2023

PSA PORTLAND
SOCIETY for
ARCHITECTURE

ABSTRACT

Our team developed an ambitious proposal for the Leventhal City Prize with "Ozymandias: Using Artificial Intelligence to Map Urban Power Structures and Produce Fairer Results for All."

When we were recognized as finalists and encouraged to submit a seed grant, we went back to the drawing board. Our goal is still to use emerging algorithms for practice to illuminate patterns in power structures and urban decision-making that can lead to data action to produce equitable outcomes. We now want to focus on building the coalition necessary to make it a reality.

We are requesting a seed grant for The Ozymandias project to build a coalition capable of tackling our goal. In Portland, Maine, we have a rich history of consortiums and collaborators who combine institutional, civic and private capital to achieve goals for the greater good. **Our coalition will include the Roux Institute at Northeastern University, MIT, the City of Portland, and the Portland Society for Architecture.** Together, we will develop a symposium and master planning effort to encourage course work, independent research, and entrepreneurial start-ups.

THE PROBLEM

Government decision-making is based on both formal and informal power structures that can be hard to decipher. As a result, the public tends to shy away from participating in public processes. Often they assume decisions have already been made. Other times they assume one person can't make a difference. In cases of marginal populations, such as New Americans, those experiencing homelessness, and those benefiting from public services, there may be a reluctance to "poke the bear" and get involved. More often the process is so arcane and obtuse that it simply seems inaccessible. **Our project seeks to pull away the veil from decision-making processes by using digital urbanism to better understand how they work.** By providing better information about processes - especially the informal ones - we hope to increase participation across a broad spectrum of participants. **Addressing this problem is essential to democracy.** In particular, as systems become more automated and rely on technology, it becomes more important to map out how decisions are made. Otherwise, society risks increasing public skepticism by adding a layer of technological "fog" to already existing bureaucratic "fog." However, if used property, digital urbanism can help burn off both fogs and produce a more vibrant public discourse.

THE TEAM

Addy Smith-Reiman, AICP, The Executive Director for the Portland Society for Architecture (PSA), **Jeff Levine**, AICP, is a Lecturer of Economic Development and Planning in the Department of Urban Studies and Planning at MIT. Previously, he was the head of Planning & Urban Development for the City of Portland from 2012 to 2019. He is familiar with the internal landscape of city management as well as the nuances of public leadership and public processes. He will serve as PI.
Tim Wallace, a geographer and data visualizer with The New York Times;
Liz Trice, a community activist and housing developer, and has hosted Startup Weekends, and design Charettes through her coworking space, PelotonLabs;
Chris Miller, a trained architect, public artist, and maker who is on PSA's board.
Additionally, **Jim Ahearne**, Associate Director of Partnership Development at the Roux Institute will act as a conduit to the institute's faculty and programs.

The PSA will be the lead organization. The PSA encourages innovation and vision in the built environment through education, advocacy and engagement with community members, design & construction professionals, and the civically engaged or curious multi-generational public.

LONG-TERM GOALS

Our civilization has to make many difficult decisions. Whether on climate change, global and local equity, or even fiscal stability of institutions, the next ten years will be decisive. Unfortunately, our experience in local and regional government indicates a certain ossification of decision-making processes. Decisions are deferred, deadlines delayed, and the path of least resistance taken. Those who participate in local government processes today tend to be experienced insiders. The vast majority of the public either doesn't participate at all, or - when faced with a planning effort or development near where they live - instinctively fear change and come out in opposition. **The long-term goal of our research is to use digital urbanism to help address these shortcomings.** We aim to understand the processes that lead to the current default decisions and determine how to improve it. One small example can be seen in the introduction of webinar formats for public meetings. Until 2020, while some communities live streamed City Council and Planning Board meetings, that was generally a one-way process. If you wanted to speak at the meeting, you still had to attend in person. The introduction of Zoom and similar tools - driven by the need for social distancing - helped increase the accessibility of these meetings. While some still were not able to participate due to limited access to technology, the overall impact was to increase involvement and even excitement about public processes. We hope to double down on that limited success with this research and increase the effectiveness and transparency of decision-making to allow for bold and positive progress.

DIGITAL URBANISM

The Ozymandias project will ultimately create algorithms for practice by mapping out and implementing a methodology to use advanced computational techniques, including machine learning and AI, to understand how cities are planned and built. **We propose to use this seed grant to develop a baseline of common understanding on this goal through holding two convenings, one in Cambridge at LCAU, and the other in Portland, ME.** These convenings will establish a baseline as to what technology can (and can't) do to help uncover hidden power systems. **We will then create a work plan for Ozymandias that will take us to the next step - trying to use these algorithms on the test case of Portland's city government to see how they work.** This project also implements data action by experimenting with how to use large sets of public records, such as meeting minutes and records of decisions, to learn about how planning decisions are made. This mapping of existing processes can be used to discuss what isn't working - and what is - to create changes to enhance democratic and participatory decision-making to make difficult policy choices.

IMPACTS+MEASURES

If we can uncover patterns that indicate whether ideas die or move forward, we could create more efficient processes so that decisions align with data stated policy goals. We hope we could then apply this process to other cities.
Success would be evaluated by engaging local advisors, analyzing data, discovering one or more patterns in the data, and bringing that data back to the community.

COLLABORATIONS

Our newest partner in this endeavor, absent from our original application, is **The Roux Institute, Northeastern University's center for graduate studies and research in Portland, Maine**. They are committed to the vision of Ozymandias and are actively working with the PSA to define opportunities of support. Potential avenues for The Roux Institute's participation in this initiative include invitations to Roux Institute faculty with expertise in Experiential AI (EAI) and Human Data Interaction (HDI), as well as faculty from Northeastern's College of Social Sciences and Humanities, to contribute to the dialog as participants in forums and workshops. Similarly, Roux graduate students in the Data Analytics and Applied Machine Learning programs, who have project based experiential learning components integrated into their curricula, may be available to take up exploratory and advanced data analysis projects central to the discussions of Ozymandias. Also, The Roux Institute is prepared to make introductions to aligned start-ups working in this intersection between civic engagement and decision-making with data transparency, understanding, and utilization. And, we expect the coalition will grow.That is another goal:, to build, and strengthen collaborations.

BUDGET+ TIMELINE

jan - april convene	may - aug assess/ analyze	sept - dec convene/finalize workplan

Ozymandias Portland LCAU Seed Grant Budget

ITEM	AMOUNT	
Marketing	$1,000.00	
RA	$7,920.00	
Travel	$3,000.00	
Honoraria	$4,000.00	
Space (in kind)		($2,500.00)
Refreshments	$1,000.00	
PSA (project admin)	$2,500.00	
Total	**$15,920.00**	