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American manufacturing continues to be in crisis. Despite recent signs of economic “recovery,” manufacturing employment likely will continue its descent or, at best, stagnate in the months ahead. As of December 2003, manufacturing has lost jobs for 41 consecutive months, the longest such stretch of monthly job losses since the Great Depression. After rising during the economic expansion of the 1990s, real manufacturing output dropped suddenly and sharply (by 7 percent) from June 2000 until the recession’s trough in November 2001.

The result has been a dramatic decline in manufacturing employment, which plummeted to its lowest level in 45 years—and it continues to fall. Since March 1998, the last peak of manufacturing employment, the United States has lost 3.1 million manufacturing jobs a drop of 17.8 percent. More than 80 percent, or nearly 2.6 million, of these jobs have been lost since President George W. Bush took office—more than half a million were shed in 2003 alone. Meanwhile, the trade deficit in manufactured goods has reached unprecedented heights, growing to more than an estimated $529 billion in 2003, or $1.45 billion each day.

These data suggest that manufacturing is suffering from more than a recessionary decline. The U.S. manufacturing base is eroding, as plants throughout the nation shutter their doors and manufacturers hollow out their capacity by outsourcing to off-shore, low-wage locations. In cyclical downturns, driven by lulls in demand, workers are recalled to their old positions as the economy revives. However, according to the Federal Reserve Bank of New York, the evidence indicates the economy has been undergoing a structural change: Permanent job losses have predominated over temporary layoffs, and most of the lost jobs will never return. The result is the “jobless recovery” we have experienced over the past year.

The crisis in manufacturing is undermining the livelihoods of America’s working families, and it threatens serious consequences for the nation’s economy as a whole. Manufacturing historically has been a major generator of good, high-skilled, well-paid jobs, including in nonmanufacturing sectors, and remains a mainstay of local and state economies throughout the nation. That mainstay is now threatened, not only by the disappearance of manufacturing jobs, but by the erosion of pay and benefits within the sector. Moreover, the massive scale of manufacturing plant closings and job layoffs are contributing directly to the serious fiscal crises afflicting virtually every state in the nation.

Manufacturing has been the primary driver of U.S. productivity gains, technological innovations and economic growth. As such, a robust domestic manufacturing base is vital for maintaining a strong defense and homeland security. The decline in its manufacturing base could weaken America’s leadership in critical technological areas and limit its long-term productivity growth. In addition, greater reliance on foreign sources for strategically critical products and components could threaten the nation’s defense, making it more vulnerable to international crises and terrorist attacks.

Finally, expanding manufacturing exports is essential for reversing the dangerously large trade deficit and returning it to a positive balance. If this turnaround is not achieved soon, the resulting massive foreign debt—one-quarter of U.S. gross domestic product (GDP)—could provoke a financial crisis and prolong, if not deepen, the economic recession.

America’s manufacturing workers are the most productive in the world. But they operate under enormous competitive disadvantages resulting from several factors, such as unfair trade and tax policies, an overvalued dollar, inadequate
investment incentives, health care costs not borne by overseas producers and foreign government subsidies. Unless these problems are addressed soon, American manufacturing jobs may end up permanently lagging, even after the economy recovers from the current recession.

The extent to which we successfully revive our manufacturing base may determine the depth of the nation’s economic recovery and shape its future economic prosperity. It is therefore vital that the president and Congress acknowledge the severity of this crisis and take the necessary steps to reform the policies at its root.
American Manufacturing Is in Crisis

The U.S. manufacturing base is eroding and shedding good jobs at an alarming rate. The U.S. trade deficit tied to manufacturing’s decline is reaching dangerous heights, threatening the nation’s economic well-being. The health care crisis is hitting manufacturers and their workers especially hard.

- Manufacturing employment fell to 14.5 million in December 2003, its lowest level in 45 years. Manufacturing job losses account for virtually all the net job losses in the United States since President Bush took office.

- Unionized manufacturing jobs have been hit especially hard, falling from 28 percent of all manufacturing jobs in 1983 to only 14 percent in 2002.

- In real-dollar terms, the U.S. goods trade deficit is 13 times greater than in 1980. The trade deficit in goods grew to an estimated record $529 billion in 2003, or $1.45 billion a day. From 1994 to 2000, the trade deficit cost 3 million job opportunities, 2 million in manufacturing. It accounts for at least 40 percent of the decline in real wages since the 1970s.

- Health care costs grew nearly 14 percent in 2003. Manufacturers having to absorb these costs are put in an impossible competitive disadvantage with overseas producers. To cut these costs, manufacturers are trying to shift the burden of health care and retiree benefits to their employees, which will increase the ranks of the uninsured.

Why Manufacturing Matters

Manufacturing is vital for fostering a strong economy, generating good jobs and guaranteeing a high standard of living for America’s working families. It is a mainstay of state and local economies, providing both jobs and tax revenues for essential public services. It is the major driver of U.S. productivity growth and technological innovation. A strong manufacturing base is critical for restoring the nation’s trade balance and ensuring economic and financial stability. It also is essential for maintaining a strong national defense and homeland security.

- Manufacturing workers’ earnings exceed those of workers in the service and other sectors. Average hourly compensation for manufacturing workers was $24.30 in 2001, compared with $19.74 in service-producing sectors.

- Union manufacturing jobs have higher wages and greater benefits.

- Manufacturing jobs create as many as four other jobs, providing a boost to local economies.

- Annual labor productivity growth in manufacturing averaged 2.57 percent in the 1980s and 3.51 percent in the 1990s, compared with 0.57 percent and 0.71 percent, respectively, in nonmanufacturing sectors.

- As the U.S. trade deficit rises, U.S. foreign debt also grows to record and unsustainable proportions—it was 25 percent of GDP in 2002.
**Roots of the Crisis**
The roots of the crisis include flawed trade policies, unfair trade practices, an overvalued dollar and tax policies that put U.S. manufacturers at a competitive disadvantage, drive up the trade deficit and encourage American firms to move factories and jobs offshore.

- China and other Asian nations have pegged their currencies to the U.S. dollar to keep them artificially low. As a result, China’s U.S. trade surplus grew to an estimated $120 billion in 2003, the largest of any trading partner.

