



The Burnes Center for Social Change designs and implements practical solutions to society's hardest problems. We develop innovative, participatory, and equitable approaches to solve problems using new technology.

Rethinking Reading

Al for Literacy Achievement







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Burnes Center for Social Change Northeastern Universit

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____ The Burnes Center's Equitable Literacy Initiative

Free Workshop Series provides AI and Literacy training to hundreds of educators and policymakers

The latest Nation's Report Card data continued to show declines in reading for U.S. students, compounding a decline that started prior to the pandemic. In 2024, average reading scores declined by 2 points for both 4th and 8th grade students compared to 2022. This steepens the 3-point decline seen in both grades between 2022 from 2019. While education experts have established best practices for teaching literacy, inequity surrounding the resources and opportunities of students is leading to drastic gaps in achievement in reading.

In partnership with InnovateUS, The Learning Agency, and The International Society for Technology in Education (ISTE) the Burnes Center launched the "Rethinking Reading: Al for Literacy Achievement," a free workshop series aimed at helping education innovators explore how Al can advance K-12 literacy.

The series is reaching hundreds of educators, policy makers, and caregivers from across the country and equipping them with the skills to implement Al literacy tools in educational settings, create personalized reading intervention strategies using Al-driven insights, design inclusive literacy programs that serve diverse learning needs, and more.

Creating Pathways for Literacy Teachers through Northeastern's Graduate School of Education The Burnes Center has partnered with the Northeastern's Graduate School of Education (GSE) to support a pilot program between The Carroll School, an independent day school for elementary and middle school students in grades 1-9 who have been diagnosed with specific learning difficulties in reading and writing, and Guild Elementary School, a Boston Public School in East Boston, to support professional licensure and development for literacy educators. Over a five-year period, the Carroll School partnership with Guild Elementary expects to train at least 70 teachers and impact at least 1,300 students.

Workshops

- Writing Smarter with AI: Digital
 Assistants for Enhanced Reading and
 Writing with Perpetual Baffour (The Learning Agency)
- ► Gaming the Reading Gap: Gamified Al Tools for Literacy Development with L. Burleigh (The Learning Agency)
- Interactive Reading Intelligence:
 Personalizing Reading Comprehension
 with Language Models with Perpetual
 Baffour (The Learning Agency)
- Reading Out Loud, Growing Strong: Al Tools for Fluency Development with L.
 Burleigh (The Learning Agency)
- ► Reading Challenges Revealed: Al Innovation in Dyslexia Assessment with Lizzie Jones (The Learning Agency)
- ➤ Smart Literacy Instruction: Using AI and Speech Recognition to Teach Reading with Cas Burnes (The Learning Agency)

- Reading Together with AI: Tools for
 Parent-Led Learning with Lizzie Jones (The Learning Agency)
- ► From Vision to Implementation: Al for Principals and School Boards with Tony Howard (Jacksonville North Pulaski School District, AR) & Jordan Smith (Anglophone East School District, Canada)
- ► Al and the Future of Public Education –
 A Briefing for State and Local Leaders
 with Michael Lubelfeld (North Shore School
 District 112)
- ➤ Teaching with AI Real Stories from the Classroom with Matt Jones (Suffern Central School District, NY) & Jessica Medeiros (Clarksville-Montgomery County School System, TN)
- Al for Family Advocacy and Learning:
 Making IEPs Accessible with Sofia Bosch
 Gomez (Northeastern University, The Burnes
 Center for Social Change)

Read about early insights from the workshop series: Al in the classroom: Key insights from the Rethinking Reading Workshop Series

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Unlocking the Power of Al in the Public Sector

InnovateUS has trained over 60,000 public sector workers

InnovateUS by the Numbers:

+000,08

Learners to Date from 48 states, representing over 150 government agencies

160+

Workshop:

125+

Leading Faculty

20+

Federal, State, and Local partners.

New partnerships: Arizona, Colorado,
Ohio, Maine Municipal Association,
Indianapolis, Hawaii, Maryland, Kansas

80%

of workshop attendees are likely to apply what they've learned to their job, 85 percent would recommend to a colleague



Free Upskilling for Federal Workers Impacted by Layoffs

Upskill for free. Build what's next.

u have been impacted by the recent federal layoffs, we're here to help. Losing a job involuntarily is shocking and disturbing. In these challenging times, innovateUS and Po

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SUPPORTING FEDERAL WORKERS IMPACTED BY LAYOFFS

InnovateUS, Power at Work, and the GovLab launched a new resource highlighting free training and opportunities for federal workers impacted by recent layoffs: https://innovate-us.org/federal-workers

InnovateUS provides no-cost, live and at-your-own pace learning on data, digital, innovation, and AI skills to public professionals.

For Public Sector Professionals, By Public Sector Professionals

InnovateUS is governed by a coalition of public sector learning and innovation leaders from across the country.

INNOVAMOS

InnovateUS launched a Spanish workshop series "Innovamos" in March with workshops led by the Burnes Center's Sofia Bosch Gomez and Santiago Garces to equip Spanish-speaking professionals in the public sector with tools and skills that public sector professionals can quickly put into practice, with special emphasis on data analysis, digitalization, artificial intelligence, and innovation.



INNOVATEUS IN THE NEWS

Minnesota, Arizona and Indianapolis publicly announced their InnovateUS partnerships to train their workforce in Al.

