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The Living New Deal

The Unsung Benefits of the New Deal for the United States and California

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The New Deal was one of the great public experiments in American history. Crafted pragmatically by the Roosevelt administration to fight the Great Depression of the 1930s, it helped the country recover from economic disaster and put millions of desperate people back to work. In the long run, it ratcheted up the role of the federal government in business affairs and injected an unprecedented measure of shared responsibility for the welfare of all people. It also marked a dramatic shift in class power over the workings of U.S. democracy.

The recent crash of the global economy — now referred to as the Great Recession — has revived interest in the efficacy of Franklin Roosevelt's panoply of experiments in reform and recovery, and renewed debate over what the New Deal actually accomplished. Yet the New Deal's legacy has been largely forgotten or expunged except for a few highlights recycled in national memory.

Sirens of the Right deny that the New Deal had any beneficial effect at all or even prolonged the agony of the Depression (Powell 2003, Shlaes 2007, Folsom 2008). Such critics are not only wrong, they are busy recycling the hackneyed ideas of FDR's contemporary enemies. Even postwar liberals, who took Roosevelt's accomplishments for granted, came to stress the limitations of the New Deal as the enthusiasm of the era gave way to new social movements of the 1960s (Leuchtenburg 1963, Bernstein 1967, Zinn 1990).

So when we speak of a "Living New Deal" we mean two things. The first is recovery of the lost legacy of New Deal programs — a kind of archeological dig into America's past where so much remains buried from public view. It is testimony to a kind of collective blindness, for the remains of the New Deal are ubiquitous and in plain sight, but are mostly unseen and unappreciated. They live on in tens of thousands of public works still standing, still functioning, and still providing benefits to unwitting millions of Americans over generations. And they live on in public programs such as Social Security and mortgage guarantees that have changed the face of economy, society, and the landscape.

California's Living New Deal project at the University of California, Berkeley campus is an unprecedented attempt to identify, map, and interpret the physical legacy of the New Deal legacy in one state. That legacy encompasses tens of thousands of mostly unmarked buildings, dams, pipelines, roadways, amphitheaters, and much, much more. Remarkably, most of it is still extant, waiting to be sifted from the surrounding landscape. As the project advances, the picture becomes clearer: beneath the dusty lapse of memory lies a lost civilization built in less than a decade.

The second legacy of the New Deal is the 'civil' in that lost civilization. The New Deal era represents, more than anything else — more than economic recovery and long-term investment — the ideals of civil society, collective governance, and social well-being that animated an era. Those ideals have been progressively eroded by the *réal politique* of the Cold War American empire and the right-wing politics of neoliberalism, with its distaste

for government, disdain for the welfare of the many, and advocacy for the enrichment of the few. Roosevelt's ideals stand opposed to crass power politics and neoliberal doctrine. How distant from our own times his declaration: "The test of our progress is not whether we add more to the abundance of those who have much, it is whether we provide enough for those who have too little."¹

The New Deal and public works had beneficial consequences for the United States that have been ignored for too long. We review the short-term and long-term effects in the two sections to follow. After that, we turn to California, to reinforce the case for the benefits of New Deal programs on the country's most populous and dynamic state.

Any discussion of the full impact of the New Deal must necessarily be broad, so we can only touch on the highlights, but it should include five major elements: economic recovery and development; employment, income and consumption; public works (infrastructure), housing and cities; education and culture; and government, politics and democracy. All three sections of this paper will be built around those five topics.

I. The New Deal in the 1930s

President Franklin Delano Roosevelt's inauguration on March 4, 1933 heralded the New Deal of government activism that he had pledged to the American people during his campaign. The famous Hundred Days of new initiatives, both legislative and executive closely followed in the spring of 1933. Measures passed by a solidly Democratic Congress included banking and monetary reform, the Federal Emergency Relief Act (FERA) to support the states, the National Industrial Recovery Act (NIRA) to stabilize prices, and the Agricultural Adjustment Act (AAA) to bolster farms and farm prices (for overviews, see Schlesinger 1958, Leuchtenberg 1963, Conkin 1975, Brinkley 1995, Rauchway 2008). *(All New Deal programs are listed in Appendix 1)*

A common mistake, however, is to think that everything was done in the first Hundred Days of the new administration. New policies and laws continued to appear throughout FDR's first term and new initiatives were added in the second term. Most commentators speak of a First New Deal in 1933-34 and a Second New Deal in 1935, but there is good reason to refer to a Third New Deal in 1937-38, after Roosevelt's reelection. Some later programs, such as Social Security and Fannie Mae, would be the most famous and durable parts of the New Deal legacy. *(A New Deal program time-line is provided in Appendix 2)*

The ways in which the New Deal aided the nation in the short-run have been much debated, but most of the contestation has been over economics and politics, missing the social and human side of the federal programs. Therein lies the hidden secret of Roosevelt's success and popularity, sufficient to reelect him four times. He and his team changed the country and made it a better place to live for millions of ordinary people. That generation never forgot what he had done for it, even if we have. That FDR also

¹ The Second Inaugural Address, Jan. 20, 1937.

very likely rescued capitalism and American democracy is something that his enemies among the bourgeoisie could not see, could not remember, and, ironically, have never forgiven him for (Rudolph 1950, Patterson 1981, Alter 2006, Phillips-Fine 2009).

1. Economic Recovery

The Great Depression was the deepest and longest economic downturn in American history. By the time the economy hit bottom in early 1933, GNP had fallen by a third. The proximate trigger for the collapse was the Great Crash of October 1929 on the New York stock exchange, but the farm economy — representing half of total U.S. output — was already in crisis by the mid-twenties and the Florida real estate bubble popped soon thereafter. Industrial production hit the wall in 1930, falling by 25%. The banking system imploded in 1931-32, as savings, investment, and buying withered, and went into free-fall in early 1933. Without a safety net of any kind, multitudes lost their life savings as thousands of banks closed their doors on panicked clients (Chandler 1970, Romer 1990, Eichengreen 1996, Kindleberger 2005).

President Herbert Hoover at first refused to intervene except — fearing an encore of the sharp recession of 1921 caused by postwar spending cutbacks — to cajole big capitalists not to cut wages in order to maintain consumption. Hoover was an activist president who preached cooperation and confidence, but he was up against two daunting obstacles. One was the ideology of automatic markets preached by the economists and an article of faith for the bourgeoisie (Keynes 1937); Hoover's first Treasury Secretary, Andrew Mellon, advised him to let it all collapse in order to purge the system of its speculative excesses. His other handicaps were the lack of precedent for large-scale federal spending outside of wartime and his absolute belief in the need to balance the federal budget.

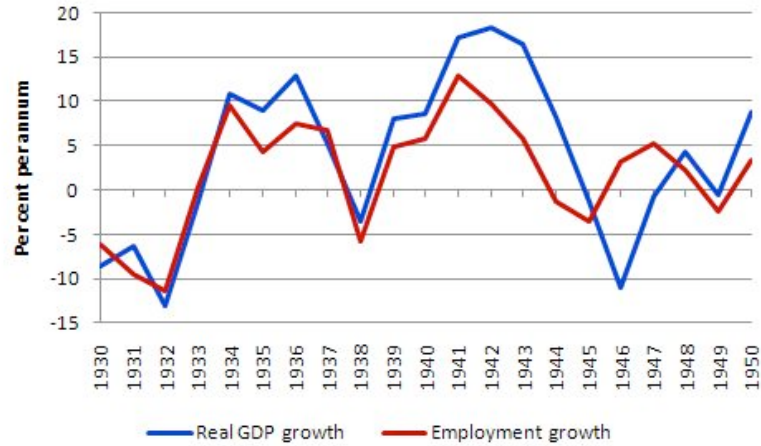
Nonetheless, Hoover at last took halting steps to stop the bleeding in 1932: the Reconstruction Finance Corporation and the Federal Home Loan Bank Act creating the Home Owners Loan Corporation (HOLC) (both of which continued under the New Deal) (Olson 1986). Such measures were too late; Hoover's popularity was at rock bottom and he was defeated in a landslide by Roosevelt in November, 1932.

FDR did not take office for four months while the economy plumbed new depths and terror gripped the nation (for that reason, the inauguration date would be set earlier thereafter). When Roosevelt finally took the reins of government, he and his cabinet quickly and forcefully went to work, and the economy responded.

A long-standing myth holds that recovery was painfully slow, but in fact GNP grew very fast from 1933 on (with the exception of 1938)(**Figure 1**). Indeed, while the US economy had fallen farther than all other leading nations, except Germany and Canada, in the early years of the Depression, it recovered more briskly than all but Germany and Japan — both of which engaged in dramatic military build-ups well before the United States.²

² Brad DeLong blog graph @ http://econ161.berkeley.edu/TCEH/Slouch_Crash14.html

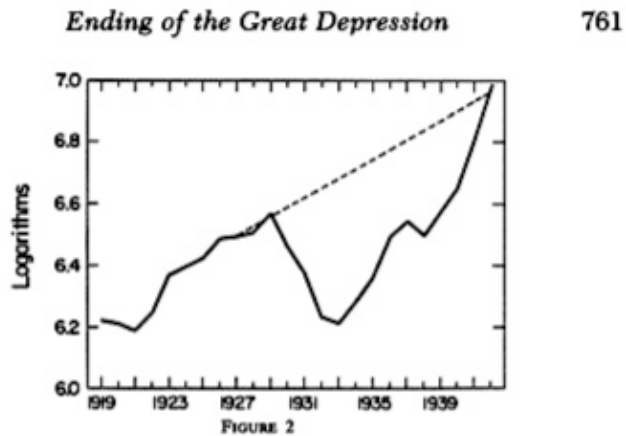
FIGURE 1: US Growth Rate, GDP and Employment, 1930-1950



source: US Census data, graph from <http://bilbo.economicoutlook.net/blog/?p=7261>

By 1942, before the World War kicked into high gear, the U.S. economy had already climbed all the way back to normal (i.e., the trend line of the 1920s). (**Figure 2**)

FIGURE 2: US GDP Growth Versus Trend Line, 1919-1942



ACTUAL AND TREND REAL GROSS NATIONAL PRODUCT, 1919-1942

Note: Trend GNP, which is shown by the dashed line, is calculated by extrapolating the growth rate of real GNP between 1923 and 1927 forward from 1927. Therefore, this series does not start until 1927.

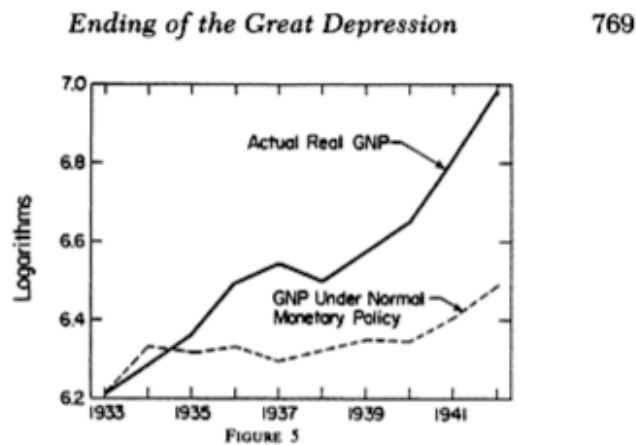
Source: The source for real GNP is the same as in Figure 1.

source: Romer 1992, p. 761

Did the New Deal cause the recovery? Indeed, it seems that it did.³ The main reason, in the short run, was that it salvaged the banking system and pumped credit back into the economy. FDR called a national 'bank holiday' to stop the carnage and then let officials sort the wheat from the chaff. Congress then passed the Federal Emergency Banking Act and the Glass-Steagall Act to provide bank oversight and federal deposit insurance. FDR also took the US off the gold standard, cutting loose that deflationary anchor (the dollar would fall by half in value), and the Federal Reserve Bank reversed course and began to pump money into the banking system (Romer 1992; Eichengreen 1996; cf. Temin 1976).

With the bleeding stanching, money began flowing again through the veins of the economy, credit loosened, and investment shot up (**Figure 3**). Christina Romer (1992), who makes a strong case for the critical role of monetary recovery, calls this "monetary policy", but it was far more: Roosevelt's team was reconstructing the entire financial system in order to save it.⁴ Moreover, the stabilization programs of the National Industrial Recovery Act (NIRA) and Agricultural Adjustment Act (AAA) buoyed prices and profits, after years of deflation, while an administration taking bold action infused the country with a newfound confidence and optimism.⁵

FIGURE 3: Monetary Expansion and Economic Recovery in the 1930s



ACTUAL OUTPUT AND OUTPUT UNDER NORMAL MONETARY POLICY, 1933-1942

Note: The dashed line shows the path of real GNP under the assumption that the money growth rate was held to its normal pre-Depression level throughout the mid- and late 1930s; the solid line shows the path of actual real GNP.

Sources: The calculation of output under normal monetary policy is described in the text. The source for real GNP is the same as in Figure 1.

Source: Romer 1992, p 769

³ Several neo-conservative economists have tried to show that the New Deal made matters worse (e.g., Vedder & Gallaway 1993), but their arguments do not hold up to scrutiny. Cf. Brad DeLong: http://econ161.berkeley.edu/Econ_articles/Reviews/vedder.html

⁴ Romer was writing at the height of the monetary policy obsession of the 1990s, which might explain the fulsome usage of the term. Fiscal policy came back into fashion in 2009.

⁵ The NRA and AAA were both struck down by the Supreme Court in 1935. The former was dead in the water anyway by that time, and the latter was restructured and its major support programs continued.

The other arm of the New Deal economic recovery effort was fiscal policy, or federal spending. Congress speedily authorized \$3.3 billion in emergency spending for job creation and relief of the states in 1933-34 under the NIRA, which included the Federal Emergency Recovery Agency (FERA) and the Public Works Administration (PWA). The Civilian Conservation Corps (CCC) and Tennessee Valley Authority (TVA) contributed further injections of new spending. A further \$4.88 billion was added in the Emergency Relief Appropriation of 1935. Roughly half the federal budget during the Roosevelt Thirties consisted of emergency disbursements meant to fight the Depression (Smith 2006, p. 1).

Emergency spending supplemented appropriations for *existing* federal programs, many of which expanded markedly during the New Deal. This facet of federal expenditures is often overlooked, but it included such things as public roads, military outlays, and federal buildings. Broadly speaking, the federal government expended more than \$16 billion in grants and payments from 1933 to 1939 and over \$10 billion in loans for public works, farm supports and housing (Fishback et al., 2001). **(For one estimate, see Appendix III; see also Figure 10).⁶**

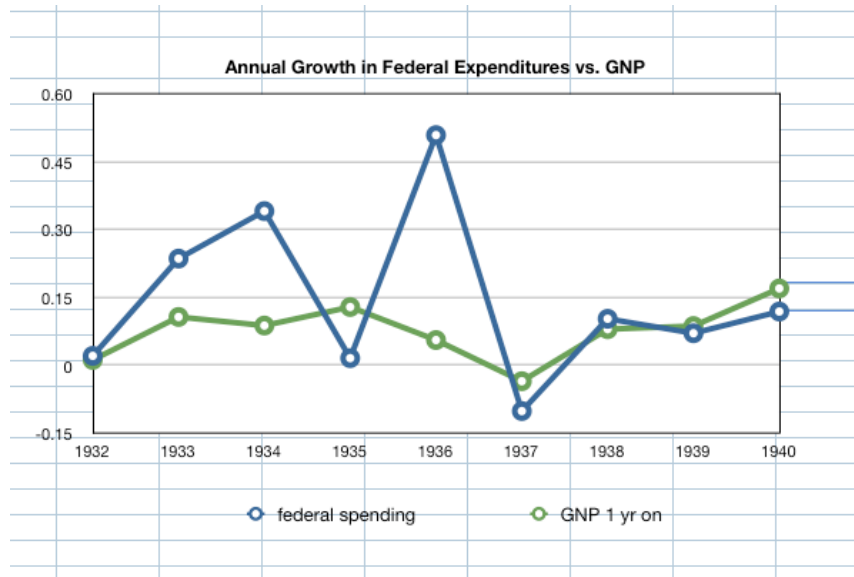
Altogether, the federal government's share of GDP more than doubled, from about 4 to 9 percent (Wallis & Oates 1994). There were also loans programs that were mostly repaid by business and local governments, such as those under the RFC, PWA and Farm Security Administration (FSA). The new Federal Housing Administration (FHA), along with the HOLC, bolstered the housing market.

The effect of all this spending on the recovery is harder to gauge than that of financial reconstruction. Romer argues that fiscal outlays cannot have been decisive because the federal deficit did not rise enough (**Figure 4**). But the deficit alone surely underestimates the stimulative effects of federal spending. For one thing, the deficit did not balloon as much as it might have because the sharp recovery boosted tax revenues. Contrast that time with the present, where a weak recovery and major fiscal stimulus have led to truly massive deficits.

Moreover, fiscal outlays provided contracts to hundreds of desperate companies, stanching the bleeding among state and local governments, and put money in the pockets of consumers, all of which had the secondary multiplier effect of helping business get back on its feet and start producing, hiring and investing again. County-level analysis shows a strongly positive relation between New Deal public works and personal spending and between home loans and household spending, with a mildly positive effect of relief spending (only AAA disbursements, which tended to restrict farm output, had a negative impact) (Fishback et al. 2001).

⁶ This is a low estimate, which only goes up to 1939. See the discussion of public works spending in section I.3 and Figure 10, below. All figures are given in current dollars, unless otherwise indicated. For 2010 dollars, multiply by about 16. Thus, total New Deal federal spending is roughly \$425 billion today.

FIGURE 4: Growth of Federal Spending



Source: www.bea.gov (thanks to Dean Baker)

Further proof that New Deal programs were largely responsible for economic recovery is the counter case of the 1938 recession. While this sharp downturn was a serious setback for overall recovery in the decade, it was partly triggered (and definitely worsened) by cutbacks in federal spending and credit creation. A major fiscal retrenchment took place that year, as FDR pulled in the reins on federal spending. Congress failed to renew a huge veterans pension payment and CCC remittances and WPA wages were cut off, hurting the poorest and many local economies (Leighninger 2007). In addition, collection of Social Security taxes hit for the first time, further undermining consumer spending.

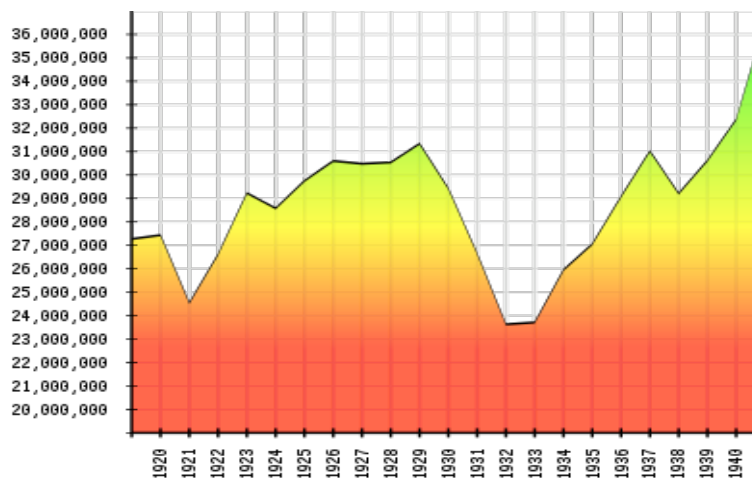
Unfortunately, almost everyone (80% in polls) including FDR viewed the return to fiscal probity (a balanced budget) as a good thing, which it was not. Even worse, the Fed pulled the rug out from under the banks in 1937, shrinking the money/credit supply. Romer (1992) insists that the latter was the greater error, which exonerates FDR for his part in bringing on the recession but minimizes the adverse impact of reducing public works spending. In any case, Roosevelt quickly reversed course and the economy responded, continuing on its previous upward course right into the war.

The immense economic buildup and federal expenditure during the Second World War often overshadows the New Deal in histories of US economic recovery from the Great Depression. It has become a standard trope of historians and economists, even those who support the New Deal, that only World War II lifted the country from the Great Depression (e.g., Conkin 1975, Alter 2006). But the wartime mobilization should not be allowed to eclipse the substantial contributions made by the New Deal in the 1930s.

2. Employment and Income

After stabilization of business and finance, the most pressing task of the New Deal was to put people back to work. In the collapse of 1929-33, some 10-15 million people were without jobs and the unemployment rate had soared to 25% of the working population – and only half of the rest had full-time jobs (**Figure 5**). While general economic revival was essential to generating employment, the new administration felt it had to act quickly to alleviate the misery of mass joblessness and to prime the economic pump, as the common metaphor had it (Schlesinger 1958, E. Williams 1968, Rose 1994).

Figure 5: Total Employment in the United States, 1928-1941



source: http://en.wikipedia.org/wiki/File:US_Manufacturing_Employment_Graph_-_1920_to_1940.svg

Three job creation programs were put into place during the first Hundred Days: the CCC, FERA and the PWA. The CCC, FDR's personal favorite, was intended to put young men without means, skills or prospects to work on conservation projects. Created under the Emergency Conservation Act, it was assembled with wartime efficiency, hiring 275,000 men by the summer of 1933. The CCC was the most basic kind of 'make-work' initiative, putting "CCC boys" to work on reforestation, soil conservation and park improvements under a military form of organization at a minimum wage.

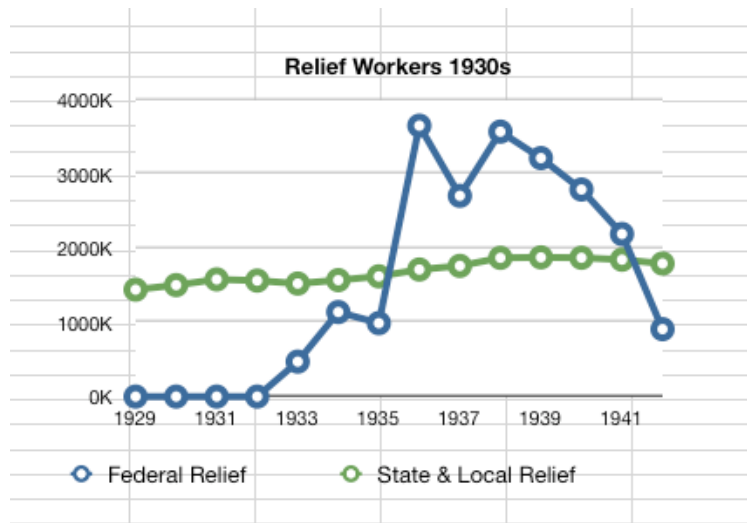
FERA supplied 'direct relief' via grants to the states, which had been overwhelmed by mass impoverishment, business failures, and falling tax revenues. Many local governments had declared bankruptcy. FERA grants were used to support state emergency relief administrations (SERAs), which dispersed monies to local agencies (half the grants had to be matched 3:1 by state and local contributions). Because FDR's cabinet, like most Americans, preferred work to "handouts" as a means of dealing with destitution, the favored program was "work relief" in which those on the

dole had to be approved for jobs. Despite the extra paperwork this required, FERA put hundreds of thousands to work, mostly on construction and repair projects, at prevailing wages (Rose 1994). But it was always seen as temporary.⁷

Because the need was so urgent, FDR grew impatient with work relief. By Executive Order, he had Harry Hopkins, head of FERA, carve out a new program for direct hiring of the unemployed, the Civil Works Administration (CWA). The CWA mobilized almost 4.5 million workers in five months during the hard winter of 1933-34 (another 7 million applied) to work on some 180,000 projects (Rose 1994, p. 47). Yet the CWA engendered fierce opposition and was terminated in the Spring. FERA once again ramped up work relief to fill the gap, generating some 2.5 million state and local relief jobs by the end of that year.

