



City of Pittsburgh

Innovation & Performance

William Peduto
Mayor

Debra Lam, Director & Chief
Innovation & Performance Officer

Mayor's Maker Movement Round Table Summary Report

1) Purpose:

The purpose of the roundtable is to provide a forum for the City to engage those involved in the Maker Movement to discuss current topics within the maker community and brainstorm opportunities for collaboration. This effort, which aligns closely with the [White House's Mayors Maker Challenge](#)¹ initiative, will be the first step toward creating on-going dialog between the City and the Maker community.



2) Event Description:

The Mayor's Maker Movement Roundtable² is the first in a series, allowing for the City to discover ways it can grow and support various innovative movements in every community. The Maker Movement roundtable was also part of the White House's Mayor's Maker Challenge. Already identified as a national leader in the Maker Movement; **Mayor William Peduto, Children's Museum of Pittsburgh Executive Director Jane Werner, Gable Foundation Executive Director Gregg Behr, TechShop Pittsburgh's Senior Accounts Manager Les Geis, and The Sprout Fund Executive Director**

¹ (Kalil, Miller and Patel 2014) The White House Mayors Maker Challenge seeks to boost American manufacturing, give students the opportunity for hands-on STEM learning, and support more entrepreneurship in local communities.

² (Nath 2014)

Cathy Lewis Long, will all be representing Pittsburgh at the White House Maker Faire³ on June 18th, 2014.



The screenshot shows the City of Pittsburgh website navigation bar with links for Home, Mayor, City Council, City Controller, Public Safety, City Directory, and 311. Below the navigation bar is a banner titled "INNOVATION & PERFORMANCE" featuring a photo of a person wearing safety glasses and purple gloves working on a project. The text on the banner reads: "MAYOR WILLIAM PETUDO: MAKER MOVEMENT ROUND TABLE DISCUSSION" and "Mayor William Peduto will be speaking with local members of the Maker Movement to discuss current topics within the maker community, and brainstorm opportunities for collaboration and promotion. This event will be broadcast live on the City Channel Pittsburgh starting at 2:00pm on Monday, June 9th."

The event was broadcast live on the City of Pittsburgh Cable Channel while City representatives live tweeted the event to engage with citizens. Four micro-presentations on maker arts, maker education, maker workforce development, and maker entrepreneurship provided a basis for the open discussion that followed. The event will be rebroadcast on the City of Pittsburgh Cable Channel starting Tuesday June 17th, 2014.

a) Introduction:

- **Mayor William Peduto and City Councilman Dan Gillman** gave brief introductions to the roundtable outlining the background of the Maker Community and offered a collaborative hand from the City.
- **Innovation & Performance Chief and Director Debra Lam** spoke to the purpose of the roundtable, and introduced the speakers.



b) Presentation by speaker and the topic covered:

- [Lisa Brahms](#) - Director of Learning and Research; [Children's Museum of Pittsburgh](#)
 - Maker Education and the work done by the Children's Museum through the [MAKESHOP®](#) and beyond.
- Rachel Saul - Education Program Coordinator; [Society for Contemporary Craft](#)
 - Maker Arts & Crafts and the work her organization does with local artists and adults.

³ (Kali and Miller 2014)

- Paulo Mzambi – COO; [Manchester Bidwell Corporation](#)
 - Maker Movement allows for new opportunities in job training and workforce development.
 - [Tom Lauwers](#) - Owner; [BirdBrain Technologies](#)
 - The role of local business and how the Maker Movement can create new entrepreneurial opportunities.
- c) After the presentations the Roundtable opened up with three discussion questions for the attendees facilitated by **Jennifer Wilhelm, Innovation and Entrepreneurship Strategist at the URA of Pittsburgh**. The questions were:
- What has helped the Pittsburgh Maker Community grow?
 - How does the maker movement involve citizens and students from all backgrounds and communities?
 - How can the City and the Maker Community collaborate to enhance the Maker Movement?

3) Communications

The Department of Innovation & Performance undertook a communications plan to inform the public of the ability to view the Mayor’s Maker Movement round table and gain feedback. The audience of the communications plan was on Members of the Maker Movement, active citizens who are interested in what is happening in the City and any Citizens or Business owners that may have been unaware of the maker movement but are predisposed to its culture and goals.



The Wednesday leading up to the event the Mayor’s Communications Department put out a [press release](#) advertising the event to the public.⁴ These citizens were reached out to on multiple platforms. The [Innovation & Performance website](#) and [twitter handle](#) were used to advertise the event online, as well as advertisements on the City Cable Channel in the week leading up to the Roundtable. The twitter campaign was coordinated with each of the participating organizations, with each organization following each other and retweeting and using the same hashtag, **#MakerMovement**.