**Agenda for a Strong Manufacturing Base**
Congress must take immediate steps to address the crisis in manufacturing.

**Trade and industrial revitalization**
We need measures that rectify the trade, dollar and tax policies that put America’s manufacturing workers at a competitive disadvantage in the global economy. We also need high-road industrial development policies and investment strategies that support the modernization, retention and expansion of the nation’s manufacturing industries—to help them become more globally competitive—while preserving and creating good manufacturing jobs—high-wage jobs with full benefits, safe working conditions and respect in the workplace. Key measures include:

- Fair trade policies that reduce the U.S. trade deficit, protect U.S. trade laws and require inclusion of enforceable workers’ rights and environmental standards in trade agreements. This must include opposition to bilateral, regional and multilateral trade agreements such as the Central American Free Trade Agreement (CAFTA), the Free Trade Area of the Americas (FTAA) agreement and the U.S.–Thailand Free Trade Agreement, which do not include meaningful protections for workers’ rights, so that America’s workers can compete fairly.
- Aggressive use of U.S. trade law to address unfair trade practices including violations of workers’ rights.
- Revised tax laws eliminating incentives for corporations to move production overseas and punish those that do; opposition to reform of the Foreign Sales Corporation (FSC) tax that encourages shifting manufacturing jobs overseas; replacing FSC with tax incentives that help American manufacturers create U.S. jobs and help workers cope with retiree health care and pension costs.
- Immediate intervention to address the problem of the overvalued dollar, which puts U.S.-based producers at a large competitive disadvantage. In particular, the Industrial Union Council is actively exploring a variety of options to press China and other countries to stop artificially pegging their currencies to the U.S. dollar.
- Strengthening the manufacturing base for national defense and homeland security through procurement reform, enhanced Buy American requirements, an updated assessment of critical defense manufacturing
capabilities and limits to “offsets” that drain critical technology and good jobs.

- Targeted public investments for rebuilding and modernizing the nation’s public infrastructure, transportation and energy systems and for other national needs to stimulate innovation, industrial development and job creation.

Health care reform
Solving the health care crisis, for manufacturing in particular, will require infusions of new public dollars as well as effective cost-containment policies. We need to bring new public money into the system, ease cost and competitive pressures and preserve employer-sponsored health care plans. Key measures include:

- Fixing the Medicare prescription drug benefit law so employers are not provided with incentives to drop retirees from coverage. A proper drug benefit should provide continuous, comprehensive coverage for all seniors, including those previously covered through employer-sponsored plans. It should not penalize employers that provide retiree health care, the primary source of prescription drugs for seniors.

- Incentives to employers to maintain health care benefits of retirees. There should be significant subsidies to encourage employers that have been offering benefits to active workers and retirees to continue to do so.

Labor law reform
Reforming and enforcing the nation’s labor laws are essential to addressing the manufacturing crisis, as well as for promoting good jobs for all U.S. workers. We need:

- Stronger labor laws to prevent employer suppression of workers’ freedom to form unions and bargain collectively. In particular, the AFL-CIO and Industrial Union Council support the Employee Free Choice Act (S. 1925, H.R. 3619) to restore workers’ freedom to form unions free of employer interference and coercion, making union protections and benefits more widely available to working families.

- Opposition to efforts that could strip overtime pay protections from 8 million workers, who would be denied the extra income of overtime pay in uncertain economic times when they work more than 40 hours per week.

- Guarantees of meaningful collective bargaining rights and legal protections extended to all workers, regardless of their classification.
The scope of the manufacturing crisis transcends the recent recession. The United States is losing its manufacturing base and good jobs, a problem exacerbated by rising health care costs that hit manufacturers and their workers and retirees especially hard. The U.S. trade deficit, directly linked to the erosion in manufacturing, is reaching dangerous heights, threatening the economic health of the nation.

**America has lost manufacturing jobs at an alarming rate.** Total manufacturing employment fell to 14.5 million in December 2003 (Figure 1), its lowest level since 1958. In total, 3.1 million manufacturing jobs have been lost since March 1998, the last peak of manufacturing employment—a drop of 17.8 percent. More than 80 percent of these losses—nearly 2.6 million manufacturing jobs—occurred on President Bush’s watch. More than a half million manufacturing jobs were shed in 2003 alone.

Every industry sector in manufacturing has suffered a loss, some as great as one-fifth to more than one-half of their total workforces (Table 1). Mass layoffs (50 or more separations) and extended mass layoffs (50 or more separations for more than 31 days) at manufacturing plants in 2001 rose dramatically, by more than 60 percent and nearly 80 percent, respectively, compared with 2000. Extended mass layoffs in 2002 were 30 percent higher than in 2000. Since the recession began in March 2001, employment

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**FIGURE 1**


- **PEAK:** 19,553,000 jobs (June 1979)
- **17,637,000 jobs (March 1998)**
- **Bush takes office**
- **14,504,000 jobs (December 2003)**

*Note: November, December 2003 data preliminary. All data are seasonally adjusted.

**Definition of manufacturing is based on North American Industrial Classification System (NAICS).**

in manufacturing has taken a disproportionately larger hit compared with other sectors. Although manufacturing was only 13.3 percent of the private nonfarm labor force in 2003—down from 16.8 percent in 1998—it accounted for most of the net jobs lost in the economy during the recession. Manufacturing’s share of private nonfarm employment has declined steadily in the post-World War II era.

### TABLE 1

The Manufacturing Recession by Industry

(Numbers in thousands, seasonally adjusted)

