Federal Crowdsourcing Webinar Series

Episode Two
Federal Use of Prize Competitions: Challenge.gov

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Prize competition overview

Federal prize competitions have catalyzed advancements in areas such as autonomous transport and infectious disease forecasting, and stimulated research and investment in market sectors including solar energy and small business development.

Benefits of Prize Competitions:

- Pay only for success and establish an ambitious goal without predicting which team or approach will succeed.
- Reach beyond the "usual experts" to increase the number of minds tackling a problem.
- Increase cost-effectiveness to maximize the return on taxpayer dollars.
- Inspire risk-taking by offering a level playing field with credible rules and robust judging.
# Prize Competition Types

<table>
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<tr>
<th>Type</th>
<th>Description</th>
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<tr>
<td>Analytics</td>
<td>Analytics, visualization and algorithm challenges focus on finding better ways to interpret or communicate data.</td>
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<td>Ideas</td>
<td>An ideation challenge supports new ways of understanding and framing problems, new processes to solve problems, and innovative implementations as solutions to problems.</td>
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<td>Design</td>
<td>Creative design and multimedia challenges can help agencies capture, communicate and project a concept or aesthetic that would be difficult to achieve with a grant or contract.</td>
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<td>Scientific</td>
<td>Scientific challenges seek to promote the understanding of a problem, solution or outcome using empirical or measurable evidence-based practices.</td>
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<td>Entrepreneurship</td>
<td>Entrepreneurship or business plan challenges are competitions used by government, universities and private sector organizations to help train and equip entrepreneurs, as well as launch their ventures.</td>
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<tr>
<td>Software</td>
<td>In a software and app development challenge, an organization asks solvers to create a software application to solve an existing problem or draw attention to potential uses of available datasets.</td>
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<tr>
<td>Technology</td>
<td>Technology demonstration and hardware challenges seek prototypes or fully developed solutions to catalyze and demonstrate breakthrough technical innovations.</td>
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Historic Examples of Government-Sponsored Prizes

**Longitude Prize**
Problem: Inability to accurately determine longitude caused the British Navy many accidents and impacted their naval superiority.
Year: 1714
Sponsor: British Government
Prize Amount: £20,000 (Today’s value > £2,000,000)
Winner: John Harrison, a watchmaker

**DC Flag Design Competition**
Problem: Over 100 years after the founding of the District of Columbia the capitol was still without an official flag.
Year: 1938
Sponsor: U.S. Congress
Winner: Charles A.R. Dunn, a flag designer, who produced a design based on George Washington’s family’s coat-of-arms
Prize Competitions in the Federal Government

*By the Numbers:* More than **100 federal agencies** have run nearly **1,000 prize competitions** since 2010, offering **more than $250 million in cash prizes** and other incentives.

Legal authorities used to issue prize competitions:
- Direct Prize Authority (DoD, NASA, DOE, NSF, USAID)
- Broad Prize Authority
  - 2017, American Innovation and Competitiveness Act (AICA) (P.L. 114-329)
- Other (procurement and assistance)

“Each head of an agency, or the heads of multiple agencies in cooperation, may carry out a program to award prizes competitively to stimulate innovation that has the potential to advance the mission of the respective agency.”

—COMPETES Act
Our Mandate: Challenge.gov serves as a champion for open innovation in government.

GSA launched Challenge.gov in 2010 to deliver new tools and approaches to assist federal agencies in developing and executing successful competitions.

The Challenge.gov program:

- Offers resources, consultations, and training for the Federal Prizes and Challenges Community, such as:
  - An online Prizes Toolkit, developed in coordination with agency prize leads
  - A network of more than 730 prize practitioners across government
  - Individualized consultation to facilitate the use of public-sector prize competitions
  - In-person and virtual training to over 2,000 federal, state and local employees

- Provides the Challenge.gov crowdsourcing platform
  - A centralized site for federal agencies to post prize competitions
Challenge.gov

GEAR Center Challenge
Scale new solutions to boldly tackle government's most complex management challenges.

Status Update: GSA will host a webinar May 13 to answer questions about the GEAR Center Challenge. Questions can be submitted in advance to GEARCenter@gsa.gov. Register to participate at https://www.eventbrite.com/e/gear-center-challenge-qa-webinar-tickets-6143830701.

Type Of Challenge: Ideas

The Federal government would benefit from better access to a well-integrated set of partners representing diverse industries and sectors to help resolve our toughest management problems. How can the government improve collaboration with leading private sector organizations, state and local governments, researchers, academic institutions, Federal government representatives, and the public? We cannot keep solving problems the same way and expect different results.

