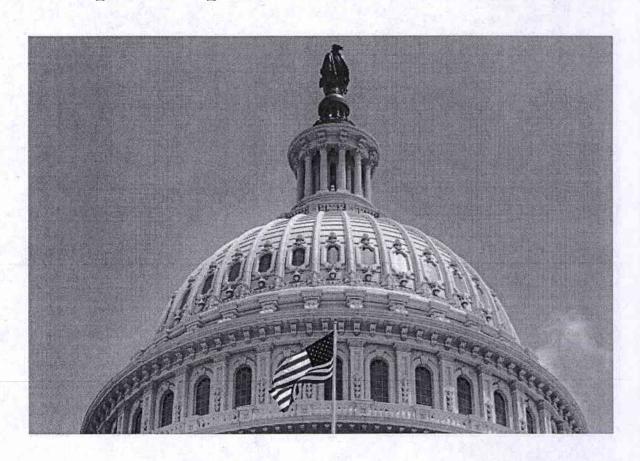
# Deloitte.



# Leadership wanted U.S. public opinions on manufacturing



# Contents

Executive summary	3
Current environment	7
The importance and image of manufacturing	9
The talent pool and future outlook for manufacturing	11
Competitiveness environment	13
Public guidance for policymakers	15
Methodology	17

### Executive summary

#### American manufacturing renaissance? Maybe.

The U.S. economic recovery and job creation continue to be important concerns for many Americans. The American public continues to show very strong support for manufacturing and a deep understanding of the economic benefits that result from a vibrant manufacturing sector. Yet Americans continue to have mixed views regarding the future of manufacturing in the United States.

The results of our fourth annual survey of American citizens measuring their perceptions of the manufacturing industry in the United States relative to other industries reveal that the vast majority firmly believe that a strong manufacturing industry is crucial to Americans' standard of living and economic prosperity, as well as the national security of the United States. However, most see our nation's global competitiveness in manufacturing as stagnant or declining.

Many Americans also aren't convinced that government leaders know how to turn things around and are almost evenly split on their views of business leaders. It's not surprising then that many Americans are steering their children away from careers in manufacturing in favor of other industries they believe offer more stable and certain futures—a trend that will only further erode our nation's long-term manufacturing base. That is unless we do something about it.

Results from our fourth annual survey reveal that manufacturing is once again viewed as the most important industry for maintaining a strong national economy, with 90 percent of respondents rating it as "important" or "very important" for America's economic prosperity and standard of living. Moreover, when asked what type of facility they would establish if given an opportunity to create 1,000 new jobs in their community, Americans again placed manufacturing at the top of the list—ahead of all other industries including energy, technology, healthcare, and communications. With job creation struggling since 2008/2009, being at the top of this list of industry choice is indeed a strong endorsement.

Unfortunately, over the long term most Americans see the U.S. manufacturing sector as getting weaker (46 percent), or at best staying the same (32 percent). Nearly two-thirds (64 percent) of Americans believe the U.S. manufacturing industry can compete effectively in the global marketplace. But only 43 percent believe a manufacturing career is as secure and stable as a career in other industries, and an overwhelming majority (80 percent) believe manufacturing jobs are the first to be moved to other countries. Adding to their lack of confidence about the future, nearly two-thirds of Americans feel that government leadership in the U.S. is generally not helping create a competitive advantage for U.S. manufacturers relative to all other countries. Further, they feel current trade and tax policy in the U.S. creates a disadvantage with respect to making America an attractive place to conduct manufacturing business. No wonder only 35 percent of Americans say they would encourage their children to pursue careers in manufacturing, despite the advanced skills and above average pay that are characteristic of work in today's highly technical, advanced manufacturing facilities.