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MANUFACTURING</td>
<td>17,637</td>
<td>14,504</td>
<td>–3,133</td>
<td>–17.8%</td>
</tr>
<tr>
<td>Production Workers</td>
<td>12,888</td>
<td>10,154</td>
<td>–2,734</td>
<td>–21.2%</td>
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<tr>
<td>DURABLE GOODS</td>
<td>10,943</td>
<td>8,993</td>
<td>–1,950</td>
<td>–17.8%</td>
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<tr>
<td>Wood Products</td>
<td>607</td>
<td>548</td>
<td>–60</td>
<td>–9.8%</td>
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<tr>
<td>Nonmetallic Mineral Products</td>
<td>532</td>
<td>500</td>
<td>–32</td>
<td>–6.0%</td>
</tr>
<tr>
<td>Primary Metals</td>
<td>646</td>
<td>470</td>
<td>–176</td>
<td>–27.2%</td>
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<tr>
<td>Fabricated Metal Products</td>
<td>1,742</td>
<td>1,472</td>
<td>–271</td>
<td>–15.5%</td>
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<tr>
<td>Machinery</td>
<td>1,523</td>
<td>1,163</td>
<td>–360</td>
<td>–23.6%</td>
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<tr>
<td>Computer and Electronic Products</td>
<td>1,852</td>
<td>1,377</td>
<td>–474</td>
<td>–25.6%</td>
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<tr>
<td>Electrical Equipment and Appliances</td>
<td>592</td>
<td>462</td>
<td>–130</td>
<td>–22.0%</td>
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<tr>
<td>Transportation Equipment</td>
<td>2,081</td>
<td>1,762</td>
<td>–320</td>
<td>–15.4%</td>
</tr>
<tr>
<td>Motor vehicles and related (parts, etc.)**</td>
<td>1,279</td>
<td>1,125</td>
<td>–154</td>
<td>–12.1%</td>
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<td>Aerospace products and parts**</td>
<td>579</td>
<td>425</td>
<td>–153</td>
<td>–26.3%</td>
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<tr>
<td>Furniture and Related Products</td>
<td>635</td>
<td>576</td>
<td>–59</td>
<td>–9.2%</td>
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<tr>
<td>Misc. Manufacturing</td>
<td>733</td>
<td>664</td>
<td>–69</td>
<td>–9.4%</td>
</tr>
<tr>
<td>NONDURABLE GOODS</td>
<td>6,694</td>
<td>5,511</td>
<td>–1,183</td>
<td>–17.7%</td>
</tr>
<tr>
<td>Food Manufacturing</td>
<td>1,554</td>
<td>15,113</td>
<td>13,559</td>
<td>872.5%</td>
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<tr>
<td>Beverage and Tobacco Products</td>
<td>209</td>
<td>191</td>
<td>–18</td>
<td>–8.4%</td>
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<tr>
<td>Textile Mills</td>
<td>432</td>
<td>250</td>
<td>–182</td>
<td>–42.1%</td>
</tr>
<tr>
<td>Textile Product Mills</td>
<td>217</td>
<td>179</td>
<td>–39</td>
<td>–17.7%</td>
</tr>
<tr>
<td>Apparel</td>
<td>662</td>
<td>293</td>
<td>–369</td>
<td>–55.7%</td>
</tr>
<tr>
<td>Leather and Allied Products</td>
<td>86</td>
<td>43</td>
<td>–43</td>
<td>–49.9%</td>
</tr>
<tr>
<td>Paper and Paper Products</td>
<td>629</td>
<td>520</td>
<td>–109</td>
<td>–17.3%</td>
</tr>
<tr>
<td>Printing and Related Support Services</td>
<td>828</td>
<td>679</td>
<td>–150</td>
<td>–18.1%</td>
</tr>
<tr>
<td>Petroleum and Coal Products</td>
<td>136</td>
<td>115</td>
<td>–21</td>
<td>–15.5%</td>
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<tr>
<td>Chemicals</td>
<td>993</td>
<td>908</td>
<td>–85</td>
<td>–8.5%</td>
</tr>
<tr>
<td>Plastics and Rubber Products</td>
<td>949</td>
<td>823</td>
<td>–127</td>
<td>–13.3%</td>
</tr>
</tbody>
</table>

* December 2003 data preliminary
** Data for March 1998–November 2003; November 2003 data preliminary; not seasonally adjusted

Definition of manufacturing sectors based on North American Industrial Classification System (NAICS).

Source: U.S. Department of Labor, Bureau of Labor Statistics
FIGURE 2
(Job changes by state)

Note: Data not seasonally adjusted; November 2003 data preliminary.
period, from 40 percent in 1950 to 28 percent by the late 1970s and down to its current low level. This did not necessarily translate into loss of jobs, as manufacturing employment grew steadily in the first three postwar decades, reaching its historic peak of 19.6 million jobs in 1979. The dramatic decline in jobs coupled with the decline in employment share, however, suggests the U.S. manufacturing base is eroding, especially compared with America’s major international trading partners. Manufacturing output as a percentage of U.S. GDP, which fell steadily for more than 50 years, suffered its largest decline (1.4 percent) in a single year, to 14.1 percent, in 2001—and it fell further, to 13.9 percent, in 2002. By contrast, in Germany manufacturing in 2001 accounted for 21 percent of that nation’s GDP; in Italy, it equaled 19 percent; and in Japan and Korea, the shares were 22 percent and 31 percent, respectively, placing the United States at the end of the list of advanced industrial nations.

The crisis also is being felt at the state level. Nearly every state in the nation has lost both manufacturing output and jobs over the past five years, especially since the recession began in 2001. Forty states and the District of Columbia saw a decline in real manufacturing output between 2000 and 2001. In seven states, the percentage loss was in the double digits, and in 20 states and the District of Columbia the declines ranged from 5 to 10 percent.

Between June 1998 and November 2003, the states also averaged a drop of more than 17 percent in their manufacturing workforces—a loss of about one in six manufacturing jobs. Over the same period, all but two states shed manufacturing jobs, all but four lost at least one in 10 manufacturing jobs and 14 states and the District of Columbia lost one-fifth or more of their manufacturing workforces. All but one state lost manufacturing jobs since President Bush took office (Figure 2). California, Ohio, Texas, North Carolina, Pennsylvania, Michigan, New York and Illinois fared worst, each losing 100,000 or more jobs.

The quality of manufacturing jobs also has deteriorated. Manufacturing’s ability to generate well-paying, skilled jobs that provide a high standard of living for millions of middle-class working families has been eroding. In efforts to trim costs and increase their ability to compete in global markets, numerous American manufacturers moved plants and increasingly outsourced operations throughout the 1980s and 1990s to offshore as well as domestic locations that usually offered access to lower-wage labor pools. Manufacturing jobs shifted to other locations or to suppliers within the United States usually paid less and provided fewer or no benefits—and usually were not unionized—compared with the original positions lost.

The result has been a decline in manufacturing workers’ real earnings. After steadily rising through 1978, real manufacturing earnings dropped after the double-dip recession in the early 1980s and the deindustrialization that followed. After a small recovery shortly after, real manufacturing earnings fell further until the mid-1990s and have been relatively stagnant compared with the earlier decades of continual growth. The degradation of job quality in manufacturing also is reflected in the number of manufacturing workers living below the poverty line. Between 1979 and 1999, the share of manufacturing workers earning poverty-level wages rose from 14.9 percent to 18.3 percent.

