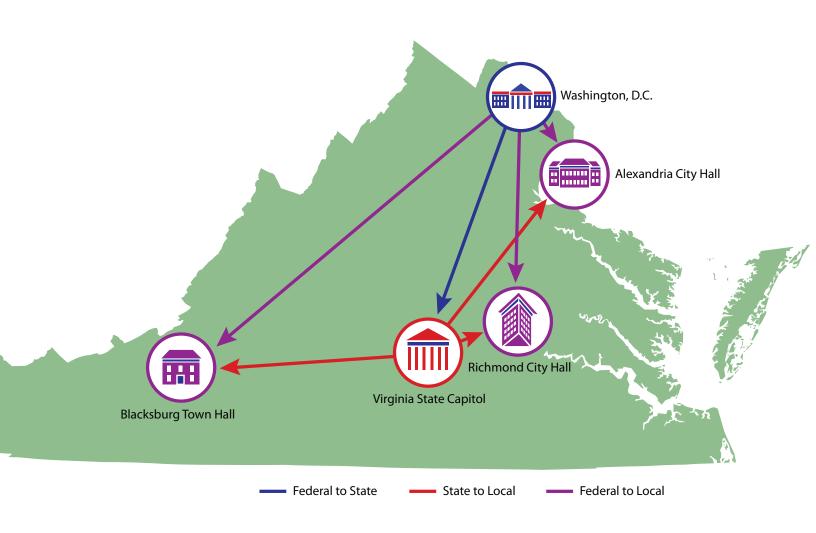


Virginia's Implementation of the American Recovery and Reinvestment Act:

Forging a New Intergovernmental Partnership



Anne Khademian Sang Choi

Virginia Tech

Virginia's Implementation of the American Recovery and Reinvestment Act: Forging a New Intergovernmental Partnership

Anne Khademian Sang Choi Virginia Tech



Table of Contents

Foreword	4
Introduction	6
Overview and Key RecommendationsImage: Commendation of the co	7 0 3 7
Three Virginia Municipalities and Three Distinct ARRA Management Strategies2.2Management Strategies: Three Dimensions2.2Alexandria: Incident Command System Strategy2.3Richmond: IT-Driven Strategy3.2Blacksburg: Partnership-Leveraged Strategy3.3	1 3 2
Conclusions	1
References42	2
About the Authors	5
Key Contact Information	7

Foreword

On behalf of the IBM Center for The Business of Government, we are pleased to present this report, *Virginia's Implementation of the American Recovery and Reinvestment Act: Forging a New Intergovernmental Partnership,* by Anne Khademian and Sang Choi of Virginia Tech.

In 2009, the American Recovery and Reinvestment Act (ARRA) provided a one-time boost in spending to state and local governments of more than \$275 billion which was distributed via 65 different federal programs (both new programs and some already in existence). For context, *total* federal aid to states and localities in the preceding year (2008) was \$461 billion. The funds were intended to help bridge the immediate fiscal problems created by the Great Recession. ARRA funds were accompanied by a new, centralized system of strict financial accountability and performance reporting, with frequent reporting requirements. These new requirements, as well as the rapid implementation time-frame required by ARRA, created an enormous implementation challenge for all the participants in our federal-state-local-non-profit intergovernmental system.

This report is the first in a series examining the implementation of ARRA, the largest, fastest, most far-reaching counter-cyclical spending program ever undertaken by the federal government. Its successful implementation to date has resulted in GAO reports with titles like "Federal, State, and Local Auditors Reported *No* Major Issues." (Italics added.)

While the Recovery Act is a temporary program, its implementation and its centralized requirements may have potential long-term implications. The authors examined the implementation of ARRA in three localities in the Commonwealth of Virginia: Alexandria, Blacksburg, and Richmond. Specifically, the authors examined the impact of the speed at which the localities implemented their funding; how they addressed increased information demands and increased frequency of reporting; how they used risk management as a strategic lens in their decision-making; and how they increased their collaborative efforts with both state and federal partners.



Jonathan D. Breul



David Edwards

www.businessofgovernment.org

Based on an analysis of the implementation of ARRA grants in the Commonwealth of Virginia, the report offers a series of recommendations to improve the federal grants process in the future. The authors conclude that the ARRA implementation model may also serve as a new benchmark for rapid information sharing. In fact, Congress seems pleased enough with the data collection approaches used in the Recovery Act to be considering expanding the same type of reporting requirements to all federal spending.

We hope this report will be useful to government executives at the federal, state, and local level as they work together to develop a new intergovernmental framework in the years ahead.

Jonathan D. Breul Executive Director

matha D. Sul

IBM Center for The Business of Government jonathan.d.breul@us.ibm.com

David Edwards
Associate Partner

State and Local Government Strategies IBM Global Business Services

david.edwards@us.ibm.com

Introduction

The American Recovery and Reinvestment Act (ARRA) established ambitious goals for economic recovery. The legislation also set new directions for the relationship between federal and local governments with its requirements for

- Speed
- Increased information for accountability, transparency, and performance
- Risk management
- Collaboration in the implementation of federal grants, contracts, and loans

While studies have examined the economic impact of ARRA and the federal and state challenges in managing its requirements, there is less information about local governments' efforts to manage implementation of the act and about the impact of new legislative requirements on the intergovernmental partnership. This report examines the intergovernmental requirements for the legislation, and highlights the implementation of ARRA in three municipalities in Virginia:

- Alexandria, a historic town located in the national capital region
- Richmond, the capital city of the Commonwealth of Virginia
- Blacksburg, a dynamic small town in southern Virginia, home to Virginia Polytechnic Institute and State University (Virginia Tech)

Virginia's experience with ARRA demonstrates that the implementation effort has affected the long-term intergovernmental partnership by bolstering local government use of risk management and fostering stronger communication and more collaboration between the federal government and localities, prompted in large part by the increased information requirements.

Federal requirements for ARRA are examined in the first section, which offers recommendations for federal and local managers to advance the positive trends fostered by ARRA that can improve intergovernmental policy development and implementation. Three case studies are presented in the second section.

Overview and Key Recommendations

The paradox of ARRA is that achievement of these compelling national goals rests on the shoulders of the thousands of state and local governments, nonprofits, and private firms who would be assigned the primary implementation roles for ARRA programs. The tensions that will unfold between national policy ambitions and noncentralized implementation regimes are as old as the republic. However, the consequences of this tension have rarely been so immediately apparent and politically consequential (Posner).

Implementation of the American Recovery and Reinvestment Act (ARRA) relied upon an intergovernmental partnership of historic scale intended to rescue the nation's economy, protect its most vulnerable citizens, preserve public services, and establish a foundation for economic recovery (Posner 2010; GAO, April 2009). The legislative requirements for speed of implementation, increased information demands, risk management, and collaboration have also altered the federal, local, and state government relationships that frame the intergovernmental partnership. Propelled by the stress of economic and fiscal crisis and motivated to meet legislative requirements, local governments have made changes in managing their grants process in particular and in their working relationship with the federal government in general.

This report focuses on ARRA's implementation in three Virginia municipalities and examines how ARRA's legislative requirements are fostering a new intergovernmental partnership. These three cities are Alexandria, a historic town located in the national capital region; Richmond, the capital city of the Commonwealth of Virginia; and Blacksburg, a dynamic small town in southern Virginia and home to Virginia Tech. The report describes the lessons learned for each of the three cases, and provides recommendations for federal and local government managers to better manage the new intergovernmental partnership.

ARRA Background and Timeline

On February 17, 2009, President Obama signed into law the American Recovery and Reinvestment Act (ARRA, Public Law 111-5). ARRA was aimed at bolstering a staggering economy in the wake of the biggest economic crisis since the Great Depression. ARRA legislation followed a series of landmark laws the previous year (2008) to address collapsing housing markets, unemployment, and an increasingly weak auto manufacturing sector (Table 1). In February 2008, one year before passage of ARRA, President Bush signed the Economic Stimulus Act, which provided tax rebates and incentives for business investment and made it easier for banks to sell higher risk loans (low down payments, large loans, and adjustable interest rates) to Freddie Mac or Fannie Mae. The Housing and Economic Recovery Act, passed in July of 2008, was aimed at helping homeowners in danger of foreclosure to refinance their homes by providing insurance to lenders for the refinancing. By September 2008, however, Fannie Mae and Freddie Mac were placed into government conservatorship. In October 2008, Congress passed the Troubled Asset Relief Program (TARP) as part of the Emergency Economic

Stabilization Act, allowing the U.S. Department of the Treasury to purchase or insure troubled assets on financial institutions' balance sheets in an effort to stabilize financial markets. By February 2009, unemployment reached 8.1%, the highest level in 25 years. Foreclosures for the month of February 2009 increased by 30% from the previous year, and Realty Trac reported that one in every 440 homes in the United States received a foreclosure notice that month (Realty Trac 2009). Between February 2008 and February 2009, bankruptcy filings increased by 29.9% (Lawless 2009). U.S. auto sales reached a 27-year low in January 2009.

Table 1: Timeline Pre- and Post-ARRA

2008		
February 13, 2008	As the financial crisis deepens, President Bush signs the Economic Stimulus Act of 2008	
July 30, 2008	President Bush signs into law the Housing and Economic Recovery Act of 2008	
September 7, 2008	Fannie Mae and Freddie Mac placed into government conservatorship by the Federal Housing Finance Agency	
October 3, 2008	President Bush signs legislation establishing the Troubled Asset Relief Program (through the Emergency Economic Stabilization Act) authorizing the Treasury Department to purchase or insure up to \$700 billion in troubled assets	
2009		
January 20, 2009	Inauguration of President Obama	
February 13, 2009	Both the House and Senate pass the American Recovery and Reinvestment Act (ARRA)	
February 13, 2009	Deadline for federal departments and agencies receiving ARRA funding to name a senior official responsible for coordinating recovery-related efforts across the agency	
February 17, 2009	ARRA signed into law by President Obama	
May 17, 2009	Deadline for federal agency and program plans to be posted to Recovery.gov	
October 1 – 10, 2009	Recipients of ARRA funds submit their first quarterly report	
October 30, 2009	Recipient grant and loan data published on Recovery.gov (data reported at the end of each quarter)	

The dire economic conditions hit local and state governments particularly hard. Unemployment and distressed housing markets resulted in lower receipts from income and property taxes and increased expenditures on unemployment insurance, benefits to unemployed workers, and other services (Kumar and Nakamura 2008; Maguire 2011). Following President Obama's election in November 2008, efforts were underway to craft a stimulus package that could be passed in the first days of the new Congress. The January 2009 meeting of the U.S. Conference of Mayors was therefore an opportunity for mayors across the country to reinforce their city or town's priorities with their members of Congress and the incoming administration, just before the February passage of ARRA. Mayors wanted the White House and Congress to understand the need for programs that would restart the economy and create jobs. Building on these expectations and fundamental needs, ARRA established ambitious economic goals:

- To preserve and create jobs and promote economic recovery
- To assist those most affected by the recession
- To provide investments to increase economic efficiency by spurring technological advances in science and health

- To invest in transportation, environmental protection, and other infrastructure that will provide long-term economic benefits
- To stabilize state and local government budgets, in order to minimize and avoid reductions in essential services and counterproductive state and local tax increases

These goals were pursued through the following three components of ARRA:

- Awarding of federal grants (bolstering existing grant programs and creating new programs), federal contracts, and loans for states and localities (totaling \$275 billion)
- A broad range of tax credits (\$288 billion)
- Increased spending on entitlements, unemployment support, education, and health (\$224 billion)

As of March 31, 2011, based on the most recent data available from the ARRA website Recovery.gov, the federal government has paid out a total of \$647 billion consisting of tax benefits (\$259.9 billion), entitlements (\$183.6 billion), and contracts, grants, and loans (\$204 billion). The Recovery Act allocates \$275 billion total to states and localities, a significant portion of which is in the form of contracts, loans, and grants. The GAO reports that ARRA allocations to state and local governments affected "about 50 state formula and discretionary grants as well as about 15 entitlement and other countercyclical programs" (GAO 2010). Table 2, provided by the GAO (2010c) shows the actual composition of outlays to states and localities for the years 2009, 2010, 2011, estimated outlays for the years 2010 and 2011, and a composite estimated projection of 2012–2019, with health, education, and training outlays leading in the first three years, followed by accelerated transportation spending in 2011 and beyond. (Because the 2012-2019 figures are projections, the total for Table 2 adds to \$281.9 billion.)

Table 2: Composition of Recovery Act Funding to State Governments and Localities

Actual		Estimated		
	2009	2010	2011	2012–2019
Health	60	39	17	1
Education and Training	28	37	46	8
Transportation	6	9	14	40
Income security	3	7	10	21
Community development	3	5	7	13
Energy & environment	1	3	7	17
Total	100%	100%	100%	100%
Total dollars in billions	\$52.9	\$103.7	\$63.4	\$61.9

Source: GAO 2010c, based upon GAO analysis of CBO, FFIS, and Recovery.gov data

Although the financial situation in some localities has recently improved, fiscal conditions for many local governments are projected to worsen in coming years due to a long-term structural imbalance—a serious financial mismatch between revenues and expenditures. Over the past decade, local governments have faced steadily rising costs for health care, public safety, employment, education, and social welfare (Behn & Keating 2004; Boyd 2009; Walker 2006; Kincaid 2006; GAO 2010d) in a time of declining tax revenues. Local government debts are likely to soar to a record level. The GAO (2010d) projects state and local government operating deficits of about \$124 billion for 2011, with a two-year projected operating deficit of approximately \$163 billion for 2010 and 2011 combined. The Center on Budget and Policy Priorities notes that the District of Columbia and as many as 44 states are predicting budget

shortfalls for 2012 (McNichol, Oliff and Johnson 2011). On a state-by-state basis, projected budget shortfalls for 2012 range from a high of 45% of the FY 2011 budget for the state of Nevada to a low of 2% for the state of Indiana.

