

TESTIMONY OF
GARY LOCKE
SECRETARY OF COMMERCE
BEFORE THE
SENATE COMMERCE, SCIENCE AND TRANSPORTATION COMMITTEE
MARCH 2, 2011

INTRODUCTION

Chairman Rockefeller, Ranking Member Hutchison, Members of the Committee, thank you for giving me an opportunity to appear before you today. I first want to commend the Committee for holding this hearing and focusing on the critical role of manufacturing in the United States.

Without a doubt, domestic manufacturing production is vitally important to the United States, ensuring both our national and economic security, and providing good-paying jobs to millions of Americans. Maintaining a vibrant U.S.-based manufacturing sector is necessary if we are to protect our citizens, create good jobs, foster innovation, and ensure that our nation retains the capacity to make products that we, and the rest of the world, need to transition into a cleaner, greener economy. In short, manufacturing matters.

OVERVIEW OF MANUFACTURING IN THE UNITED STATES

Let me start by stating the obvious: The U.S. manufacturing sector has changed dramatically over the last 30 years. The challenges that currently face our manufacturing sector are a result of two important and fundamental shifts. First, we have seen a dramatic improvement in productivity in the manufacturing sector, a resulting rapid technological change in how we make products. This was most recently evidenced by the introduction of computerized ‘smart’ production processes. Second, the growth in worldwide manufacturing capacity and trade has presented challenges in a world of ever increasing competition. U.S. manufacturers are operating in a world of vastly increased global competition. Overlaid on these two fundamental shifts is the rapid evolution of consumer demand for what is produced—products have ever shorter life cycles and consumers expect new, improved versions to rollout with increasing regularity

We cannot turn back the clock on these changes. The only way to retain a strong and vibrant manufacturing sector in the United States is to LEAD the change. This transformation has not been easy or painless, and while we still have a long road ahead of us, we have seen real progress.

While U.S. manufacturing has changed dramatically, our manufacturing sector continues to be the largest in the world. As a stand-alone economy, U.S. manufacturing would be the world’s seventh

largest economy. Over the past year, the manufacturing sector has been leading the economic recovery. The sector has increased employment for the first time in over a decade, and manufactured goods exports have increased by 16 percent over the last year. This is not to say that manufacturing has not faced real challenges in both the recent recession and in the decades that preceded it. While we have the world's largest manufacturing sector, our share of global manufactured goods has declined over the last decade. Over that period of time, our trade deficit in manufactured goods began to soar. And of course, we have lost millions of manufacturing jobs.

For manufacturing firms operating in the United States, many changes have been required. Successful U.S. manufacturers have only been able to maintain their competitive advantage in the global marketplace by continuing to invest in research and development and by continuously introducing new products and manufacturing techniques. In particular, to remain a leader in manufacturing the United States cannot allow others to set the pace in the development and production of the services and products that go into a greener, more sustainable economy. To remain competitive in the global marketplace, our manufacturing operations must be at the forefront in energy and resource efficiency, and innovate to meet and exceed increasing demands for cleaner production and sustainable consumption.

Further, we have been able to drive high levels of productivity growth by increasing the capital intensity of our manufacturing base, moving away from labor-intensive manufacturing and toward more high-value-added manufacturing. This productivity growth enables manufacturers to continue to provide good-paying jobs in the face of global competition, but it also means that fewer people are needed to produce our manufactured products.

In 1979, there were 19.4 million manufacturing jobs in the United States. In 2010 there were only 11.5 million workers employed in the manufacturing sector. Moreover, the skill mix of manufacturing workers has also shifted. The need for highly skilled workers in the manufacturing sector is growing as a result of changes in technology, which is why the Obama Administration is investing resources to make sure the U.S. workforce has the skills needed to fill manufacturing jobs now and in the future.

