Data Transparency Town Hall meeting

September 26, 2014

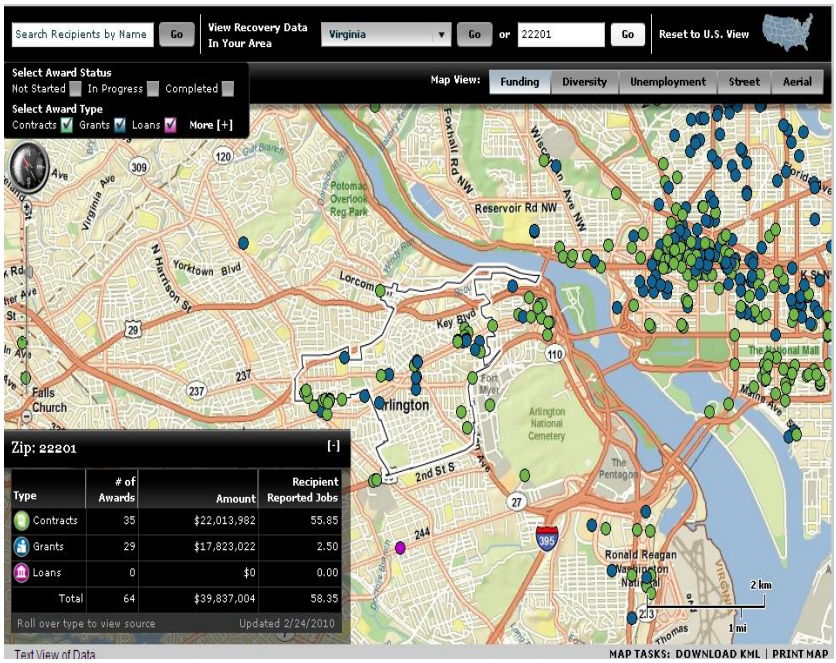
Esri public comments

Presenter: Owen Evans, Esri

Esri, the world leading GIS software company, and would like to address the questions posed under question #3:

Technical Implementation: Industry Perspective. Goal: Demonstrate what is possible from a technology perspective.

To address this goal, we wish to provide an internet based demonstration to show how the federal spending data could and should be visualized, analyzed and integrated with other data to derive better understanding and inform decision making. These capabilities can make the data easily accessible to government agencies and the public through a simple browser interface. We intend to show what is possible with the latest spatial analytical and visualization tools. Esri is able to build on past experience gained in implementing the geospatial mapping and analysis compatibilities for the www.recovery.gov website. This will be best demonstrated live, but I have inserted below written comments and several representative screenshot graphics to illustrate the type of capabilities we intend to demonstrate.



Making the Most of the Data Act

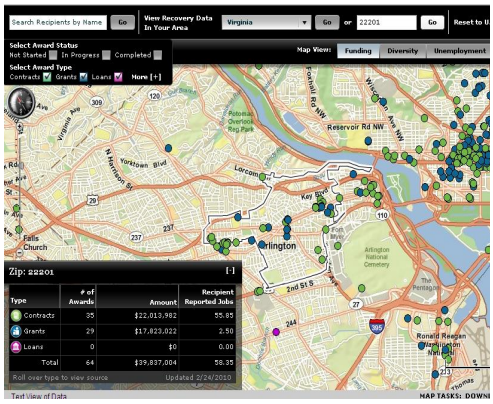
If a picture is worth a thousand words, how much is a map of government spending worth? Fortunately the cost to create it is minimal if the data collection requirements of the recently passed DATA Act, include adequate reporting of location information, specifically addresses for contract recipient and place of performance. Once this information is collected, it can be mapped (geocoded) once and served dynamically on the web for all to use. The USASpending database can be map-enabled with open APIs for easy, understandable exploration and broad data sharing if implemented properly. The Recovery Board's www.Recovery.gov website has demonstrated the power of making government spending data available as an interactive map on the web and they have proven the process to accomplish it. The results have been impressive; improved transparency, reduced fraud, waste and abuse, and energized and empowered citizenry. The Data Act can now deliver the same for all government spending.