Virginia and ARRA

Implementation of ARRA presented a number of challenges for Virginia. Meeting federal expectations for speed of implementation, increased information to enhance transparency and accountability, risk management, and collaboration were central to the planning and efforts to implement the Act. Transparency of reporting to enhance accountability was particularly important for a Democratic governor facing a Republican-controlled state house of delegates concerned that ARRA money could be used to curry political favor across the state.

How the Study was Conducted

Managers and staff involved in implementing ARRA were interviewed in each of the three municipalities and in the Virginia state government. Interviews focused on the implementation process from planning and preparation for the ARRA to the rollout, the first reporting cycle, and beyond. Interviewees described how the ARRA grants process differed from traditional practices, how ARRA may or may not have changed city grants management practices overall, and how relationships with the federal and state governments may have changed.

In addition to the interviews, websites of the three municipalities and Virginia's ARRA webpage were studied, and extensive information was drawn from the federal webpage, Recovery.gov; OMB guidance and correspondence with federal agencies and ARRA recipients was reviewed, as were GAO reports on the ARRA implementation effort; and local newspapers were searched in each municipality for information on the ARRA implementation process.

The following individuals were interviewed for this report.

City of Alexandria

William Euille, Mayor
Tom Gates, Assistant City Manager
Bernard Caton, Legislative Director
Ryan Touhill, Budget and Management Analyst
Cassandria Menefee, Analyst, Finance
Department

Malik Williams, Fiscal Officer II and Grants
Manager, Transportation and Environmental
Services Department

City of Richmond

Gurdeep Bhatia, Head, Applications Solutions Division, Department of Information Technology

Subhashini Narra, Systems Developer Lead,
Department of Information Technology
Chris Johnston, City Grants Coordinator
Mike Wallace, Public Information Manager,
Office of Press Secretary to the Mayor
Albert Stokes, Grants Manager for Richmond
City Police Department

Alicia Zatcoff, Sustainability Manager, Public Utilities

Town of Blacksburg

Steve Ross, Deputy Town Manager Susan Kaiser, Director of Finance Matt Hanratty, Housing and Neighborhood Services Manager

Crystal Handy, Housing and Neighborhood Services Grants Coordinator

Susan Garrison, Environmental Manager of Public Works

Dianna Morris, Grant Coordinator of Blacksburg
Transit

Janaka Casper, President and CEO, Community Housing Partners, Christiansburg, VA

State of Virginia

Wayne Turnage, former Chief of Staff for Governor Tim Kaine David Von Moll, Virginia Comptroller Then-governor Tim Kaine appointed his chief of staff, Wayne Turnage, to serve as the state's "stimulus czar" responsible for overseeing implementation of ARRA in Virginia. Turnage and department-level administrators across the executive branch formed a working group that provided the core component of a broader approach to implement ARRA. In addition to the working group, the input of the public, local governments, and state agencies was gathered regarding priorities for ARRA funding; broad stakeholder communication efforts were pursued, and "significant process" financial control practices were utilized for managing the funds.

The Virginia Working Group: Communication, Prioritization, and Control

Chief of Staff Wayne Turnage oversaw an in-house, state-level team representing functional expertise in the areas funded by ARRA. The Governor's Stimulus Working Group represented health and human services, education, transportation, commerce and trade, natural resources, and public safety. The group had responsibility "for evaluating ARRA requirements in each policy area and sending project proposals to cabinet secretaries for review." (Accountablerecovery.org). Cabinet secretaries would then forward proposals recommended by the group to the governor.

It was essential that all ARRA stakeholders saw the process as transparent and fair in the selection of funding opportunities. Clarity and transparency were essential for two fundamental reasons. First, as Wayne Turnage explains, "The ARRA was so hyped up, viewed as a financial savior" for states and localities. It was important to put the legislation in realistic terms, specifying what was available, where the money came from, how money could be spent, and the expectations for spending and performance reporting. Second, partisan concerns over favoritism in the allocation of ARRA funds demanded clarity about the selection process. "If we deviated from the guidelines," Turnage notes, "we explained and made it clear." Where there was discretion in the selection of projects, the criteria for selection were communicated and understood.

Communicating with stakeholders about ARRA, the project selection process, expectations, and so on, was a key responsibility of the working group. Weekly newsletters to local governments, state agencies, and state legislative committees provided updates on projects applied for, funds awarded, and funds received, as well as on reporting requirements and competitive and targeted opportunities. Conference calls and presentations to the money committees in the state legislature also provided communication outlets for the ARRA implementation process.

The federal expectations for quick implementation challenged the state government. There were initially no clear guidelines for implementation at the state level, yet the need to build a smooth implementation process to prevent waste, fraud, and abuse was paramount. "Federal relationships in the startup mode," notes Virginia Comptroller David Von Moll, were complicated, but once in "operational mode, calmed down." The working group focused on communicating with local governments, in particular, on a regular basis to communicate developing guidance from the Office of Management and Budget (OMB), to set priorities relevant for the localities, and to ensure workable processes were in place for reporting and accountability. One part of this strategy was to work closely with the Virginia Local Government Management Association, for example, as a liaison with local governments in Virginia.

The Virginia Stimulus Working Group began its efforts early on with a review of more than 9000 proposals received from Virginia residents, local governments, and state agencies recommending priorities for the use of ARRA funds (National Council of State Legislators; Digital Communities 2009). When ARRA became law in February 2009, Virginia launched the website stimulus.virginia.gov to solicit spending proposals and to provide information to the public on funds applied for, awarded, and received. When Republican Governor Bob McDonnell succeeded Governor Kaine in January of 2010, the website was renamed arra.virginia.gov.

The working group also provided guidance on establishing the infrastructure or design for managing ARRA funds. The state has a decentralized system for managing intergovernmental grant processes. State agencies build and maintain connections with federal partners, but central oversight is implemented through an enterprise risk management system. Implementation of ARRA was named a significant process, which provided a structure or formal template for managing ARRA funds at the state level. The significant process designation provides a common financial controls framework with internal controls. The ARRA accounting structure establishes a separate account for each ARRA-related grant, centrally managed. Comptroller David Von Moll, who has served as state comptroller under four governors, describes the implementation of the significant process as reflecting the tone at the top of the state, or the expectation for a rigorous internal control structure and effective procedures for financial reporting. Building on this tone at the top, Von Moll notes that the state took "a deep dive into the process."

While individual Virginia state agencies varied in their preparedness for reporting under ARRA, the structure of grants at the federal level varied as well. The state central accounting system provided overall continuity. The comptroller's office was continuously engaged with the agencies as they developed their reporting processes, but the reporting responsibility rested directly with the agencies themselves. These responsibilities were often not new, as state agencies had responsibilities for coordinating with federal agencies, communicating issues related to the management process, and clarifying issues before passage of the ARRA. What has changed, according to participants in the process, is the rigor of the reporting process and improvements in transparency, particularly at the sub-recipient reporting level. This was the initial intent of the Federal Funding Accountability and Transparency Act of 2006 (FFATA), and even after ARRA implementation is complete, the FFATA "will be with us," notes Von Moll, "we can't go back." The challenge will be to solve the "OMB gap" in guidance. OMB spent a great deal of time, effort, and resources on oversight and communication at the local level, but not at the state level.

Awards and Impact

Virginia has been awarded more than \$6.2 billion in cumulative ARRA funding for federal contracts, grants, and loans between February 17, 2009, when the legislation was passed, and March 31, 2011 (Recovery.gov). Table 3 shows a cumulative overview of ARRA contract, grant, and loan awards for Virginia as reported by prime recipients for the period February 17, 2009–March 31, 2011; and shows the estimated number of jobs funded by the Recovery Act for each award type. Virginia's General Assembly appropriated the funding over a two-and-a-half year period, with 30 percent authorized to specific programs for FY 2009. More than \$3 billion of Virginia ARRA funding targets local or regional programs or projects. Additionally, a large portion of the funds will be in the form of competitive grants that have yet to be awarded.

ARRA and FFATA: Building Sub-Recipient Reporting Capacity

The adequacy of individual state agency systems for tracking grant activities has varied. Prior to passage of ARRA, the federal government attempted to improve recipient reporting with 2006 passage of the Federal Funding Accountability and Transparency Act (FFATA). Sponsored by then-Senator Obama (D-III.) and Senator Tom Coburn (R-Okla.), the Act aimed to enhance the transparency of federally funded grants, contracts, and loans by establishing a searchable public database (now USASpending.gov) listing details for every grant, contract, and loan. The requirement for sub-recipient reporting went into effect on October 1, 2010, following extensive sub-recipient reporting under ARRA. Initial passage of ARRA put these reporting requirements on hold while technical issues were worked out, but set the stage for full implementation of the FFATA requirements down the road. As ARRA is winding down, FFATA compliance with reporting requirements will be paramount and the need for guidance will continue (see Oliver 2009; Maryland Governor's Grants Office 2010).

Table 3: Total Virginia ARRA Awards by Type, February 17, 2009-March 31, 2011

Award Type	# Awards	Completed Awards	Recipient Reported Jobs*
Contracts	2366	\$1,731,061,742	1,677
Grants	3548	\$4,276,435,023	10,228
Loans	62	\$196,492,704	118
Total	5,843	\$6,203,989,469	12,022

Source: Recovery.gov

In addition to the contracts, grants, and loans awarded to the state and its localities, ARRA provided individuals an array of tax credits for first-time home purchases, new vehicle purchases, computers purchased for educational purposes, lower energy bills, and higher education, among others.

In early 2009, large and small municipalities across the United States faced growing unemployment, rising foreclosures, and the challenge of reducing public expenditures across the board by cutting services, letting city employees go, and eliminating or halting infrastructure projects. ARRA promised jobs and funding for transportation projects, energy efficiency, housing, clean water, public safety, and more by channeling billions of dollars through existing grant programs and creating new grant opportunities. But ARRA also established criteria for accountability, transparency, performance, and risk mitigation that required new systems for managing federal grants. Virginia and its local governments, like all 50 states and all municipalities, now face rigorous reporting standards and vigorous federal oversight in the implementation of ARRA.

States are responsible for reporting to the federal government the ways in which funds are being used, descriptions and status reports on projects funded with stimulus money, estimates of jobs saved or created, and estimates of tax increases avoided due to stimulus funds. Many local governments are accustomed to reporting their performance to management officials, local governing bodies, citizens, and occasionally officials in state or federal agencies. The more advanced reporting to the federal government on the effects of stimulus spending, including the online availability of the data on Recovery.gov, establishes new and expanded expectations, as well as a national audience that includes the American public, the media, advocacy and interest groups, and national policy leaders. The level of detail available to the public is unprecedented, and the quality of the reporting is kept high by provisions for federal oversight, reviews and audits, coordinated by a Recovery Accountability and Transparency Board; and by the Board's and federal agency inspectors' general access to information necessary to ensure accountability at the national level.¹

ARRA requirements are advancing a new intergovernmental partnership. Recommendations follow on page 17 so that federal and local managers can build on the trends, not only as a means of strengthening their grant administration processes, but as a means of enhancing intergovernmental implementation efforts more broadly.

Advancing a New Intergovernmental Partnership

To date, the debate and discussion about ARRA have primarily centered on its size, nature, and economic impact. The primary focus has been on job growth, speed of program area

^{*} Recipient reported jobs are for the first quarter of 2011, January 1, 2011-March 31, 2011.

^{1.} The ARRA establishes an oversight board of inspectors general which is responsible for overseeing federal agencies to ensure that there is transparency and accountability for the expenditure of recovery funds.

funding and use of funds, and project monitoring methods used by federal programs to ensure proper use and safeguarding of Recovery Act funds (GAO 2010a, 2010b). Less attention has been paid to impact of the legislation on the intergovernmental partnership, and the ways in which municipalities are responding.

Part 2 of this report details the management strategies used by three municipalities in Virginia to implement ARRA. These strategies have been developed to respond to and work within the federal requirements that are influencing the relationship of the municipalities with the federal government for implementing the grant administration process, and beyond. Here, federal requirements are reviewed for:

- Increased speed of implementation
- Increased information for accountability, transparency, and performance
- Risk management as a driving factor
- Increased communication and collaboration

These requirements call for innovation on the part of local governments, in particular, for adjustments and attentiveness on the part of federal managers, and for a concern with reputation and capacity that is reflected in local governments' strategic efforts to implement the legislation. As detailed in Part 2 of this report, the management strategies developed in three Virginia municipalities reflect not only responsiveness to the mandate of ARRA, but also the significance and importance afforded the requirements on the part of local officials in their efforts to meet the mandates in a capable and flexible manner.

Increased Speed of Implementation

ARRA provisions placed a premium on speed of implementation. This had implications for the intergovernmental partnership between local governments and the federal government. In late 2008, in anticipation of a federal stimulus package becoming law, municipalities had to move quickly to plan to apply for competitive and formula-based federal grants, loans, and contracts, and prepare to implement these programs to maximize local economic opportunities and job creation. Localities expected that legislation would be in place shortly after January (ARRA passed in February 2009), and they needed to hit the ground running.

