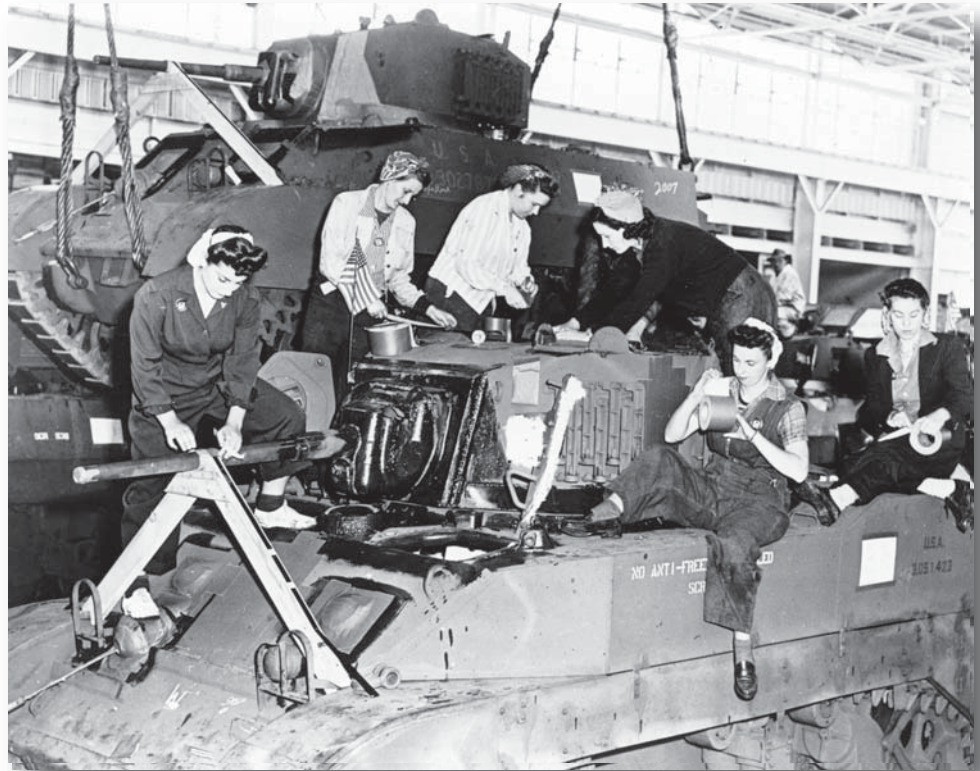


Chapter 2

Historic Overview



The American World War II Home Front

The story of the World War II home front is a significant chapter in America's history; the changes to society and industry that occurred during the war had sweeping and lasting impacts on the nation. The cooperation of government, private industry, and labor unions to mobilize the work force, and the creation of innovative plans and production methods designed to rapidly produce quantities of munitions and other essential supplies thrust the United States into the role of "arsenal of democracy." Fully engaged in winning World War II, American citizens of all ethnic and economic backgrounds worked together toward a common goal, in a manner that has been unequaled since. In significant ways, World War II was a period of large and lasting change for America, causing many historians to see it as a watershed event that made postwar America profoundly different from prewar America.



Recruiting poster, 1943, National Archives.

WARTIME MOBILIZATION

Mobilizing the United States for World War II involved an enormous effort with huge consequences for the American home front. The task was immense: ensure that the nation had the material, munitions, manpower, and money to wage a global war, all the while managing the domestic civilian economy. Meeting that challenge entailed giving the federal government responsibilities and authority that went well beyond the New Deal state of the 1930s. The process began haltingly in the late 1930s, particularly after the beginning of World War II in Europe in September 1939, and gained momentum in 1940-41 as the United States edged closer to war. After the attack on Pearl Harbor and American entry into the war in December 1941, American mobilization efforts expanded rapidly and grew more efficient until, by 1944, the United States provided some 40% of all war goods produced worldwide.

A Nation Unites Ship Launching



USS Red Oak Victory Launch, November 9, 1944

Occasionally, shipyard workers witnessed the fruits of their labor being launched in to the sea.

"It was really something to watch a ship being launched. There were ceremonies for each one: a woman to break a bottle of champagne over the bow, flag waving, speeches. But, it was just a small section of activity that didn't interfere with building ships. We didn't quit work to watch, except for maybe a few minutes as the ship slid down the ways and splashed into the water, empty and high. We never heard the speeches. We never left our work stations, didn't see the celebrities. There was a war to win."

--Elaine Lolos Lackey
Burner,
Kaiser Shipyards,
Richmond, CA



USS Red Oak Victory, Shipyard No. 3, 2005

Although mobilization got off to a slow and stumbling start and never resolved all of its difficulties or disputes, the American production effort found its stride by 1943 and ultimately turned out enormous quantities of munitions and other essential supplies, while also providing essential goods to Great Britain and the Soviet Union. Not only the sheer quantity but also the quality of American production helped win the war; and not just through traditional manufacturing processes—new departures in science, technology, and fabrication were a key.

ENDING THE GREAT DEPRESSION

Wartime mobilization brought a successful end to the war abroad and brought economic policy change to America; it ended the Great Depression at home and returned prosperity to the American home front. In 1939, unemployment stood at a depression level of 17.2%, but as mobilization geared up, unemployment went down sharply to 4.7% by 1942, and to 1.2% by 1944.

Mobilization brought more jobs and higher incomes; it brought new opportunities and rising living standards. As production demands grew and some 10 million people entered active military service, employers had to find new workers to replace those going to war. They increasingly turned to groups which had filled only limited roles in the pre-war economy: women, African Americans, minority groups, and the elderly. People who had once been marginalized now found jobs that often had high status and pay associated with them.

The armed forces also provided new opportunities, training, and experience, while the “GI Bill of Rights” provided veterans with educations, home ownership, and other benefits.

POPULATION ON THE MOVE

For more than a decade, industry and people had already been moving toward what would become known as the “Sunbelt”—areas of the South and

West, particularly along the Pacific, Gulf, and South Atlantic coasts. Mobilization for war accelerated these geographic and demographic changes. While war contracts went to established industries in the Northeast and Midwest, they also went to newer aircraft, shipbuilding, and other defense-related industries in these Sunbelt areas. Nearly 10% of all federal government expenditures during the war was spent in California alone.

Military bases also were located in Sunbelt states, and millions of war workers, GIs, and their families moved there during the war. Many, who relocated from poor, rural areas and marginal jobs, were determined to stay on after World War II. Thus, rapid industrialization and the resulting mass migration of millions of Americans who relocated around burgeoning military and civilian defense centers laid the economic and social foundations of the Sunbelt. The region grew in population and economic power in comparison with other sections of the country.