Even as the domestic manufacturing sector and its workforce have evolved dramatically over time, one thing that has not changed is the central importance of the manufacturing sector to our nation's economy and its future. While the relative percentage of the U.S. workforce employed in manufacturing has declined over time, manufacturing creates more ancillary economic activity than any other sector, it represents 68 percent of exports and 70 percent of private sector R&D. There are those who would argue that manufacturing does not need special help—that competitive forces will naturally result in the right allocation of resources in our economy. However, that completely laissez-faire approach ignores the fact that we do not live in a world defined by free and open competition, operating without government intervention. Actions of governments—our own included—influence the relative competitiveness of entire sectors and individual industries. For example, our corporate tax system causes costly distortions where particular companies and industries with accountants or lawyers can end up paying no taxes at all, but all the rest are hit with one of the highest corporate tax rates in

the world. This is why the President called for reform of the corporate tax code in his State of the Union address.

The government also has an important role to play with regards to innovation. All advanced governments invest in basic and applied research. The challenge is for our nation to make private and public investments in science, engineering, research and development that will ensure that the United States is the world's leader in innovation for decades to come. However, there is a growing concern that further decline in American manufacturing could have broader negative effects on overall economic performance. It is not enough to only invent products here. The "invent it here, manufacture it there" economic approach is not sustainable. We must be able to make things here in America, and without this capability it may become increasingly hard to invent things here in America.

Lastly, in the face of transitory but severe situations, governments must sometimes play a critical stabilizing role, so that companies and markets have time to adjust. In 2008, the U.S. auto industry faced such a situation. GM and Chrysler faced almost certain liquidation, and most believed that without intervention Ford would soon follow. The Administration was left with a decision of whether the U.S. auto industry was worth saving. There is no doubt that the old business models of GM and Chrysler were no longer viable. However, many have estimated that the ripple effects of jobs that would have been lost had the Administration not intervened would have been in the millions. The Administration set tough but fair conditions for the companies in order to receive assistance, requiring major restructurings of both their balance sheets and their entire operations. While this should not be a general model for government intervention, it was what was required given the extraordinary circumstances. Last month's announcement that each of GM's 45,000 U.S. hourly workers would receive at least \$4,000 under a profit-sharing agreement with the United Auto Workers was a fitting Valentine's Day testament that the transition plan has been a success.

MANUFACTURING AGENDA

The Obama Administration's top priority since day one has been fixing our economy and putting Americans back to work. Manufacturing is a key component in revitalizing the U.S. economy and creating U.S. jobs. That is why the President unveiled a framework to revitalize American manufacturing in December, 2009. However, the challenges that face manufacturers existed long before the recession. Winning the future will require a robust and vibrant manufacturing sector, but to get there we must ensure that companies see the United States as a competitive location to invest, build factories, and create jobs. The Commerce Department is actively supporting President Obama's commitment to ensuring that the United States maintains a robust, globally competitive manufacturing sector that will continue to generate high-paying jobs for Americans both in the near-term and well into the future.

Just as the character of our manufacturing sector continues to evolve, so too must the services Commerce provides in support of this sector. Gone are the days when manufacturing was characterized by highly repetitive work performed in mass production facilities that were geographically concentrated

and where the output was sold almost exclusively to the domestic market. Instead, today's manufacturing sector relies on a highly trained workforce and entrepreneurial behavior that drives continuous innovation—all subject to the discipline imposed by global competition. Moreover, evolving advanced manufacturing technologies offer the potential to produce higher quality and wider variety of products—even customizing products for just a few or even a single buyer— and do so at low cost. However, the rest of the industrialized world is pursuing these same goals for their domestic industries by investing substantial sums in new technology platforms and supporting technical infrastructures. To foster such innovation and entrepreneurship in the United States, the Commerce Department has focused the work of its bureaus on supporting the needs of manufacturing firms at crucial points in their lifecycle where government activity can provide added value—helping support innovation, commercialization, and access to global markets.

Today, I want to highlight these three areas where the Department of Commerce is engaged in helping U.S. manufacturers succeed in today's competitive marketplace and discuss our new approach to providing services.