What's next?

RESPONSIBLE AI FOR PUBLIC SECTOR AI PROFESSIONALS

Two Responsible AI for Public Sector Legal Professionals courses coming this summer

Using Generative AI: Everyday Tools and
 Best Practices and Designing AI Policy,
 Projects and Societal wImpact — will teach
 public sector lawyers how to use AI effectively.

Designed with a national advisory board, the free courses will include hands-on demonstration of the latest tools and how to use them responsibly in government legal contexts to serve the public.

SHAPING THE FUTURE OF AI: A NATIONAL GATHERING FOR STATE AI LEADERS

Beth Noveck and the InnovateUS team

This year InnovateUS aims to reach 100,000+ learners across our offerings.

are leading the organizing of a <u>national</u> <u>conference</u> of State AI leaders with the National Governors Association at Princeton University in June to develop practical frameworks for responsible AI implementation in government.

COACHING SERIES: HUMAN-CENTERED DESIGN FOR PUBLIC SECTOR INNOVATION

Coaching programs are group-based live learning offering personalized guidance to help participants apply new skills to their work. The next InnovateUS coaching series, led by Virginia Hamilton, will equip public sector professionals with the mindset, tools, and methods to design services and solutions that truly meet community needs.

INNOVATEUS PARTNERS INCLUDE





























Al for Impact

How can we leverage AI to solve our most challenging public problems? Over 50 Northeastern students have contributed to making government services work better for residents through the Burnes Center's AI for Impact Co-op Program.

The Al for Impact Co-op Program is a pioneering product-based learning program where student teams wield Al as a tool for transformative innovation, turning ideas into measurable impacts in collaboration with the communities they are serving and under the expert guidance of seasoned professionals.

Al for Impact's mission is to deliver innovative projects that will improve people's lives and create a pipeline of Al-trained and mission-driven talent.

PROJECTS

This semester students are working with the Commonwealth of Massachusetts and State of New Jersey to build:

EASE (Entrepreneurial Application Screening Engine)

Partner: New Jersey Economic Development Authority

Al tool that validates tax clearance documents by flagging potential issues and provides real-time error detection for applicants. The system aims to streamline application processing for small businesses seeking state aid.

FAIR (Fast Al-Assisted Investigation & Review)

Partner: New Jersey Attorney General's Office Division on Civil Rights

Al system that assists with drafting verified complaints, generating document requests, and creating targeted interview questions for civil rights cases. The tool will help the agency handle increasing complaint volumes more efficiently.

Infrastructure Project Acceleration Initiative

Partner: Massachuåsetts Office of Federal Funds & Infrastructure

Platform that helps communities navigate federal grant requirements and secure funding for priority infrastructure projects. The tool significantly reduces application time and increases success rates for municipalities.

Assistive Buyers Engine (ABE)

Partner: Massachusetts Operational Services Division

Generative AI tool to enhance the procurement process for state buyers by enabling efficient navigation of procedures and regulations and offering support in understanding their application.

Election Content Analysis and Improvement Tool

Partner: New Jersey Secretary of State's Office

To help the NJ Division of Elections share accurate and timely information ahead of a gubernatorial election and anticipated changes to election law, this Al tool analyzes website content against established content guidelines and identifies unclear, redundant, inaccessible texts side-by-side by revised text suggestions. It makes design accessibility recommendations along with source code evaluation. The tool generates sample voter personas in order to recommend site improvements to adjust to various users.

MassHealth Helper

Partner: Massachusetts Executive Office of Health and Human Services

Generative AI tool for MassHealth Enrollment Centers (MEC) workers to efficiently reference the large volume of documents about eligibility requirements and application procedures when assisting Commonwealth residents enrolling in MassHealth.





Al for Impact co-op students Jai Surya Kode and Anjith Prakash Chathan Kandy presented their project, "Grantwell" at Northern Essex Community College in Haverhill, MA to municipal workers alongside the Commonwealth's Federal Funds and Infrastructure Office. GrantWell is a free, Al-enabled tool designed to simplify the federal grant application process for municipalities, community groups, and underserved populations in Massachusetts.





Al for Impact students learned about Al product development and more during recent visits to AWS and Microsoft offices.



Al for Impact Alumni Diane Grant and Shreya Thalvayapati presented on the Al for Impact co-op program at the Boston Consortium for Higher Ed Conference on "Infusing Al into Education, Research and Operations" at Babson College. The panel was moderated by Babson's Chief Information Officer, Patty Patria.

ADDENDUM: All for Impact students worked with Northeastern Professor Jill Abramson, Burnes Center Senior Fellow and former editor of the New York Times to explain their fall 2024 projects. The summaries follow this report.

AIEP

With the support of the Chan Zuckerberg Initiative, the Burnes Center for Social Change, its Al for Impact program, and Innovate Public Schools are working with families in California and Massachusetts to use artificial intelligence to enhance educational outcomes for learners with disabilities.

AIEP, a free, open-source platform aims to eliminate key barriers families face when engaging with IEPs, which are often lengthy and packed with specialized educational jargon, making them challenging to understand. By integrating community perspectives into the heart of the platform's technological design, the project aims to ensure that the AI tool reflects and serves the needs, values, and aspirations of the people who will use it.

Learn more about the Burnes Center's AIEP project:

Designing AI With Communities: the AIEP Project on

Reboot Democracy on Reboot Democracy by Sofía

Bosch Gómez.

