MATHEMATICA Policy Research



SELECTED OFFERINGS

- Bayesian methods
- Business intelligence
- Data governance
- Data linkage
- Data quality
- Data validation
- Data visualization
- Data warehousing
- Machine learning
- Modeling and simulations
- Performance analysis and scoring
- Predictive analytics
- Program integrity
- Quality measures
- Rapid-cycle experimentation
- Risk adjustment

Advanced Analytics for Government Agencies

Mathematica Policy Research offers a full suite of advanced analytics services that maximize the transformative power of data and provide the best possible solutions to today's most pressing policy issues. Backed by decades of experience in rigorous research and data collection, we bring together state-of-the-art methods with program and policy expertise to meet the strategic goals of our clients.

Our data analytics services provide clients with objective, high quality information that helps them make effective operational decisions. Our analytics services are not just a one-size-fits-all software package. We work in close partnership with government agencies to harness the power of their data and to develop the analytic tools that are right for them.

Our deep bench of program and policy experts, data scientists, systems experts, and statisticians design solutions with our clients' best interests in mind.

Mathematica

A Leader in Policy Research & Advanced Data Analytics



Our Pillars

- Program & policy experts
- Data science & statistics
- Systems & technology
- Data & program management
- Visualization

Our Foundation

- Subject-matter expertise
- Advanced solutions

FEBRUARY 2016

SELECTED CLIENTS

- U.S. Department of Health and Human **Services**
- Center for Consumer Information and Insurance Oversight
- Center for Medicaid and CHIP Services
- Center for Medicare & **Medicaid Innovation**
- Social Security Administration
- U.S. Department of Education
- U.S. Department of Agriculture
- U.S. Department of Labor
- U.S. Department of Veterans Affairs
- U.S. Department of Defense
- National Science Foundation
- State Medicaid and public health
- State and local education and workforce agencies

PROGRAM AND POLICY EXPERTS

Mathematica's program and policy experts include nationally acclaimed researchers and former program administrators who understand the daily operational challenges faced by public agencies. We leverage this expertise to create cutting-edge analytic tools designed to help programs achieve their policy goals.

Mathematica helps agencies to advance their mission through rapid-cycle experimentation, microsimulation models that predict the cost and distributional effects of changes in nutrition policy, and the development of measures that can improve services.

DATA SCIENCE AND STATISTICS

Building on our long-standing leadership in the collection, processing, maintenance, and analysis of primary, secondary, and administrative data, our data science and statistics capabilities help public agencies develop measures to manage performance, assess quality, predict the impact of policy changes, detect improper payments, identify ways to reduce costs, maintain program integrity, and use data with confidence for program monitoring and decision making. In this capacity, we offer expertise in advanced analytics methodologies, including data mining, predictive modeling, text analytics, data integration, data validation, data visualization, Bayesian methods, and machine learning.

SYSTEMS AND TECHNOLOGY

Mathematica's systems and technology staff are critical to the development of successful analytics solutions. They have worked with public agencies for decades, so they know the strengths and vulnerabilities of agency data and systems. When combined with our state-ofthe-art IT capabilities, this knowledge yields solutions that are efficient and effective. From identifying project objectives to developing business requirements to writing specifications and creating sophisticated models, we develop solutions architectures that are tailored to the unique requirements of each client.

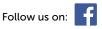
DATA AND PROGRAM MANAGEMENT

We work closely with our clients to protect the integrity of their data and strengthen the reliability of their programs. Our data management services include data profiling and governance, as well as system testing. We make data more powerful through advanced linking strategies and more accurate by conducting independent verification and validation of our clients' systems.

VISUALIZATION

From interactive dashboards and scorecards to network maps and representations of performance indicators, our data visualization experts can simplify even the most complex analytics. Our visual tools help program administrators "tunnel in" to the right level of detail at the right time.

For more information, please contact Scott Cody, Managing Director, Data Analytics Phone: (617) 715-6937 Email: scody@mathematica-mpr.com Web: mathematica-mpr.com/our-focusareas/data-analytics







to visit our website.