However, before I move on to the Commerce programs, I would like to take a moment to applaud this Committee for not just recognizing, but acting on the need to maintain America's global leadership in science, technology, and innovation. Your leadership reauthorizing the America COMPETES Act is truly an investment in America's future and our long-term global competitiveness that transcends politics and partisanship. By increasing science and research investments; strengthening science, technology, engineering and mathematics (STEM) education; and developing an innovation infrastructure, you are focusing attention on the drivers of our economy and keys to our economic success. You have provided all the right tools. Now, supporting the President's FY 2012 budget request, which maintains the Administration's commitment to double Federal investment in key basic research agencies consistent with the COMPETES Act, is among the most important things that Congress can do to ensure America's continued leadership in the decades ahead.

Innovation – A competitive manufacturing capacity requires creating and deploying new ideas in the form of new products, new business models, and improved production processes. Our Patent and Trademark Office (USPTO) enables these developments through an improved environment for intellectual property (IP) creation – driving a more efficient patent system and better protection at home and abroad. As I noted earlier, recent innovation in the manufacturing sector has enabled makers to produce variable quantities or on a semi-custom basis at a low unit cost. This development, coupled with strong IP protection for local innovators and manufacturers will enable any American with an idea, anywhere, to set up shop and build her dream. The USPTO supports this objective by providing IP education, resources, and fee discounts for small businesses and independent inventors. Commerce, through investments in our National Institute of Standards and Technology (NIST), further supports the creation of new ideas directly through critical investments in basic science, measurement capacity, and technical assistance for the establishment of industry standards that enable the development of entire markets for manufactured goods.

Without a strong foundation for advanced manufacturing, benefits for the economy, including long-term job growth, cannot be maximized. This is why our Economic Development Administration's (EDA) leadership on regional innovation clusters is critically important to building the capacity for global competitiveness. For example, EDA invested in the Northeast Ohio Technology Coalition (NorTech) of Cleveland, Ohio, to develop a regional innovation strategy and advanced energy industry cluster roadmap, creating new jobs and reinvigorating the competitiveness of communities and regions impacted by the downturn of the auto industry. This investment is especially timely as this region has been hard hit over the past few decades with job losses and a significant decline in small business development.

Commercialization – Transforming new ideas into manufactured outputs is a challenge that often confounds entrepreneurs – both start-up and large-businesses alike – in their attempts to take new ideas to market and ensure profitable, sustainable manufacturing businesses. Commerce supports these efforts in multiple ways. I would like to offer three examples that demonstrate the Department's work in this area.

EDA's Office of Innovation and Entrepreneurship (OIE) focuses specifically on the challenges of commercialization. OIE plays a leading role in developing policy recommendations, with a focus on increasing the commercialization of technology developed through university and federally funded research. The Office has developed the i6 Challenge, a multi-agency competitive grants initiative that encourages and rewards innovative ideas that accelerate technology commercialization, new venture formation, job creation and economic growth in the United States. The Office is also leading efforts to develop a study of federal lab commercialization efforts, with the ultimate goal of advising on methods to increase results.

Additionally, the Hollings Manufacturing Extension Partnership (MEP) at NIST is a program that works directly with companies to help them improve production efficiency and identify and enter new markets. This is an effective program with demonstrated success.

For example, the MEP program helped Ulbrich Precision Flat Wire in Westminster, South Carolina, reorganize and modernize its manufacturing process and maximize efficiencies internally. MEP's assistance enabled Ulbrich to achieve \$1 million in increased sales, \$2 million in retained sales and realize \$150,000 in cost savings. In Marlow, Oklahoma, MEP worked closely with the Wilco Machine & Fab, Inc., to help them implement an export program when opportunities to grow in the domestic market were limited. This enabled the company to expand by identifying and entering new overseas markets, resulting in a 60 percent increase in revenue and a 600 percent increase in export revenue. In Fiscal Year 2009, MEP clients reported the creation of more than 17,000 jobs and nearly 54,000 jobs retained.