The expectation was that localities would have "shovel-ready" projects lined up or have projects with approvals secured, planning complete, and employees ready to work once ARRA funding was in hand. This required preparation to move aggressively in the application for all grants, creatively in the application for competitive grants, and in a coordinated manner with authorities and eligible subgrant recipients across the municipalities. This also required smooth and quick communication with the Virginia state government for funds that would pass through state agencies, or with granting federal agencies and OMB to ensure grant processes were clear and reporting requirements were understood, and any adjustments or changes were quickly reported and accounted for.

While not all intergovernmental efforts post-ARRA will have the same intense expectations for rapid implementation in the midst of economic crisis, the emphasis on speed of implementation and the increased importance of communication and preparation have been advanced as important elements of the emerging intergovernmental partnership.

Increased Information for Accountability, Transparency, and Performance Consolidation of more detailed financial and performance reporting with greater frequency and transparency to the federal government is a key element of ARRA that is also shaping the intergovernmental partnership. Expectations for reporting that would foster accountability, transparency, and performance were central to the preparation for and management of ARRA at the local level, and will likely continue to influence reporting and accountability across a wide range of intergovernmental policy areas. Since passage of ARRA, state and local elected officials and their managers have been accountable for reporting:

- Federal funds received under ARRA
- Expenditure of funds on activities specified in the grant applications
- The oversight of sub-recipients in the granting process
- The reporting of grant administration practices and implementation of the grants

Officials have also been responsible for meeting transparency demands—making visible and accessible the application, receipt, expenditure, performance, and reporting associated with every ARRA grant. Reporting on performance expectations—the effectiveness of the expenditure of federal dollars in achieving key program goals—is also key.

In many respects, these expectations connected to reporting are not new. Accountability, transparency, and performance have always been objectives associated with reporting on the expenditure of federal funds. Yet, as demonstrated by the case studies, several enabling factors give these expectations new teeth—local governments work hard to demonstrate compliance with the reporting requirements, and the reporting requirements provide data on overall performance. The Internet-based technology developed over the past decade, key changes that facilitate compatibility of data and the easy transfer of reports, the role of savvy information technology experts in government at all levels, and the efforts of federal agencies and OMB to provide clear guidance and support in developing performance measures and targets have extensively furthered these long-standing ambitions.

Public Engagement

In anticipation of ARRA, cities and states engaged the public in identifying spending needs and priorities in the midst of economic crisis. Drawing upon surveys, e-mails, and other Internet-based input systems, cities and states identified thousands of recommendations for targeting potential spending. Technologies today facilitate this form of public participation, and the opportunity not only generates an ongoing expectation, but provides governments with important input for complex decision-making in previously arcane decision processes. Beyond this initial solicitation of ideas, and the later communication of ARRA progress and expenditures, public engagement was minimal in each of the three municipalities.

Risk Management as a Driving Factor

ARRA mandates that federal departments and agencies commence with "expenditures and activities as quickly as possible consistent with prudent management" to achieve the goals of the legislation (PL 111-5, Section 3). OMB guidance for federal agencies and grant recipients details the practices required for good governance, risk management, and program integrity (OMB 2009). Risk management practices are central to this guidance to ensure accomplishment of accountability objectives such as the prompt, fair, and reasonable distribution of funds, transparency, mitigation of fraud, waste, error and abuse, minimal delays, and achievement of program goals (OMB 2009, Section 3). At the local level, grant managers must consider, the implications of the funding on the long-term fiscal demands on a state or city. For example, are other funds required for a successful program that might not be included in the particular

grant? And, does a local or state government have systems in place for managing the reporting requirements for the receipt of federal money?

Efforts to mitigate and manage the risks associated with particular events or trends, such as a terrorist attack, a major snowstorm, or the large-scale loss of talent because of retirements from government agencies, have become a key component of public policy development and implementation not only for all types of hazards, but for managing human resources, budgets, IT systems, and development. In the city of Alexandria, ARRA expectations for risk management crystallized broader practices across the city that had already embraced risk management as a key component for decision-making and priority setting. In Richmond and Blacksburg, adoption of a risk management approach for implementing ARRA may have been a catalyst for the broader use of a risk management approach.

Here, risk management had two basic components:

- Risk assessment (raising questions about appropriate systems, implications for municipalwide resources, and missed opportunities)
- Efforts to increase ARRA funds oversight (to ensure proper management and avoid embarrassing problems)

These two components were closely connected in terms of actual practices. In Alexandria, for example, identifying potential grants involved a bottom-up process that began with assessments of city and program needs and capacities at the agency level, followed by recommendations that were eventually reviewed and discussed by a special accountability committee, implementation committee, and eventually a subcommittee of the city council.

The bottom-up approach was paired with centralized decision-making and guided decisions on competing for, receiving, reporting on, managing, and closing out federal grant money through ARRA. In all three municipalities, the emphasis on risk management reflected a heightened awareness that the federal expectations for reporting to Recovery.gov, the federal ARRA site, made scrutiny and possible embarrassment more likely. In the first of a series of ARRA implementation meetings with federal cabinet officials, Vice President Biden in February 2009 set the tone for federal expectations for government vigilance:

We have got to make sure that we hold as many people accountable, not in a draconian way, but to actually get this done. And up to now, you've never had to—we've never had to sort of follow the dollar—follow the dollar beyond where we ordinarily—other than meeting the criteria, does the state, the county, and the city qualify for it; we cut the check. Well, we're going to be more intrusive than that on cutting the check.

And so every person that any federal dollar flows through has a responsibility to see it's used well. And so it's the fact that millions of Americans are struggling just to get by, that this should be an incentive to ensure that the money we spend is spent well (Biden, February 25, 2009).

Increased Communication and Collaboration

A final requirement of ARRA that contributes to a new intergovernmental partnership is an increased emphasis on effective communication and collaboration. This has two key aspects. First, implementation of ARRA, according to many of the people interviewed for this study, bolstered communication with federal officials (both in granting agencies and in the OMB) and improved the overall communication practices, particularly between the cities and the federal government, and between the state and the federal government. Key to effectively implementing

ARRA, and in overall intergovernmental relations, is the quality of political communication. This was reflected in the initial framing of ARRA, which involved sharing concerns and local needs with policy makers, building a sense of partnership in the implementation of the act between the federal, state, and local levels of government, and communicating with the residents and businesses. While there is certainly a hierarchy of reporting and accountability from the federal to the state and local governments with respect to the expenditure of federal funds, the way ARRA was implemented has encouraged more frequent, more useful communication between the layers of government. In the long run, this can result in greater understanding of the challenges and constraints at each level of the intergovernmental partnership, and a more collaborative approach to determining appropriate performance indicators, for example, or making improvements in the reporting system.

Meeting the technical aspects of ARRA, from reporting requirements to the determination of performance, also bolstered communication, particularly between local managers and federal grant administrators. On the federal side, the savvy use of technology websites to convey communication, webinars, direct communications, and the use of XML as the format for submitting reports all enhanced the clarity of the process and qualifications for the grant process. In general, taking advantage of the webinars and websites was valuable for the three cities.

Second, ARRA expectations for more rigorous oversight of subgrant recipients is promoting more thoughtful partnerships at the local level, with more explicit guidelines for working together. As will be detailed in the case of Blacksburg's implementation of ARRA, cultivating a long-term partnership with a nonprofit organization has allowed the town to leverage its resources for more effective outcomes.

Recommendations for Local and Federal Grants Process

Based upon this new approach to intergovernmental partnership, what should managers incorporate into their day-to-day management practices? What should be the focus for managing the grants process within this new intergovernmental relationship? What should be the focus for advancing the helpful elements of the new intergovernmental partnership more generally?

Recommendations for Local Government Managers

Continue the Use of High Coordination, Standardization, and Enhanced Accountability as the New Benchmark to Administer Grants and a Broad Range of Other Municipal Responsibilities. A more comprehensive, standardized, and coordinated approach to grant administration facilitates accountability. In Alexandria, Richmond, and Blacksburg, this lesson is applicable not only in managing future grants, but also in managing other areas of municipal responsibilities. Managers in Alexandria and Blacksburg responded to the requirements in ARRA with more comprehensive and inclusive decision-making processes for engaging and managing the federal grants system. In Richmond, a more centralized reporting and oversight process standardized practices across city agencies and brought better (more timely, more representative) information to central decision-makers for prioritizing grants and minimizing duplication of effort. Pulling in non-city stakeholders, such as the public schools, public housing, and utilities, for example, provides more comprehensive information for decision-makers as well.

Beyond grant administration, as demonstrated in Alexandria, the emphasis on coordination and standardized practices for information sharing has continued to inform a more robust emergency management effort. Improvements in information sharing across city agencies in Richmond similarly have many potential benefits in coordinating for a range of benefits and services.

Engage in Regular Assessments of the Capacity for Coordination and the Quality of Standardization as Key to Transparency and Accountability

Managers should regularly identify the capacities for coordination and the use of standardized practices to effectively share information. With respect to the grant administration system, managers should ask, "What are the overall city priorities, what information is needed to enhance any or all of the criteria, what are the reasons for reliance on subrecipients, and who should be involved in the process?" Key to the strategies adopted by each municipality for managing ARRA implementation was an understanding of the existing grant administration capacity and the strengths and weaknesses of that system in light of the expectations built into ARRA. This understanding then provided a foundation for building out, or working within the parameters of the existing system.

In the case of Richmond, an earlier formal assessment by the city auditor placed into stark relief the limitations and risks associated with the existing grant administration system. The ARRA implementation strategy then explicitly engaged and addressed those weaknesses by strengthening central oversight of the grant process and making grant information accessible to a range of city government officials.

In the case of Blacksburg, the reputation and stability of the existing grant administration system provided a foundation for ARRA; the town, however, did not test the competitive grant waters, but rather focused on formula grants and state pass-through funds. Competing for grants requires an additional layer of capacity and costs, with only a probability of funding.

Alexandria, while confident about its existing system, drew on the experience of emergency management efforts to mitigate the impact of disasters, such as the 2010 snowstorms, to build out the grant administration process related to ARRA. The goal was more transparency, more accountability, higher performance, and implementation with rapid speed, as well as maximum grant opportunities. The use of the city's incident command system provided a rigorous framework for maximizing grant opportunities by strengthening coordination and improving processes for information sharing. The result was a more transparent grant administration process, more accountability to the public and the federal government, and a smoother implementation process.

Make Communication a High Priority

Strong communication is always a priority, but is not always practiced in a direct manner that improves the quality of information or facilitates coordination. Implementation of ARRA prompted more direct communication by phone and by e-mail, as well as through webinars, workshops, and road shows between the grant administrators at the local level and at federal granting agencies. Communication was driven by the need to clarify federal guidelines, to seek approval for a performance measure, or to identify opportunities. This improved communication facilitated risk mitigation in securing and managing federal grants as well.

While grants, loans, and contracts present opportunities for local governments, they also present threats if there are negative long-term fiscal implications, if there is overlap between local agencies (particularly non-city government organizations), or if a local government is unable to report on grant-based activities. Conversations early in the process could address many of these concerns. In many ways, the ARRA communication streams were facilitated by the pointed and direct nature of the work—local managers had specific questions about grant applications, implementation, sub-recipients, and so on, driven by the time demands of the process. As opportunities grow for local governments to receive and manage federal grants directly, opportunities for direct communication grow as well. Local government executives should take full advantage of these opportunities to strengthen ties with federal granting agencies and improve coordination in the long term.

Engage the Public

Local managers should find ways to engage the public in decision-making related to intergovernmental grant opportunities in particular. Public input into priority setting, as well as public access to spending and performance data, are an essential part of the ongoing assessment of a grant administration system and improve accountability to the public.

Recommendations for Federal Government Managers

Be More Collaborative in Engaging Local Government Executives and Representatives in the Federal Grant Process

The expectations for speed of implementation, increased information sharing, risk management, and collaboration require capacity on the part of local governments. Federal grant administrators should engage local capacities for reporting, monitoring, and partnering with sub-recipients, and meeting performance targets should be supported and encouraged by federal managers.

Representative organizations such as the Virginia Local Government Management Association (VLGMA) are important contacts in this ongoing process of building collaborative capacity by drawing upon feedback for operations on the ground. Prior to ARRA's passage, and shortly thereafter, the interaction between the White House and OMB and the mayors and representatives of local governments proved to be very effective. It clarified federal intent, addressed questions raised by the localities, and established working relationships for the long-term implementation efforts. In all three case studies, learning took place at all levels to improve reporting and to identify performance indicators through these exchanges.

Promote Risk Management as a Framework for Local Government Implementation of Federal Grants and Other Municipal Systems

The cities studied do not have a standard methodology for approaching risk management, yet the lack of a common method did not discourage local managers from implementing risk management practices. In Alexandria, risk management was implemented through a decision process that drew on the expertise of program and grant administrators across the government, but filtered through committees with different priorities such as accountability, implementation, and overall fit with the priorities of the city. In Richmond, risk management was pursued through a more standardized and centralized reporting and accounting process and common data template. And in Blacksburg, the oversight role of the assistant town manager provided additional checks on the ARRA grant process. The development and management of mature relationships with key sub-recipients was central as well. Approaching intergovernmental activities through the lens of risk management fosters efforts at the agency and city level to sustain high credibility, encourages more educated decision-making, and increases knowledge and understanding of risk across the organization.