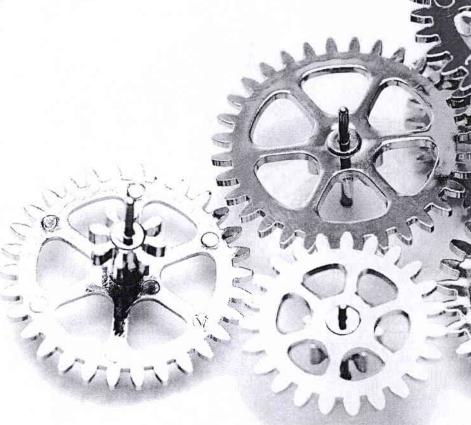


Interestingly, Americans' support of manufacturing and their views regarding career stability have not changed over the last four years. Americans have consistently and resoundingly voiced their opinions relative to the importance of manufacturing, and consistently expressed strong support for a wide range of actions to ensure a position of strength for the U.S. manufacturing sector. Starting in the immediate aftermath of the recession in 2008-2009, each year our survey has uncovered a consistently high regard for manufacturing, both in terms of its role in the U.S. economy and our global standing, as well as its critical importance in job creation. In many cases, the results of our queries on these messages are virtually interchangeable over the past four years.

This is good news for both policymakers and business leaders. It suggests that despite the frequent swings of public opinion on a wide range of topics, Americans remain steadfast in their commitment to creating a strong, healthy, globally competitive manufacturing sector in the United States, no matter the prevailing economic winds.

And it further suggests they would support, and expect, appropriate business-related policies and investments toward that end. That's important for leaders in business and government to understand, as they work together to pull the right levers on the country's economic and job creation engine. According to the public, manufacturing is consistently a top priority.

We created this annual research program to provide a running view of the U.S. public's perspectives on manufacturing to supplement the many other research reports and perspectives of economists, policymakers, business leaders and other stakeholders that have important points of view relevant to this discussion. Taken together, the public's views are an important bellwether for public policy and should be an important consideration for all those responsible for planning and enabling America's future.



#### Key takeaways

Here's a closer look at seven important takeaways from the fourth annual study.

1.	Americans value a strong	
	manufacturing sector	

When asked which industries are most important to the national economy in rank order, manufacturing is at the top of the list, above energy, health care, technology or financial services. Moreover, 90 percent indicate that America's manufacturing base is "important" or "very important" to our standard of living and economic prosperity.

#### 2. Americans want stronger policies to support manufacturing

Eighty percent of Americans believe a strong manufacturing base should be a national priority. But they are not confident that we are taking the right approach today - 84 percent "strongly agree" or "agree" that the United States needs a more strategic approach to developing its manufacturing base, and 82 percent support further investment in America's manufacturing industry.

3. Americans believe the U.S. manufacturing industry has the ability to compete globally but are looking for better leadership from both policymakers and business leaders to support U.S. competitiveness

About two-thirds (64 percent) of respondents agree that the manufacturing industry in the U.S. is well-positioned to compete globally. However, Americans are unsure about the ability of both business leaders and government leaders to create a competitive U.S. economy. Fifty-five percent believe current business leadership provides a competitive advantage to U.S. competitiveness versus all other countries but only 35 percent and 36 percent, respectively, believe that federal and state leadership are helping create a competitive advantage for the U.S. versus all other countries.

4. Americans view the manufacturing sector as fragile and unstable

When asked whether U.S. manufacturing is becoming stronger or weaker over the next 12 months, only 16 percent feel the sector is likely to improve. In contrast, 23 percent feel manufacturing will weaken. The perceived lack of a competitiveness strategy, business policies, and overall leadership seem to be dragging down the otherwise positive views of and strong support for manufacturing in the United States.