California received more interstate migrants than any other state, absorbing more than 1.5 million newcomers between 1940 and 1944. Between 1940 and 1943, migration for defense industry jobs helped expand the population of California by 72% and of the Pacific Coast states as a whole by 39%. This vast reshuffling of the population was one of the most dramatic episodes in the history of American migration, rivaling the great waves of European immigration of the late 19th and early 20th centuries.

CHANGING COMMUNITIES

The cities where the World War II industries mobilized were confronted with overwhelming demands on housing, transportation, community services, shopping, and infrastructure. Responding to these needs required the cooperative efforts of the private sector and all levels of government.

Consumer spending increased during the war, despite shortages, rationing, inflation, and higher taxes. With the United States devoting only about 40% of its Gross National Product to war production, civilians were able to purchase a range of consumer goods and foodstuffs, enjoy rising living standards, and find entertainment through the various manifestations of American popular culture. Home front Americans also found common cause in aiding the war effort with bond drives, scrap collections, recycling endeavors, "victory gardens," and other efforts to support American troops.



Grease recycling for war effort, 1942. Library of Congress.

Nevertheless, there were less salutary aspects of the home front experience during the war. Although most Americans understood the need for price controls and rationing, they were never happy about limits on their own income, and many bought at least some goods on the wartime black market. The tides of migration that sent millions of people to new destinations helped to create a more homogeneous national culture, but also produced tensions and sometimes conflict. Older residents feared that newcomers would erode community standards and would cause taxes to be raised to pay for additional community services and infrastructure. Racial tensions and even violence sometimes flared, as did anti-Semitism.

A Nation Unites

Memorable Experiences



Lena Horne sings at the launching of the USS George Washington Carver

Celebrities often graced the ship launching ceremonies. Workers had no way of knowing that the fame of the very ships and planes they were producing could one day eclipse that of any celebrity.

"One day I was in the shop working and I looked across the hanger. I saw a B-29 taxi up to the hanger and turn around. On the side of the plane its name (was) printed as the *Enola Gay*. We talked about the different names the crews had chosen. One of them was 'The Lords Sesspool' [sic]." We didn't know at that time the mission of the *Enola Gay* until recently I read a book that said it was to drop the atom bomb on Nagazacki [sic]."

— Loucille Ramsey Long, Sheet Metal Mechanic, U.S. Air Force, Mather Field, Sacramento, CA, and Riveter, Boeing Air Plant Factory, San Diego, CA



Enola Gay in flight at Tinian - August 1945

DIVERSIFYING THE WORKFORCE

Industry initially resisted the integration of minorities in the nation's workforce. However, African American leaders called for a protest march on Washington, D.C., during the summer of 1941; this resulted in the issuance of an executive order by President Franklin D. Roosevelt prohibiting workplace discrimination and setting up the Fair Employment Practices Committee. This government initiative, along with wartime necessity, eventually forced the integration of the workforce that had not been otherwise achieved. Overall some 340,000 African Americans relocated to California during World War II to take advantage of defense industry employment opportunities. In addition, approximately 40,000 American Indians worked in West Coast defense plants along with many Hispanics and Asian Americans.

The contributions of women during World War II provide especially useful insights into the impact of the war and the combination of change and continuity on the home front. The phrase "Rosie the Riveter" was a term that was coined to help recruit female civilian workers and came to symbolize a workforce that was mobilized to meet the nation's wartime needs. After some initial resistance from

employers, wartime necessity resulted in women replacing men in many traditionally male jobs as men enlisted in active military service. Nationwide, 6 million women entered the home front workforce. Employment opportunities for women of color were unprecedented, and for the first time, African Americans, Asians, Hispanics, and Native Americans were employed.

"Rosie the Riveter" has survived as the most remembered icon of the civilian workforce that helped win the war. The image of "Rosie the Riveter" has come to symbolize women's empowerment. World War II established the foundations for dramatic change in women's roles and opportunities by bringing far more women into the work force in a much greater array of jobs. The wartime experience of women in the United States, together with rising educational levels, the ability of married women to enter the workforce, a changing post-industrial world with more white-collar jobs, the demands and enticements of the consumer culture, and changing societal values, contributed to major gender role changes in postwar America.

ORGANIZED LABOR

The war years represented a significant chapter in the development of the nation's labor unions.



Integrated work crew, Richmond, California, ca. 1943. Richmond Museum of History.

Unions experienced rapid growth, schisms over newcomers' rights and the incorporation of minority members, dissent and leadership challenges, segregated affiliates, and concerns over prefabrication and "de-skilling" of trades. Unions and locals varied in their accommodation of women and minorities, with the Congress of Industrial Organizations being the most supportive. A rising tide of African American activism emerged in the formation of some labor organizations.

Ultimately, management and organized labor cooperated to support the war effort, although many of the worker rights and privileges obtained by women and African Americans would be forfeited when the war industries shut down at the end of World War II.

CIVIL RIGHTS AND LIBERTIES

With the exception of Japanese Americans who were relocated to internment camps and imprisoned during the war, World War II challenged the color line on many fronts for most minority groups in the United States. The hypocrisy of a country fighting for freedom abroad while denying it to minorities at home became increasingly abhorrent. African American groups and institutions, growing in size and militancy, consciously used the war effort to extract concessions and gains. These forces played a part in altering the status of African Americans and quickening the pace of their struggle for equal rights.

World War II may not be the watershed of "the Negro Revolution" that some have claimed it to be. Some wartime gains were quickly lost after the war, and some of the seeds of change planted during the war did not flower for another decade or so (not until the Civil Rights Movement of the 1950s and 1960s). Nevertheless, the war years remain a key era in what was, and is, an ongoing struggle for civil rights in the United States.

A Nation Unites Kaiser Shipbuilding Company

Prior to entering World War II, the US Maritime Commission, through the Lend-Lease Program, contracted with Henry J. Kaiser to build ships for commerce and defense. After the United States entered the war in 1941, the Maritime Commission requested that Kaiser build an additional shipyard in Richmond specifically for the construction of Liberty class cargo ships. As the war progressed, Kaiser operated four shipyards in Richmond, as well as others in the Portland, Oregon / Vancouver, Washington area.

"It [Kaiser Shipyards] set two world records for speed of construction. Four days, 15 hours, and 26 minutes after the keel was laid — and the world record was 7 days, 14 hours, and 23 minutes from keel to delivery."

--James McCloud,
Field Construction
Superintendent,
Shipyard Number 2,
Kaiser Shipyards,
Richmond, CA



Henry J. Kaiser demonstrating the use of pre-assembly for shipbuilding

The Richmond World War II Home Front

If there is any city that could be called America's home front city, it is probably Richmond, California. The city was home to over 50 war-related industries, and as thousands of war workers streamed into the city to support these industries, both public and private entities struggled to keep the city's burgeoning population housed, healthy, and highly productive. They generally succeeded, but the cost to the city was enormous.

