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NATIONWIDE CONTEXT, INVENTORY, AND HERITAGE ASSESSMENT OF WORKS PROGRESS ADMINISTRATION AND CIVILIAN CONSERVATION CORPS RESOURCES ON DEPARTMENT OF DEFENSE INSTALLATIONS

Nationwide Context, Inventory, and Heritage Assessment of Works Progress Administration and Civilian Conservation Corps Resources on Department of Defense Installations

By

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Prepared For:

Department of Defense Legacy Resource Program PROJECT 07-357

In 1990, Congress passed legislation establishing the Legacy Resource Management Program to provide financial assistance to the Department of Defense (DoD) efforts to preserve our natural and cultural heritage. The program assists DoD in protecting and enhancing resources while supporting military readiness. A Legacy project may involve regional ecosystem management initiatives, habitat preservation efforts, archaeological investigations, invasive species control, Native American consultations, and/or monitoring and predicting migratory patterns of birds and animals.

Three principles guide the Legacy program: **stewardship**, leadership, and partnership. Stewardship initiatives assist DoD in safeguarding its irreplaceable resources for future generations. By embracing a leadership role as part of the program, the Department serves as a model for respectful use of natural and cultural resources. Through partnerships, the program strives to access the knowledge and talents of individuals outside of DoD.

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engineering-environmental Management, Inc.

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Acronyms

AFB Air Force Base

AFCEE Air Force Center for Engineering and the Environment

CAA Civil Aeronautics Administration

CCC Civilian Conservation Corps

CES/CEVN Civil Engineering Squadron - Environmental

CWA Civil Works Administration

DoD Department of Defense

e²M engineering-environmental Management, Inc.

ECW Emergency Conservation Work

ERA Emergency Relief Act

FERA Federal Emergency Relief Administration

LEM Local Experienced Men

NARA National Archives and Records Administration

NRHP National Register of Historic Places

NYA National Youth Administration

O. P. Official Project

OCR Character Recognition Software

POC Point-of-contact

POW Prisoner-of-war

RFC Reconstruction Finance Corporation

SHPO State Historic Preservation Office

WPA Works Projects Administration



Chapter 1: Introduction

As part of President Franklin Roosevelt's New Deal for America, the Civilian Conservation Corps (CCC) and the Works Progress Administration were formed to hire skilled and unskilled labor that had been unemployed as a result of the Great Depression. The CCC, established by a Senate Bill in March 1933, was a work relief program for young men to combat the poverty and unemployment of the Great Depression. The CCC operated numerous conservation projects, including prevention of soil erosion and the impounding of lakes. Other projects of the CCC included construction of buildings and trails in state and national parks, installation of telephone and power lines, construction of logging and fire roads, fence construction, tree-planting, beekeeping, archaeological excavation, and furniture manufacturing. Due to the changing manpower and budgetary needs associated with the United States' entry into World War II on 7 December 1941, and the disbanding of the CCC program on 30 June 1942, all CCC work except for wildland firefighting was shifted onto U.S. military bases to help with construction there.

The Works Progress Administration (later Work Projects Administration [WPA]), was created in May 1935 by Presidential order. Headed by Harry L. Hopkins, the WPA was a work relief program that provided jobs and income to the unemployed during the Great Depression in the United States. Unlike the CCC, which provided manpower and equipment directly to the project site, the WPA approved projects submitted by state and local agencies and dispersed funds; the state and local agencies were responsible for hiring personnel from relief rolls and administering the project work, although the WPA would periodically audit the progress of projects. WPA funds built many public buildings and roads, compiled enormous banks of statistical data on the internal workings of many state and federal agencies, supported historic preservation initiatives, and supported numerous arts projects (e.g., Federal Writers Program, theater programs, and public art). Until it was closed down by Congress in 1943, it was the largest employer in the country; indeed, the largest employer in most states. About 75 percent of WPA employment and 75 percent of WPA expenditures went to public facilities such as highways, streets, public buildings, airports, utilities, small dams, sewers, parks, libraries, and recreational fields, including features on military installations.

1.1 Project Description

Between 1933 and 1943, the CCC and WPA undertook a diversity of projects throughout the nation, including a range of construction projects on behalf of the military services. Military training camps, such as MacDill Air Force Base (AFB) in Florida, McChord AFB in Washington, Kirtland AFB in New Mexico, and Camp Edwards in Massachusetts, were initially constructed as WPA projects. Camp David, the presidential retreat, was created by converting an existing WPA camp, Camp Hi-Catoctin, in the Catoctin Recreational Demonstration Area. Military installations, such as Tobyhanna Army Depot in Pennsylvania, hosted CCC camps, while some former CCC camps were later converted into military installations, such as the Tooele Army Depot in Utah. Other installations, such as Fort Indiantown Gap in Pennsylvania, Jackson Barracks in Louisiana, the Ogden Arsenal in Utah, and Camp Joseph T. Robinson in Arkansas, were the sites for WPA improvement projects. Numerous National Guard armories also were constructed by the WPA.

As a result, Department of Defense (DoD) installations include a number of resources (buildings, structures, infrastructure elements, landscape features) constructed by the CCC or as a WPA project. Many of these resources remain intact and a number have been determined eligible for listing in the National Register of Historic Places (NRHP) either as individual resources or as contributing elements to districts. Contexts developed for CCC and WPA resources range from local or statewide summaries prepared by historical societies or State Historic Preservation Offices (SHPOs), to a more comprehensive national inventory of CCC and WPA projects within national parks compiled by the National Park Service.

This project, assisted by DoD Legacy Resources Program as Project 07-357, is intended to address the lack of a national historic context for CCC or WPA projects on military installations or systematic identification and evaluation efforts focusing on CCC or WPA resources on DoD property. Similarly, to date, few of the installations constructed as WPA projects have been evaluated as historic landscapes. Project 07-357 is sponsored by the Air Mobility Command of the U.S. Air Force, with Jason Kirkpatrick of the 6 CES/CEVN at MacDill AFB as project sponsor. The work was completed by engineering-environmental Management, Inc. (e²M) under contract with the Air Force Center for Engineering and the Environment (AFCEE). Project 07-357 includes the following four primary components:

- Development of a national historic context for CCC and WPA projects related to military installations (this document)
- Creation of an inventory of CCC and WPA resources at current DoD installations, with notes on heritage tourism potential (Appendix B and C)
- Documentation/evaluation of representative examples of extant CCC and WPA resources at five DoD installations (Appendix D of this document)
- Development of a public education product (booklet). (Appendix E of this document)

The project brings together extensive information in the administrative histories and other records for the CCC, WPA, and DoD on file at the National Archives and Records Administration (NARA) as well as contained in state-specific contexts and other sources. This historic context document includes a summary of the formation of the CCC and WPA as part of President Roosevelt's New Deal, the involvement of these agencies with military construction projects, a discussion of the resource types typical of CCC and WPA construction on military installations, and information on how to apply the context to the NRHP evaluation of CCC and WPA resources. Primary research for the historic context took place at the NARA in College Park, Maryland. Secondary research involved contact with SHPO offices and state archives for those states that either have developed contexts for CCC and WPA projects or have military installations constructed as CCC and WPA projects. Contacts via phone, email, and written correspondence with historians, cultural resources managers, and historic architects working at specific facilities also were made.

The inventories of CCC and WPA resources on DoD installations are found in Appendices B and C, Tables B-1, B-2, C-1, and C-2 of this historic context document. Table B-1 is a list of CCC projects on DoD installations based on the NARA CCC records. Table B-2 is a list of known and extant resources on DoD lands, as ascertained through archival research and interviews with installation and agency personnel. For extant or partially extant resources, the B-2 inventory also includes a matrix that assesses the heritage tourism potential of the resources in terms of installation access restrictions, physical condition/safety, historical importance of the resource, and availability of historic records and photos for interpretive displays. Information regarding presence/absence of CCC resources on installations, and data for the heritage tourism matrix was obtained via phone calls, emails, servicewide data calls or questionnaires, and correspondence between the project manager and installation contacts. The C-1 table similarly is a list of WPA projects on DoD installations based on NARA records, and the C-2 table is a culling of projects on DoD installations that remain in DoD control today. The C-3 table provides an assessment of the heritage tourism and public interpretation potential of the WPA resources. Its major limitation is information about the current state of the WPA resources, some of which are not yet identified.

The documentation/evaluation component of the project involved survey and evaluation of a sample of unevaluated CCC and WPA resources on five DoD installations for NRHP eligibility. CCC and WPA resources at the following five installations were surveyed and evaluated Fort Sill in Oklahoma, Fort

Huachuca in Arizona, F.E. Warren AFB in Wyoming, Fort Riley in Kansas, and the Naval Air Warfare Center (NAWC) China Lake in California. The choice of the installations to be surveyed proved to be somewhat problematic because of difficulty finding resources to survey that had not been previously evaluated for NRHP eligibility, a project requirement. Once an installation was identified with resources that had not been evaluated for their CCC or WPA significance, the NARA project summary cards for that installation were matched to the real property inventory by the base's Cultural Resource Manager (CRM) according to building type, date of construction, and other criteria. Other installation records including architectural drawings in the base civil engineering records were consulted, and additional research in the installation's archives and the local town halls, state and county libraries, and local historical societies and museums was conducted. Unique resources such as photographic albums of completed WPA resources were found at the Fort Huachuca Museum, as was a similar album at the Fort Sill National Historic Landmark and Museum Archives. These sources augmented additional historic photographs and the cards in NARA records. Armed with this information, each WPA or CCC resource was surveyed and photographed. Appropriate historic resource or building forms of the respective state's SHPO were completed. A mini-report was prepared for each installation survey that presents a historic context specific to the installation and describes the survey and research methodology, resources surveyed, and evaluation of NRHP eligibility of each surveyed resource, and the completed SHPO survey forms. The five reports are in Appendix D of this document.

The final component of the project is a public education booklet that summarizes the results of the project. Titled *Built by the CCC and WPA 1933-1943*, *New Deal Resources on Department of Defense Installations*, the booklet discusses the history of the CCC and WPA resources constructed under the CCC or WPA programs on military installations, and their contributions to the U.S. military and to the broader patterns of American history. The range and typical building types of CCC and WPA resources on military installations are described. A final section of the booklet provides a mini-guidebook to military installations with CCC or WPA resources grouped in western, central, and eastern regions of the U.S. Each region has a table of information about the CCC or WPA resources and museum at each installation, a map showing location of the installation within the region. The public education booklet is Appendix E of this document.

The project was conceived by Susan Goodfellow, Ph.D., currently Cultural Resources Specialist of the Marine Corps Headquarters and formerly of HDR/e²M and Jason Kirkpatrick of the 6 CES/CEVN at MacDill AFB. The historic context and inventory were completed under the direction of Dr. Goodfellow, who also completed the primary and much of the secondary research for this project. She was assisted by Jayne Aaron (peer reviews), Louise Baxter (technical editing), Cheryl Myers (formatting), Elaine Dubin and Adam Turbett (microfilm research), Elizabeth Lamb and Jennifer Rose (database entry), and Lori Monahan (data entry and typing), all of HDR/e²M.

With Dr. Goodfellow's departure from e²M in January 2008, Marjorie Nowick also of HDR/e²M directed the inventory, resource survey and documentation, and public education booklet components of the project. HDR/e²M's cultural resource professionals Chad Blackwell, Daniel Hart, Kathryn Plimpton, and Steve and Linda Moffitt completed the surveys of CCC-WPA resources on the five installations and prepared the mini-survey reports and resource forms in Appendix D. Chad Blackwell and Daniel Hart completed the field surveys at the Arizona, Kansas, Oklahoma, and Wyoming bases and prepared the reports and forms. Chad Blackwell and Kathryn Plimpton completed the booklet component of the project. The public education booklet draws heavily on this historic context and on the surveys of the resources at the five installations. At the completion of the resource survey component, this historic context was updated and refined to include information from and lessons learned from the survey and documentation. Dr. Melissa Wiedenfeld, HDR/e²M's senior historian, Dr. Goodfellow, Jason Kirkpatrick, and Hillori Schenker peer reviewed and contributed to the draft public education booklet. Nancy Jepsen and Yelena Johnson of HDR/e²M were responsible for the formatting of the final document.

1.2 Methodology

Primary research for the historic context and inventory was conducted at NARA in College Park, Maryland, between June and November 2007. Researchers reviewed project lists, correspondence files, administrative records, and photographs from Record Group 35 (Records of the Civilian Conservation Corps), Record Group 69 (Records of the Works Progress Administration), and Record Group 407 (Records of the Office of the Adjutant General). Project summary cards for all WPA projects, available only on microfilm, were reviewed in their entirety and the cards for military-related projects were printed or photographed. Copies of the finding aids for Record Groups 35 and 69 are provided in Appendix A, but can also be downloaded from NARA's online research catalog.

Secondary research involved reviewing materials collected by authors of published works on New Deal Programs in the United States, including the following:

- Nature's New Deal: The Civilian Conservation Corps and the Roots of the American Environmental Movement (Maher 2008)
- Civilian Conservation Corps: A Selectively Annotated Bibliography (Sypolt 2005)
- The Tree Army: A Pictorial History of the Civilian Conservation Corps, 1933–1942 (Cohen 1980)
- The Civilian Conservation Corps: Contributing to the Defense of the Nation (Government Printing Office 1941).

It was considerably easier to find published materials regarding the CCC and its members, particularly given that many former CCC members or their children participate in commemorative societies. Published materials about the WPA construction program are rare; it is more typical to find works about the WPA Writers, Theater, or Arts programs, or works produced by these latter programs. A progress report on the WPA was issued in 1937 in paperback format, but this document does not include substantive information relating to military construction apart from the armory construction program, since the bulk of the national defense projects were not initiated until 1940–42.

Secondary research also involved phone calls, emails, and questionnaires sent to historians and cultural resources managers at specific installations, military museums, and commands. The responses to the questionnaire were typically mixed; those installations with dedicated cultural resources managers and known CCC or WPA resources tended to respond with more alacrity and provide more detail. Some provided photographs and copies of reports or contexts developed for their resources, while others provided the minimal response of "no such resources present on the installation." Some installations did not submit responses at all.

Internet research provided links to other secondary source information, including local historical societies and museums that maintain information on CCC camps and companies, newspaper articles from the 1930s and 1940s focusing on the accomplishments of the CCC and WPA, and organizations collecting oral histories of former CCC company members.

1.2.1 Project Inventory

Development of the inventory of WPA and CCC resources has been a labor intensive and time-consuming process. Challenges associated with the respective datasets are outlined below, along with an assessment of the quality of the final inventory.

1.2.1.1 CCC Projects

The CCC records at the NARA include boxes of project cards divided into groups corresponding to the sponsoring agency or owner of the land on which the project was completed. For example, "A" typically refers to projects conducted for the Department of Agriculture, while "NP" refers to projects completed for the National Park Service. For military projects, relevant codes include "Army", "ASCS" (Army and Soil Conservation Service), "NP-A (National Park Service and Army), and "Navy." Unfortunately, the project cards include very little useful information apart from the general project location, the dates the project was started and completed and the name of the company or companies that worked on the project (**Figure 1-1**Figure 1-1). Similarly, the company records include details relating to the membership and command of the company, the formation and disbandment dates for the company, and lists of the locations where the company completed various projects; but provide no specific information on the nature of the projects.

