

**Testimony of Commerce Secretary John E. Bryson
Before the House Energy and Commerce Committee
Subcommittee on Commerce, Manufacturing, and Trade
Where the Jobs Are: Can American Manufacturing Thrive Again?
April 19, 2012**

Introduction

Thank you Chairwoman Bono Mack, Ranking Member Butterfield, and members of the Committee for inviting me here today to talk about the Department of Commerce's lead role in advancing President Obama's manufacturing agenda.

A robust manufacturing sector is vital to the U.S. economy. It currently provides 12 million American jobs, accounts for the bulk of U.S. exports, drives technological innovation, and strengthens national security.

Manufacturing plays a unique role in supporting working families and the middle class. In general, manufacturing jobs are more likely to be full-time, provide good benefits, and pay significantly more than other jobs. The Bureau of Labor Statistics reports that total hourly compensation in the manufacturing sector is, on average, 20 percent higher than that in the service-providing sector. Even after controlling for education and skill level, manufacturing wages are still 8.5 percent higher than other sectors of the economy, according to a recent Brookings study.

The manufacturing sector is also a key component to our economic and national security. Manufacturing is the largest contributor to U.S. exports. In 2011, the United States exported nearly \$1.27 trillion of manufactured goods, which accounted for 86 percent of the value of all U.S. goods exports and 60 percent of U.S. total exports.¹ However, even with a trade surplus in the services sector, we need a faster growing manufacturing sector to begin to reduce our trade deficit.

Further, we must maintain the ability to domestically produce the advanced defense systems needed by the modern military as well as ensure that we have sufficient capabilities to domestically source critical infrastructure components, from communications equipment to power generation, to protect ourselves against potentially catastrophic supply chain disruptions. In a networked world, secure supply chains are increasingly essential.

Manufacturing also plays in an outsized role in driving innovation. Manufacturing companies in the United States account for 70 percent of private sector research and

¹ The value of total exported manufactured goods includes \$174 billion of "reexports," defined as imported merchandise that, at the time of exportation, is in substantially the same condition as when imported. "Reexports" are also included in the total exports (the denominator).

development (R&D) and employ the majority of domestic scientists and engineers. Manufacturing R&D is also the dominant source of innovative new technologies that are adopted into the service sector.

For all these reasons, the President has made American leadership in manufacturing a top priority of the Administration. When I set out my priorities as Secretary, I was determined to harness the great potential of the Commerce Department to be even more effective in driving advanced manufacturing, exports and business investment. My goal as Secretary of Commerce is simple—to help American businesses build it here and sell it everywhere.

American Manufacturing Is Coming Back

Manufacturing has historically been a backbone of the American economy, but the sector has experienced significant challenges over time, but particularly over the last decade. Despite continued output growth, manufacturing as a share of U.S. GDP, manufacturing has declined from 27 percent in 1957 to just over 11 percent by 2008. While manufacturing employment has faced a similar decline on a relative basis, the actual number of Americans employed in manufacturing was the same in the 1965 as it was in 1999. But over the last decade, in a real break from the past, the manufacturing sector lost about a third of its total workforce and the impact of this absolute decline in manufacturing employment has been acutely felt in many communities across the country. Significantly, this decline has not just been in low-wage jobs. As the President's Council of Advisors on Science and Technology (PCAST) notes, the United States has also lost sophisticated engineering and advanced manufacturing jobs.

But the declines over the last decade in U.S. manufacturing are showing signs of reversing. Over the past 24 months, the manufacturing sector added 458,000 jobs. Manufacturing as a percentage of GDP rose between 2009 and 2010, reversing a five-year decline. More companies, U.S. and foreign, are expanding their U.S. production. And more U.S. companies are making the decision to bring manufacturing jobs back to the United States. Why? Companies are realizing that the United States remains the best place in the world to invest and manufacture. Costs of production, energy and transportation in the U.S. are very competitive. We have a strong and stable workforce, a reliable legal system, and very strong IP protection.