Maps Make Data Understandable and Actionable

This administration has lead a powerful charge to open up government data through open data policies and continues to work on implementation practices to achieve this mission with proper implementation. With the proliferation of smart phones, tablets and web apps in our increasingly connected world, the government must meet new expectations when delivering data and tools. Citizens expect to be able to search and find data easily and have it makes sense. If the question is tracking spending data, they want to see WHERE the money is going, not just to which companies but to what locations, what communities. Citizens routinely use maps on the web to navigate to places and explore and understand data and relationships. Citizens will expect to see federal spending data on a searchable map too. And to deliver this, good location information must be a required submission under the Data Act, for both company location and place of performance. Ready access to a vast array of public data coupled with intuitive map based web tools, enables both citizens and government to create and share a common picture of government spending and operations.

Where is the Money Going?

With a dynamic Web map, the United States Recovery Accountability and Transparency Board's Recovery.gov Web site shows details about how American Recovery and Reinvestment Act of 2009 (ARRA) funds are being spent.



Agency- and recipient-reported information includes award type, status, and amounts. The recovery.gov map gallery allows anyone to explore where money gets spent in the context of related 'needs' data. These map overlay tools make it easier to assess the effectiveness or appropriateness of government spending. For example, when transportation spending is viewed on top of a traffic congestion map or education funding with school performance one can begin to ask questions and evaluate if the money is going to the right places.

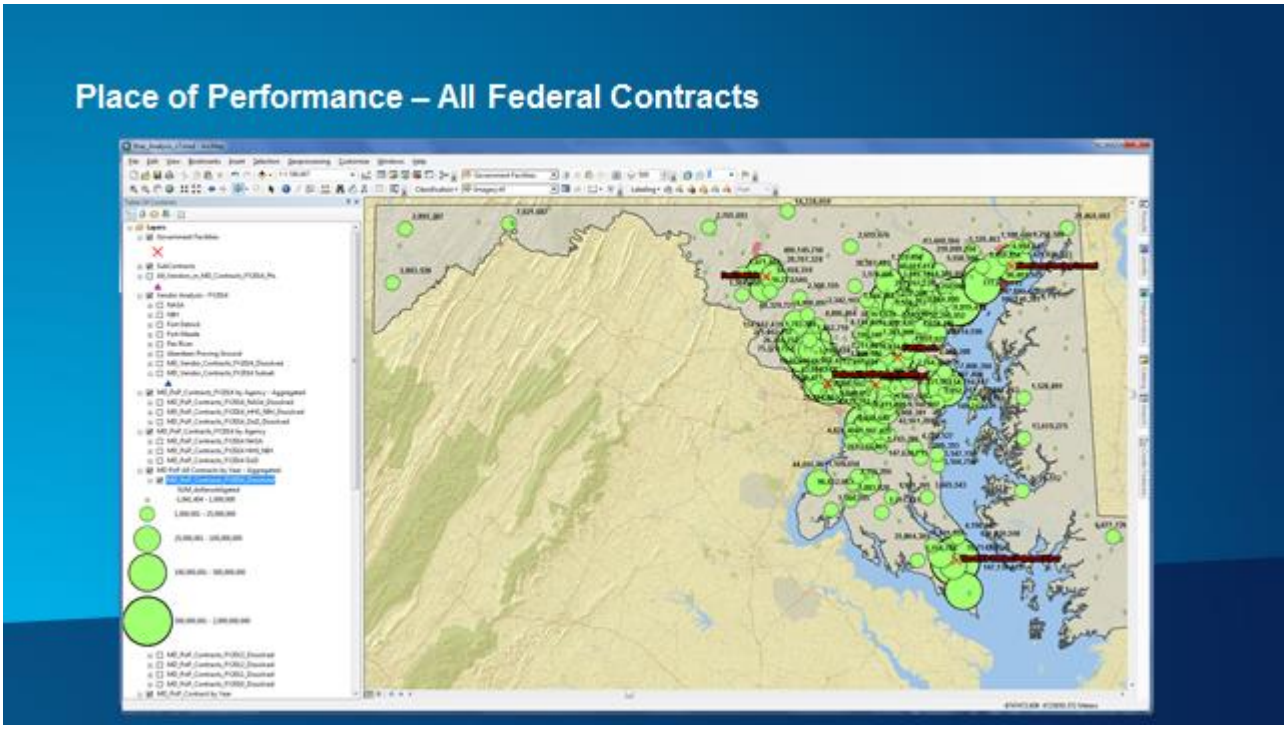
The true value of opening government data lies in how agencies and the public put it to use. Providing access to data is an essential first step, but making sure that the right data is being collected and sharing

it in a format that is actionable is the key to fostering a new level of open-government transparency and efficiency. Geographic information system (GIS) technology unlocks the potential of open data by bringing it into an intuitive spatial context, enabling individuals and government to better understand the data and issues, drive decision making and take informed action.

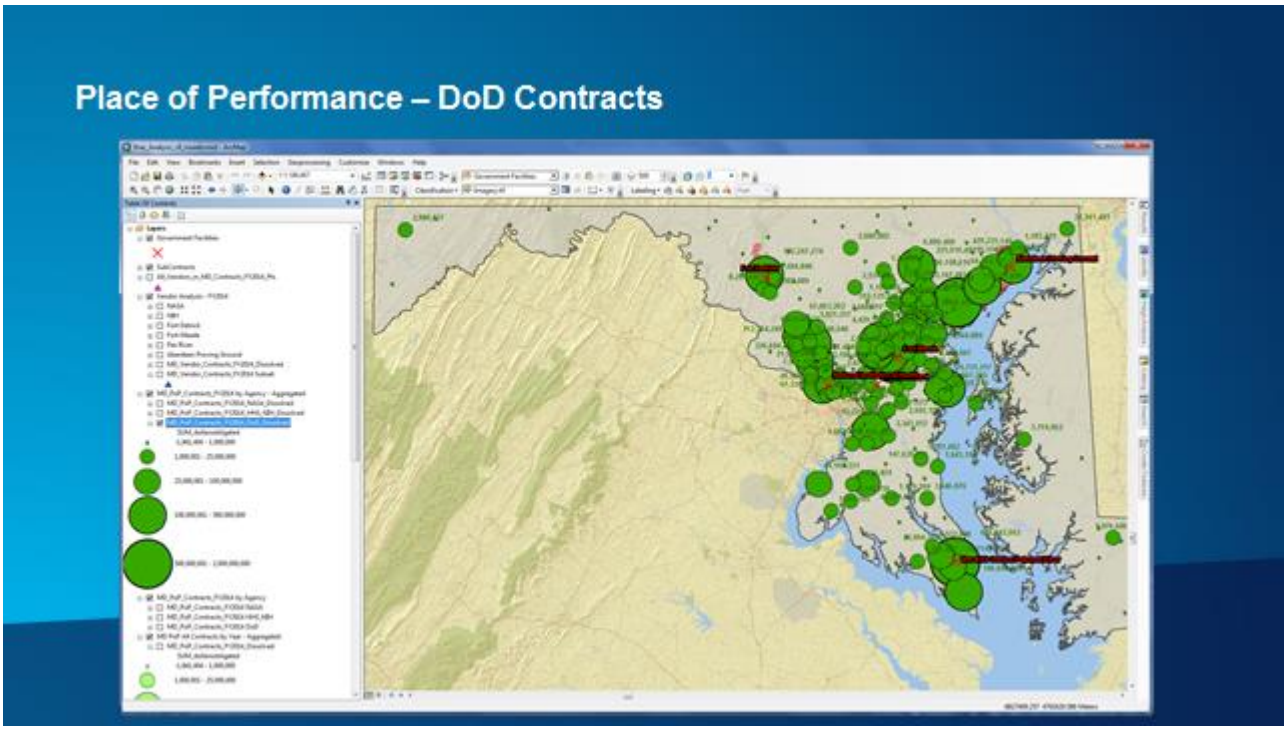
"Maps enable an immediate understanding of the patterns and relationships the information portrays." – Esri President Jack Dangermond

