

Jim Westmoreland, P.E. Greensboro City Manager City of Greensboro PO Box 3136 Greensboro NC 27402-3136

Dear City Manager Westmoreland,

In follow-up to our conversation, Forge Greensboro formally requests the City of Greensboro to invest in Forge Ahead, a capital campaign, by providing \$50,000 in City match grant funding for the purchase of a CNC (Computer Numeric Control) Router and Laser. These two pieces of capital equipment will strengthen current programs and provide for programs in development. Both are used in modern manufacturing, design, fabrication, and art industry applications. These two machines have been identified as having the most potential to impact local makers. Engineers, furniture makers, inventors, designers, entrepreneurs, STEM students, robotics clubs, and artists would benefit. Currently, very few have even limited access to comparable machines.

Upon acquiring these pieces of capital equipment, Forge Greensboro would lead entire southeast region in low barrier access to industrial manufacturing tools. In addition, we know that many employers in our region are currently looking for employees who have skills and experience in operating this type equipment and that Forge Greensboro, will serve as an ideal venue for offering access to and training on the use of this type equipment.

So in closing, thank you and City Council for your consideration of this request. If approved by City Council, Forge Greensboro will agree to fund raise \$50,000 in matching funds to help further support and leverage other elements of our capital campaign. As the Executive Director of Forge Greensboro, I will also make myself available to review this request and answer any further questions pertaining to it at the convenience of the City Council. Additional information about our capital campaign and Forge Greensboro is attached.

Sincerely,

Joe Rotondi Executive Director

Attachments: Appendix A - More info on the Forge and the campaign

Appendix B - Forge Operating Budget

Appendix C - Forge Ahead Campaign Budget

Appendix A

Forge Greensboro and the Forge Ahead Capital Campaign

Forge Greensboro, a 501c3 nonprofit, is the largest community makerspace in the Southeast. The Forge provides members with equipment for woodworking, welding, sewing, 3D printing, laser engraving, 3D design, sheet metal, electronics and ceramics. The core program provides affordable access to tools, technology and a community of entrepreneurs, artists, artisans, inventors, students, skilled trades folk, engineers, hobbyists and tinkerers. Forge Greensboro is an open and accepting environment where people can come and share their skills, experience, ideas, networks and curiosity.

Forge Ahead is the organization's first major capital campaign. This campaign's goal is to raise \$200,000 over the course of a year. The funds will be used to develop Forge resources and programs to support a growing entrepreneurial membership and further develop mentoring and education in the trades. This development includes the acquisition of key tools and equipment and the hiring of additional staff. The campaign goal is essentially a fundraiser for capital growth. Identifying funds we projected to raise over the next two years, the Forge Board of Directors concluded that a successful campaign will focus our efforts in business development. The desired result is a revenue model that supports program development without relying on grant funding. Appendix A is our projected four year budget, and Appendix B represents the budget for our fundraising goals.

Specific plans for funds from the campaign include:

- Supporting the Forge's *Talent and Skills Pipeline Program* that helps participants develop professional skills needed for a trade career. This program is directed towards students in Title I middle schools and high schools, the homeless and unskilled workers living in poverty. The program also benefits recent graduates of trade schools who volunteer to teach, and gain access to equipment, resources and professional networks.
- Providing more educational classes and workshops. At its current capacity, the Forge
 offers an average of 10 classes, interactive tours, and workshops to about 50 individuals
 on a monthly basis. Classes include specialized trade orientations, safety courses,
 introductory trade workshops and new skill labs.
- Helping the Forge address the needs of its growing membership and attract new people
 to its creative community. The Forge has increased membership by 36 percent in the last
 year, and over 1,000 people have registered to attend classes or workshops at the Forge
 in the past year.
- Providing resources needed for the growing number of organizations who use the Forge facility to expand education. Member organizations include the Boys and Girls Club of America, UNCG entrepreneurial students, A&T Engineering students and faculty, and HPU Physics faculty.

Appendix A continued

- Expanding the Forge's free and open community engagement offerings. Current efforts
 include innovative education programs, maker meetups and basic skills training. In
 addition, the Forge partners with local universities and sponsors to provide students with
 "makerships," as a means of furthering their studies, developing businesses and
 prototyping their ideas. The Forge also hosted the first Greensboro Mini Maker Faire in
 which thousands of participants come together to advocate for the maker movement and
 STEM education.
- Maintaining and expanding equipment, machines and tools in the facility, and hiring additional staff work alongside its existing volunteer base, to aid in management and further development of the organization.

