

Center for American Progress



Part of *Progressive Growth*, CAP's Economic  
Plan for the Next Administration



# Progressive Growth

*Transforming America's Economy through  
Clean Energy, Innovation, and Opportunity*

John Podesta, Sarah Rosen Wartell, and David Madland

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# Contributors

The editors and authors of *Progressive Growth* thank their colleagues, the fellows, and staff of the Center for American Progress, listed below, who work on related issues and/or contributed to select portions of *Progressive Growth*. While the ideas and analyses of these experts inspired many of the recommendations in *Progressive Growth*, the recommendations in each report are those of that report's authors and the Center's leadership, and do not necessarily represent the views of all associated with the Center.

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A list of earlier reports published by the Center for American Progress describing policy incorporated into the *Progressive Growth* plan can be found on the inside back cover.

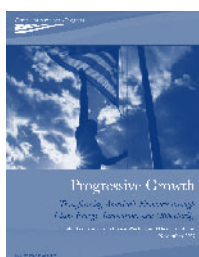
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# About Progressive Growth



**T**he Center for American Progress offers a fiscally responsible investment plan to:

- *Grow our economy* through the transformation to a low-carbon economy and leadership in innovation, technology, and science.
- *Recreate a ladder of economic mobility* so that Americans may make a better life for themselves and their families, and America may be a land with a thriving and expanding middle class prospering in the global economy.

An overview of the entire plan can be found in:

## **Progressive Growth**

### ***Transforming America's Economy through Clean Energy, Innovation, and Opportunity***

By John Podesta, Sarah Rosen Wartell, and David Madland

Other reports detailing aspects of the challenges and recommendations in the *Progressive Growth* plan are:

## **Capturing the Energy Opportunity**

### ***Creating a Low-Carbon Economy***

By John Podesta, Todd Stern, and Kit Batten

## **A National Innovation Agenda**

### ***Progressive Policies for Economic Growth and Opportunity through Science and Technology***

By Tom Kalil and John Irons

**Opportunity and Security for Working Americans*****Creating the Conditions for Success in the Global Economy***

By Louis Soares, Andrew Jakabovics, and Tim Westrich (*forthcoming*)

**Virtuous Circle*****Strengthening Broad-Based Global Progress in Living Standards***

By Richard Samans and Jonathan Jacoby

**Responsible Investment*****A Budget and Fiscal Policy Plan for Progressive Growth***

By David Madland and John Irons

Other reports developing these and other new ideas will be published as part of the *Progressive Growth* series of economic policy proposals from the Center for American Progress. The first were: ***Serving America: A National Service Agenda for the Next Decade***, by Shirley Sagawa, published in September 2007; ***New Strategies for the Education of Working Adults***, by Brian Bosworth, published in December 2007; and ***Social Entrepreneurship and Impact: Creating a Climate to Foster Social Innovation***, by Michele Jolin, published in December 2007.

## Progressive Growth: A Summary

**T**he American Dream has been a story of progressive policy establishing conditions in which individuals have been able to seize opportunities and make a better life for themselves, their children, their families, and their communities. It can be so again. The United States faces unprecedented challenges. Yet at the Center for American Progress, we are optimistic about America's economic future. We are confident that the ladder of economic mobility can be rebuilt with the right leadership and progressive policy.

**Today, working Americans feel less and less secure, and their prospects for economic mobility seem more and more remote.** People are working longer hours than ever before, change jobs more frequently, and have more volatile incomes. Forty-seven million live without health insurance. Few are represented by a union. Many face tough competition from lower-wage workers abroad. The land of the American Dream now has less inter-generational income mobility than many other developed countries. Family incomes have risen on average within generations only because the incomes of women have risen as their participation in the workforce has grown dramatically; incomes of men have stagnated. The additional income from the second earner is essential to cover the rising cost of healthcare, energy, and childcare, among other things.

Each of the traditional pathways to progress is littered with roadblocks. Incomes are not rising; the historical link between greater productivity and higher wages has broken down. Personal savings in the United States is near record lows. From pre-school through high school, we are failing to prepare many for college and the workplace. Those who begin degree or credential programs to improve earnings complete them at alarmingly low rates. Until recently, homeownership was a pathway to wealth accumulation, but many now see their equity slipping away. **American workers feel less secure with good reason. Their prospects for getting ahead are more limited. Working hard and playing by the rules is not enough.**

In recent years, economic growth has been relatively strong, but the economy has added jobs at a lackluster rate compared to similar times in the economic cycle. The share of the nation's income that goes to those in the middle is lower than it has been in 50 years. The benefits of economic growth have all flown to those at the very top.

## Key Steps to *Progressive Growth*

### Accelerate America's transformation to a low-carbon economy.

- Implement an economy-wide cap-and-trade program for greenhouse gases.
- Dedicate cap-and-trade revenues to, first, offset energy costs for low- and moderate-income consumers and support the employees and communities of carbon-intensive firms, and second, invest in innovation and the transformation to a low-carbon economy.
- Implement complementary policies to reduce emissions and increase energy efficiency in the transportation and electricity sectors.
- Create a White House National Energy Council to manage the transformation and ensure that the federal government leads the way.
- Exercise global leadership.

### Spur innovation to sustain productivity growth *and* job creation.

- Make significant new investments to stimulate innovation to address our nation's grand challenges and emerging opportunities.
- Build a flexible, problem-solving workforce that includes more workers with world-class science, technology, engineering, and math skills.
- Restore the integrity of American science.

### Rebuild the ladder of opportunity by restoring economic security and mobility.

- Guarantee quality, affordable *health care* regardless of employment or life circumstance.
- Expand access to effective *education* for our children and adult workers to ready the workforce for 21st century jobs in the global innovation economy.
- Make work pay and *incomes* keep pace with growth through the minimum wage, expansion of the Earned Income Tax Credit and Child Tax Credit, the right to organize, and reforms to unemployment insurance and adjustment assistance.
- Provide greater opportunities to build and secure *wealth* through work, retirement savings, affordable and safe financial services, and home ownership.

### Create a virtuous circle of rising economic fortunes for a growing global middle class—future consumers of U.S. products and services.

- Refocus the three main elements of our international economic policy—trade, aid, and monetary policy—on achieving progressive growth around the globe.
- Enlist all the international institutions—the International Labor Organization, the International Monetary Fund, the World Bank, the World Trade Organization, and regional multilateral development banks—in a coordinated strategy to promote decent work: quality jobs, fundamental rights at work, social protection, and social dialogue.
- Support construction of the laws and institutions that will enable middle-income nations to share new growth widely within their populations.
- Support low-income nations in meeting basic human needs, advancing decent work, moving more workers into the formal economy, eliminating trade barriers to their exports, and supporting the creation of trade-related infrastructure.

### Adopt a responsible fiscal policy to finance needed investments in national priorities.

- Make needed investments in economic growth and restoring economic mobility.
- Dedicate cap-and-trade revenues to ease the transition to a low-carbon economy and invest in policies to spur innovation and the energy transformation.
- Adopt a tax system that is fair and rewards human capital by:
  - Rewarding work and wealth equally.
  - Expanding the Earned Income Tax Credit and Child Tax Credit to help make work pay for low-income workers.
  - Providing tax breaks to employers and employees to encourage more investment in credentialed and portable education of adult workers.
  - Improving retirement security through matching contributions for lower-wage workers in a new Universal 401(k) plan.
  - Lifting the cap on which the employer pays social security taxes while maintaining the employee cap.
  - Permanently reforming the estate tax so that only a tiny fraction of the wealthiest heirs would be subject.
  - Closing loopholes and improving tax enforcement.
- Put America on course to reduce our debt as a share of our Gross Domestic Product.



The prospects for long-term growth are also weak. Our economy is increasingly reliant on unsustainable, debt-driven spending (by consumers and the federal government), instead of innovation and investment. Between March 2001 and March 2007, 84 percent of economic growth came from consumption spending, while less than 4 percent came from investment. The United States has fallen behind many countries when it comes to equipping the workforce with the education and training necessary for individual and national success, doing a mediocre job especially of preparing our children for careers in the innovation economy. Younger cohorts moving into the workforce in coming years will be smaller and have less education than the older generations leaving the workforce.

Globalization and technology have changed the rules of the game. Unsustainable appreciation in the housing market buoyed the economy for too long. And we face a clear and present danger to our economy and the earth itself from global warming. As Rajendra Pachauri, Chairman of the Intergovernmental Panel on Climate Change and recipient of the 2007 Nobel Peace Prize, said recently, “If there’s no action before 2012, that’s too late. What we do in the next two to three years will determine our future. This is the defining moment.” America needs policymakers with a plan for restoring U.S. economic leadership in a global and carbon-constrained economy, making it possible, once again, to dream that our children can look forward to a better future.

The next administration can offer a new vision of America as an economic leader with a growing middle class in a vibrant global economy. America’s economy

could be driven by ongoing invention and the production of high value-added goods and services. America could lead a global energy transformation based on more efficient technologies and clean, renewable fuels. These forces could fuel the creation of good jobs and good prospects for workers at all skill levels. America’s students and workers could be readied to meet the demands of the innovation economy. Moreover, we could ensure the economic security necessary, so that people can take risks and generate wealth for themselves and our country. America could put globalization and change to work for American workers and for millions around the globe.

At the center of this vision is a strategy to address the greatest moral and economic challenge of our time—climate change—and turn it into our greatest opportunity. Left unchecked, the economic disruption caused by climate change will sap our resources and dampen our growth. But with low-carbon technologies and clean, renewable energy, we can capture a new global market, drive American economic growth, and create green jobs for American workers, offering new skills and new earnings opportunities up and down the economic ladder.

CAP’s economic blueprint for a new administration would also leverage our creativity, entrepreneurial culture, and a restored leadership in science and technology to create an innovation economy and spur economic growth. It would seek to enhance economic security and mobility for American workers by creating the conditions in which they could protect and improve their own health, education, incomes, and wealth. It would refocus our international economic policy on promoting decent work and higher living

standards around the globe, helping to generate additional demand for American products and services, restoring American leadership, and ensuring that the rising tide produced by economic integration lifts all boats. Finally, CAP's plan offers a responsible pro-growth fiscal policy that would value work and fairness and support necessary investments in our economic future while setting us on a course to reduce the debt as a share of GDP and ready ourselves for the additional demands of the aging baby boom generation.

Restoring economic mobility for Americans, sustaining economic growth in a global economy, and combating global warming are great challenges, but America is up to the task. From sweatshops to segregation to the space race, the progressive commitment to fairness, human dignity, and what FDR called "bold, persistent experimentation" has driven our country to overcome obstacles as great as these we face today.

## A Unique Plan: What Is Different About *Progressive Growth*?

### CAP's plan differs from other offerings.

First, *we reject the false choice between greater growth and greater mobility and equity*. We focus on growth first, because it is essential to improving living standards. But growth will be greatest when all Americans are contributing their full potential and taking home their fair share.

Second, *we place the energy transformation at the center of our strategy for economic growth*. The energy transformation will not only forestall climate catastrophe. It will create jobs and drive new innovation. It will improve overall growth by reducing the volatility of energy prices. In short, the energy transformation can remake America as an innovation nation, offering the high value products and services that will allow us to continue to lead the global economy despite intense competition from countries with lower labor costs. This will not happen on its own, but it will happen if the president leads a concentrated and coordinated effort to create a low-carbon economy.

Third, *we emphasize restoration of the social safety net because it is necessary to broad-based, long-term growth and not because we view it as the political price to pay to win support for free trade*. Some in Washington speak today of strengthening our domestic social infrastructure in order to quell populist sentiments against trade. At CAP, restoration of economic security is about fairness and the nation's economic interest. Workers will be unwilling and unable to seize opportunities to improve their education, start a new business, or change jobs, if, by so doing, they put at risk their families' health and welfare. Basic security for all workers, we believe, will strengthen economic growth.

Fourth, *CAP wants more for American families than economic security. We want to offer them a chance to get ahead, if they will make the investments in their own future*. In a more dynamic global economy, workers are not buffered from change by employers like they once were. We must rebuild the social safety net, starting with health benefits, and mitigate some of the worst consequences of a continuously shifting global economy with more effective adjustment assistance and unemployment insurance policies. However, we should not be satisfied with only offering American workers a modicum of security. We also want to empower them to move forward and make a better life for themselves and their children—through education and lifelong learning and opportunities to save and build wealth.

Fifth, *CAP's approach builds a ladder of opportunity starting from the bottom of the economic scale.* CAP rejects the ideas of those who say we should only talk about social inclusion, not the reduction of poverty, and those who say we should focus predominately on the electorally relevant middle class. All Americans benefit from a society that offers everyone an opportunity to move ahead from wherever they start.

Sixth, *we offer a new approach to the stale conversations in Washington about trade and globalization.* Today's public debate quickly degenerates into name calling, in a context where the only policy choices offered are to support or oppose specific trade agreements. We propose an international economic agenda built around a serious investment in helping to enhance the quality and quantity of jobs, social safety nets, and rights and relationships at work—the decent work agenda—for workers around the globe, encouraging greater sharing of the benefits of globalization, within and among countries. This agenda serves America's long-term economic interest by supporting the creation of large classes of middle class consumers, who can become new customers for American products and services. This agenda also restores America to a position of global leadership, in which we use our influence to advance the well-being of the billions who still live on less than \$2 a day. In this framework, trade liberalization can be a tool to advance shared growth, and trade agreements should be evaluated based on how well they do so, at home and abroad. Trade agreements should be designed with incentives to advance decent work, create the institutions necessary to help lift living standards, and ensure effective enforcement of commitments and un-

dertakings. But trade is not the only tool to advance this vision; trade, aid, and monetary policy need to be coordinated in support of strengthening the global virtuous circle.

Finally, *CAP has taken on the challenge of showing how to pay for progressive investment priorities, while also charting a pro-growth, fiscally responsible course.* Too many believe that we cannot afford to accomplish our shared aspirations for society, such as providing universal health care, improving education, offering a secure retirement, and reducing poverty. Yet, we can do this and at the same time remain fiscally responsible. We are constrained from doing so only by a fear of tackling special interest giveaways—and addressing conservative tax arguments that are really designed to shrink government until it is small enough to “drown in the bathtub.”<sup>22</sup> A fairer pro-growth tax system would provide sufficient revenues to support required investments while maintaining fiscal discipline.