Make Continuity of Federal Grants Personnel a High Priority in the Grant Management System

The high turnover of federal personnel in granting agencies stands out as the primary impediment to local governments in their ability to articulate clear performance goals and hone the grant management processes. The relationships and institutional memory of longer-term federal personnel provide stability and a source of trusted expertise upon which local government grant administrators can rely. For example, a common challenge for local governments in developing performance targets is the question of whether performance measures should be aimed at demonstrating effectiveness of the grant, compliance with federal reporting and management guidelines, or both. Turnover in federal offices often leaves this question unanswered, or answered in conflicting ways.

Looking Forward

Did ARRA work?

ARRA worked on several levels. First, its requirements for speed, increased information, risk management, and collaboration prompted the municipal governments of Alexandria, Blacksburg, and Richmond to improve their management of federal grants. The money went out quickly, the governments have been timely in their reporting, and there has been minimal waste, fraud, or abuse. The risk of embarrassment and the need to manage that risk proved to be one motivating factor in local government success. From the scrutiny and high-profile comments by Vice President Biden about the need to get ARRA right—implemented quickly, reported in a timely and accessible manner, risks properly managed, and collaborative in nature—to the guidance and support of OMB, to the visible and accessible reports of any given locality available on Recovery.gov, city leaders were motivated to get ARRA right.

Second, the requirements for ARRA fostered new trends in the intergovernmental partnership between federal and local governments. These trends are reflected in the requirements:

- An expectation for speedy implementation of programs
- A partnership built upon better information sharing to promote transparency, accountability, and performance
- A gradual shift toward risk management as the framework for engaging many activities
- A preference for collaboration rather than top-down decision-making

While ARRA funds were temporary increases in spending, its effects on the intergovernmental partnership may be longer-lasting. For example, the immediate availability of data in one central location, in particular its accessibility to anyone with Internet access, has moved the partnership from a more siloed, top-down set of relationships to a more interactive process driven by real-time data.

While the partnership has changed throughout history depending upon spending patterns, funding mechanisms, and ideology, intergovernmental management and relationships have suffered from declining interest in previous decades. The reinvigoration of this interest is a positive result that can foster better public policy outcomes across our federal system.

Is ARRA a Model for Future Intergovernmental Initiatives?

The economic crisis created a unique and urgent situation. The question that comes to mind is whether ARRA, with its emphasis on speed, information sharing, risk management, and collaboration, is a one-time opportunity to enliven the intergovernmental partnership. As a model, ARRA alters the incentives facing local government and federal government executives. With results or progress reports immediately accessible, and the potential for embarrassment from lack of cooperation or limited capacity high, incentives to collaborate, to share more information, and to work more quickly are likely to take hold not only in the grants management process, but in other policy areas as well.

The new emphasis on speed, increased information, risk management, and collaboration, for example, can foster improved intergovernmental management in homeland security. In any given emergency, information needs to be shared quickly from local to state to federal, and vice versa, where the emphasis is on assessing and mitigating risk, and where collaboration across the region, and across layers of government and government agencies, is essential. The expectations in ARRA foster this type of information sharing; the motivation to avoid embarrassment moves it forward in creative ways; and improved collaboration encourages more collaboration and speed of implementation. Whether this new model will hold in a stronger economy is not clear.

Three Virginia Municipalities and Three Distinct ARRA Management Strategies

Management of the ARRA implementation in Alexandria, Blacksburg, and Richmond has resulted in three distinct strategies which are classified as:

- Incident Command System
- Information Technology (IT) Driven
- Partnership Leveraged

Three features differentiate these three strategies. They are the design of the overall management system, the political and technical communication practices of the respective cities, and the characterization of coordination patterns with non-city government partners. In each city, attention to federal expectations for transparency, accountability, speed, risk management, and performance were high priorities, resulting in some distinct innovations; but each city addressed these expectations in ways that varied with respect to design, communication practices, and non-city partnerships. The cases are presented around these three dimensions.

These approaches are referred to as management strategies because they provide top managers in each city with a logic or framework to engage state and federal governments to manage the requirements, expectations, and city needs associated with ARRA. Each strategy directly impacts the intergovernmental partnerships for implementing ARRA, as well as future intergovernmental policies. Political and administrative leaders in the three cities made explicit choices about:

- · Design of the grants management process
- Communication practices
- Coordination with local partners outside government

The management strategies were influenced by past practice in some cases, and in other cases influenced by efforts to directly alter and improve the city's capacity for intergovernmental grant administration and the overall management of city finances.

Management Strategies: Three Dimensions

Design of the Grants Management Process

This refers to the way each city organized to:

- Manage the identification of grant opportunities for which an agency or department could apply
- Implement the process for grant applications
- Respond to federal inquiries about the application

- Manage the award process
- Report on the short and long-term expenditures and performance

There are two core points of variation in the three cities with respect to design.

First, the cities varied in the degree of centralization or decentralization of the ARRA implementation system; specifically, the involvement of central administration (city manager or chief administrative officer's office), members of the city council, or other city-related supporting staff. Centralization is high involvement of the city manager's office, elected officials, and possibly an office of management and budget or finance. Decentralization refers to reliance upon specific agencies and departments to make decisions about the grants to pursue, or about seeking guidance on the clarification of expectations, reporting or performance indicators, and so on. Within a decentralized approach, coordination through the central city offices is minimal.

Second, the cities varied in the degree to which the management system was integrated with existing grant management processes, or designed as a separate process.

Communication Practices

There are two components to the communication practices of each city as they apply to the management strategy for ARRA implementation.

Political communication practices. Each city varied in its degree of participation in early ARRA discussions, expressing local expectations and preferences for the legislation and learning directly about the changes and interpretations taking place in the legislation firsthand to anticipate and plan for early implementation efforts. These practices were expressed in the form of an active mayor or legislative liaison who could interface with elected officials on behalf of the city. This particular practice is a crucial component of the intergovernmental relationships impacted by passage and implementation of the legislation.

ARRA money is channeled through existing programs and new programs, and each federal agency and locality has its own system that must flex and adjust to the ARRA requirements. Tracking, absorbing, and applying the requirements is a tremendous capacity issue for the local governments. While there may be one or more people in charge of gathering and disseminating the information, getting the word out across the various agencies and ensuring compliance can be more challenging.

Table 4: Implementation Strategies for Alexandria, Richmond, and Blacksburg—Three Strategic Dimensions

Implementation Strategies	Design of the Grants Management Process	Communication Practices	Coordination with Local Partners Outside Government
Alexandria: Incident Command System Strategy	Centralized, Separate	Political: Advanced Technical: Agency- Based	Centralized Committee Process
Richmond: IT-Driven Strategy	Decentralized, Separate	Political: Medium Technical: Agency- Based	Minimal Coordination, Contract-Based with Nonprofits
Blacksburg: Partnership-Leveraged Strategy	Decentralized, Integrated	Political: Medium Technical: Central to Agency-Based	Partnered Initiatives

Technical communication practices. The second communication practice is technical communication, expressed primarily after the legislation was in place. This focused on the role of individual agencies, grant managers, program managers, and city managers to draw upon contacts and information sources with the state and federal governments to:

- Learn directly about the reporting and performance expectations
- Speak with a program manager at the federal level regarding a reporting requirement
- Clarify a technical requirement
- Build longer-term relationships that facilitate the overall grant management process

These practices on the part of the cities are vital. Recipients reported that various federal agencies have significant turnover among the points of contact for grant applications, awards, and reporting; hence, effective management at the local level requires a persistent effort to communicate with state and federal managers to stay on top of information that is continuously updated and fluid. This type of communication practice varied from an agency-based approach, in which the program expert grant managers initiated and built contacts at the state and federal level, to a somewhat centralized approach, in which the city manager or finance department played a key role in clarification on key issues.

In Blacksburg, the purchasing office communicates with all departments and watches the account numbers to be sure those purchases are identified and given the extra terms and conditions. In Alexandria, the practice is a combination of agency-based communication by grants managers with program managers at the federal level, and a dedicated point person on accountability who manages the flow of information and requirements from the federal government and distributes the information among grants managers. In Richmond, individual grant managers played the central role in communicating with program managers at the federal level for technical communication purposes.

Coordination with Local Partners Outside Government

Each city's overall management strategies varied in the extent of coordination with local partners outside city government in applying for and managing federal grants. This variation ranged from formal inclusion in the management process to decentralized contacts through city agencies. Often subgrantees, these partnerships are vital for attending to the expectations for reporting, accountability, and transparency.

Alexandria: Incident Command System Strategy

Alexandria's management strategy for implementation of the ARRA is labeled an Incident Command System (ICS). The ICS is a model for emergency response management first designed in the wake of coordination challenges among California firefighters responding to massive forest fires in the 1970s. As described by the Department of Homeland Security in its National Incident Management System guidance, the Incident Command System is a management system

designed to enable effective and efficient domestic incident management by integrating a combination of facilities, equipment, personnel, procedures and communications operating within a common organizational structure (DHS 2004: 14)

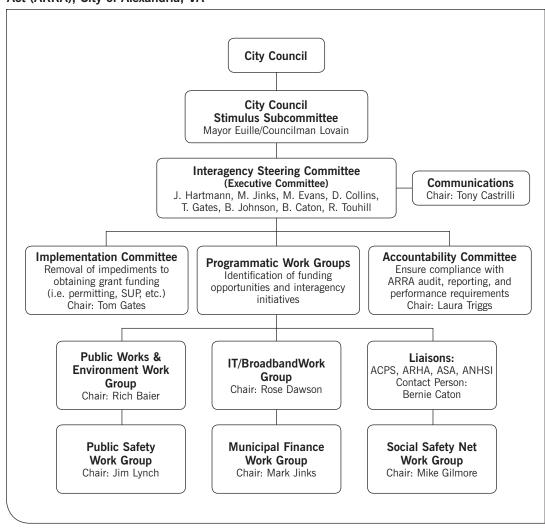
Central to this organizational structure is the ability of personnel from multiple agencies and jurisdictions to work seamlessly within a common organizational structure to manage an emergency incident. The approach is similar to "contingent coordination" described by Don Kettl as

a means for multiple agencies to work together for a particular emergency event or response (Kettl 2003). The city of Alexandria has adopted the ICS approach to successfully manage numerous emergency situations such as the multiple snowstorms during the winter of 2010, and now adapted a variation of ICS for implementation of ARRA. Characterization of the Alexandria system as an ICS was suggested by Assistant City Manager Tom Gates, who also noted the original idea for the structure arose from a Metropolitan Washington Council of Governments (COG) meeting for the national capital region and the original efforts of Montgomery County, Maryland.

Explaining the analogy to an incident command system, Mr. Gates noted the flexibility associated with cross-agency participation in this particular structure, as well as the bureaucratic stability provided by the system with clear lines of responsibility:

The emphasis is on cross-cutting communication. This structure, in practice, represents how we have begun to respond to emergencies, similar to the ICMS (incident command management system). Like that system, there is clear delineation of responsibility ... We've had success in using that basic structure ... Always flexible, always responding.

Figure 1: Work Flow Chart for Implementation of the American Recovery and Reinvestment Act (ARRA), City of Alexandria, VA



The ICS approach also minimizes duplication of effort by establishing unified central authority and coordination across the command system for decision-making. The overall design of the ARRA implementation system (depicted in Figure 1), the communication practices, and coordination efforts with non-city government partners each then align within this ICS approach. Each will be discussed in greater detail in the following sections on design, communication, and partnerships.

Table 5: Alexandria Community Characteristics

Community Characteristics	Alexandria		
Population			
Population in 2009	150,006		
Income			
Estimated per capita income in 2007	\$52,048		
Median household income in 2008	\$86,682		
Industry			
Civilian employed population 16 years and over	83,365		
Construction	4,886 (5.9%)		
Professional, scientific, and management, and administrative and waste management services	19,029 (22.9%)		
Educational services, and health care and social assistance	13,507 (16.3%)		
Public administration	14,673 (17.7%)		

Centralized and Separate Grants Process Design

Alexandria's design for implementing ARRA varied in the degree to which it was centralized for purposes of coordination and oversight, and the degree to which the system was integrated with existing systems for federal and state grant management.

Alexandria's ARRA implementation system, or the task force as participants referred to the organizational structure and process, was designed to be centralized and initially separate from the existing grants application and management processes. The goal, as described by Alexandria Mayor William Euille, was to reduce internal competition among city agencies by packaging and going after grants through a collaborative process—or at least a process characterized by broad information sharing and discussion. The goal was also to be able to adjust to the changing information regarding the stimulus package through the 2008 election and into the first few months of 2009 when ARRA became law, and to meet the federal expectations for transparency, accountability, and performance.

As described by Ryan Touhill, a lead ARRA staff member from the Alexandria Office of Management and Budget, the city posed many questions as the task force was formed and early work began:

We had the chart, but we had complexity and lack of finite information. [There were expectations for] Increased accountability, what are the implications? Getting money out the door quickly, what are the impediments and how can we mitigate them? How to meet transparency? We would need to report regularly, to account for the money. We had to consider the fiscal implications for Alexandria, anticipate the consequences for all of the requirements. The time period is now January to February (2009), budget

season for FY 2010. In the long term, we didn't want the ARRA money to put us on the hook ... down the road. In the fiscal environment we were more careful, facing tough challenges. This was accomplished by establishing a centralized process that required all proposals for ARRA-related grants to come up through the "task force" structure.