Unionized manufacturing workers have been hit especially hard. The deterioration in good manufacturing jobs is tied to the loss of unionized jobs. Unionized manufacturing workers have suffered relatively higher job losses, in numbers and share of total employment, as American employers have built much of their new capacity in “right to work” states and aggressively implemented sophisticated anti-union “human resource” programs. In 1983, the 5.3 million unionized manufacturing jobs made up 28 percent of all jobs in that sector. By 2002, unionized manufacturing employment had fallen by more than half, to 2.5 million workers, or only 14 percent of all manufacturing jobs. At the same time, nonunion manufacturing employment grew by 1.1 million.

Because union jobs tend to be pay more and provide better benefits and protections than nonunion jobs, this trend drives down the standard of living
for working families. Manufacturing industries usually offer higher wages and nonwage compensation, such as health care coverage, pensions and vacations, than nonmanufacturing industries, owing in large part to greater union density. According to a study by the nonprofit Economic Policy Institute, unionized employees are 28 percent more likely to be covered by employer-provided health insurance, are 28 percent more likely to be covered by a pension plan and receive 14 percent more paid time off. This union premium often has spilled over to benefit nonunion manufacturing workers, as employers provide similar compensation to discourage union organizing initiatives. Diminished unionization therefore is associated with depressed compensation for manufacturing workers as a whole.

The manufacturing trade deficit has grown dramatically, contributing to the decline in manufacturing jobs and wages. The U.S. economy started showing significant trade deficits in the 1980s, the result of foreign competitors’ growing penetration into traditional manufacturing and high-tech markets once dominated by U.S. industries. Despite the economic boom of the 1990s, the U.S. goods trade deficit soared in the last half of the last decade, reaching historic heights; it is now 13 times larger, in real-dollar terms, than in 1980. Manufacturing imports have grown from 4.4 percent of GDP in 1981 to more than 10 percent in 2002, more than twice as fast as manufacturing exports.

The U.S. trade deficit in goods was a record-breaking $396.5 billion for the first three quarters of 2003 and was projected to grow to an astounding half trillion dollars—$529 billion—by the end of 2003 (Figure 3), reaching more than 5 percent of GDP. By far the U.S. trade relationship with China is the most imbalanced. The U.S. bilateral trade deficit with China was $102 billion in 2002, up almost 25 percent since China was granted permanent normal trade relations status in 2000. The deficit with China for the first three quarters of 2003 rose another 20

![FIGURE 3](image-url)

**FIGURE 3**

**U.S. Merchandise Trade Deficit, 1979–2003**

*Estimated
Source: U.S. Census Bureau
percent, to a record-breaking $87 billion, compared with the same period a year before.

Almost every industrial sector has been affected by the deteriorating U.S. goods trade balance. Ten of the 12 industries accounting for 95 percent of our goods deficit in 2003 are in manufacturing. Major losers from U.S. foreign trade include the “new economy” sectors of semiconductors, computers and communications equipment and audio and video equipment. A U.S. Department of Energy study similarly reports that reliance of energy-intensive industries on imported final products jumped dramatically between 1997 and 1999. Import dependence in glass and glass-products manufacturing rose by more than 350 percent. The U.S. chemical industry ran trade deficits in 51 of 101 traded commodities and the U.S. steel industry saw imports in its subsectors grow by 52 percent.

Although real U.S. GDP grew quickly during the 1990s, creating more than 2 million jobs, the rapidly growing trade deficit was responsible for the loss of millions of high-paying manufacturing jobs during that time. An Economic Policy Institute study estimates the rising U.S. trade deficit cost nearly 2 million actual and potential manufacturing jobs (3 million overall) between 1994 and 2000. The stagnation in manufacturing workers’ earnings since the mid-1970s also coincides with the U.S. trade balance in goods falling into chronic deficit (Figure 4). The trade deficit accounts for an estimated 40 percent of the decline in real wages over this period.

The manufacturing sector is being especially hurt by the national health care crisis and exploding health care costs. Health care costs are rising by 10 percent to 13 percent yearly and are accelerating. The Manufacturing Institute reports that more than 60 percent of manufacturers have

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**FIGURE 4**

**Hourly Wages and the U.S. Trade Balance**

*Data from 1947 to 2002 are based on the CPI-U deflator; from 2003 to 2005 they are based on the CPI-U-RS deflator. Both deflators are used to deflate earnings and growth rates.*

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*Sources: U.S. Bureau of Labor Statistics; U.S. Department of Commerce, Bureau of Economic Analysis; Economic Policy Institute*
seen their costs for workers’ health care benefits rise by 13 percent, with small manufacturers experiencing much higher increases. Absorbing these costs is hurting companies’ ability to compete with U.S. companies that don’t provide health care benefits and with overseas producers. Health care is the No. 1 issue in contract negotiations today. Many companies are trying to shift the burden of health care costs to their employees. According to the U.S. Census Bureau, 1.4 million Americans lost their health insurance in 2001 because of layoffs and employers reducing benefits.

Rising health care costs take a special toll on manufacturers for two reasons. First, unionized manufacturers bear health care costs that nonunion firms and manufacturers operating abroad do not bear. For example, between $650 and $830 of the cost of each car produced by the Big Three automakers goes toward health care costs. This is a major factor in undermining the competitiveness of unionized manufacturers, which are more likely than nonunion producers to provide health care benefits to their employees.

The second reason is the large retiree population in manufacturing. The share of large employers (with 200 or more employees) offering retiree coverage has dropped substantially over the past decade. According to the Kaiser Family Foundation, 66 percent of large firms offered retiree coverage in 1988 compared with only 38 percent in 2003. This trend only will worsen with rising health care costs. The fastest-growing share of overall health cost hikes is prescription drugs. Prescription drug costs constitute well over half of employers’ retiree health care costs, and steep prices are prompting employers to eliminate drug benefits, cap their contributions or drop retiree coverage altogether.