Importantly, President Obama has taken bold steps to accelerate this resurgence.

In the year before the President took office, the American auto industry lost 400,000 jobs. Chrysler and GM were facing liquidation. Independent forecasts projected that if these companies failed, more than one million jobs could have been lost.

The President made the difficult decision to offer financial support when there were no willing private sector investors and in return required hard sacrifices by all stakeholders as part of a corporate restructuring. Today, the auto industry is coming back. Since

Chrysler and GM emerged from bankruptcy in June 2009, the American auto industry has added more than 200,000 new jobs. GM is again the number one automaker in the world in terms of sales, Chrysler is the fastest growing major car company in the U.S., and Ford has committed to \$16 billion in new investment and 12,000 jobs over the next several years.

Since coming into office, the President has signed into law many tax cuts that support American manufacturing. For example, the President signed into law a provision for 100 percent depreciation last year – allowing businesses, both large and small, to immediately write off 100 percent of the costs of new investments in plants and equipment in the United States. .

The President has also laid out a proposal to reform our corporate tax code for the first time in decades – lowering the effective rate for U.S. manufacturers to 25 percent while closing many loopholes. The proposal also includes expanding, simplifying and making permanent the research and experimentation tax credit which is so critical to our manufacturers. This package also includes rewarding businesses that keep jobs in the United States while ending tax incentives for corporations that move jobs abroad.

The Administration has also focused on opening markets to exports of American-made products and services. After making improvements to pending trade agreements with Korea, Colombia, and Panama – to ensure that American workers were getting a fair deal – the Administration worked with Congress to secure support for their passage. The U.S.-Korea Trade Agreement is already in effect. The President announced on Sunday (April 15) that the agreement with Colombia will go into effect on May 15, and we are now working closely with Panama to ensure the requirements laid out in the agreements are met and implemented as quickly as possible.

The Administration is also increasing investment in foundational public goods critical to manufacturing competitiveness, such as education and workforce training, infrastructure and basic research which I will not detail here. A recent report from the Commerce Department, *The Competitiveness and Innovative Capacity of the United States*, provides analysis of these issues.

One of the President's recent actions in support of his manufacturing agenda was to name me co-chair of the White House Office of Manufacturing Policy (OMP) along with Gene Sperling, Director of the National Economic Council. The purpose of the Office is to ensure effective coordination of manufacturing policy implementation and to serve as a resource for all federal agencies to coordinate manufacturing activities. This "Manufacturing Cabinet" held its first meeting on January 20, and we are now more focused and driven than ever before. Agencies have stepped up their efforts to collaborate on efforts focused on advanced manufacturing and support for small and medium manufacturers.

The Commerce Department is helping to lead the Administration's manufacturing agenda. We have grouped our programs and initiatives around four strategic objectives.

They are:

- Promoting innovation and protecting intellectual property;
- Establishing regional manufacturing partnerships;
- Promoting investment and trade; and
- Providing information and analysis on the manufacturing sector.

Promoting innovation and protecting intellectual property

Manufacturing is Key to an Innovation Economy

I am pleased that the national discussion surrounding manufacturing has highlighted the need for a coherent innovation policy that will ensure the United States remains a technological leader. A critical component of an innovation policy is the link between new ideas and the manufacture of new products with new processes. Through thoughtful analysis by groups such as PCAST and the National Science and Technology Council, this Administration has shown that we cannot focus only on the invention and innovation of new products and leave the actual production to other countries. In many industries and technologies, production and innovation are inextricably linked.

Our innovative capacity as a nation hinges on our capacity to manufacture.

Advanced Manufacturing

Advanced manufacturing – the set of manufactured goods that rely on rapid innovation and use of the newest technologies – are critical to American competitiveness. The Commerce Department has a long history of working with these manufacturers directly. We play an important role in funding research and development and our labs have a history of generating key fundamental measures and standards that have enabled the development of new generations of products and services such as GPS technology. We also support advanced manufacturing by protecting intellectual property so that individuals and businesses can invest in their new ideas with confidence. However, in order to better serve this crucial manufacturing sector in the 21st century, we are stepping up our game.