Rosie the Riveter/World War II Home Front National Historical Park in Richmond, California commemorates the efforts of all Americans serving on the home front, but also acknowledges Richmond's role in the victorious war effort and the high price the community paid for that role. The surviving historic buildings and sites in Richmond represent an unusually rich collection of related industrial and community-based resources that were built for the short duration of the World War II effort and remain surprisingly intact over a half century later. The traumas and hardships Richmond's citizens faced as a result of rapid war mobilization and postwar readjustment have left a legacy of urban problems with which the community still struggles, but its citizens have begun to embrace a new found sense of pride in Richmond's wartime accomplishments and legacy.

WARTIME MOBILIZATION

The cultural transformation of wartime mobilization was very evident in the East Bay community of Richmond. It was the home of four Kaiser shipyards and over 50 other war-related industries—more than any other city of its size in the United States. These included new industries as well as existing plants and facilities that were converted to wartime production. In tonnage, the Port of Richmond became the 2nd leading port on the Pacific Coast and the 12th leading port in the United States, as commodities consisting largely of supplies and equipment connected with the war effort moved through its four terminals to the war zone.

WARTIME BOOM AND DEMAND FOR HOUSING

The San Francisco Bay Area saw more economic activity, social disruption, and sheer wartime frenzy than most regions of the country. As the nation's number one shipbuilding center and key port of embarkation to the war's Pacific theater, the Bay Area's population swelled by more than half a million from 1940 to 1945. Over half of these newcomers, many of them from the South and Midwest, settled outside of San Francisco in the East and North Bay areas. In the process, the area's population composition, urban environment, and social and cultural life were transformed. Thus, the long-term social and demographic impacts of the war, including changes in the racial and cultural diversity of the Bay Area, would remain a permanent feature of urban social and political relations, long outliving the economic forces that brought it about.

Small industrial cities like Richmond became boomtowns: from a prewar population of fewer than 24,000 in 1940, the city's population grew to approximately 100,000 at the end of the war. Richmond earned a citation as the quintessential war boomtown bestowed by both the *Washington Post* and *Fortune* magazine. In 1943, it was recommended that Richmond be a "Purple Heart City" because of the fiscal, environmental, social, and economic impacts of the industrial build up and associated population explosion that it experienced during World War II. The relatively small community was suddenly thrown into civic chaos and social upheaval and forever altered by the events of the war. A February 1945 article in *Fortune* magazine, entitled "Richmond Took a Beating," described Richmond's challenges as an impacted home front city.

Richmond's challenges were many. Along with the population increase, Richmond's overnight growth overwhelmed public services (fire, police, health, and social), housing, schools, and infrastructure. Its elementary school population quadrupled, while its secondary school population more than doubled,

necessitating double sessions and school building additions. Family breakdown, social dislocation, and criminal and antisocial behavior were associated with this overnight growth. Henry J. Kaiser, other major defense contractors, and federal, state, and local government agencies initiated efforts to meet the social, educational, recreational, and economic needs of the burgeoning population.



Housing poster, Office of War Information, 1944. National Archives.

As the migration of war workers to Richmond began, previously vacant housing in the city was quickly occupied. Residents took in boarders; suitable—as well as unsuitable—space was rented, including rooms, garages, and barns; and private builders attempted to meet the demand with new, low-cost housing. “Hot beds” (beds rented for an eight-hour shift) became commonplace. As more and more newcomers continued to arrive, they were often forced to sleep in movie theatres, parks, hotel lobbies, and automobiles.

Not only did many newcomers find poor living conditions in Richmond, but they often encountered resentment, jealousy, and prejudice, as well. Prior to World War II, Richmond had been a relatively small, close-knit, semi-pastoral community by East Bay standards. Despite its industrial growth since its founding in 1905, there was abundant open space along its south side. Open fields covered the area south of Cutting Boulevard, where poorer families grazed goats and other livestock during the depression years. The downtown area was fairly small, encompassing the main thoroughfare of Macdonald Avenue and a few cross streets.

A Nation Unites

Richmond, California

Because of the war industries that centered in Richmond, the town grew from 23,000 to over 90,000 between 1940 and 1943. This rapid growth overwhelmed available housing, roads, schools, businesses and community services. Although agricultural fields were quickly converted to housing developments, the shortage was so severe that many people slept in theaters and unconventional venues around town.

“I suppose if you looked at each specific change, you might notice it more. Like, if you were shopping you’d notice more people, or if you went to the movies, the movies were more crowded. It happened fast, I know that. My first job at the shipyards was that section I worked in, handled finding some housing, because people were coming in so quickly. ...The fact that there wasn’t housing was obvious, I think.

I know that there were a lot of people that took in boarders, or that have what’s called the ‘sleeping room.’ The bed would always be warm, because every eight hours the sleeping shift would change.”

--Stella Faria,
Requisitions,
Kaiser Shipyards,
Richmond, CA

Richmond's predominately pre-war working class citizenry found it difficult to adjust to the sudden influx of war workers, many of whom came from lower class, unskilled, and uneducated elements of the rural South. Thus, the city's way of life was drastically changed by the war.

Richmond's available housing was totally inadequate to take care of the flood of new arrivals. Private house builders attempted in vain to meet the problem. Rollingwood, a neighborhood of 700 modest homes built in the unincorporated area between Richmond's Hilltop neighborhood and San Pablo, was among the Federal Housing Administration's (FHA) first attempts in the nation to relieve wartime housing shortages through partnerships with local housing developers. To meet the continuing critical housing shortage, the Richmond Housing Authority was incorporated in Richmond on January 24, 1941, to exert some degree of control over imminent federally sponsored construction.

The Lanham Act of 1940 provided \$150 million to the Federal Works Administration, which built approximately 625,000 units of housing in conjunction with local authorities nationwide. The Richmond Housing Authority was selected to be the first authority in the country to manage a defense project. The site of Atchison Village, which would contain 450 dwelling units, was selected for its close proximity to the Kaiser shipyards, two miles to the south, and to the commercial downtown area to the east. Constructed in 1941 as the city's first public defense housing project, Atchison Village was one of 20 public housing projects built in Richmond before and during the war.

The Richmond Housing Authority completed three federally funded housing projects in Richmond during its first year of operation: Atchison Village, Triangle Court, and Nystrom Village. By the end of World War II, Richmond would maintain the largest federal housing program in the nation. More than 21,000 public housing units were constructed in the city by 1943, providing housing for more than 60% of Richmond's total population. Funding for these various projects came not only from the Lanham Act, but also from the United States Maritime

Commission, the Federal Public Housing Administration, and the Farm Security Administration.