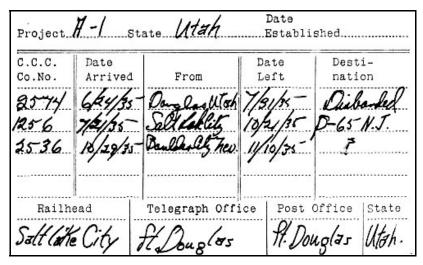


Figure 1-1. Example of a CCC Project Card.

Ultimately, the list of CCC projects used as the basis for the inventory was derived from the camp inspection reports, as work completed for military installations was typically completed by companies resident in CCC camps on those installations. This resource was still somewhat imperfect and the authors cannot be confident that the resulting list of projects is comprehensive. Some camps were only inspected once, while others were inspected multiple times and thus had more records available for review. Inspection reports were typically completed on a standard form, which provided useful information relating to the location of the camp and the general types of projects being completed by the camp residents, but the information on the form was more focused on problems with unit discipline, issues with morale, and basic living conditions. In those cases where the inspection report included the optional Work Status form or the original work proposal submitted to the CCC by the sponsoring installation, it was possible to compile more detailed information on the projects that were completed by the CCC at a specific installation. It is estimated that, of the 93 folders of inspection files examined from Record Group 35 (Entry 115), only 40 percent contained this level of detailed information. A final issue contributing to the incompleteness of the CCC project list is that there was no way to consistently track down records for projects completed at military installations that were completed by CCC companies stationed off of the installation. For example, review of the inspection reports for Camp NP-A-1 in Maryland revealed that some of the company personnel from this camp were stationed at Fort Meade for various work projects, but there is little actual description of what those projects constituted.

Once the list of CCC projects completed on military installations was compiled, such as it was, the list was sorted by state and installation (Appendix B, Table B-1). The list was then reviewed to determine which of the installations still remained in DoD control as of November 2007; the projects associated with this subset of installations then became the master list (Table B-2). The master list was sorted by service branch (current owners) and will be sent out to installation historians and cultural resources personnel in early December 2007, with a request to review the list of projects and provide information on which of the features (built resources, infrastructure, landscape elements) still remain within the installation, their present condition, whether the resource had been evaluated for NRHP eligibility, and any interpretive materials that might have been developed to highlight the history of the resource. In many cases, the information obtained from the installations was incomplete, particularly because landscape features (culverts, stone walls, erosion- or flood-control features) are often not tracked in the installation Real Property database. In those instances, the installation respondent needed to rely on institutional memory or personal observation to determine whether a given feature still exists on the installation. Given regular rotation of personnel and lack of time to complete field checks, it was more often the case that respondents provided a response of "unknown" when the answers could not be readily obtained.

1.2.1.2 WPA Projects

Unlike the CCC project files, the WPA project files are easy to locate. Before the WPA disbanded, it microfilmed its project files on 16-millimeter microfilm. The files are arranged by state and generally by the Official Project (O. P.) number. They include the project application, financial information, and general correspondence pertaining to the project. They do not usually contain maps, blueprints or drawings. Unfortunately, the quality of this microfilm is poor and it is not currently available in the National Archives microfilm reading room. In order to view the film, a researcher must first determine the O. P. number of the project in which he or she is interested and request the project file through the Archives II Reference Branch.

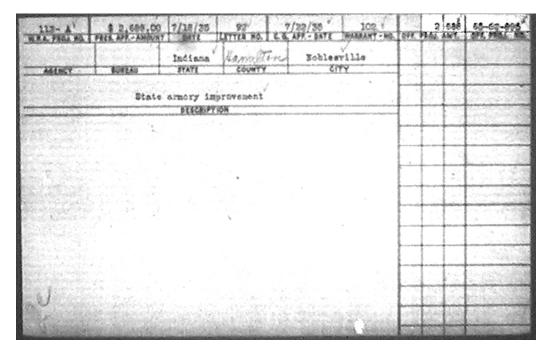
To determine the O. P. number for a given project, researchers can review the indices to the WPA project files, which are available on three National Archives microfilm series. Microfilm series T935 covers the years 1935–1937, T936 encompasses 1938, and T937 covers 1939–1942 (see series descriptions in Appendix A); together, these indices compose 119 rolls of microfilm. Within each series, project summary cards are arranged by state, there under by county, and there under by municipality. Projects sponsored by military installations or services, the War Department, or projects related to the military (e.g., construction of armories and arsenals) are distributed among the cards for a given state, so researchers have to review all of the cards on all of the 119 rolls (estimated at 1,000 cards per roll) to find the relevant project cards.

The WPA project summary cards included two primary formats (**Figure 1-2**). Information provided on all cards included the O. P. number; the approved budget; the sponsoring agency; a brief project description; and the state, county, and town/installation where the project was to be completed. Some cards included more financial details. Most information was typed, but hand-written annotations regarding the rescinding of a project or reduction of funding are often present. A stamp certifying project approval and the final approved budget appears on many cards. Cards from series T936 and T937 often feature stamps designating the project as a National Defense Project, meaning either that it was sponsored directly by the War Department or Department of the Navy, or that it was of a type of project that these agencies had highlighted to the WPA as being essential for National Defense.

As noted above, the O. P. number is the primary link between the project summary card and the detailed project description file (also only available on microfilm), and the NARA staff will only allow researchers to access the rolls of microfilm that have the project description files if they can provide the O. P. number. In those instances where the O. P. number could not be obtained from the project summary card, it was

not possible to access the project description file. Because of the restrictions involved in accessing these latter files, the typically poor quality of the microfilm on which these files are preserved, and overall time constraints given the labor required to simply review and compile the project list from the project summary cards, the researchers did not regularly attempt to access the project description files for specific projects.

The quality of the microfilm is generally poor (as noted on the finding aid provided in Appendix A). Although the federal employee responsible for photographing the cards for each roll of microfilm had to complete a certification that the task was done properly, there are numerous instances where cards are placed at angles such that information was cut off in the image frame, cards are placed upside down or backwards, or the exposure is so poor that the information on the cards cannot be discerned even with high magnification and backlighting. On some rolls, the microfilm itself is deteriorating; pinholes are developing and contact with researchers' fingers during the viewing process has left smudges and dirt. The cards themselves also range in quality—some are clearly original cards with clear typing, while others were poor carbon copies with blurred, elongated, or compressed typing. Some cards were also stained or ripped.



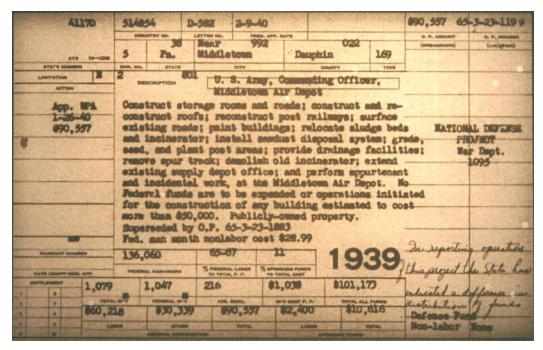


Figure 1-2. Examples of WPA Project Summary Cards.

Nevertheless, the researchers reviewed all of the project cards on all 119 rolls of microfilm and either printed a hard copy of the relevant project cards or took a digital photograph of the card and printed it from a PDF file once it had been edited in Photoshop to increase the image clarity. "Relevant" cards were those for projects sponsored by a military agency or military installation, or the War Department, or those for projects such as armory construction that were often sponsored by agencies other than the State National Guard, but that directly benefited the military. Projects sponsored by the U.S. Veterans Administration and the U.S. Treasury Department (Coast Guard) were not included in the inventory, nor were projects involving completion of personnel records or military histories. The research ultimately focused on construction projects on military installations or construction of military buildings such as armories or arsenals; projects such as those to track where veterans of previous wars were buried, to compile a history of the National Guard within a state, or projects conducted by the U. S. Army Corps of Engineers for state and local governments (e. g., flood control projects) were typically noted, but not included in the final inventory.

The information that could be discerned from each card was entered into a spreadsheet, and subsequently sorted by state and installation. This process was labor-intensive, particularly because researchers could only review the microfilm at the NARA during the hours of 9 am to 5 pm, Monday through Friday (except for those few days each month where NARA has extended hours). The NARA does allow researchers to purchase copies of microfilm; however, the duplication process takes at least 4 weeks to complete and the cost of \$65/roll could not be justified within the project budget, particularly when project funds were still required to fund the hours needed to review each roll. The NARA does not have the capability of scanning microfilm into digital format; doing so would have required purchasing duplicates of each roll of microfilm and then having each roll scanned (up to \$100/roll additional cost). Even with digital scans of each roll, the image quality is sufficiently poor that researchers would not have been able to use character recognition software (OCR) or search programs to locate relevant project cards and thereby reduce the time required to review the cards on each roll or enter the information from the relevant cards.

As with the inventory of CCC projects, it is likely that the list of WPA projects is not comprehensive. The poor microfilm quality, poor condition of the cards, and absence of some cards (placed backwards) all contributed to loss of information. Additionally, the potential for human error by researchers during the data gathering process may have resulted in missed information. Finally, the annotations regarding rescinding of projects were not always clear; some projects were not rescinded until more than a year after their original approval, leaving open the possibility that the projects were actually started by the proponents. In the initial series of cards (T935), cards from disapproved projects were clearly separated from the other project cards and designated as "disapproved"; in the second two series (T936 and T937), approval or disapproval was noted with a stamp on the card, but not all cards were stamped and some simply had a diagonal pencil line drawn across them. In the end, the researchers did the best that they could within the time frame available and given the nature of the data set. Certainly, the information provided in Appendix C (Table C-1) represents the majority of projects completed on military installations or sponsored by military agencies, and can be considered representative of the range of projects completed using WPA funds for National Defense projects. The list obtained from the WPA project cards was supplemented by a list of War Department and Department of the Navy sponsored projects found in the text records of Record Group 69 at the NARA; this list included projects funded through 10 April 1941.

Once the list of WPA projects was compiled, it was scrubbed to remove those projects not directly related to construction of buildings, structures, infrastructure, or landscape features on military installations, and then sorted by state and installation (Appendix C, Table C-2). The list was then reviewed to determine which of the installations still remained in DoD control as of November 2007; the projects associated with this subset of installations then became the master list (Table C-3). The master list was sorted by service branch (current owners) and was sent out to installation historians and cultural resources personnel in early December 2007, with a request to review the list of projects and provide information on which of the features (built resources, infrastructure, landscape elements) still remain within the installation, their present condition, whether the resource had been evaluated for NRHP eligibility, and any interpretive materials that might have been developed to highlight the history of the resource. In those cases where the installation had previously provided sufficient information on the initial data call questionnaire, no further information was requested. In many cases, however, installation personnel had to do further research to provide their responses to the follow-up questionnaire.

The process was further complicated by the fact that the WPA Project Cards and Project Description files rarely provided building or structure identification numbers or photographs; if the installation did not retain good records regarding the construction date for a specific building, it was often difficult to state with certainty that a building currently on the military installation was the one noted in the WPA project description (i.e., is the vehicle maintenance garage referenced in the WPA project description the same building as the garage in the current Real Property inventory?). For the National Guard, this process was streamlined by personnel at headquarters, National Guard Bureau, who accessed their Real Property databases to generate lists of sites and training installations from the 1930s and 1940s still owned or controlled by the National Guard in each state.

1.3 Acknowledgements

Hillori Schenker of the DoD Legacy Resources Management Program provided assistance in reviewing draft documents including this historic context, distributing copies of the initial questionnaire at the DoD Sustainability conference in Orlando, Florida, in July 2007, and by including the questionnaire in the Cultural Resources Update newsletter. The following service branch representatives provided invaluable assistance in identifying installation points of contact (POCs) and querying Real Property databases at headquarters-level:

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- Jane Yagley, formerly Cultural Resources Specialist, National Guard Bureau (Air National Guard)
- Matt Nowakowki, NEPA and Cultural Resources Technical Advisor, National Guard Bureau (Air National Guard)

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- At NAWC China Lake, Michael Baskerville

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Chapter 2: Civilian Conservation Corps

This chapter outlines the history of the CCC and the use of the CCC for national defense projects. Typical projects are described; the full list of projects and camps on military reservations is provided in Appendix B, along with photographs scanned from Record Group 35 at the National Archives Still Photograph collection.

2.1 Historical Overview

The following overview is taken from several sources, including Sypolt (2005:1–4), Cohen (1980), and the Administrative History provided in the *Preliminary Inventory of the Records of the Civilian Conservation Corps* (Helms 1980) prepared by the NARA for Record Group 35.

By 1932, more than 5 million young men were unemployed, including large numbers of World War I veterans. These men roamed the country looking for work, went on welfare rolls, or turned to crime. At the same time, millions of acres of farm land were being eroded, threatened by fire or by indiscriminate timber harvesting. Recreational opportunities were being lost because of budget and personnel problems. The Emergency Conservation Work (ECW), the original name for the agency that would become known as the CCC, was authorized by the 73rd Congress under Public Act No. 5. The act, known as the "Reforestation and Relief Bill," was approved by President Franklin D. Roosevelt on 31 March 1933. It gave the President authority to establish a chain of forest camps in which unemployed young men could be placed to protect and improve our nation's millions of acres of forest land. Roosevelt's concept for the CCC is best captured in a message sent to the 73rd Congress on 21 March 1933:

I propose to create a Civilian Conservation Corps to be used in simple work, not interfering with normal employment, and confining itself to forestry, the prevention of soil erosion, flood control, and similar projects. More important, however, than the material gains, will be the moral and spiritual value of such work. The overwhelming majority of underemployed Americans, who are now walking the streets and receiving private or public relief would infinitely prefer to work. We can take a vast army of these unemployed out into healthful surroundings. We can eliminate to some extent at least the threat that enforced idleness brings to spiritual and moral stability. It is not a panacea for all the unemployment, but it is an essential step in this emergency...³

The name was officially changed to the CCC by act of 28 June 1937, which established the CCC as an official agency within the federal government. The new CCC agency had a stronger emphasis on education and vocational training than the original ECW forest camp agency.

The administration of the ECW, and later CCC, was composed of a director, originally Robert Fechner, and representatives of the four cabinet agencies involved in its makeup, namely the War Department and the Departments of the Interior, Agriculture, and Labor. Each department was responsible for certain activities in the coordination of the program.

The War Department was responsible for the physical maintenance of the camps and the enrollees. Under the leadership of military and naval officers, this included fiscal matters, health, supplies, shelter,

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¹ Cohen 1980:6.

² Ned H. Deaborn, *Once in a Lifetime: A Guide to the CCC Camp* (New York: Charles E. Merrill Company, 1936), 5.