C.U.E. of West Virginia, LLC located in Mount Hope, West Virginia, manufacturers cast urethane products for industrial applications. C.U.E. contacted the West Virginia Manufacturing Extension Partnership program recently to help the company improve operations and maintain certifications needed to satisfy customer requirements. The West Virginia MEP performed a review of the current quality and environmental/management system and the required improvements needed to achieve

success. Company managers were briefed on MEP's findings and an improvement plan was agreed to and implemented. With the assistance of the West Virginia MEP, the company was able to position itself for success in the future, increase sales by \$695,000 and realize \$4,000 in cost savings.

We know that in technology entrepreneurship, angel investors and venture-capital firms often will not invest capital unless the startup possesses a granted patent. Therefore, the USPTO has announced the creation of an Accelerated Patent Examination program as part of a Flexible "Three Track" Patent Processing Program that will provide a decision on a patent application within 12 months, thus speeding capital to our nation's best ideas.

Commerce is also able to support commercialization by providing direct information and support to manufacturers in understanding the domestic and global marketplace, areas of growth and opportunity in key sectors through the work of the Economics and Statistics Administration and the International Trade Administration. This is also true with regard to crucial scientific information which can help manufacturers understand emerging demand opportunities. For example, the National Oceanic and Atmospheric Administration is working with the Department of Energy to improve atmospheric forecasting and support the siting and interconnection of renewable energy projects into the grid.

Global Competitiveness – The future of manufacturing will be fundamentally reliant on the ability of U.S. businesses to access and thrive in overseas markets, and the Commerce Department is working to help position these businesses for success through its efforts to drive the National Export Initiative (NEI). At the heart of the NEI is the basic premise that domestic production is critical: we need to make it here, in order to export it from here. Further, by subjecting our businesses to the rigors of foreign competition, it makes it more likely that they will produce products of the caliber that is demanded by our domestic markets, possibly displacing some imports. The NEI was established by President Obama in 2010 with a goal of doubling U.S. exports over five years. Implementing a strategy to expand exports is critical because 95 percent of the world's customers live outside of the United States. We ignore these consumers at our peril. By identifying and removing market access barriers and by determining key markets, sectors and export opportunities for manufacturers, the Department is profoundly focused on ensuring export competitiveness for U.S. manufacturers primarily through the work of the International Trade Administration in partnership with other agencies both within and outside the Department. The Manufacturing and Services unit of the International Trade Administration will sharpen its focus on current and high potential export intensive manufacturing sectors.

In support of the National Export Initiative, I am embarking on four trade missions with U.S. businesses to key overseas markets this year. In February, I led a delegation of 24 U.S. businesses to India to promote their technologies and services related to civil nuclear energy, civil aviation, defense and homeland security, and information and communications technology. This mission provided the U.S. delegation access to key Indian public and private sector decision-makers to explore opportunities to enter or expand their presence in this emerging market. I am looking forward to leading three additional trade missions with U.S. businesses in the months ahead to further expand U.S. exports in overseas markets.

If we are serious about fighting for American jobs and American businesses, one of the most important things we can do is open up more markets to American goods around the world. The Department of Commerce is also actively engaged in promoting approval and implementation of the U.S.-Korea Trade Agreement (KORUS Agreement) as soon as possible, as the President has called for. American manufacturers – from machinery, aerospace and chemicals to information technology and medical devices -- stand to gain tremendous benefits from the tariff and non-tariff provisions of this agreement. According to the U.S. International Trade Commission, the KORUS Agreement is expected to increase our annual merchandise exports to South Korea by nearly \$11 billion, and these additional exports could support 70,000 American jobs.