Pi-Squared: Private Innovation in the Public Interest with Anita McGahan

In March, Professor Anita McGahan launched the Innovating in the Public Interest: Partnering for Public Good workshop series, a free six-part InnovateUS series about what it takes for public sector innovators to collaborate with private-sector partners effectively.

The workshop series is one piece of the <u>Private</u> <u>Innovation in the Public Interest</u> initiative, or Pi-Squared for short. Pi-Squared empowers leaders to create impactful, scalable solutions to society's

toughest challenges. Unlike traditional Corporate Social Responsibility or ESG models, Pi-Squared focuses on bridging public and private sectors to drive meaningful change.

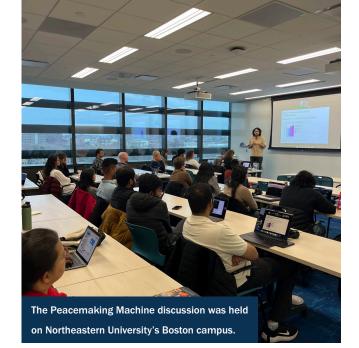
The series complements Anita's new podcast series, "Private Innovation in the Public Interest" aimed at understanding and reinventing corporate social responsibility in service of the public good. The series has hosted over 20 innovative global leaders since launching in early 2025.

Innovating in the Public Interest: Partnering for Public Good

A free workshop series led by Anita McGahan March 26 - May 27, 2025

2024-2025 Rebooting Democracy in the Age of Al Lecture Series

The 2024-2025 Rebooting Democracy in the Age of Al lecture series, hosted by the Burnes Center and The GovLab in partnership with the Institute for Experiential Al at Northeastern University, has continued to bring together people around the world to explore the intersection of artificial intelligence and democratic governance. Under the direction of Professor Beth Noveck, the series has hosted innovative thinkers and changemakers to discuss how Al can enable more participatory and inclusive approaches to democracy.



THURSDAY, MARCH 20, 2025

Artificial Intelligence in the Fight Against Misinformation: A Conversation with Ed Bice

How do we tackle misinformation when traditional strategies no longer work? That was the central question in our conversation with Ed Bice, 2024 Skoll Award Winner for Social Innovation and CEO of Meedan, a nonprofit organization focused on building tools for fact-checking, verification, and media literacy. The conversation explored the evolution of misinformation, the challenges of combating it in today's media environment, and the potential for Al-driven solutions to restore trust in information.

THURSDAY, FEBRUARY 27, 2025

The Peacemaking Machine with MIT and Deepmind's Michael Henry Tessler and Michiel A. Bakke

The Peacemaking Machine, featuring Michael Henry (MH)

Tessler and Michiel A. Bakker from MIT and Google

DeepMind explored how artificial intelligence can play a role in fostering consensus in democratic deliberation and whether AI can mediate political discourse in ways that human facilitators cannot. Their talk focused on recent research they conducted in the UK with 5,700 participants, where they investigated whether an AI system can facilitate collective deliberation by mediating discussions on social and political issues.

THURSDAY, JANUARY 23, 2025

Al and the Future of Legislation: Innovation at the Library of Congress with Natalie Buda Smith

Natalie Buda Smith, the Director of Digital Strategy at the Library of Congress, the world's largest library, discussed her team's work investigating how Congress can use artificial intelligence to enhance its operations. Natalie emphasized that the Library's approach to AI is focused on augmenting rather than replacing human expertise, with a strong emphasis on maintaining authenticity and authority in all their Congressional work. She noted that their experiments are still in relatively early stages, with the most successful applications being those that support staff workflows rather than fully automated solutions.

THURSDAY, DECEMBER 5, 2024 Smart City, Smarter Citizens with Dr. San-Cheng Chang, Mayor of Taoyuan

Taoyuan, one of Taiwan's most populous cities with 2.2 million residents, consistently wins international awards for its innovative use of technology in city services. This "smart city" has implemented an Al-powered system to protect rivers and ecosystems, using real-time image analysis to monitor water quality. The city also



employs sensors to optimize traffic flows and Al-enabled virtual replicas to engage residents in urban planning. Dr. San-Cheng (Simon) Chang, Mayor of Taoyuan and former Taiwanese Premier showcased how the city harnesses artificial intelligence to enhance governance and transform one of Asia's most innovative cities.

TUESDAY, NOVEMBER 19, 2024

OUR BIGGEST FIGHT: Reclaiming Liberty, Humanity, and Dignity in the Digital Age with Frank McCourt

Frank McCourt, Executive Chairman of McCourt
Global and Founder of Project Liberty discussed
his book, OUR BIGGEST FIGHT: Reclaiming Liberty,
Humanity, and Dignity in the Digital Age, and his
bid to acquire TikTok in the U.S. with Project Liberty.

OUR BIGGEST FIGHT is considered "A resounding call to action for building a healthier and more equitable internet that frees users from Big Tech's exploitation, recognizes individuals' rights to their data, safeguards children and prioritizes the common good.

WEDNESDAY, OCTOBER 30, 2024

Leveraging AI to Promote Fair Elections with Jeanine Abrams McLean and Kate Gage

Less than a week before the 2024 Presidential Election, Jeanine Abrams McLean, President at Fair Count, and Kate Gage, Executive Director of the Cooperative Impact Lab, discussed how the Cooperative Impact Lab has helped leverage Generative Al in support of Fair Count's work to promote voter education, fair and accurate counts in the United States Census, and initiatives that promote equity and social justice.

