

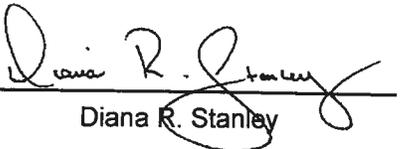
**CITY CLERK MEMORANDUM**  
**14-37**

**DATE:** May 30, 2014  
**TO:** Honorable Mayor and Members of City Council  
**FROM:** Diana R. Stanley, City Clerk  
**SUBJECT:** AGENDA ADDITION-MAYORS' MAKER CHALLENGE

At the request of Mayor Beehan, attached is supporting documentation regarding the Mayors' Maker Challenge, a request from Oak Ridge National Laboratory (ORNL) for the City to accept the challenge, and a resolution formally accepting said challenge as briefly discussed at the May 12, 2014 City Council meeting and May 27, 2014 City Council Work Session.

Both documents—the Mayors' Maker Challenge and the ORNL letter—outline details on the program, as well as the benefits.

The June 2, 2014 agenda will need to be amended in order to accept this addition and it will be the last resolution considered under "Resolutions."

  
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Diana R. Stanley

cc: Mark S. Watson, City Manager  
Kenneth R. Krushenski, City Attorney

May 12, 2014

## Take the “Mayors Maker Challenge”

Ladies and Gentlemen Mayors:

We write to challenge you to become a “Maker Mayor” and to promote the emerging Maker Movement, as part of a larger strategy to boost American manufacturing, give students the opportunity for hands-on STEM learning, and support more entrepreneurship in local communities. With this letter, we are launching the “Mayors Maker Challenge”, and seeking to recruit dozens of Maker Mayors by June 12, 2014. We commence this Challenge by writing you, because you and your community are already recognized for innovation in manufacturing and support for the Maker Movement.

Manufacturing is making a comeback in communities across America, and innovation is helping drive our economy. Part of the momentum in manufacturing is the “Maker Movement,” which promotes locally-driven efforts to convene inventors with innovative technology tools to drive progress in manufacturing, engineering, industrial design, hardware technology, and education. In recent years, communities across the country have benefitted from the democratization of the tools needed to design and make just about anything. More Americans have access to 21<sup>st</sup> century tools such as 3D printers and scanners, computer-aided design software, laser cutters, and computer-numerically controlled machine tools. Hundreds of thousands of entrepreneurs, students and families are participating in Maker Faires, and expert Makers and a variety of organizations are promoting new innovations. Companies, libraries, museums, universities, schools, philanthropists and community-based organizations are investing in for-profit and non-profit makerspaces. Labor unions are creating apprenticeship programs in digital manufacturing. Expert Makers are “passing it on” by serving as mentors for young Makers. These grassroots efforts are empowering Americans – young and old – to become the producers of things, not just consumers of things.

As mayors, you can be a part of this exciting Maker Movement, which has the potential to provide great benefits to your communities. *Cities need makers*, because manufacturing and technological innovation are driving economic growth, creating jobs, promoting new collaborations, inspiring youth and reinvigorating STEM education. Cities that seek to thrive in the advanced manufacturing economy of the 21<sup>st</sup> century need to harness these opportunities.

Likewise, *makers need cities* and the leadership of mayors, to convene stakeholders to support maker innovation, provide makerspaces, tailor education and job training to support makers, support maker approaches in local incubators and accelerators, provide sites for promising technologies to grow into businesses, and help small businesses understand how they can harness local/state/federal/other resources to support growth of their technological and manufacturing enterprises.

Leaders at all levels are noticing the potential of the Maker Movement. In mid-June 2014, the White House is holding its first-ever “White House Maker Faire” to highlight the power of this movement and how it can contribute to advancing American manufacturing, education and entrepreneurship. See [www.whitehouse.gov/blog/2014/02/03/announcing-first-white-house-maker-faire](http://www.whitehouse.gov/blog/2014/02/03/announcing-first-white-house-maker-faire). The White House has also put out a call for inventions, projects and products that potentially could be part of the White House Maker Faire. We invite you to reach out to your Maker community to submit their ideas at [www.whitehouse.gov/webform/white-house-makerfaire-interest-form](http://www.whitehouse.gov/webform/white-house-makerfaire-interest-form).

But we know that there is much more we can do – and that is why we have joined together to launch the “Mayors Maker Challenge”, which seeks to recruit mayors across America like you, to help build the Maker Movement in your own communities and beyond. Between May 12 and June 12, 2014, we will conduct a one-month campaign to recruit a powerful coalition of mayors to take this challenge and become “Maker Mayors”. To take the Challenge, you must make a public pledge to take one or more of the actions below during 2014 aimed at boosting and supporting the Maker Movement; submit that maker pledge to the Manufacturing Alliance of Communities by June 12; be willing to let us publicize your participation; and work with us to provide a short note on your progress at the end of 2014, so that we can issue a national report on the actions mayors and communities are taking to fulfill their pledges. To take the Challenge, simply fill in the short Mayor’s Maker Pledge online at [www.ManufacturingAlliance.us/Challenge](http://www.ManufacturingAlliance.us/Challenge).