5. Americans want manufacturing iobs...for someone else

While the U.S. public registers a strong belief in the importance of manufacturing for the country's economy and Americans' prosperity, when it comes to choosing manufacturing as a career choice, they place it near the bottom of the list. Out of seven key industries, manufacturing ranks fifth as a career choice. Only 35 percent indicated they would encourage their children to pursue a career in the manufacturing industry. In addition, when asked if their parents encouraged them to pursue a career in manufacturing, only 17 percent responded in

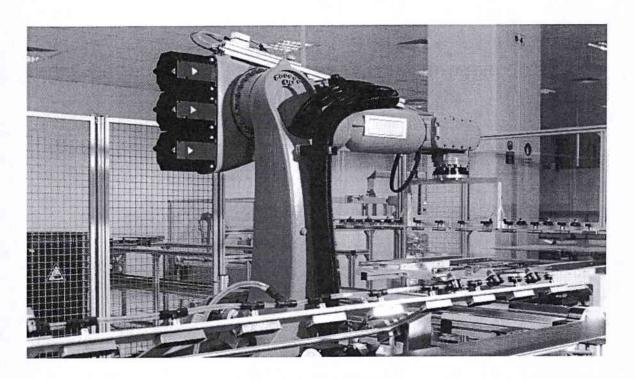
6. Americans lack confidence in their school system's ability to provide the necessary skills and career guidance required to pursue a job in manufacturing

Forty-nine percent of respondents feel students today are qualified to pursue careers in manufacturing, and nearly the same number (47 percent) feel elementary, middle, and high schools have some responsibility for the creation of America's next generation of skilled workers. And only half of all respondents (49 percent) believe their local school system exposes students to the appropriate skills required to pursue a job in manufacturing. More troubling, however, are survey results that reveal only 20 percent of Americans feel the schools in their communities encourage students to pursue careers in manufacturing.

7. They have strong perspectives on what needs to change to bolster manufacturing competitiveness

Americans identified high healthcare costs, energy costs, and a domestic education system in need of reform as challenges negatively impacting the competitiveness of the U.S. manufacturing sector. They also see tax policy as an important tool, with 77 percent "agreeing" or "strongly agreeing" that tax cuts for businesses create jobs and 74 percent "agreeing" or "strongly agreeing" that tax incentives for manufacturing in the U.S. enhance competitiveness.

While these results measure public opinion, it is certainly food for thought for leaders charting America's economic future, and the role manufacturing should play,



#### Building on strength

Eighty percent of Americans believe the United States should invest more heavily in manufacturing. Why? Because strong manufacturing capabilities are the single best predictor of a vibrant, successful, and growing economy. Simply put: manufacturing matters.

When it comes to world-class manufacturing, America has a number of important advantages to build on. Key advantages cited by our survey respondents include:

- · Advanced research and development capabilities
- Widespread use and availability of technology
- · Vast natural resources and energy
- An unmatched network of suppliers and distributors
- A highly skilled workforce with a strong work ethic

These are just a few of the advantages that made American manufacturing the envy of the world for most of the past century. And despite increased competition from emerging markets, they remain as relevant as ever today. But as recent years have shown, simply having these advantages is not enough.

America's position of global leadership is not a birthright. Restoring U.S. manufacturing to a position of strength will require deliberate and sustained effort by both business and government. The people have spoken. It's time for action.

### Current environment

Despite indicators that show some economic improvement in the United States, the majority (59%) of Americans do not believe they are better off than they were four years ago and many (63%) continue to view the U.S. economy as being weak and fragile with the potential to fall back into a recession. While over half (54%) are optimistic the U.S.economy will show significant improvement sometime in the future, Americans continue to have limited confidence (55%) in the ability of business leaders and little confidence (35%) in policymakers to improve the situation. Similarly, they view the manufacturing sector as weak, and continue to be pessimistic on its long-term outlook.