³ Cohen 1980:6.

transportation, communication, and cooperation from the U. S. Office of Education. The Department of the Interior cooperated in the supervision of the CCC camps in national parks, on Indian reservations, and in the territories of Alaska, Hawaii, and the Virgin Islands. It also cooperated in connection with the Grazing Service, U.S. Fish and Wildlife Service, Bureau of Reclamation, and General Land Office activities. The Department of Agriculture cooperated through the U. S. Forest Service, Soil Conservation Service, drainage, Beltsville Research Station, plant industry, entomology, and plant quarantine programs. The Department of Agriculture also was responsible for work done on private lands and in state forests. The Department of Labor was responsible for the selection of enrollees, upon recommendations of the state relief agencies. Need and population quotas determined who and how many were to be selected.⁴

The initial call was for 250,000 "boys" to be enrolled by 1 July 1933 (**Figure 2-1**). They were to be unemployed, between 18 and 25 years old, and unmarried. They were to come from families on relief. On 14 April 1933, enrollment of 14,000 American Indians was authorized because of chronic unemployment and soil erosion on the reservations. These men stayed on their reservations and lived at home under the jurisdiction of the Office of Indian Affairs. On 22 April, enrollment of 24,000 "Local Experienced Men" (LEM) was authorized; these were usually older men who had experience in woodcraft and were hired to supervise the work crews. The Forest Service, which was responsible for most of the camp projects, did not have the manpower to manage the thousands of youths enrolling. On 11 May, 24,000 veterans of World War I (men in their 30s and 40s) were authorized for enrollment. Due to severe unrest and unemployment among the veterans, a partial solution to the problems was the enrollment of veterans in their own conservation camps. By 4 July 1933, approximately 275,000 youths, L.E.M., American Indians, and veterans were enrolled in the CCC.⁵

The enlistment period was 6 months with the option of re-enlistment for another 6 months up to a maximum of 2 years. The enrollee was paid \$30 a month, of which \$25 was sent to his family. The remaining \$5 could be used by the enrollee at the camp canteen or for personal expenses of his choice. Room, board, clothing, and tools were provided by the government. The enrollee was expected to work a 40-hour week and adhere to camp rules.⁶

Initially, the enrollees were sent to conditioning camps at existing Army posts (**Figure 2-2**). Here the enrollees went through days of exercise before being sent to their assigned camps. The War Department ran the camps and by 1 July 1933, the Army had 3,000 regular Army officers, 1,890 reserve officers, 556 Navy and Marine officers, and 300 contract surgeons on active duty.⁷

⁴ Sypolt 2005: 1-2.

⁵ Cohen 1980: 6-8.

⁶ Ibid. 8.

⁷ Ibid. 8.

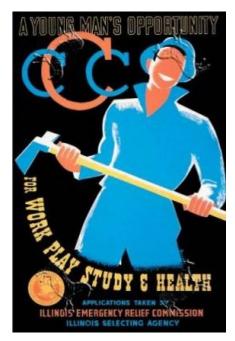




Figure 2-1. CCC Recruitment Posters.



(Cohen 1980:11)

Figure 2-2. CCC Enrollees at Conditioning Camp, Fort Sheridan, Illinois.

The administration of the CCC was divided into nine Army Corps areas, following the division of the U.S. Army, which administered the program. Later on in the program, a tenth division corresponding was

added to cover camps in Alaska and Hawaii. The states' Corps area jurisdiction and the headquarters location are as follows:

- First-Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut. HQ: Army Base, Boston, Massachusetts
- Second–New Jersey, Delaware, New York. HQ: Governors Island, New York
- Third-Pennsylvania, Maryland, Virginia, District of Columbia. HQ: U. S. Post Office and Court House, Baltimore, Maryland
- Fourth–North Carolina, South Carolina, Georgia, Florida, Alabama, Tennessee, Mississippi, Louisiana. HQ: Post Office Building, Atlanta, Georgia
- Fifth-Ohio, West Virginia, Indiana, Kentucky. HQ: Fort Hayes, Columbus, Ohio
- Sixth–Illinois, Michigan, Wisconsin. HQ: Post Office Building, Chicago, Illinois
- Seventh–Kansas, Arkansas, Iowa, Nebraska, Minnesota, North Dakota, South Dakota, Missouri.
 HQ: Federal Building, Omaha, Nebraska
- Eighth–Texas, Oklahoma, Colorado, New Mexico, Arizona, Wyoming (less Yellowstone National Park). HQ: Fort Sam Houston, San Antonio, Texas
- Ninth–Washington, Oregon, Idaho, Montana, Utah, Nevada, California, Yellowstone National Park (in Wyoming). HQ: Presidio of San Francisco, California.⁸

Each corps area was subdivided into administrative districts. Each had a district commanding officer who, along with his staff, saw to the needs of each CCC camp in his district. Enrollees were divided into junior enrollees, war veterans (chosen by the Veterans Administration), American Indians, colored enrollees, and other groups. Within each district were numerous companies, each assigned to a CCC camp. Each CCC company consisted of a commanding officer, typically either a regular Army or Reserve officer; an executive officer; a staff doctor provided by the War Department; and enrolled "overhead" leaders, assistant leaders, company clerks, storekeepers, supply officers, infirmary attendants, stewards, cooks, chauffeurs, mechanics, and assistant educational advisors. The project superintendent, usually employed by the technical service the camp was under, was in charge of all work projects away from camp and had 8 to 10 foremen under him. The foremen were usually L.E.M. The work sections were divided into crews under foremen and assistant foremen. Figure 2-3 provides a typical organizational chart for a CCC company.

Between 1933 and 1939, the CCC functioned primarily as a relief agency, under President Roosevelt's original vision to provide occupation for the nation's unemployed youth for the benefit of themselves as well as the nation's natural resources. The program was generally a success, reducing unemployment and providing invaluable conservation benefits. As events progressed towards World War II, however, defense spending in the United States increased and unemployment declined dramatically. In 1939, Congress passed an act ensuring continuance of the CCC through 30 June 1943, but under the control of the Federal Security Agency. Improvements in pay rates and uniforms increased morale initially, as did the reduction of the War Department's role in administration, but gradually, issues related to racial segregation, ineffective leadership, inadequate living conditions, and a reduction in the enrollment age to 17, all led to increasingly high rates of desertion.

⁸ Happy Days CCC Directory, 5.

⁹ U. S. Congress. Senate. *Civilian Conservation Corps*. 77th Cong. 2nd Session, Document No. 216, 1–3.

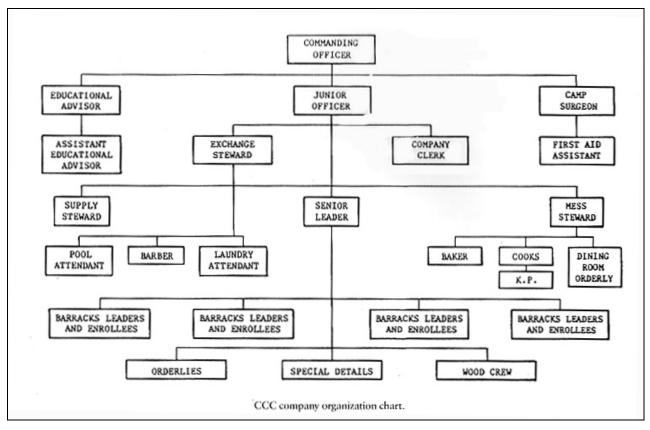


Figure 2-3. CCC Company Organization Chart (Cohen 1980:8).

Roosevelt proclaimed a limited national emergency in 1940 after Hitler's troops overran France and, as a result, the CCC became more involved in national defense work. Camps were established at many military posts, and more defense-related subjects, such as radio training and aircraft maintenance, were offered in the training program (**Figure 2-4** and **Figure 2-5**). Military drill was installed and each enrollee was required to take first-aid training. After 7 December 1941, the CCC offered all its camps to the Army for work on military projects, and offered the American Red Cross help with war emergencies. Except for forest fire fighting, all conservation work off military reservations was canceled on 1 January 1942. Two hundred camps were on military reservations and 140 were assigned to fire-fighting duty in the West. The manpower drain was enormous as thousands of enrollees and camp administrators left the CCC to enter military service. Under pressure to abolish the CCC due to the cost of the program and difficulty in maintaining it alongside the war effort, the House voted to halt the program as of 30 June 1942.



(NARA, RG 35, Image VI-255-B23)

Figure 2-4. Learning Morse Code.



(NARA, RG 35, Image VI-252-B23).

Figure 2-5. Woodworking and Carpentry Instruction.

2.2 The Camps

By the peak of the CCC program, there were more than 4,000 permanent and side or spike (temporary) camps across the continental United States and Alaska, Hawaii, Puerto Rico, and the Virgin Islands. Each camp had a letter designation that indicated what type of camp it was, and under what jurisdiction it fell. These camp designations or symbols were as follows:

- A Agriculture (Bureau of Animal Industry), U.S. Forest Service and Bureau of Animal Husbandry, Department of Agriculture
- Army Military Reservations, U.S. Army, War Department
- BF Federal Game Refuge (Biological Survey), Bureau of Biological Survey, Department of Agriculture
- BR Bureau of Reclamation
- BS Biological Survey
- C of E State Land (Corps of Engineers), U.S. Army, War Department
- CP County Park
- D Private Land (Drainage), Bureau of Agriculture Engineering, Department of Agriculture
- DG Public Domain, Division of Grazing, Department of the Interior
- F National Forests, U.S. Forest Service; Department of Agriculture
- GLO General Land Office
- L State and Federal Land (Levee), U.S. Forest Service, Department of Agriculture
- MA Metropolitan Area Municipal Park, National Park Service
- MC Private Land (Mosquito Control), U.S. Forest Service and State, Department of Agriculture
- MP Military Park, National Park Service, Department of the Interior
- NA National Arboretum (Bureau of Plant Industry), U.S. Forest Service, Department of Agriculture
- Navy Naval Military Reservation, U.S. Forest Service, and U.S. Navy (except Navy-I-VA, by National Park Service and Navy), Department of Agriculture
- NHP National Historical Park, National Park Service, Department of the Interior
- NM National Monument, National Park Service, Department of the Interior
- P Private Forest, U.S. Forest Service and State, Department of Agriculture
- PE Private Land Erosion, U.S. Forest Service and State, Department of Agriculture
- S State Forest, U.S. Forest Service and State, Department of Agriculture
- SCS Private Land, Soil Conservation Service, Department of Agriculture

- SP State Park, State Park Division of National Park Service, Department of the Interior
- TVA Tennessee Valley Authority, U.S. Forest Service and Tennessee Valley Authority, Department of Agriculture
- TVA-P Tennessee Valley Authority, State Park Division of National Park Service and Tennessee Valley Authority, Department of the Interior.¹⁰

Each CCC camp was composed of one company of approximately 200 men. Except for a few installations in northern states, camps were racially segregated: white, colored, and Indian. An effort was made to integrate the camps for war veterans, but it did not work out. Several camps for women were said to have been established in New Hampshire and New York, but the CCC was mainly a man's organization. The enrollees were eligible to become "rated" men to help with the camp administration, usually a senior leader, mess steward, storekeepers, and two cooks. Assistant leaders were the company clerk, assistant education advisor, and three second cooks. These men were picked from the company and were paid \$45 and \$36 a month, depending on the rating, compared to \$30 a month per enrollee.

2.3 The Projects

The CCC performed more than 150 types of work. Most projects involved the protection, restoration, improvement, utilization, and maintenance of natural resources of federal and state lands and waters. The CCC reported the following general types of work performed by enrollees:

- Forest culture
- Forest protection
- Erosion control
- Flood control
- Irrigation and drainage
- Transportation improvements
- Structural improvements
- Range development
- Aid to wildlife
- Landscape and recreational development. 13

In its early years, projects were confined to forestry, park developments, and soil erosion control, but later they included disaster relief, historical restoration, and national defense. For the Department of Agriculture, CCC projects included fighting fires, planting trees, thinning timber stands, forest recreation projects, insect and plant disease control, road building, soil erosion control, levee repairs, and installation

¹⁰ *Happy Days CCC Directory* (Washington: Happy Days Publishing Company, 1937), 3; and, Colorado State Archives, Colorado Civilian Conservation Corps Records at Colorado State Archives web: http://governo.co.us/gov_dir/gss/archives/.

¹¹ Cohen 1980: 8.

¹² Ibid. 30-31.

¹³ Helms 1980:1.

of drainage tile (**Figure 2-6**). Within the national and state parks systems, the CCC supplied manpower and materials to build shelters, picnic areas, swimming pools, recreational facilities, water and sewage systems, administrative structures, museums, historic restorations, and roads, and manpower for reforestation and soil erosion control work. Work for the Bureau of Reclamation involved repairing irrigation systems, building dams, clearing reservoir sites, excavating canals, and building other water control structures. For the Grazing Service, the CCC built water holes, reseeded burned lands, built roads and fences, completed surveys and made maps, and worked on control of insects and predatory animals. Fish and Wildlife Service work was comparable, including construction of water control features, planting of cover vegetation, soil erosion control, construction of fire lookout towers and fences and firebreaks, and installation of phone lines.

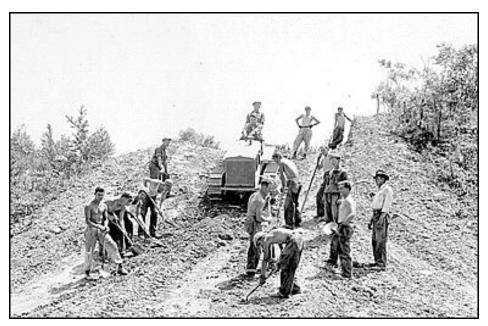


Figure 2-6. CCC Work Crew on Road Construction Project.

Work for the War Department was initially focused on CCC camp construction and work for the U.S. Army Corps of Engineers on construction of dams on the Winooski River in Vermont and channeling and levee construction on the Walkill River in New York. By 1940, however, CCC projects generally had a national defense orientation and, by the CCC's disbandment in June 1942, most of the remaining camps were on military reservations. On the reservations, enrollees were put to work building airfields, artillery ranges, ammunition storage buildings, and many other military structures (**Figure 2-7**). The National Defense Act of 1940 changed some of the educational policies of the CCC as well, increasing the number of training programs in vocational subjects such as radio operation, welding, aircraft maintenance, auto mechanics, and clerking-typing. When the United States entered World War II, former CCC men provided a great pool of trained manpower for the armed services. Appendix B, Table B-1, provides a list of the CCC projects completed on military reservations.

¹⁴ Ibid. 129.

¹⁵ Ibid. 116.



(NARA, RG 35, Neg. 35-SU-16-2)

Figure 2-7. CCC Work Crew Clearing Land at Fort Benning, Georgia.

The list of projects completed at Camp Ord in California is typical of CCC work on military reservations. This list includes fence repairs, construction of retaining walls, construction of truck trails and artillery trails, water development (wells, repairing water mains), soil erosion control (ditches, culverts, curbs, gutters, earth dams, sidewalks), planting sod and trees, fire hazard reduction, cutting poles for corral fences, civil surveys, hauling gravel, tear down and replacement of target butts, cleanup of camp areas, building medical sanitary area for maneuver camp, rebuilding the old Spanish fort, paving the road in front of post headquarters, and grading of parade grounds and riding pens. The CCC cleared and graded areas for anti-tank and firing ranges on a number of installations, repaired or constructed targets, built access roads and parking areas, completed general landscaping, and often worked to improve drainage problems created by earlier construction. Although the CCC built structures such as recreational shelters, lookout towers, and latrines, construction work largely focused on infrastructure and landscape elements.

Chapter 3: Works Progress Administration

This chapter outlines the history of Federal Emergency Relief programs, including the precursors to the WPA. A discussion of the projects completed under the WPA follows the historical overview, and specific details regarding national defense projects are provided from the WPA's internal 1944 summary report. Appendix C includes an inventory of all projects completed in support of national defense, compiled from a review of the WPA project cards.