More from Reboot Democracy

Rebooting Democracy in the Age of Al aims to shift the narrative around Al from one of fear to one of opportunity, empowering democratic institutions and the public to leverage AI for improved governance, transparency, and public engagement. Through widespread dissemination of insights, tools, and practical guidance, including a chatbot that advises people on using AI to enable public engagement, the initiative seeks to influence policymakers, technologists, and civil society to adopt AI practices that enhance democratic processes. Over time, this could result in stronger, more participatory governance models, a reduction in the spread of misinformation, and more inclusive decision-making at various levels of government.

THURSDAY, SEPTEMBER 12

California's Digital Democracy: Using AI to Enhance Legislative Transparency

<u>Calmatters</u> co-founder and veteran California journalist and state policy expert David Lesher discussed how AI is being used to foster legislative transparency. He co-founded CalMatters, a nonpartisan and nonprofit news organization bringing Californians stories that probe, explain and explore solutions to quality of life issues while holding our leaders accountable in 2015. STAY TUNED FOR 2025-2026 SPEAKERS TO BE ANNOUNCED SOON

Recent Publications

How New Jersey's Al Task Force Used Al to Develop Evidence-Based Policy Solutions with New Jersey Residents

From Citizen to Senator: Artificial Intelligence and the Reinvention of Citizen Lawmaking in Brazil

America First, Science Last? Kratsios Hearing Signals
Empty Al Strategy

A New Research Agenda for AI and Civic Engagement

An Al Opportunity: California's Wildfire Detection
System

Beyond Al Regulation: New Executive Orders Show Government Embracing Al as Infrastructure

Brazil's Legislative Workshops: Using AI to Strengthen Youth Engagement

Artificial Intelligence in the Fight Against
Misinformation: A Conversation with Ed Bice

Brazil's Online Consultation System is Reimagining Democracy for the Digital Age

Selected Publications

Private Innovation in the Public Interest for Collective Impact,

by Anita McGahan, Collective Impact Virtual Salon

Civic Virtue among Engineers | Institute for Social Concerns,

by Erhardt Graeff

Opinion | AP sues Trump aides for limiting press access,

Boston Globe, by Jill Abramson

Signalgate: Trump's band of bros could use a refresher course on the Constitution,

Boston Globe, by Jill Abramson

How Tech Oligarchs Are Using Al Hype to Push Mass Layoffs,

by Dane Gambrell

No Urban Myth: The Lasting Impact of COVID-19 on Canadian Cities,

Rotman Magazine, by Anita McGahan

____ Selected Media Mentions

Al Poised to Reshape State Transportation Departments, Staff,

GovTech, featuring Beth Noveck

How AI is changing esports: Northeastern students win big at Valorant challenge

highlighting Al for Impact's Dhruv Kamalesh Kumar and Rudra Sett.

How should the news industry cover Trump? Ten top journalists weigh in,

Washington Post, featuring Professor Jill Abramson

Being Human in 2035: More predictions on change as humans adapt to AI,

Imagining the Digital Future, featuring Professor Erhardt Graeff

The people who deliver your Amazon packages are striking. Here's why.,

Vox, featuring Professor Seth Harris

Shutdown threatens 'chaos' for Trump's transition and inauguration,

Politico, featuring Professor Seth Harris

Controversial Reaction to Accused CEO Killer,

MSNBC, featuring Jonathan Metzl

Ukrainian educator gains nation-rebuilding skills with eCornell,

highlighting the Cornell Public Sector Leadership program authored by Seth Harris

Elon Musk in the Oval Office - The News Agents,

featuring Seth Harris

COVID-19 pandemic, what we got wrong, how science evolved since,

Boston Globe, featuring Dr. Alister Martin

Workers, beware: Trump hates you,

featuring Seth Harris

ChatGPT Gov offers another option to boost employee productivity

Route Fifty, featuring Beth Noveck

How DOL headquarters encapsulates Washington paralysis,

Politico Weekly Shift, featuring Seth Harris

ADDENDUM

The Al for Impact Co-op Program: July 2024 - December 2024

Al for Impact students worked with Northeastern Professor Jill Abramson, Burnes Center Senior Fellow and former editor of the New York Times to explain their fall 2024 projects.

The AI for Impact Cooperative Education (Co-op)
Program is a pioneering fully-immersive learning
program where students work alongside professional
advisors and public interest partners using AI and
human-centered design to deliver impactful, cuttingedge projects that solve public problems.

The co-op program is a six-month, full-time paid job that equips students from across disciplines with cutting-edge AI skills to drive public benefit, positioning them as future leaders in Al.

In its first year, AI for Impact partnered with the Commonwealth of Massachusetts and students worked along state agencies to improve the delivery of services and programs for Massachusetts residents using AI. The partnership was announced as part of Governor Maura Healey's strategy to position Massachusetts as a global leader in applied AI

Managed by the Burnes Center for Social Change at Northeastern University, student teams are advised by Boston Chief of Information (CIO) Santiago Garces and a team at the Burnes Center.

Intro Letter

Artificial intelligence (AI) offers a transformative opportunity to address persistent public challenges, modernize and enhance the efficiency of government operations, and foster equitable access to essential services for all of our residents.

