Plan*, prepared by Department of Transportation and Public Facilities (November 1982), 6-14.

## 4. Significance

The Roads Methodology provides guidance on the application of the National Register Criteria for Evaluation, identifying areas of significance, and evaluating significance under *Criteria A, B, C*, and *D*.

#### A. Criterion A: Events

To meet the threshold for significance under *Criterion A*, a road or bypassed segment must possess a direct and important association in one or more supplemental areas of significance as identified in the Roads Methodology in addition to *Transportation*.

The Glenn Highway includes numerous sections of bypassed roadbed that may represent the road's significance. This evaluation of significance under *Criterion A* considered all potential areas of significance identified in the Roads Methodology for the current alignment and any bypassed sections of roadbed. If the segment of the highway being evaluated was bypassed, its period of significance should correspond to the date it was no longer part of the main route and it no longer possesses an important association. Based on research and context development, only the applicable areas of significance for this road are addressed below.

#### Transportation

The Glenn Highway has a direct and important association in the area of *Transportation* as its completion from Anchorage to Glennallen in 1944 provided the first vehicular link between the Anchorage-Matanuska Valley region to the interior and the rest of the Alaskan road system and lower 48 states. The Glenn Highway was also one of the major routes included in the massive postwar improvement project to reconstruct the most heavily used through routes in the territory. The period of significance for *Transportation* will relate to the historical purpose this road had in the conveyance of people and goods as defined in one or more supplemental areas of significance under *Criterion A*.

#### Agriculture

Overall, the Glenn Highway, as completed in 1944 between Anchorage and Glennallen, does not meet the requirement for significance in the area of *Agriculture*. Although the Anchorage-Palmer Highway section of the Glenn Highway was the principal regional route between farms in the Matanuska Valley and markets at Anchorage, the initial direct access that gave rise to agricultural production in the area, including the establishment of the Agricultural Experiment Station and the Matanuska Colony, was provided by the Alaska Railroad and occurred prior to the construction of the Glenn Highway. When the Glenn Highway was completed to Glennallen, existing farms in the Matanuska Valley were already connected to Anchorage by both the railroad and the Anchorage-Palmer Highway, which was later incorporated into the Glenn Highway. The agricultural region remained centered around the Palmer vicinity, and construction of the 142-mile route from Palmer east to Glennallen did not provide significant access to more farmland and did not contribute substantially to the expansion of farming in the postwar period.

Evaluation of non-Interstate segments between Anchorage and Palmer should take into consideration that this portion of the route was originally part of the Anchorage-Palmer Highway. The Anchorage-Palmer Highway is significant at the local level for its associations and role in the development of the

Matanuska Colony and agriculture in the region. The period of significance for the Anchorage-Palmer Highway is 1937-1969, corresponding to the period between the road's completion and the year in which it was bypassed by the new alignment on the opposite side of the Matanuska River, altering the nature of the initial connectivity it provided.

#### Industry

The Glenn Highway does not meet the requirement for significance in the area of *Industry*. Gold and coal mining occurred for several decades prior to the highway's construction and the coal mining industry was served by the Alaska Railroad. While trucks may have been used to move coal from the mines in the Matanuska Valley to Anchorage in the 1940s and 1950s, the construction of the Glenn Highway did not result in any significant expansion of the existing mining industry in the region.

#### **Community Planning and Development**

The Glenn Highway in Glennallen is significant at the local level in the area of *Community Planning and Development* for the crucial role it played in the physical development pattern of Glennallen. The Glenn Highway was constructed as a major transportation corridor in the state; however, the road played a crucial role in the establishment of the community and the portion of the road within Glennallen visibly impacted the street pattern within the community. Glennallen was established with the relocation of the ARC district headquarters and the camp to support construction activities for the Glenn Highway. The community initially grew along the corridor of the Glenn Highway in a linear fashion centered on the road and growth was limited to short spur roads to either side. This linear pattern of development along the highway continued until the 1970s, when expansion of the community grew beyond a mere few blocks to either side of the road when secondary routes within the community began to be established as the result of increased population growth.

The period of significance for the portion of the road in Glennallen (approximately from Milepost 177.3 to Milepost 180, terminus at the Richardson Highway) is 1941 to 1970. The period of significance begins with the establishment of the ARC camp resulting in the development of the community of Glennallen and continues until the development pattern of the community expands beyond the highway corridor.