3.1 Historical Overview

The following summary is adapted from the "Administrative History of the Federal Emergency Relief Administration, the Civil Works Administration, and the Work Projects Administration", ¹⁶ which was developed as part of the descriptive information for Record Group 69: Records of the Works Progress Administration. Footnotes are presented verbatim from that document.

Until the creation of the Federal Emergency Relief Administration (FERA) in May 1933, the responsibility for the administration of relief rested almost entirely on state and local governments, aided to some extent by private agencies and individuals. With the stock market crash of 1929 and the period of widespread economic depression that followed, however, the volume of unemployment mounted so rapidly that existing public and private relief agencies found themselves unable to bear the increased load without assistance. To meet this need, local emergency relief organizations were created, but their limited resources soon proved inadequate and state aid became imperative. The first state emergency relief administration was established in New York in November 1931 and by the summer of 1932, similar organizations were functioning in every state, except Wyoming.¹⁷

Gradually, however, the demand for federal aid increased as the states found it difficult to carry the vast relief burden and as more and more people came to believe that widespread unemployment was a national, not merely local, problem. The first federal agency created to deal with the unemployment problem was the President's Emergency Committee for Employment, set up by President Hoover in October 1930, with Colonel Arthur Woods as its chief. In August 1931, the Woods Committee was supplanted by the President's Organization of Unemployment Relief, headed by Walter S. Gifford. Both of these committees, however, were restricted to advising and encouraging state, local, and private agencies concerning ways of meeting relief needs. These efforts failed to curb mounting distress resulting from unemployment.

The first definite step taken by the federal government toward assuming at least partial responsibility for unemployment relief was the passage of the Emergency Relief and Construction Act, which was approved by President Hoover on 21 July 1932. 19 This act made \$300 million available to the Reconstruction Finance Corporation (RFC) for the purpose of advancing money to states and their political subdivisions. These advances were to be used in furnishing both direct and work relief to destitute persons. As the RFC considered itself only a banking agency, it did not try to supervise the administration of relief made possible by these loans. Instead, the RFC concerned itself only with attempting to determine the amount each state actually needed for relief purposes, and how much of this amount the state could itself furnish. The RFC loan was intended to make up the difference between these

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¹⁶ Bourne and Herscher, 1946.

¹⁷ Edward A. Williams, Federal Aid for Relief, 18-19 (New York, 1939).

¹⁸ The records of both the Woods and Gifford Committees are in the National Archives (Record Group 73).

¹⁹ 47 Stat. 709.

two sums. In order to get first-hand information concerning the relief situation throughout the country, the RFC sent representatives into the states, some of whom were later hired by the FERA because of the specialized knowledge and experience they had acquired in this field. Much of the data collected by these field representatives, as well as that contained in the applications for loans submitted by state governors, were later made available to FERA officials who found it valuable for determining the amounts of the first FERA grants that were made to the states.²⁰

The total sum made available under the Emergency Relief and Construction Act was ultimately not adequate for relief needs, and the amount of employment stimulated by state and local construction made possible by the act fell far short of expectations. The ever-increasing volume of unemployment, together with the business failures of March 1933, brought about a crisis that finally forced the federal government to participate directly in the administration of relief.

3.1.1 Federal Emergency Relief Administration (FERA)

On 12 May 1933, President Roosevelt approved the Federal Emergency Relief Act of 1933, which appropriated \$500 million for outright grants to the states for relief purposes and created the FERA to carry out the provisions of the act.²¹ There were several reasons for setting up the FERA as a grant agency. The relief situation had become so critical that it seemed advisable to use existing state and local relief agencies at once, rather than to take the time to set up a new federal agency for this purpose. Furthermore, the grant method was judged likely to prove a less repugnant form of federal intervention to those who were convinced that relief was properly a state and local responsibility. Finally, the belief in some quarters that the need for federal aid might quickly pass had a certain influence in the decision that it was not desirable to establish a strong centralized relief agency as an integral part of the federal government. As it turned out, therefore, the chief function of the FERA was to allocate federal funds to the states for direct and work relief and, in connection with these allocations, to issue such rules and regulations as were necessary to ensure the maintenance of minimum relief standards and the proper use of federal funds in the states, and also to serve as a coordinator and clearinghouse of information on relief problems, policies, and procedures.

The administrative machinery created to carry out the provisions of the act was comparatively simple. Harry L. Hopkins was named Federal Emergency Relief Administrator by the President and was authorized to appoint a staff. As had been the case with RFC loans, the states made application for FERA funds through their governors, who were required to furnish certain information concerning the amount of federal money needed, the purposes for which it was to be used, and the provisions made for adequate administrative supervision and the maintenance of suitable relief standards. The act also required the governors to submit a monthly report of the disbursement of federal funds to the Administrator, who, in turn, was directed to prepare a monthly report concerning his activities and the expenditures made under the act.²²

Of the \$500 million made available by the act, \$250 million was to be allocated on the basis of granting one dollar of federal money for every three dollars spent by the state for unemployment relief during the

²⁰ Some of the reports of these field representatives are among the WPA records now in the National Archives.

²¹ 48 Stat. 55. For a useful outline of the history of the FERA, see <u>Chronology of the FERA, May 12, 1933 to December 31, 1935</u>, by Doris Carothers, WPA Division of Social Research (<u>Research Monograph VI</u>, Washington, 1937). The best source of information concerning the administration of the FERA is its central files, which are described in this checklist.

²² The monthly reports of the Federal Emergency Relief Administrator were printed as public documents, of which copies, covering the period March 1935 – June 1936, are among the FERA records now in the National Archives.

preceding 3 months. This "matching" provision was abandoned in November 1933, however, as it operated to preclude the granting of federal aid to those states needing it most.

The administrative organization of the FERA is difficult to describe in general terms because of the constant changes that took place during its brief period of existence. During the first year, administration of the FERA was highly centralized, and almost all important decisions were made in the Washington, D.C. office, although field representatives visited the states and submitted reports. Early in May 1934, however, the Administrator set up a number of regional offices, each staffed with a field examiner, a social worker, an engineer, and sometimes a rural rehabilitation expert. The staffs of these regional offices were appointed by the heads of the Washington, D.C. office divisions, with the approval of the Administrator. The regional officers, consequently, looked primarily to the Washington office division chiefs, rather than to the field representatives, for orders and advice. As the FERA drew to a close in the summer of 1935, however, the field representatives were achieving a greater degree of control over the regional offices, partly because of the greater degree of control over the regional offices, partly because of the preoccupation of Washington officials with the new WPA program, and partly because of the growing realization of a need for greater decentralization.

3.1.2 Civil Works Administration

The Civil Works Administration (CWA) was created by an Executive Order of the President on 9 November 1933, under the authority of the National Industrial Recovery Act, for the purpose of providing work for approximately 4 million unemployed persons during the winter months of 1933–34. Although the CWA and FERA functioned simultaneously for several months and, to some extent, with the same personnel, administratively they were entirely separate organizations. Unlike the FERA, the CWA dealt directly with the unemployed person, and complete authority for the operation of the CWA program was vested in the Washington, D.C., office, which exercised its power through its own field organization in the states and localities. The Federal Emergency Relief Administrator was renamed the Federal Civil Works Administrator, and on 10 November 1933, he notified all state emergency relief administrators of their appointment as state civil works administrators. They were to function in this dual capacity for the duration of the CWA.

During the period from November 1933 through March 1934, in which the CWA functioned, the work relief activities of state and local relief agencies were greatly curtailed and many of the persons who had been engaged in planning and carrying out the work programs were transferred to CWA field offices as federal officials. About 2 million employable persons on relief rolls were placed on CWA projects, as well as an equal number of self-sustaining unemployed persons. Perhaps the most important difference between the FERA and the CWA was that the latter was designed to relieve unemployment through a public works program and no attention was paid to the relief status of the persons employed, while the

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²³ Correspondence with the field representatives, instructions to them, and reports from them are included in both the "General Subject" and "State" series of the FERA central files.

²⁴ Correspondence with regional officers, their reports, and minutes of regional conferences are included in the "General Subject" and "State" series of the FERA central files.

²⁵ Monthly Report of the FERA, May 1 through May 31, 1936, p. 14. See also Report Upon the CWA, submitted by Jacob Baker to Harry Hopkins on 30 December 1935; "A Description of Civil Works Program Statistics," prepared by Pamela Brown in 1939; and Analysis of Civil Works Program Statistics (Washington, June 1939). Copies of these three reports are in the National Archives.

FERA was created primarily to provide direct relief. There was also an important difference in the methods of financing the FERA and the CWA.²⁶

Although control of the CWA program was centered in Washington, a rather high degree of decentralization was practiced in its administration. Broad policy rulings were issued by the Washington, D.C., office, but the responsibility for the initiation and approval of projects was placed almost entirely on the state administrators. While state and locally sponsored projects accounted for the bulk of the CWA program, those sponsored by federal agencies proved to be among the most useful projects undertaken and provided work for a number of professional and white-collar workers.²⁷

Approximately 90 percent of CWA projects were those involving manual labor, such as road construction and repair, construction of schools and other public buildings, maintenance of parks and playgrounds, pest control, and water and soil conservation. The number of CWA projects allotted to each state was determined as a rule on the basis of its population and the number of cases on its relief rolls, although a state's quota of projects might be exceeded if a definite need for more employment could be shown. With the liquidation of the CWA in March 1934, most of the relief workers left on the program and the majority of incomplete CWA projects were transferred to the new emergency work relief program, which was put into operation on 1 April 1934, under the jurisdiction of the FERA.

Under this new program, the supervision of work projects came under the jurisdiction of work divisions that state and local relief organizations were required to organize, subject to regulations established by the Washington office. All work projects were financed under the same grant-in-aid system that had characterized the early FERA work program. Most of the projects operating under the emergency work relief program, as under the CWA, were of the construction and maintenance type; only about 10 percent of all persons on work relief during the period from August 1934 through April 1935 were employed on white-collar projects.²⁹

Following the creation of the WPA in May 1935, the emergency work relief program was gradually brought to a close, and it was practically terminated by 1 July 1935.³⁰ The formal liquidation of the FERA program as a whole, originally provided for by the Emergency Relief Appropriation (ERA) Act of 1935, was postponed by the ERA Act of 1937, which made the liquidation the responsibility of the WPA Administrator and provided funds for this purpose until 30 June 1938.³¹

²⁶ CWA "investigations" cases were transferred to the WPA Division of Investigation.

²⁷ One of these federally sponsored white-collar projects was the Public Works of Art Project, the records of which are in the National Archives.

²⁸ The relative weight given these two factors in determining the amount to be allocated to the States was 75 percent to the population factor and 25 percent to case load. Report Upon the CWA, p. 7.

²⁹ Copies of the final State reports on the CWA program are now in the Federal Works Agency Library.

³⁰ Copies of the final State reports on the FERA work relief program are in the Federal Works Agency Library. A copy of the over-all report, "The Emergency Work Relief Program of the FERA, April 1, 1934–July 1, 1935," prepared by the Work Division of the Washington office and submitted to the Administrator in December 1935, is in the National Archives.

³¹ 49 Stat. 1611 and 50 Stat. 357. See also <u>Final Statistical Report of the FERA</u> (Washington, 1942).

3.1.3 Work Projects Administration

Although the FERA continued to function through December 1935, the Works Progress Administration, established by Executive Order of the President on 6 May 1935, under the authority of the ERA Act of 1935, henceforth assumed the dominant role in work relief activities.³² This new organization was made responsible to the President for "the honest, efficient, speedy, and coordinated execution of the work relief program as a whole, and for the execution of that program in such manner as to move from the relief rolls to work on such projects or in private employment the maximum number of persons in the shortest time possible."³³

The WPA differed from its predecessors in two important respects. Whereas the FERA had granted funds to states and localities for both direct and work relief, the WPA program was restricted to financing work relief activities. Aid to unemployables remained primarily the responsibility of state and local governments, which might obtain federal grants-in-aid under the categorical relief provisions of the Social Security Act. Also, unlike the policy followed under the CWA program, eligibility for employment on WPA projects was based entirely upon relief status.

In the process of establishing the WPA, a conscious effort was made to profit by the knowledge and experience acquired in the operation of the FERA program. Under the provisions of the Executive Order creating the WPA, the Federal Emergency Relief Administrator was designated to serve also as Administrator of the WPA, and many persons assigned to the Washington office staff of the FERA, as well as a large number of qualified persons in the work divisions of state emergency relief administrations, were transferred to the WPA.

Although the WPA, like the CWA, was set up as a federal program in contrast to the grant-in-aid system that characterized the FERA, state and local governments were expected to cooperate with the federal government in financing and supervising work projects. From the start, the WPA functioned through four organizational levels: (1) a central administration in Washington, D.C.; (2) regional offices; (3) state administrations; and (4) district offices, which usually embraced several counties. The organizational pattern of the WPA provided for two types of relationships between offices at the four levels of administration: "a line of administrative or direct authority, and a line of technical instruction and advice." Although the Washington office made no attempt to define the extent of administrative control that state offices could exercise over district offices, it ruled that state administrators must not interfere with the direct line of technical instruction linking the functional divisions of operating units at all levels. This policy of dual authority within the WPA organizational hierarchy resulted in a certain amount of rivalry between administrative and technical supervisors that was evident not only in the field of project operation, but also in the Washington office.

The functions of the central office were apportioned among several major divisions, each of which was under the direct supervision of an Assistant Administrator appointed by and immediately responsible to the Federal Administrator. The number and names of these divisions changed frequently, but they embraced such functions as administration, employment, project control, finance, statistics, research, and the supervision of engineering and professional and service projects.

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³² The name of the agency changed to the Work Projects Administration on 1 July 1939, when it was incorporated in the newly established Federal Works Agency under the provisions of Reorganization Plan No. 1. The title of Administrator of the WPA was changed to Commissioner at that time.

³³ Executive Order No. 7034, 6 May 1935.

³⁴ WPA Manual of Rules and Regulations, Vol. I, "Organization and Administration," p. 1. 1. 011.

Immediately below the central office in the WPA hierarchy were regional offices, each under the direction of a regional field representative and staff consisting of a regional engineer, a regional examiner, a regional director of employment, and a regional director of the Division of Women's and Professional Projects. As originally established, the WPA regional organization took over the five FERA regional offices with practically no change in geographical boundaries or personnel. As the WPA program expanded, however, it became necessary to increase the number of regions to nine in 1939. In December 1940 the number was reduced to eight because of the drop in WPA employment and the need to curtail administrative expenses. When even more severe limitations were placed upon the funds that could be used for administrative purposes in 1942–43, pressure was brought to bear by members of the Senate for abolition of the entire regional set-up in preference to the consolidation of some of the state administrations. The latter action was taken in a few cases, and in September 1942 the WPA regional offices became part of the Federal Works Agency field organization.

Regional officials were responsible for giving advice and instructions to state and district WPA offices, for making reports and recommendations to the Washington office, and for approving the appointment of certain key personnel in state and district offices. By 1940, regional directors were empowered to interpret and supplement instructions of the Washington office, to review state programs and administrative budgets before they were submitted to Washington, to recommend changes in state employment quotas, and to approve the location of state and district offices. The result of this policy of increasing the power of regional officials at the expense of the Washington office was a certain measure of decentralization, which tended to diminish the consciousness of dual command that had confused many state administrators.

