Letter From the Foundation Director

2018 was a year of achievement and growth for Nuts, Bolts & Thingamajigs® (NBT), and we could not have done it without the incredible kindness and generosity of our supporters throughout the year. It has been just over one year since I became the director of the NBT foundation and it has been a wonderful journey, to say the least. We have accomplished so much in such a short period of time and this has been due to the outstanding commitment by our management team, board of directors, staff, and donors.

Our camp program grew by 30% over the previous year with 84 camps offered in 26 states, inspiring 1,585 students who started their journey into learning about the manufacturing industry. Since 1990, our scholarship program has awarded over $900,000 in support as we continue to supplement the educational process of students who are working toward their degrees or certifications that lead to prosperous manufacturing careers.

GOLF4MFG®, our annual golf outing, almost doubled its fundraising efforts from the year before as we attracted a record number of golfers and sponsors since the inception of the event. And we began planning the inaugural awards gala, which will focus on industry leaders who have made a powerful impact in the manufacturing industry.

We are very proud of what we have accomplished in 2018 and it has laid the foundation for better things to come. Thank you again to all our supporters, members, and staff for their focus on igniting the next generation of entrepreneurs and innovators in our industry.

ED DERNULC

<table>
<thead>
<tr>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director’s Message</td>
</tr>
<tr>
<td>Securing the Future</td>
</tr>
<tr>
<td>Financials</td>
</tr>
<tr>
<td>President’s Letter</td>
</tr>
<tr>
<td>Programs</td>
</tr>
<tr>
<td>Board of Directors</td>
</tr>
<tr>
<td>Events</td>
</tr>
<tr>
<td>Donors and Supporters</td>
</tr>
<tr>
<td>How to Help</td>
</tr>
</tbody>
</table>

**OUR MISSION**

Nuts, Bolts & Thingamajigs® serves to engage, nurture, and excite individuals of all ages in the pursuit of careers in manufacturing.

**SECURING THE FUTURE**

Lucrative and rewarding manufacturing jobs exist in the U.S., but there are not enough people with the training and skills to do them. NBT is taking important steps to address the skilled labor gap and secure the future of manufacturing in America.

The Power of Manufacturing: Present and Future Quick Facts

Measured alone, manufacturing in the United States would be the ninth-largest economy in the world. Over the next decade, nearly 3.5 million manufacturing jobs will likely be needed, and 2 million are expected to go unfilled due to the skills gap.

Skilled Talent Needed

Three of the top challenges manufacturing companies face revolve around developing a skilled workforce. And these challenges directly affect another challenge: expanding business, which 88% of manufacturers said is a top concern.

Manufacturers say their top workforce challenges are:

- Finding Skilled New Hires: 99%
- Upskilling Incumbent Workforce: 92%
- Onboarding New Employees: 84%

Manufacturers in the United States perform more than three-quarters of all private-sector research and development in the nation, driving more innovation than any other sector.

Manufacturers have one of the highest percentages of workers who are eligible for health benefits provided by their employer.

Industry Compensation

A LinkedIn survey of over 2 million members ranked the industries with the highest earning potential. Here are the top-10 highest paying industries with median annual wages plus bonuses (based on salary data as of April 2017):

- Software and IT Services: $104,700
- Healthcare: $84,600
- Finance: $92,800
- Consumer Goods: $80,000
- Construction: $78,500
- Corporate Services: $75,000
- Legal: $72,600
- Media and Communications: $71,900

Skilled Talent Needed

Three of the top challenges manufacturing companies face revolve around developing a skilled workforce. And these challenges directly affect another challenge: expanding business, which 88% of manufacturers said is a top concern.

Manufacturers say their top workforce challenges are:

- Finding Skilled New Hires: 99%
- Upskilling Incumbent Workforce: 92%
- Onboarding New Employees: 84%

Industry Compensation

A LinkedIn survey of over 2 million members ranked the industries with the highest earning potential. Here are the top-10 highest paying industries with median annual wages plus bonuses (based on salary data as of April 2017):

- Software and IT Services: $104,700
- Healthcare: $84,600
- Finance: $92,800
- Consumer Goods: $80,000
- Construction: $78,500
- Corporate Services: $75,000
- Legal: $72,600
- Media and Communications: $71,900

Lucrative and rewarding manufacturing jobs exist in the U.S., but there are not enough people with the training and skills to do them. NBT is taking important steps to address the skilled labor gap and secure the future of manufacturing in America.
**Letter From the President**

It was an interesting start to 2018 for the Fabricators & Manufacturers Association, International (FMA). Despite the positive economic outlook, in March, the announcement to levy a 25% tariff on imported steel and 10% on imported aluminum was a disappointing blow to the industry. Just when this market had some sustained momentum, the specter of retaliatory duties and tariffs hangs over the manufacturing sector. The uncertainty was unnerving.