Chart 1. Percentage of respondents who strongly agree or agree with each statement

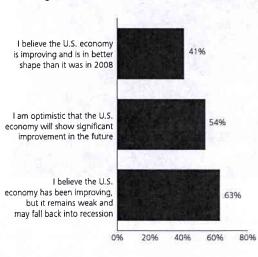


Chart 2. Percentage of respondents who strongly agree or agree with each statement

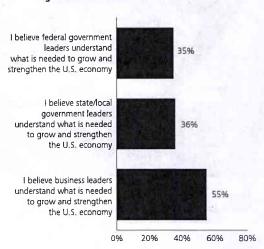
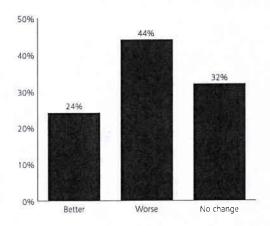


Chart 3. Respondents' views on strength of the manufacturing sector

Long-term outlook for the manufacturing sector Manufacturing activity over the next 12 months 50% 50% 4696 44% 40% 32% 30% 30% 23% 20% 17% 16% 1296 10% 10% 10% 0% Grow Stay the Grow Don't Grow Stay the Grow Don't weaker stronger same weaker know stronger



Chart 4. Respondents' views on current economic prosperity compared to four years ago



Base: 1,000

#### Concerns remain

2012 survey results reveal that Americans continue to lack confidence in both business and policy leaders' ability to understand what needs to be done to improve and grow the United States' economy. While they do feel the economy has improved over the last 12 months and will continue to improve, a vast majority (76 percent) feel their economic prosperity has either become worse or stayed the same over the last four years.

Despite their lack of confidence in leadership, Americans have grown cautiously optimistic about the short-term strength and growth of the U.S. manufacturing sector. Over the next 12 months, 60 percent of respondents indicated the manufacturing sector will stay the same or grow. Americans' short-term pessimism seems to be mellowing as well—only 23 percent of respondents felt short-term manufacturing activity would weaken, which is an 11 percent drop from the 34 percent reported in the 2011 survey. Although an improvement from the 2011 survey, Americans' long-term pessimism is still high. Only 42 percent of Americans feel the manufacturing sector will stay the same or grow over the long term (compared to 34 percent in 2011). Almost half (46 percent) still feel the sector will grow weaker in the long-term (compared to 55 percent in 2011).

## The importance and image of manufacturing

Americans continue to have strong, positive opinions about the importance of manufacturing for both the national economy and for supporting job growth at the community level. But when it comes to pursuing careers in manufacturing they are wary, for some of the reasons indicated below.

Chart 5. Percentage of respondents who believe the manufacturing industry is very important to...

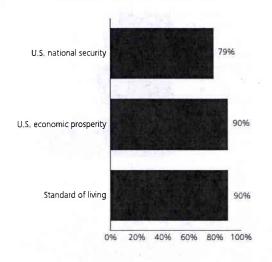


Chart 6. Percentage of respondents who strongly agree or agree with each statement

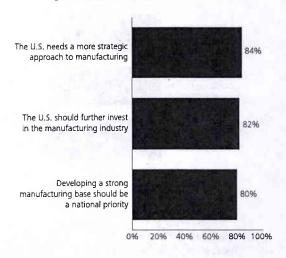


Chart 7. Ranking of industries viewed by respondents as most important to maintain a strong national economy in the U.S.

Industry	Rank
Manufacturing industry	1
Energy industry	2
Healthcare industry	3
Technology industry	4
Financial services industry	5
Retail industry	6
Communications industry	7

Aggregate ranking of sectors by all respondents

Chart 8. Ranking by respondents of the type of new industry facility they would support to create 1,000 new jobs in their community

Rank
1
2
3
4
5
6
7

Aggregate ranking of sectors by all respondents

Chart 9. Percentage of respondents who strongly agree or agree with each statement

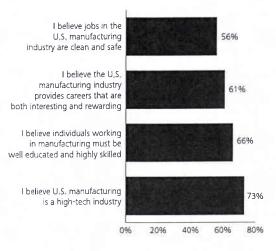
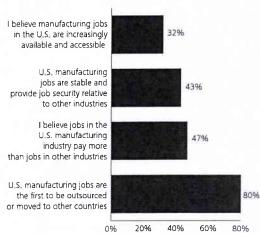


Chart 10. Percentage of respondents who strongly agree or agree with each statement



#### **Unwavering support continues**

Americans' support of U.S. manufacturing is unwavering. There is little change when comparing 2012 and 2011 results relative to the importance of the manufacturing industry and America's economic prosperity, standard of living, and national security. Americans also remain consistent in their support for further investment in manufacturing, as well as the need for a national manufacturing strategy.

Americans have been consistent in their views of the importance of manufacturing to the United States' ability to maintain a strong national economy. For the third time in the four years we have conducted this survey, manufacturing once again ranked as the most important industry to the U.S. economy. Consistent with last year, Americans also indicated that they would choose a manufacturing facility first in support of efforts to create 1,000 jobs in their community.

The image of careers in manufacturing also appears to be improving. 2012 results reveal small increases in Americans' perceptions of the industry as being high-tech, clean, safe, and offering interesting and rewarding careers.

However, Americans continue to be very concerned about job stability within manufacturing. There is little change between 2012 and 2011 results relative to Americans' fear that manufacturing jobs are the first to be outsourced or moved to other countries.

# The talent pool and future outlook for manufacturing

This year's survey indicates the ability of manufacturers to capture their fair share of the talent pool will continue to be a challenge in the future. The American public appears to be reluctant to choose careers in manufacturing and is not encouraging the next generation of talent to pursue these jobs, either, Still, there are bright spots. This year's survey showed a continued increase in the number of 18-24 year olds who feel manufacturing is important to their standard of living and economic prosperity.

Chart 11. Ranking by respondents of industry preference if they were beginning their career today

Industry	Rank
Technology industry	1
Energy industry	2
Healthcare industry	3
Communications industry	4
Manufacturing industry	5
Financial services industry	6
Retail industry	7

Aggregate ranking of sectors by all respondents

Chart 12. Percent of respondents who think the U.S. manufacturing industry can effectively compete in global markets

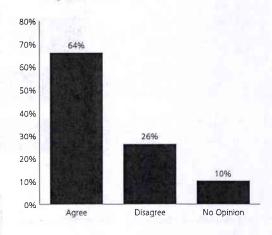
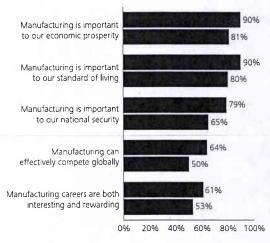


Chart 13. Comparison of total respondents to 18-24 year olds who strongly agree or agree with each statement



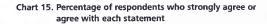
■ Total ■ 18-24 year olds

#### A viable career choice?

Comparing 2012 and 2011 survey results reveals little change in which industries Americans choose to begin their careers. Once again, manufacturing ranked fifth behind industries like technology, energy, and healthcare - which is a bit concerning given the previously mentioned increase in Americans' perception of manufacturing as a high-tech industry.

While Americans also continue to have questions with regards to students' qualifications to pursue careers in modern manufacturing, this 2012 survey reveals an underlying and important concern that their local school system is not providing the proper exposure to the skills required today for a successful career in the manufacturing industry. The good news is that support for and interest in manufacturing continues to climb for 18-24 year olds. While modest, increases from 2011 survey results were recorded across all of the statements highlighted in Chart 13. Most encouraging is this generation's response to manufacturing careers being both interesting and rewarding which jumped 14 percent when comparing 2012 and 2011 survey results.