### ***Five Challenges and Five Progressive Strategies***

The U.S. economy faces five main challenges.



1. The current prospects for sustaining vigorous economic growth are weak.
2. Our economy is dependent upon a high-carbon energy system, and global warming threatens to sap our economic resources.
3. The eroding American Dream leaves many of us fearful of the future and with few opportunities to get ahead.

**PUBLIC SUPPORT FOR PROGRESSIVE GROWTH**



The public is ahead of our leaders. Americans are worried about the direction we are going, but they also know we can do better. As summarized by the New York Times: "When Americans think about their lives in relation to the past, they are decidedly upbeat. But when the discussion is about the future, the national mood darkens."<sup>3</sup> Leaders who take up the Growing Forward agenda are likely to find strong support for their actions. Americans understand the challenges we face, crave leadership on tough economic challenges, and are open to a plan for progressive growth.

**AMERICANS ARE WORRIED ABOUT THEIR ECONOMIC FUTURE**

With the costs of housing, healthcare, education, and self-financed retirement, a middle class life has become unaffordable for most people.<sup>4</sup>



Agree  80%  
Disagree  20%

How would you rate economic conditions in this country today?<sup>5</sup>



Only Fair/Poor  67%  
Excellent/Good  33%

**AMERICANS ARE INCLINED TO SUPPORT THE COMPONENTS OF PROGRESSIVE GROWTH**



Shifting to new, alternative energy production will help America's economy and create jobs.<sup>6</sup>

Agree  79%  
Disagree  17%



The government is not doing enough to promote innovation in America.<sup>7</sup>

Agree  70%  
Disagree  30%

Government investment in education and leading-edge technology skills is the key to making sure America will be able to compete successfully in a world economy.<sup>8</sup>



Agree  86%  
Disagree  14%

Strong majorities favor improving workers' conditions and rights in other countries.<sup>9</sup>

Endorse standards  93%  
Disagree with standards  7%

**AMERICANS AGREE WITH THE DIRECTION OF PROGRESSIVE GROWTH**

Which is the better way to improve the economy, large tax cuts or public investments in schools, health care, and job training?<sup>10,11</sup>

Public investment  61%  
Large tax cuts  29%

- 4. Globalization puts pressure on U.S. jobs and leaves too many of the world's poor behind.
- 5. The Bush legacy of war spending and constrained revenues makes it challenging to make needed investments in America's future.

All five of these challenges can be overcome with a strategy for progressive growth.

One hundred years ago, at the beginning of the 20th century, we faced challenges from similarly profound transformations. America's local economies were rapidly

becoming a single national one. Robber barons used their power to accumulate previously unimagined wealth, while children labored in sweatshops. Our country's forests were being clear-cut. Few had even little hope of rising above their station in life.

But then, as now, the progressive movement offered a vision of a vibrant, market-driven economy whose benefits were widely shared; and progressive leaders set about to create the conditions in which the majority of Americans could make for themselves a more promising future. Progressive leaders crafted sweeping policy changes to give Americans greater opportunities to find good jobs and to save and invest for themselves and their families. Progressives ended child labor, established minimum wage laws, built Social Security, and made access to home-

ownership possible for millions. They also created the National Park system and enacted laws to clean our environment to protect our planet for future generations. In short, they helped to create a strong and growing middle class whose life trajectory was soon known worldwide as the American Dream.

Modern progressives are again rising to meet our economic challenges by detailing the strategies to achieve growth and opportunity in the new economy. CAP offers the *Progressive Growth* plan in the progressive movement's tradition of foresight and pragmatism. We believe it is a reality-based vision for how progressives should govern the country in service of economic growth and higher living standards for all. We urge the next president and his or her administration to lead America toward *Progressive Growth*.

## Challenge #1

### Potential catastrophic effects of global climate change.

There is no longer any question that the Earth is warming as a result of human-produced greenhouse gas emissions. America is waking up to the urgent need to reduce our greenhouse gas emissions. It is no small task when our economy today depends on coal, oil, and gas. Our shared future requires an epic transformation of the U.S. economy.

We are already beginning to feel some of the economic consequences of global warming and continued dependence on foreign oil. The insurance costs of extreme weather events, which are predicted to increase with global warming, have already increased tenfold in just 30 years.<sup>12</sup> Energy prices are becoming more volatile, harming consumers, business, and growth.<sup>13</sup> The oil market upheavals of the last 30 years have cost the U.S. economy \$8 trillion, according to a 2005 estimate by the Department of Energy. Gas prices are more volatile than the stock market and depress Americans' personal savings.<sup>14</sup> (See Costs of Inaction, p. 6)

Our national security is suffering too from our overreliance on dangerous and dirty fuel sources. Our addiction to oil funds unstable and hostile regimes, and carbon emissions from dirty coal will reinforce existing environmental challenges at home and abroad. Increasingly serious effects of global warming—ranging from more intense storms to droughts to sea level rise to food shortages—will likely cause yet more instability around the world. Other threats include a vulnerable global energy infrastructure and the waste and proliferation challenges associated with nuclear energy.

The much discussed Stern Review on the Economics of Climate Change, commissioned by the British Government and authored by Sir Nicholas Stern, former Chief Economist for the World Bank, concludes that economic damages from climate change could be seismic:

*“Our actions over the coming few decades could create risks of major disruption to economic and social activity, later in this century and in the next, on a scale similar to those associated with the great wars and economic depression of the first half of the twentieth century. And it will be difficult or impossible to reverse these changes.”*

Now consider projections for energy consumption over the next decade. According to the EIA, unless we make significant changes in the way we produce and consume

## The Cost of Inaction

*Selections taken from: “The US Economic Impacts of Climate Change and the Costs of Inaction,” from the Center for Integrative Environmental Research at the University of Maryland, a compilation of other study results.*

### National Costs

- **Coastal Property.** If sea levels rise 20 inches by 2100, the damage to coastal property throughout the country could cost anywhere from \$23–\$170 billion.
- **Electricity Infrastructure.** If the energy demand for cooling in response to warmer temperatures is met, improvements to the national electricity infrastructure could require investments worth over \$300 billion by mid-century.
- **Agriculture.** If California’s Central Valley suffers an extreme drought or water shortage, the rest of the country is so dependent on the region’s output that during just one year the entire nation’s economy could suffer around \$6 billion in losses.
- **Great Plains.** Strained water resources based out of the San Antonio Texas Edwards Aquifer could cause annual losses to the region’s agriculture totaling as much as \$6.5 billion by 2030 and up to \$10.3 billion by 2090.
- **Great Lakes.** To remedy a decline in water levels and maintain commercial and recreational activity on the Great Lakes, the region could have to dredge sediments at a total annual cost as high as \$210 million.
- **California.** Warmer weather in general could cause the state’s energy costs to skyrocket an additional \$2 billion, and in the worst case \$8.11 billion, a year by 2100.
- **Pacific Northwest.** The number of acres burned by wildfire is expected to double by 2040, costing the region \$124 million just to fight the fires in that year.

### Regional Costs

- **Northeast.** As storms intensify, the Northeastern region faces the threat of forced evacuation, which could cost between \$2 billion and \$6.5 billion. On a smaller scale, a 10%–20% decrease in the number of ski days could mean \$405–\$810 million less in economic activity each year. Reduced sap flow could burden the maple syrup industry with \$5.3–\$12.1 million in annual losses.
- **Alaska and Hawaii.** Additional infrastructure maintenance in Alaska is expected to require \$5–\$10 billion through 2080 and Hawaii is likely to need just short of \$150 million for drinking and wastewater infrastructure over the next 20 years.



Flooded New Orleans following Hurricane Katrina, August 2005; remnants of a drought-damaged crop in Minnesota; firefighters during the August 2006 wildfires in Oregon; flooding in Texas, July 2007. (AP)

Note: All financial values have been converted to 2005 US dollars, though the time frame for each estimate varies. Initially, some sectors or regions will see an economic benefit, but in few cases is it expected to exceed the eventual costs. For more information on each estimate’s source, see the underlying studies cited by “The US Economic Impacts of Climate Change and the Costs of Inaction.”

energy, U.S. energy consumption will increase 31 percent over the next 25 years. Fossil fuels are expected to account for 87 percent of that growth by 2030. One hundred forty-five gigawatts of new

coal-fired power are projected to be built in the United States by 2030, adding 790 million metric tons of carbon dioxide emissions per year.<sup>15</sup>



The challenge is markedly greater because we have made so little progress during the Bush administration. Over the past six and a half years the administration has done nothing to reduce our dependence on oil and very little to promote alternative energy sources. The president quickly abandoned his campaign promise to regulate CO<sub>2</sub> emissions from coal-fired power plants. His administration crafted an energy policy by meeting with polluters behind closed doors and then gave tax breaks to oil companies. Government officials have dragged their feet on increasing fuel efficiency standards on cars or energy efficiency ratings on appliances. The federal government spent less than \$2 billion on energy research and development last year, a third of what it spent 25 years ago and 3 percent of the total projected U.S. investment in the acquisition program for the Air Force's F-22 fighter,<sup>16</sup> a Cold War-era airplane conceived two decades ago to check the now non-existent threat from the Soviet Union.<sup>17</sup>

With such misplaced U.S. priorities, it should come as no surprise that Dutch and Spanish companies lead the world in wind turbine sales, and Germany, not known for its sunny climate, has some of the highest rates of solar photovoltaic penetration. The success of these countries is a result not of their superior engineering capabilities but of their public commitment to a strong green economy. Our opportunity to be a leader is now. We must act.

### ***Strategy #1: Accelerate the energy transformation.***

We must create a low-carbon economy that will drive our economic growth. This

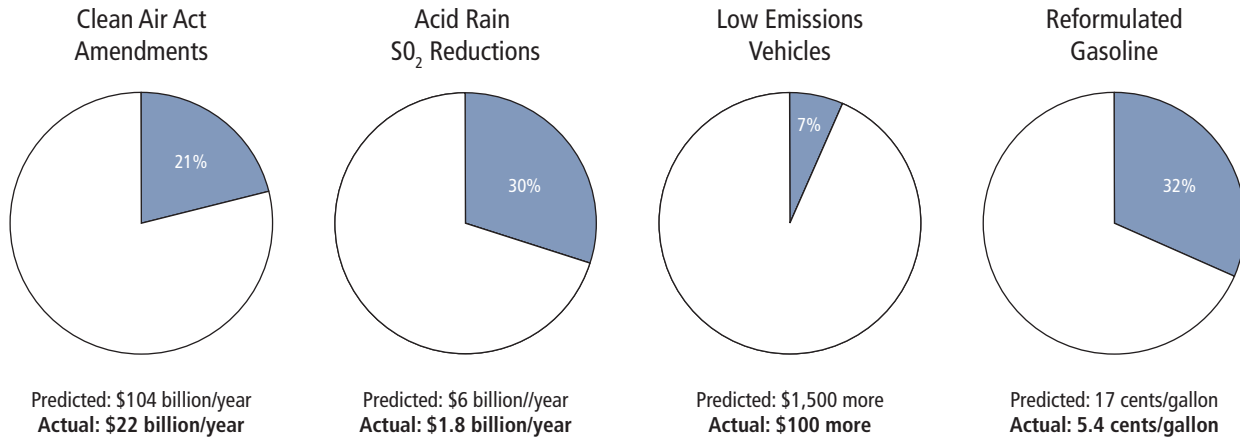
will require a transformation on the scale of great American achievements of the past, such as the creation of national railroads and the construction of the interstate highway system. Naysayers will complain that we cannot afford to tackle climate change, but the truth is that we cannot afford not to. In fact, the costs of prior efforts at air pollution control have always proven to be less than predicted (see Figure 1). And the costs of inaction are unacceptable.

We need to create an economy in which highly efficient vehicles dominate the roadways; service stations pump large quantities of low-carbon alternative fuels; buildings are lit by compact fluorescent bulbs and employ solar heating and cooling as well as highly efficient appliances and air conditioning; workers have good "green" jobs making our infrastructure more efficient as well as developing, installing, and even growing alternative energy sources; utilities increase their profits when customers save energy and the



*Green workers install solar panels. (Craig Miller Productions and NREL/DOE)*

**FIGURE 1: ACTUAL COSTS OF AIR POLLUTION REGULATION IN THE U.S. PROVED TO BE MUCH CHEAPER THAN ANTICIPATED**



Source: Environmental Defense, "Air quality measures consistently cost less than predicted."

utility companies generate a quarter or more of their electricity from renewables; coal plants are built to capture CO<sub>2</sub> and pump it through a national network of pipelines for geologic storage; businesses of all kinds factor the cost of carbon into their bottom-line calculations and aggressively pursue low-carbon options; and energy prices are stable so that individuals and businesses can make long-term plans and generate economic growth.

To achieve this transformation we will need to put in place two broad sets of policies. The first, for the nation as a whole, would limit greenhouse gas emissions. The second, for the transportation and electricity sectors that generate 72 percent of U.S. CO<sub>2</sub> emissions, would increase energy efficiency and reliance on low-carbon fuels to reduce emissions.<sup>18</sup>

*We support a cap-and-trade program to price carbon emissions—set to limit the increase in average global temperature to approxi-*

mately 2°C (3.6°F) above pre-industrial levels. Cap-and-trade programs *provide certainty of CO<sub>2</sub> reductions and have a proven record of success reducing acid rain.* Under a cap-and-trade plan, businesses would have to obtain permits entitling them to emit a certain quantity of CO<sub>2</sub> or its equivalent in other greenhouse gases. Companies unable to meet their emissions quotas with permits obtained from the federal government at auction could buy permits on the open market from other companies able to reduce their emissions beneath their quotas.