Here are key “Maker Moves” that you can take in 2014 to be part of the Mayors Maker Challenge:

- 1.) ***Maker Roundtable:*** Host a roundtable in your community that convenes partners and helps catalyze public and private commitments that will strengthen the local Maker movement.
- 2.) ***Maker Faire:*** Help celebrate the ingenuity and creativity of local Makers by holding or participating in a Maker Faire event, which convenes stakeholders to promote innovative technology ideas. See [www.MakerFaire.com](http://www.MakerFaire.com).
- 3.) ***Maker Liaison:*** Designate a Maker liaison in the mayor’s office or economic development department.
- 4.) ***Makerspaces:*** Host or help in the creation or growth of maker spaces in local incubators, accelerators, educational institutions, under-utilized buildings, and/or design-production districts, which can broaden access to tools needed for design, prototyping, manufacturing, and the growth of small business enterprises that are building new manufacturing and innovation technologies.
- 5.) ***Maker Manual:*** Issue a “Maker Manual” to explain the importance of the Maker Movement in your community, and to identify resources and incentives at local, regional, state and national levels that can support makers and small businesses seeking to grow their technology and manufacturing innovations.
- 6.) ***Make a Strategy for Education, Training & Workforce Development:*** Commit to working with your school district, libraries, museums, after-school providers, community colleges and universities, workforce investment boards, and job training organizations to give more students access to age-appropriate makerspaces and mentorship, and focus more education and training programs on the emerging fields of advanced manufacturing and technology innovation.
- 7.) ***Maker Business Development:*** Upgrade your economic and business development programs, incentives and services to provide support to manufacturing entrepreneurs and small businesses.
- 8.) ***Maker Best Practices:*** Lead or participate in local efforts to identify, document and share “promising practices” in manufacturing and technological innovation so that others in your community and beyond can learn from local experimentation.
- 9.) ***Maker Support in Struggling Neighborhoods:*** Support initiatives to engage and support students, entrepreneurs and small businesses in under-served neighborhoods.
- 10.) ***Make It Even Better:*** Your community may have even more innovative strategies for promoting the Maker Movement. Make that part of your Challenge pledge and share the strategy with others!

The White House will host a national conference call of mayors from across America on Monday, May 19 at 2PM Eastern to explain the Mayors Maker Challenge and encourage you to be a part of this endeavor. To participate in that conference call, send an email with your contact information to [Randy J Paris@ostp.eop.gov](mailto:Randy.J.Paris@ostp.eop.gov).

American cities have tremendous opportunity now to boost the expansion of manufacturing, technological innovation, education, job creation, and community revitalization. One great way to do that is to support the emerging Maker Movement in your own community and beyond. We challenge you to become a "Maker Mayor" in the coming month.

Please contact Matt Ward at [Challenge@StrategiesDC.com](mailto:Challenge@StrategiesDC.com) with any questions. On behalf of all of the undersigned mayors below, thank you for your leadership on these issues and for rising to the challenge.

Sincerely,



Dayne Walling  
Flint, MI  
Chair, Manufacturing Alliance of Communities

On behalf of

Virg Bernero  
Lansing, MI

Rahm Emmanuel  
Chicago, IL

Frank Janakovic  
Johnstown, PA

Bill Peduto  
Pittsburgh, PA

Holly Brinda  
Elyria, OH

Greg Fischer  
Louisville, KY

Edwin Lee  
San Francisco, CA

Jean Quan  
Oakland, CA

Roy Buol  
Dubuque, IA

Eric Garcetti  
Los Angeles, CA

Nancy McFarlane  
Raleigh, NC

Mike Rawlings  
Dallas, TX

John Cranley  
Cincinnati, OH

Vincent Gray  
Washington, DC

John McNally  
Youngstown, OH

Jennifer Selin  
Morgantown, WV

Mike Duggan  
Detroit, MI

Charlie Hales  
Portland, OR

Mark Olson  
Fayetteville, NY

Marty Walsh  
Boston, MA

Denny Doyle  
Beaverton, OR

Sly James  
Kansas City, MO

May 29, 2014

The Honorable Tom Beehan, Mayor  
City of Oak Ridge  
200 South Tulane Avenue  
Oak Ridge, Tennessee 37830

Dear Mayor Beehan:

**Subject: Oak Ridge Participation in the Mayors' Maker Challenge**

I am writing to encourage you and the other members of the Oak Ridge City Council to accept the Mayors' Maker Challenge issued by the Manufacturing Alliance of Communities (<http://www.manufacturingalliance.us/challenge>). The rapidly growing "maker movement" is characterized by local inventors using innovative technology to drive progress in American manufacturing, engineering, industrial design, hardware technology, and education. Across the nation, hundreds of thousands of entrepreneurs, students, and families are participating in Maker Faires. Companies, libraries, museums, universities, and community-based organizations are investing in "makerspaces" equipped with 21st century tools such as 3D printers, computer-aided design software, and laser cutters. These grassroots efforts are empowering Americans to become producers, not just consumers.