Funds for the operation of the WPA program were provided in the annual ERA Acts of 1935 through 1943, and in supplementary measures passed to provide additional funds.³⁷ The fact that the WPA had to depend on annual appropriations prevented its officials from planning work more than one year in advance or from making long-term commitments to public agencies or institutions that might otherwise have sponsored worthwhile projects of an extensive character. During the last few years of the agency, program planning and project operation became increasingly difficult.

Before funds made available to the WPA under the ERA Acts could be allocated to the states, specific project proposals had to be reviewed and approved by the proper district and state officials, the Project Control Division in the Washington office, the President, and the Comptroller General.³⁸ The types of projects that the WPA could undertake were specified in the ERA Acts, with some variation from year to

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³⁵ <u>Handbook of Procedures for State and District Works Progress Administration</u>, Ch. 2, sec. 2 (Washington, 1936). See also Williams, <u>op. cit.</u>, 250, and Arthur W. MacMahon, John D. Millet, and Gladys Ogden, <u>The Administration of Federal Work Relief</u>, 230-36 (Chicago, 1941). Administrative correspondence between the central office and each of the regional offices is classified in the 130 classification of the "General Subject" series of the WPA central files.

³⁶ The state administration of Nevada was combined with that of Northern California from September 1941 to August 1942. The Administrations of Delaware and the District of Columbia were consolidated with that of Maryland on 1 August 1941, but Delaware was reestablished as a separate administration in August 1942, and the District of Columbia was made directly responsible to the central office in December 1942. These consolidations of state administrations are reflected in the filing of records in the "State" series of the WPA central files.

³⁷ Prior to 1940 the title of each ERA Act included the year in which it was passed, but in 1940 and subsequent years and title included instead the fiscal year for which the money was being appropriated.

³⁸ The records of the Project Control Division have been microfilmed and the film is in the custody of the Federal Works Agency. For a description of the procedure for approval of projects, see MacMahon, Millet, and Ogden, <u>op. cit.</u>, 100-102.

year. As under the CWA and FERA programs only those projects were eligible that were designed to benefit the public health and welfare. The majority of WPA projects were planned, initiated, and sponsored by cities, counties, and other public agencies (**Figure 3-1**). Figures available for total WPA expenditures in the early part of 1940 reveal that about one-half of the projects were sponsored by municipal agencies and about one-fourth by county agencies. The remaining one-fourth was sponsored by state, federal, or other public agencies. The so-called "federal" projects, which were sponsored either by the WPA itself or by other federal agencies, accounted for only about 3 percent of the estimated cost of all WPA projects. The percentage of sponsors' contributions ranged from 10 percent of the total cost of all WPA projects in 1936 to 30.1 percent in 1943, or an average of 21.9 percent for the entire 8-year period. The percentage of the sponsors of the entire 8-year period.



Figure 3-1. WPA sign in front of WPA-constructed front gates at Jackson Barracks, Louisiana.

When a project was ready to begin operations, the sponsor was called upon to furnish the contributions that had been pledged in the project proposal and application. The degree of control exercised by a sponsor over a project varied, depending largely upon the type of work performed. At first, the WPA was inclined to consider that its primary function was to supply labor and that the responsibility for carrying the project through to completion belonged to the sponsor. Gradually this view changed, and the WPA provided trained supervisors and foremen who were to follow the wishes of sponsors as closely as possible. In the case of the white-collar projects, especially in the federal arts program, qualified persons were asked to serve on advisory committees created for the purpose of making available expert technical

³⁹ Donald S. Howard, The WPA and Federal Relief Policy, 144-145 (New York, 1943).

⁴⁰ Williams, op. cit., 251. Two-thirds of these "Federal" projects were sponsored by the WPA itself.

⁴¹ "Operations and Employment of the WPA," table 3, p. 11 (H. Doc. 392, 78 Cong., 2 sess.).

experience and advice. ⁴² Likewise, trained engineers on the staffs of local and state departments of public works were often able to assist WPA supervisors in planning and operating construction projects.

The formal order for the liquidation of the WPA was contained in a letter of 4 December 1942, addressed by the President to the Federal Works Administrator. Stating that the WPA rolls had decreased to a point where a national work relief program was no longer necessary, the President requested that project operations be closed out in as many states as possible by 1 February 1943 and in all other states as soon thereafter as possible. Steps were taken immediately by WPA officials to carry out the President's order, with the result that the WPA program ceased operation on 30 June 1943, except in Puerto Rico and the Virgin Islands, where it continued until 30 November 1943, with funds provided by the Second Deficiency Appropriation Act approved 12 July 1943. Under this same act, funds in the amount of \$1,065,000 were appropriated to the Federal Works Administrator for use in liquidating the WPA from unobligated balancing remaining under appropriations of the ERA Act of 1943. A Division for the Liquidation of the WPA, set up within the Federal Works Agency on 1 July 1943, functioned until 30 June 1944, when all remaining matters pertaining to the liquidation of the WPA became the responsibility of the Office of the Federal Works Administrator.

3.2 The Projects

As under the FERA and CWA programs, most WPA projects (approximately 75 percent) were of a construction nature and as such came under the jurisdiction of the Engineering Division of the Washington, D.C. office. Immediate supervision of the projects, however, was the responsibility of state and local WPA officials under the general oversight of the regional engineer. In terms of relative cost the types of construction projects undertaken by the WPA ranged all the way from the 40-million-dollar North Beach Airport project in New York City to minor repairs on public buildings involving the expenditure of only a few hundred dollars. Many projects, such as the improvement of Pennsylvania's entire highway system, covered wide areas while others were confined to remote rural localities. Among the most outstanding achievements of the WPA during its 8-year period of operation could be the construction or repair of more than 650,000 miles of highways, roads, and streets, including farm-to-market roads and access roads to defense plants and military establishments; the construction of nearly 40,000 new public buildings and the repair or improvement of more than 85,000 existing buildings; the construction or improvement of thousands of parks, playgrounds, and other recreational facilities; the installation or improvement of public utilities service and sanitation facilities; the extension of flood and

⁴² Records relating to the National Advisory Committee are filed under the 210.11 and 211 classifications in the "General Subject" series of the WPA central files.

⁴³ A copy of this letter with related correspondence and instructions to State Administrators is filed under the "100" classification in the "General Subject" series of the WPA central files. Other instructions to State administrators concerning the liquidation of the program are filed in the "600" classification, while their reports on the progress of liquidation in their respective states are filed under the "610" classification in the "State" series. Final state reports on the administration of the program over the entire 8-year period are still in the custody of the Federal Works Agency.

⁴⁴ The records of the Division for the Liquidation of the WPA were filed according to the classification scheme of the WPA central files and so have been made an integral part of the WPA central files described in this checklist. Records pertaining to the liquidation of the WPA after 30 June 1944 form a part of the records of the Office of the Federal Works Administrator, which are filed according to an entirely different scheme.

⁴⁵ The majority of project files of the Engineering Division are incorporated in the appropriate classifications in the "State" series of the WPA central files. The classified files of the Engineering Division, as well as other records of the Highway and Conservation Section, the Airport and Airways Division, and the Project Application Section, were maintained separately from the WPA central files.

erosion control, irrigation, and conservation; the construction or improvement of thousands of airports and airways facilities; and the collection of thousands of tons of scrap metal and rubber for the salvage campaign.⁴⁶

When the crisis of war approached, large numbers of WPA workers were employed on construction projects certified as necessary for defense purposes by the Secretaries of War and the Navy, and the nationwide vocational training project was set up in July 1940 to train workers for manual occupations in defense industries. ⁴⁷ In the latter part of 1940 a nationwide project for the training of WPA workers as airport servicemen was established under the defense training program. In July 1941 a Division of Training and Reemployment was created within the central office of the WPA, with operating units on the State and district levels as well. ⁴⁸ Large numbers of women and men were transferred from other WPA projects to defense training during 1941–42, with more than 38,000 persons, or 5.5 percent of all WPA employees assigned as defense trainees in June 1942.

The WPA also participated in the formulation of a vast 6-year program of public works and services that could be undertaken at the close of the war to ease the transition from a war to a peacetime economy. In a letter dated 24 May 1941, the President approved the establishment of the Public Work Reserve project, to be operated with WPA funds and staff under the sponsorship and general supervision of the Federal Works Agency and the co-sponsorship of the National Resources Planning Board. ⁴⁹ By the time the Public Work Reserve project closed on 1 April 1942, considerable progress had been made by state and local governments in planning future capital improvements and new or expanded public services programs.

While construction and engineering projects accounted for approximately 75 percent of federal and sponsors' funds expended under the WPA program, public service projects employing white-collar workers accounted for the remaining 25 percent.⁵⁰ Of this latter type of project, one of the earliest and most prominent was the federal arts program, which was approved as WPA Sponsored Federal Project No. 1 within the Division of Professional and Service Projects on 12 September 1935, in order to provide employment for qualified artists, musicians, actors, and authors on local relief rolls. Federal Project No. 1 consisted of the Federal Art Project, the Federal Music Project, the Federal Theatre Project, and the Federal Writers' Project, of which the Historical Records Survey was a part until October 1936, when it was set up as an independent unit.⁵¹ Five other federally-sponsored projects were created within the

⁴⁶ House Document No. 392, table 2, p. 6-10.

⁴⁷ Report of the Progress of the WPA Program, June 30, 1940, p. 20; Report of June 30, 1941, p. 29-36; Report of June 30, 1942, p. 14-18. Many records pertaining to the defense training program are filed under the 045 classification in the "General Subject" series and the 645 classification in the "state" series of the WPA central files. A large quantity of press releases and publicity material relating to the program are included among the WPA Information Division records in the National Archives.

⁴⁸ Miscellaneous records of the Division of Training and Reemployment, including correspondence, interoffice memoranda, weekly statistical reports on the number of defense trainees, and organizational charges, are in the National Archives.

⁴⁹ Some miscellaneous records relating to the Public Work Reserve project are included in the WPA central files, but the main body of files has been retained by the Federal Works Agency. Some press releases and newspaper clippings concerning the project are included in the WPA Information Division records in the National Archives.

⁵⁰ Report on Progress of the WPA Program, June 30, 1942, table XII.

Division of Professional and Service Projects: No. 2–Historic American Buildings Survey, No. 3–Staffing of State Planning Boards, No. 4–Survey of Federal Archives, No. 5–Inspection of Plumbing Installations, and No. 6–Historic American Merchant Marine Survey.⁵²

Besides these arts projects, numerous other white-collar projects were set up under the sponsorship of state and local governments or other public agencies for the purpose of improving and expanding community services. Under the research and records program a variety of surveys were made, relating to traffic, land use and housing, social and economic conditions in particular localities, climatology, topography, and natural resources. Many research studies were conducted under the sponsorship of universities and other public institutions. Public administration projects reorganized files, indexed records, and rendered clerical assistance to state and local governments. Other clerical projects indexed vital statistics and immigration and naturalization records. State library service projects not only enabled many libraries to expand their services, but also operated libraries in some localities where none had before existed. Newspaper indexing, translating, and bibliographical projects were also undertaken.

The education program of the WPA continued the work of the FERA emergency education program, providing classes in adult education, vocational training, and parent and workers' education and setting up nursery and rural schools. The field of workers' education was expanded under the WPA and became known as the workers' service program. In 1940 most of the vocational training classes were taken over by the new nationwide vocational training project. The college student aid program, which had been set up under the FERA, was enlarged and reorganized under the National Youth Administration (NYA), created by Executive Order No. 7086 on 26 June 1935. The NYA functioned as a part of the WPA, under the direction of the Deputy Administrator, until 1 July 1939, when it was made an independent agency under the provisions of Reorganization Plan No 1.

⁵¹ Within the WPA central files there are specific classifications for records relating to the Art, Music, Theatre, Writers, and Historical Records Survey projects both in the "State" and "General Subject" series. In addition, records of each of these projects maintained apart from the central files are also in the National Archives. A preliminary checklist of the records of the Historical Records Survey has been prepared by the National Archives.

⁵² Records relating to these projects are included in the WPA central files. A preliminary checklist has been prepared by the National Archives on the Survey of Federal Archives records maintained apart from the central files.

⁵³ Records relating to the research and records program are filed under specific classifications in both the "General Subject" and "State" series of the WPA central files. Other records maintained apart from the central files, including administrative correspondence, manuals, and the Research and Records Library, are also in the National Archives. The library contains record copies of most of the surveys and reports published by the many research and records projects. These reports are listed in three printed index volumes and eight mimeographed bibliographies issued by the WPA from 1936 to 1943.

⁵⁴ In addition to records in the WPA central files pertaining to these projects, other records on library service and newspaper indexing projects are in the National Archives, filed separately. Some of the publications of these latter projects are included in the Research and Records library.

⁵⁵ Most of the records pertaining to the education program from 1935–39 are filed as part of the emergency education program records according to a classification scheme different from that of the WPA central files. Records relating to the specific classifications are in the "General Subject" and "State" series.

⁵⁶ A considerable quantity of records relating to this program, which were maintained as a separate file in the Director's office, is now in the National Archives.

⁵⁷ The records of the National Youth Administration are now in the National Archives (Record Group 119).

In addition to programs mentioned above, which were established to provide new or improved community services, there were others designed to promote social welfare. This group included such programs as sewing, health, feeding, child care, and the distribution of surplus commodities. Almost all the workers on the welfare projects were women, and the percentage of noncertified and skilled workers was considerably lower. Of the total cost of the welfare projects, sponsors contributed slightly more than 25 percent. The accomplishments of the welfare projects during the 8-year period of the WPA program were impressive. More than 383 million garments were produced on sewing projects for distribution to needy men, women, and children; a large quantity of army clothing and equipage was mended and reclaimed at the request of the Army; more than 32 million visits were made by housekeeping aides to homes of needy families to provide assistance in domestic emergencies; more than 1 billion hot lunches were served to school children; millions of quarts of fruits and vegetables were canned, most of the food having been produced on WPA gardening projects; and valuable assistance was given to public health agencies in the operation of clinics that made medical and dental service available to thousands of persons who otherwise could not have afforded them.⁵⁹

In order that the work of the white-collar projects might be coordinated more closely with the war effort, a reorganization was effected within the WPA in February 1942. A Service Division was created to exercise jurisdiction over two new projects, the War Services Project and the Defense, Health, and Welfare Project. The arts, research, and records projects were made a part of the War Services Project and continued to operate on a reduced scale until the end of the WPA program, with most of their activities directed towards entertaining or providing services for the armed forces and rendering assistance to civilian defense organizations. The operation of nursery schools for the children of defense workers and a school lunch program were two of the most important war-related activities of the Defense, Health and Welfare Project. While most of the war service programs drew to a close in January and February 1943, these two welfare programs continued until the termination of the WPA in June 1943, following which they were carried on as War Public Service projects with Lanham Act funds, under the jurisdiction of the Federal Works Administrator. Likewise, many construction projects certified as essential to the defense and war program were continued as War Public Works projects with Lanham Act funds.

3.2.1 National Defense Projects

The WPA contribution to the cause of national defense, through work of benefit to the War and Navy Departments, dates back to the beginning of the program. In 1935 and in each succeeding year until the liquidation of the program, there were in operation WPA engineering and construction projects and service projects sponsored by both departments. Prior to 1 July 1940, the engineering and construction

⁵⁸ Records relating to the administration and operation of these welfare projects are filed under specific classifications in the "General Subject" and "State" series of the WPA central files. A few fragmentary records pertaining to the sewing, household workers' training, and school lunch projects are filed separately.