Representative maps, graphics and visualizations

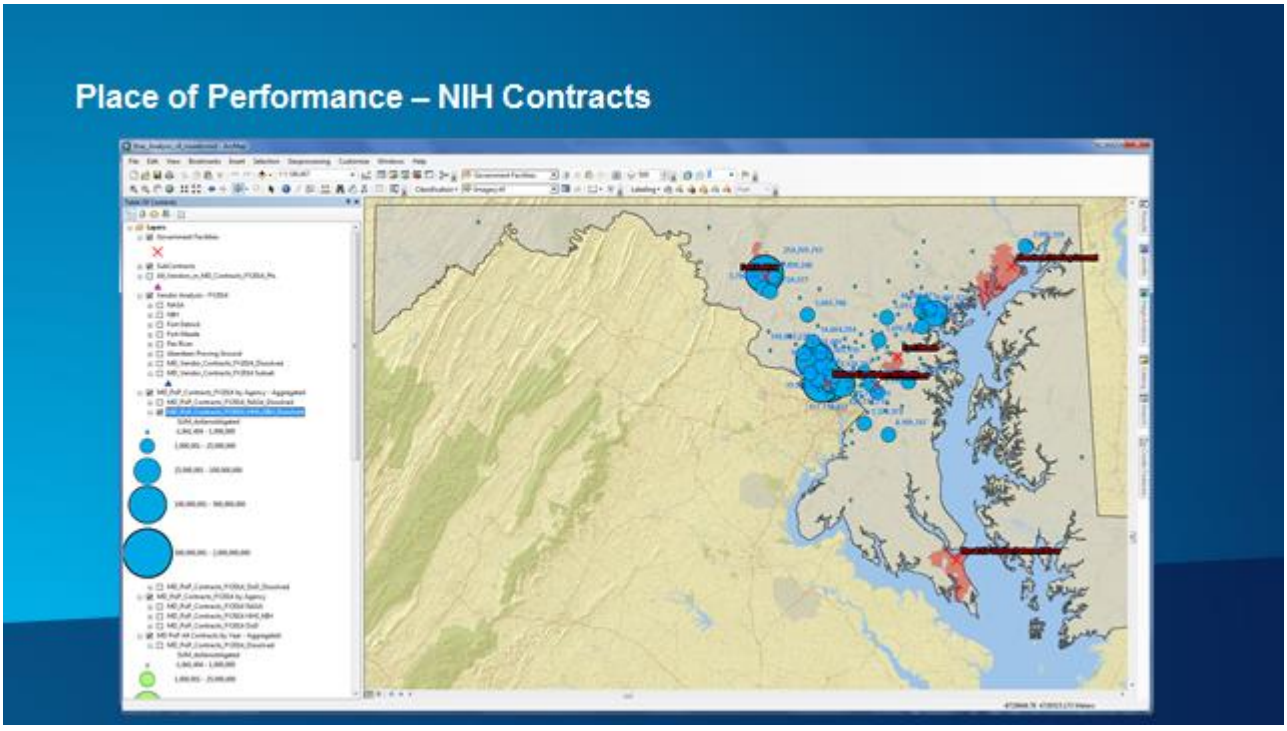
Some examples of visual presentation, interrogating the data and basic spatial analysis of USASpending data, looking at federal dollars going to the state of Maryland – all federal contracts



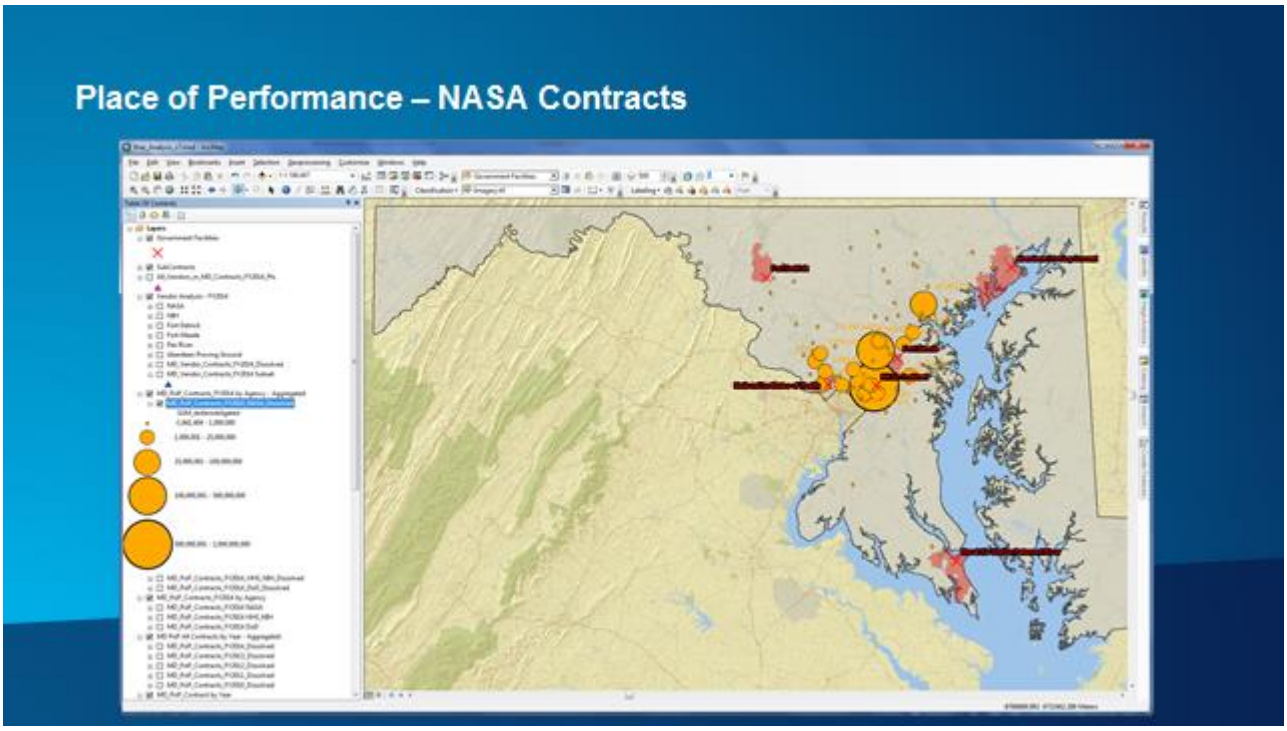
DoD contracts with place of performance reported in State of Maryland