Chart 14. Percentage of respondents who strongly agree or agree with each statement



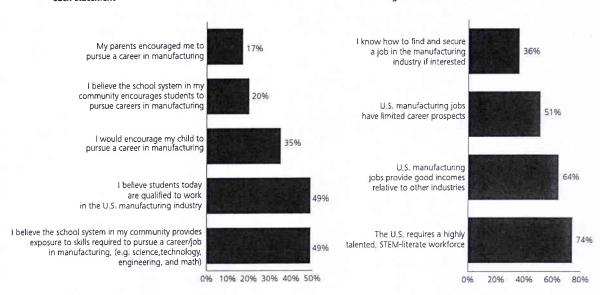


Chart 16. Please indicate which of the following sources you use when seeking information about career and/or employment opportunities

Sources	Rank
Internet	1
Personal research	2
Friends	3
Media	.4
Schools	5
Career counselors/ Counseling organizations	6
Parents	7.
Online social network	8

# Competitiveness environment

Just as in previous years, Americans continue to think that our manufacturing industry can compete on the global level. But in their opinion, policymakers are coming up short in terms of the policies and leadership needed to lead the way globally.

Chart 17. Percent of respondents rating these attributes of U.S. competitiveness as an advantage or disadvantage relative to other countries.

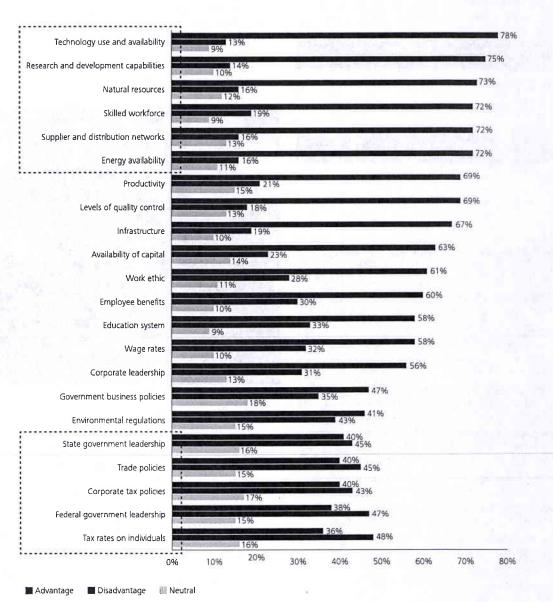


Chart 18. Capabilities the majority of respondents consider to be a competitive advantage for U.S. manufacturing

### Technical capabilities key to U.S. manufacturing competitiveness

Technology use/availability (78%)

R&D capabilities (75%)

### Country capabilities key to U.S. manufacturing competitiveness

Energy availability (72%)

Natural resources (73%)

Infrastructure (67%)

#### Workforce capabilities key to U.S. manufacturing

Skilled workforce (72%)

Productivity (69%)

Work ethic (61%)

#### Seeking competitive advantage

Americans continue to feel that federal and state government leaders are inhibiting manufacturing competitiveness in the United States. Further, they feel current trade and tax policy in the U.S. creates a disadvantage with respect to making America an attractive place to conduct business.

Perhaps most interesting are Americans' feelings regarding tax rates on individuals. When comparing 2012 and 2011 results, individual tax rates were noted as the most significant disadvantage – with those indicating current rates being a disadvantage increasing 13 percent.

Americans remain consistent in their perceptions of what advantages the United States does possess. Once again, Americans noted access to technical and natural resources, as well as high worker productivity driven by a highly skilled workforce as critical advantages the U.S. has over other nations.

Chart 19. Respondents viewed these capabilities not to be an advantage today in making U.S. manufacturing industry globally competitive

#### Capabilities inhibiting U.S. manufacturing competitiveness

Corporate tax policies (43%)

Tax rates on individuals (48%)

Federal government leadership (47%)

Trade policies (45%)