⁵⁹ Report on Progress of the WPA Program. June 30, 1942, 46-49; House Document No. 392, table 2, p. 4-5, 10.

⁶⁰ In mimeographed memorandum of December 30, 1942, the National Director of the Service Division requested state administrators to submit a "Record of Program Operation and Accomplishment" for every Service Division program that operated within their respective states. Copies of these final state reports and a few of the national reports, filed separately from the WPA central files, are in the National Archives.

⁶¹ A bill introduced by Representative Fritz G. Lanham of Texas making \$300 million available for defense housing and defense public works was enacted by Congress and approved 14 October 1940 (54 Stat. 1119). Towards the end of the WPA program, the Federal Works Administrator designated WPA state administrators and district directors to act as his representatives for the purpose of reviewing applications for Lanham Act funds made by local governments or other public agencies.

projects sponsored by the War Department provided for the construction and rehabilitation of facilities at various military posts, reservations, and air bases; and those sponsored by the Navy Department provided for similar reconstruction and rehabilitation of facilities at various navy yards, naval air stations, and other naval establishments.

In addition, national defense was aided directly or indirectly by considerable work accomplished under other WPA projects, including those for the improvement of strategic highways, extension of power and sewer lines from towns to military reservations, and improvement of water and sewage systems. National defense projects could be directly sponsored by the War or Navy Departments, but also could be sponsored by state and local agencies, who then requested certification of the project by the War or Navy Department as important to the national defense effort.

Construction on Military Installations (Non-Navy). Construction of buildings for military and naval use was done throughout the course of the WPA program. At the time when the WPA was created, the buildings at practically all of the military and naval establishments were in a badly run-down condition, which in some instances, amounted to dilapidation. No funds were available for new construction or improvements, and funds for repairs were below ordinary maintenance requirements. WPA projects were, therefore, sponsored by the Army, the Navy, the Marine Corps, the Coast Guard, the Maritime Commission, and public institutions maintaining facilities for training reserve officers. The purpose of these projects was to expand housing and training facilities.

Prompt, extensive and continuous construction, reconstruction, rehabilitation, repair, and improvement work was done at almost every regular army post and naval establishment in the country. The value of this work was attested by the highest military and naval officials. An article in the *Army and Navy Register* noted in the years 1935 to 1939, when regular appropriations for the armed forces were so meager, it was the WPA worker who saved many Army Posts and Naval Stations from literal obsolescence. Among the military installations in this category were Maxwell Field in Alabama (Figure 3-2), Fort Winfield Scott and March Field in California, Lowry Field (Figure 3-3) and Fort Logan in Colorado, Bolling Field (Figure 3-4) and Fort Humphreys in Washington, D.C., Fort DuPont in Delaware, Camp Dodge in Iowa, Fort Sheridan in Illinois, Camp Atterbury in Indiana, Fort Lewis in Washington, Fort Sill in Oklahoma, Fort Riley in Kansas (Figure 3-5), Fort Huachuca in Arizona (Figure 3-6), and Forts Hood, Bullis, Bliss, and Sam Houston in Texas.

⁶² Works Progress Administration, Division of Engineering and Construction, Final Report. Washington, D. C., January 1944, pp. 43-44.

⁶³ Army and Navy Register 16 May 1942.



(NARA, RG 69, Neg. 24310)

Figure 3-2. WPA-constructed Range, Maxwell Field, Alabama.



(NARA, RG 69, Neg. 21182-C)

Figure 3-3. WPA Improvements at Lowry Field, Colorado.



(NARA, RG 69, Neg. 8843-C)

Figure 3-4. Grading and Oiling Runways, Bolling Field, Washington, D.C.

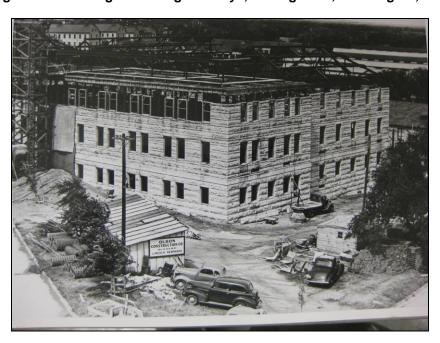


Figure 3-5. Academic building (now Patton Hall) under construction at Fort Riley, Kansas (Fort Riley Museum and Archives).



Figure 3-6. Alchesay Barracks (also known as Million Dollar Barracks), shortly after completion in 1938, Fort Huachuca, Arizona. (Fort Huachuca Museum and Archives)

In addition to the rehabilitation and reconstruction work completed on existing military reservations, WPA funding also was used to augment construction of completely new reservations and air bases authorized under the National Defense Act of 1935. Among the military reservations constructed using WPA funds and labor were Camp San Luis Obispo in California; Camp Blanding, MacDill AFB, and Eglin AFB in Florida; Camp Keyes in Maine, Fort Borinquen in Puerto Rico, and Camp Edwards in Massachusetts (**Figure 3-7**). WPA projects completed between at these installations typically included clearing of land for cantonment areas, roads, and ranges, construction of all major roads and training trails, construction of runways and hangars, construction of utilities (water, sewer, electric, telephone), construction of tent pads around the cantonment area, and construction of the administrative buildings, mess halls, and latrines.



(NARA, RG 69, Neg. 7901-C)

Figure 3-7. Utilities, Roads, and Parade Ground, Camp Edwards, Massachusetts.

The National Defense Act of 1935 also authorized the selection of seven air bases and depots but provided no funding. The Army Air Corps would construct the facilities when it received the funding. The act proposed that seven bases be established in the following locations:

- 1. Air Base at Fairbanks, Alaska (Eielson Air Force Base)
- 2. Air Depot at Ogden, Utah (Hill Air Force Base)
- 3. Air Base at Westover, Massachusetts (Westover Air Force Base)
- 4. Air Depot at Mobile, Alabama (Brookley Air Force Base)
- 5. Air Base at Tampa, Florida (MacDill Air Force Base)
- 6. Air Base in Puerto Rico (Borinquen Air Force Base)
- 7. Air Base in Panama (Howard Air Force Base).

The majority of these projects, excluding the air base in Panama, were eventually constructed in part with WPA funds and labor. The WPA funds and labor were used to clear and grade the site, install drainage, build roads, erect fencing, lay railroad tracks, and install sanitary systems. In general, the Construction Quartermaster Corps possessed the equipment and the WPA had the manpower to complete the tasks.

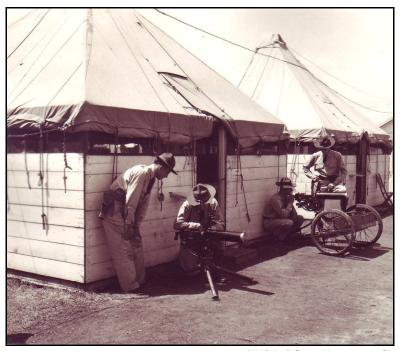
At MacDill Field (now MacDill AFB), work was also conducted simultaneously with the cutting and clearing of trees. To facilitate the process, a small sawmill was set up near the MacDill Avenue Gate. The saw mill cut the logs from MacDill's trees into lumber, which was then used to build temporary buildings and for sheathing as well as being used in the construction of sewers and underground utility conduits. It is believed that the Base mill cut over one million feet of lumber. Construction of MacDill AFB included not only the runways and associated infrastructure to operate the field (**Figure 3-8**), but the majority of the flight operations facilities and housing. Many of these buildings and associated infrastructure remain extant today, and are included within the MacDill Field Historic District.



(NARA, RG 69, Neg. 272-D)

Figure 3-8. WPA-constructed Runways, MacDill Field, Florida.

After war was declared, the Commissioner of the WPA at once placed the administrative staff and all facilities at the service of the War and Navy Departments to meet local needs. Numerous requests were received from Post Commanders and other Army officials for assistance in providing special facilities that were urgently needed for national defense. A large amount of such work was undertaken in this manner at 81 Army posts or air bases located for the most part near the Atlantic and Pacific coasts. In general, the facilities were designed to afford increased protection of military property and installations or to provide temporary housing of troops in those areas to which they had to be moved on account of the emergency. Portable buildings were fabricated, transported, and erected. Tent floors and frames were constructed (Figure 3-9). Heating, lighting, and plumbing facilities were installed. Existing buildings were remodeled and rehabilitated. Numerous blackout assemblies were made. Chairs, tables, lockers, cabinets, bunks, and other furnishings were made and installed. Materials were packed and loaded, transported to their destination, and unloaded for use or storage. Military infrastructure, such as gun emplacements, dumps, and landing fields, were camouflaged. Barbed wire and sand bag barricades were placed. Slit trenches were dug and rifle pits, machine gun nests, and anti-aircraft gun emplacements complete with ammunition platforms and projectile racks were constructed. Some two million sand bags were filled and placed in revetments for the protection of aircraft. Lookout stations, searchlight towers, and listening posts were erected. Vital areas were fenced. Emergency landing fields, strips, and taxiways were constructed. Roads were built or improved and aid was given in the construction of bomb target areas.⁶⁴



(NARA, RG 69, Neg. 21445-C)

Figure 3-9. WPA-constructed Tent Floors and Walls, Camp Perry, Ohio.

Naval Construction. The Final Report of the WPA Engineering and Construction Division (January 1944) highlights the following projects of benefit to the Navy Department⁶⁵:

⁶⁴ Works Progress Administration, Division of Engineering and Construction, Final Report. Washington, D. C., January 1944, pp. 79.

⁶⁵ Ibid. 80-81.

- Great Lakes Naval Training Station. Work included the construction of administration buildings, hospitals, infirmaries and dispensaries, nurses' quarters, a post office, swimming pools and recreational halls, officers' quarters, barracks, mess halls, shop buildings, garages and storage buildings, power plants, greenhouses, host houses, drill halls, and a guard house. In addition to these major buildings, the WPA constructed roads, streets, curbs and gutters, sidewalks and paths, bridges and viaducts. Sewer and power lines were installed, and the grounds were graded and landscaped.
- Charleston Navy Yard. The hospital at the Charleston Navy Yard was in large part a WPA project. The hospital complex included an administration building, a subsistence building, and four ward buildings. In addition to this facility, the WPA constructed officers' quarters, a mess hall, recreation buildings, a transformer vault, and sanitary sewers; and laid out railroad tracks (Figure 3-10).



(NARA, RG 69, Neg. 14682)

Figure 3-10. Charleston Navy Yard in 1938.

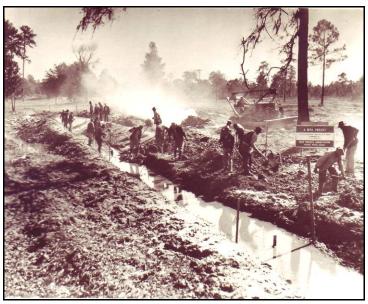
- Boston Navy Yard. Work included such items as the construction of reinforced concrete galleries for air and steam lines; installation of water lines and hydrants, floodlights, and traffic signs; construction of sidewalks, fences, sewers, and cable ducts; building of concrete ramps, rehabilitation of buildings; filling and placing of sand boxes and bags for revetments; construction of machine foundations; demolition of wooden piers; repointing of a dry dock; and laying of railroad tracks.
- <u>Norfolk Navy Yard.</u> Buildings were rehabilitated; streets, sidewalks, and fences were repaired or reconstructed; and railroad tracks were repaired (**Figure 3-11**).



(NARA, RG 69, Neg. 24124)

Figure 3-11. Building Ways Office, Constructed by WPA, Norfolk Navy Yard, Virginia.

- <u>Treasure Island Airport, San Francisco.</u> Roadways, runways, and aprons were constructed. An
 Administration building and a hangar were erected. In addition to these major operations, fences
 were built; curbs, sidewalks and catch basins were constructed; and general improvements were
 made to grounds.
- <u>U. S. Naval Ammunition Depot, Burns City, Indiana.</u> The major item of work here was the construction of 15. 7 miles of roads, together with retaining walls, gutters, and drainage structures. Approximately 80 miles of drainage ditches were provided in connection with general ground improvements and landscaping.
- <u>U. S. Navy Yard, Washington, D. C.</u> Work included a similar scope as that done at other navy yards, but also included construction of a transportation building for the repair of engines and cars as well as trucks and other transportation vehicles.
- <u>Auxiliary Air Fields, Florida.</u> In addition to improvements made at the Jacksonville and Pensacola Naval Air Bases in Florida (**Figure 3-12** and **Figure 3-13**), a number of auxiliary land fields were constructed or further developed within the training radius of these stations.



(NARA, RG 69, Neg. 22682-C)

Figure 3-12. WPA Crews Constructing Drainage Ditch, Jacksonville Naval Air Station, Florida.

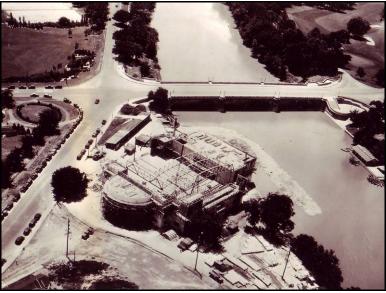


(NARA, RG 69, Neg. 24325)

Figure 3-13. WPA-constructed Aviation Cadet Quarters, Pensacola Naval Air Station, Florida.

National Guard Armories. A special feature of the building construction program was the armory construction work carried out on a nationwide scale. The assistance of the WPA was sought by the National Guard Association the United States. It was found that in many localities a building could combine all the features of an armory with those of a community meeting place or recreation center; and a combination armory and community center was very widely adopted in local plans. Some hundreds of these buildings were constructed (**Figure 3-14**), varying in cost from a few thousand to several hundred

thousand dollars, and many more old armories were reconstructed or renovated to meet advanced military needs.⁶⁶



(NARA, RG 69, Neg. 9677-C)

Figure 3-14. WPA-constructed Naval Reserve Armory, Indianapolis, Indiana.

Many of these armories were located in small communities where sufficient skilled labor was not available from relief rolls, and where the sponsors' financial means were not sufficient to cover the cost of hiring the skilled workers required. As a result, many armories were finished only after considerable delay. In larger cities, delays also were common, but related more to the fact that the sponsors submitted projects that were beyond their actual means, relying upon further federal assistance to effect the completion of work in which the federal government had a special interest. ⁶⁷

Local Airfields and Airports. At the beginning of the WPA program, airport work was in the category of "reservoir projects" – those projects that could employ large numbers of workers and from which workers could be withdrawn in accordance with the current unemployment situation. Airport projects could employ large numbers of workers because of the large amount of grading, drainage, paving, and ground improvements that they included. Work could be curtailed or suspended on such projects because, at that time, they were not regarded as of pressing importance. ⁶⁸

At the outset, these projects were considered especially desirable by the WPA, chiefly with respect to their capacity to provide sufficient and prompt employment. The applications presented by local and state sponsors did not generally include carefully prepared and fully detailed estimates of costs, and the engineering review of these applications in the central office was not stringent. As it became increasing apparent that the work performed at some sites was ill-advised, however, the WPA moved to coordinate all of the local airport work under a centralized airport program. Accordingly, in July 1936, an Airways and Airports section was set up as part of the Engineering Division. Given the general absence of standardized facilities for airport construction, it appeared that the WPA might make an important

⁶⁶ Ibid. 43.