The Richmond Housing Authority initiated segregated public housing policies in the city, creating a kind of buffer zone between the prewar predominately white community and the increasing numbers of African American residents. As a result of the housing discrimination faced by African Americans in Richmond, a local branch of the National Association for the Advancement of Colored People (NAACP) was established at Harbor Gate Homes in 1944.

Overall, Richmond developed the largest federally funded housing program in the United States before and during American involvement in World War II. Costing more than \$35 million, the city's housing program was the largest in the nation controlled by a single housing authority and included more units than were built in the entire state of Michigan during the same time period.



*Atchison Village duplex, Richmond, California, ca. 2004.
National Park Service*

LARGEST SHIPBUILDING COMPLEX IN AMERICA

The building of new shipyards began in America in 1940—first in support of America's Lend Lease assistance program to Great Britain, already at war, and then to supply naval needs after entry of the United States into the war following the Japanese attack on Pearl Harbor on December 7, 1941.

Massive new shipyards were built in the vicinities of Los Angeles, the San Francisco Bay, Portland, Seattle, and other major ports around the United States. Although western shipyards had not produced a single merchant vessel between 1929 and 1939, federal funds and industrial enterprise were united to create the capacity on the West Coast to produce 52% of the ships built during the war.

The largest concentration of shipyards in the United States during World War II was in the San Francisco Bay Area. Shipyards were established at Richmond, Sausalito, Oakland, Mare Island, Hunters Point in San Francisco, and the Stockton Channel. Well over half of the shipyard workers were employed in the East Bay area at 12 shipyards located between Alameda and Richmond, making the East Bay the largest producer of cargo ships on the West Coast. Bay Area shipbuilders launched more than 4,600 ships during the war—almost 45% of all cargo tonnage and 20% of all warship tonnage built in the United States during the war. In addition to constructing new ships, many of the shipyards also repaired damaged vessels for return to service.

The most important development in East Bay shipbuilding and the largest shipyard operation on the West Coast consisted of a complex of four shipyards built on the mudflats along the undeveloped shoreline of Richmond by Henry J. Kaiser. Richmond was selected as the site for the shipyards because of its deepwater port, which had been developed in 1929. On December 20, 1940, the newly organized Todd-California Shipbuilding Corporation in Richmond accepted a contract from the British Purchasing Commission to build 30 cargo vessels for Great Britain.

Construction of Shipyard No. 1 began on January 14, 1941, under the management of Todd-California Shipbuilding Corporation. Just a month later, however, on February 14, the shipyard came under the control of the Kaiser Permanente Metals Corporation. Construction of Shipyard No. 2 was started on April 10, 1941, by the Richmond Shipbuilding Corporation, a subsidiary of the Kaiser Permanente Metals Corporation. After the attack on Pearl Harbor in December of that year, the government awarded Kaiser the first of many contracts for Maritime Commission Liberty ships—large merchant vessels used to supply Allied troops. To complete these contracts, two more shipyards were constructed adjacent to the first two in Richmond.

A Nation Unites Ford Motor Company



Historic view of Ford Motor Company, Richmond, CA

Built in 1931, the 500,000-square-foot Ford Motor Company Assembly Plant in Richmond, California, was the largest automobile assembly plant on the West Coast.

During World War II, President Franklin D. Roosevelt banned the production of civilian automobiles. The Ford Plant was converted to assembling jeeps and tanks, armored personnel carriers, and other military vehicles.



Tank Preparation, Ford Assembly Building



Tanks in Craneway, Ford Assembly Building



Kaiser Shipyard No. 1 in Richmond, California, ca. 1943. Richmond Museum of History.



Kaiser Shipyard No. 3, Richmond, California, ca. 1945. Richmond Museum of History.

Construction began on Shipyard No. 3 during the spring of 1942 by the Kaiser Company, Inc. During the same period, Shipyard No. 3A, which became Shipyard No. 4, was built by the Kaiser Cargo Company. By late 1942 the four completed shipyards featured 27 graving basins/dry docks.

NEW SHIPBUILDING METHODS

The Richmond shipyards set historic precedents by producing more ships, more quickly and more efficiently, than had ever been done before. New to shipbuilding, Kaiser's engineers revolutionized the shipbuilding industry during World War II by introducing mass production techniques, segmenting job tasks, training unskilled labor, and substituting welding for the time-consuming task of riveting steel plates and components together.



Whirley cranes, Richmond, California, ca. 1945, Richmond Museum of History.

Until the war, shipbuilding was a skilled craft characterized by slow and laborious processes. Beginning in May 1942, and coinciding with increased recruitment of women, African Americans, and out-of-state workers, Kaiser instituted a new system of prefabrication adapted from his previous dam-building ventures. Under this system, whole sections of a ship's superstructure—boilers, double bottoms, forepeaks, after-peaks, and deck-houses—were preassembled in a new prefabrication plant located between Shipyards No. 3 and 4. This system—which allowed more work with more personnel to be conducted away from the ships with less welding, riveting, and crane lifts—resulted in the completion of ships in two-thirds of the time and at a quarter of the cost of the average of all other shipyards at the time.

As preassembly required a large amount of space for workers, warehouses, and cranes, the expansive new West Coast locations were ideal. These yards were designed with a city-like grid system of numbered and lettered streets to provide for a straight flow of parts and materials to facilitate and speed production processes; they differed noticeably from the tight vertical design of older East Coast shipyards. Whirley cranes were used to lift, move, and lower prefabricated ship components weighing up to 50 tons from station to station.

Discord

*Common Purpose/
Disparate Experience*



The nation was united in its purpose to win the war; however, this effort occurred in an environment of excessive gender and racial discrimination. Racial slurs and bigotry were part of the normal discourse of the day. This prejudicial atmosphere coincided with a nationalized war effort that relied heavily on the very members of society that it marginalized. Some women and minorities migrated from rural America to industrial centers on the coasts to fill jobs vacated by white men called for military service.

When women entered the factories and shipyards, their presence disrupted the traditionally all male environment.

"I can recall some of the incidents of that time and remember that we women were not exactly welcomed with open arms by the men who would work as our partners. They showed some hostility towards us, which led to some teasing and downgrading. We seemed to be accepted in a little while, and our work progressed more smoothly."



--Helen Ann Derusha,
Riveter,
Minter Field,
Bakersfield, CA

Proliferation of jobs in down-hand welding (considered the easiest position) facilitated quick placement of new workers, and prefabrication resulted in increased specialization and “de-skilling” of basic trades. In the boilermaker trade alone, subassembly techniques fostered more than 17 different job classifications. These narrow job classifications allowed workers the opportunity for rapid advancement from one grade to another, normally within 60 days. Under the right conditions, an unskilled newcomer could advance from trainee to journeyman status within several months—a fraction of the time once required. This not only increased the speed of construction, but also the size of the mobilization effort, and in doing so, opened up jobs to women and minorities.