Connections the Glenn Highway provides by linking existing communities to each other and to a larger transportation networks (e.g., the Richardson Highway) relate to the area of *Transportation* and represents a common function of roads transporting goods and services, and this association does not rise to significance for *Community Planning and Development*.

#### Entertainment/Recreation and Conservation

The Glenn Highway does not meet the requirement for significance in the area of *Entertainment/ Recreation* and *Conservation*. This area of significance focuses on the specific use of roads to provide critical and direct access to important entertainment or recreational facilities or conservation activities. The Glenn Highway, a regional transportation corridor, was developed to facilitate military logistics during and after World War II. Following its construction, recreational facilities were developed that could now be accessed by the highway and the larger route established by its connection with the Richardson Highway. However, many regional and state highways in Alaska frequently led to the development of recreational activities and points of interest due to the access a transportation corridor could provide. Research did not reveal that the Glenn Highway provided critical access to important entertainment or recreational activities or areas deemed critical for the management of natural resources subsequent to its construction. The activities related to *Entertainment/Recreation* and *Conservation* accessed by the Glenn Highway do not transcend normal patterns of recreational development and use as seen throughout Alaska to allow this road to meet National Register significance in these areas.

#### **Politics/Government**

The Glenn Highway does not meet the requirement for significance in the area of *Politics/Government*. Although New Deal-era funding was provided to construct a portion of the Anchorage-Palmer Highway, mere association with federal-relief programs through funding for a small portion of the road does not rise to the level of significance under the theme of *Politics/Government*. The remainder of the total route from Anchorage to Glennallen was constructed before and after the period of Great Depression-era federal relief involvement and the association with the New Deal Era in road construction is very limited.

#### Military

The Glenn Highway is significant at the state level for its association with military activity during World War II and the Cold War. Regarded by Gen. Simon Buckner as a top military priority, the Glenn Highway was constructed to complement the Alaska Highway, and defense needs were the primary factor in its construction. The Glenn Highway was planned simultaneously with the program that included the Alaska Highway and was considered a defense priority. The Glenn Highway's construction coincides with the establishment of a major World War II-era military installation in Anchorage, and was conceived to create the first overland link from Anchorage-area military facilities to other important military facilities in the Fairbanks vicinity and along the Alaska Highway. The Glenn remained the sole vehicular link between Anchorage and Fairbanks through the 1950s and 1960s as military facilities continued to be expanded and updated in both areas. The period of significance is 1941-1971, beginning with the completion of the Glenn Highway between Palmer and the Richardson Highway, and ending with the completion of the George Parks Highway, which provided an alternate vehicular route between Anchorage and Fairbanks.

#### B. Criterion B: Persons

As outlined in the Roads Methodology, a road is not likely to qualify for National Register significance under *Criterion B* for association with a significant person. To qualify under *Criterion B*, the road would need to best exemplify a person's contribution to history. Mere association with a road, such as involvement in design or construction, or roads named for an individual that is commemorative in nature, would not render a road significant under *Criterion B*. Although the Glenn Highway is named in honor of Captain Edwin Glenn, leader of the 1898 exploratory expedition of the Cook Inlet, this is a commemorative recognition as he had no direct role in the highway's construction; therefore, it would not qualify under *Criterion B* for an association with Glenn. No other individuals were identified through research to have played a significant role in the Glenn Highway that would qualify it under *Criterion B*.

#### C. Criterion C: Design/Construction

The Roads Methodology explains how a road would meet the threshold for significance under *Criterion C*. Roads will generally reflect patterns of features common to a particular road type, and under the Roads Methodology this does not convey significance on its own. In order to possess significance, a road must also reflect other important or distinctive design features and/or construction practices or be a surviving example of a rare type. This evaluation of significance under *Criterion C* considered the current alignment and any bypassed sections of roadbed according to the Roads Methodology.

Although portions of the Glenn Highway incorporate earlier road segments, the majority of construction occurred in a period when the ARC had already established a body of institutional knowledge of road construction in Alaska. At the time the final segment of the Glenn Highway was underway in the early 1940s, the ARC had already constructed the Richardson and Steese Highways and had decades of experience building roads through muskeg and permafrost. The construction of the Glenn Highway did not include any water crossings requiring innovative engineering approaches, and roughly followed the alignment of earlier roads, trails, and railroad grades for a substantial portion of its route.