During the event the Mayor and other City officials tweeted with citizens who watched the roundtable at home. Through live tweeting

⁴ (Office of Mayor William Peduto 2014)

organizations such as Black Girls Code⁵ were referred as a possible future partner for the City to **Strategy & Analytics Manager Laura Meixell**.

After the Roundtable [video clips](#) of the four speakers were put up on the [City's YouTube Channel](#) in order to allow maximum reach for the speakers and their organization. Citizens are also able to purchase a DVD from the City Cable Channel of the event.

4) Roundtable Attendees:

- a) With input from both the Sprout Fund and URA of Pittsburgh I&P Chief and Director Lam invited a group of leaders representing local universities, non-profit organizations, businesses, and the City to discuss ways to build on maker momentum.
- b) The input from the attendees will:
- Serve as a platform for fostering collaboration between the City and local Maker Organizations.
 - Inform the City of Pittsburgh of relevant National Maker Organizations in a way to join the broader movement and dialogue.
 - Form the basis of the information brought by the Mayor to the White House Maker Faire.

"I'm looking forward to meeting with colleagues to discuss the recent developments within the maker movement, and dialogue about future synergies that we can create together." – Rachel Saul
Education Program Coordinator;
Society for Contemporary Craft



⁵ (Black Girls Code 2013)

c) List of Attendees by Organization and Name.

Figure 4.1

Name	Organization	Title
Tom Lauwers	BirdBrain Technologies LLC	Founder & Chief Robotacist
Corey Wittig	Carnegie Library of Pittsburgh	Digital Learning Librarian
Toby Greenwaltt	Carnegie Library of Pittsburgh	Assistant Director of Digital Strategy
Thanassis Rikakis	Carnegie Mellon University	Vice Provost for Design, Arts & Technology
Tim McNulty	Carnegie Mellon University	AVP Government Relations
Jane Werner	Children's Museum of Pittsburgh	Executive Director
Lisa Brahms	Children's Museum of Pittsburgh	Director of Learning and Research
Dan Gilman	City of Pittsburgh	City Councilman
Debra Lam	City of Pittsburgh	Innovation & Performance Director
Geoffrey Arnold	City of Pittsburgh	Intern
Laura Meixell	City of Pittsburgh	Analytics and Strategy Manager
William Peduto	City of Pittsburgh	Mayor
Chad Eisel	HackPittsburgh	President
J Scott Hamilton	HackPittsburgh	Board Member
Paulo Nzambi	Manchester Bidwell Corp.	COO
David Ruppertsberger	Pitt & CMU	Director, Joint Economic Development
Rachel Saul	Society for Contemporary Craft	Education Program Coordinator
Les Gies	TechShop	Senior Accounts Manager
Gregg Behr	The Grable Foundation	Executive Director
Cathy Lewis Long	The Sprout Fund	Executive Director
Paul Supowitz	University of Pittsburgh	Vice Chancellor
Jennifer Wilhelm	URA of Pittsburgh	Innovation and Entrep. Strategist

5) Findings from Discussion Questions:

a) Question 1: What has helped the Pittsburgh Maker Community grow?

The Pittsburgh Maker Community has long been recognized as a leader in the National movement. This is partially due to the inherent culture of Pittsburgh **as a City which “has always made things”**.⁶ The industrial heritage of Pittsburgh meant that its citizens were already primed for the Maker Movement. **“It is no accident that TechShop opened up a location in Pittsburgh”, said Les Gies, stating the Pittsburgh branch has the highest usage of its machine shop in comparison to all other TechShop branches.**⁷

⁶ (Werner 2014)

⁷ (Gies 2014)

Maker Organizations cover a wide region of the City. For example, **the Carnegie Library has Maker based programming in all of its 19 locations.**⁸ This ease of availability has also been one of key reasons for growth in a number of organizations. HackPittsburgh's \$30 monthly dues⁹ have helped fill the gap between Maker spaces such as Assemble and TechShop.

The spirit of collaboration between the Maker Organizations within the City has also been key in helping it grow. For example TechShop worked closely with AlphaLab when opening its AlphaLab Gear hardware incubator.

Local universities such as **Carnegie Mellon University** are also a major reason for the growth of Pittsburgh's Maker Culture. Their technical and robotics programs have produced a number of companies and products through federal contracts with DARPA and student projects. Without Federal support Maker programs like **Carnegie Library of Pittsburgh's The Labs and the Children's Museum of Pittsburgh's MAKESHOP®** would never exist.¹⁰



- b) Question 2: How does the maker movement involve citizens and students from all backgrounds and communities?

Most attendees in the roundtable felt that Maker Education is the best venue for ensuring that underserved communities can be reached by the maker movement. So far organizations such as the Carnegie Library and Children's Museum have found that being able to move throughout communities has been an effective way to reach underserved youth.