TYPES OF SHIPS

During World War II, 747 ships were constructed in the Richmond shipyards, a feat unequaled anywhere in the world before or since. Ship production included approximately 20% (519) of the country’s Liberty ships—huge, nondescript, versatile vessels that have been given credit for helping to swing the war in favor of the United States.



Liberty ships under construction, Richmond, California, ca. 1943. Richmond Museum of History.

In addition to Liberty ships, the Richmond shipyards also produced 228 other vessels. These included 142 Victory ships, a class of emergency vessels designed to replace the Liberty ships after

1943. The Victory ships were faster, larger, and more efficient than the Liberty ships, featuring more modern steam plants, better trim and stability, stronger hulls, and electrically driven winches and windlasses. Other types of ships built in the Richmond shipyards during the war included 15 tank landing ships, 12 frigates, 35 troop transports, and 24 “Pint-size” Liberty ships.

The troop transports—all C4-S-A1 troop transports—were among the most time consuming to build. The first was constructed on November 25, 1942, and the last on August 12, 1945. While it took only 15,000 hours of joiner work to build a Liberty ship, it took almost four times as many hours for a C-4 troop transport. Some 9,600 components were required to construct a Liberty ship, while a C-4 required 130,000.

SHIPYARD WORKFORCE

At peak production during the war, the Richmond shipyards employed more than 90,000 people. During the early months of the war, many of the new employees in the Richmond shipyards were from agricultural and mining areas in Northern California—many were unemployed farm workers from the Central Valley. As the demand for new workers grew, however, more than 170 Kaiser recruiters scoured the United States for workers, resulting in a massive migration and resettlement program. The Richmond Chamber of Commerce supported the labor recruiting effort by distributing a publication, “Job Facts,” nationally through the 1,500 offices of the U.S. Employment Office. By the end of the war, Kaiser had brought nearly 38,000 workers to Richmond, fronting their train fare—another 60,000 came on their own with recruiter referrals.

Many of the newcomers, including former farm workers and sharecroppers, came from Texas, Oklahoma, Arkansas, and Louisiana. Recruiters paid transportation fees and provided travel advances that were deducted from the workers’ first months’ pay at a rate of \$10 per week in exchange for signed one-year contracts.

Kaiser was among the first defense contractors to employ women in substantial numbers. By 1944

women constituted 27% of the workforce in the Richmond shipyards, accounting for more than 41% of all welders and 24% of all craft employees. Although the shipbuilding, iron, and steel industries employed the largest number of women in the manufacturing sector, thousands also worked in machine shops, auto plants, military supply and ordnance, communications, electrical parts plants, and food processing in Richmond and throughout the nation.

The San Francisco Bay shipyards, including those at Richmond, were among the first defense industries to employ African Americans and other persons of color. The California shipyards provided the biggest single opportunity for African Americans to obtain higher-paying industrial work. By 1944 the Kaiser shipyards at Richmond employed more than 10,000 African American workers.



Richmond shipyard work crew, ca. 1945. Clem family archives.

The influx of African American workers had a profound demographic impact on Richmond. In 1940 the city had only 270 African Americans (1.1% of the population) who lived primarily in a semi-rural, four-block area just outside the city limits in North Richmond. By 1944 the number of African Americans in Richmond had increased to approximately 5,700, and by 1947 to more than 13,700. By 1950 African Americans accounted for 13.4% of Richmond's population.

Discord

Changing Roles

Before the war, a limited number of women worked in paying jobs outside the home. Laws were even proposed that would prohibit married women from entering the workforce.

"But that was a woman's expectations at that time. Especially going through the Depression. There was no thought of a career. I guess some girls, maybe, became teachers or nurses. But even so, it was you get married and have children. That was our role. And some of us fit it well and some of us didn't."

--Phyllis Gould,
Welder,
Kaiser Shipyards,
Richmond, CA



Women welders on their way to a job, 1943



Woman welding a gasoline trailer tank, 1943

Other minorities also found employment opportunities in the Kaiser shipyards. In an abrupt reversal of past practices, Chinese Americans were mobilized for the war effort and played an active role in Bay Area shipbuilding and other defense work. In early 1943, Kaiser employed more than 2,000 Chinese workers, the majority of whom were local residents. Increasing numbers of Mexican Americans also found employment in the shipyards, thus intensifying the crowding and expansion of Richmond's small pre-war Mexican American community that had centered near the Santa Fe Railroad yards. Although Italian Americans had constituted Richmond's largest ethnic group before World War II, ethnic-specific organizations in the city by the end of the war included Gustav Vasa, Croatian Fraternal Union of America, United Negro Association of North Richmond, Jewish Community Service of Richmond, and Hadassah.

By 1943, the Richmond population also included a small group of more than 1,000 American Indians. Most of them lived at the foot of Macdonald Avenue in converted boxcars and cottages provided by the Santa Fe Railroad, a major employer of the group. American Indians also found work in the local shipyards; at least 75 worked at the Kaiser yards alone.

LABOR UNIONS

Richmond witnessed increasing labor union activity during the war. The International Brotherhood of Boilermakers, Iron Shipbuilders and Helpers of America was the union that represented the majority of West Coast shipyard workers, including more than one-third of the Kaiser shipyard workers in Richmond. It manifested the traditional exclusivity and conservatism of American Federation of Labor craft unions. Chartered in August 1942, Richmond's Local 513 quickly became the Boilermakers' third largest local in the nation with more than 36,500 members. Primarily concerned with maintaining the status quo of long-time shipyard workers, the union was the most vocal opponent of the prefabrication process and "de-skilling" of the shipbuilding trade.

Under federal government and employer prodding, women were admitted to union membership in September 1942. Prior to the war, the Boilermakers



Fred and Mourine Merrow, a husband and wife buckler and riveter, ca. 1944. National Park Service.

had established auxiliary unions for African Americans, and a segregated auxiliary—Local A-36—was established in Richmond in early 1943 for African American shipyard workers. Although the auxiliary represented new access into the labor union movement for black workers in the shipyards, it was controlled by a white "parent" local; its members had no representation at national conventions, had no grievance mechanisms or business representatives, and received no reduced insurance benefits.

TRANSPORTATION

With the majority of shipyard workers commuting between points in the East Bay, the federal government established provisional train, bus, and streetcar lines to alleviate the chronic overcrowding of local carriers. Most notable of these was the "Richmond Shipyard Railway," constructed and operated by the Key System for the U.S. Maritime Commission from Emeryville and Oakland to the Richmond shipyards from January 18, 1943 to September 30, 1945.