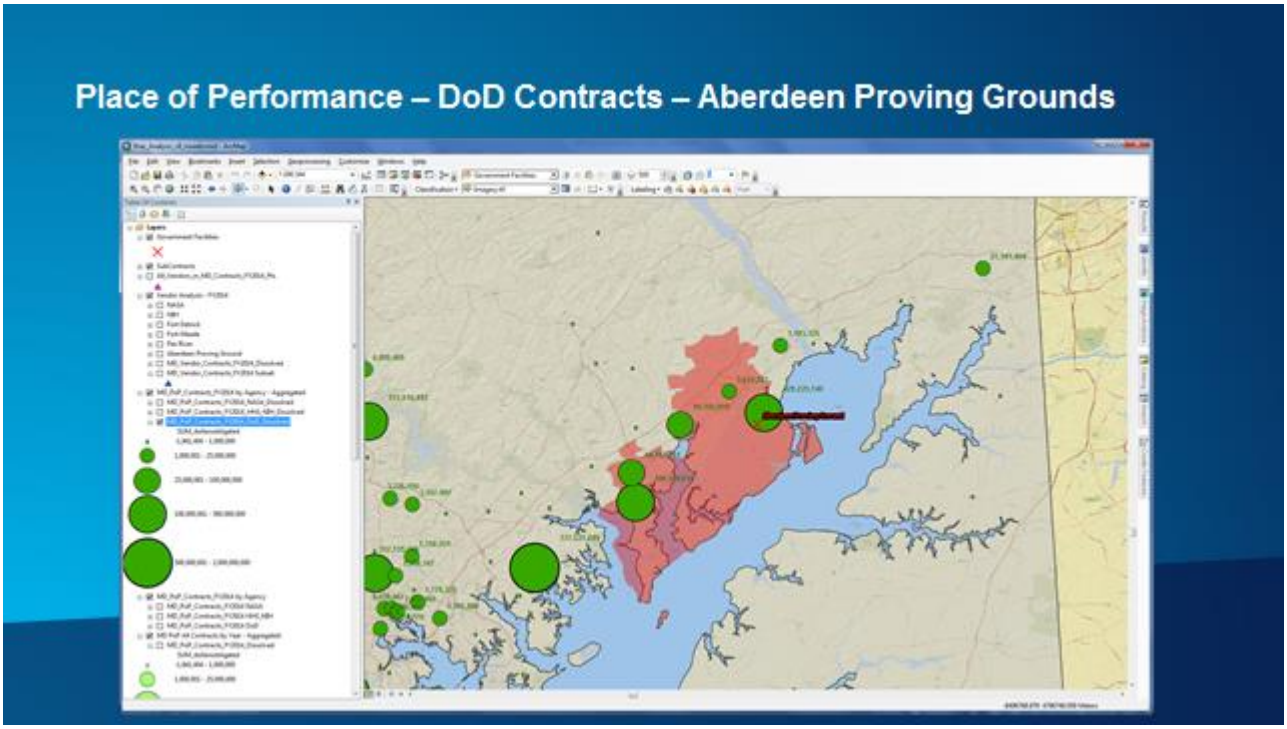
NIH contracts with place of performance reported in Maryland