Manufacturing and mining firms have disproportionately more retirees, whose costs are shared with a shrinking active workforce. Steel and auto industries especially have enormous legacy costs that undercut their competitiveness and create pressures for employers to cut retiree benefits. For example, one automaker has two and a half retirees for every active worker, while a steel company struggling to stay in business has eight retirees per active worker. Active workers in manufacturing also tend to be older, with the average age in the late 40s and early 50s. An older workforce and more retirees mean a greater likelihood of chronic illness and greater use of medical care and prescription drugs. Rapidly rising health costs, led by unsustainable prescription drug costs, are wiping out retiree health benefits in many companies. Without employer-provided coverage, retirees have very few affordable health care options.
Manufacturing continues to be vital for fostering a strong economy, generating good jobs and guaranteeing a high standard of living for America’s working families. It remains the major driver of technical innovation, productivity and economic growth. Revitalizing America’s manufacturing base is especially critical for restoring the nation’s trade balance and ensuring economic and financial stability. It also is essential for maintaining a strong national defense and homeland security.

Manufacturing is America’s engine for generating good jobs and building a middle class. Historically, manufacturing has been a major source of good jobs that pay well, and the traditional ladder to the middle-class for the three-quarters of America’s workers without college educations. Increasingly, many college-educated workers also provide high-skilled labor in cutting-edge manufacturing firms. Despite the deterioration of manufacturing jobs over the past two decades, manufacturing workers’ earnings still exceed those in most service and other nonmanufacturing sectors. In 2001, according to the Economic Policy Institute, average hourly compensation for workers in manufacturing was $24.30, or 23 percent higher than average hourly compensation of $19.74 in service-producing sectors. Overall, manufacturing jobs especially pay better than those in construction, services and retail trades. Union manufacturing jobs in particular have higher wages and greater benefits than nonunion, nonmanufacturing jobs.

According to the National Association of Manufacturers, manufacturing generates greater economic activity in other sectors that supply intermediate goods and services than any other sector and far more than the service sector. Both because of the multiplier effect from these linkages to other goods and services and the relatively higher wages paid in manufacturing, manufacturing has a greater job-multiplier effect than nonmanufacturing jobs. Aside from the direct jobs it creates, manufacturing stimulates the creation of numerous jobs in high-end services (such as professional and engineering services and software) and tertiary services (including restaurants and health services) in local economies. Each manufacturing job supports as many as four other jobs, providing a boost to local economies. For example, every 100 steel or every 100 auto jobs create between 400 and 500 new jobs in the rest of the economy. This contrasts with the retail sector, where every 100 jobs generate 94 new jobs elsewhere, and the personal and service sectors, where 100 jobs create 147 new jobs. This multiplier effect reflects manufacturing’s linkages running deep into the economy, providing the means that translate improvements in manufacturing productivity to the economy as a whole.

Because manufacturing employment pays higher wages, it also fosters a more equal income distribution. During the 1990s, many low-income workers went from the streets to decent-paying jobs. These jobs are being eliminated rapidly. The disappearance of job opportunities in manufacturing for low-income workers has contributed to growing economic disparity. For example, Los Angeles’s loss of 200,000 well-paid manufacturing jobs from defense downsizing in the early 1990s, combined with huge inflows of poorly educated, low-skilled immigrants, severely eroded the size and status of the city’s middle class. As a result, in the midst of one of the world’s richest and most glamorous entertainment communities, almost 15 percent of families in Los Angeles County live below the poverty line. Nationally, between 1980 and 1997 the decline in manufacturing’s share of private employment accounted for 40 percent of the increase in family inequality. As manufacturing jobs declined between January 2001 and September 2003, African American and Latino workers experienced significant jumps in their unemployment rates—8.2 percent to 11.2 percent, and 5.8 percent to 7.5 percent, respectively. African Americans’ poverty rates, in particular, also grew, as real incomes fell.
**Manufacturing drives productivity, technology innovation and economic growth.** The manufacturing sector historically has led the economy in productivity growth, which is fundamental to future economic growth and continually increasing living standards. Productivity gains that come about from investments in new technology, organizational change and worker training—as opposed to outsourcing and offshoring, which underlie the recent productivity spikes—historically have translated into higher wages and employment growth. When manufacturing jobs are replaced by service-sector jobs, overall productivity growth tends to slow, which in turn slows economywide growth and wage gains.

In the 1980s, manufacturing labor productivity grew an average of 2.57 percent per year, compared with 0.57 percent in the nonmanufacturing sector. In the 1990s, manufacturing labor productivity increased by 3.51 percent per year, compared with 0.71 percent in nonmanufacturing sectors (Figure 5). From 1995 to 2001, manufacturing multifactor productivity (MFP), which takes into account technological improvements and other production inputs besides labor hours, grew by an average of 2 percent per year, compared with only 0.5 percent in the non-manufacturing, private nonfarm sector. According to National Association of Manufacturers, manufacturing accounted for one-third of overall productivity growth between 1992 and 2000. In that period, productivity growth averaged 2.1 percent per year while the labor force grew by 1.4 percent, yielding a sustainable economic growth rate of 3.5 percent.

Manufacturing’s productivity gains reflect its role as the principal driver of technological innovation in the economy. As Federal Reserve Board Chairman Alan Greenspan has observed, future wealth creation hinges on the incorporation of advanced technologies into capital equipment. Similarly, in a National Association of Manufacturers report, economist Joel Popkin argues, “manufacturing’s innovation process is the key to past, present and future prosperity and higher living standards.” He warns that if the U.S. manufacturing base continues to shrink at its current rate, the manufacturing innovation process “may deteriorate beyond repair and with it the seedbed of our industrial strength and competitive edge.”

Major improvements in manufacturing processes are required to produce the next generation of goods...
faster, cheaper and cleaner. Industrial research and development (R&D) is critical in the generation of products and process innovations that drive productivity growth. The manufacturing sector performs almost two-thirds of all private-sector R&D in the United States. Although high-technology manufacturing firms (semiconductors, computers and telecommunications equipment) have led in industrial R&D, other leaders include such traditional manufacturing sectors as transportation equipment, chemicals and allied products, electrical equipment, machinery and petroleum refining and extraction. Moreover, manufacturing has generated numerous technological spillovers to other economic sectors that have contributed significantly to productivity gains outside this sector.