Initially, the trains were operated only to Potrero Avenue and 14th Street, several blocks from Shipyard No. 2. By February 1943, service was extended to all of the Richmond shipyards. In early March 1943, a single track loop was completed to the immediate vicinity of the prefabrication plant between Shipyards No. 3 and 4, and the security checkpoints of Shipyard No. 2.

Constructed from old inter-urban track lines, the railway featured converted cars from the recently abandoned New York City's Second Avenue elevated line of the Interborough Rapid Transit Company. Initially, 39 trains were operated in each direction each day, but by late February 1943, the total number of daily trains had increased to 94. A daily average of some 11,000 passengers used the transit line.

COMMUNITY SERVICES INCLUDING CHILD CARE SERVICES

Federal, state, and local public and private agencies coordinated their efforts to develop an extensive program of public services in Richmond to support new residents and to acclimate them to their new urban-industrial conditions. In addition to housing, war workers needed health care, child care, and recreational opportunities.

The Richmond Health Department extended its services to the new housing areas, and the Richmond Board of Education initiated an extensive recreational program in community centers that included music, dancing, crafts, athletics, and a variety of playground facilities. With leadership and fundraising support by the Elks Club, the Richmond Community Chest remodeled an armory building in 1944 to provide headquarters for the Richmond Boys' Club, a new organization designed to provide recreational and educational opportunities for boys aged six and older.

Funded by the Community Chest and the State of California, and operated by the Young Men's Christian Association (YMCA) and the Richmond Recreation Department, Hospitality House was opened in 1944 to provide recreation and sleeping quarters for servicemen as well as space for a YMCA Youth Center. Richmond's United Services Organization building provided a range of recreational and leisure activities designed to build morale among servicemen and servicewomen, as well as defense industry workers.

In the highly competitive labor market during the war, Henry J. Kaiser played a leading role in providing corporate welfare to the workforce in Richmond as an incentive to promote productivity, employee retention, and social harmony in the community. Kaiser offered a wide variety of recreational and sports programs (32% of the shipyard workforce participated); a company newsletter (*Fore 'N' Aft*); counselors and specialists to help improve work conditions and promote responsible personal financial management and family health; work time music; entertainment during elaborate lunchtime events; and inter-shipyard competitions to promote efficiency and safety and to spur

Discord

"No Women, No Blacks"

Even with a shrinking labor pool of white men, some employers and unions were resistant to hiring women and African Americans. Phyllis Gould wanted to work in the shipyards and was told that she would have to join the Boilermakers Union.

"So I went to the Union Hall and my memory of that place is all dark. It was like it was a dark place and this big man that was dressed in dark clothes and he just said, 'No. We don't take women or blacks.' Only that's not the word he used. So, I went home. And the next day, I went again, same routine. And the third day I didn't go to the Boilermakers' Hall. I went up to the window at the hiring hall and they said, 'No.' And I started to cry, and as I'm walking back through this room there was a man at a desk and he said, 'What's wrong?' And I told him, and I don't know what he did but he says, 'Go back up there.' And I did and they gave me the job. So, I don't know what he did. And don't know how many — how long it was between the time they said I was hired until I actually went to work. Because then they hired five or six more women and a chaperone, because we were the first.

--Phyllis Gould,
Welder,
Kaiser Shipyards,
Richmond, CA

production. Additionally, Kaiser actively advocated adequate housing and community services for his workforce.

Frustrated by the inadequacy of local programs, Kaiser helped to establish approximately 35 child care centers of varying sizes in Richmond to provide child care for mothers working in the shipyards. Some were established in new buildings built specifically for this purpose, while others were in converted buildings or in existing schools. At its peak, with some 24,500 women on the Kaiser payroll, Richmond's citywide child care program maintained a total daily attendance of some 1,400 children. All but one of the 35 centers were segregated.

With federal agencies providing for the buildings and the Richmond school district supplying the administration, the first government-sponsored child care centers opened in Richmond during the spring of 1943. The first was the Terrace Nursery School, located at the Terrace War Apartments, near the western edge of the Richmond shipyards. The Terrace Housing Community Center opened this nursery with a capacity of 45 children, aged two to four. The daily cost was 50 cents per child, with the option of adding a breakfast for an additional 10 cents.

The most substantial facilities built specifically for child care were the Maritime Child Development Center and its near-twin, the Pullman Child Development Center (since renamed the Ruth C. Powers Child Development Center). Funded by the Maritime Commission and operated by the



Child care in "War Nursery," ca. 1943. Franklin Delano Roosevelt Library.

Richmond School District, the centers incorporated progressive educational programming developed by child welfare experts from the University of California at Berkeley. Kaiser's innovative child care program was designed to help newcomers adapt by teaching youngsters how to "eat, sleep and play," and how to practice "proper habits." The program provided 24-hour care, and included well-balanced hot meals, health care, and optional family counseling.



Maritime Child Development Center, rear view, ca., 1945. Source unknown.

HEALTH CARE

Kaiser's most significant contribution in the arena of social services during World War II was in health services—a field in which the company set an industry standard. Following major flu and pneumonia epidemics in the East Bay in 1941, Kaiser inaugurated the Permanente Health Plan in 1942.

The plan involved a three-tier medical care system that included six well-equipped first aid stations at the individual shipyards, the Kaiser Permanente Field Hospital (sometimes referred to as the Richmond Field Hospital), and the main Permanente Hospital in Oakland. Together these facilities served the employees of the Kaiser shipyards who had signed up for the Permanente Health Plan (commonly referred to as the “Kaiser Plan”)—one of the country's first voluntary pre-paid medical plans to feature group medical practice, prepayment, and substantial medical facilities on such a large scale. By August 1944, 92.2% of all Richmond shipyard employees had joined the plan that was financed through paycheck deductions of 50 cents per week.



Henry J. Kaiser, ca. 1945. Bancroft Library, University of California–Berkeley.

The health plan was highly popular with workers and boosted Kaiser's image as a preferred employer. Kaiser's initial investment paid for itself many times over as better health care made for healthier workers, less absenteeism, and increased productivity.

Discord

Unequal Pay, Childcare and Housing

- Women were paid less than men.
- The average man working in a wartime factory was paid \$54.65 per week, while women were paid \$31.21 per week. Skilled women were paid less than unskilled men.
- One challenge the women faced was what to do about childcare. Industry was slow to recognize the value of women in the workplace, and even slower to associate the need for childcare with working women. Before the 1940s, childcare was typically provided by a woman's mother, sister, relative, or neighbor. Yet, working women had moved away from their extended families and had no relatives to help them. Most employers thought that women should use federal childcare, failing to recognize women's concerns about leaving their children with strangers in unfamiliar surroundings.
- A second challenge for women was housing. Some landlords were reluctant to rent to women because they made less money than men and wanted laundry and cooking privileges that men did not.