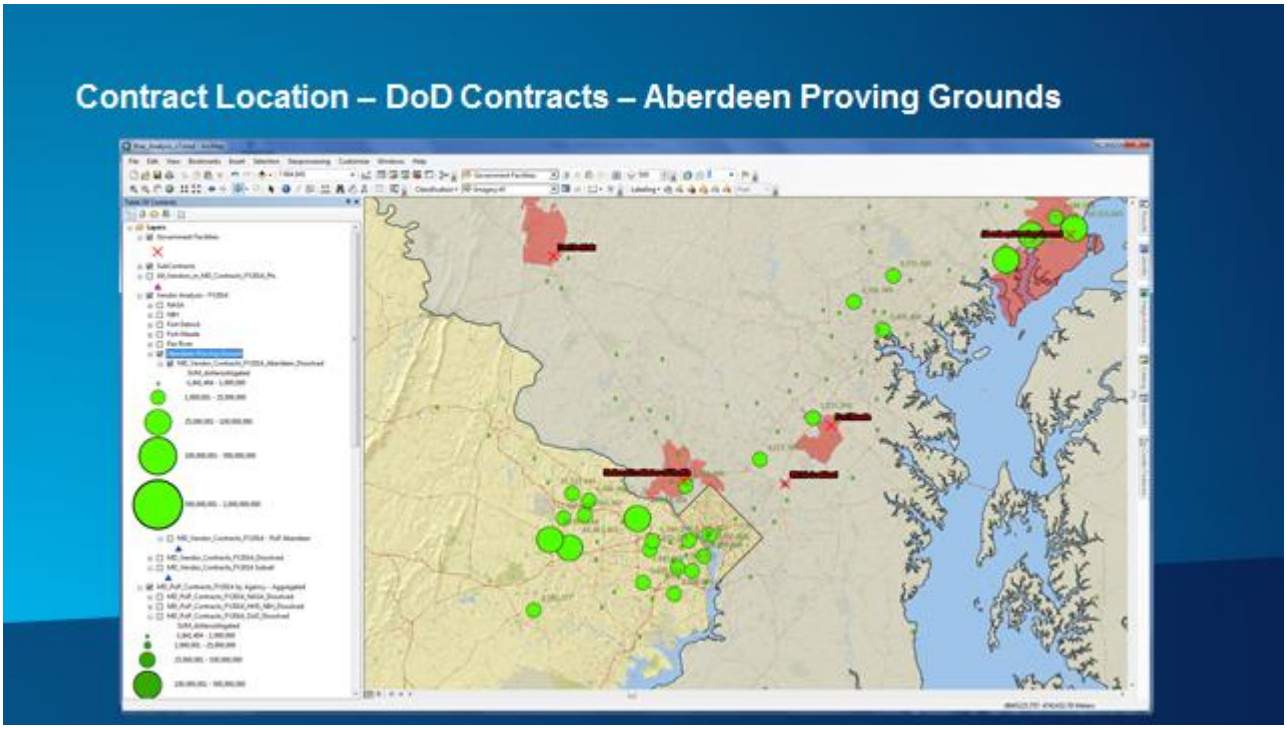
NASA contracts with place of performance reported in state of Maryland