**Manufacturing is a mainstay of state and local economies.** Manufacturing is a vital part of the economies of most states. As a share of gross state product (GSP), in 2001 manufacturing was among the three largest private-industry sectors (out of nine, using the Standard Industrial Classification System) in all but 10 states and the District of Columbia. It is the largest sector in 10 states and in the Midwest region as a whole. It is the second largest in nine states and the third largest in 21 others. These numbers mask the fact that some larger states showing a relatively smaller manufacturing share of GSP, such as California and Illinois, have some of the nation’s largest manufacturing clusters. Los Angeles’s manufacturing sector, which underpins the economy of this most populous part of California, still had more than 600,000 total jobs in 2000, even after massive defense-sector cutbacks in the early 1990s. Chicago has the nation’s second-largest manufacturing cluster, with more than 570,000 jobs in 2000.

Manufacturing tends to be concentrated in metropolitan areas, but it also has formed the economic backbone of small towns and rural areas throughout the nation, providing both jobs and tax revenues to many communities. These communities also have been hit disproportionately hard by manufacturing’s decline. According to the Federal Reserve of Kansas City, rural factory jobs rose by 3.3 percent a year in 1991–1998, 50 percent faster than urban factory job gains. After 2000, however, rural factories cut their payrolls by more than a tenth, about one-and-a-half times the job losses at metropolitan area plants. Over the past four years, rural communities lost 575,000 manufacturing jobs—a 12 percent drop in their factory workforces.

Smaller communities especially suffer hardships when manufacturing plants shut down, whether due to unfair trade practices or the recent recession. Aside from the lost jobs and all the costs associated with sudden large-scale unemployment, industrial plant closures undermine local tax bases—which can seriously undermine funding for important public services, such as education, causing even more jobs to disappear. For example, when National Steel Corp. filed for bankruptcy in 2002, the company ceased paying property taxes to the Granite City, Ill., and surrounding districts, leaving municipal treasuries short by $3 million and forcing an elementary school to close, among other impacts. Steelmaker LTV Corp.’s bankruptcy cost East Chicago, Ind., $16 million in lost tax payments, and Porter County, Ind., lost out by $31 million in property tax revenues after Bethlehem Steel declared Chapter 11.

The loss of tax revenues from shuttered manufacturing plants and jobs also contributes to the fiscal crises afflicting virtually every state in the union. The states are struggling with their worst financial crises since World War II, as they confront budget shortfalls that over a three-year period total nearly $200 billion. To close their budget gaps, states are raising taxes and making cuts in important public services, such as in education, law enforcement and even support for Temporary Assistance for Needy Families and Medicaid, placing additional burdens on working families.

**Manufacturing is critical for achieving a positive trade balance.** Every day, the United States runs a goods trade deficit of $1.45 billion. That is, every day it imports more than $1.45 billion more in goods than it exports to the rest of the world. While it runs a surplus in services, that is not nearly enough to offset the enormous goods trade deficit (and the services surplus is shrinking rather than growing). As the U.S. current account deficit climbs to record heights, U.S. net foreign debt also grows to record and unsustainable proportions,
reaching $2.3 trillion or 25 percent of GDP in 2002. According to the investment firm Goldman Sachs, it could rise to 40 percent by 2006 (Figure 6).

To finance the difference between spending on imports and earnings from exports, the United States has had to sell foreigners more assets such as stocks, bonds and other properties. Each year the United States must devote more of its income to pay the interest on the debt and to cover the transfer of profits to investors in other countries. Debt at this level makes our economy vulnerable to destabilizing shifts in speculative capital, which could prolong or deepen the current recession. Eventually, the interest burden on U.S. foreign debt will grow to a level that sparks a financial crisis, causing the U.S. dollar to fall precipitously in international markets and interest rates to spike upward. Ultimately, the United States will have to run a trade surplus or face a Depression-level shrinkage in the economy. To run a surplus, however, the United States will need a stronger and much larger manufacturing base.

A strong U.S. manufacturing base is essential for maintaining a strong national defense and homeland security. America’s defense capabilities rely on a strong industrial base. An assessment of manufacturing capabilities critical to national security has not been made in several years. But the emergence of globalized production networks in key manufacturing industries and the loss of critical domestic production and technological capacity has made the American industrial base more vulnerable to disruptions from international crises—including terrorism—than ever before. A 1999 National Research Council study warns, “greater reliance on foreign sources could threaten the security of product information and, in times of conflict, product sources.” The National Coalition for Advanced Manufacturing similarly notes the vulnerabilities in the existing supply chains for the American industrial base illustrated by the Sept. 11, 2001, attacks. Immediately after, ground, sea and air transportation systems nearly ground to a halt, leaving many companies’ just-in-time supply chain management systems dangerously low on critical input. Major manufacturing firms came close to shutting down—and Ford, DaimlerChrysler and Toyota North America did shut down—production facilities. The automobile and industrial machinery industries especially are sensitive to border delays and susceptible to major economic disruption.
1970s saw the emergence of international competitors that eroded American manufacturers’ once dominant position in domestic and global markets, in sector after sector. American firms have responded to the global challenge by restructuring, downsizing and heavily investing in automation. But it would be wrong to blame U.S. manufacturing’s decline solely on normal market forces and productivity growth. The roots of the crisis also lie with government policies and corporate low-road strategies that promote further deindustrialization of America’s manufacturing base.

Flawed trade policies and unfair trade practices have put America’s manufacturers and their employees at a competitive disadvantage. First, domestic producers have been losing markets to foreign competitors because of liberalizing trade agreements, such as the General Agreement on Tariffs and Trade and NAFTA, and policies such as Fast Track—enacted by the 2002 Trade Promotion Authority legislation—that already have allowed the Bush administration to negotiate problematic bilateral free-trade agreements with Chile and Singapore. Multiple administrations have made deregulation of trade a priority, based on the laissez-faire belief that free trade will open up vast new markets, such as China, for U.S. producers. In actuality, these trade agreements reflect the interests of multinational rather than domestic manufacturers and their workers and families. Many, in particular NAFTA, limit the ability of governments to employ capital controls to protect their economies from the destabilizing impact of speculative capital flows and financial crises. They also give investors greatly enhanced powers to challenge legitimate government regulations on public health, the environment and Buy American rules.