The task force was co-chaired by Mayor Euille and former city council member Timothy Lovain (see Figure 1). Together, they formed the city council subcommittee overseeing the ARRA process. Mayor Euille sought a city staff member to serve as czar, coordinating across the task force. Bernard Caton, legislative affairs director for the city, was asked to play this role. The czar served as an intermediary between committees across the task force, and between the committees and Mayor Euille and Council Member Lovain. Caton was also the

Table 6: Alexandria ARRA Grants

ARRA Grants Received by Alexandria	Amount of Funding		
City of Alexandria Competitive and Formula Grant Awards			
Workforce Investment Programs	\$243,044		
Homelessness Prevention and Rapid Re-Housing	\$487,214		
Community Services Block Grant (CSBG)	\$265,988		
Byrne Justice Assistance Grant—City Allocation	\$323,939		
Domestic Violence STOP Grant	\$36,884		
Community Development Block Grant (CDBG)	\$335,003		
Special Regional Surface Transportation Allocation	\$4,013,775		
CSB Early Intervention—Part C	\$154,418		
Senior Nutrition Program	\$35,545		
Head Start Program—Quality Improvements	\$127,481		
Head Start Program Expansion	\$577,864		
Energy Efficiency & Conservation Block Grant (EECBG)	\$1,372,800		
TIGER Grant (Regional COG/TPB Transportation/Transit)	\$9,170,000		
Staffing for Adequate Fire & Emergency Response (SAFER)	\$1,634,801		
Subtotal	\$18,778,756		
State Declared Pass-Through Funds*			
State Compensation Board (Sheriff's Office)	\$1,189,051		
Comprehensive Services Act	\$52,894		
Virginia Department of Social Services	\$215,765		
Subtotal	\$1,457,710		
Awards to Liaison Groups			
Alexandria City Public Schools	\$8,442,999		
Alexandria Redevelopment & Housing Authority	\$1,791,960		
Alexandria Neighborhood Health Services, Inc.	\$300,117		
Alexandria Transit Company's DASH System	\$810,000		
Subtotal	\$11,345,076		
Grand Total	\$31,581,542		

^{*} State aid that was retroactively declared ARRA funds by the state.

point person in dealing with the congressional delegation for Northern Virginia, and in working with the city agencies early in the implementation process. Throughout the process, Mayor Euille and Council Member Lovain were briefed on awards, on the acceptances and on the implementation.

The interagency steering committee, consisting of City Manager Jim Hartmann and other representatives from the city manager's office (CMO), a representative from the city's Office of Management and Budget, and the Chief Financial Officer, served as a final point of oversight and approval for requests before they reached the top subcommittee. Operating at the next level in the structure is the implementation committee, chaired by Assistant City Manager Tom Gates, and the accountability committee, chaired by Director of Finance Laura Tiggs. The former ensures smooth implementation of grant projects in anticipation of an application or award, for example by identifying potential problems with permitting and special use permits; the latter works to ensure compliance with ARRA reporting, performance, and audit requirements. The implementation, accountability, and interagency steering committees are explicitly designed to pull together representatives from multiple agencies to serve within a particular focused portion of the process.

Finally, the programmatic working groups combine multiple agencies under specific points of focus such as public safety, public works and environment, IT and broadband, municipal finance, and so on. The workflow in the task force is bottom-up, beginning with the agency-based programmatic groups that identify potential grants, shovel-ready projects, and potential risks and benefits of any grant application. The proposed projects are then worked through the task force structure. A special programmatic group draws together representatives from the Alexandria City Public Schools, the local housing authority, neighborhood health services, and the Alexandria Sanitation Authority. The work of this subgroup will be discussed further in the partnership section of the case study. Again, the organizational structure is designed to pull multiple participants into a common decision-making structure focused on clear points of responsibility and purpose and the reduction of duplicative grant requests.

The city had key people in each area of the task force. The staff members of the task force met once per week, while the mayor, council members, and others met less often. Motivation and focus on the task of implementing the ARRA was high. As Tom Gates described the situation:

The meetings took place every week to do the grunt work. Everyone was motivated, at the table, and looking for the shovel-ready projects.

The meetings would focus on new events related to ARRA, as well as information learned in more detail from the federal or state government. Each person charged with one of the key functions would also report out. The implementation committee, for example, was concerned about implications of the ARRA process for other program implementation efforts. Concerns for the necessary procurement vehicles that might need to be in place, for example, whether or not regional partners were informed of grant implications, whether there were staff and contractors, the implications of a grant for HR services, and so on, were the focus for the implementation committee. There were also challenges for reporting to meet the new accountability requirements, so the finance director and finance staff worked to construct processes for the reporting. Information about what grants were available, reporting requirements, and so on, was changing, updated, and flowing regularly, and every other week the task force would report to Mayor Euille and Council Member Lovain's subcommittee.

Everyone involved needed to understand the centralized process, know their role, and ensure that all proposals for grants came through the committee for review; the city would not rely on the individual agencies for the sole review of potential grants.

The task force played the crucial role of identifying potential grant opportunities, assessing the risks and benefits of the award, reviewing and approving grant applications, and overseeing the initial receipt and management of the system. The task force also sought ways to improve access to ARRA grant funds given the fluid nature of the federal procedures and the often narrow amount of time between the federal notice that funds were available and the deadline for grant applications. In April of 2009 the city council considered and approved a proposal put forward by members of the task force implementation committee to exempt ARRA grant applications from council approval before submitting to the granting agency, unless the grant terms and conditions mandated council action. The task force structure would continue to be the means by which the city manager would approve all grant applications. As Ryan Touhill noted in correspondence with the authors, there were several benefits associated with this change in the ARRA grant process:

"1) the introduction of greater efficiency into the submission process by decreasing impediments; 2) keeping various stakeholders (task force members, City Council, etc.) knowledgeable of grant submissions and awards as they occur through synchronized communication via e-mail; and 3) removing staff's concern with regard to shortened grant deadlines and thus broadening the pool of grants staff could potentially apply for" (e-mail correspondence with Ryan Touhill 7/19/2011).

By the fall of 2010, the task force was no longer a weekly operating process. Just as the ICS is a temporary structure for managing emergency response to an incident, the task force structure played the crucial role of centralizing and managing the application, receipt, and early reporting under the ARRA's demanding requirements. The primary implementation challenges have been managed.

However, the momentum and focus of the task force efforts to manage the risk associated with ARRA grants, to ensure accountability and transparency, and to maximize the opportunities for the city continued to generate efforts to improve grant reporting and money management procedures, in general. Perhaps most prominent is the effort, led by Management Analyst Cassandria Menefee, to clarify and standardize the grant administration process to meet the expectations for accountability, transparency, and reporting under the guidelines and expectations of the ARRA. As Menefee describes the connection, "the ARRA was the impetus, and now the process is standard for all grants." Because the ARRA had reporting requirements separate from established or existing grants, the need to set up separate accounts and reporting procedures provided a natural comparison between the two, and Menefee was in charge of operationalizing the processes and guidelines established by the task force accountability committee to ensure expectations were met by the city. In addition to her oversight of each grant in each agency, each expenditure under each grant, and a tickler file for each grant, Menefee continuously monitored the federal government websites related to ARRA and ARRA reporting, and distributed new information among grant administrators, the OMB, and others. In a series of meetings aimed at streamlining and improving the grant administration process, Menefee notes that the changes have been more than just revising forms; the city is moving toward best practices in grant administration as well as cash management, payment vouchers, and so on.

Political and Technical Communication Practices

Each city varied in the degree of participation in the early discussions of ARRA, expressing local expectations and preferences for the legislation, and learning directly or indirectly about the changes and interpretations taking place in the legislation to anticipate and plan for early implementation efforts. These practices were expressed in the form of an active mayor, legislative liaison, or ARRA czar who could interface with elected officials on behalf of the city. This stage of communication is a crucial component of the intergovernmental relationships impacted by passage and implementation of the legislation.

Public Communication

Paralleling the federal government's use of Recovery.gov to "track the money," each of the three governments provided residents with information related to the receipt and expenditure of ARRA funds, ranging from a dedicated set of webpages providing information on grants awarded, dollars allocated, and the number of jobs created for each grant, to broad information provided in a variety of media formats.

Alexandria. Alexandria provided a dedicated link within the city website (http://alexandriava.gov/recovery/) for information on ARRA. Residents could download continuously updated spreadsheets identifying grants awarded to and being implemented by Alexandria, funds passed through to the city by the state, pending grant applications, and funds managed by the liaison groups in the city, such as the Alexandria City Public Schools. This outreach also reinforced the need for a structure or process to accommodate and manage the expectations for accountability, speed, and transparency. As recounted by Ryan Touhill:

"We received ideas from the public and from public/private partnerships, suggestions. Housing, transportation, engineers, newsletters, the information was flowing in. We had a large list and as we had more info, we realized we didn't have a structure in place to deal with the three main ideas in the legislation: accountability, speed and transparency. These were widely discussed and central. We had to create structure around the issue."

Richmond. Richmond's "stimulus tracker" provides direct and accessible information about ARRA funds to residents in a dedicated location (http://www.richmondgov.com/Stimulus/Overview.aspx). Overall ARRA funding as of a particular date is broken down for website visitors in the form of a color-coded pie graph and table, and detailed graphs of each grant area. The Richmond home page provides an overview of the stimulus tracker and expectations for how the site can be used:

"Welcome to Richmond Stimulus Tracker, a citizen's guide to federal stimulus funding allocated to the City of Richmond. Richmond Stimulus Tracker is intended to provide residents and other interested parties the opportunity to follow the City's allocation of federal stimulus funds as we "Build a Better Richmond." The American Recovery and Reinvestment Act of 2009 will enable the City to finance important projects and programs that benefit citizens and create and retain jobs. ...This tracker should be used as a research tool and is a method of providing transparency in government. It should be noted that there are several areas of spending where the city administration is not the custodian. These areas include Richmond Public Schools, Port of Richmond, and Richmond Redevelopment and Housing Authority. We hope you find the information on this site helpful."

Richmond also relied on newsletters issued by the mayor's office to share information with the public about the city's efforts to bring benefits to residents, while Alexandria Mayor Euille used one of his local broadcasts to discuss the legislation and the significance for the city.

Blacksburg. Blacksburg did not have a dedicated page of the town website for residents to review, but posted information related to stimulus funding in the form of budgets, amendments, and articles. The Metropolitan Planning Organization (MPO) for the Blacksburg region (Montgomery County MPO) also posted information related to the transportation funding received by Blacksburg Transit. Local media, newspapers, and television (WSLS NBC 10 in Roanoke, VA) have provided steady reporting on the allocation and expenditure of ARRA funding in the area (http://www2.wsls.com/list/stimulus-2010/), and printed notices for comments on the amended plans for allocating the CDBG money received by the town (HUD 2007).

The political communication patterns for the city of Alexandria were advanced, meaning that the city had staff and officials designated to engage in the early discussions about the framing and content of ARRA. The location of the city in the heart of the national capital region provided a geographic advantage.

Alexandria relied upon the efforts of Bernard Caton to coordinate communication across the city in anticipation of the legislation. Bernard Caton, Mayor Euille, and others knew the city had to move fast once the legislation was passed. Caton initiated discussions with city agencies to identify potential shovel-ready projects, green jobs, and other projects that met the federal criteria. Needs and suggestions from the agencies were compiled into a spreadsheet. The city council and subcommittee and the mayor then asked to put the information into an easier-to-read format, by grant category, with costs and estimates. This became known as the stimulus project program list. As Caton describes the process:

[W]e were talking with various departments (in Alexandria), [to] let them know what we were hearing, and asking them to come up with proposals for stimulus dollars to submit as soon as possible. We had a master list of what there might be money for. It was broad and expansive. We also created a Council (task force) and subcommittee ... We tried to emphasize proposals with one time funding, nothing that required additional staff, [where we] couldn't fund positions. When the Stimulus passed in March 2009 we switched gears immediately.

Simultaneously, Bernard Caton was meeting with the staff members for Congressman James Moran of Virginia's 8th district, and Virginia senators James Webb and John Warner. Information about ARRA was initially fluid as mayors and city officials across the country communicated needs and concerns, and elected officials in Washington expressed opinions and articulated constituent interests.

Early in the process, Mayor Euille was also a key participant in political communication related to the implementation of the ARRA. The January 2009 meeting of the U.S. Conference of Mayors was an opportunity for mayors from across the country to reinforce the priorities of their cities and towns just before the ARRA was passed in February. Mayors wanted the White House and Congress to understand the need for programs that would restart the economy and create jobs. For the city of Alexandria, the priority expenditures were education, housing, and transportation. Ideally, mayors wanted the bulk of the money to go directly to the cities and towns, but the legislation relied heavily on the states to pass through much of the stimulus money. The mayors met directly with President Obama and Vice President Biden and received an overview of how implementation would work. The message from the White House, according to Mayor Euille, was clear:

Cities needed to develop an orderly and accountable process for the grant applications, no "willy nilly" procedures, from the application process to the audit reviews. It would not be an exercise in futility, but rather an orderly process.

A key part of the orderly process was to ensure that ARRA funds were used as specified in anticipation of the federal audits that would follow later in the year. In short, the political communication practices early on were vital for the city of Alexandria in order to anticipate and prepare for the ARRA and set the stage for the technical communication patterns in the city after the legislation was in place. "Again," Caton explains, "we had our list early on of good projects for us, and an internal structure at the city staff level to coordinate it all—an interagency steering committee, city manager, department heads, top staff, and so on."