What is the GEAR Center?
As described in the Delivering Government Solutions in the 21st Century reform plan, a Government Effectiveness Advanced Research (GEAR) Center could bring together experts in disciplines ranging from economics, to computer science, to design thinking, in order to take a creative, data-driven, and interdisciplinary approach to new possibilities in how citizens and government interact. The GEAR Center can help government modernize to close the gap between government and private-sector services and capabilities. This may also lay the groundwork for where Federal operations and services need to be in five, 10, or 20 years.

What is the Challenge?
This competition challenges "Solvers" (participating individuals, teams or legal entities) to demonstrate the usefulness of a GEAR Center model by describing how this model would tackle one or more of the major challenges facing government described in the current President's Management Agenda (PMA). For example, how should the government approach the introduction of artificial intelligence into operations? How can agencies more efficiently create a clearinghouse for matching government needs to relevant project ideas and researchers? Are there new ways to better connect diverse expertise across geographies with Federal agencies who can put that expertise to work in support of their missions? How can Federal agencies better prepare and recruit the Federal workforce?

Before the government invests in a future GEAR Center, it is important to first explore the feasibility of creating these types of partnerships and if they can produce the kinds of quality approaches to problem solving the government needs. This competition is designed to reward the top models and execution strategies that will demonstrate a use case of a potential GEAR Center project by building on existing similar efforts.

As a first step in formulating the vision for the GEAR Center, in December 2018, the interagency GEAR Team shared the results of the Request for Information, in which over 40 entities submitted ideas for what a GEAR Center could be and how it might operate. Now, our goal is to recognize high-potential GEAR Center models by awarding prizes to those that can propose a workable GEAR Center model through a demonstration of how that model would creatively address one or more PMA-related challenges (pg. 4, 7-9).

What is the Prize?
GSA is offering up to three $300,000 cash prizes to the top solutions proposed, as well as selecting up to five additional winners for public recognition. GSA anticipates that each selected, recognized, or awarded prize solution must demonstrate a feasible solution for the problem described in the different.
Contact us:

- team@challenge.gov
- @challengegov
- Facebook.com/challengegov
- DIGITALGOV

Articles on strategies, policies, use cases, impact and more...

And join our listserv: challenges@listserv.gsa.gov
Challenge Prizes at HRSA’s Maternal and Child Health Bureau
May 14, 2019

Jessie Buerlein, MSW
Senior Public Health Analyst, Office of Policy and Planning
Maternal and Child Health Bureau (MCHB)
Health Resources and Services Administration (HRSA)
HRSA’s Mission

- Improve Access to Quality Health Care and Services
- Strengthen the Health Workforce
- Build Healthy Communities
- Improve Health Equity
- Strengthen HRSA Program Management and Operations
Maternal and Child Health Bureau

Mission:
Improve the health of America’s mothers, children, and families.
Benefits of Prize Competitions

- Energize stakeholders around innovation
- New tool to achieve mission
- Create new collaborations
- Inspire creativity & innovation
- Include a diversity of fields
- Attract new problem solvers
- Complement traditional approaches
Bridging the Word Gap

CHALLENGE
What Is the “Word Gap?”

The Word Gap:

A disparity between the number of words spoken as well as the types of messages conveyed BY ADULTS to lower-income children versus higher-income children by age 3, often affecting preschool and school-readiness, and future academic achievement.
Why Should We Focus on the Word Gap?

• Hearing words and language interactions are the fuel for almost all later cognitive development

• Vocabulary is a key to later literacy, school readiness and overall success, and later life outcomes

• Early gaps in vocabulary are very likely to widen over time without intervention
MCHB Challenges
$300,000 Total for Word Gap

**Phase 1: Design**
7-10 winners
$10,000 to each winner

**Phase 2: Development & Small-Scale Testing**
3-5 winners
$25,000 to each winner

**Phase 3: Scaling**
1 winner
$75,000 grand prize
Bridging the Word Gap

CHALLENGE

BOOTH EXHIBITION AND JUDGE DELIBERATION

September 22, 2016

Health Resources and Services Administration
U.S. Department of Health and Human Services
Phase 3 Teams
Welcome
Welcome to the Háblame Bebé app. This app teaches you how to give Language Nutrition to your baby to maximize his or her vocabulary growth, promote bilingualism, and help him or her be ready for school.

Developmental milestones
Use the app to track your baby’s developmental milestones. You can show your baby’s developmental milestone checklist to your nurse, pediatrician, or speech-language therapist.