Evelyn Childcare Center, Richmond, CA

After the war, the health plan was extended to include workers' families, and it became the most enduring of all of Kaiser's programs. The "Kaiser Plan" was a direct precursor of the Health Maintenance Organizations (HMOs) defined by the federal Health Maintenance Organization Act of 1973. Today Kaiser Permanente is among the nation's largest and most influential health maintenance organizations.

POST WORLD WAR II RICHMOND

During the late 1940s Richmond experienced the "bust" associated with the aftermath of the war "boom"—large numbers of war workers were left unemployed and homeless when the defense industries shut down.

Although new industries, such as International Harvester, moved in to occupy some of the vacated shipyard structures, Richmond's unemployment woes were exacerbated by the loss of industry to outlying suburbs in the San Francisco Bay Area. The most significant departure was the Ford Motor Company, which moved to Milpitas, California, in 1955.

War workers found it hard to obtain new jobs. Shipyard efficiency during the war had been obtained by implementing assembly line procedures, i.e., one person, one job. After the war, those who had learned only one skill found that they could not easily transfer to other jobs in a highly competitive job market. In addition, to protect their skilled crafts, prewar workers had responded during the war by creating a system of second-class union auxiliaries for women, African Americans, and other newcomers. At the end of the war, employers and unions easily disposed of these marginalized workers, thus creating serious economic dislocation in East Bay cities such as Richmond.

Unskilled workers who were members of a minority group faced the additional obstacle of prejudice amid the tensions of the highly competitive job market. Hence Richmond became witness not only to the industrial development that supported America's effort to win World War II, but also to the bleak realities of urban blight and economic dislocation associated with peacetime conversion.

In addition to employment challenges, many workers found themselves without housing. Much of the federally subsidized wartime public housing was designed only for temporary use. To avoid conflicts between public and private sector housing during the peacetime conversion years, the Richmond Housing Authority agreed to tear down public housing within two years of the end of the war. Communities like Seaport, which housed African Americans adjacent to the shipyards, were obliterated almost overnight.

Today, in Richmond, California, there is a growing interest in remembering and honoring the city's history. Community revitalization efforts are centered on the historic resources remaining from the war years, and city celebrations are being renewed with "home front" themes. Despite the tumultuous years—both during and after World War II—the citizens of Richmond are embracing their city's history and celebrating its many contributions to victory in World War II and to significant social changes to American society.

Historic Importance of Individual Park Sites

The legislation establishing Rosie the Riveter/World War II Home Front National Historical Park recognized the national significance of the historic resources that are owned by private and public partners within the City of Richmond, California. The importance of those resources is discussed in this section. While the park's primary resources are owned and managed by many different public and private entities, they all help tell the story of Rosie the Riveter and America's World War II home front.

FORD ASSEMBLY BUILDING

The 500,000-square-foot Ford Assembly Building illustrates the conversion of American peacetime industries into wartime industries. Built as the largest automobile assembly plant on the West Coast, the Ford Assembly Plant was converted to the

Richmond Tank Depot during World War II. There were only three wartime tank depots in the United States; the Ford Assembly Building is the only surviving structure that housed one. Workers at the depot equipped more than 60,000 military vehicles including tanks, Army trucks, half-tracks, tank destroyers, personnel carriers, scout cars, amphibious tanks, snow plows, and bomb lift trucks. These vehicles were transported to the plant for final processing and to have up-to-the-minute improvements installed on them before being transported out through Richmond's deepwater channel to war zones throughout the world.

In addition to its importance for its wartime uses, the Ford Assembly Building is an outstanding example of 20th century industrial architecture. It was designed by internationally famed architect Albert Kahn who developed "daylighted" factories



Ford Assembly Building, ca. 1935. The Henry Ford Museum.

“all under one roof.” The immense size of this historic structure, along with the adjacent oil house, can provide park visitors with an understanding of

the size and scale of the wartime industries that were based in Richmond, California.



Ford Assembly Building Craneway, 2002. Library of Congress.