The Advanced Manufacturing Partnership

In June 2011, the President announced the formation of the Advanced Manufacturing Partnership (AMP), a national effort bringing together industry, universities, and the Federal Government to invest in the emerging technologies that will create high quality manufacturing jobs and enhance our global competitiveness. The President established the AMP Steering Committee, comprised of leading experts from industry and academia, to provide guidance to the Administration. This Steering Committee will soon present its recommendations to the President through the PCAST.

To implement the AMP Steering Committee recommendations and facilitate ongoing collaboration and information sharing across federal agencies, Commerce is hosting a new Advanced Manufacturing National Program Office (AMNPO) at the National Institute of Standards and Technology (NIST). This inter-agency effort will initially

operate with participation from the Departments of Commerce, Defense, and Energy and the National Science Foundation and coordinate closely with the White House Office of Science and Technology Policy through the National Science and Technology Council.

The AMNPO will also plan for the implementation of the new National Network for Manufacturing Innovation. In FY 2013, the Administration proposes to make a one-time \$1 billion mandatory spending investment to catalyze the creation of a network of up to 15 institutes to foster innovation and accelerate technological advancements in manufacturing. These institutes will bring together researchers, companies, and entrepreneurs to solve problems in pre-commercial advanced manufacturing technologies that will support investment and U.S. leadership in advanced manufacturing. These institutes will also serve as a place where smaller manufacturers can scale up production processes by accessing state-of-the-art equipment and where workers and students can receive training and education in the latest manufacturing technologies. Like many of our manufacturing initiatives, this new program would be a collaborative effort across four federal agencies, Commerce with the Department of Defense, the Department of Energy, and the National Science Foundation (NSF).

I look forward to working with you on legislation that can support the National Network for Manufacturing Innovation. This new proposal fills an important gap in our innovation system, leverages our unique strengths as a nation, and can help us compete for the advanced manufacturing investment that will make us successful in the decades to come.

The President announced on March 9, 2012, that the Administration will launch a Pilot Institute for Manufacturing Innovation. This Pilot Institute will serve as proof-of-concept for the National Network for Manufacturing Innovation. It will draw on existing resources and authorities of the same agency participants--Departments of Commerce, Defense, and Energy, and the NSF. A consultative process leading to a solicitation and an award for the Pilot Institute will occur over the next few months. Additive manufacturing has been identified as the technology focus.

R&D and Measurement

In FY13, NIST is funding \$135 million in its programs to directly address R&D and measurement challenges in the area of advanced manufacturing. These programs target nanomanufacturing (including flexible electronics), biomanufacturing, smart manufacturing (including robotics), and next-generation materials measurements, modeling, and simulation. Through these efforts, NIST is providing the R&D and measurement infrastructure necessary to support manufacturing in a number of areas, including the automotive industry, computers and advanced electronics, machine tools, chemicals, and biopharmaceuticals. The outputs of NIST's investment include new performance metrics, measurement and testing methods, predictive tools, protocols, technical data, reference materials, calibration services, and inter-comparison studies. Industry and academia utilize the outputs in product development and further research. NIST's investments are part of our government-wide effort to increase investments in advanced manufacturing R&D, and enhance coordination and collaboration across

agencies.

Implementing 21st Century Intellectual Property (IP) Protection

Advanced manufacturing is largely driven by innovation in IP-intensive industries, and these industries require access to well-defined IP rights (IPR) and effective enforcement in order to fuel economic growth and create jobs. In fact, a report recently released by the Department of Commerce shows that most IP-intensive industries are adding jobs at a much faster rate than the rest of the economy.