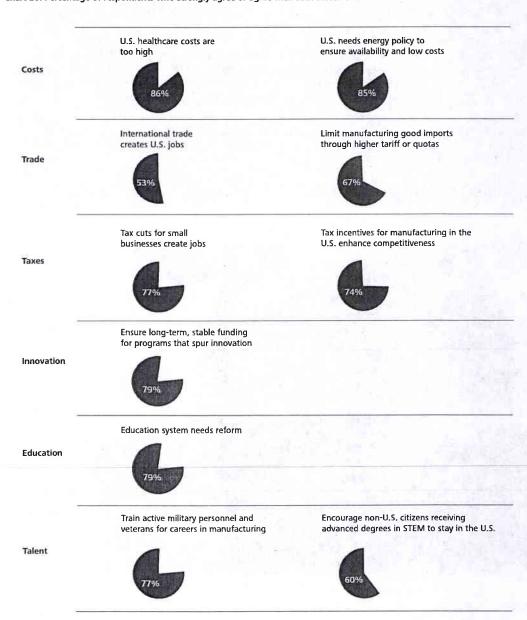
State government leadership (45%)



### Public guidance for policymakers

Americans have strong opinions on the challenges hindering U.S. manufacturing competitiveness, as seen in these responses on themes such as costs, trade, taxes, innovation, education and talent offering opinions that may prove insightful for policymakers.

Chart 20. Percentage of respondents who strongly agree or agree with each statement



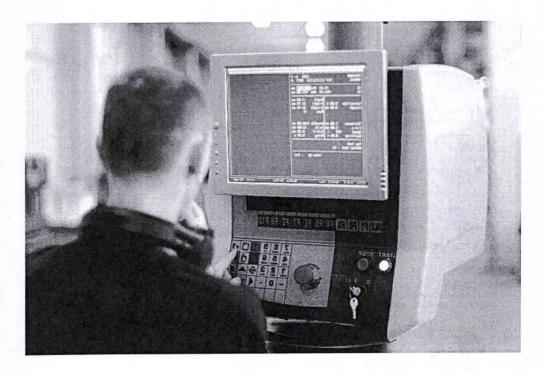
#### Cutting costs, reducing taxes, promoting innovation and creating jobs

Americans increasingly appear to view the cost of energy as an important element of U.S. manufacturing competiveness. Comparisons of 2012 and 2011 results reveal an 11 percent increase in Americans who "strongly agree" or "agree" that the U.S. needs an energy policy to ensure availability and low costs. Similarly, they view the high cost of health care as a concern.

As previously mentioned, taxes also appear to be growing in importance in the views of the American public. Comparisons of 2012 and 2011 results reveal an 8 percent increase in Americans who "strongly agree" or "agree" that tax cuts for small businesses create jobs, while support for tax incentives for manufacturing in the U.S. rose from 65 to 74 percent. While policymakers continue to debate the proper tax policy necessary to improve competitiveness and create jobs, on average American citizens responding to this survey seem clear on their position.

While a slight majority of Americans see international trade as helping create jobs here (53 percent), nearly two-thirds also seem more than willing to take on a protectionist position regarding international trade as a means to level the playing field as necessary.

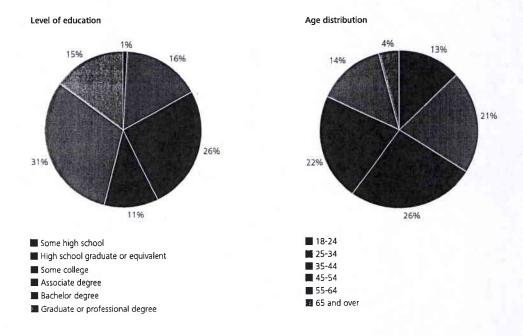
Finally, Americans strongly support (79 percent) long-term, stable funding for programs that spur innovation.



## Methodology

This survey was commissioned by Deloitte and The Manufacturing Institute, and was conducted online by an independent research company in September of 2012. The survey polled a nationally representative sample of 1,000 Americans across 50 states and has a margin of error for the entire sample of +/- three percentage points.

Chart 21. 2012 survey demographics (1,000 total respondents)



### **Authors**

Craig A. Giffi
Vice Chairman
U.S. Leader,
Consumer & Industrial Products
Deloitte LLP
cgiffi@deloitte.com

Jennifer McNelly
President
The Manufacturing Institute
jmcnelly@nam.org