⁶⁷ Ibid. 43.

⁶⁸ Ibid. 38.

contribution to the development of a system of facilities that would meet national requirements. Procedures were adopted that required full use of the information available from what was then the Bureau of Air Commerce (later the Civil Aeronautics Administration [CAA], and now the Federal Aviation Administration); this agency reviewed all airport projects with respect to their technical aeronautic features. The WPA itself, in its now more stringent engineering review of airport projects, made use of the standard plans of the CAA, including designs and specifications for drainage and paving, and the CAA criteria for selection of airport sites. ⁶⁹ It should be noted that WPA projects sponsored by the War Department and the Navy Department were not subject to CAA requirements, but to those of the sponsoring department.

The WPA airport program, after it was organized, had two primary phases of activity: that which preceded and that which followed the declaration of a national defense emergency. In the earlier phases of activities, civil airport projects were subjected to the same requirements as all other WPA projects. Airports were built throughout the country on this basis, including those with the highest type of runway pavements, hangars, and administration buildings. Large projects were usually planned for gradual construction over a period of years; and the choice of the items that were constructed at any time was governed by the need of particular facilities to meet the demands of commercial aviation, the availability of WPA labor possessing the requisite skills, and the ability of sponsors to finance the local share of the costs. The method of construction involved the use of much hand labor (**Figure 3-15** and **Figure 3-16**), and the unit costs were higher than they would have been if heavy equipment had been used to its utmost extent. These projects served the purposes of providing work relief while creating facilities of public value.⁷⁰



(NARA, RG 69, Neg. 7519)

Figure 3-15. WPA-constructed Runway, Hensley Field, Texas.

⁶⁹ Ibid. 38.

⁷⁰ Ibid. 39.



(NARA, RG 69, Neg. 4516)

Figure 3-16. WPA-constructed Runway and Hangar (extreme right), Oklahoma City Airport, Oklahoma.

In the second phase of the airport program, the defense and war phase, the WPA was called upon to carry out an accelerated program of airport construction and improvement in the strategic areas all over the country. Projects certified by the War or Navy Department as of importance to national defense could be granted exemption by the Commissioner from certain regular WPA requirements. These exemptions made possible longer working hours and larger monthly earnings for WPA workers, and permitted the hiring of non-relief workers to any necessary extent. In addition, it was no longer required, for such projects, that the sponsors contribute a certain proportion of the total costs. The CAA was provided by Congress with funds that, in many instances, were used to supplement sponsors' contributions.⁷¹

In this new phase, more heavy equipment was used (Figure 3-17). Such equipment might be rented, and the rental contracts might include the service of skilled operators. All civil airport plans were reviewed by the CAA and a certificate of air navigation facility necessity was a prerequisite to project operation. A large part of this program comprised the further development of existing airfields; however, many new airfields were constructed in their entirety by the WPA. The airport work sponsored directly by the War and Navy Departments also accelerated. On 31 December 1942, 202 airport projects were in operation. During the whole of the preceding 7 years, projects had been carried on at 1,045 airport sites. This work was divided almost equally between the earlier civil phase and the later defense phase of the program; for in the defense phase, about as much work was done in 2 years as in the preceding 5 years.⁷²

⁷¹ Ibid. 39.

⁷² Ibid. 40.



(NARA, RG 69, Neg. 18795-C)

Figure 3-17. Use of Heavy Equipment for Runway Construction, Reilly Field, Fort McClellan, Alabama.

Communications. Assistance was given to the Federal Communications Commission in the construction and extension of radio monitoring stations. This work was early considered to be sufficiently important to warrant its certification by the Secretary of War as being of military importance. Operations included the construction, reconstruction, and remodeling of station buildings; the construction of roads, walks, and parking areas; the installation of underground telephone, transmission, and antenna cables; the erection of timber poles and steel towers for antenna; the erection and installation of fences and floodlights; and the making of general improvements to the grounds.⁷³

Other Construction. Other types of construction projects completed under the auspices of national defense included construction of National Cemeteries; construction of, or improvements to, Soldiers and Sailors Homes and other Veterans facilities; and construction, improvement, or maintenance of infrastructure related to the support of military facilities. For example, in 1940, there was an emergency call for a greatly increased water service near Baltimore, Maryland, to meet the doubled needs of a bomber plant. The War Department assisted the WPA in making arrangements for the financing of the work in collaboration with the city and county of Baltimore, and in securing priorities for the pipe and fittings for a 16-inch main, 4 miles in length. The drain was laid by the WPA, with 250 men from the relief rolls, in 35 days.⁷⁴

Scrap Program. Similarly, in the summer of 1941, when increased production of steel required the recovery of available scrap steel from all sources, a nationwide survey (made by the WPA) disclosed the existence of abandoned street car rails in 799 cities in 45 states, amounting to approximately 607,000 tons of scrap steel. The WPA, which had previously worked on removal of such rail systems under the civil program, increased its removal work. When title to the rails was publically held, projects sponsored by the City for rail removal and subsequent repavement were made eligible for WPA assistance and War Department certification. When title was privately held, it was acquired by the Metals Reserve Company, and WPA assistance in removal and repavement was carried on as part of a nationwide project for scrap

⁷³ Ibid. 78.

⁷⁴ Ibid. 37.

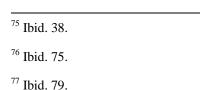
metals and rubber recovery sponsored by the War Production Board and given certification by the War Department.⁷⁵

Conservation and Survey Work. Other categories of national defense projects sponsored by the Engineering Division included conservation work, both on military reservations and large-scale conservation programs undertaken by the U. S. Army Corps of Engineers (flood control, soil erosion, reservoir construction), engineering surveys and maps (geodetic surveys, boundary surveys, topographic surveys, underground and surface structures [utilities] surveys, maps produced from aerial photographs, and planning and layout surveys for construction projects); and the scrap collection program. National defense projects were also sponsored by the Records and Research Division and the Statistical Research Division; these included compilation of military histories and National Guard yearbooks, preservation of maps and other military records, compilation of statistics relating to veterans of previous wars, and restoration of old military parks and monuments (e. g., historic Fort DuPont, Gettysburg, and St. Augustine).

Emergency Disaster Aide. National defense projects also included those falling under the heading of Emergency Disaster Relief. Projects such as the flood control and soil erosion work sponsored by the U.S. Army Corps of Engineers fell under this category, but also included emergency response for national defense situations. Shortly after the attack at Pearl Harbor, the WPA central office sent out instructions to the states to organize WPA forces of men, equipment, and tools so that they would be ready for emergency action in case of attack or sabotage by the enemy. As a result, in some states charts of the organization were developed and practice sessions were held so that all workers knew exactly where their assembly points would be. The WPA, with its trained supervisory and safety personnel, workers, equipment, and tools, was in a position to lend valuable services in case of attack.⁷⁶

Administrative Undertakings. In addition to the above work performed by the Division of Engineering and Construction, the WPA gave assistance to the War Department on several occasions in an administrative capacity. In the summer of 1942, the Map-Chart Division of the Army Air Force requested the WPA to secure information as to the facilities available at all civil airports, landing fields, and seaplane bases in the United States. This information was urgently needed. Lists of known airports, questionnaire forms and instructions were prepared in cooperation with the Map-Chart Division, and were distributed to the state administrators with the request that the information be secured as rapidly as possible through the use of both administrative and supervisory personnel. Within a little more than 2 months, the desired information on some 3,800 sites was turned over to the Army Air Force.⁷⁷

The other example resulted from the request of General DeWitt, Commanding Officer of the Ninth Corps Area to the Regional Director of WPA Region 7, for assistance in the evacuation of German, Italian, and Japanese aliens and people of Japanese ancestry from strategic areas on the Pacific Coast. The U.S. Army Corps of Engineers was to construct assembly and reception centers for the Japanese, and General DeWitt wanted the WPA to take the responsibility for managing these centers and of housing and feeding the evacuees until a permanent setup could be worked out by the War Relocation Board. The WPA Regional Director and his staff, augmented by the state WPA personnel, immediately went to work. They aided in the selection of suitable sites and worked out a plan that called for the maximum servicing of each camp by the Japanese themselves under the supervision of the WPA. In all, the WPA supervised 18 such camps.



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Chapter 4: Resource Types

This chapter provides further discussion of the buildings, structures, and landscape elements constructed on military installations by the CCC and WPA. To the extent possible, photographs of documented resources are provided as examples; however, the sheer number of resources makes it difficult to comprehensively discuss all styles and variations on a given resource type. The intent of this discussion, therefore, is to outline the major resource types associated with each program, typical building materials and designs, and the probable range of variation present within the extant inventory on current DoD installations.

4.1 CCC Resources

CCC resources located on DoD installations fall into three categories: projects or improvements directly related to military purposes, resources funded by the WPA and built by the CCC enrollees at a training and deployment camp as skill-building exercises, and resources built by the CCC for a non-military federal agency (such as the Department of Agriculture or Bureau of Reclamation) on lands that were later transferred to DoD. As noted in Chapter 2, the primary focus of the CCC was conservation. Even when they completed projects associated with national defense, typical CCC projects involved land clearing, fire break construction, landscaping, and planting. Accordingly, the property types associated with CCC projects on military reservations are related predominantly to infrastructure improvement, soil erosion and drainage control, or landscaping. The following are examples of typical CCC resources of this type:

- Water control features (check dams, culverts, lined irrigation ditches, irrigation canals)
- Transportation features (paved and unpaved roads, tank trails, pedestrian trails, bridges)
- Erosion control- features (retaining walls, terracing, sea walls)
- Military training features (anti-tank ranges and railroads, firing ranges, anti-aircraft ranges, bivouac areas, targets, monitoring structures such as observation towers and bunkers)
- Landscaping features (nurseries, tree plantations)
- Infrastructure (tent pads, latrines, sidewalks, parking areas, telephone and utility lines)
- Recreation features (picnic areas, swimming pools, shelters)
- Fire breaks.

Buildings and structures, where present, are limited to shelters at picnic and recreation areas, tent pads, latrines, and look-out towers. Unlike the structures built at National Parks and within National Forests, which are often substantial buildings of wood and stone or adobe and rustic in style, buildings for military reservations mimicked the standardized styles and materials used for other military construction projects.

The CCC used local materials for the majority of their construction projects; hauling and transportation of materials often being one of the projects listed in the typical work proposal. To keep costs down, materials were those that could be readily obtained in large quantities, usually from local quarries. In some instances, the CCC operated the quarry operation entirely, or took over operation of concrete manufacturing facilities for a given area. Work quality was variable due to the varying levels of skill among the CCC enrollees. In general, the CCC was viewed as an unskilled labor force to be used for projects that did not require particular expertise. The CCC program published a series of 21 Project Training guides to instruct enrollees in the proper way to accomplish specific types of projects, including the following:

• No. 1. The "Why" of Block-and-Tackle

- No. 2. *Outline of Elementary Courses in Forestry*
- No. 3. Carpentry Joints and Splices
- No. 4. Concrete
- No. 5. Brick and Stone Work
- No. 6. Landscape Conservation
- No. 7. Construction of Trails
- No. 8. Lumber
- No. 9. Signs and Markers
- No. 10. Construction of Relief Models
- No. 11. Carpentry Small Frame Buildings
- No. 12. Carpentry Four Room Frame House
- No. 13. Common Range Plants
- No. 14. *Lawns*. 78

Training conferences were provided for CCC project foremen, and the various sponsors, such as the Forest Service, provided other training guides related to specific conservation projects. Projects requiring greater expertise were completed using skilled laborers, often obtained with WPA funds.

4.1.1 CCC Camps

The one exception to the focus on conservation-related construction is the CCC camp itself. Although many CCC companies lived in tent camps, both during the early days of the program and while waiting for camps to be constructed during the later years of the program, CCC policies mandated they contain certain standard features. Among those were housing and sanitary facilities for the enrollees and the command staff, a mess facility, a recreation center, and various operations support buildings for storage and maintenance of equipment and supplies. In some instances, CCC camps made use of existing Army or Navy buildings on the reservation; these typically were World War II temporary structures or mobilization buildings that have been covered under other contexts (Garner 1993). As the program came of age, the U. S. Army Corps of Engineers developed designs for portable buildings that could be moved with a CCC company to successive camps as projects were completed. These buildings could also be stored as camps were liquidated.

The average camp had 24 buildings, including kitchen and mess hall, recreational building, school building, infirmary, barracks for the enrollees, and quarters for the officers and enlisted personnel. Each camp was a city in itself. It had food, health, educational, religious, and entertainment facilities along with facilities for blacksmithing, plumbing, and automotive repair. 79

In the early days, most camps began as collections of army pyramid or bell tents housing 4 to 6 men each. The CCC camps at Mitchell Field, New York, and Eglin Field, FL, are shown in **Figure 4-1** and **Figure 4-2**. A typical camp layout in 1933 and a photograph of a pyramidal tent are provided in **Figure 4-3** and **Figure 4-4**. These served until permanent buildings could be erected, at times by the enrollees

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⁷⁸ Sypolt 2005:176

⁷⁹ Ibid. 31.

themselves. Meals often were served outdoors until the mess hall could be built. The sturdy, but unpretentious barracks buildings accommodated 40 to 50 men each. 80



Figure 4-1. CCC Camp, Mitchel Field, New York.



(U.S. Air Force photo)

Figure 4-2. CCC Camp, Eglin Field, Florida.

⁸⁰ Ibid. 31.

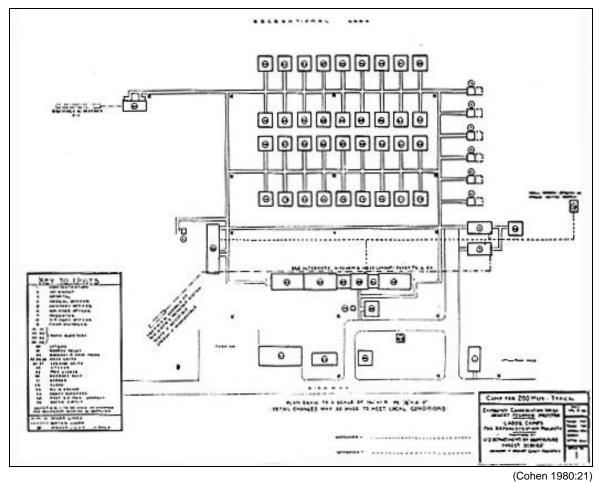
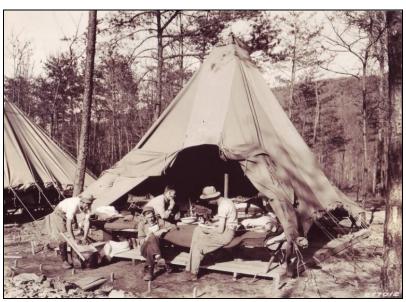


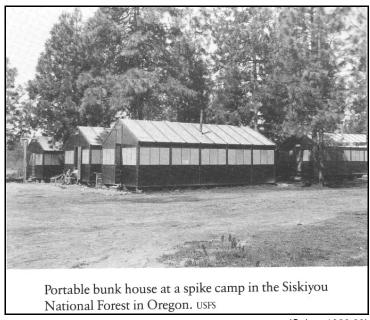
Figure 4-3. Typical CCC Camp Layout for 100 men, April 1933.



(NARA, RG 35, unattributed)

Figure 4-4. Pyramidal Tent, Unknown CCC Camp.