Carnegie Mellon has found a systemic problem in finding qualified students to apply to its programs from the region. **Thanassis Rikakis, CMU's Vice Provost for Design, Arts & Technology** believes that addressing the pipeline within the city is an important way to ensure that future makers from Pittsburgh are diverse and reflect the makeup of the city.¹¹ This is why education was a key area identified by the roundtable for City support and collaboration.

⁸ (Wittig 2014)

⁹ (Elish 2014)

¹⁰ (Behr 2014)

¹¹ (Rikakis 2014)

c) Question 3: How can the City and the Maker Community collaborate to enhance the Maker Movement?

i) Attendees identified a number of possible Events/Programs for Collaboration

Figure 5.1

Areas	Event/Program	Maker Support	City Support	Organizational Stakeholders
Education	The Children's Museum of Pittsburgh 2015 Maker Faire	Overall organizing of the event.	Promotion & public space	<ul style="list-style-type: none"> • Children's Museum of Pittsburgh • Mozilla Foundation • City • All Maker Orgs.
	Maker/STEM focused learning programs	List of pilot schools. Maker Mentors and Programming	Incentives for Pittsburgh Public Schools to take part	<ul style="list-style-type: none"> • CMU • Carnegie Library • MAKESHOP® • Pittsburgh Public Schools
	Wood & Metal shop taught in local grade schools	Maker Mentors		<ul style="list-style-type: none"> • Pittsburgh Public Schools • Carnegie Library • MAKESHOP®
	Involving Grades 7-12 in Maker Movement	Programming	Public Space, Promotion & Transportation	<ul style="list-style-type: none"> • Society for the Contemporary Craft • HackPittsburgh • TechShop
	Global Maker Party	Become a Mozilla's Global Maker Party ¹² Partner (event or promotional)		City and all Maker Organizations
Arts	Community awareness and outreach	Art and Projects to display. Programs to draw and education citizens	Space at City-County Building and/or Community Rec Centers	<ul style="list-style-type: none"> • TechShop • HackPittsburgh • Sprout Fund • Society for Contemporary Craft
Workforce Development	Involving older citizens in Maker Movement	Programming	City Parks and Senior Centers	<ul style="list-style-type: none"> • HackPittsburgh • Manchester Bidwell Corp.
	Reaching Lower Income Neighborhoods	Programming	Mobile maker venues a in disadvantaged neighborhoods	<ul style="list-style-type: none"> • CMU • Carnegie Library • MAKESHOP®
Entrepreneurship	Making Pittsburgh an easier place to build and scale a Maker focused business	Forming a network of business and startups interested in staying in Pittsburgh when scaling up their business	Low cost spaces for incubators and startups to focus on hardware and light industry.	<ul style="list-style-type: none"> • URA of Pittsburgh • Manchester Bidwell Corp. • CMU • BirdBrain Technologies • TechShop • HackPittsburgh • AlphaLab Gear

¹² (Mozilla Foundation 2014)

6) Next Steps:

Much of the immediate support from the City stems from increasing visibility of the Maker Movement. There are a number of possible areas for City and Maker collaboration. These include:

- Identifying pilot public schools which are essentially ready for Maker Programming and then developing best practices and curriculum from working with them is the most concrete solution provided during the roundtable.
- Expanding the Summer Markets on public property to include maker booths.
- Find Community Recreation and Senior Centers which have the facilities for Maker programming.
- Promoting URA loan programs as well as seed funding for new Maker businesses and those seeking expansion.

“Manchester Bidwell Corporation welcomes the Mayor's interest in workforce development and looks forward to continuing its efforts to prepare individuals for the employment opportunities in the Pittsburgh region.” – Paulo Nzambi, COO.

[Mozilla's Maker Party partnership](#) is definitely a possibility for the City which has already hosted Maker Parties in Pittsburgh partnering with TechShop and The Sprout Fund.¹³ Therefore, the city could explore the possibility of a partnership with Amira Dhalla of the Mozilla Foundation. The City would most likely work as an Event¹⁴ or Promotional Partner¹⁵ if not both.

There will be a second meeting in the early fall concerning how to flesh out and build upon the suggestions made by the Maker Community. This second meeting will be structured to flesh out the ideas generated during this first roundtable. Through these events the City of Pittsburgh will show its commitment to growing developing these partnerships to continue local community and economic development in the region.

This roundtable was only the beginning of a larger conversation between the City and other centers of innovation. Throughout the summer of 2014 the I&P Department and the



Mayor will continue with the roundtable model and meet with organizations representing Clean Tech, Co-working/Accelerator Spaces, and Startups. Each innovation roundtable will follow the same format. The end result will show the innovation network of the City of Pittsburgh and how each the sector interacts.

¹³ (Mozilla Foundation 2014) Maker Party is a global campaign to web coding through community events collaborating with educators, organizations and web designers.

¹⁴ (Mozilla Foundation n.d.)

¹⁵ (Mozilla Foundation n.d.)

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