The Forge started primarily as a hobbyist space four years ago. However, in the past two years, there has been a substantial activity in entrepreneurship and skills development. In a recent survey of Forge members, 48% identified as entrepreneurs, and 21.5% identified as skilled trades professionals. Currently, there are 20 small businesses operating out of the Forge, and frequent requests for classes and programs around trade skills development come from local nonprofits and area public and private schools. This trend has led the Forge Board of Directors to choose a more defined role for the organization as related to economic and workforce development.

The Forge has been an invaluable cornerstone in fostering a maker community here in Greensboro, and we are proud of the impact the Forge has on the community, and this campaign will help us make necessary resources accessible to our growing membership and further expand our ability to impact the community around us.

Appendix B - Forge Projected Budget 2016-2020

Revenue	Year 1 Actual	Year 2	Year 3	Year 4
Membership	\$81,092.29	\$113,529.21	\$162,000.00	\$162,000.00
Classes	\$3,899.77	\$29,521.81	\$71,442.33	\$71,442.33
Sponsors	\$24,300.00	\$34,020.00	\$47,628.00	\$66,679.20
Restricted Income (Grants)	\$17,230.00	\$24,122.00	\$33,770.80	\$47,279.12
Events/Fundraising	\$14,265.56	\$19,971.78	\$27,960.50	\$39,144.70
Misc	\$4,120.02			
COGS (Materials, Instructors)	\$5,532.55	\$14,760.90	\$35,721.16	\$35,721.16
Total Revenue	\$139,375.09	\$206,403.89	\$307,080.46	\$350,824.18
Expense				
Payroll	\$41,015.72	\$63,000.00	\$100,000.00	\$120,000.00
Loan repay		\$24,000.00	\$24,000.00	
Rent	\$45,510.00	\$51,000.00	\$84,000.00	\$120,000.00
Insurance	\$4,320.66	\$4,320.66	\$5,000.00	\$5,000.00
Marketing	\$3,285.66	\$6,000.00	\$9,000.00	\$9,000.00
Contract Services	\$3,528.32	\$5,000.00	\$4,000.00	\$4,000.00
Equipment Rental/Maintenance	\$7,406.30	\$15,000.00	\$20,000.00	\$25,000.00
Programs	\$15,297.37	\$14,780.50	\$30,080.46	\$25,824.18
Utilities	\$10,182.86	\$9,302.73	\$10,000.00	\$15,000.00
Operations (supplies, misc)	\$4,996.28	\$10,000.00	\$15,000.00	\$20,000.00
Meals and Misc	\$3,831.92	\$4,000.00	\$6,000.00	\$7,000.00
Total Expense	\$139,375.09	\$206,403.89	\$307,080.46	\$350,824.18

Appendix C - Budget breakdown for the \$200,000 campaign goal

The campaign goal is essentially a fundraiser for capital growth. Identifying funds we projected to raise over the next two years, the Forge Board of Directors concluded that a successful campaign will focus our efforts in business development. The desired result is a revenue model that supports program development without relying on grant funding.

Capital Expenditures*		Other expenditures will be funded through
CNC Laser	\$20,000	membership revenue and class revenue,
CNC Router	\$25,000	which we project to grow as a direct result
CNC Plasma	\$10,000	of the resources acquired through the
CNC Upfits (Machining)	\$24,000	campaign.
Iron Worker	\$7,000	*Donated equipment will count toward the
Surface Grinder	\$4,000	fundraising goal.
Air Compressor System	\$5,000	runardising godi.
Resaw Band Saw	\$3,000	
Metal Band Saw	\$3,000	
Forge	\$4,000	
Sewing machines	\$5,500	
M&O		
Maintenance Costs	\$12,000	
Section Head Program	\$14,400	
Pipeline Program	\$27,920	
Salary (new position)		
Program Director	\$35,000	
Total	\$199,820	

Below are initial estimates including estimated cost of shipping and setup of the requested CNC equipment. We will negotiate the best price.

Lasers		(3 machines we are considering)
Full		
Spectrum	\$19,000	https://fslaser.com/Product/DualHead
Boss	\$21,000	https://www.bosslaser.com/metal-cutting/boss-hp-4055.html
Jorlink	\$20,000	http://www.jorlink.com/lasers/laser-features/gm380
		Shopbot is in Durham and has been recommended by UNCG
CNC Router		faculty
Shopbot	\$26,000	http://www.shopbottools.com/mProducts/basicPRSsystems.htm