By 1936, camps were being built of portable precut buildings (**Figure 4-5**) so that buildings could be moved after work was finished in an area. A standard design was adopted and each new camp consisted of four barracks, a mess hall, bath houses, a latrine, school building, and 12 other buildings to house army personnel and various support services. Si Gide or spike camps were typically tent camps. Camps on military reservations consisted either of portable buildings or unused military barracks and support buildings (**Figure 4-6** through **Figure 4-9**).



(Cohen 1980:39)

Figure 4-5. Example of Portable Precut Building.



(NARA, RG 35, Army Air Corps Image 18088)

Figure 4-6. CCC Camp, Fort Knox, Kentucky.

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⁸¹ Ibid. 31.



(NARA, RG 35, Spencer and Wycoff, Image 620-8)

Figure 4-7. CCC Camp Buildings, Camp Pomona, Illinois.

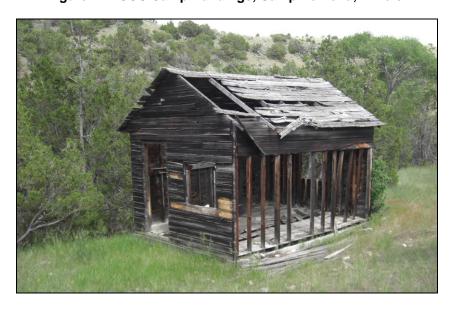


Figure 4-8. CCC cabin constructed on National Forest land now occupied by Montana ARNG as a training area.

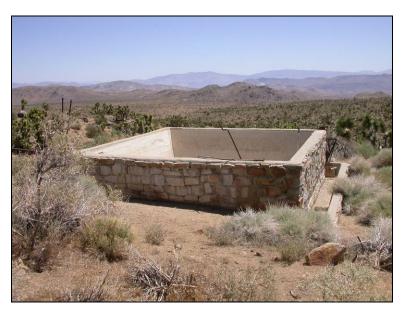


Figure 4-9. Spring reservoir tank constructed by CCC for U.S. Department of Grazing (now BLM), Naval Air Weapons Station (NAWS) China Lake, California

4.2 WPA Resources

As noted in Chapter 3, WPA projects in support of national defense included statistical research, administrative work, historic preservation, and general conservation work, in addition to the projects directed through the Division of Construction and Engineering. The primary scope of this project; however, is built resources, so the focus of the following discussion will be on the WPA construction program.

Throughout the whole building construction program, there were notable developments in certain architectural features, and certain economics accomplished by the use of particular materials. The WPA followed in architectural style the newer tendencies towards simplification, not only for aesthetic reasons, but also because simplicity of design was best suited to the limited skills usually available from the WPA. Full advantage was taken of the information and advice available from the structural committees of engineering and architectural societies, and also from producers of materials and their trade associations. The views and the technical information received from these sources were handed on to the local sponsors of WPA building construction projects, with the purpose of assisting them and their architects to plan for the use of the designs, materials, and equipment best suited to WPA operations. The WPA urged the elimination of ornate architectural features, intricate structural designs, and elaborate trim. Types of design were suggested which would not require highly skilled and specialized workers, where these were not available from the relief rolls. Encouragement was given in the use of methods that would require the least use of equipment consistent with efficiency in order to employ the maximum amount of WPA labor.

Reinforced concrete was used very extensively in new WPA construction, in designs that fitted the local architectural traditions (for example, in our originally Spanish southwestern communities). When other structural materials were used, they were generally native to the region, easily accessible, and not expensive. All kinds of materials were carefully salvaged in WPA demolition operations (mostly associated with rehabilitation projects on older military reservations), and were used in new construction, with considerable savings to the community.⁸³

Despite the encouragement of streamlined or simplified styles, designs of both public buildings (armories and arsenals) and those on military reservations typically conformed to the styles and tastes of the region. Buildings constructed on military reservations tended to be internally consistent, but architectural styles range by region and overall appearance of buildings could vary depending on the types of construction materials most readily available at the time of construction. Some construction, such as garages and other support buildings, used typical plans provided by the U.S. Army Constructing Quartermaster.

By and large, WPA construction projects on DoD installations can be categorized into one of several groups based on location and usage. Most of the WPA construction performed to upgrade existing installations or build new ones from the ground up include building types and resources common to most installations: enlisted and officer housing, administration and instructional buildings, operational buildings for machinery, and infrastructure. Many civilian WPA projects, such as stadiums and public parks, promoted the ideal of recreation; and some military WPA projects were also influenced by these Depression-era ideals. The WPA also constructed a large number of military facilities not located on large installations. These resources include armories and arsenals scattered across the country.

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⁸² Works Progress Administration, Division of Engineering and Construction, Final Report. Washington, D.C., January 1944, pp.79.

⁸³ Ibid: 79.

Categories of buildings constructed by the WPA include the following; however, given that the WPA was responsible for construction of entire military reservations as well as substantial rehabilitation of existing buildings, this list cannot be comprehensive of all resource types:

- Armories and arsenals
- Housing
- Military operational buildings/structures (motor vehicle shops, garages)
- Airfields and associated resources including hangars
- Warehousing, Administrative, and Support buildings
- Recreational facilities
- Infrastructure (roads, utilities, ditches, sidewalks)

In addition, the WPA was responsible for likely thousands of structures and landscape features, comparable to those listed for the CCC program above. **Figure 4-21** through **Figure 4-28** show a typical range of such structures constructed at Picatinny Arsenal in New Jersey.

Armories. In 1935 the WPA took primary responsibility for funding the construction of small, one-unit armories. Hundreds of utilitarian armories were built in the south and southwest, regions that were mostly too poor or too new to have constructed relatively expensive castellated armories without federal funding. The WPA focused on building smaller, simpler buildings constructed of locally procured materials and built by unemployed, often-unskilled local men. Only a few regimental-sized armories were built during this period. The majority of the WPA armories were constructed in rural areas of the West, Midwest, and South. In these small communities, National Guard units predominantly borrowed space in commercial buildings or community halls for drilling and storage prior to World War II. Oklahoma had over 50 new armories constructed by the WPA, with South Carolina coming in second with 46.

Architecturally, the WPA armories are a diverse group, generally divided geographically. Art Deco architecture of the 1920s and Art Moderne of the 1930s and 1940s provided the basis for a standardized, modern architectural style seen in armories across the country. In stark contrast to the castellated armories, these buildings were more modest in design, embellished with simple cast concrete details such as squares, crosses or an eagle. While the art deco armories continued to emphasize height over width, often through the use of a stepped parapet and vertical fluting, the Art Moderne buildings were decidedly horizontal, with simple banding and rounded corners. However, different regions favored different architectural styles and building materials, leading to some interesting design combinations. For example, all of the Oklahoma armories were designed by Bryan Nolen, an architect and officer in the Oklahoma National Guard. Nolen's design drew upon Art Deco and Art Moderne influences with horizontal emphases and simplified forms. However, many of the Oklahoma armories used native stone or a combination of native stone and brick, where the latter was more available, leading to an interesting mix of the modern and the rustic. Regional architectural styles also predominated with Classical and Colonial Revivals popular in the Southeast, the Mediterranean Revival popular in Florida and California, and Mission Revival popular throughout the Southwest.

WPA armories, therefore, run the gamut of regional styles, including both small, utilitarian structures and larger, more imposing buildings. **Figure 4-10** through **Figure 4-14** illustrate the range of regional styles encompassed by WPA armories; as can be seen in these images, even armories within the same state can vary widely in appearance due to choice of brick and cast concrete or stone.

⁸⁴ Still Serving: Reusing America's Historic National Guard Armories, National Guard Bureau, Arlington, VA.



Figure 4-10. Ottumwa Coliseum and Armory, Camp Dodge, Iowa.



Figure 4-11. Sheldon Armory, lowa.



Figure 4-12. Clinton Armory, Oklahoma.



Figure 4-13. McAlester Armory, Oklahoma.



Figure 4-14. Eufaula Armory, Oklahoma.

The Clinton, McAlester, and Eufaula armories in Oklahoma (**Figure 4-12** through **Figure 4-14**) are excellent examples of intact WPA architecture. The materials, brick manufactured in Oklahoma or stone quarried in Oklahoma, and craftsmanship evident in masonry work, reflect both the goals of the WPA Building Program in Oklahoma and the practical considerations of using unskilled labor to construct large public buildings. All three buildings exhibit the strong horizontal massing with Art Deco-influenced vertical architectural details, particularly around the primary entrances. Oklahoma WPA armories were designed to have at least two principal facades each of which provide pedestrian or vehicular access to a street. The two primary facades are marked by massive, deep piers, wing walls framing the entry, abundant windows, and decorative details. The secondary facades have almost no decoration.

Fifty-four armories were built with WPA funding in Oklahoma between 1935 and 1937. Of these, 27 are still owned by the Oklahoma National Guard. All 27 have been listed in the NRHP. WPA armories still in National Guard control in other states are somewhat less common, and range in evaluation status from those listed in the NRHP to eligible for listing, not eligible for listing, and unevaluated. The National

Guard Bureau has an historic context study on armories in multiple volumes. The volume covering WPA armories is titled, *Armories Historic Context Study, Volume IV: New Deal Era* (1933-1942). ⁸⁵ This context includes more detail on WPA armories within the National Guard real property inventory, as well as the history of architectural developments for armories in general.

MacDill Field. As noted in Chapter 3, MacDill Field was one of seven new air bases authorized for construction under the National Defense Act of 1935. Because that act did not provide funding for the proposed construction, the majority of the construction work completed at MacDill Field was done under the auspices of the U.S. Army Corps of Engineers with WPA funding. There were to be two types of classifications designated for the buildings constructed on MacDill Field: permanent and temporary. Structures such as hangars, the commissary, and officers housing were classified as permanent facilities. The architectural style chosen for the permanent facilities was a combination of Spanish and Mediterranean influences appropriately recalling Florida's heritage and in order to provide comfort in Florida's hot climate. Installations such as barracks, administrative offices, and some warehouses were considered temporary. There were 31 temporary buildings planned for MacDill Field. Temporary buildings were typically wood frame structures, one or two stories high. However, the sheer number of temporary wood structures made them the dominant building type on the base.

Approximately four houses were already in existence on the site prior to possession by the government in 1939. The most prominent building was the Benjamin House, a Spanish/Mediterranean style, cement and stucco-covered residence which would serve as the Officers Club until a new club/mess hall could be built. When the new club/mess hall was completed, the Benjamin House was used for Officers' Quarters. This house served as the model for MacDill's military housing (later demolished). The Army usually implemented a policy to utilize local construction methods and architectural styles when engaged in new construction (**Figure 4-15**).

The new buildings constructed included two aircraft hangars with a support shop, four warehouses, a photographic laboratory, and a communications building with a guard and fire house (**Figure 4-16** and **Figure 4-17**).

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⁸⁵National Guard Bureau (NGB). *Armories Historic Context Study, Volume IV: New Deal Era* (1933-1942). Prepared by Burns & McDonnell Engineering Company, Inc. and Architectural and Historical Research, LLC. December 2004.

⁸⁶ Wang et al. 1994.



Figure 4-15. Building 404, Staff Circle, MacDill AFB.



Figure 4-16. Hangars 1 and 2, MacDill AFB.



Figure 4-17. Building 26 (Communications Building with Fire Station), MacDill AFB.

The base also constructed several temporary facilities to house the enlisted men. Seventeen double-decker type barracks were built to house 63 men (Figure 4-18). There were eight mess halls capable of feeding 250 men each. Six recreation facilities also served as supply buildings. With the approach of the scheduled arrival of the first troops on 15 April 1940, the base decided to expedite the installation of necessary utilities as well as the plumbing, heating, and roofing of buildings by using WPA labor and the rough lumber produced on the base instead of outside contractors.





(NARA, RG 69, Negatives 271-C and 24293)

Figure 4-18. Enlisted Barracks, MacDill AFB, Florida.

The majority of the buildings and structures constructed with WPA funding are included in two historic districts at MacDill AFB, the MacDill Field Historic District and the Staff Officers Quarters Historic District. Both districts are eligible for listing in the NRHP and documentation has been provided to the Historic American Building Survey (HABS).

Both districts display the Mediterranean Revival architectural style. Typical features of Mediterranean Revival construction are stucco exteriors, arched openings, low pitched roofs with clay tile, and

asymmetrical facades. Most contributing buildings within the districts, especially those of lesser significance, display a practical adaptation of Mediterranean Revival in the "Military Vernacular" style. This style typically used poured-in-place concrete or concrete block construction. Mediterranean Revival, also referred to as Spanish Colonial Revival, was an early twentieth-century adaptation of an earlier Mission style. Marcus Whiffen's guide to architectural styles⁸⁷ points out that contrary to the Mission style, Spanish Colonial Revival frequently employed ornamentation. On MacDill AFB this appeared in the use of quoins (decorative blocks standing out from corners or other structural points of buildings (**Figure 4-19**), pilasters (columns inset into exterior walls), and coping (decorative extensions on top of roof lines).



Figure 4-19. Building 28 Showing Use of Decorative Quoins, MacDill AFB.

In shape, the district approximates an arrow with the point of the arrowhead at Hangar 3 and the shaft extending along Florida Keys Avenue to terminate at Building 344. From Hangar 3, edges of the arrowhead extend out to Hangar 1 to the south and Hangar 5 to the east. Structures found along the Hangar Loop complete the arrowhead and comprise the majority of facilities in the district.

Eligibility of the MacDill Field Historic District and the Staff Officers Quarters Historic District for the NRHP is based on at least two of the four National Register criteria (for description of criteria: an association with events that have made a contribution to American history (criterion A) and embodiment of a distinctive type, period, or method of construction (criterion C). Furthermore, the district meets the NRHP's general guidelines in displaying integrity of location; cohesiveness of design; definable setting; and continuity of materials; workmanship; and feeling.

Camp Edwards. Between 1935 and 1940, the Commonwealth of Massachusetts and the federal government, primarily using WPA funds, constructed 63 buildings at Camp Edwards and two, 500-foot wide turf runways at Otis Field. Most of what the WPA completed at Camp Edwards falls into the range of clearing and infrastructure work, including road construction, trenching for utilities, construction of tent pads, and similar projects. The WPA also assisted with completion of maps and surveys in advance

⁸⁷ Whiffen 1969: 225-8.

of later construction activities. Most of the buildings constructed at Camp Edwards by the WPA have long since been demolished; however, five remain including the former Camp Headquarters (Building 102), the former Williams Hospital, and three warehouses (**Figure 4-19** through **Figure 4-22**).





Figure 4-20. Camp Headquarters, Building 102 (1937 and 2005), Camp Edwards, Massachusetts.





Figure 4-21. Former Williams Hospital (1937 and 2005), Camp Edwards, Massachusetts.

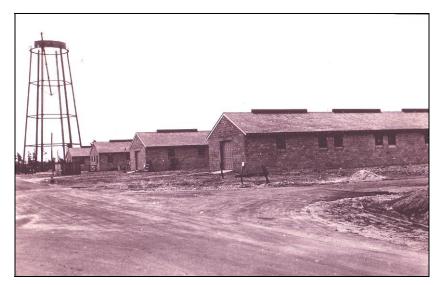


Figure 4-22. WPA Warehouses, Camp Edwards, Massachusetts.