On a related note, in February the European Parliament ratified the European Union's trade agreement with South Korea, which is scheduled to enter into force this July. Unless we act soon to approve and implement the KORUS Agreement, U.S. manufacturers and business will be at a competitive disadvantage against their European competitors in South Korea's \$1 trillion market. I believe strongly it would be unacceptable to stand idly by and watch South Korea and European Union nations benefit from our inaction when we have the opportunity, presented by KORUS, to ensure U.S. firms can compete and excel on a level playing field.

Recognizing the importance of a level playing field for U.S. manufacturers, the Department of Commerce is committed to rigorously enforcing trade laws and compliance with trade agreements. Commerce currently has 298 antidumping (AD) and countervailing duty (CVD) orders in place, covering over 120 products from 40 countries. Roughly 36 percent of the overall orders are on products from China. Commerce currently maintains 108 AD and CVD orders on imports of a wide range of Chinese products, including consumer goods, steel products, agricultural products, seafood and chemicals. Based on 2010 trade data, roughly \$11.6 billion, or 3.2 percent of imports from China, were affected by orders that year.

If we are going to reap the full benefits of trade, we must take seriously our obligation to call a foul when we see one and hold our trading partners accountable. Our actions in this regard since I became Secretary demonstrate that this Administration considers enforcement of our trade agreements a priority. We will remain vigilant about enforcement going forward.

In addition, the Department, through our Bureau of Industry and Security, is committed to reducing unnecessary regulatory burdens that harm U.S. global competitiveness, and reforming the U.S. export control system in a manner that strengthens national security and also reduces unnecessary barriers to U.S. competitiveness abroad.

The Commerce Department also provides an important piece of infrastructure to support global competitiveness – the data provided by our statistical agencies, the Census Bureau and the Bureau of Economic Analysis. Most of the public data that companies use to make decisions, including information on imports and exports by detailed industry sector, as well as the macroeconomic indicators such as GDP that guide long-term investment planning, are produced by these two organizations within our Economics and Statistics Administration.

While we are highly conscious of the benefits the country gains from trade, I believe we must acknowledge and respond to the pain and struggle that workers in the manufacturing sector have endured as our economy and the world marketplace has changed. Competitive pressures ensure that manufacturing productivity will continue to increase, but as President Obama remarked in the State of the Union address in January, this transformation has not happened without hardship for many workers. The rules and market conditions have changed over the last 30 years. Steel mills that once needed 1000 workers can now do the same work with 100. However, the same changes this industry made to improve productivity has also enabled this once threatened industry to adapt, survive and grow. Therefore, in our Fiscal Year 2012 budget request, the Department of Commerce proposes to transform and improve the services and benefits the Department, through our Economic Development Administration (EDA), provides to communities negatively impacted by foreign competition and other challenges to help them adapt to a rapidly changing global marketplace. Specifically, the Economic Adjustment Assistance (EAA) program within EDA can provide a wide range of technical, planning, public works and infrastructure assistance to communities that empowers them to harness the ingenuity and hard work of their communities to compete and thrive.

Improved Service – To ensure that the tremendous synergies of Commerce and the Federal Government are brought to bear on the goal of manufacturing competitiveness, we have established CommerceConnect—a “one-stop-shop,” offering businesses a single point-of-contact for accessing the wide range of services and programs that Commerce and the Federal Government have to offer. This initiative is not only changing the direct customer experience for manufacturers, it is also driving reform of the Commerce Department’s internal processes across the many services that we offer.

I would like to highlight a few examples of the type of assistance CommerceConnect has provided to manufacturers. In our CommerceConnect field office located in Pontiac, Michigan, we have helped companies that have historically produced small lot, precision tooling and components solely for the automotive market to consider the medical or aerospace industries as an alternative. For example, a former plant manager for a Big 3 automobile manufacturer came to CommerceConnect for assistance with a new business start, OPS Solutions, LLC. OPS Solutions has obtained a patent for its Light Guide Systems™ that can help improve product quality and worker productivity on the plant floor. After collaboration with CommerceConnect, we directed OPS Solutions to Oakland County’s Medical Mainstreet Program which has introduced the company to local hospitals interested in the system for worker training and surgical room instrument setup.