At the Burnes Center for Social Change, we've decided to act deliberately to leverage the revolutionary capacity of AI for good, using the evolving technology to drive positive change in our communities.

We launched the AI for Impact Co-op Program to harness the talent of our Northeastern students and immerse them in hands-on, interdisciplinary projects that address real-world challenges. Through this first-in-the-nation program, we are not only helping solve some of our most challenging public problems, but building a public sector talent pipeline focused on AI for good.

Over the past year, we've partnered with the Commonwealth of Massachusetts and our co-op students have created workable Al solutions that

streamline complex processes, improve service delivery, analyze vast datasets to identify patterns, automate routine administrative tasks to save resources, and personalize services for diverse communities. Projects like Al-powered chatbots in customer call centers serving our most vulnerable residents are demonstrating how technology can make government more responsive.

Now we're expanding to more states and community-based organizations to further spread this incredible impact. With bold action and strategic investment, Al can help us realize a vision of governance that is more efficient, inclusive, and capable of meeting the needs of all.

Beth Simone Noveck,

Founder, AI for Impact

Professor and Director, The Burnes Center for Social Change at Northeastern University and The GovLab

The Fall 2024 Al for Impact Projects

THE MASSACHUSETTS ACADEMICS TO CAREERS HELPER (MATCH)

Leadora Kyin and Claudia Levi

"They come in and say, 'I don't even know where to begin,'" says a guidance counselor at Quincy High, highlighting the frustration many high school seniors face—overwhelmed by deadlines, tools, and decisions, with limited school guidance to help them navigate the process.

Currently, there isn't a centralized website or directory that consolidates specialized programs offered by different universities. For example, if a student is interested in electrical engineering, both the student and their counselor must sift through separate, often outdated lists of courses published by each institution. This fragmented process means students may miss out on applying to programs they are qualified for or eligible to receive financial aid. A comprehensive, Al-powered search tool could streamline this process, making college exploration more efficient and ensuring students discover opportunities that align with their aspirations.

Even with tools like <u>NAVIANCE</u> and the <u>Common</u>.

App, college and career planning remains confusing and disconnected for many students. "They need help linking programs to careers, but there's no simple way to do that," the counselor explained. A 2023 Strava Report reflects this gap: while 74% of students pursue education to gain workplace skills, only 49% feel their education helps them achieve career goals like improving job skills, supporting their families, or increasing their income. This leaves many students unable to translate education into meaningful career outcomes.

The Massachusetts Academics to Careers Helper (MATCH) is an Al-driven platform created in partnership with the Massachusetts Executive Office

of Education to simplify college and career planning while promoting equitable access to opportunities across the state's 24 public universities and community colleges. MATCH uses a multilingual Al chatbot to provide guidance, helping students research courses, explore programs, and understand career connections anytime and in an accessible way.

Using data from partnering institutions (Bridgewater State University, Worcester State University, and Greenfield Community College), the Bureau of Labor Statistics, and the Occupational Information Network, MATCH provides insights into three high-demand fields: Life Sciences, Climate Technology, and Applied Al. It helps students explore career pathways, including job responsibilities, required skills, earning potential, and employment outlook, while streamlining research to show how courses develop career-relevant skills.

MATCH is especially valuable for Massachusetts' 25,113 high school seniors who choose public higher education annually, including the 10% who are ESL learners. By simplifying processes, MATCH could help more students access federal financial aid, potentially securing over \$12 million annually through Pell Grants. Its career-focused guidance also addresses workforce skill gaps, enhancing the state's competitiveness for federal workforce development grants while empowering students to reach their educational and career goals.

MATCH offers a transformative solution to the challenges highlighted by the Quincy High guidance counselor and others. For students overwhelmed by the complexities of college and career planning, MATCH provides clarity and support, linking programs to careers and turning confusion into confidence. By filling gaps where traditional tools fall short, MATCH ensures that education leads to meaningful career outcomes for all students.

PUBLIC PROCUREMENT AND THE ASSISTIVE BUYERS ENGINE

Prasoon Raj and Rui Ge

Public procurement is the process where the state purchases goods or services from the private sector. It is a critical process that contributes to the success of any organization, but it's also a notoriously difficult task. The process includes numerous and complex regulations buyers have to abide by, extensive documentation, and considerable research and discussion in order to determine the exact thing a buyer should procure. Our team at the Burnes Center for Social Change is partnering with the Massachusetts Operational Services Division (OSD) – the agency that oversees all procurement in Massachusetts - in response to these challenges. Our project aims to address key pain points buyers are experiencing during the procurement process by focusing on opportunities for growth. We seek to create a solution that empowers buyers and their understanding throughout the procurement process, in turn making it a more streamlined and effective process.

The primary opportunity for our project revolves around the location and complexity of resources available online. One such resource is the official Massachusetts Procurement Handbook. This document includes information about the entire procurement process, focusing specifically on how to conduct 'best-value' procurement, so it is a key resource for people who have any questions throughout the procurement process. However, the handbook is over 100 pages long, and the extensive information it covers can be difficult to understand. The second resource is the statewide contract index. Statewide contracts (available through OSD) are one of the options you can opt for to make a public purchase. They offer statenegotiated prices, pre-selected vendors, services that can be provided by each vendor, and save buyers from spending additional time on developing solicitations, issuing bids, evaluating responses, and more. There are more than 100 statewide contracts available.

and each one has unique instructions that cater to the contract. Balancing understanding these long and complex documents with numerous negotiations, regulations, and other responsibilities can make the procurement process overwhelming for buyers.