The bipartisan America Invents Act (AIA) signed into law last year is already strengthening the U.S. IP system by making it easier for enterprises of all sizes to fund, develop and protect their innovations and bring them to market sooner. The new system is also more flexible. For example, individuals and businesses can pay a little more and opt-into a “Track 1 program” that enables a patent to be examined within 12 months. This faster processing is particularly critical for advanced manufacturing technologies. Over the past three years, leadership at the United States Patent and Trademark Office (USPTO) has overseen a reduction in the backlog of unexamined patent applications by more than 100,000, allowing all users of the patent system to move ideas to market more quickly.

The Act also enhanced the current “Prior User Rights” defense to infringement actions, to allow manufacturers who adopt technology *first* to continue making products that predate a patent application filed *later* by another party. Moreover, since the prior user rights defense is available in many foreign jurisdictions, the AIA helps level the playing field for U.S. industries against foreign competition. Prior to enactment of AIA, competitors abroad could undermine American companies who invested in a technology, while being protected from similar practices by prior user rights in their home country. Enactment of this historic patent reform law removes that imbalance.

The USPTO is also working to increase outreach to individuals and companies. In collaboration with NIST, they have developed a new IP Awareness Assessment tool that educates inventors and small businesses on the different IP protection strategies at their disposal in order to help them develop their IP portfolios. This incentivizes the creation of new product lines *here* in the United States—which subsequently spurs follow-on manufacturing and jobs.

Establishing regional manufacturing partnerships

Working Directly with Manufacturing Firms

NIST’s Hollings Manufacturing Extension Partnership (MEP) program has a tremendous track record of success and an enviable return on investment. MEP client surveys indicate that for every one dollar of federal investment in MEP, American manufacturers generate approximately \$30 in new sales growth; translating into \$3.6 billion in new sales annually. In FY2010, the program resulted in over 19,000 new jobs created, and over 40,000 jobs retained, according to the clients themselves. MEP’s winning formula of being knowledgeable on the ground, and partnering with those in the know, results in

added sales, stronger companies, and more competitive small and medium-sized manufacturing businesses.

NIST/MEP works with small and mid-sized U.S. manufacturers to help them create and retain jobs, increase profits, and become more efficient, and therefore, more competitive. The nationwide network provides a variety of services, from innovation strategies to process improvements to green manufacturing. MEP also works with partners at the state and federal levels on programs that put manufacturers in touch with the resources that can help them develop new customers, expand into new markets, and create new products.

MEP's field staff of over 1,300 technical experts – located in every state – serve as trusted business advisors, focus on solving manufacturers' challenges, and identify opportunities for growth. MEP offers its clients a wealth of unique and effective resources centered on five critical areas: technology acceleration, supplier development, sustainability, workforce and continuous improvement. By placing innovations—both product and process—directly in the hands of U.S. manufacturers, MEP serves an essential role in sustaining and growing America's manufacturing base.

The MEP program also houses the National Innovation Marketplace (NIM), which connects manufacturers to technology and business opportunities resulting in new markets and new products. For example, MEP will be using the NIM in its partnership with the U.S. Department of Transportation Federal Railroad Administration to connect domestic suppliers with rail equipment manufacturers in order to maximize domestic content in the rail sector. MEP's field staff, working with their state and local partners and with original equipment manufacturers (OEMs), can help identify potential domestic suppliers for rail equipment components, which is a critical step in reestablishing a domestic manufacturing base and creating American jobs to support the rejuvenation of rail transportation in the U.S.

The Advanced Manufacturing Jobs and Innovation Accelerator Challenge, which will soon be issued, will provide coordinated, complementary investments from the Department of Commerce's Economic Development Administration (EDA) and NIST, the Departments of Energy and Labor, the Small Business Administration, and the National Science Foundation, to assist the development and implementation of regionally-driven economic development strategies that will support advanced manufacturing activities and cluster development. Academic studies have highlighted the important economic benefits of clusters, particularly in manufacturing industries. The challenge will provide catalytic funding for competitive, high-potential regional partnerships that accelerate innovation and strengthen capacity in advanced manufacturing. The investments will also assist entrepreneurial development in disadvantaged communities. This challenge will support the objectives of the President's Advanced Manufacturing Partnership and National Strategic Plan for Advanced Manufacturing and build on earlier Administration efforts to provide a coordinated approach to support regional economic strategies.