Focusing in on Aberdeen Proving Ground – Dod Contracts – place of performance

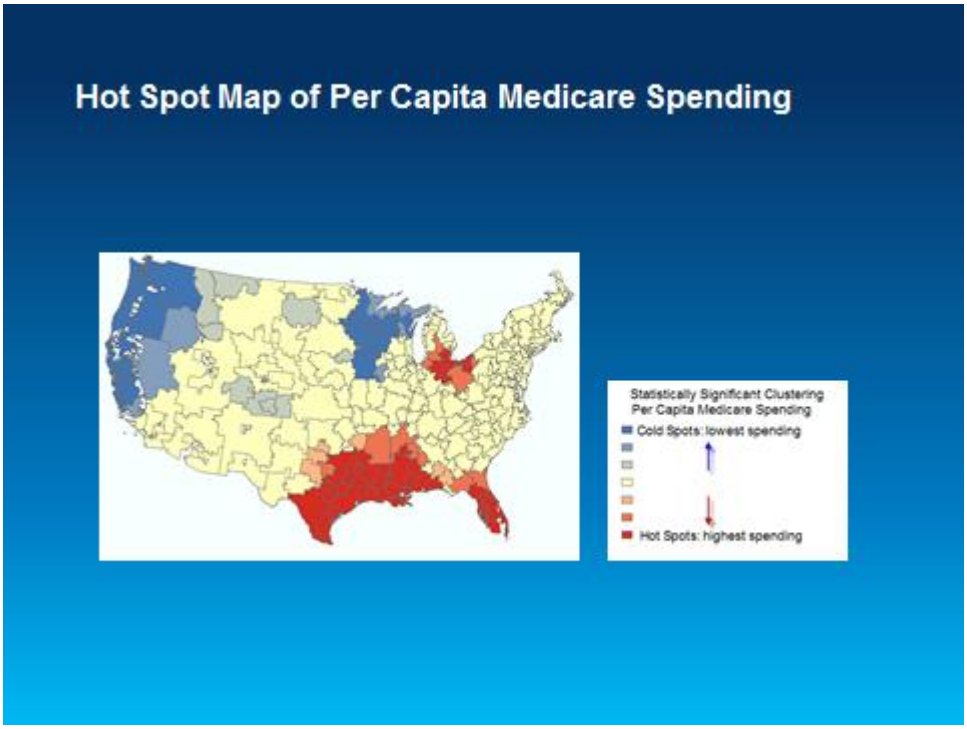


Focusing in on Aberdeen Proving Ground – DoD Contracts – reported contract location

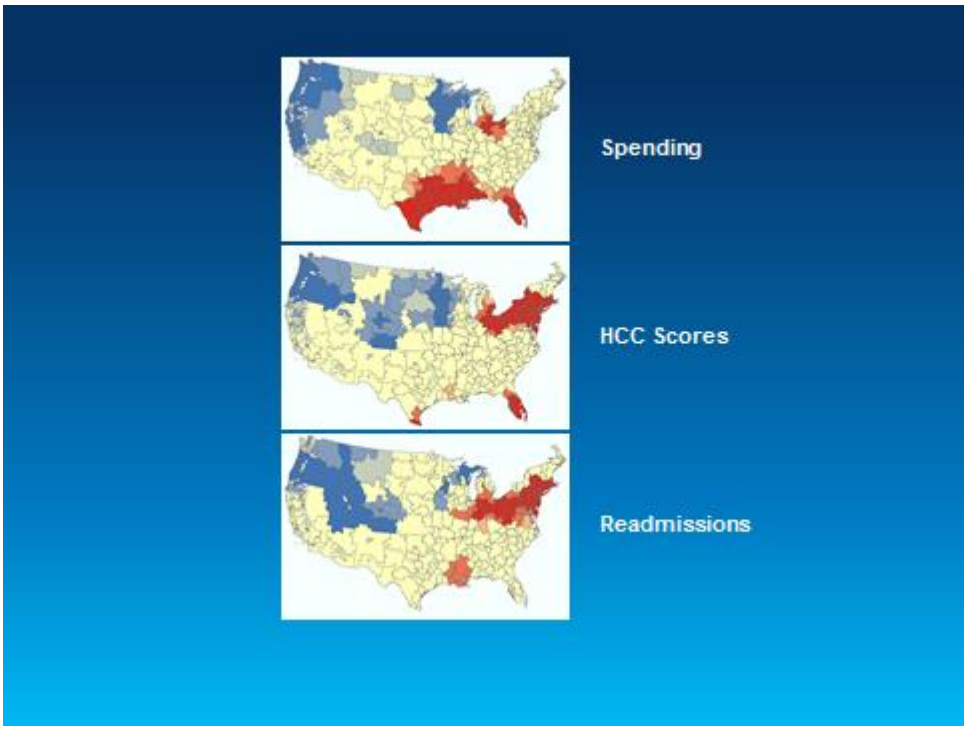


Focusing in on Aberdeen Proving Ground – DoD Contracts – contract locations with reported place of performance Aberdeen

Good location information will also enable mapping of spending hot spots and cool spots.



Spending hot spots can then be compared to additional data for deeper understanding, in this case comparing Medicare spending to indicators of quality of health (HCC) and quality of care (readmission). Comparative analysis improves understanding of complex issues and facilitates data driven decisions



Total of FEMA grants by state 2000 – 2011

FEMA grants year by year animation, 2000 - 2011