Midyear, the National Association of Manufacturers’ (NAM) Council of Manufacturing Associations (CMA) named FMA one of 10 trade associations to receive the “Best Manufacturing Associations to Work For” award. FMA is honored to be recognized with this prestigious award. Our team takes great pride in the work we are doing to help the metal fabrication industry continue to grow and thrive.

For NBT, the foundation of FMA, the support and influence remain true to the students learning new skills at summer camp and to the scholarship winners pursuing their dream of joining the manufacturing workforce. Today’s manufacturing camp participants are tomorrow’s community colleges and technical schools’ attendees that we expect will become the next-generation manufacturing workforce. This mission continues to be among our most important work.

The programs of NBT continue to gain momentum. Since its inception, NBT has awarded almost $1,000,000 in scholarships and $750,000 in manufacturing camp grants. In 2018, 84 summer manufacturing camps took place, 39 were new first-year camps. Over 1,200 students ages 12-16 toured manufacturing companies, explored entrepreneurship, and made projects to take home with them.

Forty-four college students attended school with a financial scholarship to study a manufacturing-based curriculum. As college tuition escalates and a growing population of baby boomers and skilled workers retire, the work of NBT becomes more important and necessary to the livelihood of one of our nation’s core industries.

FMA and NBT are staying the course to secure a bright future for manufacturing. We will continue the hard work of living up to our organization’s core values of honesty, integrity, respect, trust, accountability, teamwork, innovation, creativity, open communication, and acting with a sense of urgency. We ask that you continue to join us in this long journey.

Sincerely,

EDWARD YOUDELL
Fabricators & Manufacturers Association, International
Nuts, Bolts & Thingamajigs Foundation
Sought by 2018 scholarship recipients: Some of the manufacturing degrees being awarded to students wanting to learn more benefit from a degree in manufacturing. Forty-four students pursuing careers in manufacturing technology fields had the financial advantage of a tuition discount since 1990, over $900,000 in scholarships has been awarded to students pursuing follow manufacturing, and how manufacturing fills the void. Since starting school, I found a new drive for work that I haven't felt in years. The classes are hands-on, keep me engaged, and have practical applications. Last semester I received the first 4.0 GPA I've ever had in my life. The course that really hooked me though was my robotics programming course, we get the opportunity to work on actual Fanuc robots to create and run our own programs. I'm absolutely engrossed in the programming of the robots, I work ahead in the textbook, read articles in my free time, and spend the days between classes planning my coding. It all just clicks for me and I love finding new ways to write code and improve an existing program. I feel like I'm a natural around these machines and need to learn everything I can about them.

Initially, I enrolled in the Industrial Maintenance program, but was later introduced to the Automated Manufacturing program. The field combines the floor work like robot maintenance, electrical wiring, and system troubleshooting with computerized technology like programming robots and PLCs. I love the versatility of skills and the wide range of knowledge that the field requires. For the first time I feel confident I've found something I enjoy, am naturally inclined to, and want to build a career from. 

A Career Path Found During an Internship It seems that someone who was so inspired to live abroad would be equally determined about a career path, but Nathan wasn’t—at least not initially. He just knew that he loved watching "How It’s Made" and thought engineering might be the right career choice.

Nathan enjoyed helping his uncle who had a metal scrapping business. He figured that he would follow a career combining metal and engineering, probably in the automotive, aerospace, or mining sectors.

Nathan finally had everything together to pursue a special Gilman Scholarship to obtain the financial means for the foreign study program. His interest and drive also led him to study Japanese on his own to prepare for the trip. The road Nathan took from his Nebraska home to school in South Dakota and onto his first job in Kentucky included a journey to Japan that impressed his employer, a subsidiary of Japan's largest automaker, Toyota. Nathan was a student who took matters into his own hands and didn’t let anything stand in his way. He ranks his study abroad program as his most significant, life-changing experience.

A life-long fascination with Japanese culture was enough to inspire him to pursue a specialized Gilman Scholarship to visit Japan. His interest in the automotive, aerospace, and engineering, probably in the automotive, aerospace, or mining sectors.

Nathan finally had everything together to pursue a special Gilman Scholarship to obtain the financial means for the foreign study program. His interest and drive also led him to study Japanese on his own to prepare for the trip. The road Nathan took from his Nebraska home to school in South Dakota and onto his first job in Kentucky included a journey to Japan that impressed his employer, a subsidiary of Japan's largest automaker, Toyota. Nathan was a student who took matters into his own hands and didn’t let anything stand in his way. He ranks his study abroad program as his most significant, life-changing experience.

