

## **Engaging Beyond Our Walls: Libraries as Hubs for Making Neighborhood Games and Storytelling**

American University (AU) requests a two-year \$249,000 grant to train libraries in 30 cities to serve as hubs for making neighborhood games for community engagement. These “local games” can range from mural hunts to audio tours tied to local history, to interactive experiences with public art like texting-with-a-sculpture. The result: hundreds of free local games will be created by community members, reaching many thousands of players, with support for social distancing.

The games are made with *Hive Mechanic*, a new game engine for cities. Our approach is based on successful installations with the DC Public Library (DCPL), the Smithsonian Anacostia Community Museum, and neighborhood cultural centers; DCPL in particular will be a core partner in co-designing the curricula and video training to scale the project. Equity is a priority: these are games that can be played with ordinary cell phones, no iPhones or data plans required. With this project, libraries will leverage their core strengths in media literacy and their roles as local information brokers, increasing access to game design for neighborhood groups around community assets.

**National Need:** Recently, the crises of COVID-19 and systemic racism have redoubled the need to meet the public beyond library walls, with **support for social distancing**. The demand to **give voice to community history and local culture** has never been higher. Local play offers a distinct pathway to civic engagement: research shows how local play can connect us more deeply to our physical streets, local history, and can provide an excuse to talk to neighbors we don’t yet know.<sup>1</sup> One striking finding from “*Libraries, Games, and Play*,” an IMLS-supported conference<sup>2</sup> that we hosted in 2019: most libraries lack the capacity to engage with *game design*, especially for local community use. This project helps pave a new path for public libraries to be hubs for civic play, inspired by the long tradition of bookmobiles, the intergenerational play of *Pokémon GO*, and innovators like the Free Library of Philadelphia branches that remixed play to engage the public with local art.<sup>3</sup>

This project addresses three immediate needs: (1) public libraries lack **basic training** and curricula in game design for communities; (2) **access to templates** of successful community games to simplify design, and greatly reduce barriers to scale; and (3) **free authoring tools** like *Hive Mechanic* for sustainability. Budgets today are tighter than ever, and digital divides are growing. In response, the games in this project can be created for free, without any programming skills – but still providing a starting point for residents seeking a STEM trajectory. Previously, game making in libraries has emphasized screen-based media, from Minecraft to Scratch, often focused on youth in STEM initiatives<sup>4</sup>. By contrast, we insist on play that is primarily outdoors and features community assets and voices in public space.

**Project Design:** Our project is based at American University, known internationally for game-based education. The PI for this project is [Dr. Benjamin Stokes](#), a successful game designer, professor of our landmark course “Playful Cities”, and co-founder of the largest civic games festival, Games for Change.

The project is anchored by *Hive Mechanic*, a simple tool to create games for cities. *Hive Mechanic* allows anyone to make “local games” without coding skills. Instead, the system prioritizes text messaging (including photos and video messages), branching audio hotlines, and embedding play in public space with QR codes, posters, and street festivals that bring local history to life. The interface uses visual cards to show actions – like how a historic photograph might be sent as a text response to a secret keyword. It is free and open-source. Details and photographs of recent projects are available on the *Hive Mechanic* website: <http://hivemechanic.org/>

Two levels of training are needed to scale: the first is for librarians, so they can host their own workshops with confidence; the second is for residents, as they come together to make the actual games. As

<sup>1</sup> Five years of our research, published by MIT Press: “*Locally Played: Real-World Games for Stronger Places and Communities*.”

<sup>2</sup> A total of seventy-five participants attended. The conference also included a showcase of exemplary library game projects, and keynotes from leading librarians and game designers.

<sup>3</sup> See our 2018 report on the Philadelphia model: <https://playfulcity.net/go/pokemon-report/cities/philadelphia-libraries/>

<sup>4</sup> For example, see the IMLS support in 2013 to recruit libraries and youth for the [National STEM Videogame Challenge](#).

**templates** for community games, *Hive Mechanic* has a solid base of successful installations to build on. Residents will be able to try these working games from anywhere in the country and “mod” (i.e., modify) them for their needs, using local content including from library archives. Some of the game templates are based on our prior collaboration with the DC Public Library, and others are with community art centers and museums.

Our **advisory group** of library experts will help us refine our templates in the first year, and help with outreach to scale the program in the second year. **Year one** will feature five cities as national exemplars, to pilot and co-design our workshops. DC Public Library (DCPL) has committed to be our primary anchor and co-design will broaden to include several libraries – mostly likely Philadelphia, Chicago, and San Jose. The advisory will be co-led with the DC Public Library, anchored by five co-design libraries of the first year, and rounded out with national networks we will recruit like the American Library Association (ALA) and the Urban Library Council (ULC). With our advisory, we will refine a curriculum that takes other libraries through workshops where games can be made in as little as 45 minutes, or more sustained workshops to build a more complex or “launch ready” game over 4 weeks.

**Makerspaces** in libraries will be a particular focus, and host approximately 15-25% of our workshops. One reason is to recruit within established workshop series. For example, the new "crown jewel" of the DCPL is its renovated MLK Library, with a whole floor for maker space and media labs, including the "memory lab" for local history with participatory media. We will provide the popular \$50 Raspberry Pi computers to more than 15 cities to support embedding play with physical objects; similar to when we previously hosted a series of “listening stations” at the front desks of several DC public libraries, featuring oral histories from residents and the option to record new stories. These systems can be managed centrally by *Hive Mechanic*.

**Year two** will focus on scale. Informed by an advisory board recruited from organizations like the ALA and ULC, our workshops will pivot to training via Zoom, with live instruction by the Game Design faculty of American University. To support experimentation with materials, we will offer \$250 stipends to libraries from 30 cities as part of a national open call. We expect to train several major library systems with central coordination (e.g., Chicago), and expand the curriculum to include more youth and rural spaces as well.

**National Impact:** This project is ambitious, yet the need for participatory ways to engage communities in physical space is immediate, and libraries must not be left behind. We will address the national need to engage local communities beyond library walls, including to support social distancing outdoors with mobile media. Especially for neighborhoods facing gentrification and cultural displacement, this project offers a way to tap into the incredible energy of game design. At the most basic, we will track progress with the number of libraries making games with *Hive Mechanic*, and the number of librarians rating our trainings as “excellent” with confidence to support their community in making games. As a community catalyst, this project will also track self-reports of the 30+ participating libraries for: **(1)** increased self-reports of **co-creation** with community members and organizations, especially of interactive media and local games; **(2)** increased use of community-based **asset maps** in patron activities in the library, including local art and community history featured in the games; **(3)** increase in local workshops that bring together diverse stakeholders for a design activity. In terms of actual games, we anticipate libraries in 30 cities will help residents create **hundreds of local games for our cities** – and reach tens of thousands of players in communities that seek more public engagement with their history and community assets.

**Budget:** Funds over two years are requested for **staffing** (\$87,449) for the PI and several graduate research assistants to manage the co-design process, recruit libraries with the advisory group, and support *Hive Mechanic* across all sites; **stipends and consultants** (\$50,500) with most going to the open-source software developer of *Hive Mechanic* to polish the tool and provide technical support, as well as for stipends for the advisory members and 30 lead librarians, and an assessment consultant; **materials** (\$30,000) to support library workshops, especially to provide makerspaces with Raspberry Pi computers for embedding play in public space and at front desks, plus printing for curriculum and game signs; and **travel** (\$6,000) to library sites for co-design and support. The total is \$248,747, inclusive of indirect cost at the negotiated rate for American University of \$74,798. There will be no cost share or sub-awards.