This challenge is significant because it can cause delays throughout the procurement process. If a solution were created to address this problem in some form, there would be an opportunity to improve the efficiency of many procurements. This could reduce the number of general inquiries made to the OSD's Help Desk, increased cost savings, and improved buyer experiences while participating in procurement. Of course, efficient procurement also has broader implications for impacting residents. More efficient procurement results in economic growth (and, in turn, more jobs), the acquisition of more innovative products, and efficient allocation of public resources. Each of these will be expanded on in a later section, but it's clear that this problem is something that has significant and broad implications.

Taking inspiration from existing solutions and the experiences of people we talked to in our research process, we developed a chatbot application called ABE (Assistive Buyers Engine) that can provide buyers with step-by-step guidance. We will integrate essential procurement resources into a centralized knowledge base and leverage AI to pull from that knowledge base, so that our chatbot can provide accurate and relevant information through an interactive interface. This will ensure that procurement buyers have up-to-date access to critical information. Our Al solution effectively addresses some of the key identified challenges by providing buyers with assistance that is not only quickly available, but context-relevant due to the capabilities of Al. By integrating all key procurement resources into a centralized knowledge base, we can not only easily direct buyers to the relevant resources for their needs, but also provide intuitive and simplified explanations of those resources, should the need arise. This will

provide buyers with context-relevant assistance at every step of the procurement process, helping them find the resources and information they need in seconds.

In the real world, our solution would provide buyers with tailored, step-by-step guidance throughout the procurement process. This would ideally increase buyer confidence and lessen the burden on departments who are responsible for addressing buyer inquiries. However, it will be essential to ensure our data remains up-to-date in order to ensure accuracy in our chatbot's responses. It will be important for admins across various departments to update documents in the knowledge base whenever there are changes to procurement regulations. Ensuring ease of use and widespread adoption will also be critical, so that buyers are aware of a key resource they can lean on for assistance. By taking these things into account, we can ensure our chatbot effectively addresses current challenges buyers face throughout the procurement process.

SIMPLIFYING ACCESS TO BUSINESS RESOURCES IN MASSACHUSETTS

Suvir Ghai and Khushi Patel

For years, staff at the Executive Office of Economic Development (EOED) have faced an uphill battle in guiding businesses to the resources they need. EOED staff members frequently receive calls from business owners, each with unique needs. Often they are uncertain and confused about whether they qualify for the various programs and financial assistance offered by the state agency, which manages a \$250 million budget dedicated to promoting businesses and supporting entrepreneurs across Massachusetts. Take Kevin, an EOED staff member, who frequently fields calls from business owners like the phlebotomist who couldn't navigate the certification maze or the business owner who wanted to set up a mobile barber shop. As Kevin describes, "I spend a lot of time searching through websites or reaching out to

colleagues for answers, only to send a business owner down a rabbit hole of disconnected information". This frustrating process has been a significant hurdle for EOED staff and businesses alike.

The Executive Office of Economic Development caters to over 750,000 businesses in Massachusetts, 99.5% of which are small businesses, with an annual development budget of \$250 million. Yet much of this funding remains underutilized because businesses struggle to access it. Grants like those for workforce training or innovative technology projects often go unnoticed, leaving both businesses and the state short of their economic potential. The challenge? A fragmented system that overwhelms business owners and slows staff efficiency.

Our solution - an Al-powered chatbot called BEACON Al is meant to turbocharge what the Navigators* do and aims to transform the way they operate by consolidating data from over 55 grants and programs and 250+ websites to answer any business inquiry. With this tool, Navigators can input a business's details relating to business life cycle phase, industry, size, and resources they want—and receive tailored recommendations for applicable grants and programs within seconds. Beyond grant eligibility, the tool also offers quick answers to questions about permitting, regulations, and other state resources, significantly cutting down the time Navigators spend searching for answers.

Consider Susan, who recalls a business owner asking about incentives for an alpaca farm. Without a centralized system, Susan had to piece together answers by manually searching for information on obscure regulations and local resources. With BEACON AI, Susan could have located the relevant resources in moments, offering the business owner both clarity and confidence.

By amplifying the reach and efficiency of Navigators, BEACON AI ensures businesses receive timely, accurate, and actionable support. This not only

enables the EOED to allocate its \$250 million budget more effectively but also unlocks opportunities for businesses to create jobs, drive innovation, and strengthen the Massachusetts economy.

(* Navigator is a person that the business gets assigned to and is responsible for guiding and supporting the businesses that come in contact with the EOED)

GENIE: A VISION FOR THE FUTURE OF MASSACHUSETTS

Khushi Patel and Sarah Klute

What is GENIE?

Today, the Commonwealth of Massachusetts faces a challenge: how to harness the power of artificial intelligence (AI) securely and effectively for its 44,000 state employees. AI has already revolutionized workplaces worldwide, driving productivity and innovation—but the Commonwealth has lacked a tool tailored to its unique needs. This is why we have built GENIE, the Generative AI Experimentation and Innovation Environment: a transformative platform that introduces state workers to the cutting-edge capabilities of AI while safeguarding the integrity and confidentiality of public sector data.