We recommend auctioning off 100 percent of the permits, creating an incentive to reduce emissions as well as generating revenue to offset energy cost increases and improve energy efficiency. We dedicate the majority of the revenue to easing the transition. To ensure that low- and moderate-income Americans are protected from short-term increases in energy costs, we commit an estimated \$336 bil-

lion over 10 years to tax rebates and other income support to offset their higher costs. About \$75 billion in auction revenue should be invested over 10 years to help carbon-intensive businesses in order to protect the workers and communities where these firms operate. The price of the carbon credit will be reflected by the market in the price that these firms can charge, so a higher level of subsidy or free credits for incumbent carbon users would reward these slow-to-reduce-emissions firms with windfall profits.<sup>19</sup> Finally, CAP would invest the remainder of the auction revenues in policies that spur greater innovation and will drive the transition to a low-carbon economy (see Figure 2).

Some economists argue that if we set the right price for carbon, then we can dispense with complementary policies such as vehicle fuel economy standards and emission performance standards for all new coal power facilities, since price signals are more economically efficient. That argument fails in practice.

Because the energy component of overall cost is often not that high, the carbon price signal required to spur many of the changes we need—whether rapid market penetration of hybrid cars, the purchase of high efficiency appliances, or the development of a workable carbon capture-and-storage system for our coal fired power plants—would be too high. Therefore, we need other complementary

environmental policies, like requiring that 25 percent of electricity produced in the United States and 25 percent of transportation fuels come from renewable sources by 2025, to assure the market that demand will be sufficient for the new low-emission technologies and products they develop.

Others are skeptical that we need government investment and subsidies for energy technology, once we set a price for carbon and ensure adequate demand. However, while we can leverage the private sector's intellectual and financial capital to drive the transformation, government steps are also essential to ensuring the optimal investment and rapid development and deployment of low-carbon fuels and technologies.

As described in the companion report, “A National Innovation Agenda,” the social return on research and development is much larger than the private return. The returns from higher risk but higher reward research may be too speculative to draw private investment. And the private sector will not always move quickly enough. Sometimes, we need the government to invest directly to start the basic research and new technology development that will jumpstart the innovation to a stage where the private sector can commercialize the technology. The government can also lead the way, putting its own money where its mouth is, by wield-

**FIGURE 2: ALLOCATION OF CAP AND TRADE REVENUE**

	2009–2018	PERCENT
Revenues from Auction	\$746 billion (+)	100%
Support for Low Mod Consumers and Carbon Intensive Firms	\$411 billion (-)	55%
Investments to Spur Energy Transformation and Innovation	\$336 billion (-)	45%
<b>Net Revenue</b>	<b>0*</b>	<b>0%</b>

\*Does not equal zero due to rounding

ing its own purchasing power to promote new low-carbon technologies. Only by this combination of public and private investment may we hope to achieve the socially optimal reductions in emissions and the associated economic costs in the short time that we have left to reverse course.

America's core assets give us a great opportunity to become a leader in the global market for alternative energy products and services. New business formation is easier in America than in all but three other nations in the world.<sup>20</sup> Great universities, a large and diverse workforce including many of the best educated in the world, great access to capital, strong protections for investors, and the lifestyle still emulated by many around the world, all position America to become a leader quickly if we were serious about the effort. Without the proper policies in place, however, the United States will continue to lag behind other nations in the burgeoning "clean tech" market.

Other nations are helping their industries to lead in these markets. We as a nation need to boost significantly our spending

on fundamental research and development on alternative energy solutions, so that our budding green industries can gain significant first-mover advantages, become a net exporter of these technologies, and provide high quality jobs with a future for millions of Americans. If we do not provide this support, America could fall further behind the curve, purchasing the fruits of other countries' ingenuity while struggling to catch up.

Our efforts should start with transportation and electricity: the sectors that produce 70 percent of U.S. carbon emissions. To reduce emissions in the transportation sector, we need to enhance vehicle fuel economy, develop low-carbon alternative fuels and a refueling infrastructure, and reduce the number of miles we drive. To increase fuel economy, we should work to dramatically increase the market penetration of hybrid and other highly fuel-efficient vehicles. To develop alternative low-carbon fuels, we should require the rapid increase in production and market availability of such fuels through both mandates and the intensive R&D needed to move from corn-based ethanol to cel-

## Ten Steps to a Low-Carbon Economy

1. Create an economy-wide, greenhouse-gas-emissions cap-and-trade program
2. Eliminate Federal tax breaks and subsidies for oil and gas
3. Increase vehicle fuel economy
4. Increase production and availability of alternative low-carbon fuels
5. Invest in low-carbon transportation infrastructure
6. Improve efficiency in energy generation, transmission and consumption
7. Increase the production of renewable electricity
8. Use carbon capture-and-storage systems to capture and bury the carbon emissions from burning coal
9. Create a White House National Energy Council and make the Federal government a low-carbon leader
10. Lead efforts to advance international global warming policies

## The National Energy Council

### *Managing the Transition to a Low-Carbon Economy*

Capturing the energy opportunity and making the rapid transition to a low-carbon economy will require fully committed presidential leadership and a reorganization of the missions and responsibilities of the economic, national security, and environmental agencies throughout the government.

To this end, the incoming president should create a new National Energy Council of all relevant Cabinet Agency heads, lead by a National Energy Advisor reporting directly to the president. The Council's mission will be to coordinate the relevant policy of all the agencies of the federal government, outreach with states, localities, and the private sector, and U.S. leadership and partnership in international efforts to reduce global emissions.

lulosic biofuels and to electricity as plug-in hybrid vehicles become more widely available. At the same time, we need to assure the development of the service station infrastructure required to make alternative low-carbon fuels widely available. Finally, we need to focus on reducing the miles we travel in vehicles with smart land use and transportation policy that seeks to promote greener communities, with more transportation options, including mass transit.

Reducing carbon emissions in the electricity sector requires three basic elements: efficiency, renewables, and clean coal. Policymakers must enact measures aimed at deploying the energy efficiency technology we now have on the shelf, as well as developing still better products. We also need to increase the production of non-hydro renewable energy, which already generates 11 percent of electricity in California but just 2 percent of the nation's electricity. Clean coal—including the capture, transport, and geologic storage of

The Council's first task should be to support the president in preparing energy legislation for delivery to Capitol Hill within 60 days of the inauguration. Within 120 days, the Council should advise the president on an enhanced research and development program in consultation with the Energy Innovation Council,<sup>21</sup> as well as on developing an international agenda for global reductions in carbon emissions. The president should promise on Inauguration Day to convene the Council personally each quarter for the first year to ensure that all of the president's cabinet understands the importance the president puts on this effort. Each agency also shall be charged with developing and reporting on its own plan for helping to achieve the national goals.

CO<sub>2</sub> from coal-fired power plants—will require a great long-term effort, including R&D, full-scale demonstration projects and the development of a new, complex regulatory system. But unless we conquer the coal challenge—not only in the United States but globally, especially in China and India—our efforts to control global warming will likely fail.

The urgency and complexity of creating a low-carbon economy demands a president willing to make the issue a centerpiece not only of his or her energy policy but also of his or her economic program to produce broad-based growth and sustain American economic leadership in the 21st century. To this end, the incoming president in 2009 should create a new National Energy Council in the White House led by a National Energy Advisor whose mission will be the energy transformation of our economy.

Only a White House-led effort can coordinate a government-wide focus on reduc-

ing carbon emissions, work with leaders around the globe as partners, and collaborate with state and local governments. The National Energy Council can help all government agencies internalize the mandate to reduce our national carbon footprint. The Council also can ensure that the federal government uses its purchasing power to spur low-carbon technologies and promotes training for “green collar” workers in clean energy industries.

The creation of new “green jobs” is one of the great benefits of capturing the energy opportunity. The Blue-Green Alliance, a partnership of the Sierra Club and the United Steelworkers, has commissioned a series of new reports highlighting the economic opportunities that could come from a serious investment in renewable energy. The reports, produced by the Renewable Energy Policy Project, find that a serious commitment to renewable energy could create 820,000 new, well-paying manufacturing jobs across the country over 10 years, looking only at renewable electricity (wind, solar, bio-

mass, geothermal) and without considering the job creation potential of clean auto manufacturing, construction jobs for efficient buildings and retrofitting existing facilities, the creation of more efficient transportation networks, and many other new job opportunities created by the energy transformation.<sup>22</sup>

The federal government should help to ensure that some of these “green jobs” offer a pathway to family-supporting wages and benefits for those in poverty and those displaced from high-carbon industries. The federal government should create a new Clean Energy Jobs Corps to provide service-learning, training, and apprenticeship programs to help move workers into “green collar” jobs. The Clean Energy Jobs Corps will marshal the resources of agencies like the Corporation for National and Community Service that has run the highly successful AmeriCorps program, along with job training resources administered by the Department of Labor under the Workforce Investment Act.

## Challenge #2

### A weak foundation for economic growth in an innovation age.

Thus far in the 21st century, the American economy has been built on a shaky foundation. Both consumers and the federal government are spending more money than they are taking in and are borrowing to make up the difference. As a result, our economy is increasingly reliant on unsustainable debt-driven spending, instead of innovation and investment.

Between March 2001 and March 2007, 84 percent of economic growth came from consumption spending, while less than 4 percent came from investment, according to a report by Center for American Progress Senior Fellow Christian Weller. Consumer spending now accounts for a larger share of economic growth than at any other time since World War II. And since 2000, the federal government's debt has increased by over \$3 trillion. Debt-driven consumption, whether by consumers or the government, does not last indefinitely.<sup>23</sup> In fact, the recent credit crunch and declining house prices stemming from the subprime mortgage market crisis have left economists debating whether we are going to see a recession or “merely” a significant slow-down in growth. (The nightly news focus on the housing market only reminds American families—even those unaffected by the subprime market—how anxious and stressed they feel about their economic future.)

Our economy's overall productivity growth, which increased rapidly during the late 1990s to help fuel a broad-based economic expansion, has been slowing down since 2002 and is now back down to historically low levels.<sup>24</sup> Productivity growth is the foundation for long-run economic success, and even small differences in productivity have a huge impact on America's long-term standard of living. Our average standard of living will double every 23 years, if our productivity growth rate is 3 percent; every 70 years, if it is 1 percent.<sup>25</sup> Without productivity growth, other countries will pass us by.

In what our colleague Gene Sperling calls the “dynamism economy,”<sup>26</sup> productivity and economic growth depend upon a skilled workforce. But, the United States has fallen behind many countries when it comes to equipping the workforce with the education and training necessary for individual and national success. We continue to do a mediocre job of preparing our children for careers in science, technology, engineering, and mathematics. We also do not prepare our students for an economy where, regardless of profession or salary, problem solving and creativity create value. The United States ranked 16th out

of 26 among member nations of the Organisation for Economic Cooperation and Development in college graduation rates.<sup>27</sup> Math, science, and reading proficiency levels in the United States also compare poorly with other OECD countries, which bodes ill for the capacity of those with U.S. degrees to compete effectively for higher skilled jobs in a global economy.<sup>28</sup>

Our immigration policies make it difficult for the “best and brightest” from other countries who receive advanced degrees from our colleges and universities to stay here and contribute to our economy. And, even if our education system was radically transformed overnight, our demand for skilled labor would exceed the supply. Younger cohorts moving into the workforce in coming years will be smaller and have less education than the older generations leaving the workforce. “The demographic factors that worked to our advantage in the past are turning against us in the future.”<sup>29</sup> There are twice as many workers between the ages of 25 and 65 already in the workforce with no postsecondary credential (60 million), than *all* those who will graduate from high school over the next 10 years (30 million).<sup>30</sup> Therefore, we need to upgrade the skills of the U.S. resident adult workforce. We can leave no worker behind.

The dynamism economy rewards new ideas and those who can adapt to them. Innovation in products, services, and processes drive economic growth and job creation. Investment in research and development, particularly in key disciplines such as the physical sciences and engineering, has actually been declining as a fraction of the economy. Agencies such as the Defense Advanced Research Projects Agency, or DARPA, which have traditionally backed breakthrough

technologies such as the Internet, have shifted to funding projects with more immediate payoffs.

Finally, the Bush administration has rejected scientific advances when they conflict with its right-wing ideology. Dr. Richard Carmona, the Bush administration’s Surgeon General from 2002 to 2006, told Congress, “Anything that doesn’t fit into the political appointees’ ideological, theological or political agenda is ignored, marginalized, or simply buried.”<sup>31</sup> This fundamental disrespect for scientific integrity could deter the world’s best from pursuing their science in the United States.

### ***Strategy #2: Restore our leadership in innovation, science, and technology.***

To fuel economic growth in an economy driven by ideas, we need policies which promote rather than impede innovation. There are a large number of public policies that affect America’s ability to innovate, from research funding to education and training, immigration, intellectual property protection, antitrust, taxes, economic development, and even international trade. Innovation’s great potential should also be understood broadly to include advancements in the increasingly vital “third sector” of the economy by social entrepreneurs.<sup>32</sup> America needs to scrutinize our agenda in all these areas to provide the greatest possible impetus for innovation.

### **The Role of Government**

Of course, the responsibility for developing new commercial products, processes,



and services rests with the private sector, but the private sector tends to underinvest in the basic ideas, knowledge, and skills that produce innovation. As the benefits of investment in new knowledge can “spill over” to those who did not create it, private investors do not always have a sufficiently powerful incentive to make investments that would benefit the common good. For example, economists Charles Jones and John Williams conclude that the socially optimal amount for the United States to invest in R&D is two to four times the current expenditure.<sup>33</sup>

Unfortunately, while science, technology, innovation, and a highly skilled workforce are becoming more important to our future prosperity, U.S. federal investment in R&D, particularly in key disciplines such as the physical sciences and engineering, has actually been declining as a percentage of Gross Domestic Product.