The City of Oak Ridge is perfectly positioned for active engagement in the maker movement. The Knox Makers group ([knoxmakers.org](http://knoxmakers.org)) has established a makerspace at Tech 2020 in Oak Ridge. The award-winning FIRST Robotics team at Oak Ridge High School exemplifies the core values of the maker movement. UT-Battelle, which manages Oak Ridge National Laboratory (ORNL) for the US Department of Energy, is participating through its support for STEM-related educational activities, including the FIRST Robotics competitions and the Boy Scouts' new STEM Scouts program. ORNL's Manufacturing Demonstration Facility is contributing to the development and deployment of additive manufacturing, a key tool for the maker movement, and opens its doors on a regular basis to support youth education and the region's entrepreneurial community.

The Mayors' Maker Challenge has attracted the attention of President Obama's Office of Science and Technology Policy, and in mid-June the first-ever White House Maker Faire will highlight the power of the maker movement and its potential to contribute to American manufacturing, education, and entrepreneurship. The White House has issued a call for inventions, projects, and products to be featured at this event, and ORNL plans to participate.

To accept the Mayors' Maker Challenge, the City of Oak Ridge must make a public pledge to support at least one Maker initiative during 2014. This pledge can be fulfilled by hosting a Maker roundtable, hosting a Maker Faire in the region, expanding the makerspace at Tech 2020, or upgrading the City's economic and business development programs, incentives, and services to further support entrepreneurs and small businesses focused on innovative manufacturing.

Honorable Tom Beehan, Mayor

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May 29, 2014

The ORNL Science and Technology Partnerships Directorate would be happy to support the City's efforts to embrace this opportunity. If you and other Council members are interested in discussing how we might assist you, please contact Tom Rogers, or Director of Industrial Partnerships and Economic Development, at (865) 241-2149.

Sincerely,

A handwritten signature in black ink that reads "Thomas E. Mason". The signature is written in a cursive style with a large, prominent initial "T".

Thomas E. Mason  
Director

TEM:dcg

**RESOLUTION**

A RESOLUTION ACCEPTING THE MAYORS' MAKER CHALLENGE ORGANIZED BY THE MANUFACTURING ALLIANCE OF COMMUNITIES AND PLEDGING TO SUPPORT AT LEAST ONE MAKER INITIATIVE DURING CALENDAR YEAR 2014.

WHEREAS, the Manufacturing Alliance of Communities is a national coalition of local government officials seeking to promote the growth of U.S. manufacturing and innovation in ways that will boost communities; and

WHEREAS, part of the momentum in manufacturing is the "Maker Movement" which convenes inventors, youth, educational institutions, businesses, and entrepreneurs in creative ways to foster technology advances; and

WHEREAS, a group of mayors have launched the "Mayors' Maker Challenge" organized by the Manufacturing Alliance of Communities to promote locally-driven efforts to convene inventors with innovative technology tools to drive progress in manufacturing, engineering, industrial design, hardware technology, and education; and

WHEREAS, Dr. Thom Mason, Director of the Oak Ridge National Laboratory, has encouraged the City to accept the Mayor's Maker Challenge; and

WHEREAS, in order to accept the Mayors' Maker Challenge, the City is required to publicly pledge to support at least one Maker initiative during calendar year 2014 which can be fulfilled by a variety of actions such as hosting a Maker roundtable, holding or participating in a Maker Faire, designating a Maker liaison, host or help in the creation or growth of maker spaces, or upgrade the city's economic and business development programs; and

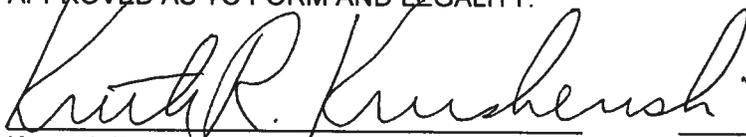
WHEREAS, the City desires to accept the Mayors' Maker Challenge.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF OAK RIDGE, TENNESSEE:

That the City of Oak Ridge, Tennessee, hereby accepts the Mayor's Maker Challenge organized by the Manufacturing Alliance of Communities and publicly pledges to support at least one Maker initiative during calendar year 2014.

This the 2nd day of June 2014.

APPROVED AS TO FORM AND LEGALITY:



Kenneth R. Krushenski, City Attorney

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Thomas L. Beehan, Mayor

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Diana R. Stanley, City Clerk