CommerceConnect also engages manufacturers with help in identifying and accessing new markets overseas. Palmer Paint Products in Troy, Michigan, is the original manufacturer of the Paint-By-Number arts and craft product you may remember from your childhood. The company continues to manufacture high quality, lead-free paint products, but faces stiff competition from cheaper, lower quality imports. CommerceConnect recommended the company consider exporting to increase sales and introduced the company to our local U.S. Export Assistance Center in Pontiac. Since then, the company has been accepted for a “Gold Key Program” to help them export to Canada and an ITA-sponsored trade mission to Nigeria.

PRESIDENT'S FISCAL YEAR 2012 BUDGET REQUEST

Looking to the future, the President's Fiscal Year 2012 budget request for the Commerce Department contains several proposals and initiatives that will strengthen the Department's capacity to promote manufacturing competitiveness, while ensuring a commitment to the President's deficit-reduction priorities. Commerce has re-invested in its most effective and synergistic programs—the programs that provide the highest return to taxpayers. These investments, which can be thought of as down payments necessary to secure the future of American manufacturing, include:

- \$764 million for NIST laboratories, part of President Obama's goal to double the funding of our nation's key science agencies. These investments will expand the frontiers of human knowledge and help create industries and jobs of the future in areas such as clean energy, advanced manufacturing and nanotechnology. This funding includes an increase of \$85 million that is specifically focused on research and standards development that will enable the development of innovative manufacturing processes and technologies.
- \$143 million for the Hollings Manufacturing Extension Program
- \$12 million for the Advanced Manufacturing Technology Consortia (AMTech)
- \$75 million for the Technology Innovation Program (TIP) to fund high-risk, high-reward research in areas of critical national need, including advanced manufacturing
- Approximately \$444 million for trade promotion activities through International Trade Administration
- Nearly \$300 million for analytical and information support in the Economics and Statistics Administration
- \$40 million for EDA investments in regional innovation strategies
- \$96 million for EDA's 21st Century Innovation Infrastructure Program
- \$45 million in loan guarantees under the newly reauthorized America COMPETES Act Science and Research Park Loan Guarantee Program.

In developing the budget, we took a hard look at existing programs. As a result, we are making changes to better focus limited resources. As just one example, the President's Fiscal Year 2012 budget achieves a cost savings of \$20 million by restructuring ITA by eliminating a number of foreign posts and better focusing its support of domestic industry toward priority sectors, markets, and activities. We believe these changes will enhance ITA's overall contribution to manufacturing competitiveness in the global marketplace.

The Department of Commerce is also in the beginning stages of a report that will help us plan strategically for the future. The America COMPETES Act requires the Secretary of Commerce to complete a comprehensive study of the economic competitiveness and innovative capacity of the United States one year after enactment and develop a set of recommendations. I look forward to conducting and completing this report, which I believe will inform our approach to manufacturing policy in many important ways. Consistent with the COMPETES Act, Commerce will also participate in the interagency National Science and Technology Council effort to develop a framework for coordinating Federal programs and activities in support of manufacturing.

CONCLUSION

Despite increased global competition, evolving consumer demands and a multitude of changes generally in this sector over the last 30 years, I am optimistic about the future of the U.S. manufacturing sector. That optimism rests in my confidence that American workers are the best in the world, and on the belief that the Federal Government will do its part. Americans recognize that we are operating in a new world. The decisions we make today about how we invest in R&D, education, and innovation will profoundly influence America's economic competitiveness tomorrow. The President knows and I know we can out-compete any other country on Earth. Our nation is well positioned to take advantage of many great strengths and promising opportunities, and we are committed to helping American manufacturers make the most of them.

Thank you again for the opportunity to appear before you today. I look forward to answering your questions.