A second important concern is the limiting impacts of foreign protectionism on U.S. exports. For most products, U.S. trade barriers are far lower and our markets much more open than the domestic markets of trading partners, such as the European Union and Japan, whose economies are laced with formal and informal nontariff (implied tariff) barriers to American goods—making the U.S. economy the “market of last resort” for the entire world. For example, in 1994, Japan’s nontariff barriers on all goods averaged 173.5 percent, compared with U.S. import tariffs of 4.7 percent and 4.9 percent on Japanese imports. The goods affected ranged from textiles, clothing, ferroalloys and nonferrous metals to radio and television sets, communication equipment and semiconductor equipment.

Finally, the lack of international labor and environmental standards in free-trade agreements encourages multinational corporations to shift their production plants to locations where such standards either do not exist or are not enforced. The enormous differential between U.S. and developing nations’ wages and the broad access to the U.S. market facilitated by free-trade agreements strengthen the logic of globalizing production by industrial firms. The impact of past trade agreements has largely been to facilitate the shift of U.S. investment offshore, much of which has gone into production for export back to the United States, boosting U.S. imports and displacing rather than creating U.S. jobs. Many manufacturers have moved plants or outsourced operations to low-wage, developing countries rather than modernize their existing U.S. plants and upgrade the skills of their workforces. A troubling trend is that of multinational corporations setting up state-of-the-art plants in low-wage, developing countries to produce goods, especially sophisticated products such as automobiles, for sale back in their home countries. Because of the absence of effective labor and environmental standards, workers and other citizens in the low-wage countries are not able to obtain their fair share of gains from increased jobs and productivity.
American manufacturers’ trade disadvantages have accelerated outsourcing to low-wage suppliers around the world. The U.S. content of manufacturing production has not kept pace with manufacturing production growth since 1979. The amount of imported intermediate inputs for all manufacturing industries between 1975 and 1995 doubled. The share of imports of total intermediate goods used in manufacturing grew from 6.5 percent in 1972 to 11.6 percent in 1990. For example, the foreign content of both U.S. commercial and military aircraft is accelerating. Imported engines and parts content, which accounted for 8 percent of total U.S. aircraft sales in 1981, was more than 20 percent in 2001.

Our flawed trade policies are costing American manufacturing jobs. The U.S. Department of Labor has certified more than half a million workers who have lost their jobs due to NAFTA. In a 1999 study, the U.S. General Accounting Office found 47 percent of the workers qualifying for NAFTA trade adjustment assistance were Latino and 66 percent were women. The Labor Department figures represent just a portion of the total workers who have lost their jobs because of NAFTA. The Economic Policy Institute estimates the growth in U.S. trade deficits with our NAFTA partners caused a net loss of 879,280 American jobs in 1993–2002.

The overvalued dollar also has been a key factor diminishing U.S. manufacturing competitiveness and driving up the trade deficit. From January 1995 to January 2003, the U.S. dollar appreciated by 33 percent in international value. By the end of 2001, the dollar reached its highest point since January 1986. A rise in the dollar increases the price of U.S. produced goods relative to foreign goods. Hence, the demand for U.S. manufactured goods shrinks relative to “cheaper” foreign goods in domestic and world markets.

The strong dollar bias also favors U.S. investors in foreign nations over U.S. producers in America, who need a lower dollar to expand exports and compete fairly with imports. Thus the high dollar has discouraged investment in domestic manufacturing, reducing manufacturing investment by $37 billion in 2001. The overly strong dollar also encourages large manufacturers to relocate overseas, where they could pay for inputs to production with undervalued foreign currencies while earning overvalued dollar revenues on sales to American domestic markets. At the same time, many small manufacturing companies, lacking the means to move overseas, have been forced to cut profits, incur losses or close their doors. Many are losing business both domestically and overseas, because their customers can source products from foreign suppliers at much lower prices.

Although the value of the dollar has fallen somewhat over the past year, especially in relation to European and Canadian currencies, it must fall much further for U.S. industry to be competitive. The greater problem, however, is with China, Japan and other Asian nations that continue to peg their currencies to the dollar, keeping them artificially low. China, in particular, has tightly pegged its currency, the yuan or renminbi, to the U.S. dollar at the same fixed level since 1994. The undervaluation of China’s currency has made Chinese exports far less expensive for foreigners and makes foreign products more expensive for Chinese consumers, effectively subsidizing China’s exports and placing a virtual tariff on foreign imports. In addition to the unfair trade advantage from China’s currency manipulations, U.S. manufacturers are competing against Chinese companies that have access to a vast, low-wage labor pool and maintain labor, health, environmental and safety standards far inferior to those of the United States. The result is China’s ever-growing trade surplus with the United States, predicted to grow to $120 billion by the end of 2003.

U.S. tax policies provide incentives to American firms to move factories and manufacturing jobs offshore. Foreign subsidiaries of U.S. multinational corporations or foreign-controlled corporations are exempted from paying U.S. corporate income taxes until the income is repatriated from abroad. But this repatriation
can be deferred indefinitely. The more extensive the network of foreign operations for a multinational corporation, the greater likelihood of tax avoidance. In addition, taxes paid to foreign governments are credited against U.S. taxes owed through the foreign tax credit. From 1996 to 2002, multinational corporations received $12.7 billion in U.S. tax subsidies on their deferred income from controlled foreign operations. As a result of the tax deferral and tax credit, the U.S. tax on foreign business income is extremely low—an estimated effective tax rate on overseas earnings of only 1.9 percent, according to U.S. Treasury studies.

Complementing these provisions in the U.S. tax code is a system of tax rules governing transfer pricing, the hypothetical prices derived for transactions of goods and services between a U.S. parent company and its foreign subsidiaries. According to the Organization for Economic Cooperation and Development, more than 60 percent of world trade occurs within multinational corporations as intrafirm transactions. Because of the difficulties of estimating and monitoring multinational corporations’ reporting of transfer prices, companies have been able to shift income out of the United States. Empirical studies link the opportunities to shift income between countries through transfer pricing, thereby evading taxation, to corporate choices of investment locations.
Congress and the president must take immediate steps to address this crisis. The ultimate goals are to make U.S. businesses, workers and communities globally competitive and rebuild the nation’s industrial base. Policy reforms in the following areas are essential to achieve these goals.