EDA's Matchmaking Tool

To support today's advanced manufacturers we need the physical capacity to establish businesses quickly and build things competitively. Currently hundreds of millions of square feet of commercial, industrial and manufacturing space sits idle due to plant closures. EDA's mission is to help turn those empty sites into thriving, productive facilities of advanced manufacturing. EDA seeks to design a system to match companies in need of production facilities and related support services with the vacant space that best corresponds with their needs. This new tool will be a valuable resource for domestic companies looking to expand as well as foreign companies exploring the North American market.

Supporting Minority-Owned Manufacturers

Our Minority Business Development Agency (MBDA) has a longstanding history of working with minority-owned firms in the manufacturing arena through its network of MBDA Business Centers around the country, particularly in heavy manufacturing regions such as the Great Lakes region and the Southeast. MBDA Business Centers provide technical assistance to minority business owners consistent with their growth strategies to secure contracts and capital along with market penetration and expansion through exports. Over fiscal years 2009 and 2010, MBDA was able to assist minority-owned manufacturing firms in successfully securing nearly \$200 million in public and private sector contracts.

Expanding Outreach to New Communities

In the spirit of working as "One Commerce," we are asking our bureaus to think creatively about how they engage their constituencies. For example, the National Oceanic and Atmospheric Administration (NOAA) works closely with industries such as renewable energy, marine transportation and boating, science observation and instrumentation, and fishing equipment. NOAA is now working to build relationships between those key industry groups and other Commerce bureaus, as well as other Federal Agencies. To illustrate: In 2012, NOAA will coordinate a White House conference focused on manufacturing of recreational fishing boats and equipment. The conference will be planned for the fall in partnership with the National Marine Manufacturers Association.

Developing Digital Infrastructure That Empowers Communities

The National Telecommunications and Information Administration's (NTIA) \$4 billion Broadband Technology Opportunity Program (BTOP) is a substantial effort the Department has underway to expand our nation's high-speed digital infrastructure to communities nationwide. The awards include major investments in broadband infrastructure to provide connectivity that will give manufacturing-based businesses, both large and small, better access to national and international markets, skilled employees, and a broader array of vendors, suppliers and customers.

For instance, MCNC, a nonprofit broadband provider that has operated the North Carolina Research and Education Network (NCREN) for more than 25 years, is using BTOP funds to deploy or upgrade 2,600 miles of fiber in rural areas across the state. MCNC's project is already creating construction jobs and jobs for local manufacturers

and vendors such as CommScope in Hickory, N.C., which is supplying fiber and other materials. It is also laying the groundwork for economic revitalization in places such as Kannapolis, N.C., a former textile mill town that is reinventing itself as a biotechnology and life sciences hub.

In a very real sense, the Department's focus on maximizing spectrum for wireless innovation and services and expanding broadband infrastructure nationwide are essential investments to enable America's manufacturers to compete and grow their businesses both at home and worldwide.

Promoting investment and trade

NEI and trade enforcement

In the 21st century, a competitive manufacturing sector operates on a global scale. This means that U.S. producers must be able to put together the right combination of skilled workers, technologically advanced capital, logistical and information technology systems, and superior quality processes in order to make a product at a price that appeals to customers at a given location. The more locations where they can meet the price/quality bar, the wider their customer base will be. The efforts described above detailing Commerce support of advanced manufacturing help companies achieve their price/quality goals. However, additional Commerce services are helping companies as they search for buyers in other countries.

U.S. businesses are not exporting nearly as much as they could. Currently, only about one percent of U.S. businesses export, and most only to one country. Many American companies would like to export, but are unsure how to start. Small businesses in particular often face big challenges when it comes to getting export financing, building relationships with foreign suppliers, and dealing with unfamiliar foreign rules and regulations. President Obama's National Export Initiative (NEI) is an Administration-wide commitment designed to help businesses overcome these hurdles, and the Commerce Department has played a central role in these efforts. In fact, U.S. companies increased their exports to record levels in 2011, totaling over \$2.1 trillion, nearly 34% above the level of exports in 2009, putting us on track to meet the challenging goal to double American exports by the end of 2014.