GENIE is more than just a platform—it's a bold step forward. Designed specifically for the Commonwealth, GENIE provides a secure, structured, and user-friendly environment for exploring Al's potential. Whether simplifying complex workflows, automating repetitive tasks, or guiding users through Al experimentation, GENIE bridges the gap between technological advancement and public sector efficiency.

Integrating Al Into Public Sector Workflows

GENIE offers practical applications that can transform how government employees perform their roles. From drafting professional emails and translating documents to analyzing large datasets and generating actionable insights, GENIE enables employees to automate repetitive tasks and redirect their focus to strategic priorities. These enhancements not only improve workplace efficiency but also enable more effective public service delivery.

Key features such as drag-and-drop document uploads, integrated tutorials, and tone customization make GENIE accessible to users across all levels of technical experience. For those new to AI, GENIE provides step-by-step guidance through tutorials and a task section with pre-defined prompting, to facilitate understanding and build confidence. For advanced users, it offers the flexibility to tailor workflows and optimize performance. This adaptability ensures that GENIE meets the diverse needs of Massachusetts' workforce.

A Secure and Scalable Al Solution

Public sector operations require solutions that prioritize security and compliance. GENIE's scalability and adaptability also position it as a forward-looking platform capable of evolving alongside the needs of the Commonwealth. By fostering a culture of innovation and equipping employees with cuttingedge tools, GENIE sets a new standard for integrating technology into public sector operations.

Positioning Massachusetts at the Forefront of Innovation

GENIE is more than an introduction to AI; it represents a strategic investment in the future of government operations. By empowering employees with AI literacy and tools, GENIE ensures the Commonwealth remains at the forefront of technological innovation. Its thoughtful design reflects a commitment to transparency, equity, and security, ensuring that the benefits of AI are realized responsibly and inclusively. As a result, GENIE not only benefits employees but also enhances the quality of public services delivered to Massachusetts residents.

Through GENIE, Massachusetts redefines what is possible in public sector innovation. By combining

cutting-edge technology with a focus on user needs, the Commonwealth sets a precedent for how governments can embrace AI to drive meaningful, long-term impact.

MECA, THE MASSHEALTH ENROLLMENT CENTER ASSISTANT

Jake Ashkenase and Temi Akinyoade

A typical call center is usually pictured as a grid of cubicles, each one indistinguishable from the next. But not this one, this call center has cubicles each with their own design and with their own creative setup. What stands out more than each worker's personal items is the unique work setup of each worker. You can see this in the documentation each worker has lined on the walls of their cubicle. Some have binders full of information, others just a couple of papers scattered on the desks, but all with their unique way of storing information.

This rather haphazard system is a perfect illustration of the problem facing MassHealth Enrollment Centers (MECs), the call centers MassHealth utilizes to provide support to Massachusetts residents looking to enroll in MassHealth programs.

MassHealth is one of many branches within the Executive Office of Health and Human Services, with the goal of providing health benefits and funding for residents of Massachusetts. MassHealth has programs reaching over 25% of the entire state, and helps vulnerable populations at an even higher rate, serving more than 40% of children in the state and over 60% of residents living in nursing facilities.

Every day thousands of residents call in to these centers with hopes of getting support in the application process to the various healthcare programs that are provided by MassHealth. However, when they do call they constantly face challenges getting the help they need from the 377 current MEC workers. All it takes is a simple google search to see how residents feel about applying to

MassHealth, and about the help they received through MEC centers. A Massachusetts resident on a Reddit thread replies to another discontent user with the following quote: "I know your frustration. Massachusetts has great programs, but the process of getting into them is ridiculously cumbersome". The problem is clear: residents do not have the support necessary for applying to MassHealth programs.

Residents often are not able to get the sufficient help they need because workers are not put in the best position to assist them. MEC workers have to manually search over 250 documents to help residents. This creates a huge strain on the workers' efficiency, which only gets compounded by weekly updates in policy and a lack of proper centralized resource management. This creates an immense opportunity to improve the reliability of help that MEC employees, especially newer staff, can provide, thereby increasing healthcare accessibility for people throughout Massachusetts.

Our solution, the MassHealth Enrollment Assistant (MECA), looks to solve this problem. MECA offers an Al powered interface for MEC workers to ask their questions and receive an answer from our chatbot in seconds. Our tool queries through hundreds of documents and can pull together information from multiple sources, connecting them into one clear and concise answer. Our tool not only provides answers, but also gives source information so workers can verify their accuracy. Users then have the ability to ask follow up questions and interact with the tool in a conversational manner because of the Al's ability to remember the previously sent messages.

Not only does this tool better equip workers to quickly answer questions, but it also ensures that they can access the information to answer more questions from residents and do so with higher levels of accuracy. From the worker side of things, they no longer need to search through documents manually and worry if a

document has become outdated without them realizing. They have all of their information in one place, and a much more efficient avenue to access that information. From the resident side of things this means that callers no longer have to feel like nobody has the answers to their questions and that getting help is a long and tedious process. Instead, residents can feel better about utilizing MECs and about applying to various MassHealth programs. This means more residents are applying to and getting accepted into the life changing programs that MassHealth has to offer.