Trade and Industrial Revitalization
Measures are needed to improve America’s international trade position and strengthen its manufacturing industries. On one hand, we need measures that rectify the trade, dollar and tax policies that put America’s manufacturing workers at a competitive disadvantage in the global economy. At the same time, we also need high-road industrial development policies and investment strategies that support the modernization, retention and expansion of the nation’s manufacturing industries—to help them become more globally competitive—while preserving and creating good manufacturing jobs—high-wage jobs with full benefits, safe working conditions and respect in the workplace. Key measures of such a policy agenda to revitalize American manufacturing include:

Trade, dollar and tax policies
- Fair trade policies that reduce the U.S. trade deficit, protect U.S. trade laws and require inclusion of enforceable workers’ rights and environmental standards in trade agreements. This includes a thorough reappraisal of bilateral, regional and multilateral U.S. trade policies and negotiating objectives, as well as opposition to trade agreements that incorporate the current flawed policies—such as the Central American Free Trade Agreement, the Free Trade Area of the Americas agreement and the U.S.–Thailand Free Trade Agreement—that neither protect the interests of America’s workers nor ensure trading parties abide by the core labor standards of the International Labor Organization. In addition, we should pursue opportunities to use U.S. trade laws to address workers’ rights violations and other unfair trade practices.
- Revised tax laws to eliminate incentives for corporations to move production overseas and punish those that do. This includes opposing any reform of the Foreign Sales Corporation (FSC) tax that would encourage the shift of more manufacturing jobs overseas. FSC should be replaced with tax incentives that help American manufacturers create U.S. jobs and meet retiree health care and pension costs.
- Legislation to ensure American companies pay their fair share of U.S. taxes, eliminating corporate “inversion”—incentives for companies to incorporate overseas to avoid such taxes. Companies that engage in these abuses should be denied government contracts.
- Immediate intervention to address the problem of the overvalued dollar, which puts U.S.-based producers at an impossible competitive disadvantage. In particular, the Industrial Union Council is actively exploring a variety of options to get China and other countries to change to stop artificially pegging their currencies to the U.S. dollar.
- Rules to deter financial crises and large currency devaluations by reducing developing country debt, regulating financial speculation and reforming the International Monetary Fund and World Bank.

High-road strategies for industrial development
- Increased incentives, assistance and access to capital, especially for small- and medium-sized manufacturers, to support modernization, job retention and creation.
• Increased funding and incentives to employers for workforce training, emphasizing joint labor–management initiatives and industry skill standards.

• Measures promoting a strong industrial base for defense and homeland security, including procurement reform, enhanced Buy American requirements, an updated assessment of critical defense manufacturing capabilities and limits to “offsets” that drain critical technology and good jobs.

• Targeted public investments for rebuilding and modernizing the nation’s public infrastructure, transportation and energy systems and to address other public needs, such as cleaning up the environment to stimulate innovation, industrial development and job creation. For example, the Industrial Union Council–backed Apollo Alliance would foster 3.3 million new jobs, with large concentrations in manufacturing, through a $300 billion investment over 10 years in energy efficiency, new energy sources and transportation.

Health Care Reform
Solving the health care crisis overall, and for manufacturing in particular, will require a substantial infusion of new public dollars as well as effective cost-containment policies. Individual tax credits and defined-contribution health plans are not the answer, as they would simply shift unacceptable costs and risks onto workers and undermine the employment-based system. The Medicare legislation passed by Congress and signed into law by President Bush, which provides incentives for employers to drop their retiree benefits, only adds to the problem. It will fundamentally undermine the security of the Medicare program with a drug plan that provides giveaways to private insurers and opens the door to privatization of the entire program. In addition, nearly 3 million retirees are expected to lose their employer-sponsored drug benefits.

Key measures to bring new public money into the system, essential for easing cost and competitive pressures and preserving employer-sponsored health care, include:

• Fixing the Medicare prescription drug benefit law so employers are not provided with incentives to drop retirees from coverage. A proper Medicare prescription drug benefit should provide continuous, comprehensive coverage for all seniors, including those previously covered through employer-sponsored plans. It should not penalize employers that provide retiree health care, the primary source of prescription drugs for seniors.

• Incentives to employers to maintain health care benefits of retirees. There should be significant subsidies to encourage employers who have been offering benefits to active workers and retirees to continue to do so.

Labor Law Reform
Reforming and enforcing the nation’s labor laws are essential to addressing the manufacturing crisis, as well as for promoting good jobs for all U.S. workers. Without changes in the law, America’s workers, the economy and society will continue to pay a very heavy price in the form of suppressed wages, enormous and widening gaps in the distribution of income and wealth, weakening of the safety net, decline in civic and political participation, unchecked corporate power and harm to the quality of life. To protect good unionized manufacturing jobs we need:

• Strengthened labor laws to prevent employer suppression of workers’ freedom to form unions and bargain collectively, including higher penalties for employer violations of labor laws. In particular, the AFL-CIO and Industrial Union Council support the Employee Free Choice Act (S.1925, H.R. 3619), which would restore workers’ freedom to form unions free of employer coercion and interference, making union protections and benefits more widely available to working families.

• To oppose bills that would substitute compensatory time for overtime pay—undermining the 40-hour workweek and resulting in more manufacturing workers working longer hours for less pay. Priority should be given to enacting legislation giving workers the right to refuse excessive overtime. At the same time, the
AFL-CIO and Industrial Union Council oppose Bush administration efforts that could strip overtime pay protections from 8 million workers, who would be denied the extra overtime pay income in uncertain economic times when they work longer than 40 hours a week.

• Legal protections extended to all workers, regardless of their classification.
Manufacturing matters! It is critical for America's future economic well-being and national security that we have polices to restore U.S. manufacturing competitiveness and create good manufacturing jobs. The nation no longer can afford ballooning trade deficits and deepening domestic budget crises driven by the loss of manufacturing that threaten to destabilize our economy and undermine the nation's long-term economic growth. Congress therefore must act now to revitalize America's manufacturing base.

References*


* Data source notes: Employment data are from U.S. Department of Labor, Bureau of Labor Statistics (BLS); Capacity utilization is from the Federal Reserve Board; trade data are from U.S. Census Bureau; GDP and industry output data are from the U.S. Department of Commerce, Bureau of Economic Analysis. Most BLS employment statistics and Federal Reserve capacity utilization data are based on industry categories defined by North American Industrial Classification System (NAICS), which recently replaced the Standard Industrial Classification (SIC) system in the federal statistical series. The switch to NAICS from SIC is reflected in several differences between numbers in this report from those cited in the 2003 version of this document.