A life-long fascination with Japanese culture was enough to inspire him to pursue a special Gilman Scholarship to visit Japan. His interest in the automotive, aerospace, and engineering, probably in the automotive, aerospace, or mining sectors.

Nathan finally had everything together to pursue a special Gilman Scholarship to obtain the financial means for the foreign study program. His interest and drive also led him to study Japanese on his own to prepare for the trip. The road Nathan took from his Nebraska home to school in South Dakota and onto his first job in Kentucky included a journey to Japan that impressed his employer, a subsidiary of Japan's largest automaker, Toyota. Nathan was a student who took matters into his own hands and didn’t let anything stand in his way. He ranks his study abroad program as his most significant, life-changing experience. Nathan enjoyed helping his uncle who had a metal scrapping business. He figured that he would follow a career combining metal and engineering, probably in the automotive, aerospace, or mining sectors.

Nathan finally had everything together to pursue a special Gilman Scholarship to visit Japan. His interest in the automotive, aerospace, and engineering, probably in the automotive, aerospace, or mining sectors.

Nathan finally had everything together to pursue a special Gilman Scholarship to visit Japan. His interest in the automotive, aerospace, and engineering, probably in the automotive, aerospace, or mining sectors.

Nathan finally had everything together to pursue a special Gilman Scholarship to visit Japan. His interest in the automotive, aerospace, and engineering, probably in the automotive, aerospace, or mining sectors.

Nathan finally had everything together to pursue a special Gilman Scholarship to visit Japan. His interest in the automotive, aerospace, and engineering, probably in the automotive, aerospace, or mining sectors.

Nathan finally had everything together to pursue a special Gilman Scholarship to visit Japan. His interest in the automotive, aerospace, and engineering, probably in the automotive, aerospace, or mining sectors.

Nathan finally had everything together to pursue a special Gilman Scholarship to visit Japan. His interest in the automotive, aerospace, and engineering, probably in the automotive, aerospace, or mining sectors.

Nathan finally had everything together to pursue a special Gilman Scholarship to visit Japan. His interest in the automotive, aerospace, and engineering, probably in the automotive, aerospace, or mining sectors.

Nathan finally had everything together to pursue a special Gilman Scholarship to visit Japan. His interest in the automotive, aerospace, and engineering, probably in the automotive, aerospace, or mining sectors.

Nathan finally had everything together to pursue a special Gilman Scholarship to visit Japan. His interest in the automotive, aerospace, and engineering, probably in the automotive, aerospace, or mining sectors.
Inspiring Creativity: Summer Manufacturing Camps

Summer camps have been a successful way of introducing middle and high school students to the fascinating, high-tech career choices available to them in today’s advanced manufacturing industry. Camps allow students to make something with their own hands, sparking their imagination and encouraging them to consider a career in manufacturing.

Since 2004, NBT has awarded over $750,000 in grants to trade schools and community and technical colleges to host summer camps that will lead to careers in manufacturing.

In 2018, a record-breaking number of 84 camps took place across the U.S. and almost half were brand new, first-year camps. For the first time, 12 of the total camps hosted all-female attendees and were a complete success. Over 1,500 students experienced manufacturing in a fun and interesting environment led by camp directors and technical education instructors.
NBT LEADERS SHOW THEIR SUPPORT

The importance of supporting NBT programs that create opportunities for students ensures that these programs can maintain growth and sustainability into the new year and well into the future. The result helps new and existing manufacturing companies thrive, thus supporting their employees and employees’ families. These opportunities are priceless and can positively impact the future of the skilled manufacturing workforce.

President’s Challenge

NBT was able to award more scholarships to deserving students and additional summer manufacturing camp grants to community colleges through the President’s Challenge campaign. Ed Youdell, president and CEO of FMA and NBT, challenged other manufacturing executives to match his $1,500 contribution. As a result, $18,700 helped to grow both programs due to the generosity of the donors participating in the challenge.

Board Chairs’ Endowment

The “Board Chairs’ Endowment” was established to monetarily support the summer manufacturing camp grant program and will be funded through gifts bestowed by past chairs of the boards of directors of NBT, FMA, and TPA. These donations are the foundation of building a strong legacy for the manufacturing industry.

The endowment will be fully funded after the initial amount of $50,000 is raised. Grants will be awarded to schools that are either new, first-year camp hosts, or past grant recipients launching a new camp.

Ed Youdell initiated this endowment fund with a $1,000 donation. Former FMA board chairs matched Ed’s contribution for a total of $7,500 in gifts.
On behalf of the NBT Foundation Board of Directors, thank you for your generosity and continued efforts to support the next generation of the manufacturing workforce. The manufacturing industry has certainly supported my family very nicely and allowed me to pursue my passion to inform and educate people about the career opportunities in this industry. My 15 years of experience in the machining workforce, followed by 20 years in post-secondary technical education, has been both eye-opening and rewarding. Eye-opening in the sense of realizing how NBT summer camps truly enlighten our youth regarding manufacturing careers. The humbling rewards come after the camps or scholarship awards when the testimonials summarize how this type of experience and support changes people’s lives.