Add words
Once your baby begins to speak, track the words that he or she is saying in the bilingual registry -- in both Spanish and English.

Learn about Language Nutrition
Conversation starters from many different life activities are provided to help you start talking more! See if you can do at least five every day.
HRSA Engagement Beyond Demo Day

- Facilitate connections
- Foster partnerships
- Ensure access to target audiences
Lessons Learned

• Challenge structure allowed for proliferation of solutions versus one final intervention
• Iterative process led to more user feedback and improved solutions
• Challenge winners represented diverse strengths and weaknesses; and created their own learning community
• Advisors and Federal Judges were key to Challenge success, and were non-monetary incentives for applicants
• Within government, challenges present multiple challenges
MCHB Grand Challenges

Remote Pregnancy Monitoring

Care Coordination for CSHCN

Preventing Childhood Obesity

Addressing Opioid Use Disorder in Pregnant Women and New Moms
Preventing Childhood Obesity

Challenge

• To empower low-income families to achieve and sustain healthy eating practices and healthy lifestyles.

Goal

• Make technology work for the family as a unit within the reality of their larger community environment.
Preventing Childhood Obesity
Phase 1 Winners

ALASKA NATIVE TRIBAL HEALTH CONSORTIUM

University of California
San Francisco
advancing health worldwide

University of Arkansas for Medical Sciences

American Heart Association

Geisinger

UNC GREENSBORO

Henry Ford Health System

Children’s Hospital of Philadelphia

HRSA
Maternal & Child Health

Alliance Chicago
Innovating for better health
Care Coordination for Children with Special Health Care Needs

Challenge
- To improve the quality of care, enhance family engagement, & positively impact health outcomes for families CSHCN.

Goal
- To use health information technology to organize data from different sources into one cohesive patient-centered record.
Care Coordination for CSHCN

Phase 1 Winners
Addressing Opioid Use Disorder in Pregnant Women and New Moms

**Challenge**

- To improve access to quality health care for pregnant & new mothers struggling with opioid use disorder.

**Goal**

- To use technology to provide access to treatment & recovery services to keep women and their children healthy and substance use disorder-free.
Addressing Opioid Use Disorder in Pregnant Women & New Moms: Phase 1 Winners
Remote Pregnancy Monitoring

**Challenge**

- Help providers remotely monitor the health of pregnant women.

**Goal**

- For technology to allow women to experience the benefits of an ongoing relationship with a health-care provider.
Remote Pregnancy Monitoring: Phase 1 Winners

- TERM
- BABYSCRIPTS
- MaMA: The Maternal Monitoring Application
- AUGUSTA UNIVERSITY
- Rural Mamas
- Connect
- bloomlife
- Stretch Med
- PreTEL

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“I wish more of the Federal Government were like this. In contrast to this experience, I’ve submitted super long grant applications with bizarre formatting requirements. The result is normally an unnecessarily complex explanation for what we’re working on. Due to their sheer length, I now disregard most such programs. In contrast, I have nothing but positive things to say about this experience. **If the government really wants to attract innovation from places like Silicon Valley this is how you should do it.**”

“My perception of HRSA and the U.S. Department of Health and Human Services has changed because I had the opportunity to meet the people working in these agencies. I see how much they care about babies and families in America. I had the opportunity to see firsthand their passion for providing the best start for the families they serve. It inspired me to share my app with as many families as possible.”
Demo Day will take place on September 12-13, 2019 at HRSA HQ.

More details to come:
https://mchbgrandchallenges.hrsa.gov/
@mchbgrandchallenges
Contact Information

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To learn more about our agency, visit

www.HRSA.gov

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Coming Up...

2 p.m. ET, June 11:

Federal Crowdsourcing Webinar Series, Episode 3: The Opportunity Project
A Conversation with Drew Zachary, director of The Opportunity Project and co-director of Census Open Innovation Labs, U.S. Census Bureau

2 p.m. ET, July 9:

Federal Crowdsourcing Webinar Series, Episode 4: Open Opportunities
Inside Open Opportunities with Lisa Nelson, engagement manager for USAJOBS and director of strategic planning, Open Opportunities, Office of Personnel and Management

2 p.m. ET, Aug. 13:

Federal Crowdsourcing Webinar Series, Episode 5: History by the People
A Talk with Lauren Algee, senior innovation specialist with the Library of Congress Labs
Questions?

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- DIGITALGOV - Articles on strategies, policies, use cases, impact and more...

And join our listserv: challenges@listserv.gsa.gov