Nonetheless, the desperate condition of millions of unemployed did not abate, despite the beginnings of economic recovery. So Roosevelt and his advisors, led by Hopkins and Secretary of Labor Frances Perkins, realized that they needed direct federal action, and fast. The CCC and CWA had proved the potential of federal make-work programs and now it was time to return to that model. Thus, in 1935, Roosevelt created the Works Progress Administration (WPA) out of the remnants of CWA and FERA, with Hopkins at the helm. The expansion of relief work was quick and decisive, and the WPA went on to the largest and best known of all New Deal programs. **(Figure 6)**

Figure 6: Government Relief Employment



source: Bureau of Economic Analysis, bea.gov, Table Ea916-965

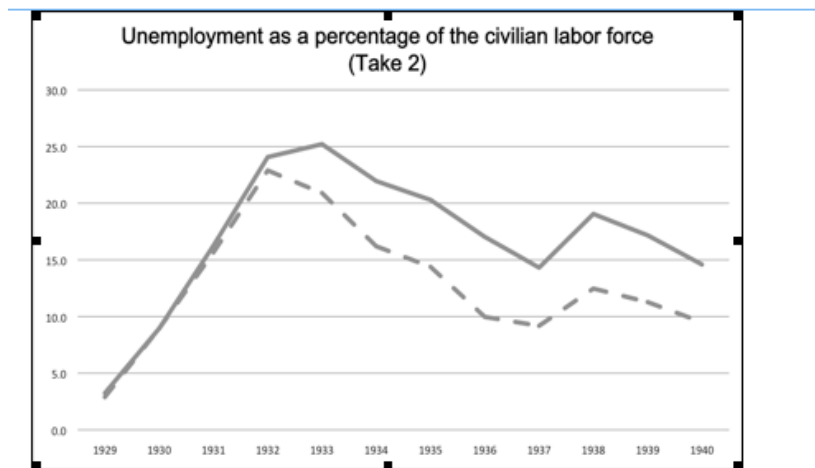
⁷ There was vigorous debate within the administration about relief versus job-creation and whether public works were make-work or long-term investments. In fact, they were both (see below). The internal struggles among FDR's advisors are discussed by Schlesinger 1958, Leuchtenberg 1963, Tugwell 1968, Schwartz 1984, Clarke 1996 and Downey 2009, among others.

At the peak of CCC activity in 1935, over 500,000 men were working in all 48 states, living in almost 3000 camps; overall, the CCC put 2.5 to 3 million men to work during its nine years (Rose 1994, p. 26, Alter 2006, p. 209). The WPA averaged over 2 million employed from 1936 to 1941 and often exceeded 3 million; it provided jobs for roughly one-third of the unemployed in the mid-1930s and put to work some 8.5 million people (WPA 1946, pp. 28-30). The WPA generated about three-fourths of all works program jobs, CCC one-eighth, and PWA and all other agencies one-eighth (WPA 1946, p. 7).⁸

The PWA was a more complicated program to build large public works in cooperation with federal agencies and the states. It gave out grants and loans and oversaw a system of contracting with the private sector to do the construction. The PWA, under Secretary of the Interior Harold Ickes, moved into action with the inertia of a freight train. “Honest Harold’s” demand for strict oversight to insure against corruption further impeded rapid uptake of the unemployed. PWA did not directly employ workers but funded projects that were responsible for creating a large number of jobs in the private sector. Hence, PWA's impact was felt more gradually and indirectly, but would be substantial in the end.⁹

Overall, national employment picked up rapidly from the nadir of early 1933. The unemployment rate fell steadily from its peak of 25% in 1933 to 10% by 1937, then rose in the Little Depression of 1938. By any measure this was an amazing achievement. Unfortunately, it has been underappreciated because of a basic flaw in the pioneering statistical work by Stanley Lebergott (1966). Lebergott did not include government relief jobs programs, so his figures for unemployment are about 5% too high, according to revised numbers (Darby 1976, Weir 1992). (Figure 7)

**Figure 7: U.S. Unemployment Rate, 1929-1940
(Revised figures shown by dotted line)**



Source: Rauchway 2008

⁸ John Kenneth Galbraith (1940) estimated that employment from all programs averaged 1.6 million annually 1934-38, but that is clearly too low.

⁹ There are, unfortunately, no solid estimates for PWA indirect employment.

New Deal jobs programs did more than create jobs for the destitute. They put to work people of every occupational type and skill level, including crafts workers, textile designers, writers, photographers and visual artists. Federal works agencies also reached out to African-Americans, and CCC camps were integrated a decade before the military (Alter 2006, Smith 2006, Taylor 2009).¹⁰

Most of all, providing jobs with a public purpose renewed workers' sense of self-worth and dignity after years of harrowing insecurity (Cohen 1990, Downey 2009, Taylor 2009). Harry Hopkins, head of the WPA and a former social workers in New York, insisted that work relief should bolster the self-respect of those pressed into service:

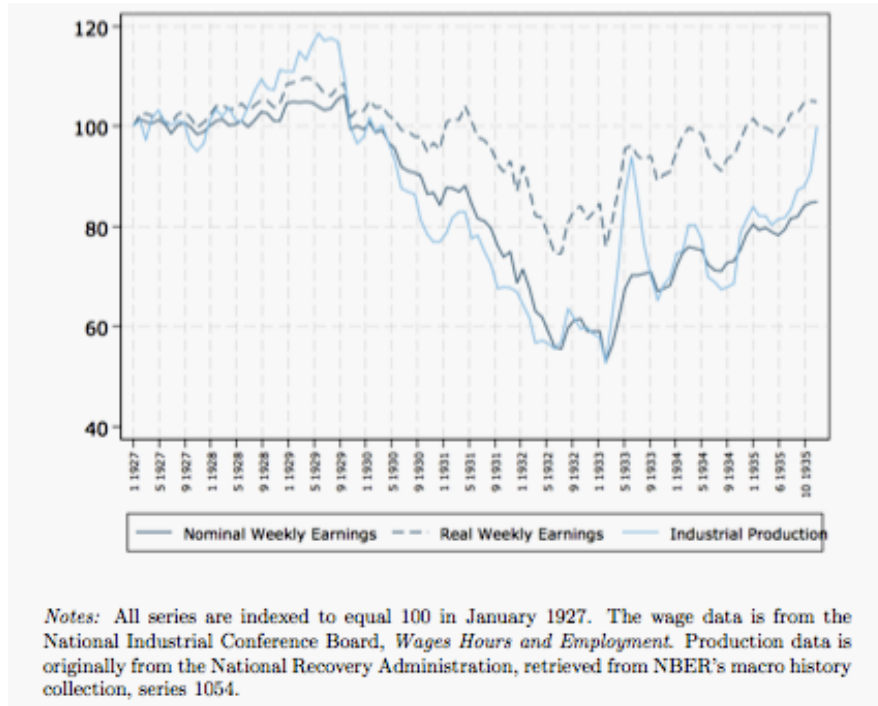
The regeneration of the individual worker no longer needs to be the only concern of a national work program for the unemployed. We have come to a second concept which is that his work is necessary to enrich the national life. In adopting this second principle we have not, however, abandoned our first. Our work must be work for the worker by the worker. He is the first figure. He must be the first and last digit in all government accounting (Hopkins 1936, p. 178).

With economic collapse of 1929-33, wages had fallen sharply and so had hours at work (Rose 2009, p. 44). Although real wages did not drop as precipitously as nominal wages, because of falling prices for consumer goods, nevertheless millions were in straitened conditions because of reduced income. The millions more who were unemployed were in truly dire straits. For the common worker, CCC and WPA jobs provided minimum wages and survival incomes to the destitute. CCC boys made a dollar a day and most of that was sent directly to their families back home. The WPA wage was about \$55, but varied by skill and by region depending on prevailing wages (Taylor 2009).¹¹ For the mostly skilled workforce on PWA projects, Ickes tried to maintain wage levels and equalize regional wages, while involving unions in labor recruiting and providing for grievances against contractors (Smith 2006, pp. 37-39). The combined effect of New Deal programs and economic revival was a sharp recovery of wages. **(Figure 8)**

¹⁰ The resegregation of CCC camps was a regrettable, however (Cole 1999).

¹¹ "The monthly earnings vary according to the degree of skill required by the job, and also according to the region and size of the community where the work is done. In large Northern and Western cities the wages run from \$52 a month for unskilled work to \$94.90 for professional and technical work; while in small Northern communities the range is from \$39 to \$68.90...." *Questions & Answers on the WPA*, 1939.

Figure 8 - Weekly Wages in Manufacturing, 1927-35



Source: Rose 2009, p. 45

The historic breakthrough to generalized income support came with the Social Security Act of 1935, in many ways the most important legislative achievement of the New Deal era. Social Security took time to get off the ground, however, and only began dispensing unemployment benefits, old age assistance, aid to children, and aid to the blind in 1940.

The New Deal also stanchd the bleeding in rural areas, bolstering farm incomes through AAA payments and price supports, easy loans from the Farm Credit Administration, and grants from the Resettlement Administration (Farm Security Administration). The latter also directly created jobs, along with PWA, CCC and WPA projects in the countryside (Saloutos 1982, Conkin 2008).

Unionization revived with the federal recognition of the right to organize offered by the NIRA in 1933 and especially by the National Labor Relations Act of 1935, passed by Congress at the urging of New York Senator Robert Wagner and Secretary of Labor Perkins (Downey 2009). The NIRA also included the first minimum wage in the United States. As the shock of the crash wore off and the New Deal began to give them hope, workers launched the greatest wave of labor organizing in American history (Moody 1989, Lichtenstein 2002). It wasn't the workers' revolution for which some had hoped, but it did represent a fundamental breakthrough that gave unions a foothold.

Together, jobs, relief, farm support, and unionization put money back in the empty pockets of millions of ordinary Americans and thus into circulation, helping to pump up the economy and improve the lives of common people across the country (Cohen 1990).

3. Public Works and Housing

The New Deal altered the landscape of America through a wide range of programs to support the building of basic infrastructure and the construction and purchase of housing. The former are usually called 'public works' and include everything from county courthouses to public fountains. The latter mostly concern financial restructuring and aid to private home builders and buyers, along with some public housing.

The public works agencies form the bulk of the 'alphabet soup' of the New Deal. The previously mentioned job-relief agencies were also builders and financiers of infrastructure: Civilian Conservation Corps (CCC), Civil Works Administration (CWA), Public Works Administration (PWA), and Works Progress Administration (WPA). To these should be added the expanded Reconstruction Finance Corporation (RFC), Tennessee Valley Authority (TVA), Bonneville Power Administration (BPA),¹² Rural Electrification Administration (REA), Soil Erosion/Conservation Service (SCS), Resettlement Administration (RA) / Farm Security Administration (FSA), and United States Housing Authority (USHA).¹³

Nor should we overlook pre-existing federal infrastructure programs that the New Deal expanded through line appropriations, as well as grants from the PWA and loans from the RFC. Such agencies include the Bureau of Reclamation in the Department of the Interior, Army Corps of Engineers, Public Building Administration (PBA) in the Treasury Department, Bureau of Public Roads (BPR) in the Department of Agriculture and the Departments of the Army and Navy. These agencies are often overlooked in discussions of the New Deal, yet they built some of the most noteworthy projects of the era, such as Grand Coulee dam and the National Recovery Highways.¹⁴

The biggest of the public works agencies were the PWA and the WPA, although the RFC and CCC were not far behind. Harold Ickes intended the PWA to provide jobs by aiding the moribund U.S. construction industry. The PWA funded around 35,000 projects, ranging from city halls and sewage treatment plants to enormous dams and bridges. The WPA under Hopkins ran its own projects which were generally smaller than those of the PWA, totaling roughly 300,000 in all. Both agencies built dams, streets, highways, amphitheatres, tunnels, water mains and sewage lines, city halls, hospitals, airports and

¹² BPA was the rump arrangement left after the failure of Congress to approve a Columbia River Authority on the model of the TVA.

¹³ Recent overviews include Cutler 1985, Leighninger 2007, Smith 2007. For detailed histories, see Alsberg 1934, Schwartz 1984, Rose 1994, Woods 1964, Salmond 1967, Maher 2007, Taylor 2009, as well as PWA 1939, Short & Stanley-Brown 1939, WPA 1937, 1942, 1946.

¹⁴ Smith (2006) only considers the PWA and WPA in his account of New Deal public works; Leighninger (2007) is broader, but leaves out pre-existing agencies. On the dam builders, see Billington & Jackson 2006; on roads, see Seely 1996, Johnson 2002.

schools. Together they built close to 80% of the new sewers, 50% of waterworks, most of the airports, and most park improvements during the 1930s.¹⁵ **(Figure 9)**

FIGURE 9: Building Norris Dam on the Tennessee River



source: TVA Historic Photo Collection

There is no comprehensive inventory of all New Deal public works. Projects were executed quickly in response to the economic emergency and the agencies were shuttered with equal rapidity with the advent World War II. Harold Ickes admitted that, “Even those of us in Washington who are most responsible for carrying out orders sometimes lack comprehension of the mighty sweep of this program.”¹⁶ In addition to poor and incomplete written records, few New Deal projects are marked with prominent plaques or inscriptions – and most are not marked at all. Nonetheless, some measure of the hundreds of thousands of New Deal public works projects can be gleaned from official sources.¹⁷ **(For a list of projects, by function, see Appendix 4)**

Expenditures by the major agencies were very large. Public works consumed roughly two-thirds of emergency funds and a goodly share of regular appropriations — though no one has fully assessed the latter. We have assembled the best available data on expenditures by program for a total estimated federal outlay on public works of almost \$27 billion by the early 1940s (about \$425 billion in today's dollars). **(Figure 10)**

¹⁵ Percentages calculated by and from Smith 2006, pp. 88-89, 113-15.

¹⁶ From remarks given at the groundbreaking for California’s Friant Dam, quoted in “Ickes Says Federal Government is Good for California,” *Architect & Engineer*, December, 1939.

¹⁷ See also the list of sources in notes 13 and 14.

FIGURE 10: Public Works Expenditures During the New Deal

(in millions of current dollars, rounded)

<i>Agency*</i>	<i>Grants</i>	<i>Direct</i>	<i>Loans</i>
PWA (1933-41)	3,310		795
WPA (1935-43)	1,085	9,780	
CCC (1933-42)		3,200	
TVA (1933-42)		530	
CWA (1933-34)		800	
FSA (1933-39)	95		425
USHA (1937-39)	125		450
RFC (1933-39)			4,400
REA (1936-39)			225
BPR (1933-39)	1,555		
PBA (1933-39)	175		
<i>Totals</i>	<i>6,345</i>	<i>14,310</i>	<i>6,295</i>
<i>All Public Works</i>	<i>26,900</i>		

This is a low estimate for three reasons: it does not include regular authorizations for the Bureau of Reclamation or Army Corps of Engineers; some totals only go through 1939; and US Office of Government Reports figures appear to be lower than numbers collected by the agencies themselves.

*For full agency names, see Appendix I.

Sources:

PWA - FWA 1941 (should upgrade to 1942); see also PWA 1939

WPA - WPA 1946, table VI, p. 118; see also WPA 1942. Est. 10% grants, 90% direct

CCC - Woods (1964); see also Salmon 1967.

CWA - Schwarz 1984 & Fishback et al 2002

USHA - Leighninger 2007, p 132 and Fishback et al. 2002

TVA - Leighninger 2007, p 112

RFC, FSA, FCA, REA, BPR, PBA - Fishback et al. 2002.

Figures in Fishback et al. 2002 are from U.S. Office of Government Reports by county and state, and are stated in 1967 dollars (but that effect is minor because the dollar remained quite steady from 1935 to 1967).

PWA expenditures are the most complex. It gave out \$1,915M in grants to federal agencies, most of which went to the Bureau of Public Roads and the rest to the Public Buildings Administration. It also gave out \$1,435M in grants and \$795M in loans to non-federal (state & local) projects; the latter were matched roughly 50-50 by state and local governments, for a total of \$1,975M. Hence, the total spending generated by the PWA was \$6,120M.

Thanks to Bob Leighninger, Jason Scott Smith and Price Fishback for answering our questions while we were compiling this table.

New Deal public works left an indelible mark on the American landscape. As Ickes remarked, "It may safely be said, [that] no Administration in our history, perhaps even no two or three Administrations, has wrought in our land physical improvements comparable in worth, variety, and magnitude to those that have been and are being built under the present one."¹⁸ Modern historians echo this sentiment, to wit: "[It was] an era of major achievement in restructuring the landscape—and by extension the politics—of the nation..." (Billington & Jackson 2006, p. 11). Overall, federal public works spending accounted for more than half of all construction in the United States, 1933-38 (Galbraith 1940).

The most visible monuments of the New Deal public works are surely the great dams constructed by the Bureau of Reclamation and Corps of Engineers, with the financial backing of the PWA and RFC. Many of the civic buildings put up at the time are magnificent edifices in their own right, whether built by CWA and WPA workers or by state and local agencies under the auspices of FERA, PWA, or the RFC. But the most extensive constructions of the 1930s were state highways that absorbed one-third of all PWA outlays and the one-half million miles of roads laid down by the WPA. Nor should we forget the trails, picnic areas and forest plantings of the CCC that are so much a part of our parklands that almost no one sees them as artifice (Salmond 1967, Maher 2007).

The majority of public works went into the cities, as courthouses, waterworks, sidewalks, schools, swimming pools, and the like, reflecting the New Deal's emphasis on urban life (NRC 1937). Much of this work consisted of a largely invisible web of water pipes, aqueducts, electric lines and city sewer systems created by the CWA, PWA and WPA (Smith 2006, p. 95, 115). The most famous urban builder in American history, Robert Moses, was largely funded by the New Deal, as New York received far more public works funding than any other state. **(See below, Figure 28)**

At the same time, the New Deal remade rural America. The CCC and SCS left an enormous imprint on farms, including ponds, check dams and windbreaks, not to mention reforestation of abandoned land (Maher 2007, Worster 1979). TVA dams, electricity, and new towns transformed the upper South (Lilienthal 1953, Morgan 1974). Farm-to-market roads reworked the geography of access and unified rural America. The REA brought electricity and co-operative power to distant areas ignored by the private sector (Shields 1952). With renewed federal support, the Bureau of Reclamation and Army Corps of Engineers executed the most ambitious flood control and irrigation projects in history, especially across the Far West (Reisner 1986, Billington & Jackson 2006).

With these infrastructure improvements, the United States leapt into 20th century modernity, at once democratizing automobility, electrification, clean water and flush toilets. Harry Hopkins could fairly claim that, "WPA projects have advanced the standards of living by fifty years. Communities now find themselves in possession of improvements which even in 1929 they would have thought themselves presumptuous to dream of" (Hopkins 1936, p. 184; see also Pisani 2004). The New Deal's modernizations were not completely unprecedented, by any means, and many projects, such as development of the Tennessee Valley or state highways had been planned for years

¹⁸ See note 16.

(Billington & Jackson 2006).¹⁹ But the dramatic expansion of possibilities in the 1930s was truly breath-taking. It was the Progressive Era on steroids.

In all cases, the emphasis was on *public* works: civic uses, public spaces, free roads, public power, and collective infrastructure (Cutler 1985). This is perhaps the most important lesson and legacy of the New Deal: devotion to the Progressive ideal of the public good over private interest. By contrast, FDR viewed the 1920s as an age of debauchery; Tugwell called it a decade of "empty progress" (Leuchtenberg 1963, p. 343).

Federal public works programs were carried out in cooperation with state and local governments (J. Williams 1968). Federal support made local projects put on hold by the Depression feasible once again, but not as a free ride. The PWA, in particular, sought local input into its projects (Leighninger 2007, pp. 36, 206); states and localities contributed roughly half the funds, with over 80% approval of bond measures in support of local contributions (PWA 1939, Smith 2006, p. 98). WPA also worked closely with local agencies, but contributed something closer to 90% of all funds (WPA 1946).

Local designs were favored, making for a wide array of architecture and artwork from region to region. There was no New Deal template, although Art Deco and a stripped down classicism – subsequently dubbed PWA Moderne – were the most popular motifs of the era. Hopkins of the WPA also stressed the importance of working closely with local officials to undertake projects their communities needed and could sponsor (Smith 206, p. 105). **(Figure 11)**

**FIGURE 11: Community Theater, Berkeley, California
an Art Deco WPA Project**



Photograph by Gray Brechin

¹⁹ The 1921 Federal Highway Aid Act and 1925 Rivers and Harbors Act are two key precedents, even in the seemingly lethargic 1920s.

Quick action by the Roosevelt administration during the first New Deal salvaged the housing market. House values had fallen by an average of 24%, 1929 to 1933, and foreclosures were rampant. Building on initiatives begun by the Hoover Administration in 1932, FDR pushed through an expanded Home Owners Loan Act in 1933 and the Federal Housing Act in 1934. The Home Owners Loan Corporation (HOLC) attempted to restructure debt for underwater mortgage holders, but it was not terribly effective in staving off foreclosures (Rose 2009).

The FHA, on the other hand, was extremely effective in bolstering the housing market, by providing federal guarantees to mortgage lenders. Home prices recovered to 1920 peak levels by the mid-1930s. Furthermore, FHA loan activity correlates strongly with regional recovery over the decade (Fishback *et al.* 2002). The Federal National Mortgage Association ("Fannie Mae") was created during the third New Deal to buy up mortgages from lenders, opening up a 'secondary market' in mortgages and channeling more funds into housing (Weiss 1989).

The federal government also funded public housing via the PWA and the United States Housing Act of 1937 (a first in peace time). Housing was a secondary concern for PWA, but the U.S. Housing Authority erected housing for 120,000 families (Leighninger 2007, p. 132). The Resettlement Administration — which morphed into the Farm Security Administration in 1937 — also built housing, including the famous Greenbelt Towns, and farm labor camps (Leighninger 2006). These programs were imbued with high hopes of improving the lives of working people, with innovative designs by some of the country's leading architects and planners (Radford 1996, Hise 1997). They were not meant as throwaways to the unworthy poor, as would happen later.²⁰

4. Education & Culture

New Deal public works agencies demonstrated an unprecedented concern for promoting public education in all of its dimensions, not only as a means of extricating the U.S. economy from the Great Depression but as an initiative indispensable to self-governance. A 1937 WPA report stated flatly “that a democratic government must be established upon the foundation of an intelligent and informed citizenry is an accepted principle.”²¹ In this regard, the New Deal was steeped in the ethos of John Dewey and other Progressive educators (Dewey 1916).

Though it lasted for less than five months, the CWA built or repaired four thousand educational buildings ranging from rural schoolhouses to the University of Pittsburgh's Cathedral of Learning (Rose 1994, p. 64). It employed over 50,000 schoolteachers, many sent to rural school districts that could not afford them (Schwarz 1984). These works accelerated with its successor agency: the WPA constructed 5,900 new schools,

²⁰ Alas, public housing remained the poor cousin of private sector building in the United States. The major public works programs neglected public housing almost completely (Smith 2006, p. 89).

²¹ WPA 1937, p. 57.

renovated 31,300 more, and built additions to 2,170 including auditoriums, libraries, laboratories and shops, gymnasias, and cafeterias. The PWA built 6,656 primary and secondary schools, almost 700 colleges and university buildings, including entire campuses (Leighninger 2007). Altogether, the New Deal agencies accounted for 70% of new schools built in the U.S. in the 1930s (Alter 2006, p. 329). **(Figure 12)**

**Figure 12: Zimmerman Library, University of New Mexico
Constructed with PWA Funds**

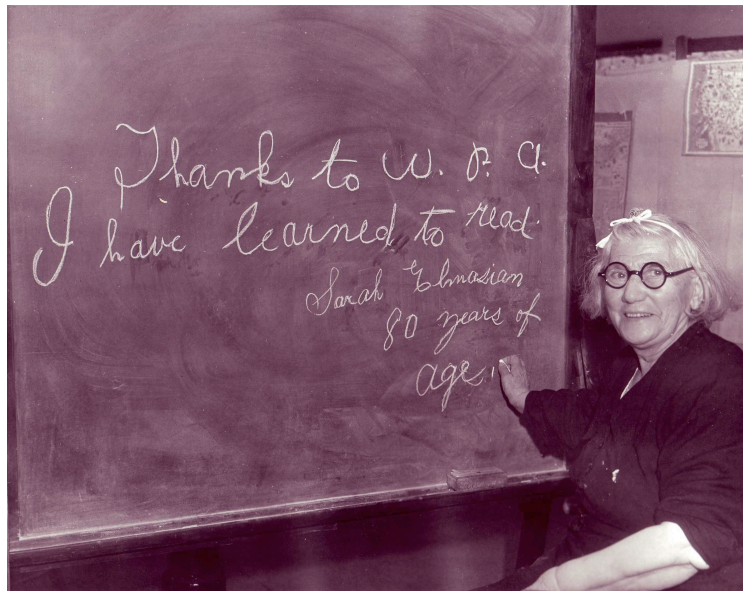


Photograph by Gray Brechin

At the nadir of the depression in 1933, about 188,000 people holding public school teachers' certificates were unemployed. By January 1934, the CWA had hired over 50,000 school teachers, many sent to rural districts that could not afford them. Four years later, the WPA was employing 44,000 men and women to conduct classes for over two million people. By 1937, these classes had lifted an estimated 700,000 Americans out of functional illiteracy (WPA 1937, pp. 56-58). CCC "boys" — many of them illiterate — received education via WPA-run extension classes or teachers assigned to their camps. **(Figure 13)**

The WPA also offered free classes throughout the country in music, art, dramatics, handicrafts, practical science, and vocational fields. It provided teachers and extension classes at all levels for men enlisted in the CCC and operated almost 1800 nursery schools. When workers demanded education relevant to their own situations, especially after the passage of the Wagner Labor Relations Act, the WPA created courses "intended to give the worker an understanding of the basic facts of economics affecting the worker, as well as the history and background of labor movements in America" (WPA 1937, pp. 56-58).

FIGURE 13: Graduate of WPA Literacy Class



Source: National Archives and Records Administration

Not only did New Deal public works programs upgrade the nation's stock of educational buildings but the vast system of all weather farm-to-market roads allowed farm children for the first time to receive adequate educations. The PWA, for example, made a grant of almost \$200,000 to the State of North Carolina to purchase 750 school buses, and the WPA provided bookmobiles (PWA 1939, p. 132). The New Deal agencies also consolidated scattered rural schools into unified structures with modern teaching and recreational facilities.

The CWA included a College Student Aid program to give part-time jobs to struggling students. Spurred by the American Youth Congress and encouraged by Eleanor Roosevelt, the National Youth Administration (NYA) was created as a division of the WPA designed to provide jobs and training for unemployed youth, including high school and college students. The NYA provided over two million young people the opportunity for education and vocational training by the time it was terminated in 1943 (despite FDR's wish that it be made permanent). Through his two years as head of the Texas NYA, teacher and future president Lyndon Baines Johnson developed a lifelong commitment to equal educational opportunity for all Americans.

In addition to schools, the PWA built 105 new public libraries. The WPA added another 140 and enlarged or reconditioned 900 others, providing aid and employees to thousands more. WPA workers assisted in the repair and renovation of some 94 million books and compiled indices of newspapers and historical records still used by researchers today.

Both the PWA and WPA built and enlarged museums and, along with the CWA and CCC, restored historic structures as prominent as the Washington Monument and Statue of Liberty. **(Figure 14)** The WPA provided professionals and interns to organize museum collections and prepare exhibitions. WPA workers conducted the first comprehensive inventories of public records in the Survey of Federal Archives and Survey of State and Local Historic Records, as well as carrying out the Historic American Buildings Survey and the Historic American Landscape and Garden Project. Moreover, the WPA's Index of American Design collected and recorded examples of folk art from throughout the country. The agency sponsored paleontological and archaeological digs, as well.

FIGURE 14: WPA Worker Repairing Statue of Liberty



source: Kennedy & Larkin 2009

Most famously, four units within the WPA — the Federal Writers', Arts, Theater, and Music Projects (collectively known as Federal One) — employed thousands of artists to express their creativity for public benefit, bringing art for the first time to millions of Americans. Moreover, the Treasury Section of Painting and Sculpture and the Treasury Relief Art Program embellished federal buildings from the smallest towns to the largest cities. The ubiquitous murals painted in post offices earned the latter the sobriquet of the People's Art Gallery, reflecting and ennobling the work performed by countless people across the nation as well as regional history and mythology (Park & Markowitz 1984).

Roosevelt's famous fireside chats demonstrated the growing political and educational power of radio. The Federal Communications Act of 1934 set up the Federal Communications Commission (FCC) on the premise that the airwaves belong to the

public. The FCC oversaw an open and systematic allocation of the radio spectrum and forestalled monopolization of the most basic and most modern of communication fields.

The point of all these efforts was to improve the lot of ordinary Americans, bringing them better educational opportunity, access to information, and exposure to the arts. The New Deal was not just about things of asphalt and cement, but matters of the mind and spirit.

5. Government & Politics

The greatest institutional legacy of the New Deal is undoubtedly the quantum expansion of the federal government. The federal share of total government spending, including states and localities, rose from 30 to 42% (Wallis 1984, p. 141). Such a jump was unprecedented in peacetime and fundamentally shifted the center of gravity of American federalism.

The speed with which the New Deal broke with the past is astonishing when viewed from today's rule-bound perspective. Roosevelt's team could move so fast to meet immediate needs precisely because there were so few precedents. They made it up as they went along, and a solidly Democratic Congress at first offered little friction (Hopkins 1936, Tugwell 1968).

FDR and his advisors looked back to parallels with the national emergencies of the Civil War and First World War for this unprecedented growth of government powers in a classically liberal (*laissez faire*) political system (Alter 2006). The New Deal, in turn, set the stage for the even greater expansion of federal spending and deficits during the Second World War. Although the war is usually credited with making federal deficit spending legitimate, the New Deal had already made the decisive breakthrough (Scheiber 1966, Patterson 1969).

The Roosevelt generation had been steeped in the ideas of the Progressive Era and FDR greatly admired the activist style of his distant cousin (and his wife's uncle), Progressive-era president Theodore Roosevelt (Alter 2006). The Progressives were the first to advocate for *systematic* government financing of public works, civic planning, and reform in the name of the public good, but they operated chiefly at the level of city government (Reagan 1999). There had been a significant leap in state and local government spending, taxation and debt during the Progressive Era and 1920s, though nothing on the level of the New Deal (Teaford 1984).

At the federal level, Progressives put in place such important initiatives as the Food & Drug Act, Federal Reserve bank, Bureau of Public Roads, and Reclamation Act. But the scale of intervention paled against what took place under Franklin Roosevelt's administration. The New Deal secured federal dominance over the states in the American system for the first time. Simultaneously, it showed great favor toward the cities and their large working class and Democratic voting-rolls. This was not just party favoritism,

however, as the public works programs funded thousands of municipal facilities that strengthened civic governance, such as courthouses and city halls. **(Figure 15)**

**FIGURE 15: New Deal Civic Building
City Hall, Houston, Texas**



Photograph by Richard Walker

The New Deal built on the Progressive tradition of government regulation, as well. It expanded federal powers over radio broadcasting with the Federal Communications Act of 1934, which created the Federal Communications Commission, and saw to the equitable allocation of the radio spectrum. It took charge of the airways with the Civil Aeronautics Act of 1938, which established the independent Civil Aeronautics Authority. In 1940, FDR split the authority into two parts, the Civil Aeronautics Board (CAB) and Civil Aeronautics Administration (later to become the Federal Aviation Administration). The Federal Trade Commission (FTC), created in 1915, had its powers extended over price fixing by the Robinson-Partman Act of 1936 and consumer protection by the Wheeler-Lea Act of 1938, and got a new headquarters in Washington, D.C. **(Figure 16)**

**FIGURE 16: Statue in Front of Federal Trade Commission
"Man Controlling Trade" by Michael Lanz, 1942**

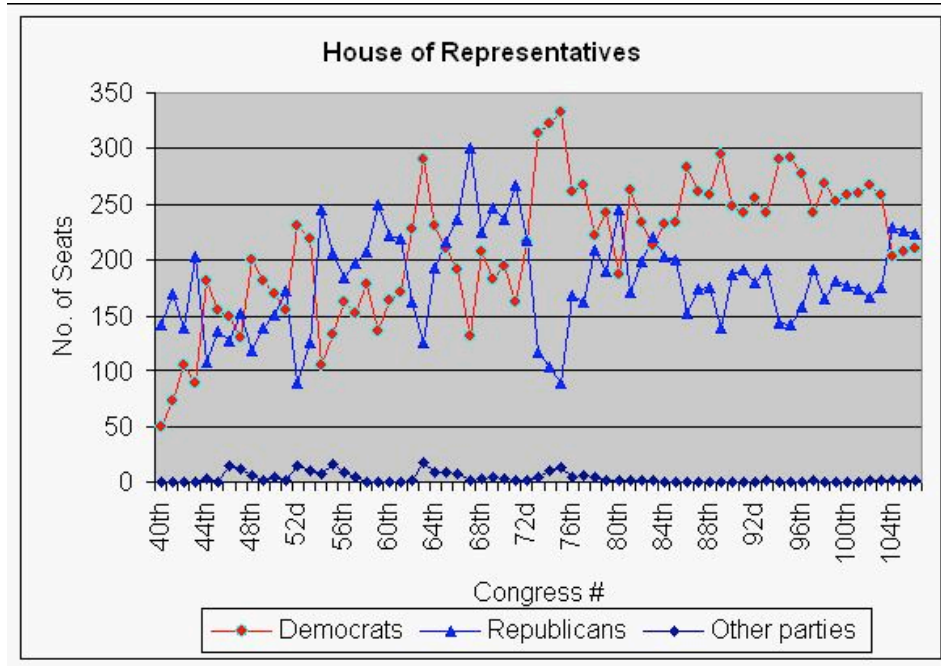


Photograph by Harvey Smith

More generally, the New Deal saved the American form of political liberalism — faith in markets, private property, business, individualism and representative democracy — from the revolutionary alternatives of fascism and communism (Schlesinger 1958, Chafe 1993). Roosevelt revitalized American democracy in three crucial ways.

First of all, he led the Democratic Party back from the wilderness where it had been wandering since the Civil War. No Democrat had won a majority of votes for president since Franklin Pierce! By breaking the Republican domination of national politics, FDR restored a measure of party competition at the federal level in place of a largely plutocratic process of presidential selection. Given new life, the Democrats gained control of Congress in the 1930s and, except for very brief reversals in 1940 and 1952, remained in the majority until the 1990s. **(Figure 17)**

**FIGURE 17: Democratic Party Majority, House of Representatives, 1867-2001
(40th to 106th Congress)**



source: Clerk of the House of Representatives, graph from:
<http://arts.bev.net/roperldavid/politics/congress.htm>

Even more dramatically, the New Deal gave the working class a seat at the table of national government. Although the New Deal’s recognition of the right to form unions was initially seen as a kind of corporatism and fair play, the powerful opposition that coalesced during FDR’s first term made him turn increasingly to the working class for support for his policies and reelection (Rauchway 2008, Downey 2009). Conversely, the workers took to him and the New Deal in the face of capital's abject failure to deliver on jobs in the Depression (Cohen 1990, Lichtenstein 2002). The result was that the election of 1936 generated the greatest landslide in American history up to that time.

Lastly, the New Deal emphasized the commonwealth over private gain, setting a new standard for public service, public welfare, and concern for all the people, including the losers in the great competitive race. It may not have come up to the mark later set by European social democracy and it had many shortcomings, but the Rooseveltian revolution ameliorated the worst of American private greed, distrust of government, and distaste for 'welfare' for the poor – and did so at a time when European democracies were sliding into fascism (Fraser & Gerstle 1989, Amenta 1998, Schivelbusch 2006).

The ruling class, almost to a man (and woman), never acknowledged Roosevelt's achievement; indeed, they hated him for it referring to him as “that man in the White House” and “a traitor to his class” (with Herbert Hoover leading the baying pack). Indeed, many of that class have never stopped hating FDR (Fried 1999). Nevertheless, it should be clear from what has been reviewed here that conservative critics are dead wrong when they argue that the New Deal offered little benefit to the country in its own time (e.g., Powell 2003, Shlaes 2007, Folsom 2008).

Postwar liberals were equally incorrect when they saw the New Deal order as a natural outgrowth of the moderate virtues of American liberalism (e.g. Lilienthal 1953, Schlesinger 1958, Leuchtenberg 1963). Many people at the nadir of the Depression, including such leading liberals as Walter Lippmann, called for temporary dictatorship to force the country back to prosperity, but FDR resisted the temptation (Alter 2006, p. 82).

Nor do we agree with the New Left view that the New Deal was no more than a cover for saving American capitalism (e.g., Bernstein 1967).²² This view sorely underestimates the potential for capitalist revanchism and right-wing fanaticism that is so apparent in our own time, and which might well have taken the country down back roads of reaction in the 1930s. Much less do we accept facile parallels between the New Deal and the fascists in Germany and Italy (e.g., Schivelbusch 2006). While they shared certain aspects of 20th century mass appeal, growing government intervention, and public works, what they clearly did not share was the New Dealers' commitment to democracy, antagonism to the Right, arm's length separation from Big Business, and alienation from the ruling class.

Nonetheless, in order to fully evaluate the achievements of the Roosevelt era, one cannot remain stuck in the 1930s. It is necessary to move on, leaving reactionary ideologues like Amity Shlaes shouting down the corridors of history.

²² To say nothing of the American empire. While Roosevelt was not innocent of complicity in American imperialism, his vision for the world under the United Nations and the rule of the Four Freedoms was remarkably generous by the standards of the Cold War to come (Smith 2003). The U.S. has a long tradition of imperial expansion and domination, which even FDR could not overcome (Nugent 2008).

II. The New Deal's Enduring Legacy

The New Deal succeeded as far more than an emergency recovery and relief operation: it radically changed the face of America. Even though its short-term programs were terminated in the 1940s by a hostile Republican Congress and the exigencies of war, its legacy carried on into the postwar era, helping to undergird the postwar Golden Age of American capitalism (Fraser & Gerstle 1989). Much of it persists to this day.

The best known legacy of the New Deal is Social Security, but there is much more. It survives in the form of specific programs and agencies, from Tennessee Valley Authority to the Federal Trade Commission. It survives as an immense landscape of public works, from dams to playgrounds. Much of the New Deal's legacy is so familiar that it is hardly recognized at all by the general public – or even by historians and other scholars. This is particularly true of public works still extant throughout the country – an indispensable infrastructure hardly acknowledged.

The New Deal changed forever the level of federal government involvement in American economy and society – so much so that many programs boosted by Roosevelt, such as federal support for highways, public education, and airports, were expanded by the more conservative postwar administrations of Truman and Eisenhower (though not, of course, always to good effect). In the 1960s, Lyndon Johnson initiated a host of new programs under the rubric of The Great Society, which many considered a second coming of the New Deal.

After the Sixties, however, a counterrevolution set in. A far-reaching effort was launched by the Reagan administration and its disciples to dismantle the so-called welfare state enacted by the New Deal. Over the last thirty years, the neoconservatives have succeeded in eviscerating much of the regulatory apparatus put in place to control the power of business in the 1930s. They have not succeeded in undoing it all, however, and programs such as old-age security, Medicare, and unemployment insurance still stand.

Nor has the right-wing counterrevolution been able to erase the physical traces of the Roosevelt Era, which lie all around us close at hand. The Living New Deal Project is excavating that astonishing wealth of public works that the men and women put to work by the government in the Depression decade bequeathed to the future.

1. Wartime Mobilization and Postwar Economic Development

The New Deal contributed significantly to preparing the country for the Second World War and to the war effort itself. Long before the Japanese attack on Pearl Harbor, the PWA had allotted just under half a billion dollars to the Army and Navy for military installations, channeling it toward highways, bridges, military posts, and airports, among other things (Smith 2006, p. 217). For its part, the WPA spent a half-billion dollars on defense-related projects before 1940. As General George Marshall stated at that time, "In

the great task of preparing for national defense, the WPA...has proved itself to be an invaluable aid" (Ibid, p. 204).

In the buildup to war, the works programs turned even more sharply toward military purposes. In 1941, WPA had about half a million workers on military projects, while continuing to build up the road and airport systems of the country (Ibid, p. 208). Indeed, four of its ten billion dollars in total outlays came in the last three years of the agency, 1940-43, leading up to and into the war.²³ The WPA also instituted a defense training program for its workers, while thousands of CCC men conditioned in their camps to military regimen transitioned smoothly into the fighting forces. In general, the New Deal experience made it easier to ramp up federal war spending with alacrity after Pearl Harbor.

The New Deal also set the precedent for federal wartime planning agencies, such as the War Production Board (1942), the Office of War Mobilization (1943), and the Office of Price Administration (1942), which were used to redirect industrial production from consumer goods to military uses and to control prices and wages (Galbraith 1952). The Roosevelt Administration had already experimented with price controls under the NRA and AAA in the early 1930s, before these efforts were ruled unconstitutional by the Supreme Court. FDR had established a National Resources Planning Board under his uncle, Frederick Delano (which was dissolved with the coming of the war). And under the federal Reorganization Act of 1939, FDR and his staff had consolidated the WPA, PWA, PBA, BPR, and USHA under a new Federal Works Agency (FWA) and all the security programs, like SSA and FSA, under a new Federal Security Agency (FSA).²⁴

A key contribution to the war effort was abundant hydropower generated along the Columbia, Colorado, Sacramento and Tennessee Rivers, which enabled the United States to produce aircraft faster than the Axis powers by feeding aluminum smelters that supplied the airframe industry (Reisner 1986, White 1991). Unbeknownst to all but a few until August 6, 1945, that energy also enabled the U.S. to step over the nuclear threshold and produce the first atomic bombs (Brechin 1999).

With few constraints on federal spending after the attack on Pearl Harbor, mobilization for war speedily brought industry and employment back up to full capacity — completing the job that the New Deal had begun. American industry was able to outproduce the Axis powers and emerged from the war with two-thirds of the world's industrial capacity (Overy 1996). In the postwar era, the United States continued on the high road of economic expansion, in what many have called the Golden Age of American capitalism (Marglin & Schor 1990).

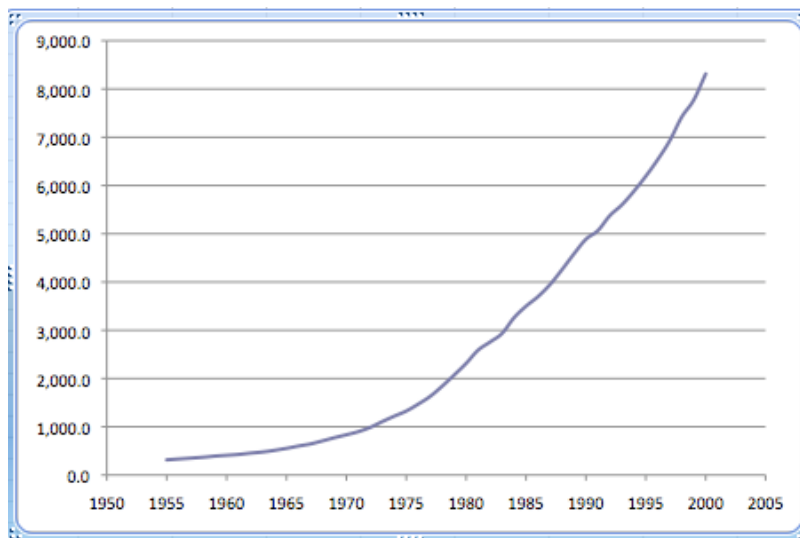
There are at least three major ways in which the New Deal paved the way for the boom times of the 1950s and 60s.

²³ Alas, under Rex Nichol森, the WPA built the Japanese internment centers in 1942, one of the great stains on the Roosevelt Administration's reputation.

²⁴ At this time, the WPA's name was changed to Works *Projects* Administration. The PWA ended in 1942 and the WPA and CCC were terminated in 1943.

The first was the strong demand for American goods created by higher average incomes for most of the working and farming classes. These were the glory days of Sears, supermarkets, and station wagons, all of which could only flourish with a mass market (Cohen 2003, Beauregard 2006). Some see the prosperous 1950s as the ultimate triumph of 'Fordism': the assembly line plus higher wages to workers in oligopolistic corporations (Henry Ford's famous five-dollar day). But postwar growth has everything to do with the general productivity of American industry (not just assembly line production) and the distributional effects of the New Deal (on the latter, see section II.3). **(Figure 18)**

FIGURE 18: US Income Growth, 1955-2000



source: Bureau of Economic Analysis, US Department of Commerce, bea.gov, c. 9/2001

A second beneficial effect of the New Deal was the way federally-financed infrastructure underwrote postwar prosperity. Harold Ickes was right when he declared that, "Public works represent capital investments" (quoted in Smith 2006, p. 44). Private production, investment, and consumption regularly piggybacked upon the overhead shouldered by New Deal. As Robert Leighninger has put it, "The New Deal...contributed a tremendous amount to the nation's public life in the form of physical and cultural infrastructure. That investment paid dividends for many decades thereafter and in many cases is still paying back" (2007, p. 218).

A third economic legacy of the New Deal was the postwar boom across much of the West, spreading prosperity across the last undeveloped parts of the country. This is undoubtedly due to the beneficial effects of huge infrastructure investments in dams, irrigation and electrification and in improved highways and roads (Lowitt 1984). Most Western states received a disproportionate share of New Deal spending per capita

(Fishback et al. 2001, 2002; Smith 2006, Table 4.4, pp. 116-17). (Figure 19) To this must be added such benefits as the park improvements by the CCC that attracted tourists during the postwar vacation and travel boom (Maher 2007). Ironically, the conservative Sunbelt cities of the Southwest are largely the unwitting creations of liberal New Deal investment (Wiley & Gottlieb 1982).

**FIGURE 19: New Deal Expenditures by State & Region, 1933-39
(Per capita)**

Table 3
New Deal Funds by Purpose by State

STATE	Per Capita New Deal Spending on:				
	Public Works Grants	Relief Grants	AAA Grants	Loans	Value of Mortgages Insured
NEW ENGLAND					
Connecticut	\$87.5	\$60.3	\$2.1	\$55.0	\$20.1
Maine	98.5	52.2	1.5	109.5	7.9
Massachusetts	122.0	105.8	0.5	56.4	11.6
New Hampshire	83.2	57.4	0.8	23.5	13.7
Rhode Island	103.8	62.1	0.1	50.0	20.2
Vermont	73.0	44.6	2.4	95.9	14.1
MID-ATLANTIC					
Delaware	112.4	57.0	5.6	34.0	27.6
New Jersey	126.2	92.7	0.5	112.8	39.6
New York	159.6	119.0	0.6	96.9	24.8
Pennsylvania	132.5	111.2	1.1	51.0	15.8
EAST NORTH CENTRAL					
Illinois	138.7	102.6	12.7	99.9	20.2
Indiana	117.1	87.6	18.7	74.0	23.0
Michigan	117.0	93.7	5.0	149.9	37.1
Ohio	137.8	115.7	7.5	128.0	25.3
Wisconsin	124.3	94.1	11.5	100.1	12.9
WEST NORTH CENTRAL					
Iowa	74.2	41.7	64.7	86.1	8.9
Kansas	101.9	65.4	81.8	71.4	14.0
Minnesota	126.3	94.4	27.8	69.4	16.0
Missouri	102.4	75.6	20.8	61.1	18.6
Nebraska	121.4	64.1	74.2	114.6	9.4
North Dakota	135.0	87.8	127.7	167.4	5.4
South Dakota	160.2	112.8	100.3	143.6	7.3
SOUTH					
Virginia	86.6	28.9	6.3	43.8	19.8
Alabama	74.7	46.6	19.5	47.8	8.4
Arkansas	85.6	56.1	31.1	64.3	7.5
Florida	113.4	76.7	4.1	66.2	40.0
Georgia	68.5	43.0	18.0	52.6	13.5
Louisiana	85.0	62.6	21.9	106.4	10.1
Mississippi	66.2	39.5	28.0	50.7	8.9
North Carolina	58.1	29.8	17.5	47.5	8.3
South Carolina	108.6	52.6	21.0	68.5	8.4
Texas					
Texas	85.3	44.9	37.4	72.8	18.1
Kentucky	76.8	51.8	17.6	43.6	10.4
Maryland	94.8	56.6	4.2	126.6	27.6
Oklahoma	103.0	72.8	38.5	58.5	13.3
Tennessee	68.0	38.8	14.4	77.2	15.0
West Virginia	108.5	88.3	1.6	42.5	10.3
MOUNTAIN					
Arizona	256.8	103.7	10.6	83.7	36.4
Colorado	160.4	121.9	28.7	76.2	18.1
Idaho	141.0	85.8	46.8	97.2	23.1
Montana	224.1	129.0	72.8	115.1	13.7
Nevada	587.3	104.6	5.3	162.3	55.9
New Mexico	181.8	90.8	23.9	69.5	15.5
Utah	157.1	96.6	13.6	112.7	35.4
Wyoming	218.4	108.0	31.2	132.6	38.3
PACIFIC					
California	132.5	102.7	4.8	144.1	83.0
Oregon	119.1	75.1	16.0	62.9	23.7
Washington	147.9	103.6	16.5	70.2	36.7
Mean	128.4	77.3	23.3	84.3	20.7
Std. Dev.	79.5	27.4	27.9	35.7	14.4

Notes: Per capita New Deal spending in Each State is computed as total spending in the state from 1933 to 1939 divided by the population in 1930. AAA includes payments to farmers under the Agricultural Adjustment Act, including rental and benefit payments in 1934 and 1935 and Conservation payments in 1936 and 1937. Relief includes spending under the Federal Emergency Relief Administration, the Civil Works Administration, the Works Projects Administration, and the social security programs for old-age assistance, aid to the blind, and aid to dependent children. Public works includes expenditures under the Public Works Administration, the Public Buildings Administration, and the Public Roads Administration. The loans include the Reconstruction Finance Corporation (includes loans made after February 2, 1932), Farm Security Administration, Farm Credit Administration, Home Owners' Loan Corporation, Disaster Loan Corporation, U.S. Housing Authority, the Public Works Administration, and the Rural Electrification Administration.

Sources: See Data Appendix.

Source: Fishback et al, 2001, Table 3
Data from U.S. Office of Government Reports

The South did not fare as well, but the PWA spent disproportionately on southern states (Smith 2006, table 4.4). Again, dams, roads, and waterworks bulk large. The greater Tennessee Valley got the TVA and cheap electricity, which triggered an industrial surge in that region (Delfino & Gillespie 2008). The Southern wood industry revived on the basis of millions of trees planted by the CCC on exhausted cotton lands, as the South broke loose from the yoke of cotton sharecropping (Schulman 1994). Parts of the South

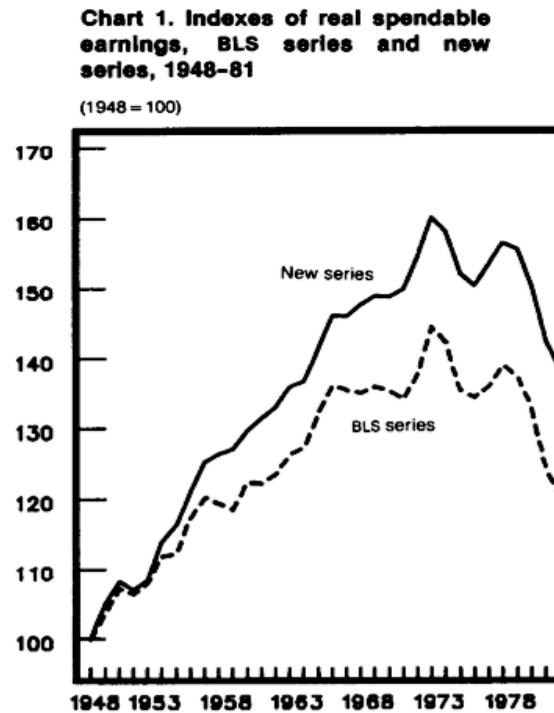
would also benefit from better retirement incomes, thanks to Social Security and union benefits, which spurred the buildup of whole communities from Florida to Arkansas.²⁵

Finally, the New Deal made macro-economic management a staple of federal government responsibilities. Even though it was done in an *ad hoc* way, Roosevelt's willingness to spend freely to restore prosperity was the right thing to do, as proven by John Maynard Keynes (1936). Keynes even wrote FDR to urge him to abandon fiscal orthodoxy after the budget balancing of 1936. The banking reforms of the New Deal strengthened the Federal Reserve Bank, which would not repeat the deflationary debacle of 1929-33. By 1970, President Nixon could declare, without irony, that, "We are all Keynesians now."

2. Employment and Income

World War II and the long postwar boom put millions of people to work and the United States enjoyed nearly full employment for a generation (Marglin & Schor 1990, Brenner 2006).²⁶ Along with jobs, the postwar Golden Age delivered rising wages and benefits for the vast majority of workers through the 1960s. (Figure 20)

FIGURE 20: US Wage Rates, 1947-81



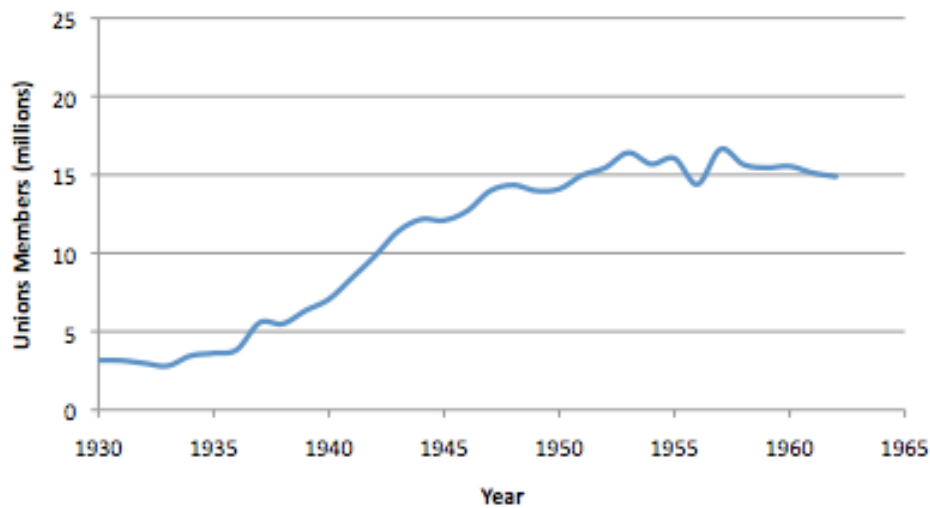
source: Weisskopf 1984

²⁵ The military buildup of the war and Cold War had a profound effect on the South and West as well, further driving the shift to the Sunbelt (Wiley & Gottlieb 1982, Nash 1985, Markusen et al. 1992).

²⁶ A sharp rise in unemployment c. 1949 was quickly overridden by continued growth. Significant unemployment did not return until the recession of the early 1970s.

A key to mass improvement in wages and incomes was the rough accord between business and workers that allowed the latter to share in rising total income as long as profits remained buoyant (Brenner 2006). That accord was not just a natural result of sustained growth, but was brought about by the mass unionization of workers in the 1930s and during the war. Union membership rose sharply in 1937. It peaked in the late 1950s. **(Figure 21)** This brought an unprecedented balance of power between workers and employers, and allowed an unprecedented improvement in the condition of the working class in America.

FIGURE 21: U.S. Union Membership, 1930-1962



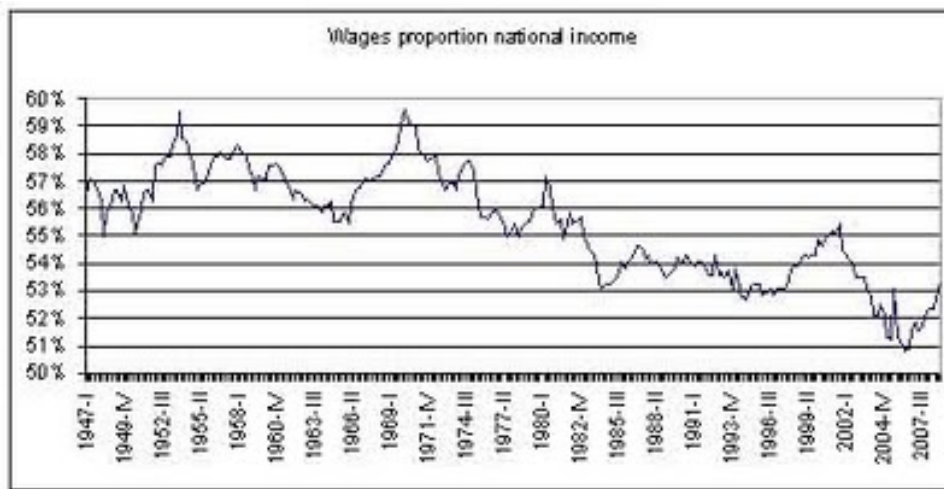
Source: Troy 1965

The unions' achievement would have been unthinkable without the labor law reforms of the New Deal: federal acknowledgement of the right to unionize and rules of collective bargaining under the NLRA. Building on that legal basis, industrial unions finally moved to the forefront of labor organizing, as they gained traction in the key sectors of manufacturing: steel, rubber, autos, chemicals, and white goods (Lichtenstein 2002). From there, the demonstration effect altered the whole structure of wages across the country in almost every sector — not to mention giving workers a sense of dignity and new protections in the workplace (Freeman & Medoff 1984).

Meanwhile, the financial collapse of 1929-1932 had the effect of deflating the wealth of the super-rich, and the stock market would remain calm and flat until the 1970s. Wealth redistribution would have been greater if Roosevelt's 1935 tax reform efforts had truly managed to "soak the rich" as promised, but Congressional Republicans beat back the unkindest cuts (Conkin 1975, Leff 1984). Price controls during World War II kept a lid on corporate profits and corporate tax rates were relatively high in the postwar era.

Altogether these effects, combined with rising union power, dramatically improved income and wealth distribution, leaving the country more egalitarian in 1950 than it had been for a century (Phillips 2002). One way of illustrating this is how much labor's share of national income rose at the expense of capital. **(Figure 22)**

FIGURE 22: Wage Share in US National Income



Source: graph from <http://www.permanentrevolution.net/entry/2629>
 Data from Bureau Economic Analysis, table 1.12

Farm family incomes also rose with price stabilization under the New Deal regime established by the reconstituted AAA and kept aloft by an economy that demanded ever more food and fiber. Although no longer dominant, the rural and small town population was still large enough to act as a further pillar of prosperity. This effect would have been greater still had New Deal labor laws not excluded farm workers because of Dixiecrat opposition to the Wagner Act (Conkin 2008).²⁷

Growth of household income for the working class and farmers translated into rising living standards that encompassed widespread homeownership, car ownership, and leisure time activities. While not everyone shared in the prosperity — the Great Society made a noble effort to bring the remaining poor whites and African-Americans into the fold — postwar renewal still represented a major step forward in the welfare of the mass of Americans. The proliferation of cars, televisions, washing machines and other consumer durables made the "American Way of Life" the envy of the world (Beauregard 2006).

²⁷ The active farm population dwindled rapidly after the war as productivity rose, farms consolidated and young people moved to jobs in the cities. After the farm crisis of the 1970s, the rural sector would become less of a factor in national income accounts.

Although Americans have always been mass consumers (a fact remarked upon as early as DeTocqueville), the postwar era was certainly a golden age of consumerism. It not only filled up homes with wondrous new products, it spawned unprecedented retail empires and made advertising into a major industry of its own (Tedlow 1990, Marchand 1985). Little recognized is the role of New Deal programs in systematically urging modern consumer habits upon the American people (Cohen 2003).

This was also the era in which the Great American Middle Class came into its own, thanks to rising prosperity among ordinary workers. Ordinary Americans had always fancied themselves as "middle class" if they manage a sufficient income to buy a measure of *petit bourgeois* respectability. But the Golden Age extended middle class status far down the social ladder, taking in all but the lowest quartile, and especially those who could now own their own homes thanks to the New Deal housing finance reforms and postwar veterans' benefits (Davis 1986). Unfortunately, this achievement was blighted by the racial strictures on FHA-guaranteed loans, which benefitted White workers gaining their piece of the American Dream but excluded African-Americans (Freund 2007).

The wage accord between labor and management was a fragile thing, however, and not the happy equilibrium of a new age of capitalism that some have fancied. The corporations always chafed against the power of the unions and the political right sought ways to undermine them from the outset. Labor's biggest setback followed almost immediately after Roosevelt's death: the Taft-Hartley Act of 1947 outlawed secondary boycotts and flying pickets and freed states to impose 'right to work' laws which became the norm throughout the South and Southwest. The counter-revolution against the New Deal from above had begun. It accelerated with the McCarthy era and the downturn of the late 1950s when big companies began fighting back against industry-wide strikes in autos, steel, and meatpacking (Davis 1986, Moody 1989, Brenner 2006).

Wages suffered substantially with the economic crisis of the early 1970s and the concomitant fall in profits. That recession triggered a hefty round of inflation that undercut real wages (Brenner 2006). The full assault on unions came during the Reagan era (Davis 1986, Greenhouse 2008). Combined with the massive deindustrialization of the early 1980s, unionization began its long decline from 35 to 10% of the civilian workforce. Labor militancy fell off drastically, and the very term "working class" practically disappeared from popular discourse (Zweig 2000).

3. Public Works and Housing

The New Deal emergency public works programs, created to fight the Depression, did not survive the Second World War. The WPA, PWA and CCC were terminated by 1943. The various alphabet agencies had already been consolidated in 1939 under the Federal Works Administration (FWA), which was finally disbanded in 1949; its remnants morphed into the General Services Administration (GSA), which still exists to manage federal buildings. Other federal builders—the Tennessee Valley Authority, Bureau of Reclamation, Bureau of Public Roads and Army Corps of Engineers— continued to operate, all having grown immensely larger because of the New Deal.

If the emergency agencies ceased to exist, their many constructions remained in place. New Deal public works were as well built as they were extensive, and the tens of thousands of buildings, highways, waterworks, and other material objects constructed during the Thirties remained in service throughout the postwar era (indeed, the vast majority remain in use today). They played a decisive role in underwriting the prosperity of postwar America – a little recognized aspect of the New Deal legacy. America ran on New Deal electricity, drank New Deal water, flushed wastes down New Deal sewers, administered local government in New Deal city halls, settled cases in New Deal courthouses, drove down New Deal roads, and traveled through New Deal tunnels. **(Figure 23)**

FIGURE 23: Grand Coulee Dam, Still at Work



source: <http://3dparks.wr.usgs.gov/grandcoulee/html/gc1240.htm>

Unfortunately, no one has yet attempted to inventory the extent of all New Deal public works, let alone their impact on the country throughout the rest of the century. There have been some noble efforts to provide an adequate picture of the era's contribution to

long-term public investment, notably by Robert Leighninger (2007) and Jason Scott Smith (2007), but they still fall short of the comprehensive evaluation that is needed.

By contrast, federal spending during World War II did not add much in the way of civil infrastructure. Indeed, the war allowed much of the country's public capital, such as trolley systems and city streets, to deteriorate for lack of maintenance and investment. Of course, the war profoundly altered the American landscape in other ways, especially the construction of thousands of military installations across the country and hundreds of new factories paid for by the federal government that were subsequently turned over to private corporations (Lewis 2008).

New Deal public works served economic growth in everything from production and transport to government function and household consumption. As Smith (2006, p. 22) puts it: "New Deal public works are better understood...as a strikingly effective method of state-sponsored economic development."²⁸ In fact, the necessity of infrastructural investment as foundational for general economic development would become a truism in development theory after the war, in part thanks to the New Deal (e.g., Hirschman 1958). This is true even if ardent New Dealers like Lilienthal (1953) exaggerated the ease of transferring the American model directly to the Third World. While development turned out to be more recalcitrant than American liberals imagined, infrastructure remains an essential foundation for development in today's fastest-developing countries from China to India. Quantifying the economic effects of infrastructure investment is, however, extremely difficult, and no one has done it for the New Deal public works.

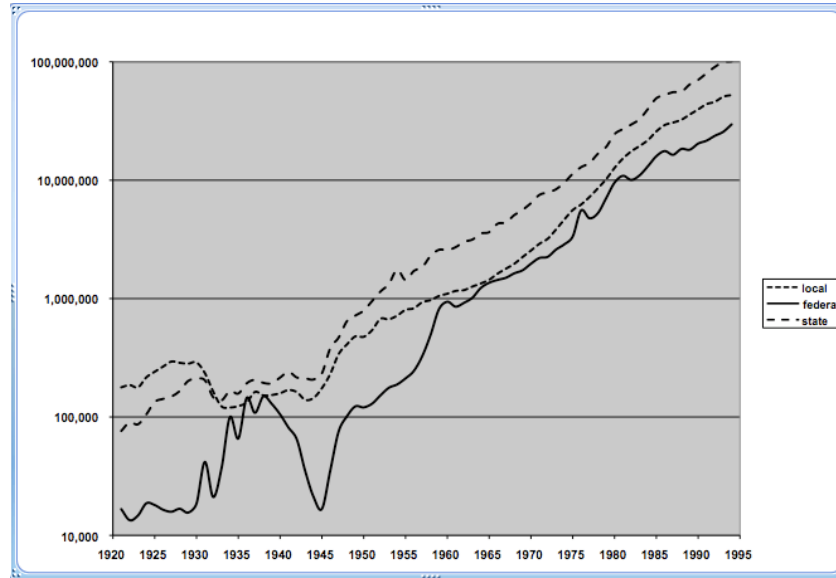
The New Deal put large-scale infrastructure spending high on the agenda of American government, as a means to create jobs, promote economic development, and stimulate consumption, setting the stage for massive postwar investments in dams, highways and schools. One clear example of this change in national outlook is the way the Roosevelt administration transformed the Bureau of Reclamation and the Army Corps of Engineers from reluctant and underfunded builders to what critics came to call "the national beavers" (Reisner 1986, cf. Billington & Jackson 2006).

The postwar interstate freeway system also grew out of the New Deal. The Bureau of Public Roads first bruited the idea in 1939, and the BPR, Federal Works Administration, and War and Navy Departments issued the first version of a plan for *Highways for National Defense* in 1941 (Smith, 2006, p. 207). The massive roadway construction of the New Deal paved the way for the logic of federal 90-10 cost sharing in the 1956 Highway Act, which made the Interstate Highway system a reality (Seely 1987, Johnson 2002; Smith 2006, p. 251). **(Figure 24)**

²⁸ Smith (2006, p. 4) adds: "I look at [New Deal public works programs] as important, wide-ranging investment in national infrastructure, rich in significance for understanding the many changes that occurred in government policy, business interests, and organized labor during this period."

FIGURE 24: Government Spending on Highways, 1920-1995

(logarithmic scale and inflation adjusted, 1982=100)



Source: Federal Highway Administration, tables LGF-201, SF-201 and FA-205A

WPA surveyors also mapped underground infrastructure in preparation for urban subways such as San Francisco's BART. Meanwhile, the federal government continued to pour money into airport construction through the FAA (Champie 1973). All of this fueled the transformation from rail and streetcars to the airways and highways.

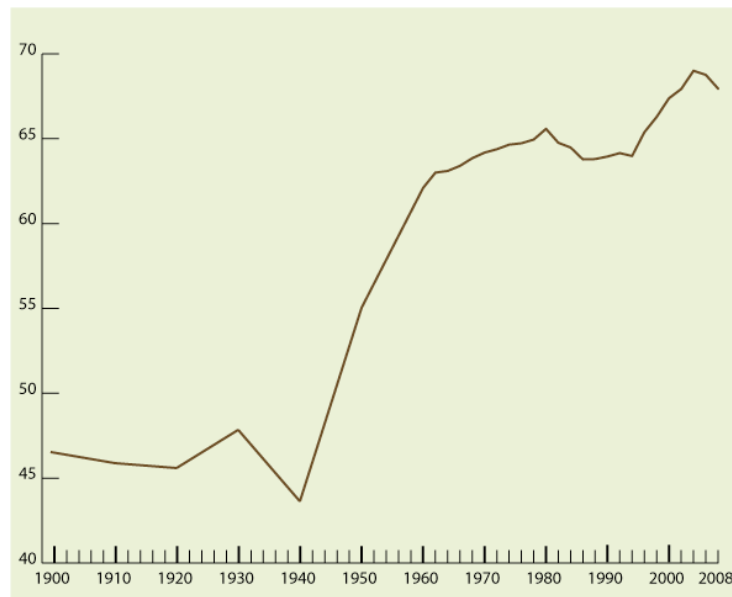
The geographic impact of the New Deal is nowhere more apparent than in the transformation of U.S. cities. Federal aid propelled the great suburban boom of the postwar decade, shaping what later commentators would call "the exploding metropolis". Suburbia has many roots, including landscape ideals, the love of the single-family house, industrial decentralization, and the evolution of large-scale building (Walker 1981, Lewis 2004, Beauregard 2006). Nevertheless, three economic conditions were decisive for the massive home-building campaign around older city cores in the 1950s and 1960s. The first was general economic prosperity, including plentiful investment capital and satisfactory incomes for the mass of middle class Americans. The second was highway building that encouraged the full flood of the automotive age. The postwar role of the New Deal on these two fronts has already been mentioned.

The third key to postwar suburbia's unparalleled success was New Deal housing policy. The set of reforms in housing finance put together in the early Thirties was instrumental in creating a flush mortgage market that could be drawn upon by both builders and buyers of houses. The FHA and its mortgage guarantees are usually credited for the stimulus, but other New Deal reforms initially designed to extricate the nation from the

Depression set the stage for the boom after it, including the rejuvenated Savings and Loan Associations backed by the Federal Savings and Loan Insurance Corporation (FSLIC), thriving banks guaranteed by FDIC, the separation of banking sectors that kept savings recirculating in local housing markets, and the secondary mortgage system backed by Fannie Mae (FNMA). On top of this, the Veterans Act of 1944 (GI Bill) provided easy credit (VA loans) for returning servicemen (Gelfand 1975, Walker 1981, Weiss 1984).

However experimental and patchwork they may have been when first devised to fight the Depression, New Deal initiatives supported a fountain of credit flowing into the housing sector after the war. Never before could so many families of modest means afford their own home (**Figure 25**). Never before did so many builders and developers have such ready access to credit to build and sell houses, now offered almost exclusively in large tracts. Despite many telling criticisms of suburban sprawl, it unquestionably offered millions of ordinary people a better life outside the old cities. Suburbia became central to the definition of the American Way of Life and entry into the middle class during the second half of the 20th century (Beauregard 2006).

FIGURE 25: U.S. Homeownership, 1900-2008



Source: (for 1900-1960, U.S. Census Bureau, Historical Census of Housing tables, decennial data; for 1960-2008, U.S. Census Bureau, Housing Vacancies and Homeownership Survey, "Table 5. Homeownership Rates for the United States: 1968 to 2008," quarterly data, averaged annually.)

source: graph @ <http://blsciblogs.baruch.cuny.edu/luc/2009/11/homeownership-good-for-you-better-for-me/>. Data from US Census of Housing.

The economic triumph of suburbanization does not mean that the American suburban dream of the 1950s was the finest expression of human aspirations (Beauregard 2006).

Nor does can one forgive the underlying racism that excluded most people of color from enjoying the benefits of postwar suburbia (Freund 2007). Moreover, perverted forms of urban renewal, transportation, and public housing contributed to the decline of the central cities after the war. Similarly, New Deal slum clearance and public housing began with the best of intentions in the Housing Act of 1936, but were twisted beyond recognition by the equivalent of Taft-Hartley for housing: the 1949 and 1954 housing and urban renewal acts. Employing the power of eminent domain, urban renewal was quickly redubbed “Negro removal” by its victims as it destroyed thousands of homes, displaced tens of thousands of people, and rendered formerly vibrant ethnic neighborhoods unlivable (Weiss 1980, Radford 1996, Johnson 2002).

4. Education & Culture

The New Deal set in motion changes in American education that were essential to post-war prosperity as well as epic advances in science and the arts. It did so with such momentum that many of its innovations continue to the present. Thousands of schools and educational buildings put up during the 1930s are still in use today all across the United States. The National Youth Administration provided an enduring model for subsequent federal aid for students and work-study programs. The Roosevelt administration delivered on what Robert Leighninger (2006) has called long-range investment in both physical and *cultural* infrastructure – which has returned the investment with compound interest.

Roosevelt's commitment to education did not end with the emergency programs of the 1930s. He envisioned much more. In his 1944 State of the Union address, FDR proposed a Second Bill of Rights, insisting that “necessitous men are not free men.” Prominent among those economic entitlements was the right to a good education for all citizens. The Omnibus Servicemen’s Readjustment Act later that year (commonly known as the G.I. Bill of Rights) was a first step toward realizing Roosevelt's dream. It provided an unprecedented program of financial assistance for higher education to young men and women coming back from the war. Largely because of the G.I. Bill, the years following the war witnessed a dramatic surge in college enrollment, particularly in the public universities, and a concomitant physical expansion of campuses to accommodate the demand (Douglass 2000b). **(Figure 26)**

FIGURE 26: Veterans Enrolled at Purdue under G.I. Bill, 1940s



source: http://www.purdue.edu/president/president_message/November_2009.html

So popular was the G.I. Bill of Rights that it served as a template for subsequent aid to veterans' education. In various reiterations, it has been reauthorized by Congress to the present. Indeed, as tuition even at public colleges and universities soars and lacking conscription, such federal aid now serves as a primary inducement for enlistment in the armed forces by youth who could not otherwise afford a college education, which, Roosevelt believed, should be universally available.

The impetus carried on into the Eisenhower years. The National Defense Education Act of 1958 generously increased federal aid to educational institutions at all levels, especially in mathematics and sciences. The NDEA was passed in response to the Soviet launch of Sputnik and is usually seen as a product of the Cold War, but the echo of the New Deal is there, as well.

Many of those who had worked in the Roosevelt administration carried the communitarian ethos of the New Deal and its commitment to equal educational opportunities into succeeding decades. Upon signing the Higher Education Act of 1965, President Lyndon Johnson recalled his years of teaching and directing the Texas division of the National Youth Administration:

I shall never forget the faces of the boys and the girls in that little Welhausen Mexican School, and I remember even yet the pain of realizing and knowing then that college was closed to practically every one of those children because they were too poor. And I think it was then that I made up my mind that this nation could never rest while the door to knowledge remained closed to any

American.²⁹

The 1965 act created low-interest loans and grants to students, increased federal assistance to colleges and universities, and established a National Teachers Corps to improve instruction in low-income elementary and high schools. As with the G.I. Bill, Congress has repeatedly reauthorized the Higher Education Act.

Although the New Deal's unprecedented patronage of theater, writing, music, and visual arts died with the WPA in 1943, that legacy lives on in innumerable works of art that still enliven public places — most famously the murals and sculptures still to be seen in post offices and other federal buildings. Far less known is the legacy of the Federal Music Project (Flynn 2008). Its director, Dr. Nikolai Sokoloff, created or nurtured symphony orchestras in thirty-eight U.S. cities, many of which are still performing. The project also supported popular music with recordings and transcriptions, endowing subsequent generations with the songs of Woody Guthrie, Jenny Vincent, and Pete Seeger. An unexpected contribution to popular music were the New Deal housing projects that provided childhood homes for the impoverished families of two of America's most famous postwar singers: Elvis Presley (the WPA Lauderdale Housing Courts in East Memphis) and Johnny Cash (the Dyess Colony resettlement project in Arkansas).

The National Endowments for Arts and Humanities were both created in 1965 as components of Johnson's Great Society and can be seen as revivals of New Deal ideals. National Public Radio, too, was created in 1967 and the Public Broadcasting Service in 1970 to provide the public with educational content unavailable through commercial mass media. Like the New Deal arts projects, all four agencies have repeatedly run afoul of conservatives who have charged them with funding subversion, divisiveness, and immorality. Yet their contribution to public life and enlightenment has been enormous (Engelman 1996).

The New Deal's equitable allocation of the AM radio spectrum carried on to the immediate postwar treatment of the later FM spectrum (despite attempts by existing broadcasters to derail FM radio). The FCC introduced the Fairness Doctrine in 1949, whose spirit was very much that of the New Deal. It required broadcasters to educate the public by presenting controversial issues in what the FCC deemed a fair and honest manner. Media critics often date the rise of stridently right-wing talk radio and television from the abolition of the Fairness Doctrine and other dismantling of regulations by President Reagan's FCC in 1987, as well as cutbacks in support for public broadcasting.

Another echo of the New Deal was the Comprehensive Employment and Training Act enacted under President Nixon in 1973 and enlarged by President Jimmy Carter. Largely enacted in response to civil unrest and recession, CETA was modeled on the WPA as a means to provide work and job-training for the disadvantaged and long-time unemployed. It did include a significant arts component, however, which has been credited with the renaissance of urban mural art and political posters in the 1970s, during which time the aging artists of the 1930s passed their skills and political convictions on to

²⁹ www.lbjlib.utexas.edu/johnson/lbjforkids/edu_whca370-text.shtm

a younger generation angered by class and racial disparities (Drescher 1998). CETA's public service jobs and the political edginess of the art that it produced helped to kill it in the conservative backlash that followed Ronald Reagan's election.

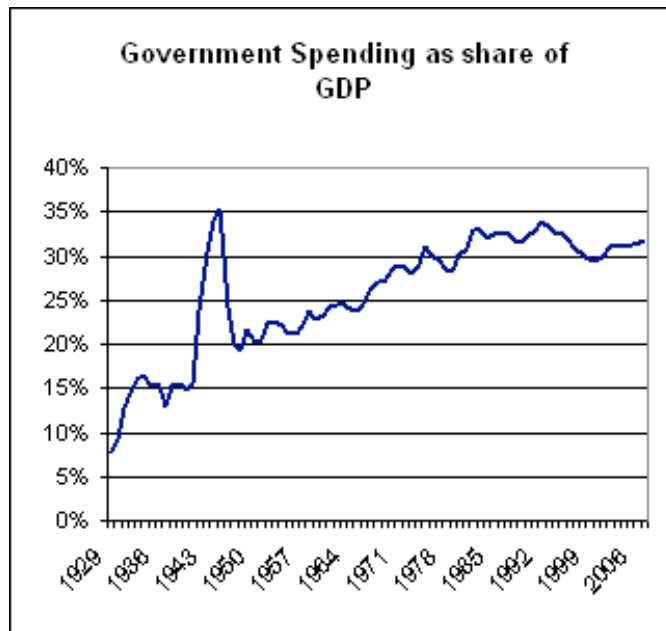
5. Government and Politics

It became apparent after the war that Roosevelt's New Deal and the demands of the Second World War had permanently transformed American federalism. A new era of government had dawned. Never before had the central government played such an overwhelming role. State and local governments were permanently subordinated in a way the authors of the U.S. Constitution – itself a centralizing document – could barely have imagined. In popular (and scholarly) consciousness, the new level of federal funding and authority has most often been attributed to the war alone. Yet it was the New Deal that paved the way for the era of federal dominance (Scheiber 1966, Brinkley 1995). As William Leuchtenberg (1963, p. 336) put it, "The New Deal, however conservative it was in some respects and however much it owed to the past, marked a radical new departure".

One index of the change was the way government spending as a share of GDP continued to rise along the trajectory established in the New Deal – with World War II a clear anomaly. **(Figure 27)**

Whether under the rubric of the Cold War, the Welfare State, or the Great Society, federal powers continued to grow. Even the conservative Eisenhower administration of the 1950s did not substantially alter that trajectory, as indicated by extension of the Social Security Act, the Urban Renewal Act of 1954, the Federal Highway Act of 1956, and water resource project acts, among other things (Johnson 2002, Reisner 1986). Eisenhower was dismissive of Republican conservatives who wanted to dismantle the newly-enlarged federal/welfare state.

FIGURE 27: Government Spending as Share of GDP



Source: www.businessweek.com/the_thread/economicsunbound/archives/2008/10/government_spen.html

In fact, the greatest expansion of government came through military spending and the growth of the American empire abroad (Melman 1974). This is a topic for another time, but it should be said that Ike's parting words about the 'military-industrial' complex was less a sign of prescience than a harkening back to an earlier and more peaceful era before America took on the role of protector of the so-called Free World. The New Deal had little of the burden of empire when it was launched, and even on the eve of World War, Roosevelt could envision a United Nations embracing an idealized view of peaceful cooperation (Smith 2003). In the long run, the militarization of state and society would do much to undermine the liberal ideals of the New Deal and the United States in general (Johnson 2004).

Bolstered by a landslide victory in 1964, Lyndon Johnson and the Democrats in Congress were able to launch the so-called Great Society. Inspired by the New Deal's good effect on the Texas of his youth, LBJ sought to extend the benefits of federal largess to the poor and minorities who had been previously left out (Dallek 1991). The Great Society was Johnson's attempt to extend the shelf life of the New Deal, including its ambitious cultural initiatives. He greatly expanded low-income housing programs and federal aid to education, and pushed through Medicare, succeeding where FDR and Truman had failed in getting universal health care support for the elderly. Yet contrary to popular opinion,

the "spendthrift" Democratic regime of the 1960s barely registers on the overall upward trajectory of federal expenditures. **(Figure 27, above)**

Johnson was detested by the same conservatives who deplored the New Deal – though, ironically, he and the Democrats were undone by the war in Vietnam, which the right-wing always fervently supported. The left also came to hate Johnson, disparaging the Great Society for its mere liberalism while condemning the war and U.S. foreign policy. The result is that Johnson domestic achievements were sorely neglected until recently (Dallek 1991, Kaplan & Cuciti 1986, Milkis & Mileur 2005).

The transformation of government by the New Deal did not reside only in the level of spending or at the programmatic level. FDR rejuvenated the office of the president beyond anything Teddy Roosevelt or Woodrow Wilson had done, greatly expanding the executive's role in legislation and budgeting, and creating the modern Executive Office. Roosevelt was also the first president to become a master of media projection with his radio broadcasts and Fireside Chats (Leuchtenberg 1963, pp. 327).

The New Deal vastly enlarged the executive branch and the staffs of individual agencies. But, more than this, there was the organizational innovation necessary to carry out New Deal programs like the TVA or PWA, which bequeathed subsequent administrations the bureaucratic means of maintaining a modern state (Amenta 2000). In this, the New Deal vastly expanded the Progressive Era policy of staffing agencies and commissions with engineers and technical experts (Smith 2006, pp. 52, 55ff).

In terms of electoral politics, the New Deal and Roosevelt's personal charisma bequeathed the Democratic Party a generation of political dominance after the war. Despite the popularity of warrior-prince Dwight Eisenhower, the GOP suffered humiliating losses in presidential elections to Truman in 1948, Kennedy in 1960, Johnson in 1964, and Carter in 1976, after Nixon's Watergate debacle. Democrats ruled Congress for most of this era and controlled the legislatures of most of the largest states. World War II did not, as some maintain (e.g., Brinkley 1995), finish off New Deal liberalism. Indeed, the era from FDR to Carter is distinctive as the only time of sustained Democratic control of the White House from the Civil War to the present day. **(See again Figure 17)**

At the same time, business and its conservative allies had to deal with an empowered working class and the enhanced political clout of the unions, mostly allied to the Democratic Party (Galbraith 1967, Lichtenstein 1995). One should not underestimate the impact of working class politics, such as the New Deal unleashed, on the democratic tenor of postwar American life (cf. Collier 1999). On the other hand, the admission of the AFL-CIO and the big union bosses to the circles of power in Washington ultimately had a chilling effect on labor militancy (Davis 1986, Moody 1989).

The Great Depression and postwar regional development broke the back of the old order in the Deep South, paving the way for the Civil Rights movement (Schulman 1991). African-American organizing for equal rights in employment, housing and public life got off the ground during the Thirties, and it accelerated during the Second World War

(Sugrue 2008). Civil Rights did get a boost from the New Deal era, even if FDR was reluctant to tackle racism head on. Eleanor Roosevelt and others around the President were vocal opponents of Jim Crow and advocates for racial equality.

In the Northern cities and college towns, another kind of revolt was taking place in the long decade of the Sixties. A movement of young people, liberated by higher incomes, greater educational opportunities, and job mobility, were keen to throw off the chains of bourgeois respectability (Roszak 1969, Breines 1992). This current moved in parallel with another, more political movement running through Students for a Democratic Society, the civil rights movement, and opposition to the war in Vietnam. Conservatives were, of course, horrified by the breakdown of conventional morality, the loss of control over the young, and the anti-Americanism they saw in the rejection of US imperialism (Ehrenreich 1989, Klatch 1999).

The political and popular triumph of the New Deal provoked a long-term effort by conservatives and the business class (often the same) to restore their lost power. Right-wing opposition was already vocal in the 1930s, with the formation of the Liberty League and the belligerent inquiries of the Congressional Dyas Committee, but the extremists were held at bay by a mobilized working class, Roosevelt's popularity and the anti-fascist left. After the Second World War, they began to have more success.

The Taft-Hartley Act, the Mount Pelerin Society, and the McCarthy Era were all early signs of the conservative counterrevolution. The Right dug in for the long haul, raising funds from big business and wealthy families to launch conservative think-tanks like the Hoover Institution, American Enterprise Institute, and Cato Institute (Phillips-Fein 2009). Neo-conservatives were also busy organizing at the grassroots (McGirr 2002). After many setbacks, particularly the steamrolling of the Goldwater campaign in 1964 and the Nixon disgrace, the New Right would finally triumph with the election of the charismatic Ronald Reagan. With that, the neo-liberal era was launched and the legacy of the New Deal would start to erode (Harvey 2005).

Today, many New Deal programs have been eliminated: the Civilian Aeronautics Board is gone, along with the Glass-Steagall Act's bank firewall, and anti-monopoly limits on radio station ownership. Key regulatory agencies like the NLRB, FCC, SEC and FTC have been gravely weakened. Beyond this, neoliberals have succeeded in inciting hostility to government itself (Block et al. 1987, Edsall & Edsall 1991, Phillips-Fein 2009).

Nevertheless, the conservative counterrevolution has failed to pull down all the institutional pillars of the New Deal so firmly implanted over seventy years ago. The Federal Housing Administration and Federal Deposit Insurance Corporation are still going strong, for example. Presidents Reagan and George W. Bush both set their sights on revising Social Security, but were met with implacable resistance from the millions who depend upon its assistance in old age and disability. The election of Barak Obama in 2008 offered new hope of a revival of the ideals of the Roosevelt era, which have not yet been realized.

III. The New Deal and Its Legacy in California

If today the New Deal legacy is insufficiently recorded and appreciated around the country as a whole, it is even more obscure at the regional level. Most writing on the New Deal focuses on President Roosevelt and politics in Washington, D.C., not on the states and local activities. In California, the achievements of the New Deal seem even more distant in time and space to most people. After all, California was already among the top five states in population and economic output by 1930 and it would, within a generation, become the largest of all, by a considerable margin (Walker 2008). In that leap to the head of the pack and the leader in everything from Hollywood to High Tech, the conventional story of the 1930s and the New Deal seems like no more than a hiccup.

Even historians of California and the West who are sympathetic to the New Deal have underestimated its impact. For example, Richard Lowitt declares, in *The New Deal and the West*, that "... the impact of the New Deal in the state was considerably less than in any other part of the West" (Lowitt 1984, p. 172). This is simply not credible. Then there are those who see the Second World War as the defining moment. For example, Gerald Nash, in *The American West Transformed*, attributes the ascendance of California in the postwar era to the impact of wartime spending, which was tilted toward the Pacific Coast by the war with Japan (Nash 1985, cf. Johnson 1993). But isolating the war in this way doesn't bear scrutiny.

The California case for the New Deal is a pivotal one not only because the Golden State became the leading edge of postwar America but precisely because it does not fit the mold. California did not have the high-profile New Deal politicians of New York nor the symbolic devastation of the Dust Bowl of the early 1930s. Then, in the 1940s, the Pacific War seems to have overwhelmed all other influences. Nonetheless, the New Deal did play a major role in California's rise to the top. It injected funds during the worst of the Depression years, built vast amounts of essential infrastructure, profoundly altered the political climate in the West, and helped inspire the postwar buildup of schools and universities, among many other things.

If all the World War II bases in California are witness to the war's impact, then equally so are the thousands of remaining New Deal public works scattered across the Golden State. But there is much more than physical evidence to support the view that California benefitted hugely from the Roosevelt legacy throughout the postwar era. The goal of the Living New Deal project and of this essay is to bring that era and its good works back into the sunlight, and to bookmark them in public consciousness.

1. Economic Recovery & Development

Like the rest of the country, California was hit hard by the Great Depression. There are no figures for state output at the time but a reasonable proxy is tax collections. Federal revenues collected in California fell from \$149 million in 1930 to \$76 million in 1932 (over half), then rebounded to \$152 million in 1935 and more than doubled to \$316 million in 1938. There was only a small decline from the recession in 1939, after which federal revenues more than redoubled to \$755 million by 1942. State revenues fell less dramatically from \$115 million in 1931 to \$99 million in 1933, then bounced back to double that figure, \$195 million, by 1936. Again, a slight downturn shows up from 1938 to 1939 and by 1942 revenues were twice the level of 1935. **(Figure 48, below)**

Since California was one of the largest states in the union, the New Deal pumped a great deal of federal money into the state. As Kevin Starr (1996, p. 275) observes, "...the federal government, operating through its established agencies and emergency programs, initiated in California during the 1930s an epic of construction without precedent in the history of the state." California took fifth place for WPA spending, 1933-42 and averaged over 100,000 workers employed by that agency (WPA, 1942, WPA 1946, Table II, pp. 110-11). **(Figure 28)**

FIGURE 28: Total Expenditures by Works Progress Administration, Top Five States, 1933-42

1. New York	\$1,358,078,431
2. Pennsylvania	980,434,907
3. Illinois	763,908,875
4. Ohio	738,912,212
5. California	529,953,996

Source: WPA 1942

Total New Deal grants in California for public works for the years 1933-39 came to over \$750 million; relief grants in the same period came to over \$580 million; and loans by all programs, almost \$820 million. Adding the small amount of agricultural grants — roughly \$27 million — New Deal grants up to 1939 total a robust \$1.38 billion and all injections of federal money amount to \$2.2 billion (Fishback et al. 2001, table 3).³⁰ **See also Figure 19, above)**

³⁰ These figures are a low estimate of total New Deal spending in California. Not only do they end in 1939, but they derive from the U.S. Office of Government Reports, which tended to have lower estimates than federal figures for New Deal programs.

Among the New Deal programs were some absolutely critical interventions for California's recovery and future. Three can be highlighted here: two river basin projects and the construction industry. While TVA and the Columbia River Project get more attention in discussions of the national New Deal, California's two monster projects outshone the others in overall economic impact, and California's construction industry became a world leader in the middle of the 20th century.

The Colorado River Storage Project was the first great river basin development program in the United States. The Colorado Project was conceived in the 1900s, approved in the 1920s, and begun under Hoover, but carried to completion under the New Deal in the 1930s. The original elements were Boulder/Hoover dam, paid for by RFC loans, Parker dam and the Colorado aqueduct (serving the Metropolitan Water District), and Imperial dam and the All-American Canal (serving the Imperial Valley). More facilities were added later. These works had an enormous impact on Southern California by providing abundant electricity to Los Angeles, irrigation water for Imperial Valley and Riverside county, and drinking water to L.A.'s blossoming suburbs (Gottlieb 1988, Erie 2006).³¹ **(Figure 29)**

**FIGURE 29: All-American Canal (Siphon Across New River)
PWA funded, built by Bureau of Reclamation**



Source: National Archives and Records Administration

³¹ The Colorado River project actually serves six states, but over its first half-century was almost entirely driven by California's unlimited thirst for water and power. It was the chief model for all the rest, not the TVA, as often imagined (Billington & Jackson 2006, p. 6).

The Central Valley Project was taken over from the bankrupt state by the federal government, financed by the Emergency Relief Appropriation Act and Rivers and Harbors Act of 1935, and completed in the 1940s (Billington & Jackson 2006). The Shasta and Friant dams (behind only Grand Coulee and Boulder Canyon in size) and associated canals provide vast quantities of cheap electricity and water, which allowed Northern California cities and industry to grow and Central Valley agribusiness to expand prodigiously (Williams 1997, Walker 2004). By 1950, the Federal government had spent over \$300 million on the CVP (Walker & Cave 1953, p. 31). **(Figure 30)**

**FIGURE 30: Shasta Dam Under Construction, 1939
Built by Bureau of Reclamation**



Source: FSA photographic archives

In the 1930s, California became the country's most advanced center for large-scale construction (Walker 2008). The state was internationally renowned for its monumental artifacts of the era, such as the Golden Gate Bridge, which embodied the latest technologies of earth moving, steel cable, and working in concrete. The latter two were financed by the New Deal through the RFC and PWA. California's enormous construction companies – Kaiser, Bechtel, Fluor, Parsons, Utah Construction and others – waxed fat on federal funds building dams, highways and other infrastructure. Kaiser, in particular, became a close ally of the Roosevelt administration (Adams 1997, Foster 1989). When Ickes charged the PWA with putting the building industry back on its feet by laying vast quantities of concrete, he succeeded beyond his wildest dreams in California.³²

³² California industry in general benefitted from all the building activity, supplying everything from turbines and bulldozers to asphalt and cement.

California benefitted mightily from Federal military spending during the Second World War, of course. California factories produced airplanes, ships and munitions, along with supplies such as blankets, clothing and canned food (Brubaker 1955, Hise 2004). The war in the Pacific was largely run and supplied out of California's army and navy bases, which multiplied rapidly over the course of the conflict (some which, like Hamilton Field and Treasure Island, were built by the New Deal agencies in the 1930s). The state also garnered more than \$1 billion in government-built or financed manufacturing plants (Walker & Cave 1953, p. 22).

Contrary to historical opinion, however (e.g., Nash 1985, Johnson 1993), the prosperity that followed World War II in California did not depend entirely on the war's stimulus. The foundations of economic growth were well established before the war, including aeronautics, agribusiness, finance and electronics, and it was the state's ability to offer the necessary industrial base and technology that rendered it indispensable to the war effort (Rhode 1994, Scott 1993, Sturgeon 2000).

Throughout the postwar Golden Age, California grew prodigiously. Population doubled and redoubled, as migrants from the rest of the United States pour in to take advantage of the rapidly-expanding job market. **(Figure 31)**

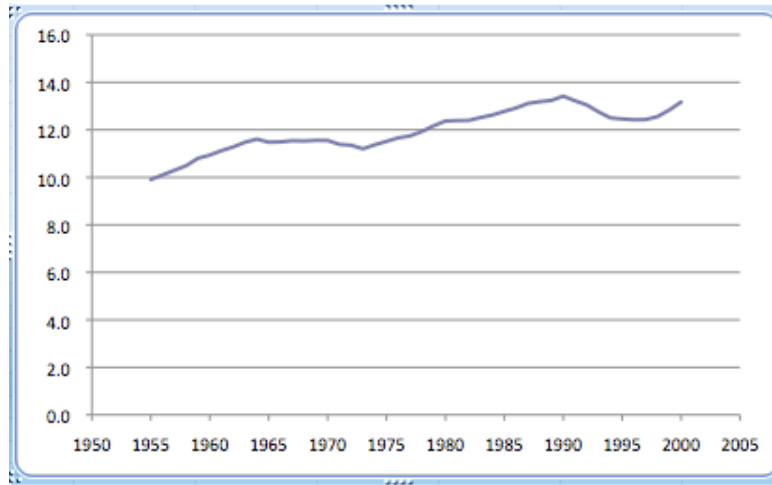
FIGURE 31: California Population, 1940-2000

	California Pop	Increase	% growth
1940	6,907,387	1,230,136	21.70%
1950	10,586,223	3,678,836	53.30%
1960	15,717,204	5,130,981	48.50%
1970	19,953,134	4,235,930	27.00%
1980	23,667,902	3,714,768	18.60%
1990	29,760,021	6,092,119	25.70%
2000	33,871,648	4,111,627	13.80%

source: US census

Meanwhile, state output and income leapt ahead at a brisk clip, with California taking a growing share of US income during the postwar era. (Figure 32).

FIGURE 32: California Income as Percent of US



source: data from Bureau of the Census @ bea.gov

The foundations of California's postwar growth were aerospace in Southern California, the expansion of electronics in Silicon Valley, the film and entertainment industry in Hollywood, garments in Los Angeles, agribusiness and food processing in the Central Valley and around the state, and Southern California oil. Along with these came massive growth of transportation, distribution, and retailing. Finance and business services also burgeoned, with San Francisco maintaining its long West Coast primacy in banking (Walker 2008).

California benefitted enormously from the Cold War arms race, garnering between 20 and 25% of all military contracts over the next forty years before the Cold War kicked in yet more federal subventions. But, here again, federal largesse was not due simply to political calculation (cf. Markusen et al. 1992), but to California's already-impressive capacities in the high technology of aeronautics, missiles, and electronics; military spending and technical innovation moved ahead hand-in-hand (Scott 1993, Leslie 2000).

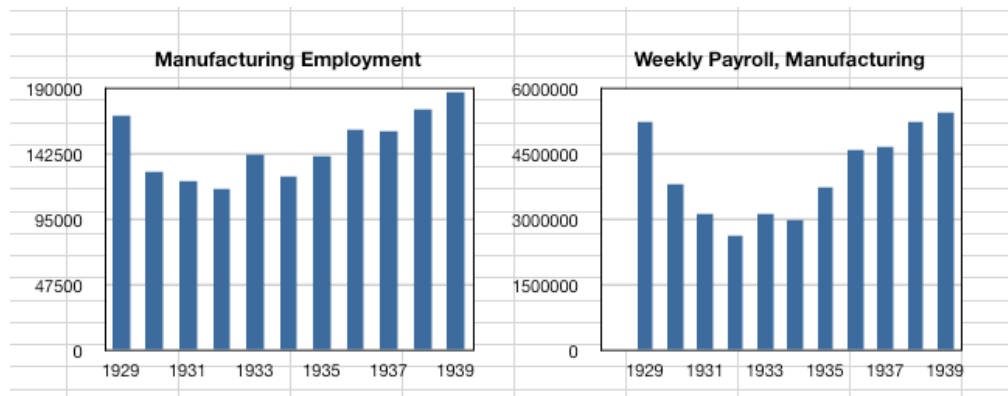
Of course, California's headstrong economic development in the postwar era benefitted from a host of other things put in place during the New Deal, such as union recognition, better schools, and improved governance. It is to these that we turn in the following sections.³³

³³ We will only touch lightly on developments since the 1970s, when things took a turn for the worse in California. On that epoch, see Walker 1995a, Bardhan & Walker 2010.

2. Employment and Income

California workers were hit hard by the Depression, as were their wages and salaries. Unemployment soared, as across the nation. Data for all employees is not available, but manufacturing employment fell by 30% from 1929 to its nadir in 1932, while payrolls collapsed by 50%. **(Figure 33)** Retail sales (a good index for disposable income) fell by 40% between 1929 and 1934 (Fishback et al. 2001, p 42). Unemployment among unionized workers rose to 33%, but by 1940 it had recovered to the level of 1928 (Gordon 1954, p. 126). Unemployment in California's big cities, especially San Francisco, was actually lower through the Depression than in other large urban areas across the country, but rural unemployment was persistently higher – though both experienced in-migration through the 1930s, indicating better job prospects than elsewhere (Ibid, pp. 126-28).

FIGURE 33: California Manufacturing Employment & Payroll, 1929-1939



source: California Labor Market Bulletin, Vol. 2 & 3,
Bureau of Labor Statistics, San Francisco

Suffering was nonetheless great enough to engender major political movements among California's workers, such as the Ham & Eggs movement in Los Angeles and the San Francisco General Strike of 1934 — the first major labor explosion of a turbulent decade. FDR was well aware of the dangers of social upheaval and mass movements to the left of the New Deal, and California certainly caught his attention with its Townsend Clubs' demands for social insurance and socialist Upton Sinclair's EPIC campaign for governor in 1934 (Alter 2006, pp. 310-11; Taylor 2009).

Relief and other federal aid poured into the state. Public works employment took off and tens of thousands were put to work (though there are no definite figures for jobs created in the state). **(Figure 34)** Social spending in general marched upward, as California went along with federal initiatives on old-age security, unemployment benefits, and workmen's compensation. By 1939, personal spending had recovered to about the level of a decade earlier (Fishback et al. 2001, p. 42).

FIGURE 34: National Youth Administration Trainee Working at the San Francisco Zoo

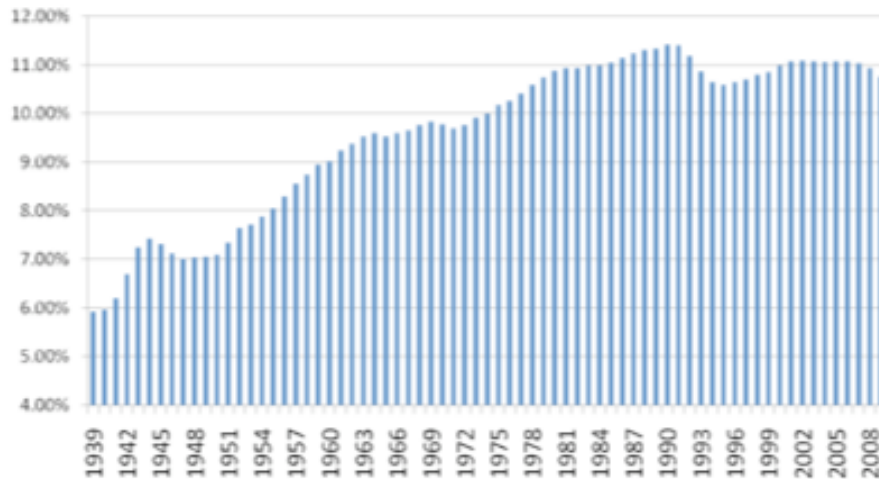


source: National Archives & Records Administration

Because California farms grow such a variety of crops and were not dependent on staples hit by collapsing prices, the state's agricultural sector fared better than the rest of the country. Hence, it received very little in the way of AAA support (Fishback et al. 2001, p. 46). In fact, California even contributed to the suffering in the South by its ballooning cotton production in the 1920s and 30s, wages and conditions for field and cannery workers were notoriously bad, however, and the decade was marked by fierce labor struggles (McWilliams 1939, Walker 2004).

After the war, California employment grew at a brisk clip, with almost no let up, until the early 1970s, and millions of new migrants, mostly from other parts of the United States, were drawn in by the robust demand for labor. **(Figure 35)**

FIGURE 35: California Employment as Percentage of U.S. Employment, 1939-2008



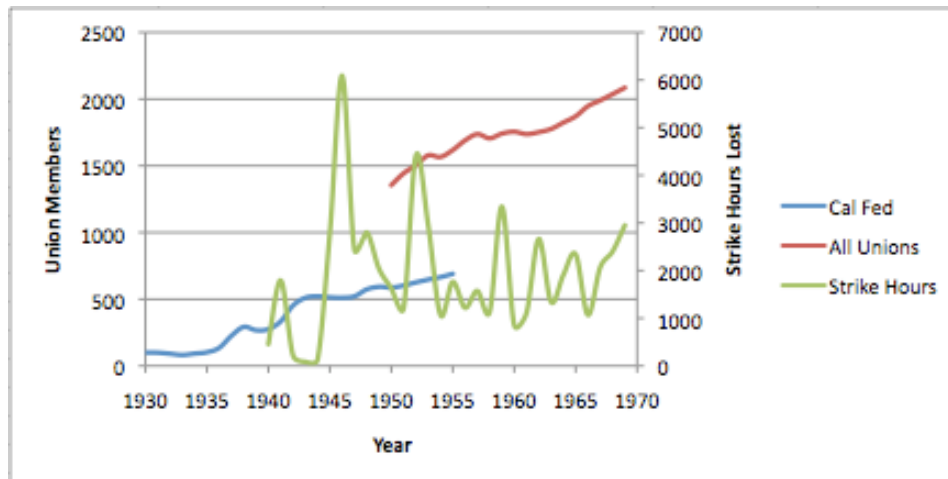
Source: Bureau of Labor Statistics and California Employment Development Department
Thanks to Ashok Bardhan

An especially significant effect of the New Deal on California wages was the spread of unionization, which surged after passage of the NLRA and again during the war.³⁴ While San Francisco had long been a labor stronghold, Southern California's business leaders had beaten back earlier offensives from labor. By the end of the 1930s, however, unions had organized Hollywood and the war brought unions to aircraft production, vehicles, food processing, and much more (Loftis 1998, Milkman 2006). Similarly, Oakland and the East Bay became a labor stronghold, leading the way, for example, in the unionization of grocery chains under the Retail Clerks (Jay 1953). Unionization rates climbed dramatically and so did strike activity in the immediate postwar era (see also Cornford 1995). **(Figure 36)**

³⁴ The beneficial effect of unions on wages, benefits and treatment of women and minorities has been shown many times, for California as elsewhere (e.g., Schmitt 2009).

**FIGURE 36: California Union Membership and Strikes, 1930-1969
(State Federation of Labor members only before 1950)**

(Membership in thousands, strikes in thousands of hour lost)



source: California State Federation of Labor 1955, pp. 98-99 (1930-1955)
California Statistical Abstract, 1970, Table C32 (1950-69)

Because of its rapid growth and high income, the Golden State had long been in the vanguard of the 20th century consumer society, but had no equal after the war. Fast-food chains such as McDonald's and A&W first emerged in California and large-scale supermarkets and chains muscled out small independent stores (Walker 2004). Car ownership and the culture of automobility was unmatched elsewhere (Nelson 2009). And, of course, purchase of the single-family house and all its accoutrements was unparalleled, as the suburbs spread far and wide across the face of the Golden State (Weiss 1987, Walker 1995b, 2008; Waldie 1996)

3. Public Works and Housing

California absorbed more New Deal projects than all but a handful of states. The Golden State recovered from the Depression in substantial part through what Kevin Starr (1996, p. 309) has called, "The therapy of public works". It would continue to build enthusiastically on that foundation of public infrastructure after the war, while benefitting hugely from the housing policies put in place by the Roosevelt administration.

The California Living New Deal Project at Berkeley has documented around 1000 New Deal public works sites, of every size and variety, during the 1930s. We are no more than one-third of the way along in tracking down all the physical evidence and records. That research continues, with the help of local historians, preservationists and other volunteers around the state (for current updates, go to: <http://livingnewdeal.berkeley.edu/>)

The CCC alone may have been responsible for thousands of projects throughout the state. The largest ranged from the almost total re-creation of Mission La Purissima Concepcion near Lompoc to the spectacular Mountain Theater high on Mount Tamalpais State Park. The CCC 'boys' readily available labor made possible an immense expansion of the state and national parks, as well as the creation of the East Bay Regional Parks District in the depths of the Depression. CCC workers left finely crafted buildings, networks of trails and roads, bridges, fire lookout towers, campgrounds, culverts, reservoirs, and water lines. Most of these improvements are readily visible today (**Figure 37**)

FIGURE 37: CCC-Built Y-Meadow Dam, Stanislaus National Forest

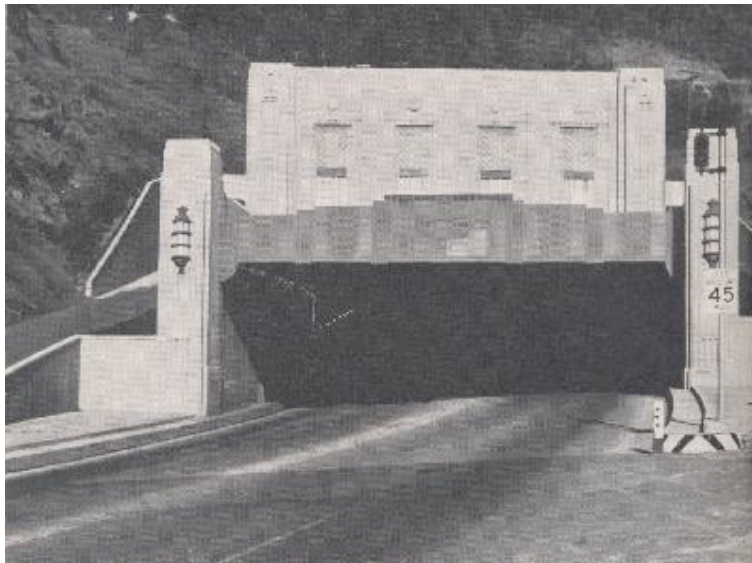


source: from livingnewdeal.berkeley.edu, photo courtesy of the U.S. Forest Service

At the same time, the CCC boys engaged in thousands of projects that have left little clear trace. They planted millions of trees on degraded lands and fought forest fires and blister rust. Little remains of their massive Ponderosa Way firebreak that once stopped fires from the Sierra foothills from reaching higher timber. Just as assiduously, they worked to reduce soil erosion with check dams and revetments on agricultural lands. They even cleared land for rural airstrips.

California garnered 807 PWA projects worth \$103 million, by one estimate (Smith 2006, p. 91). In addition to completing the Bay Bridge, building San Francisco's Cow Palace, and boring the Caldecott Tunnel through the Berkeley Hills, PWA funding built sewage treatment plants, public hospitals and schools, dams, and much of the Southern California flood control system. It built community college campuses at Santa Rosa, Pasadena, Fullerton, and Long Beach, as well as building or beefing up many of the state's military bases. **(Figure 38)**

**FIGURE 38: Caldecott Tunnel, Oakland Hills, 1938
Funded by the PWA**

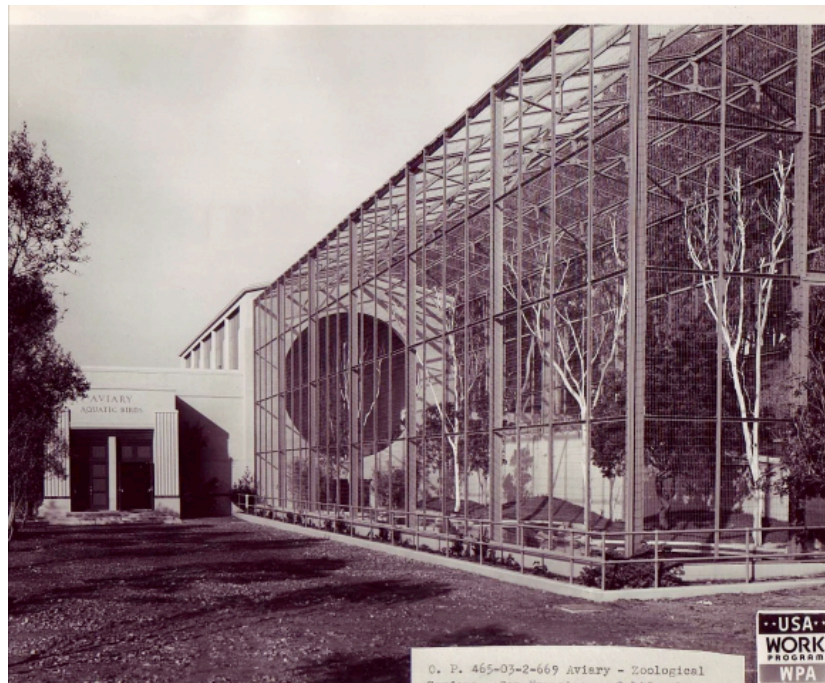


source: livingnewdeal.berkeley.edu, photo from the National Archives and Records Administration

WPA work crews built San Francisco's Aquatic Park and San Diego County's Administration Building. They filled San Francisco Bay for the San Francisco and Oakland Airports and, in conjunction with the PWA, built Treasure Island and buildings for the 1939 world's fair. Projects ranged from schools, libraries, fire and police stations

to the superfluous beauty of Berkeley's Municipal Rose Garden and Aquatic Park. WPA workers built San Francisco's zoo and improved every park in that city, as they very likely did in other cities. They also planted innumerable street trees that now in their maturity arch over roads throughout the state. (Figure 39)

FIGURE 39: WPA-Built Aviary, San Francisco Zoo



source: livingnewdeal.berkeley.edu; WPA photo from National Archives and Records Administration

In its effort to resettle the urban poor and to aid migrant farm workers, the Farm Security Administration built seventeen new communities from Brawley in the Imperial Valley to Gridley in the Sacramento Valley. Largely designed by young landscape architect Garrett Eckbo and architect Vernon DeMars (both later professors at UC Berkeley), many of the camps boasted such amenities as central parks, community centers, clinics, nurseries, post offices, stores, and safe drinking water. The contrast of the new migrant camps with the squalor of the makeshift hobo jungles documented by Dorothea Lange and Paul Taylor gained international attention, and was dramatized in John Ford's 1940 movie *The Grapes of Wrath*.

The state benefitted hugely from federal aid to the state department of highways, given its large size and varied terrain (Fleck 2001), and added some of the most monumental bridges in the country, including the RFC-financed San Francisco Bay Bridge and the

many graceful bridges along Highway 1. California led the way in grandiose water projects, as previously noted. Less dramatic but still enormous undertakings were the flood control projects undertaken around the state by the Army Corps of Engineers (under the 1935 Flood Control Act), particularly levee improvements along the Sacramento River (Kelley 1989) and entombing the Los Angeles and San Gabriel rivers in hundreds of miles of concrete (Orsi 2004).

The continuity of postwar public works in California with the New Deal era is unmistakable. In 1945, Governor Warren secured several special construction projects to serve as shock absorbers for the anticipated downturn with demobilization, a policy "credited with rejuvenating the state's rundown buildings and institutional facilities [as well as] easing the state's transition to a peacetime economy" (Putnam 1980, p 34).

California became the first state to launch a statewide freeway network, starting with the Pasadena freeway in 1940 and accelerated by increases in taxes and spending approved during special sessions of the legislature in 1947 and 1953. By the 1960s, the state had become justly famous for its advanced freeway system and car-culture (Jones 1989, Avila 2004, Starr 2009).

The state continued to build upon its massive water infrastructure after the war. Even as the Central Valley and Colorado River projects were being completed, new plans were in the works. The Army Corps of Engineers would undertake a dozen or more major dam projects, from the Kern to the Russian River, under the Federal Flood Control Act of 1944. The newly-created State Water Resource Board (1945) generated a new California Water Plan in the early 1950s which led to the State Water Project, approved in 1959, and the single greatest accomplishment of the Pat Brown administration.³⁵ That project effectively doubled the size of the Central Valley water system and gave Southern California a third water lifeline.

As previously mentioned, California became a vital center of innovation in the construction industry. The prodigies of the New Deal public works programs would grow into globe-straddling empires. Kaiser became the largest employer in the country during World War II thanks to federal shipbuilding contracts and then a builder of dams in Ghana, car factories in Argentina, and aluminum smelters in Jamaica (Foster 1989). Bechtel went abroad, especially into the Persian Gulf, and ended up as the world's largest international engineering/contracting company through the 1980s (McCartney 1988, Strassman & Wells 1988). Housing construction was another specialty of the state, with some of the largest home-builders in the nation, like Kaufman and Broad and Kaiser-Burns Homes (Weiss 1987).

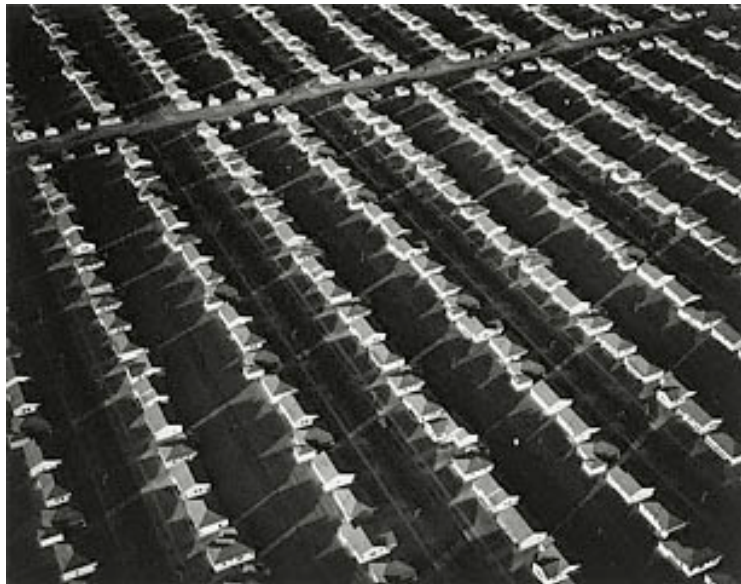
Nowhere was the impact of the New Deal programs on the postwar housing boom more pronounced than in California. The state's cities were already in the forefront of early 20th century suburbanization; the building industry operated on a large-scale, incomes

³⁵ Neither of the authors is especially enamoured of the results of all this water development, but that is a discussion for another time (see e.g., Walker 2004).

were high, and credit was abundant, providing the public with affordable homes even before the 1930s (Weiss 1987, Walker 1995b). As a consequence, New Deal mortgage assistance flowed disproportionately into the state (Fishback et al. 2001). Then, with renewed prosperity, the FHA and VA mortgage guarantees kicked in to shore up lending and ignite an explosion of home building.

Great swaths of suburban housing tracts were laid down across California in the first decade after the war, and the outward expansion has not stopped since. Not even Levitt could match the size and pace of development at places like Lakewood, San Jose, and the San Fernando Valley (Walker 1995b, Hise 1999). California suburbia became the very image of postwar Americana and the good life for the middle class, from its swimming pools and expansive lawns to its multi-car garages (Waldie 1996, Avila 2004). **(Figure 40)**

FIGURE 40: Lakewood, 1950: New Housing Financed by FHA & VA



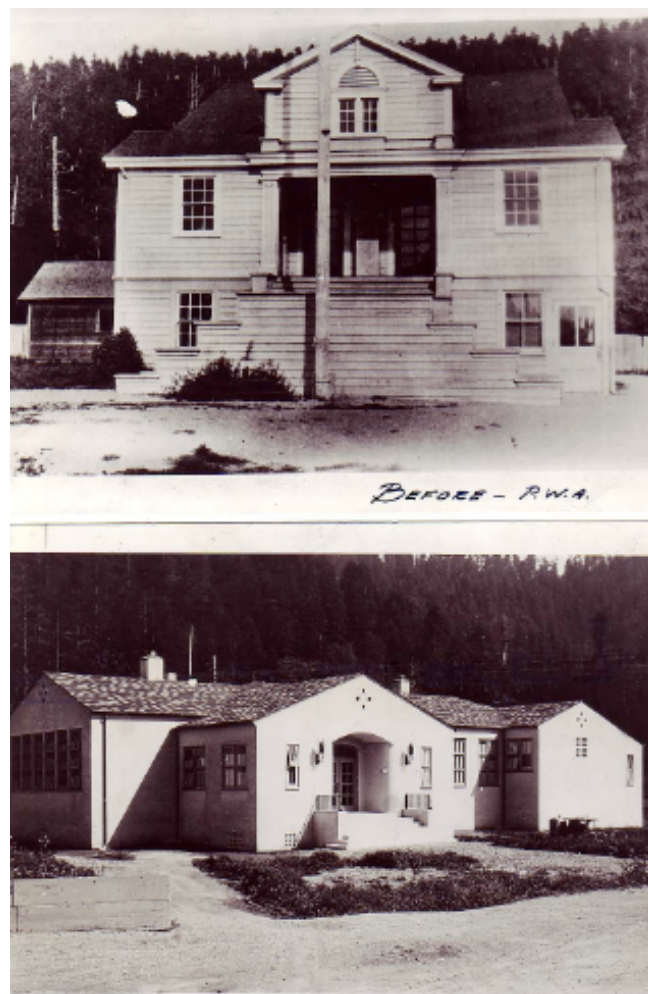
Source: <http://www.getty.edu/art/gettyguide/artObjectDetails?artobj=136939>
William Garnett, photographer

4. Education & Culture

On March 10, 1933 — six days after Franklin Roosevelt’s first inauguration — a strong earthquake centered under Long Beach struck Southern California. Within seconds, it demonstrated the lack of seismic resistance in the region’s schools, devastating those near the epicenter and damaging others throughout the region. Within three years 536 school buildings were built or rehabilitated throughout Los Angeles County alone with the aid of PWA funding and WPA labor. Many of those structures were designed by distinguished architects and most were so well built that they remain in use more than seventy years later.

Throughout the state and in the remotest regions, the PWA and WPA built hundreds of fire- and earthquake-resistant schools ranging from the smallest rural schoolhouse as in Orick in far Northern California to the Deco hilltop acropolis of San Francisco’s George Washington High School. **(Figure 41)**

FIGURE 41: PWA-Funded School in Orick, California



Source: National Archives and Records Administration

A compendium of the best projects financed by the PWA requested by President Roosevelt frankly observed, “Non-federal projects vary greatly in architectural quality from very good to extremely bad,” but flatly stated that, “Some of the best architecturally outstanding buildings in all types may be found in California.” With facilities such as multi-use auditoriums, formerly regarded as luxuries, the new buildings held more than instructional value: “In recent years... it has come to be recognized that the school should be the community center of the neighborhood and that the auditorium should be constructed for use both by the school and by the community as a school theater in which plays, concerts, lectures, and motion pictures may be presented” (Short & Stanley-Brown 1939, pp. II, XXI).

Artists employed by the WPA’s Federal Music and Theater Projects provided much of that community culture, bringing live music and plays to audiences throughout the state. Both performed repertory as well as new work they commissioned. WPA and CCC workers built open-air theaters such as Marin’s Mountain Theater, Oakland’s Woodminster, and the Will Rogers (now Santa Barbara) Bowl where, it was hoped, the commingling of citizens would reinforce democratic institutions as had once the theaters of Greece. (Figure 42)

FIGURE 42: WPA Workers Building Will Rogers Bowl, Santa Barbara



Source: National Archives and Records Administration

Perhaps because of Roosevelt’s own experience with polio, facilities were built for children with special needs regardless of ability to pay. The PWA built a state-of-the-art

orthopedic school for crippled and malnourished children in San Francisco's Mission District. Not only did the Sunshine School feature ramps and elevators now mandated by the ADA, it was richly embellished with elaborate Spanish tiles, stenciled ceilings, and Moorish light fixtures. Such aesthetic considerations were no accident: "Everything possible has been done to create the most cheerful possible atmosphere in order to encourage the children to forget as far as possible their disabilities," noted the authors of the report on the best PWA projects (Short & Stanley-Brown 1939, p. 186). **(Figure 43)**

**FIGURE 43: Door, Sunshine School, San Francisco
School Built with PWA Funds**

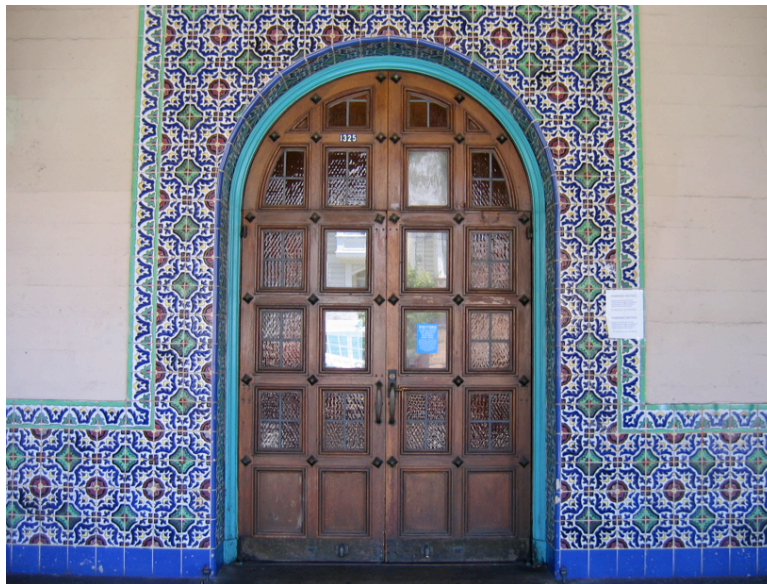


Photo by Gray Brechin

The New Deal vastly expanded opportunity for young men and women to continue schooling beyond high school, as well as for older citizens to get more education. In less than six years, WPA labor and PWA funding built entire campuses or added to existing ones, such as the community colleges at Santa Rosa, Long Beach, San Francisco, Ontario, San Bernardino, Santa Monica, Pasadena, Santa Barbara, Fullerton, and Los Angeles. Here, as in other states, the National Youth Administration (NYA) provided vocational apprenticeships and work-study jobs so that students could obtain jobs or complete their education.

New Deal agencies employed thousands of teachers, educational aides, librarians, nutritionists, and recreational supervisors. Much of their work continues to benefit us today. At U.C.'s Bancroft Library, for example, WPA workers translated, indexed, and preserved rare documents and established the still-functioning university library conservation department. WPA clerical workers organized the chaotic records of the California Academy of Sciences for the use of generations of scientists and scholars unaware of that aid. **(Figure 44)**

FIGURE 44: WPA Clerical Workers in the Archives of the California Academy of Sciences



source: National Archives & Records Administration

As elsewhere, WPA and CCC workers and PWA funds built public libraries, museums, zoos, and visitors' centers in parks. From their inception, New Deal agencies undertook architectural preservation as a component of public education: CCC workers reconstructed Mission La Purissima Concepcion in Lompoc from the ruins left by an earthquake, and WPA workers restored General Vallejo's home in Sonoma, leaving no marker that they had done so there as they did at the *asistencia* (part of Mission San Gabriel) near Redlands.

Harry Hopkins had, from the beginning of the New Deal public works projects, recognized that artists were workers as much as were stevedores, and that the Depression had rendered them even more desperate for lack of clients. Already in 1933, the emergency Civil Works Administration included a Public Works of Art Project whose first major project was the series of murals painted by 26 artists in San Francisco's new Coit Tower (the first of the famous New Deal murals across the country)(Lee 1999).

Though short-lived, the CWA version was simply a warm-up for the more ambitious Federal Art Project (FAP) under Hopkins' longer-lived WPA. FAP embellished public buildings throughout California with sculpture, frescoes, easel paintings, and architectural reliefs. Women artists employed by the WPA led a renaissance of mosaics in the Bay Area. California's schools built at that time are rich in art works now largely unknown to the public.

In addition, other agencies such as the Treasury Section of Fine Arts employed artists to decorate federal buildings, such as Anton Refregier's mighty mural cycle depicting San Francisco history seen through the eyes of labor in the Rincon Annex Post Office (now Rincon Center); this was the last New Deal art work in the country, painted following the war. Like so much else of the New Deal, reactionaries attempted to erase Refregier's murals soon after Roosevelt's death. In 1949, Congressman Richard Nixon, for example, wrote to a constituent, "I believe a committee should make a thorough investigation of this type of art in government buildings with the view to obtaining the removal of all that is found to be inconsistent with American ideas and principles." The murals were accordingly put on trial before the House Committee on Public Works in 1953, surviving to become among the most admired products of New Deal patronage and the basis of a San Francisco public school curriculum in 2010 (Brechin 1996). **(Figure 45)**

**FIGURE 45: Panel from Refregier Mural, Rincon Annex, San Francisco
Funded by Treasury Section of Fine Arts**



Photograph: Richard Walker

California's affluence and population surge were so great in the postwar era that anything seemed possible, particularly in the field of education. The Master Plan for Higher Education of 1960 vastly expanded the state's tripartite system of higher education, creating the world's largest junior college system, the country's largest public university in the California State University system, and the most prestigious public university in the world with the 9 campus University of California. At the same time, K-12 schools were so lavishly funded that they were consistently rated the best or close to the best in the nation. California's model would be emulated all across the United States and abroad.

New Dealers such as California Governor Edmond Brown and University of California President Clark Kerr carried its visionary commitment to democratic uplift into the postwar period. Although President Kerr (and, to a lesser extent, Governor Brown) is usually given credit for California's landmark Master Plan of 1960, it was built upon the immediately postwar initiatives of Governor Earl Warren to expand educational quality and opportunities — in particular, the Strayer Report of 1948, the first comprehensive plan for a state system of higher education in the nation (Douglass 2000a,b).³⁶

As impressive as were California's postwar initiatives for universal, high quality education, the physical and ideological foundations were laid by New Deal work relief and idealism. The authors of a government publication displaying the wealth of structures erected with PWA aid within seven years could confidently state that “this vast building program presents us with a great vision, that of man building primarily for love of and to fulfill the needs of his fellowmen. Perhaps future generations will classify these years as one of the epoch-making periods of advancement in the civilization not only of our own country but also of the human race” (Short & Stanley-Brown 1939, p. III). Those such as Warren, Brown, and Kerr believed that, with sufficient public commitment, they could achieve such a lofty aim in the Golden State.

³⁶ http://sunsite.berkeley.edu/uchistory/archives_exhibits/masterplan/pre1960.html

5. Government and Politics

California's political landscape was profoundly altered by the experience of the 1930s, even though it was not a New Deal state in straightforward way. Like much of the West, it had been a Republican stronghold since the Civil War and in the forefront of the Progressive movement (White 1991). California Governor Hiram Johnson (1912-16) was the dominant figure of that era. Despite the support of Democrats for Woodrow Wilson, which swung the election for president at the last minute (Rogin & Shover 1970), the California Democratic Party had shriveled to irrelevance in the 1920s, holding only a handful of statewide offices and in the legislature.

The Republicans' vice-like grip on state politics was finally broken by the Great Depression. The first sign was that Californians voted for Franklin Roosevelt by substantial margins in 1932, making the state crucial to the national Democratic Party's electoral fortunes (Wallis 1998).³⁷ William McAdoo, who had engineered the party's support for FDR, was elected Senator in the same year – the first Democratic Senator from California in decades.

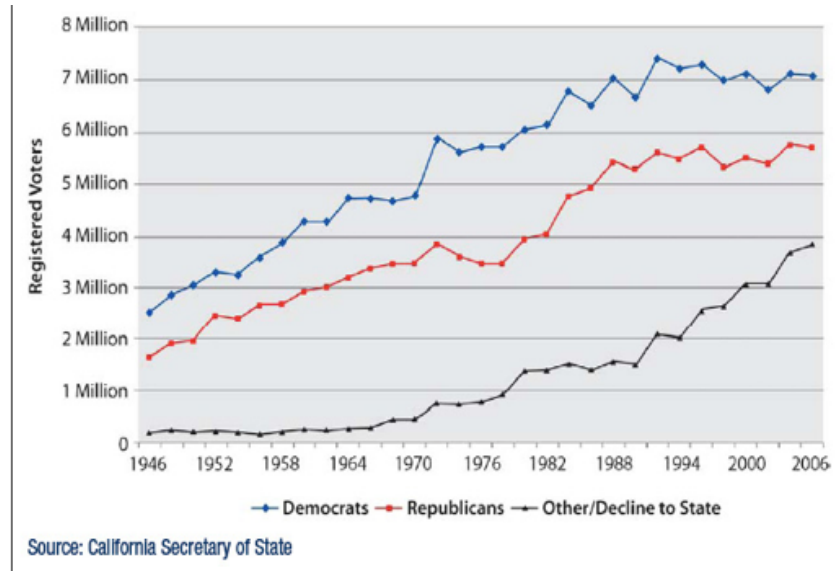
Republican governors James Rolph and Frank Merriam did not help matters for their party when they condoned vigilantism in the countryside and police crackdowns against San Francisco strikers in 1933-34. The Democrats rose from a three-to-one disadvantage among registered voters to a three-to-two majority by 1936 – a plurality they have maintained, more or less, ever since. At last, they captured the assembly in that year. **(Figure 46)**

Breaking the Republican hegemony in state politics would not prove easy, however. While Governor Rolph was hardly up to the challenge of the Depression, he did exhaust the state's budget surplus of \$30 million on relief and established a work camp program for unemployed young men a year before the CCC was launched (Putnam 1980, p. 15). His successor Merriam rode the tide of the New Deal, accepting state legislation to participate in the FERA relief system, PWA and Social Security and passage of the first state income tax (Putnam 1980, pp. 22-23). State budgets rose.

Meanwhile, California witnessed some of the liveliest political upheavals of the 1930s. As Jackson Putnam observed, "The Great Depression caused more social trauma and upheaval in California than any even since the Gold Rush" (Putnam 1980, p. 14). Out of Southern California came the Townsend Plan and the Ham and Eggs movement, both calling for old age pensions and other direct payments to boost demand; such proposals made the ballot multiple times and lost by respectable margins (Walker & Cave 1953, p. 44; Starr 1996, pp. 197-222). These movements got more attention from Washington than anything other than Huey Long's revolt in Louisiana, which was cut short by a bullet in 1935.

³⁷ The swing to the Democrats was marked all over the West and lasted until the 1970s (White 1991)

FIGURE 46: California Party Registration, 1946-2007



source: <http://www.hoover.org/publications/hover-digest/article/6061>

Especially startling to the political establishment was the 1934 EPIC campaign to elect Upton Sinclair governor on the Democratic ticket (Starr 1996). The socialist author and activist was narrowly defeated after a nasty fight against a well-organized resistance, Republican and Democrat (FDR was persuaded by McAdoo to remain aloof from the fight). The conservative establishment paid for what has been called the first modern media campaign – a sophisticated model of professional control and relentless character assassination that continues in political campaigns to this day and far beyond California (Mitchell 1992). Merriam was narrowly reelected for a full term.

Democratic Governor Olsen, elected in 1938, lasted only one term and his legislative agenda was blocked at every turn by the Republicans (Burke 1953). He was defeated in 1942 by the popular Earl Warren, a long-time Republican workhorse from Oakland with solidly conservative credentials. Warren was reelected twice, and he even defeated Roosevelt's son, James, in 1950. Nevertheless, Warren surprised friends and enemies by shifting to the left during his decade in office, a process that would continue after President Eisenhower appointed him Chief Justice of the US Supreme Court in 1953 (Cray 1997, Starr 1997, Newton 2008).

Warren was California's bastard heir to the New Deal's values, particularly public education, public works and social security. He favored greater unemployment benefits, workers' compensation, and old-age medical assistance, as well as mental health services

and fair employment laws, and opposed anti-union legislation.³⁸ Warren had "an acute recognition of the pervasive power of growth and a pragmatic willingness to use the power of the state to deal with it..." according to Jackson Putnam (1980, p. 30). So did his chief of staff, William Sweigert, a San Francisco Democrat (Starr 1997, p. 193).

An even more dramatic transformation of California politics took place once the popular Warren was out of the way. Although he was succeeded by another liberal Republican, Goodwin Knight, the weakening Republicans fell on each other and lost control of the statehouse. Edmund ("Pat") Brown was elected governor in 1958 and again in 1962, defeating two formidable Republicans with national reputations, William Knowland and Richard Nixon. Pat Brown was a New Dealer who loved public works, from water projects to state highways, and pushed through the Master Plan for Higher Education (Putnam 1980 p. 47, Douglass 2000b, Rarick 2005). Brown's son, Jerry, made it a family dynasty by winning the governor's spot in 1974 and again in 1978.

Meanwhile, Democrats gained full control over the legislature after the end of cross-filing in 1959 and reform of the "rotten-borough" state senate in 1963 (thanks to Warren's Supreme Court). Under such potent leaders as Jesse Unruh and Phillip Burton, the legislature became a more vital branch of government, and California legislation was regularly copied by other states. Unruh served as Speaker of the Assembly from 1961 to 1969 and was a fierce advocate for legislative reform, winning a 1966 constitutional amendment to make the legislature a permanent and professional body (Putnam 2005). Burton was an unreconstructed New Dealer in both his days in the legislature and his years in Congress (Jacobs 1995). The liberal Democrats who flocked to the grassroots California Democratic Council and into government service had imbibed a broad sense of public purpose from the New Deal era in which so many had cut their teeth.³⁹

The state also developed a well-qualified civil service and well-managed executive departments. Here again, the example of New Deal governance, building on the Progressive idea of expert management, was crucial. The massive public works programs in the postwar era could not have been undertaken without a solid foundation of government reform in the 1930s and 40s that yielded a larger, more professional civil service and upgraded agencies, such as the Department of Industrial Relations and State Water Resources Board, and continued with such improvements as a consolidated Department of Water Resources and Office of Planning in the 1950s (Walker & Cave 1953, Putnam 1980, Starr 2009). Local governments also improved their capacity to deliver services and manage infrastructure – often working out of buildings provided by the New Deal. **(Figure 47)**

³⁸ Warren lost state medicare to the California Medical Association and their flacks, the PR firm of Whitaker and Baxter, the same team who led the fight against EPIC and would help defeat national health care proposed by Truman (Putnam 1980, p. 36).

³⁹ Phil Burton would go on to be a dominant figure in the Congress through the 1970s (Jacobs 1995).

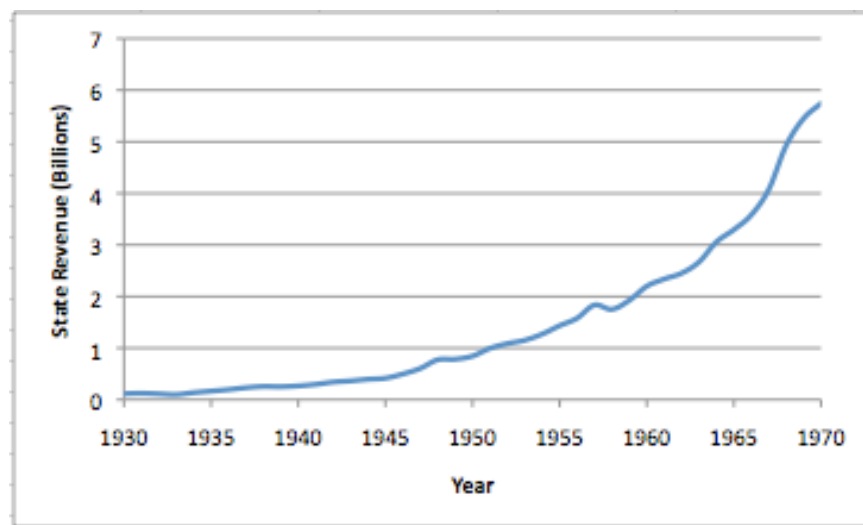
FIGURE 47: San Luis Obispo County Courthouse (PWA)



Photograph: Harvey Smith

Meanwhile, tax revenues and budgets kept going up. They rose briskly under Warren and Knight and leapt ahead once more with the many programs approved under Brown and the Democrats in the early 1960s. Even Ronald Reagan, elected in 1966, could not turn back the tide, and oversaw a steadily rising budget and increased taxes. **(Figure 48)**

Figure 48: California State Tax Revenues, 1930-1970



Source: California Statistical Abstract, 1970, Table N-7.

Another clear sign of the changing times was that by 1950 Federal grants were roughly 1/8th of the California state budget (Walker & Cave 1953, p. 194). Even more striking, California was, by then, home to more federal employees than any other state – or even in the District of Columbia (Walker & Cave 1953, p. 173). This marked the growth of the Federal government in general, but especially the targeting of California for federal programs, especially military ones, and the roles of San Francisco and Los Angeles as centers of federal administration for the whole West.

California would, alas, be among the leaders in the counterrevolution against the New Deal and the Sixties, especially as the birthplace of the New Right, the initiator of the Tax Revolt, and the launching pad for the career of Ronald Reagan. That is a story told elsewhere (e.g., Davis 1986, 1993, Walker 1995a, Dallek 2000, McGirr 2001). Although the political legacy of Roosevelt has not entirely disappeared from the Golden State, the flame may be flickering its last – all the more reason to revive the memory of the New Deal's contributions.

IV. Conclusion: Lessons for a New New Deal

In the late 2000s, Wall Street and the banking system imploded in a way not seen since the 1930s, and the American economy went into a prolonged tailspin. The decline in GDP and rise of unemployment do not compare to the Great Depression, thanks in large part to the stabilizing effect of social security, unemployment benefits, and rapid monetary response by the federal authorities. Nonetheless, this downturn has already earned the sobriquet of The Great Recession, worse than anything seen in three-quarters of a century.

A curious effect of the events of the last year was the rediscovery of what it must have felt like in the days leading up to the New Deal. After years of confident prediction that 'we're all Keynesians now' and that monetary policy can deal with anything, America's leaders rediscovered what it feels like to confront an economic crisis careening out of control. There was, suddenly, no certainly, no easy formula, and a great deal of anxiety that the downward spiral of the financial system could not be stopped.

How striking the parallels between the elections of 1932 and 2008, as things got worse during the presidential campaign and ultimately put the challenger over the top. The Bush administration, like that of Hoover, took a few halting steps to arrest the debacle, but its initiatives were too little, too late, and the Old Guard exited looking grim and besieged (particularly the Secretary of the Treasury). Similarly, the victory of Barak Obama restored a sense of optimism and hope that the economy could be fixed and the nagging problems of the nation attended to.

Soon there was talk of major financial reform, a huge stimulus package, and dramatic new initiatives, such as universal health care. Indeed, echoes of the New Deal soon reverberated around the country, as President Obama promised support for infrastructure, job creation, and revenue sharing. Even the British Prime Minister called expressly for an International New Deal. Hope ran even higher that Obama might be the Second Coming of FDR. **(Figure 49)**

Liberal economist Cristina Romer, well-placed as chair of the president's Council of Economic Advisors, was heard to make such pronouncements as this:⁴⁰

...signature programs such as the WPA that directly hired millions of workers no doubt contributed to a sense of progress and control. In this way, Roosevelt's actions may have been more beneficial than the usual estimates of fiscal policy suggest. If the actions President Obama is taking in the current downturn can generate the same kind of confidence effects, they may also be more effective than estimates based on conventional multipliers would lead one to believe."

⁴⁰ Speech at the Brookings Institution, March 9, 2009.

FIGURE 49: Obama as FDR, Cover of *Time*, 2009



But reality soon settled in, much to the chagrin of the hopeful. The first damper on the comparison of presidents is that while Obama and Roosevelt share a similar pragmatic liberalism, Obama appears not to be as bold as FDR in trying out new ideas. Certainly, FDR was no radical and even opposed some of the best ideas of the New Deal at first blush (like the FDIC), but he was also willing to insist on rapid-fire action when he thought it would help (as with the CCC) and his aristocratic background seems to have allowed him to rise above the fray (Leuchtenberg 1963, Alter 2005, Taylor 2009).

The second drawback is the blind opposition to everything Obama puts forth from the Republican Party and Blue Dog Democrats (mostly elected from former Republican territory). While during the New Deal the GOP and Dixiecrats griped unceasingly about Roosevelt and his program, the Democratic majority was greater and more progressive in 1933 than in 2009. Equally important, Roosevelt soon had a massive working-class mobilization behind him, while the labor movement is muted in the age of Obama, and populist outbreaks are coming from the Right rather than the Left.

A third difficulty Obama faces is the rising opposition to running budget deficits for economic stimulus. This is just the old orthodoxy rearing its head again, with the same pre-Keynesian (and incorrect) arguments that government spending crowds out private investment and the national debt will undercut economic recovery. Obama's stimulus package was a bold Keynesian move, fully justified by the shrinkage of the U.S. economy in 2008 and 2009 and by the complete absence of private investment and

consumer spending in the aftermath of the financial meltdown. Yet, in 1933 the fear of deficits was even greater than today and FDR himself believed in balanced budgets.⁴¹ What Obama failed to do was to create an equivalent of the WPA to deal with massive unemployment directly and allowing California and other states go bankrupt is the kind of deflationary and retrograde policy that should never have been repeated. Obama's recovery package was bank bailout plus PWA, but without FERA, CCC and WPA.

A fourth barrier to an Obama New Deal is American's position in the world. The U.S. is the unchallenged imperial power, ensnaring President Obama in wars halfway around the world (from which he has not recoiled, alas). Furthermore, half the discretionary federal budget is devoted to military spending; military adventurism under Bush II has already nearly bankrupted the government. So the mounting deficit has done less for the domestic economy than might appear at first sight.

Finally, the US economy is not the rising star of the world but a rather tarnished and ungainly reminder of past glories (though we often forget how undernourished and shabby much of American infrastructure was in the 1920s). The U.S. industrial base has shrunk badly, while that of East Asia has powered to new heights, feeding consumer goods into the America maw. The result is an uncontrollable trade deficit in the hundreds of billions of dollars per year. The US is not an enormous pump waiting to be primed, as in the 1930s, but a somewhat rusty and leaky spigot of collective consumer fantasy.

All the same, the New Deal offers important lessons for the present.

The first is that quick and decisive action *can* help economic recovery, while doing wonders for the well-being of those at the bottom who pay the greatest price for economic failure. Moreover, direct jobs programs have an enormous social and political payoff, as well as reducing human suffering.

The second lesson is that public works spending is a vital strategy of economic development and redevelopment that pays enormous long-term dividends. This country has let its roads, rails, bridges and sewers and schools decay for years under the rule of neoliberalism. The United States will never be able to compete economically with the up-and-coming capitalist economies if we let the rot continue.

The third lesson is that in a severe crisis there is a window of opportunity for major political reforms while the elite is temporarily disgraced and weakened by the failures of the past. It's not just the economic effects of the New Deal that count, but the way it turned things around politically, letting voices from below be heard, breaking the monopoly on power held by the capitalist class, and letting fresh air blow through the corridors of Washington and the state capitals.

The lesson, in short, is that we should do it again.

⁴¹ A poll in 1938 showed 80% approval of budget balancing (Conkin 1975, p. 33).

APPENDICES

I. New Deal Programs, by Function

Stabilization

- National Industrial Recovery Act - NIRA (1933)
 - National Recovery Administration - NRA
 - price stabilization via trade associations
 - includes PWA & FERA (see below)
 - overturned by Supreme Court in 1935
- Agricultural Adjustment Act - AAA (1933, 1938)
 - price stabilization for farm products
 - overturned by Supreme Court 1935, reauthorized 1938

Bank Reform

- Emergency Banking Relief Act (1933)
 - Evaluation of all banks, closures of insolvent ones
- Glass-Steagall Banking Act (1933)
 - creation of Federal Deposit Insurance Corporation - FDIC
 - Separation of commercial & investment banking - Firewall
- Federal Reserve Bank upgrade (1935)

Other Financial Reform

- Dollar devaluation/End of Gold Standard
 - Emergency Banking Act of 1933 (impounds all gold)
 - Gold Reserve Act (1934) (government hoard)
- Securities Act (1933)
- Securities Exchange Act (1934)
 - Securities and Exchange Commission - SEC
 - regulation of publically traded stocks

Housing & Mortgage Reform

- Home Owners Loan Act (1933) (expanded existing law)
 - Home Owners Loan Corporation - HOLC
 - aid to distressed mortgage holders
- Federal Housing Act - FHA (1934)
 - Federal Housing Administration - FHA
 - mortgage guarantee program
 - Federal Savings & Loan Insurance Corporation - FSLIC
- Federal National Mortgage Association - FNMA (1938)
 - buys mortgages from banks
- United States Housing Act - Wagner-Steagall - USHA (1937)
 - builds public housing

Public Works⁴²

- Civilian Conservation Corps - CCC (1933)
 - created under Emergency Conservation Act
 - put under Federal Security Agency, 1939-43
- Tennessee Valley Authority - TVA (1933)
 - river basin development based on dams & hydroelectricity
- Civil Works Administration - CWA (1933-34)
 - created by Exec. Order under FERA, which was part of NIRA
- Public Works Administration - PWA (1933)
 - created under NIRA
- Works Progress Administration - WPA (1935)
 - continued programs begun under FERA, by Exec. Order
- Rural Electrification Administration - REA (1935)
 - created by Executive Order
 - Rural Electrification Act follows (1936)
- Soil Conservation Service - SCS (1933, 1935)
 - begins as Soil Erosion Service, under Emergency Conservation Act
 - Soil Conservation & Domestic Allotment Act (1935)
- Bonneville Power Administration - BPA (1937)
 - Bonneville Power Act
 - sells power from Columbia River dams
- Federal Works Agency - FWA (1939)
 - Reorganization Act allows FDR to created FWA
 - Umbrella for PWA, WPA, USHA, BPR, FBA

Rural & Farm Assistance

- Agricultural Adjustment Act (1933, 1939)
 - raise farm incomes
- Farm Credit Act (1933)
 - Farm Credit Administration - FCA
 - oversight of all farm credit programs
 - refinance of farm mortgages
- Resettlement Act (1935)
 - Resettlement Administration - RA
 - becomes Farm Security Administration - FSA (1937)
 - Aid to farm workers
- Farm Tenancy Act (1937)
 - Aid to poor farmers

⁴² List does not include assistance to pre-existing federal agencies: Bureau of Reclamation, Army Corps of Engineers, Bureau of Public Roads (BPR) and Federal Building Administration (FBA)

Relief & Welfare

- Federal Emergency Relief Administration - FERA (1933 & 1935)
 - aid to states for relief of destitute (mostly work relief)
 - originates with NIRA; spawns CWA which morphs into WPA
- Social Security Act - SSA (1935)
 - old age pensions & unemployment assistance

Labor Law & Assistance

- National Industrial Recovery Act - NIRA (1933)
 - right to organize, minimum wage, no child labor
- National Labor Relations Act (Wagner Act) (1935)
 - collective bargaining, as under NIRA, with enforcement
 - National Labor Relations Board - NLRB (1935)
- Social Security Act (1935)
 - Retirement benefits & unemployment insurance for jobless workers
- Fair Labor Standards Act (FLSA) (1938)
 - restores minimum wage, no child labor, as under NIRA

Regulation of Trade, Transport and Communications

- Federal Communications Act (1934)
 - establishes Federal Communications Commission - FCC
- Civil Aeronautics Act (1938)
 - establishes the Civil Aeronautics Authority - CAA
 - split into two parts:
 - Civil Aeronautics Board - CAB
 - Civil Aeronautics Board (later Federal Aviation Administration)
- Federal Trade Commission - FTC
 - Powers increased by Robinson-Patman Act (1936) & Wheeler-Lea Act (1938)

General Good Sense

- Repeal of Prohibition (1933) (21st Amendment)

II. New Deal Program Time-Line

(See Appendix I for abbreviations)

First New Deal

(1933)

Bank reform
CCC
NIRA
PWA
FERA
AAA

(1934)

CWA
FHA
SEC
FCC

Second New Deal

(1935)

Emergency Relief Appropriation
WPA
REA
RA
NLRA
SSA

(1936)

SCS
FTC strengthened

Third New Deal*

(1937)

USHA
BPA
FTA
FSA

(1938)

FNMA
AAA
FLSA
CAA

End of New Deal

(1939)

FWA reorganization

(1941)

War with Japan

(1942)

PWA & CCC terminated

(1943)

WPA terminated

(1945)

Death of Roosevelt

(1946)

FSA ended

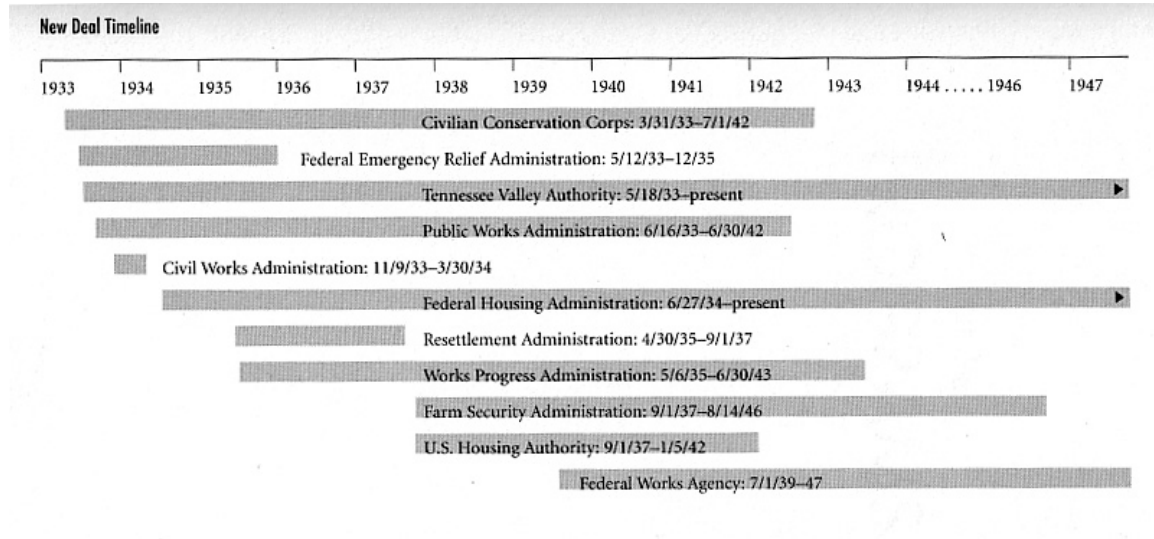
(1949)

FWA ended, leaving only GSA

* - A Third New Deal is not generally acknowledged in the literature, but is, in our view, a justifiable term.

PUBLIC WORKS TIMELINE

(from Leighninger 2007, p. xix)



III. New Deal Expenditures by Program/Agency, 1933-39

(From Fishback et al. 2002, Table 1.)

35

Table 1

Total Federal Grants, Loans, and Value of Mortgages Insured, March 1933 – June 1939, by Program

NON-REPAYABLE GRANTS:	Grant Dollars	% of Grants
Agricultural Adjustment Adm. (AAA)	\$1,981,801,905	12.1
Farm Security Adm. (FSA) Grants	93,408,281	0.6
U.S. Housing Authority (USHA)	127,206,671	0.8
Public Building Adm. (PBA) Federal Buildings	174,228,825	1.1
Public Roads Adm. (PRA)	1,556,290,368	9.5
Public Works Adm. (PWA) Federal Projects	798,501,411	4.9
Public Works Adm. (PWA) Non-Federal Projects	1,367,347,520	8.4
Civil Works Adm. (CWA)	757,172,702	4.6
Federal Emergency Relief Adm. (FERA)	2,654,860,349	16.3
Social Security Adm. Public Assistance (SSAPA)	596,010,054	3.6
Works Progress Adm. (WPA)	6,222,385,662	38.1
Total Grants	16,329,213,748	100.0
LOANS:	Loan Dollars	% of Loans
Farm Credit Adm. (FCA) Loans	\$1,257,491,136	12.0
Farm Security Adm. (FSA) Loans	427,932,675	4.1
Rural Electrification Adm. (REA) Loans	226,247,292	2.2
Home Owners Loan Corporation (HOLC)	3,077,258,287	29.5
U.S. Housing Authority (USHA) Loans	449,854,991	4.3
Disaster Loan Corp. (DLC)	\$10,504,466	0.1
Reconstruction Finance Corp. (RFC)	4,425,940,596	42.4
Public Work Adm. (PWA) Non-Federal Program Loans	567,616,807	5.4
Total Loans	10,442,846,250	100.0
INSURANCE:		
Federal Housing Adm. (FHA) Mortgage Insurance: Value of Loans Insured	\$2,707,560,412	

Note: The RFC loans began in February 1932.

Source: U.S. Office of Government Reports (1940).

NB: this table is based on data from the US Office of Government Reports (1940a & b), which was collected by state and county. It does not jibe completely with data collected by federal agencies in various reports (e.g., PWA 1939, WPA 1946).

See also Figure 10

IV. New Deal Public Works Projects By Agency & Function

(from Leighninger 2007)

Public Works Administration (PWA)

Table 6.1 Physical infrastructure projects completed by the Public Works Administration (federal and nonfederal)

	Federal	Nonfederal	Total cost (\$ million)*
Streets and highways	9,928	1,500	920.8
Engineering structures			
Bridges and viaducts	9	379	221.9
Wharves, piers, docks	62	53	38.5
Subways and tunnels	0	14	207.0
Other	110	27	18.9
Aviation projects			
Airports	354	30	25.4
Improvements to landing fields	193	0	21.1
Other aids	101	0	3.2
Railroads	0	32	201.0
Sewer projects			
Disposal plants	21	873	326.1
Sanitary sewers	72	463	90.0
Storm sewers	5	116	20.8
Combined sanitary and storm	0	75	32.6
Sewer and water systems	29	196	24.4
Garbage and rubbish disposal plants	20	41	11.0
Water projects			
Reservoirs	21	182	27.2
Filtration plants	1	118	18.8
Water mains	38	252	31.5
Complete waterworks	103	1,867	237.8
Electrical power projects			
Electrical distribution systems	39	53	20.5
Power construction projects	53	230	91.7
Gas plants	1	25	1.9
Water navigation aids			
Channels and levees	164	6	105.9
Dams and canals	29	2	93.1
Locks	35	0	31.0
Lighthouses	212	0	3.9
Other	256	37	42.9
Flood control, water power, and reclamation			
Channels	18	3	3.8
Dams and canals	149	32	92.4
Storage reservoirs	18	8	9.7

Works Progress Administration (WPA)

Table 5.1 Contributions to civil infrastructure through the Works Progress Administration, 1935-43

Urban streets	Libraries
Hard surfaced..... 30,000 miles	New 151
Other..... 37,000 miles	Additions..... 67
Sidewalks	Renovations..... 856
New..... 24,000 miles	Auditoriums, gymnasiums,
Improved..... 7,000 miles	recreational buildings
Curbs	New 9,300
New..... 25,000 miles	Renovated 5,800
Improved..... 3,000 miles	Swimming pools..... 900
Road and street lighting	Wading pools..... 1,000
New 838 miles	Skating rinks..... 1,200
Improved..... 1,641 miles	Ski jumps..... 80
New traffic signs erected..... 937,000	Golf courses
Rural roads	New 2,800 holes
Hard surfaced..... 57,000 miles	Improved..... 5,000 holes
Other..... 515,000 miles	Band shells..... 170
Bridges, viaducts	Hospitals
New..... 78,000	New 226
Improved..... 46,000	Additions..... 156
Culverts	Renovations..... 2,168
New 29,805,000 linear feet	Office and administrative
Improved..... 3,288,000 linear feet	buildings..... 6,400
Roadside drainage ditches	New 1,536
New..... 79,000 miles	Additions..... 323
Improved..... 84,000 miles	Renovations..... 4,524
Tunnels	Dormitories..... 7,000
Vehicular..... 26	Storage buildings..... 6,000
Pedestrian..... 193	Armories
Railway, sewer, cattle underpasses. 800	New 400
Parks, new or improved..... 8,000	Renovated..... 500
Athletic fields, new or improved.... 5,600	Firehouses..... 2,700
Stadiums, grandstands,	Jails, prisons..... 760
new or improved..... 3,300	Airports
Playgrounds, new or improved... 12,800	New 350
Schools	Enlarged..... 700
New 5,900	Runways, new or
Additions..... 2,170	improved.... 5,925,000 linear feet
Renovations..... 31,300	Taxiways..... 1,129,000 linear feet

Table 5.1 continued

Airport buildings
New 1,200
Improved..... 2,800
Fish hatcheries
New 163
Additions..... 135
Improvements..... 169
Riverbank and shore
improvements..... 4,419 miles
Water treatment plants, new
or improved..... 500
Pumping stations..... 1,800
Water mains, new or
repaired..... 19,700 miles
Wells
New 4,000
Improved..... 2,000
Storage tanks or reservoirs,
new or improved..... 3,700
Sewage treatment plants,
new or improved..... 1,500
Incinerators, new or improved..... 200
Storm or sanitary sewers
New..... 24,000 miles
Improved..... 3,000 miles
Sewerage service connections, new or
repaired..... 639,000
Manholes and catch basins
New..... 815,000
Improved..... 423,000
Sanitary privies
New 2,309,000
Renovated..... 40,000

Source: Federal Works Agency, *Final Report on the WPA Program, 1935-1943* (Washington, D.C.: U.S. Government Printing Office, 1946), 50-52, 131-33.

Civil Works Administration (CWA)

Table 4.1 Accomplishments of the Civil Works Administration

New roads	44,000 miles
Road repairs	200,000 miles
Drainage and irrigation ditches	9,000 miles
Levees	2,000 miles
New water mains	1,000 miles
Sanitary and storm sewers	2,700 miles
Bridges	7,000
Large culverts	10,000
Sanitary privies	150,000
Pumping stations	400
Playgrounds	2,000
Swimming pools	350
Athletic fields	4,000
Schools, new or repaired	4,000
Airports, new or improved	1,000

Sources: Harry Hopkins, *Spending to Save* (New York: W. W. Norton, 1936), 121, 168; Bonnie Fox Schwartz, *The Civil Works Administration, 1933–1934: The Business of Emergency Employment in the New Deal* (Princeton, N.J.: Princeton University Press, 1984), 183.

Civilian Conservation Corps (CCC) (some accomplishments)

fire towers erected	3,470
fire roads	97,000 miles
fire-fighting (forest fires)	4,000,000 man-days
trees planted	3,000,000,000
erosion works (with SCS)	20,000,000 acres
misc. conservation works	7,000,000 man-days
drainage system maintenance	84,000,000 acres
flood assistance, Ohio & Mississippi Rivers	1,240,000 man-days

source: http://www.ccclegacy.org/CCC_brief_history.htm#Corps

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