Of course, while there are significant “market failures” associated with the innovation process, interventions can lead to “government failures” as well, such as pork-barrel politics, rent-seeking by interest groups, regulatory capture, decision-making on the basis of faulty or incomplete information, policies where benefits are greatly exceeded by costs, and lack of flexibility to adapt to changed circumstances and new evidence. Government’s role in spurring innovation, science, and technology must be guided by principles that, among other things, seek to avoid these problems. CAP believes these principles should include the following:

- The role of the government is to make investments in areas where the private sector will underinvest relative to their social return, such as fundamental research and a skilled workforce, and



*Although science, technology, innovation, and a highly skilled workforce are becoming more important to our future prosperity, federal investment in R&D has been declining.*

to create a policy environment that will foster competition, innovation, and entrepreneurship. The private sector then takes the lead on the commercialization and adoption of new technologies.

- No one can predict the future evolution of technology—not even the participants in the marketplace. For this reason, the government should set broad goals and invest in a portfolio of approaches to achieve those goals.
- America’s innovation policy needs to recognize that even the way we change is changing. Companies are pursuing globalized, democratized, open-innovation strategies that challenge traditional business and government models.
- The role of the federal government should be to serve as a catalyst. New initiatives should be designed to spark additional investments by industry, academia, states, foundations, and other stakeholders.

- Finally, more and more Americans should be both participants in and beneficiaries of the innovation economy. We must not think of innovation as the province only of the highly educated.

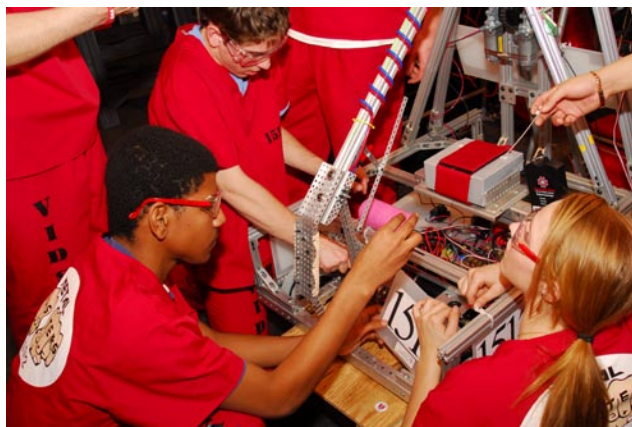
### The Innovation Agenda

To help create the building blocks of innovation, we should first make sustained increases in federal research funding, particularly for university-based research. Federal investment in many key disciplines has actually declined as a fraction of GDP. Currently, agencies can fund only a fraction of the high-quality proposals that they receive. The budgets for the National Institutes of Health, the Department of Energy's Office of Science and the National Institute of Standards and Technology should be doubled over the next 10 years, while the budget for research and education at the National Science Foundation should be increased by 10 percent per year for the next 10 years. The Defense Department should reallocate R&D spending so that funding for research (as opposed to development) grows at a rate of 10 percent for the next 10 years.

Most of the proposed increases in research funding should augment the core

disciplinary programs of science agencies that support investigator-initiated projects. Some of the increase in funding, however, should be targeted to multi-disciplinary initiatives that respond to national priorities and emerging opportunities, such as research on alternative energy and education and training, as well as methods to improve healthcare outcomes while reducing costs. Here, the president and the Congress should set broad goals, but not pick winners. Instead, they must rely on the scientific and technical community and other stakeholders to identify the most promising research directions.

We also need to ensure that these funds generate the most bang for the buck. We should expand support for high-risk, high-return research; foster new partnerships between universities and industry that address long-term, scientific, and technological challenges; and actively encourage multidisciplinary research and education. We should also make greater use of prizes and advance market commitments as tools for stimulating technological innovation and work to expand private sector incentives to invest in R&D. Finally, the federal government should encourage all agencies to conduct innovation-related research on the major national challenges they are working to address.



2007 BAE Granite State Regional FIRST Robotics Competition in Manchester, NH. Images courtesy of BAE Systems.

Human capital investment is equally important to our capacity for innovation. We must enhance the quality of our education in Science, Technology, Engineering, and Mathematics, or STEM, at every stage of the pipeline. We can start with improving the quality and quantity of K-12 math and science teachers (see the companion report: "Opportu-

nity and Security for Working Americans” (forthcoming)), support undergraduate and graduate education in science and engineering, and support initiatives to expand the diversity of the STEM workforce. We also can do more research and development on technology to enhance the effectiveness of learning, in STEM disciplines and others, across the spectrum from early childhood, K-12, higher education, and lifelong learning.

Our workforce is not made up of U.S. natives exclusively; almost 25 million, 15.3 percent, are foreign-born workers who immigrate to the United States temporarily or permanently, largely drawn by the opportunity here.<sup>34</sup> Immigration affects all aspects of the U.S. economy from the corner store to the multinational corporation, from lettuce fields to biotech laboratories, from the lowest to the highest skilled work, and from the least to the most educated among us, and *all* that lies between. Reforming our country’s immigration system to meet both our security and economic needs is a challenge beyond the scope of this plan. Yet our capacity for innovation depends upon getting all aspects of our immigration policy right for

a 21st century economy. Some principles are set forth in more detail in the companion report: “*A National Innovation Agenda.*”

In sum, we must invest in the scientific, technological, and innovative capacity of our nation and treat that capacity like the most valuable of all natural resources, for it is the base upon which much of our economic future will be built. Fifty years ago, in the wake of the surprise launch of the Soviet Union’s Sputnik satellite, President Eisenhower and the Congress created the predecessor of what become the Defense Advanced Research Projects Agency and the National Aeronautics and Space Administration and passed the National Defense Education Act. President Eisenhower also created the President’s Scientific Advisory Council and met consistently with the nation’s top scientific talent to discuss many of the key issues of the day. The challenges we face today—from climate change to lagging educational attainment to globalization—are every bit as momentous. They demand a response as serious, a similar level of executive and congressional leadership, and a commitment to the United States being the world’s leading “innovation nation.”

## All Workers Can Contribute to the Innovation Economy

An innovation economy is based on the skills of *all* of its workers, not just the most highly educated. Innovation-driven business models require large numbers of technically-proficient, scientifically-literate, knowledge workers at every level of the organization who can work across disciplines and job descriptions to solve ever changing problems. High school graduates and PhDs contribute to the innovation economy. If we want to share the *benefits* of an innovation economy widely, a broad cross section of our population must be able to *participate* in the creative process. Therefore, both our current workforce and the workforce of tomorrow must be empowered to become perpetual learners, supported so that they may constantly add to their own capacity for innovation and thus to the nation’s wealth. (Additional policy details about CAP’s proposals for education and workforce training are described in Strategy #3 below.)

## Challenge #3

### The eroding American Dream—the decline of both economic security and economic mobility.

Our national identity is intricately tied to the pursuit of the American Dream. We share the belief that, in our country, advancement and prosperity depend upon one's abilities and efforts, not on where one started in life. In return for hard labor and sacrifice, we will be secure against the vagaries of the economy and, with some luck as well, have a chance to own a home, send the kids to college, and live with dignity in retirement.

Basic economic security provides the underpinning for the hope of advancement and the risk-taking spirit from which our economy benefits. Unfortunately, the America that is a land of both *economic security* and *economic mobility* exists today more in myth than in reality for millions of working Americans.

***American families feel increasingly insecure—having at best a tenuous hold on middle class status.*** People are working longer hours than ever before. Many have lost jobs to new technologies or foreign competition and the next job often will pay less.<sup>36</sup> People now change jobs more frequently and their incomes are more volatile.

American families are now significantly more likely than they were 30 years ago to suffer a major drop in their annual incomes.<sup>37</sup> Seventy percent of Americans now do not have enough financial wealth to withstand a medical emergency or a bout of unemployment.<sup>38</sup> One in eight Americans now lives in poverty, and one-third of all Americans experienced poverty over a 13 year period.<sup>39</sup> Most frightening to many is the prospect of losing a job—and with it health insurance—and the possibility that the next job might not provide insurance at all. Today, 47 million Americans live without insurance, each day worried that they or their family could be denied needed care or be bankrupt by the cost.

The diminished power of American unions—due in large part to conservative efforts that have made it extraordinarily difficult and risky to form a union—also puts economic security at risk. In 2006, a mere 7.4 percent of private sector workers were unionized—down from 24.2 percent in 1973, the first year in which these data were collected.

Without the countervailing pressure of workers united together, the benefits of growth have gone to corporate executives and shareholders, but not wage earners. When unions are strong and able to represent the people who want to join them,

wages and benefits increase for workers throughout the economy.<sup>40</sup>

***Our nation’s once legendary economic mobility is more myth than reality.*** Struggling to hold on, it is no wonder that fewer and fewer Americans can actually get ahead. A parent may not take the risk of returning to school, buying a house, or starting a business, if the decision could jeopardize their children’s health insurance or require all available funds, leaving no cushion in the event of a job loss.

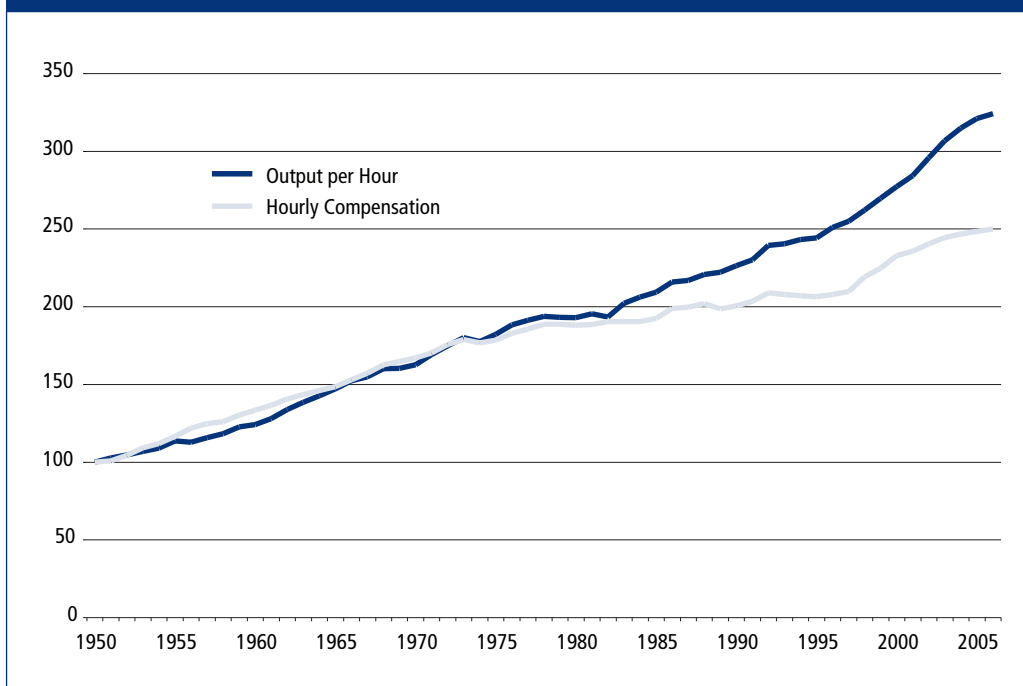
The land of the American Dream now has less intergenerational income mobility than other economically developed countries, such as France, Germany, Canada, Sweden, or Norway, as Tom Hertz demonstrated in a paper published by CAP. Hertz found that “children born [in the United States] to the middle quintile of parental family

income (\$42,000 to \$54,300) had about the same chance of ending up in a lower quintile than their parents (39.5 percent) as they did of moving to a higher quintile (36.5 percent).<sup>41</sup>

Within generations, family incomes have risen only because the incomes of women have risen as their participation in the workforce has grown dramatically; incomes for men have “stagnated.”<sup>42</sup>

The share of the nation’s income that goes to those in the middle is lower than it has been in 50 years.<sup>43</sup> Of course, it is hard to get ahead when the benefits of economic growth all flow to those at the very top of the economic spectrum, as any number of recent economic and social indicators make clear. Since the 1960s, when corporate profits were at an equally high share of GDP,<sup>44</sup> CEO pay has gone from being 24 times the average American’s wage to 262 times that amount.<sup>45</sup>

**FIGURE 3: WAGES LAG BEHIND PRODUCTIVITY GROWTH, 1950–2006**



Source: Author’s calculations are based on data from the Bureau of Labor Statistics, Output per Hour (nonfarm business) and Real Hourly Compensation (nonfarm business) series.

*Each of the traditional pathways to advancement—rising incomes, greater personal savings, education and training, and homeownership—are littered with roadblocks.*

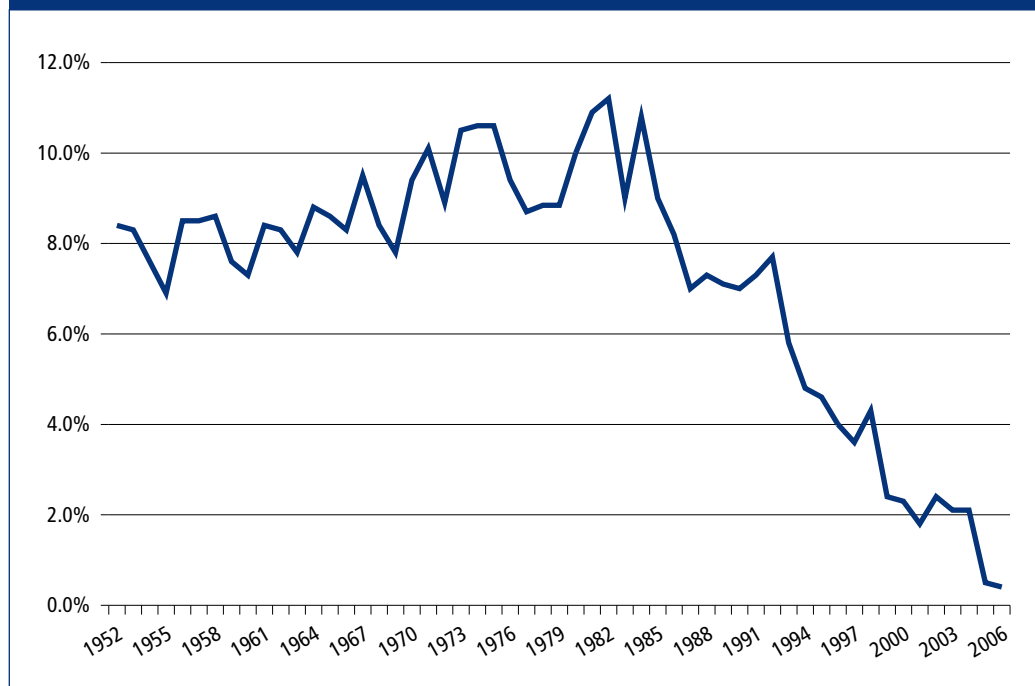
**Income Gains.** Hard work doesn't pay like it used to. For much of the 20th century, when American workers generated economic growth by increasing their productivity, they were rewarded with higher wages. But this link between greater productivity and higher wages has broken down (see Figure 3).