Alexandria: Lessons Learned for the New Intergovernmental Partnership

- An incident command approach can facilitate speed of implementation, communication and
 collaboration, and risk mitigation. Alexandria learned the benefits of ICS as a means to move
 quickly in a coordinated manner across multiple agencies during the snow emergencies of
 January and February 2009. Bottom-up, coordinated communication, drawing on the strengths
 of individual departments and specialized committees, and centralized final decision-making
 provided an excellent means to satisfy the requirements of ARRA.
- Individuals with targeted responsibility for coordinating key aspects of the task force work facilitated speed of implementation. Bernard Caton's role as task force czar provided up-to-date information from Washington and facilitated communication across the ICS groups. Mayor Euille's communication with the public and oversight of the task force built broad public support and provided political approval for task force efforts. And Ryan Touhill's work within the Alexandria OMB to develop and frame the work of the task force facilitated coordination across the city departments, early on.
- Efforts to improve and standardize reporting have generated support for continuous improvement in the city.

Alexandria's technical communication patterns have been primarily agency-based. While decisions about what grants to pursue have been centralized through the incident command model, identification of grant opportunities for task force consideration and management of the grants once in place remain an agency-based priority. Alexandria grant managers often received changing and sometimes conflicting answers from federal agency personnel new on the job or transitioning within a job regarding grant criteria, metrics, and reporting guidelines. A grant manager from Alexandria's Department of Transportation and Environmental Services noted the evolving nature of the federal guidelines for the Energy Efficiency and Conservation Block Grant Program (EECBG), which was new under ARRA for the U.S. Department of Energy, and new for the city of Alexandria:

They are still refining the guidelines. We received an award in November (2009), and then [they said] 'oh by the way, buy-American doesn't apply for these applications' ... We asked for metrics, but no definition of the metric was set at the time ... The contact person for EECBG had not previously worked on funded projects. The agency actually contracts for employees (to do the work of grant administration) ... So there's no consistency, one grant, it is 'this' and one grant, it is 'that.'

Despite the volatility in technical advice from the federal government, agency-based websites, in this case for the Department of Energy, were recognized by grants managers as useful sources of information that "were pretty easy to use, fairly clear." Similarly, staff across the city found the information provided through Recovery.gov, Grants.gov, and for applicable agencies and programs, Fedconnect.com to be very helpful and the fully electronic application process was efficient.

Coordination with Local Partners Outside Government

ARRA management strategies in each city varied in the extent of coordination with local partners outside of city government in order to apply for and administer federal grants. While each city has long pursued grants administration with some connection to non-city-government partners such as school districts and housing authorities, for example, and each city has long relied upon various non-profit organizations as sub-recipients who participate in the implementation of federal funds, here the focus is on the slight variation from the norm for purposes of implementing ARRA.

The city of Alexandria formally included representatives from liaison groups in the ARRA task force operations: Alexandria City Public Schools, Alexandria Redevelopment & Housing Authority, Alexandria Neighborhood Health Services, Inc., Alexandria Transit Company's DASH System, and the Alexandria Sanitation Authority. As part of the incident command design, information related to grants that the liaisons were pursuing was shared with the city, and vice versa, to prevent duplication and to foster possible coordination. Ryan Touhill of the Alexandria OMB described the task force process and the way the liaison groups plugged in:

Whether the grants were competitive or formula, we used the same process. ID the funding source, the application, bring to the structure (task force), get approval, expert in the department completes the application. The liaison groups plugged in. We needed to know if they were applying for some grant and they needed to know info. The ACPS consultations, knowing how the info was used, helped with our deliberations.

Richmond: IT-Driven Strategy

Anticipating the rigorous reporting requirements under the new legislation and the expectations for transparency and accountability, the city of Richmond developed an information technology-driven strategy for implementing ARRA. The IT-driven strategy was motivated by the need for accuracy in reporting information to the federal government, the volume of grants anticipated under ARRA, the need for improved oversight and citywide administration of the grants process, and the capacity of the city's business process management software, Metastorm, to support an IT-based grant administration process.

Developing an IT approach as the strategic frame for implementing ARRA was facilitated in a technical manner by the use of extensible markup language (XML) by the federal government as the primary format for data exchange between local, state, and federal government. An IT approach to implementation of ARRA was also supported by the foresight and capabilities of two IT experts in the Department of Information Technology (DIT), Gurdeep Bhatia, head of the Applications Solutions Division in the city of Richmond, and Subhashini Narra, systems developer lead for the city, both working with Chris Johnston, the city grants coordinator. Together they developed a fully automated framework for reporting ARRA-based federal funds.

The centerpiece of the implementation strategy was the development by Bhatia and Narra of a grants administration process that allowed document sharing among the departments of budget and finance, as well as other departments and officials. In the summer of 2010, DIT moved to integrate the ARRA processes with SharePoint (software developed by Microsoft to facilitate document sharing and collaboration) as the user interface for grants administration to track and report grant activity, and Information Builders software for collecting information. In anticipation of the city-wide SharePoint launch in June 2010, a 2009 citywide grants audit reported,

we will have a robust system for tracking grant related data, conducting desk reviews, sharing documents, and sending automated reminder e-mails to grants managers. Once complete, the system will allow the Mayor and other stakeholders to have available comprehensive information about the status of grant funds and the projects they support (Office of the City Auditor 2009: 22).

In a traditionally decentralized system driven by the initiatives of individual city agencies, the fully automated system provides shared data to the grants coordinator, the finance director, and the budget director for oversight and approval. Once approved, submitted and awarded, the system began a seamless reporting process to www.FederalReporting.gov on a quarterly

basis. As Gurdeep Bhatia pointed out, the process early on resulted in only two errors in the reporting process, one connected to a discrepancy in the federal government information.

Table 7: Richmond ARRA Grants

ARRA Grants Received by the City of Richmond	Amount of Funding
Energy and Environment	\$2,106,200
Health and Human Services	\$2,270,368
Housing	\$1,336,140
Infrastructure	\$5,731,141
Public Safety and Justice	\$5,165,411
Economic and Workforce Development	\$78,600
Total Recovery Act Investment	\$16,687,860

Decentralized and Separate Grants Process Design

Richmond's system for implementing ARRA was built to address the expectations of the Act while working with a decentralized grant administration system. Under the established grant administration system, citywide coordination was limited to the pass-through of grant applications with the grant coordinator's office (located in the Department of Budget and Strategic Planning) and to city approval through the Chief Administrative Officer's (CAO) office and a city council ordinance before a grant application was submitted to a grantor. Once a grant application was approved, it moved back to the initiating agency for submission to the grantor, and once awarded, the finance department would establish a special fund. However, there was no central verification for the expenditure of funds on allowable goods and services, no verification that the recipient agencies were maintaining required documentation, and no comprehensive registry of all city grant applications and awards. This lack of central oversight was highlighted in a December 2009 audit of the city grant administration process. The concern for variation across agencies was also pointed out in the audit letter accompanying the report:

Delegating the monitoring function to the agencies could result in inconsistent practices due to varying levels of training provided to the agency staff. This risk was verified based upon the departmental survey responses which identified inconsistent monitoring procedures (Office of the City Auditor 2009).

The risks of this decentralized system to the city of Richmond were high. On one hand, the audit reports noted the denial of several competitive grant applications in the 2006-2009 period because agencies lacked sufficient plans and were not able to provide competitive cost-benefit ratios. On the other hand, the decentralized system posed challenges for proper accounting of federal fund expenditures that had been received.

In anticipation of ARRA, the city grants coordinator, Chris Johnston, put together a committee with participants from the IT and finance department to develop a framework for meeting the federal government reporting standards in the ARRA and to provide more oversight and infrastructure for the grants process. The goal was clear: to automate the entire process. The committee met regularly to identify what elements needed to be included in the automated process, both the needs and goals of the finance and budgeting departments and the elements needed to meet the federal reporting requirements. Once the direction was clear, the IT team had four to six weeks for the technical implementation. As described earlier, the result was the development of a data gathering and sharing process, and the coupling of that process to the existing MetaStorm electronic business flow application for the city. As described by Chris Johnston:

Concern with reporting properly [to the Federal government] has spurred us to develop new techniques.

The effort to design, develop, and implement a collaborative data-sharing process for managing ARRA grants and improving overall grant administration in the city had strong support from Mayor Dwight Jones, the Chief Administrative Officer, and department directors. From the perspective of Gurdeep Bhatia and Subhashini Narra, the design team, use of the XML schema by the federal government established a new standard for communication with local governments that made the new grant administration system possible. Building on the success of the ARRA reporting process, the city fully implemented the software programs SharePoint and Information Builders in June 2010 as the primary processes for citywide grants management in Richmond. The system improvements and management benefits are detailed in the management response to the city audit of the grant administration process:

As a byproduct of the City's Recovery Act process, this (SharePoint) is currently being implemented including interfaces between the City's accounting systems. The tracking and reporting system will use SharePoint as the user interface and Information Builders or other applications for data collection. For each project funded by a grant award, SharePoint will provide collaboration and document sharing environment and Info Builders or other applications will draw and data from financial and other appropriate systems (Office of the City Auditor 2009).

Table 8: Richmond Community Characteristics

Community Characteristics	Richmond	
Population		
Population in 2009	204,451	
Income		
Estimated per capita income in 2007	\$25,198	
Median household income in 2008	\$36,157	
Industry		
Civilian employed population 16 years and over	94,540	
Professional, scientific, and management, and administrative and waste management services	10,994 (11.7%)	
Educational services, and health care and social assistance	24,496 (26.0%)	
Arts, entertainment, and recreation, and accommodation, and food services	11,977 (12.7%)	

Political and Technical Communication Practices

Richmond's political communication practices had many components similar to Alexandria's. Like the political leaders and top managers in Alexandria, officials in Richmond viewed the initial framing of ARRA as an opportunity to share concerns and local needs with policymakers, to build early partnerships between federal, state, and local levels of government in the implementation of the Act, and to communicate with the residents and businesses of the city. Incoming mayor Dwight Jones was elected in November 2008 and so did not participate in the January 2009 Conference of Mayors, but took the initiative early on to participate in the informational calls hosted by Vice President Biden to discuss the implementation of ARRA (White House). He then held a kickoff meeting with the chief administrative officer of the city and department directors to discuss ARRA's implementation and communicate accurate information.

www.businessofgovernment.org

ARRA was a moving target throughout the presidential campaign and the early months of debate and discussion in the House and Senate. The amount of money that would be available, the types of grants and the program areas that would be funded, and the process for applying for and receiving grants remained in flux. Similar to the strategy in Alexandria, part of the political communication strategy for Richmond was to stay tuned in to the unfolding legislative package so that the city would be on firm ground when the legislation was approved. In a February 2009 news release, Mayor Dwight Jones related the uncertainty as well as the planning component of the strategy:

We're ready to move forward on many projects that will put people to work . . .It's unclear which funds will come directly to the city and which will come through the state channels, but we are covering all bases ... We are ready to act quickly and will be aggressive in securing these funds when they become available to cities. (Richmond City News, 2009)

The news release noted that the mayor had "identified over \$75 million in shovel-ready projects that could move forward quickly," from transportation projects, to green initiatives, housing infrastructure, and water improvements. In the early stages of the ARRA process, the mayor and other city officials were focused on getting as much support for the city of Richmond as possible to stimulate jobs.

In Richmond, technical communication practices were patterned after the decentralized structure of the grant administration process. Grants managers from individual agencies took the lead on communicating with federal agencies and state agencies. Albert Stokes, grants manager for the Richmond police department, described the role he plays in seeking out grant opportunities, as well as establishing and maintaining the flow of communication with the program managers at the federal level throughout the implementation process. Within the Richmond police department, for example, technical communication began with Stokes communicating to the command staff that ARRA was a different process with different federal expectations. In particular, the department would need to be prepared to produce quarterly reports on the amount of ARRA funding received, amount expended or obligated during the quarter, details of all funded projects and programs, and details of all subcontracts or subgrants. Each year, the police department receives money through the U.S. Department of Justice (DOJ) Justice Assistance Grant (JAG) program, a formula grant program that awards subgrants to local governments and state agencies in support of critical funding for a variety of program areas. Under ARRA, the police department anticipated an increase over the average \$300,000 grant received from DOJ in previous years.

Stokes pulled together the command staff, including the police chief, the assistant chief, and majors for the divisions, and deputy division leaders to discuss how much money the department would receive under ARRA, how the grant would be managed, and what to do with the money. In addition, Stokes encouraged the command staff to consider the economy and the needs of the police department. In previous years, the police department shared JAG money with other outside entities (sheriff's office, Commonwealth Attorney's office, Administrative Drug Court, and others) through subcontracts or subgrants. Under the prevailing economic conditions in 2009, Stokes warned members of the police department as well as the subcontracting entities that the police department would determine the priority and funding and that subcontracting should be minimal. "The economy was worse than we realized and we needed to keep every penny for ourselves ... to keep our doors open, and everyone employed at a maximum level." Despite the warning, the department continued to make promises to potential subcontractors that later had to be rescinded. The original JAG proposal included these subcontracted partners; the initial application, therefore, needed to be adjusted:

Richmond: Lessons Learned for the New Intergovernmental Partnership

- Effective entrepreneurial efforts by IT staff, with the support of leadership, fostered the collaborative data-sharing process for managing federal grants. Gurdeep Bhatia and Subhashini Narra had the insight and knowledge to build a new grant system, and led the coordination with OMB, but the support of Mayor Dwight Jones and Grants Coordinator Chris Johnston were vital to the effort.
- A regional grants group provided key technical communication for sharing and risk management. As a strategy for dealing with time and reporting pressures as well as a continuously changing set of federal employees, Chris Johnston's use of the regional group mitigated some of the risks of moving forward with limited or unclear information.
- An IT-based grants management system provided standardization to reduce reporting errors and improve information sharing within the city, but also may reduce the person-to-person contact between agencies at the city and federal level. While the highly decentralized grants management process prior to ARRA was cited for inconsistencies and missed opportunities, the new system may eliminate important personal relationships that also enhance coordination.