Our International Trade Administration (ITA) is focused on helping American companies sell their products and services to the 95 percent of the world's consumers who live beyond our borders. We are engaging foreign governments to eliminate foreign trade and regulatory barriers to our exports, advocating to foreign governments the purchase of U.S. products in public tenders, and vigorously enforcing our trade rules. ITA helps level the playing field for U.S. manufacturers of all sizes to grow their export markets. Additional help is offered to small or medium exporters looking to expand into additional export markets.

Our manufacturers also look to the Administration to go to bat for them when our foreign

trade partners do not play by international rules. That is why, in his State of the Union Address, the President called for increased efforts to investigate unfair trading practices in countries around the world, including China. In February, the President carried through on that commitment through the establishment of the Interagency Trade Enforcement Center (ITEC), which will level the playing field for U.S. manufacturers by bringing a more aggressive “whole-of-government” approach to trade enforcement. The ITEC will devote more personnel and resources to facilitating our engagement through the World Trade Organization, and better utilizing our domestic trade enforcement authorities.

I want to take this opportunity to thank you and your colleagues in Congress for your efforts in maintaining the strength of our trade laws. Congress' passage of GPX legislation has ensured that U.S. manufacturers can challenge and seek relief against unfairly subsidized or dumped products entering the U.S. market. Failure to pass this legislation would have put at risk tens of thousands of U.S. workers in manufacturing companies across the United States.

Equally important for our exporting manufacturers, however, is Export-Import Bank's reauthorization and Jackson-Vanik's revocation as it applies to Russia. Without Congressional action on both, our exporting manufacturers will be at a competitive disadvantage.

Select USA and business investment

Commerce's efforts to support advanced manufacturing and aid exporters help attract and retain business investment. The Commerce Department and the Administration are focused on doing even more in this area by expanding a new initiative, SelectUSA, and being strategic with our economic development dollars administered by the Economic Development Administration (EDA).

SelectUSA was established by Executive Order on June 15, 2011. It is the first Federal effort designed with executive authority to support foreign and domestic business investment in the United States. It showcases the United States as the world's premier business location, complementing the activities of states and regions—the primary drivers of economic development—to spur economic growth and job creation. SelectUSA coordinates existing resources and functions across all Federal agencies that have operations relevant to business investment decisions. As a central point of contact within the U.S. government, SelectUSA serves as an advocate and ombudsman for the investor community.

Providing information and analysis on the manufacturing sector

Census Bureau

Finally, I would be remiss if I didn't mention that the Department of Commerce houses two of the premier Federal statistical agencies that provide critical business data, the Census Bureau and the Bureau of Economic Analysis. The Census Bureau collects and

reports on key measures that are used in business decision-making every day. These include estimates of exports, imports, population trends, retail sales, and industry output. The Census Bureau is currently conducting its every-five-years Economic Census, which surveys all American businesses and provides the best available information on business size and sales by industry and by product.

Bureau of Economic Analysis

The Bureau of Economic Analysis aggregates data from both private and public sources to produce the national income accounts, which allow us to track economic growth in the aggregate and by industry sector. These data are invaluable in understanding how American manufacturing is changing and in guiding business investment decisions.

Conclusion

Build it here. Sell it everywhere. This is how the United States became the world's greatest economic power in the 20th century. An innovative, vibrant, and dynamic manufacturing sector is needed for America to remain a great economic power in the 21st century.

With the actions I have outlined today and the President's proposals for expanded work in this area, I know we will be able to look back 10 years from now and view this period as the beginning of a true renaissance in U.S. manufacturing.

Thank you for giving me the opportunity to testify today. I look forward to working with you and the Members of this committee to develop policies to continue to strengthen our manufacturing sector.