A review of the ARC's annual reports and other materials from the period in which the initial construction and substantial postwar reconstruction occurred yielded no evidence of any extraordinary challenges or solutions that transcend normal methods of road construction. Nothing in the literature noted any engineering or construction significance; the highway's design and construction fall within the ARC's established standard practices of the time and it does not represent any significant or innovative developments in highway construction or contain segments that are a surviving example of a rare road type. Early segments of the Glenn Highway that remain as the result of realignments or bypasses do not constitute significance under *Engineering* because they were designed and constructed utilizing routine methods and therefore would not represent a rare road type. Neither the Glenn Highway nor its bypassed segments meet the threshold for significance in the area of *Engineering*.

#### D. Criterion D: Information Potential

*Criterion D* is most often applied to archaeological properties. As outlined in the Roads Methodology, roads in vehicular use are not likely to be significant under *Criterion D* for the ability to yield information. The Glenn Highway is in vehicular use and remains an above-ground property type. No evidence was found for potential significance under *Criterion D*.

### 5. Recommendation

The Glenn Highway possess significance under *Criterion A* for its direct and important association with *Transportation* and under the supplemental areas of significance of *Military* and *Community Planning and Development*. The Glenn Highway has a direct and important association in the area of *Transportation* as its completion from Anchorage to Glennallen in 1944 provided the first vehicular link between the Anchorage-Matanuska Valley region to the interior and the rest of the Alaskan road system and lower 48 states.

The Glenn Highway possesses significance at the state level under *Criterion* A for its direct and important association with *Transportation* and under the supplemental area of significance of *Military*. The Glenn Highway was constructed to complement the Alaska Highway, and defense needs were the primary factor in its construction. The Glenn Highway's construction coincides with the establishment of a major World War II-era military installation in Anchorage, and was conceived to create the first overland link from Anchorage-area military facilities to other important military facilities in the Fairbanks vicinity and along the Alaska Highway. The Glenn remained the sole vehicular link between Anchorage and Fairbanks through the 1950s and 1960s as military facilities continued to be expanded and updated in both areas. The period of significance is 1941-1971, beginning with the construction of the Glenn Highway between Palmer and the Richardson Highway and ending with the completion of the George Parks Highway, which provided an alternate vehicular route between Anchorage and Fairbanks.

The Glenn Highway in Glennallen possesses significance at the local level under *Criterion A* for its direct and important association with *Transportation* and under the supplemental area of significance of *Community Planning and Development*. The Glenn Highway played a crucial role in the establishment of Glennallen, and the road within Glennallen visibly impacted the community's street pattern. Glennallen was established with the relocation of the ARC district headquarters and the camp to support construction activities for the Glenn Highway. The community initially grew along the corridor of the Glenn Highway in a linear fashion centered on the road, and growth was limited to short spur roads to either side. This linear pattern of development along the highway continued until the 1970s, when expansion of the community grew beyond a mere few blocks to either side of the road when secondary routes within the community began to be established as the result of population growth. The period of significance for the portion of the road in Glennallen is 1941-1970. The period of significance begins with the establishment of the ARC camp resulting in the development of the community of Glennallen and continues until the development pattern of the community expands beyond the highway corridor.

The Glenn Highway does not possess significance under Criteria B, C, or D.

Individual segments between Anchorage and Palmer that were originally part of the Anchorage-Palmer Highway are significant at the local level for their direct and important association with *Transportation* and *Agriculture* for their role in the development of the Matanuska Colony and agriculture in the region. The period of significance for the Anchorage-Palmer Highway is 1937-1969, corresponding to the period between the road's completion and the year in which it was bypassed by the new alignment on the opposite side of the Matanuska River, altering the nature of the initial connectivity it provided. If a segment of the highway being evaluated was bypassed, its period of significance will correspond to the date it was no longer part of the main route and it no longer possesses an important association.

The Anchorage-Palmer Highway does not possess significance under Criteria B, C, or D.

The Glenn Highway (Alaska DOT&PF CDS number 135000) has an Interstate Highway System designation, and under the Federal Highway Administration Interstate Exemption (2005) is exempt from Section 106 consideration as a historic property. However, bypassed segments not covered by the exemption possess significance under *Criterion A*. Identification of essential physical features and an assessment of integrity would be needed to determine National Register eligibility of those segments.