**Savings.** Personal saving in the United States as a percentage of disposable personal income stood at 0.06 percent in the 2nd Quarter of 2007 (see Figure 4). Our "upside down" system of tax incentives to encourage retirement savings distributes the vast majority of the benefits to those who can most easily afford to save,<sup>46</sup> serving to reinforce and further exacerbate already troubling inequality trends.

**Education and Training.** High-wage manufacturing jobs for those with only a high school diploma are a thing of the past. Yet from preschool through high school, our public systems are failing to prepare young people for college or the workplace, especially those from low-income and minority backgrounds. In 2005, only 53.6 percent of 3-to-4 year olds attended preschool.<sup>47</sup> In 2007, CAP released a joint report with the U.S. Chamber of Commerce which found that not one state had a majority of 4th and 8th graders proficient in math and science.<sup>48</sup>

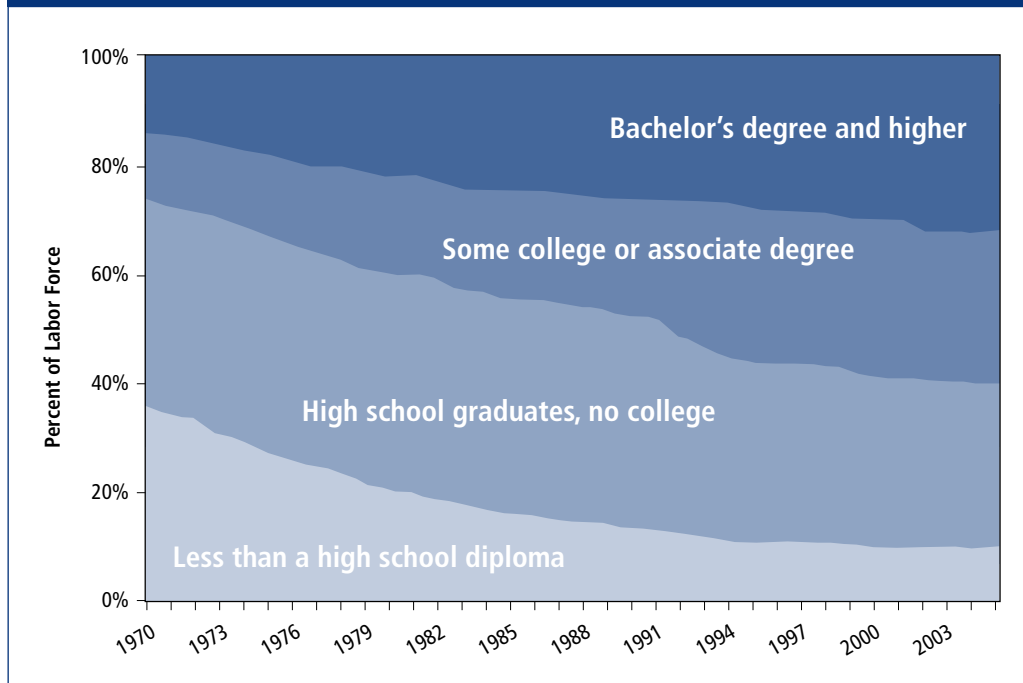
At the secondary school level, on-time graduation rates (within six years) are lackluster at about 70 percent and have been static for about two decades. High school is not preparing students for the workplace. In a national study of over 400 employers, less than 1 percent of employers rated the overall preparation of high school graduates as excellent, and over 40 percent actually rated it deficient.<sup>49</sup>

**FIGURE 4: PERSONAL SAVINGS AS A PERCENTAGE OF DISPOSABLE PERSONAL INCOME**



Source: Bureau of Economic Analysis: National Income and Products Accounts, available at: [www.bea.gov/methodologies/index.htm#national\\_meth](http://www.bea.gov/methodologies/index.htm#national_meth).

**FIGURE 5: EDUCATIONAL ATTAINMENT OF THE LABOR FORCE HAS IMPROVED OVER TIME, BUT MAY SOON DECLINE DUE TO DEMOGRAPHIC FACTORS**



Source: Bureau of Labor Statistics.

Note: Data are from the March 1970–2005 Current Population Survey and are for persons age 25–64. Beginning in 1992, data are based on highest diploma or degree received; prior to this time, data were based on years of school completed.

Among working adults, more than half the American workforce between the ages of 25 and 65 has no postsecondary degree, in fact no postsecondary credential of any kind (see Figure 5).<sup>50</sup> Of those who try to improve their future by starting two-year, four-year, or certificate programs, too few earn a degree or credential that will increase their earnings.

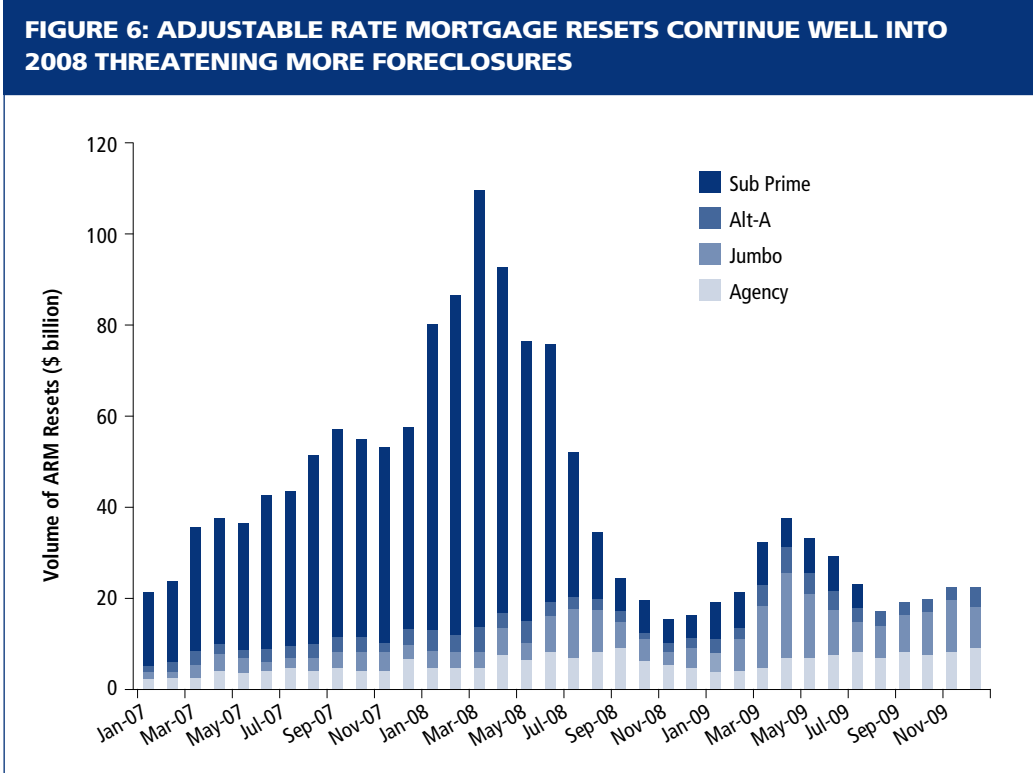
**Homeownership.** Owning a home was one pathway to wealth that had been working in the United States until recently. Now, recent first-time homebuyers with subprime mortgages, too many of them Hispanic and African American, are at substantial risk of foreclosure, losing their home and whatever savings they invested in its purchase (see Figure 7). Other homeowners also stand to lose equity in their homes as the foreclosure wave pushes

house prices down, especially in low- and moderate-income communities with larger concentrations of subprime loans.

In short, American workers feel less and less secure, with good reason. And, their prospects for getting ahead seem to be more limited. Working hard and playing by the rules does not seem to be enough.

***Strategy #3: Create the conditions in which working Americans can find security and make a better future for themselves and their families.***

CAP's plan to restore economic opportunity is based on four elements: health, lifelong education, income, and wealth. In each of these areas, success depends



Source: Center for Responsible Lending, available at: [www.responsiblelending.org/issues/mortgage/briefs/a-snapshot-of-the-subprime.html](http://www.responsiblelending.org/issues/mortgage/briefs/a-snapshot-of-the-subprime.html).

first and foremost upon the individual. But we must align public policy to make it possible for workers to take the risks, ready themselves for a new opportunity, and seize the chance to get ahead. America’s history has been driven by enterprising Americans who made economic progress when the circumstances allowed. We can create the conditions to allow for such success again, if our policies accomplish the following:

- Ensure quality, affordable, and effective **health care** for all, with an emphasis on preventing illness and improving health.
- Provide access to **education and training** that prepares students and workers for the dynamism economy throughout their lifetime from pre-

school to higher education to lifelong learning.

- Reward work, create a fair tax system, promote unionization, and reform unemployment insurance and adjustment assistance, so that Americans who contribute to productivity will see **rising incomes** in the dynamism economy.
- Ensure access to opportunities to **build wealth** through retirement savings and mainstream financial products and services and protect homeowners from predatory practices that put wealth at risk.

Taken together, the proposals in these four areas form an agenda to increase *economic security* and improve the chances for *economic mobility* in America.



**FIGURE 7: TOP STATES FACING DECLINES IN HOUSE VALUES AND LOCAL TAX BASES DUE TO SUBPRIME FORECLOSURES**

STATES (IN ORDER OF REDUCTION IN HOUSE VALUES AND TAX BASE)	NUMBER OF NEIGHBORING HOMES EXPERIENCING DEVALUATION	DECREASE IN HOUSE VALUES/ TAX BASE FROM FORECLOSURE EFFECT (\$ MILLIONS)
California	8,396,887	\$67,608
New York	3,945,030	\$40,738
Florida	4,318,020	\$23,546
Illinois	2,871,480	\$17,535
New Jersey	1,883,257	\$11,969
Maryland	1,430,011	\$8,003
Arizona	1,259,918	\$5,135
Massachusetts	1,049,757	\$4,747
Virginia	1,127,458	\$4,219
Pennsylvania	1,834,314	\$4,135
Nevada	598,129	\$3,966
Texas	2,528,119	\$3,087
Washington	915,058	\$2,974
District of Columbia	223,797	\$2,425
Hawaii	168,799	\$2,358
Mississippi	1,422,570	\$2,185
Colorado	790,356	\$1,898
Ohio	1,493,263	\$1,722
Oregon	477,690	\$1,475
Minnesota	553,647	\$1,291
Georgia	743,581	\$1,205
Connecticut	453,717	\$1,180
Wisconsin	571,917	\$1,106
Missouri	737,694	\$1,077
Rhode Island	256,966	\$1,048
<b>United States</b>	<b>44,511,850</b>	<b>\$222,746</b>

Source: Subprime Spillover: Foreclosures Cost Neighbors \$223 Billion; 44.5 Million Homes Lose \$5,000 on Average. Center for Responsible Lending Issue Paper, November 2007.

Note: Based on conservative estimate of the effects of foreclosures on properties in the same census tract.

## Universal Health Care and Prevention

There seems to be a growing recognition that access to quality affordable health coverage regardless of employment is an essential first step in restoring economic security. To ensure that all Americans have quality, affordable health care, CAP's "Progressive Prescriptions for a Healthy America" plan provides guaranteed access to coverage through any

one of employer-sponsored insurance, Medicaid, or private coverage purchased through a new group insurance pool. The new national insurance pool will offer the cost-saving benefits of group purchasing to individuals who do not, today, have access to this cost-effective strategy for purchasing health coverage. It will also help small businesses and other employers who have trouble finding group coverage by establishing new, affordable options for these employers.

## Economic Security and Mobility Reinforce Each Other

Policy advocates and analysts often separate policies to protect economic security from policies to promote economic advancement. At CAP, we believe that security and mobility are reinforcing ideas—each essential to allow workers and their families to experience the other.

- Portable health and retirement plans available regardless of employment provide security, but they also allow people to take risks, change jobs, go back to school, and start a business—all steps to get ahead.
- A great educational foundation and effective access to lifelong learning give workers the security of knowing that they can adapt and remain employable in an ever changing marketplace and offer the single most important pathway to economic advancement in America.
- Rising incomes are, of course, the key to economic mobility; however, as workers gain experience and their contribution to productivity grows, they also need the security of rising incomes because they also are assuming with time more responsibility for family and must prepare for their own retirement.
- Affordable financial services, products, and benefits allow workers to build wealth over time—a core element of economic mobility. But predatory financial services, credit and mortgage lending practices, and lack of effective incentives for retirement saving for low- and moderate-income workers pose a serious threat to their economic security.

In return, everyone would be expected to enroll in coverage; if they choose not to enroll, they would pay an income-related charge for the health costs they will inevitably need. New subsidies—through expanded Medicaid eligibility and refundable tax credits for those purchasing private coverage—will make coverage more affordable for all. New technologies and research on the effectiveness of treatments will improve the quality of care and reduce the overall costs.

A new emphasis on prevention could improve workers' capacity to get ahead, if health is improved and illness avoided. It also would lower the cost of health care. For example, routine childhood vaccines could save up to \$40 billion in direct and societal costs over time; Medicare could save \$90 billion over 25 years from effective control of hypertension and \$1 trillion for returning to levels of obesity observed in the 1980s. AP proposes to create a universal prevention benefit and

create a Wellness Trust to finance and manage the program.<sup>51</sup> The Trust would create an incentive-based payment policy that would engage an emerging “wellness” industry and emphasize high priority services.