This annual report summarizes the rewarding opportunities that our youth were able to experience thanks to your generosity and kindness. This year, your support of manufacturing summer camps and scholarships resulted in NBT inspiring 1,630 young adults through career path development and financial support toward completion of a manufacturing-related post-secondary credential. I can assure you from my experience as an NBT camp coordinator, it means a lot to the students and their families.

Every gift matters, as you can see in this report. The efforts of the NBT Foundation are a piece of a large puzzle that the foundation board, the NBT organization, and I are committed to continue to make strides to solve. We look forward to your generous support to broaden these efforts and reach more of the manufacturing workforce of the future.

Sincerely,

Mike Catтелino
Fox Valley Technical College
FUNDRAISING EVENTS

SILENT AUCTIONS

The impact of silent auctions not only raises awareness for the foundation, but also for the donating companies. Fortunately, NBT has a generous audience of supporters and was able to offer several tables full of interesting items and experiences during the NBT silent auction at the FMA Annual Meeting. Hundreds of young people with an interest in manufacturing will benefit from $24,700 in 2018 auction sales.

The NBT Processors Auction held at the Motor City Slitters golf outing in Detroit is an opportunity for metal manufacturers to bid on processing services such as slitting, pickling, and transportation, and other items such as sports tickets and theme baskets. Proceeds of $14,000 from the 2018 auction benefited the John Grossheim Memorial Scholarship fund. The endowment fund is named after the founder, who was passionate about encouraging the next-generation workforce.

Over 100 golfers attended GOLF4MFG 2018 on Monday, August 20 at Cantigny Golf Club in Wheaton, Illinois. Company sponsorships, raffle ticket sales, and on-course games contributed to the success of the golf event, raising $32,000. Event proceeds gave NBT the opportunity to award additional scholarships and support several more summer camps in 2019.

Golfers enjoyed a fun day of play and camaraderie while coming together to support the future of the industry. New games and contests, four military veteran attendees, and a past NBT scholarship winner made this event one to remember.
RUN4MFG® 5K took place in Atlanta during FABTECH® 2018. Runners gathered with show attendees and exhibitors to show their support of NBT and the charitable foundations of the other FABTECH event partners – SME, AWS, PMA, and CCAI. NBT board members Roger Wilson and David Pettigrew showed their support and were among the runners who enjoyed the race and friendly competition. Stride-for-stride, this successful and healthy event helps ensure a sustainable future for manufacturing.
The success of these programs essentially contributes to the success of area businesses and regional economies. Every year, the added skilled talent and sparked interest from these efforts can positively change the forecast of an area’s manufacturing outlook.
HOW YOU CAN HELP

Donate
NBT relies on the generosity of corporations, foundations, and individuals like you to develop and fund programs that inspire, prepare, and support tomorrow’s manufacturing workforce. Make a cash contribution to support a scholarship or manufacturing camp at a school near you, ask your employer if they have a matching gifts program, donate items or services to a silent auction, participate in NBT fundraisers, or be creative and host a fundraising event in your area to benefit NBT.

Leave a Legacy
Remember us in your will to reduce estate taxes while ensuring the future of our mission. An effective way to help NBT in its efforts to narrow the skills gap is by establishing a named endowment to fund a scholarship or camp program in perpetuity. Another planned giving strategy is to designate NBT as a beneficiary of your IRA or other retirement plan assets. When you leave a portion of your assets to the foundation, you can protect your family members from heavy taxes and get the most value from your retirement savings.

In-Kind Gift
In-kind donations, such as entrustments of manufacturing equipment, offer unique benefits to both schools and businesses. Schools receive state-of-the-art equipment they otherwise cannot afford. Students, in turn, receive critical hands-on experience with advanced manufacturing technology, which allows companies to have access to a workforce that is already familiar with their equipment and technology, resulting in a shorter on-the-job learning curve.

Volunteer
Lend your expertise and knowledge to future manufacturing professionals by serving as a scholarship reviewer — NBT receives hundreds of scholarship applications twice each year. Contact your local community college to ask if they run summer manufacturing camps and host a plant tour or offer to be a guest speaker. Invite high school or college students to come work at your business through internships, apprenticeships, or mentoring. Whether it’s a large manufacturing company or a small fabricating job shop, you would be providing invaluable hands-on experiences that would also give you an opportunity to evaluate prospective future employees.

To learn more about how you can support NBT’s mission, please visit nbtfoundation.org. Contact us at foundation@fmanet.org or call 888-394-4362.