GRANTWELL: EMPOWERING MASSACHUSETTS TO SECURE FEDERAL FUNDING

Shreya Thalvayapati, Serena Green and Deepikasai Mettu

Massachusetts faces a significant challenge with lead contamination. In 2016, it ranked among the top ten states with the highest number of lead service lines, underscoring the urgency of lead pipe replacement. Yet earlier this year, the EPA reduced funding for these critical efforts. The reason lies in the structure of formula-based federal funding, which relies on factors such as population size and socioeconomic metrics—criteria that often disadvantage smaller, relatively affluent states like Massachusetts.

Fortunately, Massachusetts has another pathway to address urgent issues like lead remediation: discretionary grants. Through the Bipartisan Infrastructure Law, the state had access to up to \$10.7 billion for projects such as lead pipe replacement. However, \$3.2 billion of this funding—nearly a third—was tied to competitive grants requiring complex and challenging applications. Without the resources or expertise to navigate this cumbersome process, Massachusetts risks leaving a significant portion of these funds on the table.

To access discretionary funding, municipalities must wade through Notices of Funding Opportunity (NOFOs)—

documents often exceeding 100 pages—to assess eligibility and requirements. Then, they must craft compelling narratives to prove their case. It's a grueling process: 72% of applicants spend 5–30 days on a single proposal.

The Massachusetts Federal Funds and Infrastructure Office (FFIO) was established, in part, to address these challenges. With a mission to help municipalities secure federal funding, the FFIO provides technical assistance and guidance, but even with their support, resource-strapped municipalities face immense barriers. Recognizing this gap, we created GrantWell: an Al-powered tool designed to simplify the federal grant application process.

GrantWell focuses on two critical pain points: interpreting NOFOs and crafting compelling project narratives. Here's how it works:

- 1. Requirements Extraction: GrantWell uses generative Al to analyze lengthy NOFOs and extract key details, such as eligibility criteria, required documents, and deadlines. It organizes these into clear, actionable checklists. This transforms an overwhelming document into a manageable to-do list, enabling municipalities to quickly assess their eligibility and prepare their applications.
- 2. Narrative Assistance: Through a user-friendly chatbot interface, GrantWell guides users in drafting their project narratives. It prompts them for specific information, integrates relevant public data, and generates tailored sections of the proposal. Users can review, refine, and iterate on these drafts, ensuring they meet NOFO requirements and reflect the unique needs of their communities.

While the tool is still in its early stages, internal testing has shown promising results. FFIO staff who have used GrantWell report significant reductions in the time required to interpret NOFOs and draft proposals. Once publicly released, the tool will be available for municipalities to use independently or in collaboration

with FFIO staff, maximizing its reach and utility.

The potential impact of GrantWell is transformative. If fully deployed, it could enable Massachusetts municipalities to secure millions more in federal funding each year, supporting clean energy projects, road repairs, and affordable housing developments. By combining clarity, accessibility, and the capability to craft competitive applications—tasks that traditionally demand professional expertise and weeks of effort—GrantWell simplifies the process and ensures no opportunity is left behind.

LINKHEALTH: IMPROVING ACCESS TO FEDERAL BENEFITS PROGAMS

Sarah Klute and Rishabh Saxena

Over the past 6 months, we took some time volunteering in clinics with an organization named Link Health talking to people, trying to sign them up for benefits programs. It was awkward work. We felt ridiculous in our large, light blue shirts, approaching and trying to strike up conversation with busy people waiting for their doctor appointments in mostly empty rooms. However, those experiences helped us realize something. So many of them knew about benefits programs in broad strokes, but understanding the assistance that they were eligible for in concrete dollar amounts—"Lifeline could save you \$25 next month"—seemed to light a fire in them. Once they had that understanding, getting them to apply was easy.

Right now if you wanted to determine your eligibility, you have to first look up whether federal benefits programs exist for the problem you need help with, find the eligibility requirements on the webpage, click through links in that section to understand specific wording, and then scroll past lists and lists of irrelevant information to find a table that may or may not apply to you. Determining eligibility currently is navigating a maze of text with no promise of a better understanding at the end.

For many individuals and families, navigating that maze is too much. Each program—whether SNAP, WIC, or Lifeline—has unique eligibility criteria, separate application portals, and burdensome documentation requirements. For someone already stretched thin, the process can feel insurmountable. Even more troubling is the lack of awareness. According to the Greater Boston Food Bank survey among the eligible but not enrolled, the leading reason people don't apply for benefits is, "I didn't know I was eligible." This information gap disproportionately affects vulnerable populations, including low-income families, seniors, and immigrants, who are already at a disadvantage. Programs like SNAP are lifelines for struggling families, but it's too easy for those patients to fall through the gaps.

In understanding this issue, we have been working with Link Health. Link Health's mission is to empower individuals and communities by linking them to essential public benefit programs. Over the past 2 years, they've helped countless families connect to federal benefit programs and put real federal dollars back towards the people that need them. We tried to find a way for technology to help achieve their mission.

The Al-powered eligibility screener we developed is designed to alleviate the barriers of confusion and lack of awareness. Accessible via a simple QR code, the tool allows users to complete a personalized eligibility screening on their phones in just minutes. The screener combines data from an expansive list of curated program information to screen for eligibility for each of those programs, get rid of repeated questions, and prioritize important, more useful questions first. Al can take all those lists and pages of information and condense them into the important applicable information for someone.

If rolled out and implemented, this application would make it easier for organizations to screen for programs, and patients to understand their eligibility quickly and painlessly.



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