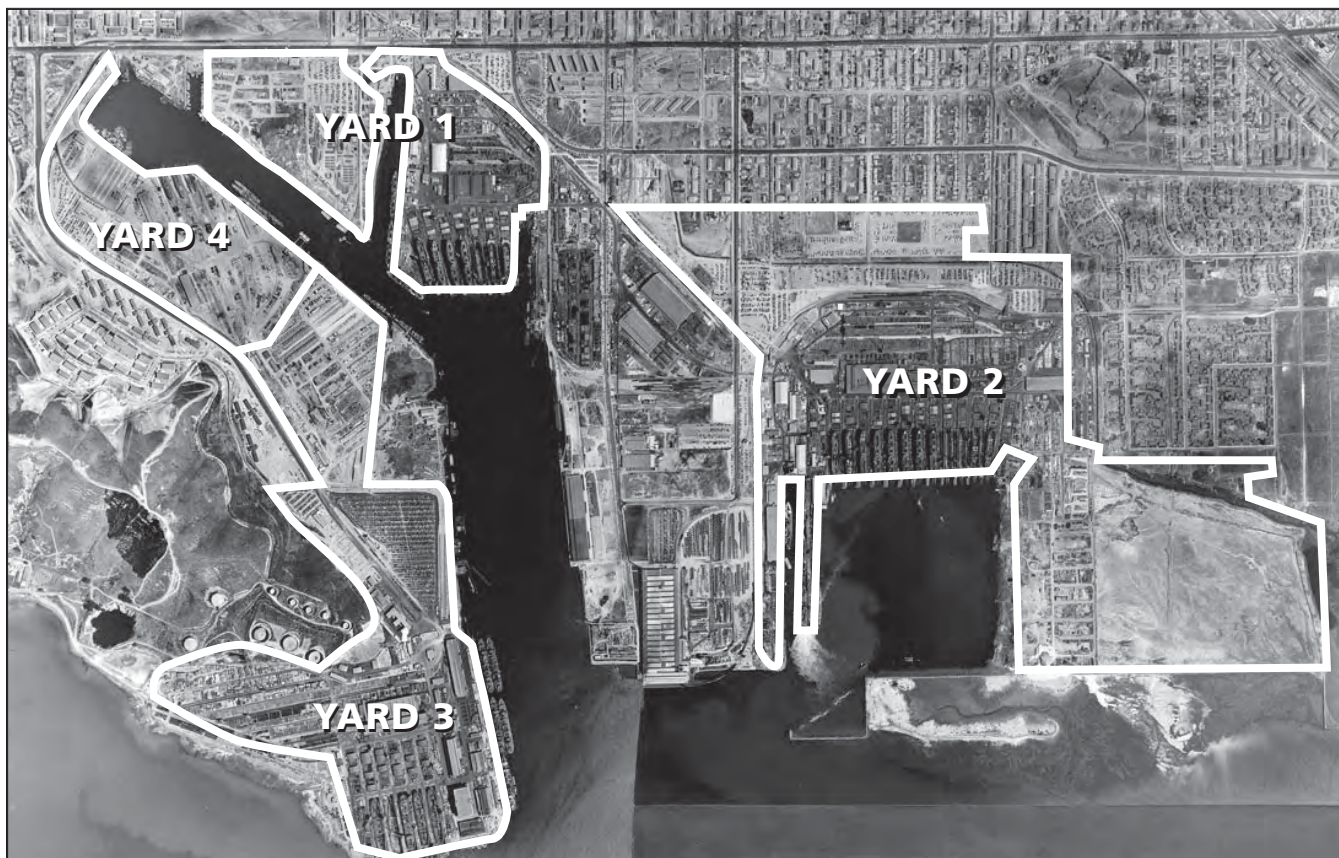
RICHMOND SHIPYARD NO. 3 AND THE SS *RED OAK VICTORY*

The Richmond Shipyard complex built by Henry J. Kaiser was one of the largest wartime shipyard operations on the West Coast. Shipyard No. 3 is the only remaining wartime shipyard of the four that Kaiser constructed in Richmond; it is still relatively intact and is listed in the National Register of Historic Places.

Richmond Shipyard No. 3 was built for the ease of mass production of wartime ships, and has retained its exemplary resources in part because it was built to be a permanent facility. The level graving basins/dry docks eased hull construction, while the large assembly areas and the alignment and spacing of the buildings contributed to production speed.

Kaiser’s ship building methods involving prefabrication allowed much of the initial construction to be accomplished away from the dry-docks/graving basins, which led to increased efficiency and speed. Whirley cranes were used to move the components from place to place in the shipyard. After launching, the ships were taken to the outfitting berths for the final electrical connections, sheet metal work, furnishings, and artillery installation.

The park includes a surviving wartime ship that was built in the Richmond Shipyards. The SS *Red Oak Victory* is listed in the National Register of Historic Places to recognize its military, transportation, and engineering significance as an ammunition and cargo vessel during World War II. The ship also is acknowledged for its significance as a product of the Kaiser Corporation’s revolutionary innovations in



Kaiser Shipyards, ca 1945. Library of Congress. Richmond Museum of History.

shipbuilding techniques that were undertaken in the shipbuilding industry during World War II.

The SS *Red Oak Victory* is a tangible resource that demonstrates the power and contribution of individuals to the World War II war effort. The ship helps visitors comprehend the massive undertaking associated with the Richmond's shipyards and the American wartime home front. The size and scale of the surviving shipyard help visitors to comprehend the enormity of the American World War II effort. By exposing visitors to the remaining historic sites and structures of Richmond Shipyard No. 3, they can learn how ships were made and how "Rosie the Riveter" contributed to the effort.

The views of the contemporary commercial land use along the Santa Fe Channel from various park sites helps provide visitors with the context and a sense of size of the wartime industrial landscape.



SS Red Oak Victory ship under construction, ca 1944. Richmond Museum of History.



SS Red Oak Victory ship, 2004. National Park Service.

KAISER PERMANENTE FIELD HOSPITAL

In 1942, Henry J. Kaiser inaugurated the Permanente Health Plan for his shipyard workers. He instituted a three-tier medical care system consisting of first-aid stations in the shipyards, a field hospital, and a main hospital. One of Kaiser's original first-aid stations remains intact in Richmond Shipyard No. 3. The Kaiser Permanente Field

Hospital still exists on Cutting Avenue in the national historical park and is privately owned.

Preserving the Kaiser Permanente Field Hospital can help visitors understand the health care needs of the workers who labored in Richmond's wartime industries, and can also help them understand the profound changes to America that resulted from World War II home front activities.



Kaiser Permanente Field Hospital, ca 1945. Library of Congress.



Kaiser Permanente Field Hospital, 2002. National Park Service.

CHILD DEVELOPMENT CENTERS

In addition to health care, Kaiser provided child care for families working in Kaiser's shipyards. The centers he built with funding provided by the United States Maritime Commission incorporated progressive educational programming and 24-hour care; services included well-balanced hot meals, health care, and family counseling.

The largest child care facilities were the Maritime Child Development Center and the Pullman Child

Development Center (later renamed Ruth C. Powers Child Development Center). Both are still in existence and were in use as child care centers until just recently. By preserving the surviving child development centers in Richmond, California, visitors have the opportunity to explore the social and community responses to the World War II home front effort that occurred in cities and towns across America.



Maritime Child Development Center, ca. 2004.

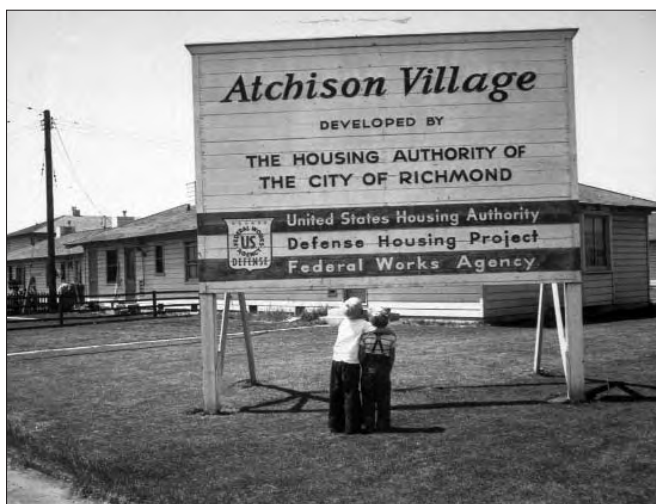


Ruth C. Powers (formerly Pullman) Child Development Center, 2002. Architectural Resources Group.

WORLD WAR II WORKER HOUSING

Small, pre-World War II industrial cities like Richmond, California, became boomtowns during the war; housing provides some of the most visible evidence of the drastic changes that occurred in these cities almost overnight. Beginning with a prewar population of 23,642 in 1940, the city's population grew to more than 93,000 by 1943. With a population increase of 296%, Richmond was thrown into civic chaos and social upheaval and was forever altered by the events of World War II.

To meet the continuing critical housing shortage, the Richmond Housing Authority was incorporated on January 24, 1941. The program consisted of 20 projects that including apartments, dormitories, and three trailer parks; these projects housed more than 60% of Richmond's population during the war.



Atchison Village, 1940. Library of Congress.



Housing Unit, Atchison Village, 2002. National Park Service.