When we sent the proposal to the federal government it included those entities, but as the economy deteriorated we couldn't fund those agencies ... I had to speak with the project manager at DOJ and tell her about the package and that we needed to revise the award and DOJ would need to approve the revisions ... I called the project manager in DOJ just to run it past her.

The phone call to touch base, Stokes shared, is essential to keep the lines of communication open, to stay in "constant contact." According to Stokes, the project managers in DOJ appreciate the effort as much as the grants managers in the city. The visits by the federal program manager to Richmond to directly communicate the expectations of the new program are also an important piece of the technical communication practices.

Technical communications on grant management, however, were more complicated in areas with high federal personnel turnover. As Chris Johnston, Richmond grants coordinator, noted in reference to efforts to get the reporting requirements correct, "the federal staff was changing . . . and we received different views, different advice." This variation was mitigated, however, by a regional grants group that brought together members from local jurisdictions in the Richmond region to share information on the federal reporting process, frustrations, and solutions. This group provided an opportunity to think out loud about risks associated with applying for and receiving grants, and hence played a key role in the technical communication practices.

As the online grant administration system develops for Richmond, the person-to-person communication efforts between agencies and federal officials, and between regional officials may diminish. Communication efforts by Gurdeep Bhatia and Subhashini Narra with OMB to clarify the federal government expectations are built into the new system which may eventually shift the technical communication practices to a central federal hub, such as OMB.

In addition to formula grants received through the ARRA application process, both Richmond and Alexandria competed for grants, several of which were startup programs in energy and transportation. The newness of the grants, the short timeline for getting money out the doors of federal agencies and into the hands of state and local governments and non-governmental partners, and the lack of grant management experience among federal employees hired to facilitate

the ARRA implementation, particularly in the Department of Energy, together made technical communication practices a priority. Technical questions were less of a concern for Blacksburg, working with established grant programs such as CDBG, and for grants that passed through the Commonwealth of Virginia to the localities based upon a formula for distribution.

Coordination with Local Partners Outside Government

The IT-driven, agency-based process in Richmond did not formally include the Richmond Public Schools or the Richmond Redevelopment and Housing Authority early in the decision-making process. However, education and housing are among the topics on the Richmond stimulus tracker. Inclusion of nongovernmental, nonprofit partners varied depending upon the agency and the extent of the relationship. As noted, close working ties with non-city government law enforcement organizations were difficult to sever in anticipation of the police department retaining more of the JAG grant than in previous years.

Blacksburg: Partnership-Leveraged Strategy

Blacksburg integrated its implementation of ARRA funding directly with its existing grant management process. As of March 22, 2010, the town of Blacksburg received a total of \$5,103,105 from ARRA. The bulk of the funding went to Blacksburg Transit (a town department) as pass-through money from the Virginia Department of Transportation (VDOT) and the Virginia Department of Rail and Public Transportation (DRPT) dedicated to spending in rural and small urban areas and capital expenditures. Blacksburg Transit planned for and applied the funds to new buses for the region under a transportation improvement plan amendment with the regional metropolitan planning organization (MPO Minutes). Reports on the grant management and expenditures are made directly to VDOT and DRPT. The remaining ARRA money received to date was awarded to the police department, the public works department, and the Community Development Block Grant (CDBG) program.

Table 9: Blacksburg ARRA Grants

ARRA Grants Received by the Town of Blacksburg	Amount of Funding
Blacksburg Transit FY10 capital grants	\$4,523,664
Blacksburg Transit FY10 state operating funding	\$171,748
Police Department—Edward Bryne JAG grant	\$49,973
Public Works—EECBG	\$186,900
CDBG—Additional Funding	\$170,820
Total	\$5,103,105

The strategy for Blacksburg was to implement ARRA with processes already in place for ongoing grants management, while leveraging town partnerships to extend or enhance the application of ARRA funds. While Alexandria and Richmond also worked with subrecipients to implement ARRA dollars, the Blacksburg subrecipient relationships are better described as partnerships that leverage the grant benefit to enhance community outcomes. The partnership between the town of Blacksburg and Community Housing Partners (CHP) to implement the \$170,820 in Community Development Block Grant (CDBG) funding through the ARRA to support affordable housing and provide home improvements for low to moderate-income families will be examined later in this section. The partnership also worked as a management strategy, as examined here.

Table 10: Blacksburg Community Characteristics

Community Characteristics	Blacksburg
Population	
Population in 2009	42,998
Income	
Estimated per capita income 2007	\$16,773
Median household income 2008	\$29,264
Industry	
Civilian employed population age 16+	16,559
Professional, scientific, and management, and administrative and waste management services	1,792 (10.9%)
Educational services, and health care and social assistance	7,592 (45.9%)
Arts, entertainment, and recreation, and accommodation, and food services	2,900 (17.6%)

In an interview focused on a recent Blacksburg/CHP housing project to build new energy-efficient and affordable homes, the manager of Blacksburg's Housing and Neighborhood Services, Matt Hanratty, emphasized the importance for the town, as project leader, to identify and work with good partners:

CHP understands working with neighborhoods, and sustainability is part of their mission. We can do public works, but we don't build houses, so developing the partnership was important (HUD 2007).

This small municipality with a well-established grants management system was able to expand upon the impact and reach of the federal dollars received under ARRA through a partnership-leveraged approach. The primary concerns for accountability and reporting under the act, complicated by the use of sub-recipients, was addressed through the town's approach to long-term partnership building that divides responsibility between the town and the partner to match capabilities and to mutually support the goals of each.

Decentralized and Integrated Grants Process Design

Blacksburg implemented the ARRA using its existing grant management system. To meet ARRA-related responsibilities and mitigate implementation risks, Blacksburg carefully reviews the grants available under ARRA, participates in relevant webinars by federal granting agencies, communicates with granting officials, and looks at Virginia's terms and conditions for ARRA purchases. The deputy town manager's office coordinates the town-wide effort, while responsibility for the grants rests with the individual departments that obtained the grants. Susan Kaiser, finance director, says, "The town has a very reputable financial accounting system, managed by the financial service department. They have accounted for numerous grants."

In addition to the use of the existing grant administration system, however, the town drew on a reliable nongovernment partner to leverage the funds provided through ARRA. The partnership is central to the design of the ARRA implementation system. In this case, the town worked with Community Housing Partners, an established partner in a very successful green, affordable housing project in 2006 and 2007. Building on this partnership, the town leveraged the \$170,820 in CDBG money from ARRA to implement an emergency home repair program for low to moderate-income residents. Requests for the emergency home repairs—repairs

"required to remove imminent threats to health and safety,"—are made to both the town and the CHP, and CHP then hires local contractors to complete the work. The town reimburses CHP for the work (Bardin). The close working relationship between the town and CHP is an essential component of Blacksburg's implementation of ARRA. Working with an established partner and clear parameters for the relationship between the CHP and the town was essential in meeting the expectations for transparency and accountability in the implementation of ARRA. Partnerships between cities and nonprofit organizations are certainly nothing new, but partnerships developed over time and drawn upon to leverage the citizen benefits of ARRA are distinctive in the case of Blacksburg.

Political and Technical Communication Practices

Blacksburg did not have the advantage of geographic proximity or special staff to focus on the early shifting parameters of ARRA and relationships with the state and federal government. While the town remained informed prior to passage of the legislation, the primary communication practices focused on the technical component related to securing, implementing, and reporting on a grant with the state and federal agencies. The minimal political communication practices also reflect the larger strategic decision to focus on ARRA funding passed through the state as formula grants, and not to pursue competitive grants that required preparation to identify and capitalize on those opportunities early on.

The town practices centrally coordinated technical communication for implementing ARRA. To meet recovery-related responsibilities and mitigate implementation risks, program managers and the town's deputy manager, Steve Ross, carefully review the grant criteria and reporting responsibilities. Central to the draw-down of information from the federal government has been participation in webinars presented by the federal agencies. A seven-part webinar series developed by OMB, "Implementing Guidance for the Reports on Use of Funds Pursuant to the American Recovery and Reinvestment Act of 2009," provided both an overview and detailed information on federal reporting requirements, data quality, and subrecipient reporting. Granting agencies such as the Federal Transit Administration also provided webinars for grant recipients.

Deputy Town Manager Steve Ross coordinates the technical communication. He communicates with federal granting officials with questions or points for clarification, reviews Virginia's terms and conditions for ARRA purchases, and coordinates with the town departments applying for and receiving the grants. Steve Ross ensures that all reporting requirements are communicated to each department. Project managers at the department level check that sub-recipients meet the specified criteria and financial standards, and evaluate performance of each program stream in accordance with the grant requirements. Purchasing requirements are distinct for the ARRA, so the purchasing department has communicated with all departments and watches the account numbers to be sure purchases under ARRA are identified and the extra terms and conditions are addressed.

Coordination with Local Partners Outside Government

Blacksburg has developed a tight working relationship with Community Housing Partners, a private, non-profit organization focused on affordable housing, energy efficiency, and other housing initiatives. The relationship has extended the town's impact and reach with respect to implementation of CDBG formula funds received as part of ARRA. In contract terms, there is significant clarity of expectations for the town of Blacksburg and the CHP in terms of their respective roles in bringing ARRA-funded programs to fruition. The relationship has developed over time, which proved beneficial given the demands for speedy delivery of ARRA funds. Blacksburg and CHP were able to get the home improvement projects underway quickly given their longstanding working relationship.

Blacksburg: Lessons Learned for the New Intergovernmental Partnership

- Collaboration takes time and expectations must be carefully managed. Blacksburg's partner-ship with Community Housing Partners has helped the town leverage CDBG money for a more effective housing impact, but the partnership requires careful management. Effective collaboration in the intergovernmental process also requires setting realistic expectations. Participants must have realistic expectations about what partner agencies will do and what the performance timeframes will be. Partner agencies have other important goals and deadlines. It is important to acknowledge these diffuse and conflicting pressures.
- In smaller municipalities, a point person for managing technical communication and overseeing the grants management process provides sufficient breadth of information and coordination. Deputy Manager Steve Ross provided a key source of risk mitigation by reviewing different funding opportunities and grant criteria and serving as the point person with the OMB.
- The strategic choice to stay out of the competitive grants processes was a key component of
 risk management for this small town. The reputation and stability of the existing grant administration system provided a foundation for ARRA; the city, however, did not test the competitive
 grant waters, but rather focused on formula grants and state pass-through funds. Competing
 for grants requires an additional layer of capacity and costs with only a probability of funding.

In each of the three cases, assessments of the city's potential capacity gained by partnering with non-city-government entities (such as school districts or housing authorities) or with local non-profits (such as CHP), were weighed against the immediate financial needs of the cities and agencies, and the capacity of the cities to manage the subcontractor relationships. While coordination with the school district or housing authority might leverage grant opportunities and prevent overlap or duplication of effort, forging processes of inclusion in the grant process were not straightforward and required additional staff coordination to make them work (Alexandria built liaison groups into the incident command system). Similarly, while partnering or contracting with a subgrantor might extend a city's ability to serve the public through a particular program or policy, the responsibilities for managing subcontractors and reporting on expenditures and activities were high, and in some cases resulted in the decision not to collaborate.

Conclusions

ARRA established rigorous requirements for speed, increased information, risk management, and collaboration associated with the expenditure of federal funds. The three cities examined here faced dual challenges. On the one hand, the municipalities had to move with speed to secure federal dollars and implement programs to maximize economic opportunities for the communities of Richmond, Blacksburg, and Alexandria. These expectations for shovel-ready projects required preparation to move aggressively in the application for grants, creatively in the application for competitive grants, and in a coordinated manner with authorities and eligible grant recipients across the cities. This also required smooth and quick communication with the state in some cases, or with granting federal agencies and OMB in others, to ensure that grant processes were clear and reporting requirements were understood.

On the other hand, expectations for increased information to ensure accountability, transparency, and performance were central to the preparation for and management of the ARRA. Elected officials and top managers were focused on accountability demands, or the management of federal funds received under ARRA, the expenditure of funds on activities specified in the grant applications, the oversight of sub-recipients in the granting process, the reporting of grant administration practices, and the implementation of the grants; they were focused on transparency demands, or making visible and accessible the application, receipt, expenditure, performance, and reporting associated with any grant; and they were focused on performance demands, or reporting on how effective the federal dollars were in achieving key program goals.

To meet both sets of expectations, the strategies developed by the cities were premised on managing the risk of fraud, waste, error, and abuse, the risk of accepting money that might create longer-term obligations the city could not meet, and ensuring a high level of quality for all projects. Risk management, in short, was not a specific step or category in the implementation process, but rather the context in which the overall management strategies were engaged. Similarly, the state's significant process approach was embedded in an enterprise risk management context, aimed at minimizing the risk associated with fraud, waste, and abuse.