### Education and Training for a Lifetime

America's best route to sustaining economic growth and better jobs for more Americans comes from embracing and spurring the innovation economy, as described above and in the companion report, “A National Innovation Agenda.” Innovation will allow U.S. firms to compete in a global economy, not on price, but on value. Customers will be willing to pay a premium for products and services that meet their needs in new ways, thus allowing for the creation of higher wage jobs. Creating value by solving large-scale, complex challenges like clean energy

production, security, health and well-being for an aging population, and even new technologies to support entirely new ways of teaching and learning at every stage of life will be key to generating new jobs for American workers. Sharing our culture and entertainment products with the world also will continue to require creative, innovative, and increasingly technologically sophisticated workers up and down the ranks.

Regardless of education level and occupation, success for working Americans in these and many other fields in the innovation economy will depend upon strong basic skills, at least some technical expertise, the ability to engage in con-

stant learning and collaboration across disciplines, and teams to generate insights and produce value. Our systems of education and training need to be reformed and redesigned to foster innovation skills. We also must close the achievement gap that disadvantages poor and minority students, who will make up an increasing proportion of our workforce.

To provide students with 21st century skills and keep our workforce prepared and relevant to a more dynamic economy, we need to re-engineer our systems of education and training. Changes are needed at all levels, starting with early childhood and on up throughout a worker's life.

## Innovation-Enabled Jobs for American Workers

Our economy is already creating jobs that are "innovation-enabled" for working Americans. These are jobs in which a new technology enables what was once a blue collar or service worker to leverage technology, expert thinking, and communication skills to add value for customers.

Skilled auto technicians, for example, will see growth in employment above the national average through 2014. Higher wage-earning auto technicians combine knowledge of the latest diagnostic tools and automotive technology with expert thinking and communication skills to solve customer challenges.<sup>52</sup>

The burgeoning wind energy market also is providing higher wage innovation-enabled jobs. Wind turbine technicians install and maintain the increasingly familiar windmills. The job typically requires an associate's degree but is accessible to workers with transferable skills in the electrical trades. In addition to electrical skills, workers will need to learn the basics of how wind energy works and interpret customer problem information.<sup>53</sup>

Even traditional service sector jobs are being transformed, creating higher value and better paid jobs, but requiring a bit more technical and communications skills to help workers move up in the innovation economy. For example, the LL Bean customer service representative is required to access computer databases

and use their communication skills to create customized offerings for their client.<sup>54</sup> Similarly, housekeeping staff at the Mandarin Oriental hotel chain may use BlackBerry technology to record and anticipate customer needs.<sup>55</sup>

Jobs like these are likely to grow and are not susceptible to outsourcing. These and many more innovation-enabled jobs can be a pathway to economic mobility for working Americans, provided that our systems of education and lifetime learning support the preparation and ongoing education of America's workers for the innovation economy.



**Expanded Access to Preschool and Universal Kindergarten.** To provide greater opportunity to the next generation of workers, we must expand access to preschool. Neuroscience research shows that the great majority of the brain’s creative “wiring” occurs in the first years of life—most intensely in the first three years, but continuing at a high rate until approximately age 8 when it begins to slow.<sup>56</sup> More than half of 3- and 4-year-olds in poverty currently receive no preschool education,<sup>57</sup> which is critical for the development of school readiness skills. High quality programs serving disadvantaged students have been found to produce economic benefits that are much greater than their costs, including improved student achievement, lower rates of special education referrals and retention in grade, higher educational attainment, and lower rates of criminal involvement.<sup>58</sup>

Along with preschool, access to full-day kindergarten is correlated with greater success in math and reading, as well as the development of important social and behavioral skills.<sup>59</sup> Most children in this country already attend full-day kindergarten, but it is important to create equal learning opportunities for the rest. A recent Brookings Institution study predicted that investment in early education could cause an increase in GDP of over \$2 trillion (2005 dollars) by 2080—a gain of approximately 3.5 percent.<sup>60</sup>

**Improved Effectiveness of Elementary and Secondary Education, with Expanded Learning Time and More Effective Teachers.** Our collective economic future demands that we leave no child behind. Our economy will need all our children to be prepared to be lifelong learners, flexible problem solvers, and have the basic skills and technical knowl-

*“The slower expansion of the labor force, all else equal, implies slower growth of potential output. More schooling for more of the workforce could help cushion the impact of this demographic transition on economic growth by boosting productivity growth.”*

*—Ben F. Bernanke, Sept. 24, 2007*

**FIGURE 8: LENGTH OF SCHOOL YEAR IN SELECTED INDUSTRIALIZED NATIONS**

COUNTRY	LENGTH OF SCHOOL YEAR
South Korea	225
Japan	223
Chinese Taipei	221
Italy	210
Czech Republic	197
Russian Federation	195
Netherlands	191
England	190
Canada	188
Singapore	180
United States	180
Hong Kong	176
Belgium (Flemish)	175
<b>International Average</b>	<b>193</b>

Source: American Institutes for Research, *Reassessing U.S. International Mathematics Performance: New Findings from the 2003 TIMSS and PISA* (Washington, DC: November 2005).

edge for success in an innovation economy. But, if we are serious about that goal, we must ensure that our children get as much learning time as they need and the highest quality teachers regardless of the incomes in their community, as recommended by the Education Task Force Commissioned by CAP and the Institute for America’s Future.<sup>61</sup>

The school year in the United States is 13 days less than the international average for industrialized nations (see Figure 8). Across 12 years of study, this 13-day deficit means that our children lose 156 days—almost one entire school year. When that learning loss is viewed against the background of huge achievement gaps among U.S. students and mediocre achievement by our students as a whole, America’s use of learning time cries out for change. Lengthening the school day and/or school year will help move our education system out of the agrarian age into the information, knowledge-driven era of today.

CAP has proposed that Congress establish a federal competitive grant demonstration program for states that would pay a portion of the cost of extending learning time in a number of their high-poverty schools and/or those identified as in need of improvement under No Child Left Behind. Rep. Donald M. Payne (D-NJ) introduced the Expanded Learning Time Demonstration Act in September to promote the use of more and better learning time to improve student performance, close achievement gaps, and expand enrichment opportunities for our nation's most underserved students. A number of states would be funded to initiate programs in their selected low-achieving schools.

CAP also believes that every child should have a high-quality teacher and principal and every teacher should have the support they need to do their job well. Effective teachers should not be limited to those students lucky enough to go to the high-achieving schools that tend to attract our best teachers. Legislation introduced by Sen. Ted Kennedy (D-MA) and Rep. George Miller (D-CA), the Teacher Excellence for All Children Act (the TEACH Act), is based on CAP proposals to improve teacher quality. The TEACH Act includes strategies to improve teacher preparation, recruit talented teachers, and provide teachers with incentives to stay in the profession and teach in high-poverty schools. The legislation would provide scholarships and bonuses to recruit high-quality teachers in teacher shortage areas and for teachers to commit to teaching in high-poverty schools.

***Targeted Science and Innovation Initiatives in Elementary and Secondary School.*** Given that employment in the fields of science and math is project-

ed to increase at more than double the rate of other fields in the next decade,<sup>62</sup> adjustments to elementary and secondary school learning must be made to ensure the U.S. workforce remains globally competitive. Congress passed and the president signed the America Competes Act of 2007.<sup>63</sup> The bill outlines a number of strategies that, if fully funded and well implemented, will improve our students' education and preparation for a global economy. These strategies include state grants to better align elementary and secondary curricula with the knowledge and skills needed for a 21st century workforce, improving the preparation of math and science teachers, helping states establish specialty schools in mathematics and science, and creating partnerships between national laboratories and local high-needs high schools to establish centers of excellence in math and science education. CAP recommends funding these programs and encouraging partnerships with employers and postsecondary institutions in these disciplines as a way to build bridges to educational and employment success.

***Ensure Students Graduate from High School and Provide a Fast-Track to College.***

In the face of increasing international competition, the United States must increase the number of high school and college graduates more rapidly than at any time in the past 50 years, and it must do so in ways that make college success likely for those traditionally most underrepresented in higher education—low-income and minority students. Yet these students are the least likely to graduate from high school—nationally graduation rates are about 70 percent, while rates for low-income and minority students are deplorable at slightly over 50 percent. Moreover, researchers have identified 2,000 “dropout factories”

that graduate 60 percent or fewer of 9th grade students and together produce almost half of the nation's dropouts. Intervening in these schools would make a significant dent in the dropout crisis. So CAP proposes federal funding for intensive support to the dropout factories and other struggling high schools. The Graduation Promise Act, which was introduced in both houses of the U.S. Congress in the spring of 2007, outlines three strategies for turning around struggling high schools:

1. Formula grants to states to identify and intervene in low-performing high schools
2. Competitive grants to nonprofit organizations, districts, and states to develop and replicate effective, research-based models for improving student achievement and increasing graduation rates for struggling students
3. Competitive grants to states to support the development of policies that both improve graduation rates and ensure rigorous academic standards

In addition, we must meet the challenge of ensuring that all students graduate ready for college and career. The demands of the 21st century economy require reconfiguring the use of time and money across the K-16 system. The Fast Track to College initiative, based on proposals by former CAP Senior Fellow Hilary Pennington and incorporated in S. 1642, the Higher Education Amendments Act of 2007, would demonstrate the most effective models to move students beyond high school. The bill would authorize funding for the development of alternatives to the traditional high school junior and senior years that will give students a head start on a recognized postsecondary creden-

tial (industry certificates, apprenticeships, associate's and bachelor's degrees). The legislation passed the Senate; companion legislation is awaiting floor action in the House. If the bill reaches the president's desk and is signed, appropriations funding of this demonstration program will be required.

**Lifelong Learning.** For those currently working, current policies promote postsecondary educational practices—program structures and delivery methods—that simply do not work for most working adults. We have no system in place that might encourage employers to invest more in the skills of their less prepared workers, and we offer little help to those low-skilled adults who are prepared to invest in their own education.

CAP Adjunct Scholar Brian Bosworth will publish a paper in the *Progressive Growth* series in which he propose five steps to advance the education of working adults.<sup>64</sup>

First, he proposes creating new economic incentives for employers to help finance basic skill training, ESL training, and credentialed postsecondary education for their employees, at least through the subbaccalaureate level. He proposes an employer tax credit in the amount of 50 percent of certain educational investments, up to \$2,625 per employee per year.

Second, he proposes to strengthen existing incentives for individuals themselves to invest in their basic skills and their credentialed postsecondary education. He proposes that the Lifetime Learning Tax Credit be expanded and made fully refundable for low-income workers.

Third, we need to find more effective ways to encourage postsecondary institu-

tions to evolve more flexible programs and degree strategies that work for working adults. Bosworth propose a five-year program of federal matching grants to those states that are most committed to helping their public postsecondary institutions create innovative and effective degree and credential pathways for working adults.

Fourth, to prompt a fresh start on adult basic education, Bosworth proposes a new strategy centered on the deployment and utilization of technology to accelerate English language acquisition by non-English speakers and employer-defined basic skills for low literacy adults. He would revamp the existing federal adult basic education program, beginning anew with a more employment-focused and technology-based program that supports individual and employer investment in basic skills and English acquisition.

Finally, to help millions of working adults and their employers better understand their shared interest in more and better education and learn about effective ways to plan, finance, and complete that education, he proposes that the federal government launch a national marketing campaign.

This agenda is aimed in particular at helping working adults, especially less well educated adults, improve their educational attainment through a system that works for them and their already complex and challenging lives. CAP believes the next administration should embrace this goal and develop legislation to advance Bosworth's proposals as part of a new agenda for human capital investment.

CAP also urges greater investment in the emerging model of "Workforce Partnerships" to help both upskill workers

and help businesses be more productive. These labor, employer, education, and community partnerships were inspired and initially funded through collaboration of large national foundations. The Department of Labor should help to begin to expand the reach and impact of this promising approach.

### Rising Incomes

We must restore the linkage between productivity increases and income gains for American workers.

**Access to unions.** The first step would be to make it easier to join unions. When workers do have a voice, the results are staggering, in the form of higher pay, higher rates of health coverage, and better benefits overall.<sup>65</sup> For example, 80 percent of union workers participate in some sort of retirement plan whereas 47 percent of non-union workers do not.<sup>66</sup>

**Trade Adjustment Assistance.** We also recognize that, in the dynamism economy, more and more workers will find themselves forced to change jobs and/or careers due to global trade and outsourcing. The House of Representatives recently passed legislation, the Trade and Globalization Assistance Act of 2007, to extend Trade Adjustment Assistance, or TAA, job training and health benefits to service workers and to cover more manufacturing workers, although the bill faces a veto threat from the White House.<sup>67</sup> CAP urges its enactment.

**Economic Dislocation Adjustment Assistance.** Beyond the needed reforms to TAA, it is time to begin to think more comprehensively about how one eases the transitions for workers in a more vol-

atile and dynamic global economy, with reforms to make adjustment assistance available regardless of whether trade is the cause of the dislocation and to make the system simpler and more transparent to use. Our colleague Gene Sperling proposed this approach to Congress recently, testifying that:

*Similarly situated families are just as hard hit whether they lose a job due to trade, outsourcing, technology, or a change in consumer trends—and in the current economy, it will be harder and harder to even distinguish the differences. ... The U.S. ties its most generous adjustment assistance package to trade-specific job loss, through Trade Adjustment Assistance (TAA). The U.S. is in fact an outlier in this regard—all other OECD countries make the package available to all dislocated workers.*

He also noted:

*Our current adjustment assistance programs are complicated and impossible to navigate. Nearly everyone knows where to go to get a driver's license, for instance, but no one knows where to go when they lose their job. Instead, there should be a single phone number, website, and series of one-stop shops throughout the country that any dislocated worker can visit upon job loss.<sup>68</sup>*

CAP proposes that Congress establish a competitive grant program for the states to encourage the design of new, transparent, integrated, and effective demonstration programs for adjustment assistance for dislocated workers, with eligibility to include workers regardless of the reason for dislocation.

We also want to reform unemployment insurance guidelines to ensure that job loss will not result in a severe, immediate hardship. Currently, only about 35

percent of the unemployed, and a substantially smaller percent of low-wage unemployed workers, receive unemployment benefits, due to inflexible guidelines. Beneficial changes include reforming “monetary eligibility” rules that screen out low-wage workers, broadening eligibility for part-time workers and workers who have lost employment as a result of compelling family circumstance, and allowing unemployed workers to use periods of unemployment as a time to upgrade their skills and qualifications. The Trade and Globalization Assistance Act of 2007 discussed above would make many of the necessary reforms.<sup>69</sup>

**Minimum Wage, EITC, and CTC.** We also must recognize that many Americans who work hard still find themselves unable to rise above poverty. We must ensure that the federal minimum wage cannot repeatedly lag behind other wages in the economy. We also recommend tripling the Earned Income Tax Credit for childless workers and expanding help to larger working families. We also would make the Child Tax Credit refundable and so increase its potential to help the poorest families, who pay payroll taxes but have no income tax liability, thus lifting 2 million children and 1 million parents out of poverty.

**Opportunity Housing Vouchers.** Finally, where one lives in part determines what kind of opportunities one has. For low-income families, access to thriving and prosperous communities can affect opportunities as well. CAP's Poverty Task Force recommended the creation of 2 million new “opportunity housing vouchers.” As the Task Force wrote:

*Communities shape people's understanding of their world and their visions for the future. Communities can also directly*



*affect people's employment opportunities, education, and physical and mental health. But too many Americans live in communities with failing schools, unsafe streets, deteriorating housing, and few jobs ... We recommend creating 150,000 new tenant-based vouchers annually, with payment standards high enough to make a broader range of housing choices available to families. An additional 50,000 new project-based vouchers should be created for specific units in areas with good schools, high-quality public services, and good employment opportunities, and to preserve affordable housing in rapidly gentrifying neighborhoods to prevent displacement of low-income residents. Preference for administering vouchers should be given to agencies that operate regionally or cooperate with other regional agencies to maximize housing choice. Voucher funding should be combined with funding for housing-search assistance and case management services so families can participate in HUD's Family Self-Sufficiency program, which connects recipients to employment-related services and allows them to accumulate savings as their earnings increase.<sup>70</sup>*

The Task Force suggested that the key to success for these vouchers would be ensuring that these families can move to communities with significantly more opportunities and pairing the vouchers with employment and social services.

### **Building Wealth**

Finally, we must ensure that our financial system allows everyone adequate opportunities to build their own nest egg, both for economic security and to provide capital to allow workers to seize new opportunities for education, business start-up, and homeownership. That starts with giving the unbanked and un-

derbanked good, safe places to put their paychecks and get access to lower-cost financial services. It includes protections against unfair and predatory credit terms for credit cards and home mortgages. In light of the potential for significant house price depreciation to continue for some time in many areas, we also must have a serious federal and state effort to prevent foreclosures and stabilize neighborhoods and preserve wealth that low- and moderate-income people have built up in their homes. Finally, it means providing people with the opportunity to have a secure and dignified retirement with “right-side-up” incentives for retirement savings through a universal 401(k) system.

### **The Relationship between Globalization and Economic Security and Mobility in America**

The challenges of declining security and mobility stem in part from global forces described in the next section. Technological developments have created a global economy in which American workers face increased competition from large numbers of lower-wage workers overseas. Employers facing global competition have increasingly sought to shed their responsibility to provide benefits that offer economic security and mobility. “Go-it-on-your-on” policies, of course, have exacerbated these trends. A strategy to address the challenges of globalization is described below, but—like all components of the *Progressive Growth* plan—must be read as part of the strategy to provide economic security and mobility for working Americans.

### **A Note about Poverty**

An opportunity nation must provide opportunity for *all* its citizens. We all share

an interest in living in a society where a ladder of opportunity extends from the bottom rung of our economy to the very top. In “The Economic Costs of Poverty in the United States: The Subsequent Effects of Children Growing up Poor,” published by CAP, the authors conclude that “allowing children to grow up in persistent poverty costs our economy \$500 billion dollars per year in lost adult productivity and wages, increased crime, and higher health expenditures.”<sup>71</sup> CAP’s Task Force on Poverty called for a national goal to cut poverty in half in 10 years and proposed a strategy to reach that goal.<sup>72</sup> In the *Progressive Growth* companion report, “Opportunity and Security for Working Americans” (forthcoming), we include a number of the Poverty Task Force recommendations, as described above:

- Raising and indexing the minimum wage
- Expanding the Earned Income Tax Credit and the Child Tax Credit
- Enacting the Employee Free Choice Act
- Promoting early education
- Adopting universal health care
- Ensuring equity for low-wage workers in the Unemployment Insurance system
- Creating 2 million new Housing Opportunity Vouchers
- Curbing predatory lending practices

### ***Shared Responsibility for Security and Opportunity***

In order to rebuild the ladder of opportunity that once characterized the American Dream, we need to create the conditions in which Americans can find economic security and pathways to upward mobility. In the United States, the policies that support security and opportunity have, since they were first created by progressive reformers in the early 20th century, been built on a platform of shared responsibility between workers, business, and government. America’s global economic leadership over the last century is, in part, due to our systems of public education, social security, employer-based healthcare and pensions, unemployment insurance, and tax code and other market supports to encourage homeownership. These progressive solutions provided a framework for a competitive domestic marketplace, worker mobility, health, and financial security. Unfortunately, our system of shared responsibility no longer provides the opportunity and security it once did and needs to be rebuilt.

## Challenge #4

### The pressures of globalization.

The United States and world economies are at a moment of great transition driven by technology and globalization. About 1.5 billion workers have entered the global workforce from places such as India, China, and the former Soviet Union.<sup>73</sup> Those manufacturing, service, and other jobs that are not location-specific can now easily move, so employers can take advantage of lower labor costs for comparable quality and service. Between 2000 and 2006, the United States lost 3.2 million manufacturing jobs—an 18.5 percent decline. Economists Martin Baily and Robert Lawrence estimate that 12 percent of net manufacturing job losses are due to trade, based on data from 2000 to 2003.<sup>74</sup>

Some believe we have only seen the beginning. Princeton economist Alan Blinder argues that as many as 30 million to 40 million American jobs are or will be potentially off-shorable in the next decade or two (see Figure 9).<sup>75</sup> “These include scientists, mathematicians and editors on the high end and telephone operators, clerks and typists on the low end,” Blinder writes.<sup>76</sup>

**FIGURE 9: BLINDER STUDY—HOW MANY U.S. JOBS MIGHT BE OFFSHORABLE?**

CATEGORY	DESCRIPTION	NUMBER OF OCCUPATIONS	NUMBER OF WORKERS (MILLIONS)	OFFSHORABILITY INDEX
I	Highly offshorable	59	8.2	100–76
II	Offshorable	151	20.7	75–51
III	Non-offshorable	74	8.8	50–26
IV	Highly non-offshorable	533	92.6	25–0
All		817	130.3	100–0

Source: Blinder, Alan. “How Many U.S. Jobs Might Be Offshorable?” Princeton University. Center for Economic Policy Studies. Published March 2007. Last viewed Aug. 9, 2007.

Economic growth in emerging economic powers has improved the standard of living for many of those countries’ citizens. For example, rapid economic growth in China, India, and other emerging economies has lifted over 300 million people out of poverty,<sup>77</sup> but many more remain and vast inequality exists. Most workers in these economies are not yet participating in their country’s new prosperity. Workers are not only paid less than their American counterparts; they also work with far more rudimentary social and legal

protections. There may be no safety net to keep disabled and elderly workers from falling into poverty; no pension or guaranteed access to health care; no right to a safe workplace, decent working conditions, or a right to freedom of association and collective bargaining. Environmental standards may be far lower than U.S. firms must meet. And what rights do exist may not be widely enforced. Americans do not expect to compete always against workers granted the same standards of protection that our laws provide, but too often they compete with those working in labor conditions that fall below minimal international standards.<sup>78</sup>

These significant pressures on American workers have frozen the U.S. policy debate and limited discussion to a series of important but ultimately narrow issues. Differing progressive perspectives are quickly labeled derisively as either “Protectionist” or “Free Trade.” The media only want to report on whether political leaders will continue to ignore the costs of globalization, such as job losses, offshoring, and depressed wages, in order to support trade agreements or whether they will abandon their support for open markets and oppose new trade deals.

Debate on these terms prevents discussion of other steps we must take to support American businesses and workers—help them to develop more of the kind of high quality, high value-added products and services that America is best suited to provide, work with trading partners to improve the standards their products must meet, and help to expand the markets for American products around the globe. The current debate also makes difficult any discussion of our moral responsibility to improve living standards for the billions who still live on less than two dollars a day.

For this analysis, we need to look differently at the challenges we face from nations at different stages of development. The rapid economic growth of **middle-income developing countries**, as well as the inequities in their growth, places competitive pressure on American jobs, wages, and benefits and threatens to fuel a global race to the bottom where low standards prevail. Even if American firms position themselves at a different place on the value scale, American business will not be able to sell many of their high-value products if only a few in these countries can afford to buy them. So America has an interest in how widely shared within these countries are the benefits of globalization. As living standards and wages rise, their demand for U.S. products will increase and the extreme wage competition they present to U.S. workers will be reduced.

**Low-income developing countries** face different challenges and pose fewer challenges to American workers, but, over time, also present new opportunities as markets for U.S. goods and services. The vast majority of workers in low-income countries are not even in the formal economy. What little economic wealth is produced is held by only a small fraction of the population. The policies of the international financial institutions have sometimes put selling products overseas, especially natural resources, ahead of developing the domestic economy. Some low-income nations cannot begin to develop their own domestic markets and an export capacity because they can be undercut by subsidized products from developed and developing nations. For example, China’s appetite for natural resources has led to close ties with developing nations in Africa. To the African consumers, China brings lower-cost, fin-

ished material goods but it also hampers Africa's ability to make its own products and develop healthy, diverse economies.<sup>79</sup>

Over time, these countries also represent a potential market for our goods and services—a fact that China seems to appreciate more than we do. America has a moral imperative to be a good partner to these countries as they join the global economy by supporting efforts to ensure development is fair and sustainable; it also has strong long-term self-interest (on economic and national security grounds beyond the scope of this paper) in helping these countries create decent work and rising living standards for their people.

***Strategy #4: Ensure that a rising tide really does lift all boats at home and abroad.***

In contrast to the stale debate and name-calling around trade and globalization in Washington, CAP proposes a new framework in which two goals—positioning America for success in the global market and improving living standards for workers around the globe—are served together. We believe that a strategy to build a global middle class can create a race to the top, where rising standards of living and greater economic integration and trade reinforce each other in a virtuous circle.

In this framework, as described in the companion report “Virtuous Circle: Strengthening Broad-based Global Progress in Living Standards,” the primary emphasis of U.S. international economic policy in the next phase of globalization must be to improve the quality of economic integration and not simply its quantity. The United States should

lead the international community in a cooperative effort to strengthen the sustainability of global growth and translate it more effectively into broad-based progress in living standards and purchasing power around the world. Having succeeded in bringing large parts of the world into a liberal economic order over the past generation, our challenge in the next one is to build mechanisms to ensure that the rising tide produced by economic integration does in fact lift all boats—that expanded trade and investment with developing countries drive strong increases in their living standards and consumption, which in turn generate additional demand for our own products and services with the result of producing further improvements in our own living standards.

America's own economic model is built upon not only market-driven growth, but also a set of economic institutions and policies, born of the progressive leadership of the Presidents Roosevelt, that provide a social safety net, and the labor, environmental, consumer and investor laws and institutions that enable the gains in national income to be shared widely across our country. These institutions at home have deteriorated. It must be a primary focus of the next administration to restore economic security and create the conditions in which American workers have a chance to get ahead, as detailed in another component of the *Progressive Growth* plan: “Opportunity and Security for Working Americans” (forthcoming). At the same time, we must take a similar approach to our international economic agenda, helping them to build the institutions and infrastructure that will create strong middle classes in a manner appropriate to their own unique histories, cultures, and circumstances.

*The next administration's international economic agenda must be an integral part of its long-term strategy to restore economic mobility and security to working Americans.*

The top priority of the next administration's international economic policy should be to breathe additional life into a virtuous circle of strong, synergistic advances in median living standards at home and abroad. Rather than simply declaring a pause in trade liberalization, the next administration should reevaluate how well each of the three main elements of international economic policy—trade, aid, and monetary policy—have been contributing to the twin goals of sustained global growth and broad-based programs in living standards. And it should then pledge to refocus these policies, individually and collectively, more sharply on the achievement of these underlying strategic objectives. If we succeed, America will grow too, making more jobs and greater economic mobility possible for more Americans. Thus, the next administration's international economic agenda must be an integral part of its long-term strategy to restore economic mobility and security to working Americans.

Trade agreements and other initiatives to deepen global economic integration are but a means of public policy rather than ends in themselves. Policy is best assessed by judging how well it works to advance a shared vision of global prosperity: What is the best way to improve living standards for working families in our own country, those in emerging economies, and the “bottom billion,”<sup>80</sup> whose incomes have been virtually stagnant for almost half a century? A policy agenda based on this assessment would differentiate between countries based on level of development.

For middle income developing countries, such as India and China, we need to reduce the biases—macroeconomic, structural, and institutional—that suppress these countries' domestic consump-

tion and lead them to generate unduly high domestic savings and foreign trade surpluses. We need to support a wider agenda of economic institution-building, including stronger safety nets and labor, environmental, consumer, and investor laws and institutions that will enable the gains in national income brought by these countries' integration into the world economy to be shared more widely by their populations.

The International Labor Organization should play an important role in this agenda. Trade agreements with these middle income countries should build upon important steps recently taken to include respect for labor and environmental standards in the body of free trade agreements. The United States should subject bilateral economic integration agreements to a pre-negotiation assessment of whether they would contribute significantly to the net (not just bilateral) expansion of trade and whether improvements should be sought in the country's labor, environmental, consumer, or investment laws and institutions in order to strengthen the likely payoff to broad living standards from expanded trade and investment with the U.S. economy.

The more economically advanced the country, the higher should be our expectation of the quality of its laws and institutional capacity in those areas, although we should not expect these arrangements to be exactly like our own. Of course, we must expect core labor standards to be recognized regardless of a country's level of development.

Weakness in law or capacity should be the basis for a mutual plan to correct them over time, with multilateral and bilateral assistance offered as part of the

agreement. These arrangements may emphasize carrots as well sticks, taking lessons learned from the textile trade agreement between the United States and Cambodia. The commitments made by the trading partner should be expressed in the laws of the country. And failure to implement agreements regarding standards, including any pledge to implement capacity-building programs, should have consequences for trade and investment conditions.

The next administration should launch a major campaign to strengthen the ILO and support widespread implementation of its Decent Work Agenda—employment that respects the rights and representation of workers but also provides adequate working conditions and a sufficient income for basic needs in a social structure that ensures basic economic security. ILO Director-General Juan Somavia has called decent work “the high road to economic and social development.” Taking the high road means replacing a global race to the bottom with a global race to the top.

In low-income countries, we need to help put them on a path toward middle-income status. A strategy to wean them from export-led growth and to spread purchasing power more widely does not fit—yet—where the majority of the working population is engaged in subsistence agriculture. Our policy must foster a shift from dependence on the export of commodities to more labor-intensive exports that add value through processing; eliminate trade barriers to their exports; require that they meet core labor and environmental standards and help them to raise and enforce those standards; build a capable human resources base by investing in the long-term capacity of these

countries to provide and sustain basic services, including health, education, and clean water; and leverage our capital and influence to generate investment in the physical infrastructure that is necessary to generate domestic, regional, and international trade and to spur increased foreign investment. We also require a new strategic framework that elevates development policy and assistance as critical elements of our global economic strategy and foreign policy and a new commitment to use our resources and influence to leverage the capital and collaboration of other actors in the donor, private sector, and philanthropic communities.

For developed countries, we need to raise their contribution to global growth by applying more pressure on them to undertake long-delayed structural economic reforms. We also must encourage them to support major renovations in the primary multilateral economic institutions relevant to the task of diversifying the sources of global growth and broadening progress in living standards, especially the ILO, World Bank, regional development banks, and the International Monetary Fund. In particular, we must persuade them to join with us to reform and redeploy these institutions in a coordinated strategy to provide greater support for newly industrializing countries making the transition from heavy reliance on exports to greater emphasis on domestic consumption and social inclusion, especially by helping to improve domestic investment-enabling environments, liberalize exchange rate regimes, build social insurance programs, close infrastructure financing gaps, and install clean energy systems.

To reduce the incentives that emerging market economies have to value their

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*Strengthening the world's economy will create new markets for U.S. products. Just as Henry Ford raised his workers' pay so they could afford the cars they produced, higher wages and living standards abroad will create new and more robust markets for cutting-edge, high-quality goods and services produced by American workers.*

exchange rates, we should strengthen the IMF's mandate and capacity to assess—publicly and privately—the appropriateness of exchange rate parities as well as facilitate macroeconomic policy coordination to prevent or redress persistent misalignments. We must also work with other members of the Fund's board to strengthen the institution's independent execution of its surveillance and macroeconomic coordination functions. Finally, to enhance the credibility of this initia-

tive, the United States should designate China under its own laws.

Strengthening the world's economy will create new markets for U.S. products. Just as Henry Ford raised his workers' pay so they could afford the cars they produced, higher wages and living standards abroad will create new and more robust markets for cutting-edge, high-quality goods and services produced by American workers.



## Challenge #5

### Massive War Spending and Irresponsible Tax Cuts Constrain Investment Options.

President Bush entered office with a budget surplus that was projected to equal 3.3 percent of GDP in 2004.<sup>81</sup> The president rejected the argument that we needed to keep deficits low to prepare for the generational challenges we face with entitlements. Instead, he pressed through irresponsible tax cuts that benefited few.

At the same time, the Bush administration prosecuted an unnecessary and ill-planned war in Iraq. The war has already cost the U.S. Treasury Department \$102.7 billion dollars for each of the past six fiscal years. After fiscal year 2008, the additional cost of the war could run between \$493 billion and \$973 billion over nine years, depending upon the level of troop involvement.<sup>82</sup> The Joint Economic Committee recently estimated that the actual costs of the war were much higher than appropriations levels sought by the administration, when you counted indirect costs such as interest payments on government debt, higher energy costs due to regional instability, cost of repair and reset of equipment, higher recruitment and retention costs for the military, and much more.<sup>83</sup>

America's soldiers and their families have sacrificed for this ill-fated effort, but the president has asked no sacrifice in wartime from those who have seen unprecedented income gains over the last decade. The president's budget priority is to make permanent the tax cuts that disproportionately benefit the wealthiest amongst us. According to Bloomberg, "Iraq is the only major U.S. conflict, except for the 1846-48 Mexican-American War, in which citizens haven't been asked to make a special financial sacrifice."<sup>84</sup>

Our national debt today stands at over \$9 trillion dollars.<sup>85</sup> It would be far larger, except that those who have done well have done very, very well in the Bush economy. Although tax rates are lower, tax revenues have rebounded due to the extraordinary disproportionate income gains of those at the highest income levels and the high corporate profits that increased corporate tax receipts. Still, President George W. Bush joins President George H. W. Bush and President Ronald Reagan in having overseen a dramatic increase in the public debt as a percentage of GDP (see Figure 10). Since 1980, the Clinton administration was the only period of a sustained reduction in the debt to GDP ratio.

This conservative legacy of the Bush administration—constrained revenue and significant debt—leaves us ill-prepared to address the demographic challenges to entitlements. For example, annual expenditures for the Medicare program are predicted to be greater

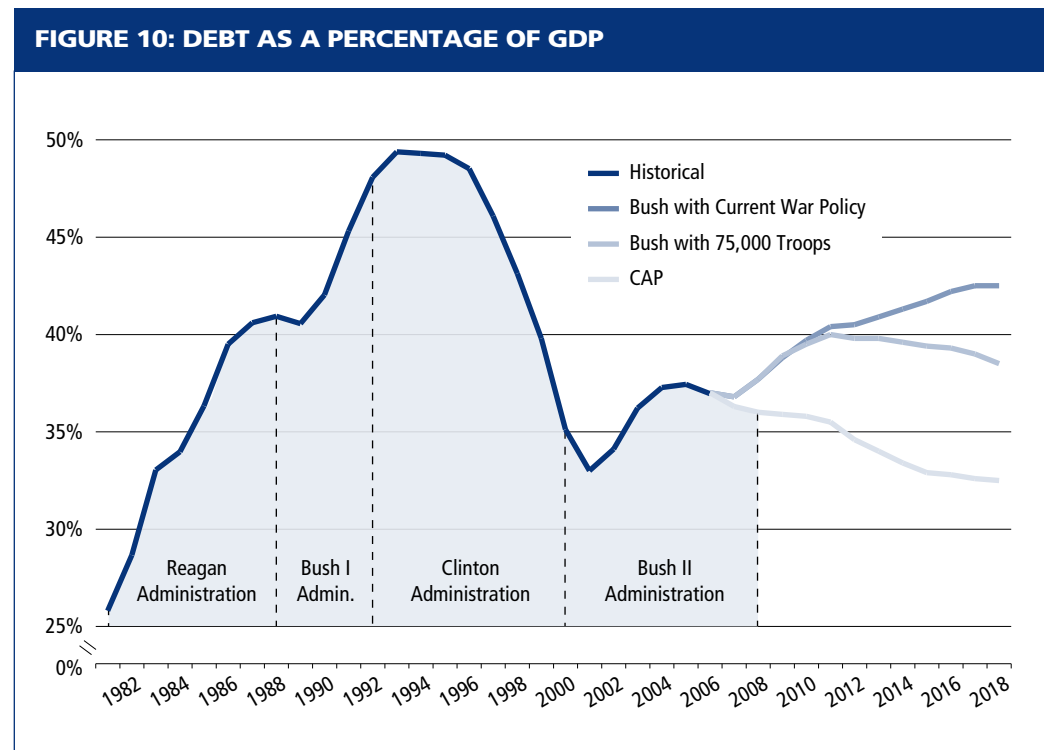
than annual assets by 2013.<sup>86</sup> This legacy also makes it challenging to advance an investment agenda, even when these investments are essential to the long-term economic welfare of the nation.

**Strategy #5: Pay for investing in our priorities and maintain the fiscally responsible conditions for growth.**

CAP’s plan, as detailed further in the *Progressive Growth* companion report “Responsible Investment” (forthcoming), starts with tax reforms to create a fair, simple, and pro-growth tax system that rewards work and wealth equally, respecting the human capital that is most essential for American success in the 21st century global economy.

CAP closes loopholes and enhances enforcement to make sure that everyone pays what they owe. To ensure greater fairness and progressivity, we eliminate the cap on the employer side of the Social Security payroll tax and dedicate additional revenue from this change to the Social Security Trust Fund to start us toward addressing the needs of the baby boom generation. We also reform the estate tax by setting the exemption and marginal tax rate at the current levels, indexing the exemption for inflation, and making the law permanent. Under this reform, only a tiny fraction of the wealthiest heirs would be subject to the estate tax.

Our plan also provides a number of tax cuts and other incentives. It increases the take-home pay of low-income taxpayers by significantly expanding the Earned



Source: Congressional Budget Office, Historical Budget Data.  
 Note: Our estimates for President Bush’s budget are based on CBO’s March 2007 estimate of Bush’s proposed Budget for 2008. We assume that Bush will be able to enact the policies of his choosing, including extending all of his tax cuts and making significant reductions in domestic discretionary spending. The two changes we have made to Bush’s proposed budget are: to index the Alternative Minimum Tax for inflation each year, instead of using Bush’s proposed two-year, partial AMT fix; and to include the costs of continuing the wars in Iraq and Afghanistan—with either a continuation of current policy or a troop drawdown to 75,000 by 2013—instead of assuming as Bush’s Budget does, that War spending will end in 2009. CAP assumes that we will draw down troop levels in Iraq and Afghanistan to 40,000 by 2010.

Income Tax Credit, including an increase for childless workers and a reduction in the marriage penalty. It also makes the Child Tax Credit refundable. The plan encourages retirement security by matching contributions to a new Universal 401(k) retirement savings vehicle. It provides tax incentives to firms and individuals to encourage their investment in the credentialed and portable education of adult workers. Finally, the plan reforms the alternative minimum tax, so that the vast majority of Americans are not affected by it.

CAP's plan establishes a cap-and-trade system that will generate significant revenue from the auction of carbon credits. However, we would limit the use of that revenue *only* to easing the transition for low- and moderate-income consumers and carbon-intensive firms and to support complementary policies to spur innovation and the energy transformation. Specifically, as noted above, a system of tax rebates and other income supports would be used to offset energy cost increases for the majority of consumers; we also would provide support to carbon-intensive firms in order to support their employees and communities. The remainder of cap and trade revenue would be dedicated to the energy transformation and restoring our innovation leadership.

*Progressive Growth* demonstrates that transformative change is possible and can be achieved in a financially responsible way. Some argue that we cannot afford to invest in alternative energy, innovation, opportunity, and building a global middle class. Others suggest that we must worry less about fiscal discipline and make needed investments to spur growth and that growth will generate the revenues needed. Neither viewpoint is right.

CAP pays for our investments in economic growth and opportunity. Just as a business or family might, from universal health care to the energy transformation, we insist that government pay for its investments in the future and do so in a fiscally responsible way, by consistently reducing the debt burden that we are now slated to leave to our children. We must continue to make progress on reducing the debt as a percentage of GDP, so that its presence does not become a drag on our economic growth. We also have to focus spending on productive investments that will pay dividends for long-term economic growth. But to do this, we must get out of the box that conservatives framed to limit our fiscal options and find the revenue necessary to pay for these investments. Our challenge is to raise the revenue we need from smart and targeted taxes that leave the system fairer, simpler, and better able to spur growth and economic opportunity. Our *Progressive Growth* plan boasts just this kind of balance.

*Progressive Growth* systematically reduces the nation's debt as a share of GDP, putting us on the right financial path so that we do not burden our children and are better prepared for the aging of the baby boom generation. Comparing CAP's plan with an extension of President Bush's policies into the future, CAP's plan would reverse the growth of debt as a percentage of GDP and put us once again on a declining debt to GDP ratio path last seen in the Clinton administration (see Figure 10).

Even while meeting these ambitious goals, government revenue as a percentage of GDP would average 19 percent over the next 10 years—comparable to the levels seen during the Clinton administration when the country experienced tremendous growth.

## Conclusion

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One hundred years ago, at the beginning of the 20th century, we faced challenges from similarly profound transformations. America's local economies were rapidly becoming a single national one. Robber barons used their power to accumulate previously unimagined wealth while children labored in factories. Our country's forests were being clear-cut. Few had even little hope of rising above their station in life.

But then, as now, the progressive movement offered a vision of a vibrant market-driven economy whose benefits were widely shared; and progressive leaders set about to create the conditions in which the majority of Americans could make for themselves a more promising future. Progressive leaders crafted sweeping policy changes to give Americans greater opportunities to find good jobs and to save and invest for themselves and their families. Progressives ended child labor, established minimum wage laws, built Social Security, made access to homeownership possible for millions, and created the National Park system and enacted laws to clean our environment to protect our planet for future generations. In short, they helped to create a strong and growing middle class whose life trajectory was soon known worldwide as the American Dream.

Modern progressives are again rising to meet the economic challenges we face by detailing the strategies necessary to achieve growth and opportunity in the new, dynamic economy. CAP offers the *Progressive Growth* plan in the progressive movement's tradition of foresight and pragmatism. We believe it to be a reality-based vision for how progressives should govern the country in service of economic growth and higher living standards for all. We urge the next president and his or her administration to lead America in *Progressive Growth*.

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## Related Work by CAP Fellows and Staff

Some of the policy analyses and recommendations in *Progressive Growth* were previously published in the following sources, listed in reverse chronological order. All materials were published by the Center for American Progress unless otherwise noted.

***A New Strategy to Spur Energy Innovation***

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