Each city made changes in its traditional grant administrative processes to implement ARRA, some more elaborate than others, but all reflective of the demands and expectations of the new intergovernmental partnership. In the city of Richmond and the Commonwealth of Virginia, highly decentralized grant administration systems became more centrally managed in the process of implementing ARRA. Both retained the role of city agencies or state agencies taking the lead in working with federal granting agencies, but both implemented oversight systems that standardized the ways in which agency proposals and awards were managed, and provided greater access to information for which agencies have traditionally been responsible. In Alexandria, implementation of ARRA promoted a more centrally managed grant administration system, but one that relied heavily upon the expertise and legwork of the city agencies for providing the input needed to propel the process. Blacksburg made minor adjustments in its processes that resulted in more standardization as well.

References

American Recovery and Reinvestment Act (ARRA). Pub. L. No. 111-5, 123 Stat. 115 (February 17, 2009).

Ammons, David N. 2009. *Measuring the Results of Economic Stimulus Investments: Local Government Leading the Way*. A policy issue white paper prepared on behalf of the Governmental Affairs and Policy Committee of ICMA. Washington, D.C.: International City/County Management Association.

Bardin, Sharla. 2009. "Blacksburg Program to Help Homeowners with Repairs." *The Roanoke Times*, September 4, 2009: http://www.roanoke.com/news/nrv/wb/217696

Behn, Robert and Keating, Elizabeth. 2004. Facing the Fiscal Crises in State Governments: National Problem; National Responsibilities. Cambridge, MA: Taubman Center for State and Local Government.

Biden, Joseph. 2009. "ARRA Comments with Joe Biden and Earl Devaney." The White House, Office of the Vice President, February 25, 2009, Press Release. http://alaskakid.wordpress.com/peter-orszag/arra-comments-with-joe-biden-and-earl-devaney/

Boyd, Donald J. 2009. What Will Happen to State Budgets When the Money Runs Out? Albany, New York: Nelson A. Rockefeller Institute of Government.

Cole, Richard. 2010. "The State of State Advisory Commissions on Intergovernmental Relations: Do They Continue to Have a Role in the U.S. Federal System?" In *Book of the States*. Council of State Governments.

Cole, Richard and John Kincaid. 2006. "Public Opinion on U.S. Federal and Intergovernmental Issues in 2006: Continuity and Change." *Publius: The Journal of Federalism* (May).

Department of Homeland Security. 2004. *National Incident Management System*. U.S. Government Printing Office.

Digital Communities. 2009. "\$1.6 Billion Stimulus Funding Allocation Announced by Virginia Governor." http://www.digitalcommunities.com/articles/16-Billion-Stimulus-Funding-Allocation-Announced.html

Government Accountability Office. 2009. Recovery Act: As Initial Implementation Unfolds in States and Localities, Continued Attention to Accountability Issues Is Essential. Statement of Gene L. Dodaro, Acting Comptroller General of the United States. GAO-09-631T

Government Accountability Office. 2010a. Recovery Act: Contracting Approaches and Oversight Used by Selected Federal Agencies and States. GAO-10-809.

Government Accountability Office. 2010b. Recovery Act: States' and Localities' Uses of Funds and Actions Needed to Address Implementation Challenges and Bolster Accountability. GAO-10-605SP.

Government Accountability Office. 2010c. Recovery Act: One Year Later, States' and Localities' Uses of Funds and Opportunities to Strengthen Accountability. GAO-10-437

Government Accountability Office. 2010d. State and Local Governments' Fiscal Outlook: March 2010 Update. GAO-10-358

Housing and Urban Development. 2007. "Affordability and Energy Efficiency Mark New Homes." Research Works 4 (7): July/August. file:///E:/IBM%202009/RW_vol4num7t1.html

Kettl, Donald. 2003. "Contingent Coordination: Practical and Theoretical Puzzles for Homeland Security." *American Journal of Public Administration* 33 (3): 253-277.

Klarman, Kim Walker and Julie Jennings. 2009. *Authoritative Resources on the American Recovery and Reinvestment Act (ARRA)*. Congressional Research Service.

Kumar, A. and D. Nakamura. 2008. (September 24). "Md., Va., D.C. Face Budget Upheaval, Next Step Is Tax Hikes, Service Cuts." *The Washington Post,* A01. http://www.washingtonpost.com/wp-dyn/content/article/2008/09/23/AR2008092303665 pf.html

Maguire, Steve. 2011. "State and Local Government Debt: An Analysis." Congressional Research Service, http://www.cdfa.net/cdfa/cdfaweb.nsf/fbaad5956b2928b086256efa005c5f78/4886e49351a9f3648825786b00707a3a/\$FILE/Congressional%20Research%20 Service%20Report%20on%20State%20and%20Local%20Debt.pdf

Maryland Governor's Grants Office. 2010. "Special Report: Office of Management and Budget." September 29, 2010. http://archive.constantcontact.com/fs019/1101383760746/archive/1103726331786.html

McNichol, Elizabeth, Philip Oliff and Nicoloas Johnson. 2011. "States Continue to Feel Recession's Impact." Center on Budget and Policy Priorities. March, 2011. http://www.cbpp.org/cms/?fa=view&id=711

MPO Minutes (Metropolitan Planning Organization). 2009. Minutes for the Blacksburg/Christiansburg/Montgomery Area Metropolitan Planning Organization Policy Board Meetings, May 7, 2009 and June 11, 2009. http://www.montva.com/content/1146/98/157/default.aspx

National Council of State Legislators. http://www.ncsl.org/default.aspx?tabid=12577

Office of the City Auditor. 2009. *Audit Report #2010-005 on the Citywide Grants Process*. Richmond City Council, Richmond, VA. Official Government Report.

Office of Management and Budget, Executive Office of the President. 2009. "Memorandum for the Heads of Departments and Agencies." M-09-15. http://www.whitehouse.gov/sites/default/files/omb/assets/memoranda fy2009/m09-15.pdf

IBM Center for The Business of Government

Oliver, Merril. 2009. "Reporting Requirements under ARRA and Beyond." PowerPoint presentation developed by the Maryland Governor's Grants Office in partnership with Federal Funds Information for States (September 18, 2009).

Posner, Paul. 2010. "The Recovery Act: An Accountability Test for Our System." In *Framing a Public Management Research Agenda*. IBM Center for the Business of Government.

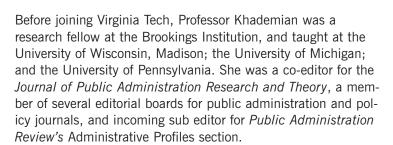
Richmond, Virginia City News. 2009. "City Prepares for Stimulus Funding." February 12. file:///E:/IBM%202009/2009 02 08 archive.html

Walker, David. 2006. "America's Fiscal Future." Speech before the London School of Economics, London, England. March 14. GAO-06-1037CG

About the Authors

Anne M. Khademian is a professor of public administration and policy with Virginia Tech, and was recently named the Director for the School of Public and International Affairs in the College of Architecture and Urban Studies.

Her research interests focus on leadership and organizational culture, inclusive management, policy networks, and the work of organizations involved in homeland security and financial regulation. She is the author of numerous articles on public management and public policy, and the books *Working with Culture: The Way the Job Gets Done in Public Programs* (CQ Press, 2002), *Checking on Banks: Autonomy and Accountability in Three Federal Agencies* (Brookings, 1996), and *The SEC and Capital Market Regulation: The Politics of Expertise.*



In 2009, she was elected a Fellow with the National Academy of Public Administration. She is the co-convener of the CPAP Round Table on Leadership and Administration, and serves on the Advisory Board for the Center for Technology Security and Policy to support a partnership with the Center for Public Administration and Policy in developing a distinctive research and educational focus on homeland and national security. Anne holds a BA in Political Science and an MPA from Michigan State University, and a Ph.D. in Political Science from Washington University in St. Louis.



IBM Center for The Business of Government

Sang Ok Choi is an Assistant Professor of the Center for Public Administration and Policy at the School of Public and International Affairs at Virginia Tech. He was previously an Assistant Professor at the Department of Public Administration and Public Policy at the California State University, Dominguez Hills. He teaches courses on Public Management Network, Public Human Resource Management, Public Budgeting and Financial Management, and Advanced Methods.

His research interest focuses on intergovernmental relations, public management network, and emergency management. In particular, he studies what characteristics of a network influence its performance in the public and nonprofit sector. In addition, he examines local government growth and spending priorities. He extended Peterson's *City Limits* perspective to counties to empirically examine how economic, political, institutional, and demographic factors influence overall county spending and spending priorities across three core policy arenas in his article, "County Limits: Policy Types and Expenditure Priorities," in the *American Review of Public Administration*. Recently, he has expanded the focus of his government spending research to include the "Community Quality of Life (QoL)" concept. He empirically examines how spending priorities influence community QoL.

Professor Choi received a Master of Arts in Public Administration from the Maxwell School of Citizenship and Public Affairs at Syracuse University, and a Ph.D. in Public Administration at the Florida State University. He received a Best Dissertation Award at the Academy of Management Public and Nonprofit Division. His article, *Employee empowerment and team performance: autonomy, responsibility, information, and creativity,* has been chosen for a Highly Commended Paper Award from Emerald Literati Network Awards for Excellence 2010.

Professor Choi's work has been published in, among others, Public Administration Review, American Review of Public Administration, State and Local Government Review, Administration & Society, International Journal of Public Sector Management, and Journal of Homeland Security and Emergency Management.



Key Contact Information

To contact the authors:

Anne M. Khademian

Director and Professor School of Public and International Affairs Virginia Tech 1021 Prince Street Alexandria, VA 22314 703-706-8119 (Alexandria office) 540-231-2291 (Blacksburg office)

e-mail: akhademi@vt.edu

Sang Choi

Assistant Professor
Center for Public Administration & Policy
School of Public and International Affairs
Virginia Tech
104 Draper Road, SW (0520)
Blacksburg, VA 24061
540-231-6946 (personal office)
540-231-5133 (CPAP main office)
540-231-7067 (fax)

e-mail: sang@vt.edu or soc4707@gmail.com



For a full listing of IBM Center publications, visit the Center's website at www.businessofgovernment.org.

Recent reports available on the website include:

Assessing the Recovery Act

Virginia's Implementation of the American Recovery and Reinvestment Act: Forging a New Intergovernmental Partnership by Anne Khademian and Sang Choi

Collaborating Across Boundaries

Environmental Collaboration: Lessons Learned About Cross-Boundary Collaborations by Kathryn Bryk Friedman and Kathryn A. Foster

Managing Innovation Prizes in Government by Luciano Kay

Conserving Energy and the Environment

Implementing Sustainability in Federal Agencies: An Early Assessment of President Obama's Executive Order 13514 by Daniel J. Fiorino

Breaking New Ground: Promoting Environmental and Energy Programs in Local Government by James H. Svara, Anna Read, and Evelina Moulder

A Guide for Local Government Executives on Energy Efficiency and Sustainability by Nathan Francis and Richard C. Feiock

Fostering Transparency and Democracy

Assessing Public Participation in an Open Government Era: A Review of Federal Agency Plans by Carolyn J. Lukensmeyer, Joe Goldman, and David Stern

Using Geographic Information Systems to Increase Citizen Engagement by Sukumar Ganapati

Improving Performance

A Leader's Guide to Transformation: Developing a Playbook for Successful Change Initiatives by Robert A. F. Reisner Project Management in Government: An Introduction to Earned Value Management (EVM) by Young Hoon Kwak and Frank T. Anbari

Managing Finances

Strategies to Cut Costs and Improve Performance by Charles L. Prow, Debra Cammer Hines, and Daniel B. Prieto

Strengthening Cybersecurity

A Best Practices Guide to Information Security by Clay Posey, Tom L. Roberts, and James F. Courtney
Cybersecurity Management in the States: The Emerging Role of Chief Information Security Officers by Marilu Goodyear,
Holly T. Goerdel, Shannon Portillo, and Linda Williams

Transforming the Workforce

Engaging a Multi-Generational Workforce: Practical Advice for Government Managers by Susan Hannam and Bonni Yordi Implementing Telework: Lessons Learned from Four Federal Agencies by Scott P. Overmyer

Using Technology

Using Online Tools to Engage—and be Engaged by—The Public by Matt Leighninger
An Open Government Implementation Model: Moving to Increased Public Engagement by Gwanhoo Lee and Young

How Federal Agencies Can Effectively Manage Records Created Using New Social Media Tools by Patricia C. Franks



About the IBM Center for The Business of Government

Through research stipends and events, the IBM Center for The Business of Government stimulates research and facilitates discussion of new approaches to improving the effectiveness of government at the federal, state, local, and international levels.

About IBM Global Business Services

With consultants and professional staff in more than 160 countries globally, IBM Global Business Services is the world's largest consulting services organization. IBM Global Business Services provides clients with business process and industry expertise, a deep understanding of technology solutions that address specific industry issues, and the ability to design, build, and run those solutions in a way that delivers bottom-line value. To learn more visit: ibm.com

For more information:

Jonathan D. Breul

Executive Director
IBM Center for The Business of Government
600 14th Street NW
Second Floor
Washington, DC 20005
202-551-9342

website: www.businessofgovernment.org e-mail: businessofgovernment@us.ibm.com

Stay connected with the IBM Center on:









