APPALACHIAN REGIONAL COMMISSION

FY 2011 Performance Budget Justification

As Submitted by the Federal Co-Chair to the Appropriations Committees of the House and Senate

February 2010
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BUDGET SUMMARY & HIGHLIGHTS
ARC FY 2011 Budget Summary & Highlights

The Federal Co-Chair requests $76 million in direct appropriations for The Appalachian Regional Commission to implement the Appalachian Regional Development Act Amendments of 2008, which authorizes the Commission through FY 2012. This represents level funding with the amount enacted for FY 2010. The Commission’s programs are designed to help the 13-state Appalachian Region achieve socioeconomic parity with the nation. FY 2011 activities will further the Administration’s special focus on the diversification of the Appalachian economy and advance the four goals of ARC’s Strategic Plan to increase job opportunities and per capita income, strengthen economic competition, develop and improve the Region’s infrastructure and build the Appalachian Development Highway System to reduce the Region’s isolation.

Appalachian Development Highway System

The Safe, Affordable, Flexible, Efficient Transportation Equity Act—A Legacy for Users (SAFETEA-LU) authorized $470 million annually from the Highway Trust Fund for the Appalachian Development Highway System. ARC continues to oversee the development of this system.

Area Development

The request includes $63.5 million for Area Development. At least half of this amount will benefit economically distressed counties and areas. While final program decisions will be made jointly by the Federal Co-Chair and the Appalachian governors, the Commission expects to place a priority on creating jobs through grants for basic infrastructure improvements. It will continue its special focus on increasing access to and use of broadband services, expanding access to quality healthcare, and reducing the gap in college-going rates between Appalachia and the nation. ARC will also capitalize on the Region’s abundant energy assets to promote job creation and workforce training in renewable energy and energy efficiency. For Local Development Districts, the ARC budget provides $6.2 million.

Salaries and Expenses

To implement the ARC program, the Federal Co-Chair requests $6.2 million for salaries and expenses. Increases primarily reflect a cost-of-living adjustment in addition to increases in costs associated with federal financial requirements and the new Inspector General Reform Act.

Performance

Performance targets for FY 2011 include: create/retain 20,000 jobs; position 20,000 Appalachians for enhanced employability; provide 20,000 households with basic infrastructure services; open 25 additional miles of the ADHS; and leverage $4 of private investment for every $1 of ARC funds invested in job-creating projects.

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The Appalachian Regional Commission is the only federal entity specifically created to focus on the unique needs and opportunities of Appalachia. No other agency is charged to be simultaneously a regional advocate, knowledge builder, investor, and partner at the federal, state and local levels. ARC complements the broad national activities of other federal agencies by facilitating and extending federal programs into the most challenging and distressed parts of Appalachia. In addition, ARC uses its grassroots delivery system and region-wide partnerships to make strategic place-based and regional investments and attract private and non-profit investment to areas suffering from intense economic distress.

While Appalachia has made considerable progress over the last few decades, it continues to lag behind the nation on key indicators of economic success in areas such as education and health. Appalachia has long been buffeted by a series of setbacks that disproportionately affect the region because of its historic reliance on big industries like manufacturing, mining, tobacco and steel. The Region confronts a complex combination of challenges that few other parts of the country face such as a mountainous terrain, a dispersed population, environmental problems, and a lack of human resources. Appalachia also has a weak track record in applying for and receiving funding assistance. These special set of barriers hinder regional competitiveness and economic growth. They call for a specially tailored and flexible federal response that recognizes the unique problems and history of each city and county in Appalachia. This is the role of the ARC. Activities in FY 2011 include continuing to address the Administration’s special focus on the diversification of the Appalachian economy through interagency collaboration.

ARC is a performance-based agency whose regional strategies to help communities help themselves show substantial results. Since its inception, the ARC has helped cut Appalachia’s poverty rate from 31 percent to 14 percent. In the past five years alone, ARC-funded infrastructure projects have resulted in the creation or retention of nearly 80,000 jobs and provided almost 200,000 Appalachian households with access to clean water and sanitation facilities.

In FY 2009, ARC invested roughly $75 million in projects that:

- Leveraged over $657 million in private sector investment, a ratio of 9:1;
- Created or retained 21,183 jobs;
- Provided water and sewer service to 25,981 households; and
- Delivered workforce training to 23,764 students or individuals

The FY2011 budget request allows ARC to continue its mission to help Appalachia achieve socioeconomic parity with the rest of the nation. It includes ARC performance over the past year and projected performance for the upcoming fiscal year.
MISSION & HISTORY
Mission and History

The Appalachian Regional Commission (ARC) is a federal-state partnership that seeks to foster economic development, create jobs, and improve the quality of life in a 13-state region that stretches along the Appalachian Mountains from the Southern Tier of New York to northeastern Mississippi.

The Appalachian Region includes all of West Virginia and portions of 12 other states: Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, and Virginia. ARC serves 420 counties that encompass roughly 205,000 square miles, with a population of 23 million people.

Established by Congress through the Appalachian Regional Development Act of 1965 and recently reauthorized through FY 2012, ARC was created to help close the profound socioeconomic gaps between Appalachia and the rest of the nation. These gaps are widespread and generational. As a region, Appalachia confronts a combination of challenges that few other parts of the country face – its mountainous terrain, dispersed population, environmental issues, lack of financial and human resources, and weak track record in applying for and receiving funding assistance. In addition, the Region suffers economic distress largely because its economy is disproportionately dependent on manufacturing, mining, tobacco and steel. The combination of these special problems has resulted in concentrated areas of poverty, unemployment, and underinvestment.

The current economic downturn has affected Appalachia even more severely than other parts of the nation. Overall, the rate of job loss has been more severe in Appalachia than in the nation as a whole with southern Appalachia bearing the most significant losses. Of the 420 counties in Appalachia, only 11 registered positive employment growth since the fourth quarter of last year. Employment in the region has decreased to 2002 levels, wiping out all jobs gained since the previous recession in 2001.

As declared in its Strategic Plan, ARC’s vision is that Appalachia will achieve socioeconomic parity with the nation. To achieve that vision, ARC’s mission is to employ locally-driven, integrated and place-conscious solutions across Appalachia as well as to be a strategic partner and advocate for sustainable community and economic development in Appalachia.
ARC’s programs focus on two broad areas: a highway program to connect Appalachia with national and international commerce, funded through SAFTEA-LU, and a non-highway area development program to create jobs, stimulate economic growth, provide needed infrastructure, and improve the education and health of the people of Appalachia.

Each year almost half of ARC’s nonhighway funding supports basic infrastructure projects such as construction of water and sewer facilities and telecommunication. ARC often provides the first public water supply for residents of isolated communities in rural Appalachia. Telecommunication, particularly broadband, is a key component to reducing isolation and enabling Appalachia to participate in the global economy. The remaining funds target other ARC priorities, including workforce development, entrepreneurship, healthcare, and local leadership development. Most of these activities are carried out through grants to government entities and nonprofit organizations.

ARC seeks to provide the “building blocks” that are essential for local economic growth. Its programs complement other federal activities and extend the reach of those programs into the most challenging parts of Appalachia. ARC provides “gap funding”—the missing piece of the puzzle that enables many distressed communities to take full advantage of other federal programs and acts as a key financial partner in attracting private and nonprofit investment to the Region. Because the programs at major federal departments use broad nationwide guidelines, many Appalachian communities have difficulty accessing these federal resources.

ARC is a performance-based agency that makes long-term and short-term investments and designs performance measures to track its progress. The results of ARC’s work to date are compelling: the number of high-poverty counties in the Region has dropped from 295 in 1960 to 116 in 2009; the more than 400 ARC-funded rural primary care health facilities have helped improve access to health care and reduce the infant mortality rate by two-thirds; and high school graduation rates now meet the national average, with ARC helping build and equip 700 vocational education centers. Over the past five years, ARC infrastructure projects have provided almost 194,000 Appalachian households with access to clean water and sanitation facilities.

A recent independent evaluation of ARC infrastructure projects funded between 1998 and 2004 found that the sampled projects resulted in leveraged private-sector investment of $1.7 billion and yielded 17,800 new jobs. Private investment has played an important part in the economic
development of Appalachia, and in FY 2008 ARC’s job-creating projects attracted almost $14 of private investment for every $1 of ARC support.

Another independent evaluation analyzed differences in economic growth rates between Appalachian counties and their non-Appalachian socioeconomic “twins” between 1969 and 2000. The empirical findings indicated that during that period, income growth in the Appalachian counties was 131 percent higher than income growth in the non-Appalachian counties; earnings growth was 96 percent higher; population growth was 9 percent higher; and per capita income was 36 percent higher.

Despite this success, serious challenges continue to confront Appalachia, and, in many ways, they are even more complex and profound today than they were in the 1960s. Then, the major concern was addressing the most basic infrastructure, environmental, training, and health needs. Today, patterns in global trade and technology have shaken Appalachia’s historic economic reliance on traditional manufacturing, extractive industries, and tobacco production, threatening many communities whose local economies were already fragile. Even the coal industry, which is experiencing a resurgence, has lost almost 50,000 jobs since the 1980s, due largely to productivity gains and mechanization.

Manufacturing job losses have also taken their toll. Between 1995 and 2005, one out of three American jobs lost in the apparel sector and one out of five jobs lost in textiles manufacturing occurred in Appalachia. Primary-metals sectors, such as steel, have lost 21,000 jobs since 1995. The furniture industry, which had been a robust source of jobs in southern Appalachia, is facing severe challenges from imports.

Some of the earlier infrastructure problems still exist in Appalachia, and they require continued attention. Roughly 20 percent of Appalachian households are not served by a public water system (compared with 10 percent of the rest of the nation’s households), and 47 percent of Appalachian households are not served by a public sewage system (compared with a national average of 24 percent).

To better assess progress in completing its mission, ARC developed an index that compares the economic condition of Appalachian counties with all counties in the nation (based on unemployment, per-capita income, and poverty rates). Appalachia has proportionally more of the economically weakest counties and fewer of the economically strongest counties. More than 20 percent of the nation’s weakest counties are in Appalachia, while the Region has only 5 percent of the nation’s strongest counties—which are often
the engines that drive regional economic growth. The Region lags behind the rest of the nation in per capita income, college enrollment, and population growth; and has higher rates of cancer, heart disease, diabetes, and chronic obstructive pulmonary disease than the nation as a whole.

ARC is working with Appalachian communities to help them capitalize on trends that offer encouragement for a more robust regional economy—the growth of a vibrant automobile industry in southern Appalachia, new opportunities for clean coal and renewable energy industries, expansion of telecommunications access throughout Appalachia, and increased focus on the Region’s unique cultural and scenic resources. Finally, the construction of the Appalachian Development Highway System, along with the growth of intermodal facilities and inland ports, is positioning Appalachia as a key venue for the movement of freight that can boost not only the Region’s economy but the nation’s economy as well.

Programs and Policies

Area Development Program

ARC’s nonhighway program is based on a Strategic Plan adopted by the Commission in August 2004. While the program includes research and technical assistance, the bulk of the Commission’s nonhighway appropriation goes to grants to governmental entities and nonprofit organizations in each of the 13 Appalachian states. ARC grant funding is not available to for-profit entities. The Commission approved $75.1 million in funding for 497 nonhighway grants (commonly referred to as “projects”) during FY 2009. ARC targets its grants to the areas of greatest need across the Region and will continue the Administration’s special focus on the diversification of the Appalachian economy through interagency collaboration.

Generally, ARC grants must be matched with state, local, or private funds, with the amount of that match set by statute, according to the economic condition of the county in which the grant activity is conducted.

Some of the major kinds of projects that ARC funds include the following:

- **Basic infrastructure**: The Commission invests close to half of its grant funds in projects that bring new or upgraded water and sewer systems to Appalachian communities. Infrastructure projects are some of the primary generators of new jobs in the Region. In many cases, the ARC grant helps provide the first public water or sewer

![ARC Investment, FY 2009](image)
service to a community. Additional infrastructure projects include telecommunications and broadband access, industrial park development, and housing development. In FY 2009, ARC invested $34.7 million in basic infrastructure, which leveraged $580 million in private investment related to the ARC projects.

- **Education and job training:** Equipping Appalachia’s workforce for the high-growth, high-demand jobs of the future is an essential element of ARC’s grant activities, especially in growing renewable energy fields. These education and workforce development projects include developing new curricula at community colleges, using distance learning technology to reach more students, and boosting the proportion of high school graduates who go on to college, as well as literacy, math and science education, and preschool programs. In FY 2009, ARC invested $11.4 million in education and job training projects.

- **Health care:** ARC has a long and rich history in addressing Appalachia’s health care deficiencies. Current activities include placing American-trained foreign physicians in areas without an adequate number of primary care doctors (the J-1 Visa Program), addressing the Region’s disproportionate incidence of diabetes and cancer, and supporting community-based approaches to substance abuse. The Commission has recently increased its work on oral health and also invests in health facilities and telemedicine. In FY 2009, ARC invested $5.3 million in a variety of health projects.

- **Entrepreneurship and small business development:** ARC seeks to foster entrepreneurship and small business growth across Appalachia through access to capital and technical assistance. ARC has helped capitalize 36 revolving loan funds across the Region to serve small businesses. The total current capitalization from ARC is $30.4 million. ARC also provides support to business incubators and offers export promotion assistance to help Appalachian businesses access key foreign markets. In FY 2009, ARC invested $4.8 million in business development projects.

- **Local leadership, capacity building, and asset-based development:** ARC views the development of local civic capacity as an important strategy for helping distressed communities create a stronger economy. Currently, 32 Appalachian communities are receiving support through projects that will strengthen local leadership. ARC also supports the development of existing assets in the Region, such as tourism, energy, and agriculture. In FY 2009, ARC invested $7.5 million in projects that build on the existing strengths of communities in the Region.

- **Technical assistance, research, and planning:** To help guide Appalachian communities in crafting effective economic and community development strategies, ARC sponsors research on key issues affecting the Appalachian economy and provides technical assistance to its member states and communities in translating that research into plans and activities that can boost local economies. In FY 2009, ARC invested $4.5 million in grants for these projects.

- **Local development districts:** ARC encourages regional approaches to economic development in part through its support of multi-county planning and development organizations (local development districts, or LDDs). These organizations craft regional strategies, provide planning assistance to small rural governments, and identify local economic development opportunities. Each ARC county is served by a local development district. In FY 2009, ARC invested $6.8 million in the 73 LDDs to foster regional planning and development.
**Highway Program**

Congress authorized construction of the Appalachian Development Highway System (ADHS) in the Appalachian Regional Development Act of 1965 (ARDA). The ADHS was designed to generate economic development in previously isolated areas, supplement the interstate system, connect Appalachia to the interstate system, and provide access to areas within the Region as well as to markets in the rest of the nation. The ADHS is the centerpiece of ARC’s economic and social development programs. At the end of FY 2009, a total of 2,585 miles, or over 83 percent, of the 3,090 miles authorized for the ADHS were open to traffic, and 97.5 additional miles were under construction. Another 122 miles were in the final design or right-of-way acquisition phase, and 273 miles were in the location study phase.

Section 1101 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) provided annual authorizations of $470 million for the ADHS for FY 2005 through FY 2009, for a total of $2.35 billion over the five-year period, from the Highway Trust Fund. The $470 million authorized in SAFETEA-LU was apportioned to states annually based on each state’s proportional share of the cost to complete the ADHS as specified in the latest available estimate of the cost to complete the ADHS. It is anticipated that funding for FY 2011 will be consistent with prior years.

**Targeting and Leveraging**

ARC annually designates counties according to their economic condition, using the most recently available data for unemployment, per capita market income, and poverty. The categories are: distressed, at-risk, transitional, competitive, and attainment. Each county’s status is determined through an index that monitors the economic status of Appalachian counties relative to all counties in the nation.

ARC targets its funds to the areas of greatest need. By law, at least 50 percent of its grant funds each year must go to projects and activities that benefit the Region’s economically distressed counties and areas. ARC routinely spends over 60 percent of its grant dollars on these activities.

ARC targets its funds in three ways: First, it reserves 30 percent of its project funds for use exclusively in the Region’s distressed counties, and allocates those funds solely to states that have distressed counties. Second, it adjusts the matching rate required for ARC to reflect the economic condition of the counties, with projects in distressed counties eligible for a larger proportion of ARC funding than projects in non-distressed counties. Finally, it prohibits ARC funding of most projects in counties that have strong economies.
To achieve maximum impact from its investments, ARC seeks to leverage other public and private dollars. In 2008, each $1 of ARC grant funds attracted almost $14 in private investment. Each dollar of ARC grant funds also drew in $2 in other public funds.

**Innovative Regional Initiatives**

In addition to the broad program categories outlined in ARC’s Strategic Plan, the Commission from time to time adopts particular topics for special work across the Region through “regional initiatives.” ARC periodically reserves a small portion of funding that can be used only on projects in these topical areas, and uses these dollars to spark innovative regional approaches. The two current regional initiatives focus on telecommunications and asset-based development.

The Telecommunications Initiative emphasizes the importance of broadband access and use in developing the economies of rural communities. Telecommunications technology can enable businesses in Appalachia to compete successfully in the global economy. Activities include: providing telecommunications infrastructure, promoting the use of distance learning and telemedicine applications, and helping small businesses enter the world of e-commerce.

The Asset-Based Development Initiative helps communities identify and capitalize on their existing economic development assets—natural, cultural, structural, and leadership resources that can enable communities to shape a new economic future for themselves. Commission activities in this area have included: the promotion of cultural and heritage tourism, support for value-added agriculture, use of the Region’s diverse energy resources as a strategy for local economic growth, and support for “gateway communities” that capitalize on their proximity to public lands.

**Energy Initiatives**

ARC’s unique structure and strong grassroots support make it particularly well positioned to address energy development with a regional approach and an economic development perspective. Recognizing the potential impact of recent energy developments on the economic well-being of the Region, the Federal Co-Chair and 13 Appalachian state governors formally called for the creation of an Appalachian Energy Blueprint in February 2006. ARC’s goal was a comprehensive plan that would tap all the Region’s assets – its conventional and renewable energy resources, its research institutions, its regional economic development entities, its two national energy labs, and its local communities. The plan calls for the Commission to focus on job creation in three broad areas:

1) Promoting energy efficiency to enhance the Region’s economic competitiveness;
2) Increasing the use of renewable energy resources to produce alternative transportation fuels, electricity, and heat; and
3) Developing conventional energy resources.

Congress embraced the general approach outlined in this blueprint in ARC’s recent reauthorization, establishing a special authority for the Commission to work on energy and economic development. Over the past two years, the Commission completed several grant competitions intended to help communities revitalize their economies by leveraging renewable energy and energy-efficiency resources.
Wellness Initiative
As a region that struggles with many health issues such as obesity, diabetes and high rates of cancer, it is important that Commission staff be more proactive about health and wellness. In FY 2011, the Commission will begin a “Wellness 101” initiative that will include activities designed to enhance staff knowledge of healthy eating choices and easy exercise habits.

Emphasis on Distressed Counties
ARC devotes special attention to the Appalachian counties that are designated as economically distressed. In FY 2010, 82 of the Region’s 420 counties are designated as distressed. In addition to reserving grant funds that can only be spent in those counties, the Commission takes a number of steps to address the particular challenges in these counties. For example, a special “Flex-E-Grant” program makes small grants (usually less than $10,000) available for leadership development and capacity-building projects in these counties. The Flex-E-Grants program uses citizen “sparkplugs” to create the community change needed to jumpstart local economies. By starting with small projects, the program enables the most distressed rural communities to gain the experience needed to move on to more complex strategic development efforts. In addition, in its grant competitions, the Commission gives extra weight to applications from distressed counties.

Special Partnership Activities
ARC seeks to achieve the maximum impact from its dollars by creating key partnerships with other public and private entities. Through a partnership with Microsoft from 2004 to 2006, communities across Appalachia benefitted from a commitment of $2 million in Microsoft software. ARC provided a conduit for this partnership using its grassroots distribution system of Local Development Districts, non-profits and educational organizations. ARC continues its ongoing partnership with the Parametrics Technology Corporation (PTC) to deploy their engineering software for use throughout the region in Community Colleges, high schools and middle schools. To date more than $24 million in software and associated licensing fees have been distributed throughout the region. A partnership with the National Geographic Society has boosted tourism in the Region through a first-of-its-kind geotourism map guide in 2005 and a new Appalachian driving tours map released in the spring of 2008. In November 2008, ARC announced a new partnership with the Claude Worthington Benedum Foundation to improve oral health in West Virginia by creating school-based dental clinics. Finally, using ARC’s local network of economic and community leaders, the Centers for Disease Control and Prevention has committed over $1.7 million since 2002 to focus on reducing health disparities in Appalachia, particularly in diabetes and cancer. The Commission also works with and assists Historically Black Colleges and Universities (HBCUs). Funding for HBCUs includes a scholarship program and a grant to provide specialized technical assistance.

Advisory Councils
To help guide its policies and programs, the Commission periodically establishes informal advisory councils, with each governor asked to designate a member from his or her state, and the Federal Co-Chair or Alternate Federal Co-Chair representing the federal interest. The Commission currently has advisory councils on the following issues: export trade, energy, health, tourism, intermodal transportation, and business incubators.
ARC STRATEGIC PLAN
ARC Strategic Plan

ARC’s Vision
For Appalachia to achieve socioeconomic parity with the nation

ARC’s Mission
To be a strategic partner and advocate for sustainable community and economic development in Appalachia

ARC performs its mission by fulfilling four regional development roles: advocate, knowledge builder, investor, and partner. Unlike economic development agencies that are primarily categorical grant makers, ARC performs advocacy, regional planning, and research activities in combination with its special grant program. No other entity has this regional mandate for Appalachia. As an advocate, ARC works with federal and state agencies, nonprofits, and other organizations to better deploy policy, programs, and financial resources in the Region. As a knowledge builder, the agency uses its unique expertise to focus on problems and development opportunities by convening councils, regional forums, and meetings of community leaders, and by performing in-depth research. As an investor, ARC creates economic opportunities by making its funds available for seed capital, gap funding, and investments in innovative programs. As a partner in the Region, ARC draws on its unique federal-state-local partnership model to expedite project development and solve problems that cannot be addressed by one level of government alone.

ARC organizes its funding policies and administration programs around four goals as laid out in its Strategic Plan to carry out its mission. Strategic objectives under each goal embody core ARC policies. Please see ARC’s Performance Measurement Framework on page 16 as a demonstration of how the Agency’s goals, objectives and performance coincide with one another. The following section explains each goal and the methods used to attain them. The Major Programs Section of this document integrates the ARC Strategic Plan with the FY 2011 Budget Request by program area.

ARC Strategic Plan Goals:

Goal 1: Increasing Job Opportunities and Per Capita Income in Appalachia to Reach Parity with the Nation

Strategic Objectives
1.1: Foster Civic Entrepreneurship
1.2: Diversify the Economic Base
1.3: Enhance Entrepreneurial Activity in the Region
1.4: Develop and Market Strategic Assets for Local Economies
1.5: Increase the Domestic and Global Competitiveness of the Existing Economic Base
1.6: Foster the Development and Use of Innovative Technologies
1.7: Capitalize on the Economic Potential of the Appalachian Development Highway System

1 ARC will extend its current strategic plan through FY2011.
Goal 2: Strengthen the Capacity of the People of Appalachia to Compete in the Global Economy

**Strategic Objectives**
2.1: Foster Civic Entrepreneurship
2.2: Enhance Workforce Skills through Training.
2.3: Increase Access to Quality Child Care and Early Childhood Education
2.4: Increase Educational Attainment and Achievement
2.5: Provide Access to Health-Care Professionals
2.6: Promote Health through Wellness and Prevention

Goal 3: Develop and Improve Appalachia's Infrastructure to Make the Region Economically Competitive

**Strategic Objectives**
3.1: Foster Civic Entrepreneurship
3.2: Build and Enhance Basic Infrastructure
3.3: Increase the Accessibility and Use of Telecommunications Technology
3.4: Build and Enhance Environmental Assets
3.5: Promote the Development of an Intermodal Transportation Network

Goal 4: Build the Appalachian Development Highway System to Reduce Appalachia's Isolation

**Strategic Objectives**
4.1: Foster Civic Entrepreneurship
4.2: Promote On-Schedule Completion of the ADHS
4.3: Coordinate Work on ADHS State-Line Crossings
**ARC Performance Measurement Framework**  
**Fiscal Year 2011**

### JOBS AND INCOME
- **Performance Goals**  
  **Outcome Goal**: Create or retain 20,000 jobs for Appalachians.  
  **Leveraging Goal**: Achieve a 4:1 ratio of leveraged private investment (non-project investment) to ARC project funding.  
  **Targeting Goal**: Direct 50% of grant funds to projects that benefit distressed counties or areas.

#### Key Strategies and Activities:
- Promote economic diversification through advocacy, regional forums, information sharing, training, and cooperative funding. Target entrepreneurship development and business support.

### COMPETITIVENESS
- **Performance Goals**  
  **Outcome Goal**: Position 20,000 Appalachians for enhanced employability.  
  **Matching Goal**: Achieve a 1:1 ratio of non-ARC project funding to ARC project funding.  
  **Targeting Goal**: Direct 50% of grant funds to projects that benefit distressed counties or areas.

#### Key Strategies and Activities:
- Increase employability by identifying and replicating exemplary projects, expanding alliances with other organizations, and providing funding leadership. Focus on college-going rates, worker skills, science/math education, school readiness, and high school completion rates. Address health access issues.

### INFRASTRUCTURE
- **Performance Goals**  
  **Outcome Goal**: Provide 20,000 households with basic infrastructure services.  
  **Matching Goal**: Achieve a 2:1 ratio of non-ARC project funding to ARC project funding.  
  **Targeting Goal**: Direct 50% of grant funds to projects that benefit distressed counties or areas.

#### Key Strategies and Activities:
- Seek highly leveraged and collaborative funding for basic infrastructure projects, emphasizing clean water and waste disposal. Expand telecommunications infrastructure through advocacy, knowledge sharing, and targeted funding.

### HIGHWAYS
- **Performance Goal**  
  **Outcome Goal**: Open 25 additional miles (net increase) of the ADHS to traffic.

#### Key Strategy:
- Work to complete the ADHS in close cooperation with state and federal partners as Highway Trust Fund financing becomes available.

### Ten-Year Goals
- **Outcome Goal 2005–2014**: Create or retain 200,000 jobs.
- **Outcome Goal**: Provide 200,000 Appalachian citizens with enhanced education/skills.
- **Outcome Goal 2005–2014**: Provide new or improved water/sewer services to 200,000 households.
- **Outcome Goal 2005–2014**: Open 250 additional miles (net increase) of the ADHS to traffic.
Goal 1: Increasing Job Opportunities and Per Capita Income in Appalachia to Reach Parity with the Nation

Appalachia’s economic vitality and stability require a more diversified regional economy. While attracting new industry and retaining and expanding existing businesses is important, the Region needs to nurture home grown firms, encourage innovation and foster greater private sector investment. Appalachia has a wealth of natural, cultural, and structural assets that can be leveraged to provide local economic development opportunities. Additionally, liabilities such as Brownfield sites should be transformed into income generating centers of economic growth. ARC collaborated with the National Geographic Society to develop a geotourism map, which capitalized on the Region’s scenic beauty and cultural tourism opportunities. Preliminary evaluations indicate that the map has resulted in a direct increase in tourism in the Region. Based on the success of the first collaboration, a second project featuring scenic driving tours was developed and released in 2008. Special strategies for communities that surround the Region’s national parks have been developed as well.

In an effort to address the abundance of energy assets in the Region, the governors of the 13 Appalachian states and the Federal Co-Chair mandated development of a comprehensive blueprint that provides a strategic framework for the promotion of new energy related job creation opportunities. Strategies and objectives will be implemented that feature energy efficiency, renewable energy technologies such as biomass, and conventional energy sources such as clean coal.

The Region also faces entrepreneurial shortcomings that stem from Appalachia’s longstanding dependence on extractive industries and branch plant manufacturing, and the presence of absentee landlords who, in some cases, have siphoned off value from the Region. Furthermore, the culture of entrepreneurship is neither broad nor deep and research findings indicate that there are many gaps in the infrastructure for supporting entrepreneurship, ranging from technical assistance to development finance. ARC continues to sponsor a network of business incubators to provide fledgling entrepreneurs technical assistance and the opportunity to share services and reduce overhead costs while launching new business efforts. Another key component of ARC’s business development efforts has been the 41 Appalachian revolving loan funds that received ARC support. In addition to revolving loan funds, ARC has invested in international trade and market expansion for Appalachian companies; provided funds for downtown renewal and business incubators; supported tourism initiatives and industrial park development; and sponsored conferences on business issues.

ARC has encouraged and supported organizational efforts in the Region to take advantage of the Treasury Department’s New Markets Tax Credit Program, designed to attract private sector capital investment in community development. The most recent success in this effort is the award of a $17 million tax credit allocation to the Southeast Local Development Corporation to make business loans in Appalachian Tennessee, Georgia, and North Carolina. The need for this ARC support is evident in that only a tiny proportion (approximately less than three percent) of the Treasury program has been placed in Appalachian communities or states. ARC also collaborated with the Tennessee Valley Authority, several regional banks, and two foundations to launch the $12.5 million Southern Appalachian Fund, providing further access to venture capital for businesses.
Goal 1 Strategic Objectives

1.1. **Foster Civic Entrepreneurship:** Building the capacity of three interdependent elements: individual leaders, organizations, and the community as a whole in order to foster broad-based civic engagement and support strategic readiness to take advantage of economic opportunities.

1.2. **Diversify the Economic Base:** Providing a range of new employment opportunities in Appalachian communities that build on regional strengths and foster stability.

1.3. **Enhance Entrepreneurial Activity in the Region:** Fostering locally owned businesses are they are essential for sustainable local economies and improved quality of life in Appalachian communities, especially in economically distressed areas.

1.4. **Develop and Market Strategic Assets for Local Economies:** Identifying and developing local cultural, heritage, and natural assets in order to capitalize on the economic benefit of indigenous Appalachian resources, experience, wisdom, and skills.

1.5. **Increase the Domestic and Global Competitiveness of the Existing Economic Base:** Assisting local firms find new markets at home and abroad as well as helping increase foreign direct investment when possible.

1.6. **Foster the Development and Use of Innovative Technologies:** Helping create and retain technology-related jobs in high-value-added industries such as telecommunications and computing services to close the job gap in Appalachia.

1.7. **Capitalize on the Economic Potential of the Appalachian Development Highway System:** Assisting communities maximize the benefits of connectivity to the ADHS through better strategic planning.

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**ARC Strategic Goal 1 Performance Measures**

**Short Term Performance Measures:**
- 1) Create or retain 20,000 jobs annually (10% of long term goal)
- 2) Leverage an average of 4:1 private sector to ARC investment ratio
- 3) Direct 50% of grants funds to distressed counties/areas

**Long Term Performance Measures:**
- 1) Create or retain 200,000 jobs by 2019
- 2) Leverage 15:1 private sector investment to ARC ratio for business infrastructure projects
Goal 2: Strengthen the Capacity of the People of Appalachia to Compete in the Global Economy

Job growth will not occur in places where there is an uneducated or unskilled workforce, or where health problems abound and access to care is poor. Global competition is reinforcing the economic premium on workers in knowledge-based industries, leaving low or unskilled U.S. workers increasingly vulnerable. ARC seeks to increase the employment rate and productivity of Appalachia’s workers, and attract educated and skilled workers to the Region. This will attract desirable business to the Region. Doing so will require considerable investment in improving educational achievement at all levels, as is illustrated in the included map.

Economic forecasts for the Appalachian Region’s occupational growth indicate substantial growth in many technically-oriented occupational groups. According to the Bureau of Labor Statistics the 30 fastest growing occupations will require post-secondary educational attainment levels, special post-secondary certification or moderate to short-term training. In the Appalachian Region, the regional economy is forecast to add over 346,000 jobs in these high-growth occupations through the year 2012. These high growth occupations will require different types of training, ranging from the 12 high growth occupations with the greatest skill requirement such as computer and information services that require a Bachelor’s Degree or higher levels of educational attainment, to the seven occupations, principally in the health-related fields, that demand an Associate’s Degree, to occupations that require post-secondary vocational awards or technical education beyond high school. In FY 2006, ARC partnered with American Electric Power and three community colleges from three Appalachian states to develop and implement a workforce training program to prepare workers for employment in the electric utility industry.

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Educational Achievement Results

The ARC-funded Appalachian Higher Education Network initiative increased college-going rates for Appalachian high school graduates by double digits for only a few hundred dollars per student. This highly regarded program is being replicated in 140 high schools in nine Appalachian states and has served approximately 35,000 students to date. The original Ohio program received the “Innovations in American Government Award” from the Harvard University Kennedy School of Government in 2003. Participating schools routinely report double-digit increases in their college-going rates.

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In the energy field, the increasing diversification of the nation’s domestic energy industry has created new demands for technical education and skill development in the regional economy. In Appalachia, almost 150,000 jobs are generated by the energy industry. Hundreds of thousands more are involved in the production and distribution of products and services for the energy industry. Coal production alone stimulated an estimated 60,000 jobs in indirect supply and induced consumer spending in 2005. Workers can enter the oil and gas extraction industry with a variety of educational backgrounds, with entry-level jobs usually requiring little training or experience, while positions such as engineering technician usually require at least a two-year Associate Degree in engineering technology. However, Appalachia’s higher education attainment gap with the rest of the nation has widened in the last decade for those with a college degree or graduate degree. In 1990 the difference between the Region and the nation’s share of adults with college degrees was 6.0 percentage points, but in 2000 the gap widened to 6.7 percentage points. ARC’s regional expansion of its highly successful project to increase college going rates through higher education/school system partnerships is an example of the agency’s work in this area.

Access to quality health care is also lacking, which makes Appalachia a less desirable place to live and work. Appalachia suffers from disproportionately high rates of chronic diseases such as cardiovascular disease, cancer, and diabetes. Although the Region has improved its health care infrastructure in recent years, it still needs to attract more physicians and medical facilities in order to be on par with the rest of the Nation. As evidenced by Figure 1, over two-thirds of the Region’s counties are fully or partially designated by the Department of Health and Human Services as health professional shortage areas (HPSAs). Most Appalachian counties have had difficulty attracting basic services such as dentistry, outpatient alcohol treatment, outpatient drug treatment, and outpatient mental health services. Examples of ARC’s action on health issues are its collaboration with the Centers for Disease Control (CDC) regarding chronic diseases and its placement of foreign physicians in underserved areas of Appalachia through the J-1 visa program.

Figure 1

Appalachian Counties Lacking Access to Health Care

Table: Counties Fully Designated as a Health Professional Shortage Area (HPSA)

Data Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, November 2008.

3 U.S. Department of Labor, Bureau of Labor Statistics 2006; and Regional Economic Models, Inc. 2005
Goal 2 Strategic Objectives:

2.1. **Foster Civic Entrepreneurship**: Strengthening collaborative relationships among communities, agencies, and individuals that encourage innovative and achievable opportunities towards improved community responsibility and use of resources.

2.2. **Enhance Workforce Skills through Training**: Assisting communities acquire retraining and additional education in response to new economic opportunities and weather economic uncertainty vocational schools and other training resources.

2.3. **Increase Access to Quality Child Care and Early Childhood Education**: Assisting communities strategize ways to locate or create cost effective child care and/or high quality early childhood education programs that not only allow guardians to take advantage of job opportunities but enhance the lives of their children.

2.4. **Increase Educational Attainment and Achievement**: Increasing the educational attainment and achievement of Appalachian residents as it is associated benefits with improved health, longer life expectancies, and higher salaries.

2.5. **Provide Access to Health-Care Professionals**: Improving the supply and distribution of Appalachia’s professional health-care workforce (physicians, nurse practitioners, psychologists, dentists, medical technicians, etc.), especially in remote areas, to help ensure that health care is comprehensive, affordable, and tailored to the specific needs of each community.

2.6. **Promote Health through Wellness and Prevention**: Increasing education on positive health behaviors to develop a stronger workforce and ensure the long-term viability of the Region.

<table>
<thead>
<tr>
<th>ARC Strategic Goal 2 Performance Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short Term Performance Measures:</strong></td>
</tr>
<tr>
<td>1) Prepare 20,000 Appalachians with enhanced employability</td>
</tr>
<tr>
<td>2) Leverage an average of 1:1 non-ARC to ARC investment ratio</td>
</tr>
<tr>
<td>3) Direct 50% of grants funds to distressed counties/areas</td>
</tr>
<tr>
<td><strong>Long Term Performance Measures:</strong></td>
</tr>
<tr>
<td>1) Prepare 200,000 Appalachians with enhanced employability by 2019</td>
</tr>
<tr>
<td>2) Leverage a 1:1 average non-ARC to ARC investment ratio for employability projects</td>
</tr>
</tbody>
</table>
Goal 3: Develop and Improve Appalachia's Infrastructure to Make the Region Economically Competitive

Many Appalachian communities, especially the most rural and economically distressed areas, lack basic infrastructure services that others take for granted. Data from Environmental Protection Agency (EPA) surveys show that 20 percent of Appalachian households are still not reached by community water systems vs. 10 percent for the nation. Forty-seven percent of Appalachian households are not served by public sewer, compared with a national average of 24 percent. For many communities, this lack of service may force residents to haul water from springs or rain barrels; homes without sewers or septic tanks typically “straight pipe” their untreated waste directly to streams. These fundamental problems threaten public health, damage the environment, and undermine economic stability for families and the Region as a whole.

ARC has completed a study to document the Region’s funding resources and funding gaps for drinking water and wastewater infrastructure. The study found that, using EPA data, Appalachian counties require investments of at least $11.3 billion for drinking water needs and $14.3 billion for wastewater needs, substantially more than the funding available from combined state and federal funding programs. The study noted, however, that other national and state studies suggest that the EPA estimates substantially undercount the needs, so that the Appalachian estimates could be as high as $35 billion–$40 billion. Analysis of the EPA data shows that, on average, community water systems in distressed counties have greater needs per person served ($497) than systems in non-distressed counties ($191–$353). There is ample evidence that communities will actually have to pay far more than these estimates to ensure services that fully meet basic public health and environmental standards, since they do not include the billions of additional funds needed to address the thousands of substandard and failing individual wells, septic tanks, cesspools, and straight pipes. The surveys also do not include the funds that will be necessary to operate and maintain new facilities or facilities that have been neglected in the past.

Smaller rural Appalachian communities that have water and sewer systems face relatively higher investment costs, due to pressing economic development needs, increasing environmental requirements and challenging topography. These communities are also hindered by the formidable terrain and vast pockets of sparsely populated communities which make implementing these systems difficult. Communities that are experiencing declining customer bases and low household

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Distressed County Infrastructure

In 2007, ARC partnered with the Environmental Protection Agency, the Community Development Block Grant Program, and Rural Development on a $6.4 million project to replace an aging wastewater treatment facility and to extend service to an area whose residents were straight-piping raw sewage into the river. Located in economically distressed Letcher County, Kentucky, Whitesburg lacked the resources to rehabilitate its sewage treatment system, which was functioning under a state consent order. ARC contributed $500,000 in 2007 to complete Phase I of what would eventually be a regional system providing improved service to 472 households and new service to another 58. A total of 211 commercial customers were also served.

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4 Drinking Water and Wastewater in Appalachia: An Analysis of Capital Funding and Funding Gaps. UNC Environmental Financing Center, June 2005
incomes cannot rely on rate increases to meet capital investment needs. The local ability to pay is particularly low in 331 ARC counties where average household incomes were two-thirds or less of the national average, according to the 2000 Census. These communities need additional technical, managerial, and financial assistance to meet their future needs.

Appalachia has other environmental problems that inhibit economic development. For example, in addition to inadequate water and sewer services, the Region has many tracts of land known as Brownfields, properties that have been developed for industrial or commercial purposes, polluted, and then abandoned or underused. These properties are also some of the best in the Region for economic development purposes, but restoring them to productive use requires considerable effort and resources.

The Region lags in access to broadband telecommunications so essential to today’s commerce. ARC research suggests that high-speed Internet access via cable, DSL, or other means continues to grow at a substantially slower pace in the Region than in the nation as a whole. While progress has been made in reducing geographic isolation, the information superhighway and the digital revolution have been slow in coming to Appalachia’s businesses and 23 million residents. The Region lacks an adequate and affordable telecommunications infrastructure. Its people are less familiar with and therefore more easily intimidated by its complexity. Addressing these issues will require continued partnerships with the private sector to apply their resources and expertise, as ARC has recently done with Microsoft and with the EBay Foundation. The Microsoft partnership resulted in the donation of over $1.8 million in software products to schools, community technology centers, nonprofits, and local agencies throughout the Region.

Communities across the Appalachian Region, especially those in rural areas, face serious challenges in using new information, computing, and telecommunications (ICT) technologies to expand their economic development horizons. The telecommunications infrastructure in the Region is underdeveloped, and compares negatively to national averages on various indicators. In addition, the capacities to use these technologies to improve performance in public and private sector institutions are often not as well developed as in urban centers.

Access roads serving enterprise sites and other important facilities are another historically important program for the Commission. While funds appropriated to ARC have long been used for this purpose, national surface transportation legislation (TEA-21 and SAFETEA-LU) has permitted the use of a portion of ADHS funds by the individual states for development access roads. In FY 2008, $1.4 million of TEA-21/SAFETEA-LU funds were obligated for access road construction.

Goal 3 Strategic Objectives:

3.1. Foster Civic Entrepreneurship: Promoting visionary leaders and effective organizations to strategically mobilize communities to develop the regional infrastructure necessary to make Appalachia competitive. Expanding the kinds of “self-help” water and wastewater projects that ARC pioneered in parts of Appalachia can apply the skills and commitment of local communities to solving local infrastructure needs.

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3.2. **Build and Enhance Basic Infrastructure**: Investing in adequate water and wastewater treatment systems and decent, affordable housing to sustain businesses, generate jobs, protect public health, and ensure a basic standard of living for residents to prevent compromising the Region’s ability to pursue basic development activities.

3.3. **Increase the Accessibility and Use of Telecommunications Technology**: Assisting communities take advantage of computing and telecommunications technologies that have the potential to expand their economic development horizons.

3.4. **Build and Enhance Environmental Assets**: Cleaning up defunct industrial sites, promoting environmentally sensitive industries, and providing responsible stewardship and use of Appalachia’s natural assets to help place the Region on an equal economic footing with the rest of the nation.

3.5. **Promote the Development of an Intermodal Transportation Network**: Supporting intermodal transportation strategies designed to improve access to Appalachia’s transportation network (including aviation, local transit systems, railway systems, and inland waterways) as well as to increasing the responsiveness of that network to the needs of businesses, communities, and residents.

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**ARC Strategic Goal 3 Performance Measures**

**Short Term Performance Measures:**
1) Serve 20,000 Appalachians households
2) Leverage an average of 2:1 non-ARC investment ratio
3) Direct 50% of grants funds to distressed counties/areas

**Long Term Performance Measures:**
1) Serve 200,000 Appalachians households 2019
2) Leverage 2:1 non-ARC investment ratio for water and sewer grants
Goal 4: Build the Appalachian Development Highway System to Reduce Appalachia’s Isolation

The Region is well on its way to reducing geographic isolation by building the Appalachian Development Highway System (ADHS). The ADHS is the first highway system designated by Congress to be built primarily for economic development purposes. As highways are constructed, considerable secondary and tertiary highway and road construction occurs. This “spider web” effect makes it significantly easier to move products in and out of the Region, to travel longer distances for employment opportunities, and entice businesses to locate along major thoroughfares and therefore strengthen the economy of the Region.

The Appalachian Regional Development Act of 1965 authorized the Commission to construct the Appalachian Development Highway System, with assistance from the Department of Transportation, as a supplement to the Interstate System and other federal-aid highways programs. P.L. 108-199 added 65 miles to the system in 2004, for a new system total of 3,090 miles. Congress authorized this initiative because it recognized that regional economic growth would not be possible until the Region’s isolation had been overcome. In FY 2008, ARC delivered a new cost-to-complete study which measures the eligible work to be done and estimates the funding necessary to complete the work. This study guides the allocation of ADHS funds throughout the Region.

Because of the high cost of building roads through Appalachia’s mountainous terrain, adequate roads had not been built in much of the Region. When the interstate system was built, large areas of Appalachia were simply bypassed, compounding the problems of the Region’s already troubled economy. The ADHS was designed to link Appalachia with the US interstate system. The Region has significantly benefited from the ADHS. New jobs have been created as businesses have located along the system. Substantial time savings have occurred as isolation is reduced, and crash and injury rates have dropped as much as 60 percent as two-lane roads are replaced by modern and safe four-lane thoroughfares.

Over 83 percent (2,574.9 miles) of the total 3,090 miles of the ADHS authorized by Congress for construction are open to traffic, and another 97.5 miles are under construction. The remaining 417.6 miles, which will be some of the toughest miles to build due to the diversified topography, are in the location or final design stages. The Commission continues its strong commitment to complete the ADHS, the centerpiece of ARC’s Strategic Plan for the Region. Please see Figure 2 in the Major Program Section on ADHS for more progress information on the system through the end of FY 2008.

Completion of the ADHS will permit the nation to realize the system-wide efficiencies of connecting with the interstate highway system and the nation’s intermodal transportation networks, linking air, rail, road, and waterway freight shipments. The International Intermodal Center in Huntsville, Alabama, is recognized as one of the most successful intermodal initiatives in the country, and ARC is helping to develop similar facilities at strategic locations in the Region. Appalachia’s strategic location between the eastern seaboard and the Midwest enhances the national value of the ADHS as a transportation asset to channel increasing domestic and international freight traffic between metropolitan centers and trade gateways. Forecasts of national freight demand over the next ten to twenty years by the U.S. Department of Transportation
underscore the potential of the ADHS to help relieve congestion along major transportation routes and offer new and more efficient freight flows to trade gateways.

**Goal 4 Strategic Objectives:**

4.1. *Foster Civic Entrepreneurship:* Promoting long-term strategic planning by local and regional leadership is critical to taking full advantage of the economic and community-building opportunities presented by existing and planned ADHS corridors. New outreach and awareness efforts are needed to help communities fully integrate the ADHS into their economic development planning. ARC is positioned to continue to serve as a focal point for removing barriers to ADHS completion and ensuring collaboration among the U.S. Department of Transportation, and other state and federal agencies involved in the Region’s economic development.

4.2. *Promote On-Schedule Completion of the ADHS:* Promoting timely completion of the ADHS is essential for fostering economic growth and connecting the 13 states in the Region with national and global economic opportunities. ARC will continue to work with federal and state departments of transportation and other entities to expedite location studies, solve design problems, and accelerate construction while working to preserve the cultural and natural resources of the Region.

4.3. *Coordinate Work on ADHS State-Line Crossings:* Completing the ADHS expeditiously will require close coordination of activities on those segments of the system that cross state lines. ARC will coordinate technical information, funding disbursements, and construction scheduling between adjoining states to facilitate completion of state-line crossings of ADHS corridors.

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**ARC Strategic Goal 4 Performance Measures**

**Short Term Performance Measures:**

1) Open 25 miles of the ADHS to traffic

**Long Term Performance Measures:**

3) Complete the ADHS by 2021

4) For every dollar invested, $1.10 in increased travel efficiency benefits
## ARC Strategic Plan Goals and Performance Measures

<table>
<thead>
<tr>
<th>General Goal</th>
<th>Strategy/Expected Benefit</th>
<th>Long-Term Performance Measures</th>
<th>Short-Term Performance Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal 1: Increase Job Opportunities and Per Capita Income</strong></td>
<td>Promote Economic Diversification/Enhanced economic benefit</td>
<td>1) 200,000 jobs created/retained by 2019*&lt;br&gt;2) Achieve 15:1 private sector to ARC investment ratio for business infrastructure projects</td>
<td>1) Annual: 20,000 jobs created/retained: 10% of long-term goal*&lt;br&gt;2) Achieve initial average 4 to 1 private sector to ARC investment ratio in projects&lt;br&gt;3) Direct 50% of grant funds to benefit distressed counties/areas</td>
</tr>
<tr>
<td><strong>Goal 2: Strengthen Capacity of the People to Compete in the Global Economy</strong></td>
<td>Increase Workforce Employability/Enhanced economic benefit</td>
<td>1) 200,000 Appalachians with enhanced employability by 2019**&lt;br&gt;2) Achieve 1:1 average non-ARC to ARC investment ratio for employability projects</td>
<td>1) Annual: 20,000 Appalachians with enhanced employability: 10% of long-term goal**&lt;br&gt;2) Achieve initial average 1 to 1 non-ARC to ARC investment ratio in projects&lt;br&gt;3) Direct 50% of grant funds to benefit distressed counties/areas</td>
</tr>
<tr>
<td><strong>Goal 3: Develop and Improve Infrastructure</strong></td>
<td>Ensure basic infrastructure/services and increased telecommunications access/deployment</td>
<td>1) 200,000 households served by 2019&lt;br&gt;2) Achieve 2:1 average non–ARC to ARC investment ratio for water/sewer projects</td>
<td>1) Annual: 20,000 households served: 10% of long-term goal&lt;br&gt;2) Achieve initial average 2 to 1 non-ARC to ARC investment ratio in projects&lt;br&gt;3) Direct 50% of grant funds to benefit distressed counties/areas</td>
</tr>
<tr>
<td><strong>Goal 4: Build the Appalachian Development Highway System to Reduce Isolation</strong></td>
<td>Complete the ADHS/Reduced isolation and improved regional access</td>
<td>1) Complete the ADHS by 2021</td>
<td>1) Open 25 miles of the ADHS to traffic&lt;br&gt;2) For every dollar invested, $1.10 in increased travel efficiency benefits</td>
</tr>
</tbody>
</table>

*ARC reports total target jobs of funded projects; related validation studies and ROI data are separately reported.
**Measured in higher educational attainment, increased access to health care, or employment after training.
MAJOR PROGRAM JUSTIFICATION:
AREA DEVELOPMENT
The Federal Co-Chair of the ARC requests $76 million for its Area Development Program and associated administrative costs. This is level funding with the FY 2010 enacted amount. Table 1 outlines ARC Appropriation history.

Table 1 ARC Appropriations

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Appropriation</th>
<th>1998–2007 Average Enacted</th>
<th>2009 Enacted</th>
<th>2010 Enacted</th>
<th>2011 President’s Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$65</td>
<td>$75</td>
<td>$76</td>
<td>$76</td>
</tr>
</tbody>
</table>

The ARC is a federal-state partnership composed of the governors of the 13 Appalachian states and a Federal Co-Chair. The FY 2011 request of $76 million reflects direct program funding for area development, full funding of the administrative costs of the Office of the Federal Co-Chair and the Office of the Inspector General as well as 50 percent of the administrative costs associated with the non-federal professional staff that report jointly to the Federal Co-Chair and states. The request includes modest support to the 73 Local Development Districts in the Region whose role is to provide bottom-up support for the program. Table 2 below details the allocation of funds by goal area for direct program funding, support of the Local Development Districts, and ARC administrative expenses. These funds will be heavily targeted to designated distressed counties and areas in the Region.

Table 2 Summary of FY2011 Request by Strategic/Performance Goal ($ Millions)

<table>
<thead>
<tr>
<th>Goal Description</th>
<th>Program Funding</th>
<th>Local Development Districts</th>
<th>Salaries &amp; Expenses</th>
<th>Total Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1: Increase Job Opportunities and Per Capita Income</td>
<td>14.1</td>
<td>1.5</td>
<td>1.0</td>
<td>17</td>
</tr>
<tr>
<td>Goal 2: Strengthen Capacity of the People to Compete in the Global Economy</td>
<td>13.1</td>
<td>1.2</td>
<td>1.2</td>
<td>16</td>
</tr>
<tr>
<td>Goal 3: Develop and Improve Infrastructure</td>
<td>36.3</td>
<td>3.5</td>
<td>4.0</td>
<td>43</td>
</tr>
<tr>
<td>Goal 4: Build the Appalachian Development Highway System to Reduce Isolation</td>
<td></td>
<td></td>
<td></td>
<td>[470]*</td>
</tr>
<tr>
<td>Total Base Program Current Request</td>
<td>63.5</td>
<td>6.2</td>
<td>6.2</td>
<td>76</td>
</tr>
</tbody>
</table>

* Financing from the Highway Trust Fund under 2005 SAFETEA-LU legislation; will be discussed in the next section.
Appalachian Regional Economic Diversification Initiative

Throughout FY 2009 and ARC worked with the White House Council for Environmental Quality (CEQ) on strategies for the creation of green energy jobs throughout the Appalachian region. As dialogue continued, other federal partners joined the effort and the focus expanded from energy and green jobs to overall economic diversification of the region and implementation of place based strategies for development. The Administration signaled strong support as USDA Rural Development and ARC continued to collaborate on an effort to better deploy existing programs in areas of severe economic distress. Other federal agencies including SBA, EPA, and the Departments of Commerce, Interior, Energy, Labor, Transportation, Education, HHS, and HUD joined the effort in FY 2010. As a result of this collaboration federal agencies gained more knowledge of the challenges unique to Appalachia.

Data collected from regional listening sessions sponsored by ARC and USDA will be used to guide economic development strategies unique to distressed communities in Appalachia. The region has suffered significant job losses in areas of traditional manufacturing, extractive industries and tobacco production over the last decade. Additionally, the recent economic downturn has affected this area more severely than other parts of the nation. ARC will continue to work with USDA and other federal agencies to design place based strategies unique to the needs of each Appalachian community whether it is the site of a former textile mill attempting to retool its workforce or a tobacco grower transition to another crop. ARC is using its specific knowledge of the region to guide the Administration’s special focus on Appalachia in FY 2011.

In FY 2011 ARC will devote $10M to the following activities:

- Help to create a highly skilled and diversified workforce through education and training in the high growth high demand fields.

- Fund special grant competitions designed to encourage distressed communities to revitalize their economies and create new jobs by leveraging renewable and energy efficient resources.

- Build on the FY 2010 ARC sponsored convening of foundations including the Benedum and Ford Foundations. As a result, each organization can become more active in the Appalachian region.

- Continue its interagency collaboration with USDA and federal entities to better deploy existing resources in the region and create sustainable job growth.

- Leverage existing assets including the vast energy resources in the region and foster stronger demand for green products and services, such as making schools and government facilities more energy efficient, encouraging the use of alternative fuels for local government vehicle fleets, and retrofitting water and wastewater treatment plants.
Goal 1: Increase Job Opportunities and Per Capita Income - $17 Million

As described earlier, Appalachia’s economic vitality and stability require a more diversified regional economy. In addition to attracting new industry and retaining and expanding existing businesses, the Region also needs to nurture home-grown firms and encourage innovation and risk-taking, as well as foster greater private sector investment. Appalachia’s rich cultural heritage, which includes the Region’s natural resources, scenic beauty, products, and crafts, must be better harnessed to provide local economic opportunities.

ARC FY 2009 Accomplishments

<table>
<thead>
<tr>
<th>ANNUAL PERFORMANCE GOALS</th>
<th>FISCAL YEAR 2009 INTERMEDIATE ESTIMATES</th>
<th>RESULTS ACHIEVED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome Goal:</strong> 20,000 jobs created or retained</td>
<td>21,183 jobs created or retained</td>
<td>Exceeded goal</td>
</tr>
<tr>
<td><strong>Leveraging Goal:</strong> Achieve a 4:1 ratio of leveraged private investment to ARC investment for projects in General Goal 1</td>
<td>Achieved a 3:1 ratio</td>
<td>Met 75% of goal</td>
</tr>
<tr>
<td><strong>Targeting Goal:</strong> Direct 50% of grant funds to benefit distressed counties or areas for projects in General Goal 1</td>
<td>Directed 47% of funds*</td>
<td>Met 94% of goal</td>
</tr>
</tbody>
</table>

*ARC exceeded its overall goal of investing 50% of total ARC nonhighway funds in projects that benefit distressed counties or areas. Project funds are included if the project primarily or substantially benefits distressed counties or areas.

In FY 2011, ARC will:

- Create and retain home-grown jobs as an essential strategy to mitigate the effects of industrial declines and business out-migration from the Region. Special focus will be devoted to creating and retaining jobs in alternative energy fields by capitalizing on the Region’s natural resources. ARC will utilize its grassroots community capacity to develop a clean energy cluster in the Region.

- Continue to address the Administration’s focus on the diversification of the Appalachian economy through interagency collaboration.

- Diversify the economy by promoting place based development, entrepreneurship, and business vitality through advocacy, cooperative funding, regional forums, information sharing, training, and. Work in 2011 would continue a regional initiative, started in 2005, to encourage asset-based development and creation of related indigenous businesses to expand the economic base.
• Promote export development by increasing the number of firms engaged in exporting and increasing the volume of exported goods and services.

• Conduct policy discussions among Commission members on ways to increase global competitiveness through better coordination of the Region’s transportation resources, and specifically through addressing 21st century needs for rapid, reliable, and efficient intermodal transfers of containerized goods. The Region can no longer rely solely on the massive bulk movement of mineral and agricultural commodities that characterized previous eras.

• Support leadership, marketing and planning efforts to enhance local strategies for economic development that make effective use of other federal and non-federal funds.

Wind and Solar Energy
Certified Education Program, Maryland
This grant provided $45,816 in 2008 to fund training in the installation and maintenance of wind generation and photovoltaic equipment at Frostburg State University in Maryland. Each course includes workshop instruction and hands-on laboratory time in the college’s Wind and Solar Energy System. On completion of the course, students will be prepared to take the certification test offered by the North American Board of Certified Energy Practitioners. This program will expand opportunities for local contractors and entrepreneurs. The program has been highly successful and can easily be replicated in other institutions across the region.
Goal 2: Strengthen Appalachian Competition in the Global Economy - $16 Million

The Commission has always understood that job-producing private sector businesses can neither start nor thrive without an educated, skilled, and healthy workforce. ARC has conducted major and pioneering efforts in rural Appalachia in education and health care. Over the years, ARC has tailored its program policies and funding to focus on unmet education and health priorities.

**ARC FY 2009 Accomplishments**

<table>
<thead>
<tr>
<th>ANNUAL PERFORMANCE GOALS</th>
<th>FISCAL YEAR 2009 INTERMEDIATE ESTIMATES</th>
<th>RESULTS ACHIEVED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Competitiveness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Outcome Goal:</em> 20,000 students/ trainees with improvements</td>
<td>23,764 students/trainees with improvements</td>
<td>Exceeded goal</td>
</tr>
<tr>
<td><em>Matching Goal:</em> Achieve a 1:1 ratio of non-ARC to ARC investment for projects in General Goal 2</td>
<td>Achieved a 1:1 ratio</td>
<td>Met goal</td>
</tr>
<tr>
<td><em>Targeting Goal:</em> Direct 50% of grant funds to benefit distressed counties or areas for projects in General Goal 2</td>
<td>Directed 68% of funds*</td>
<td>Exceeded goal</td>
</tr>
</tbody>
</table>

* ARC exceeded its overall goal of investing 50% of total ARC nonhighway funds in projects that benefit distressed counties or areas. Project funds are included if the project primarily or substantially benefits distressed counties or areas.

**Education and Training**

ARC has long emphasized upgrading educational capabilities, providing re-entry and school-to-work transition programs, training for job skills. These efforts have required collaboration among businesses and local school districts, the non-profit sector, and federal and state education agencies. Since ARC cannot be a primary funding source for systems of education, the ARC role has been concentrated on nurturing partnerships among these diverse organizations. ARC partnered with American Electric Power, a public utility, and the U.S. Department of Labor on a workforce training initiative.

*In FY 2011 ARC will:*

- Maintain and expand alliances with other organizations; identify and replicate exemplary model programs.
- Provide regional leadership to increase the college-going rate in Appalachia, especially in distressed areas.
- Continue to address the Administration’s focus on the diversification of the Appalachian economy through interagency collaboration.
• Expand worker skills in science, technology, engineering, and mathematics (STEM).

• Enhance school readiness and high school completion. This work will include continuing ARC’s successful partnership with the Department of Energy for student/teacher technology workshops, as well as collaboration with the Department of Education, National Science Foundation, and other agencies.

• Promote workforce training for high growth high demand industries.

---

**Enhanced Workforce Training in Mississippi**

In 2008, ARC partnered with the Mississippi Department of Education on a $2.5 million project to upgrade vocational education equipment in high schools in each of the state’s 12 economically distressed Appalachian counties. ARC invested $2 million and the State of Mississippi invested a total of $500,000 to complete the project. The project will serve two purposes: First, it will prepare students to enter the workforce with marketable skills in high-growth, high-demand areas such as welding and automotive manufacturing. Second, it will encourage high-risk students to complete high school by providing learning activities more likely to engage their interest and result in student success.

---

**Health Care**

Improving access to quality health care has been a part of ARC’s work since the agency’s beginning. Early ARC investments focused on constructing and modernizing roughly 400 health clinics across the Region, many of which continue to serve their communities. ARC established a Health Advisory Council comprised of health experts throughout the region. The Council commissioned research to determine the biggest health challenges in Appalachia. Based on the findings, the Council made programmatic recommendations which guide ARC’s health related activities. Recent ARC activities have included providing access to health services through the expansion of telemedicine, upgrading high-tech equipment in rural health-care facilities, and developing health-care education and training programs that recruit and maintain more health professionals in the Appalachian Region. ARC also manages a program to place American-trained foreign physicians in areas that lack an adequate number of primary care physicians (the J-1 Visa Program).

---

**Hospital Digital Radiographic/Fluoroscopy Equipment**

In 2006, ARC participated in a telemedicine program in rural Adams County, Ohio. A $215,000 grant, combined with $220,750 from the grantee, was used to purchase equipment for the screening and treatment of 400 community residents, 300 more than the prior year. Sick or injured patients often required referral to larger facilities located many miles outside the county for treatment or screening. This program enabled the community hospital to provide immediate treatment and to administer screening examinations onsite.
In 2011, ARC will:

- Continue partnerships with the CDC, medical centers, and health care organizations to address gaps through screening, prevention, and control programs, especially in distressed counties.
- Continue to address the Administration’s focus on the diversification of the Appalachian economy through interagency collaboration.
- Support telemedicine as a means of universal access to comprehensive health care.
- Increase the supply of health professionals in underserved communities through the J-1 Waiver program and by collaborating with the Region’s medical schools and other health profession institutions.

**Goal 3: Develop and Improve Appalachia’s Infrastructure to Make the Region Economically Competitive- $43 Million**

Many Appalachian communities, especially the most rural and economically distressed areas, lack basic infrastructure services that others take for granted. For many communities, this lack of service may force residents to haul water from springs or rain barrels; homes without sewers or septic tanks typically “straight pipe” their untreated waste directly to streams. These fundamental problems threaten public health, damage the environment, and undermine economic stability for families and the Region as a whole.

**ARC FY 2009 Accomplishments**

<table>
<thead>
<tr>
<th>ANNUAL PERFORMANCE GOALS</th>
<th>FISCAL YEAR 2009 INTERMEDIATE ESTIMATES</th>
<th>RESULTS ACHIEVED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infrastructure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outcome Goal:</strong> 20,000 households served</td>
<td>25,981 households served</td>
<td>Exceeded goal</td>
</tr>
<tr>
<td><strong>Matching Goal:</strong> Achieve a 2:1 ratio of non-ARC to ARC investment for projects in General Goal 3</td>
<td>Achieved a 6:1 ratio</td>
<td>Exceeded goal</td>
</tr>
<tr>
<td><strong>Targeting Goal:</strong> Direct 50% of grant funds to benefit distressed counties or areas for projects in General Goal 3</td>
<td>Directed 61% of funds*</td>
<td>Exceeded goal</td>
</tr>
</tbody>
</table>

* ARC exceeded its overall goal of investing 50% of total ARC nonhighway funds in projects that benefit distressed counties or areas. Project funds are included if the project primarily or substantially benefits distressed counties or areas.
Infrastructure
Inadequate water and sewer service is still a critical issue in Appalachia—particularly in smaller, poorer communities. Without these basic services, business and industry are simply not interested in locating in the Region, and the health of citizens is endangered. Essential community facilities, a safe environment, and access roads are required for economic and community vitality. Supplemental funding authority in the ARDA is historically a tool for effective use of ARC funds in combination with Rural Development, EDA, HUD, EPA, DOT, TVA, and other national providers.

In FY 2011, ARC will:

Develop basic infrastructure through highly leveraged and collaborative funding of projects, with an emphasis on essential clean water and waste disposal in distressed counties and promotion of cost-effective approaches to rural infrastructure design and financing.

- Continue to address the Administration’s focus on the diversification of the Appalachian economy through interagency collaboration.

- Support water resources management and cooperative solutions among providers.

- Promote multi-county approaches and partnerships with the private sector to manage solid waste disposal, water, and waste treatment.

- Support waste recycling and new disposal technologies.

- Advocate for the needs of remote rural areas in infrastructure policy formulation and funding.

- Use authority in surface transportation legislation and ARC funds to construct needed access roads.

- Support environmental quality, especially through cleanup of Brownfield areas.

Public Service District Water Extension
In 2007, ARC partnered with Rural Development to extend new water service to 207 homes and 15 businesses in economically distressed Fayette County, West Virginia. An additional 297 existing customers were provided improved service as a result of the project. The area’s geographic conditions and mining impacts made it difficult to rely on onsite water systems for clean drinking water; residents were forced to use streams or haul water to meet daily needs. The community worked with Rural Development, receiving both a grant and a loan, but needed funds from ARC to fill the funding gap. ARC invested $1.5 million in the $4.2 million project, which positioned the county for future interconnections to regional water systems.

Telecommunications
There exists a significant gap in high-speed telecommunications between Appalachia and the rest of the country that continues to hinder competitiveness and economic growth. ARC has been involved with aspects of telecommunications development in the Region for many years, ranging from early work with NASA satellite capabilities to distance learning projects reaching rural areas with new educational and health care technology. In recent years, ARC has maintained a regional
initiative to promote broadband Internet access and e-commerce applications. Primary national funders of telecommunications—FCC, RUS, NTIA, EDA, - are seen as partners with the Commission in assisting Appalachian communities. ARC has also collaborated with TVA in this area. The specific focus of ARC efforts is to prepare the groundwork and develop community readiness to make use of other resources effectively.

In FY 2011, ARC will:

- Continue to address the Administration’s focus on the diversification of the Appalachian economy through interagency collaboration.

- Expand private sector telecommunications infrastructure through advocacy, knowledge-sharing, and targeted collaborative funding that facilitates the spread of broadband connectivity in rural areas. Understanding the aggregation of demand is the key to marketing rural communities to broadband providers. In some cases, direct investment in services may be necessary as a precursor to private sector investment.

- Continue to provide regional workshops and training in e-commerce and e-government applications to make full use of telecommunications capacity where it is available. ARC will work jointly whenever possible with the Small Business Administration, National Business Incubator Association, Industrial Development Authorities, Chambers of Commerce, Local Development Districts, Small Business Development Centers, and other organizations that promote IT sector development.

- Assist local strategic planning to identify gaps, assess demand, and establish priorities as a way to guide orderly and effective development of infrastructure and applications.

- Continue to partner with Microsoft and the EBay Foundation to distribute hardware and software throughout the Region.

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**Rust College Technology Infrastructure**

In 2008, ARC invested $250,000 in special funds designated for use in distressed counties to assist Rust College, located in Holly Springs, Mississippi, in purchasing distance learning equipment. The new equipment made it possible for 500 college students and 250 high school students to have access to advanced math and science curriculum that had not previously been available. Additionally, 600 citizens would have access to the equipment for a variety of educational, community, and business related uses.
MAJOR PROGRAM JUSTIFICATION:
HIGHWAY PROGRAM
Congress expressly created the Appalachian Development Highway System (ADHS) to provide economic growth opportunities for the residents of the Region—the same benefits afforded the rest of the nation through the construction of the Interstate Highway System, which largely bypassed the Region due to its rugged terrain. The program was authorized under the Safe, Affordable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) at $470 million per year from 2005 through 2009. It is anticipated that funding for FY 2011 will be consistent with prior years.

Table 3
Summary of FY 2011 Request by Strategic/Performance Goal ($ Millions)

<table>
<thead>
<tr>
<th>Goal 4: Build the Appalachian Development Highway System to Reduce Isolation (From separate legislation)</th>
<th>Program Funding</th>
<th>Local Development District</th>
<th>Salaries &amp; Expenses</th>
<th>Total Request</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>470</td>
</tr>
</tbody>
</table>

The Appalachian Regional Development Act of 1965 as amended authorized the Commission to construct the Appalachian Development Highway System (ADHS), a 3,090-mile road system, with assistance from the Department of Transportation as a highway system that supplemented the Interstate System and other federal-aid highways programs. Congress authorized this initiative because it recognized that regional economic growth would not be possible until the Region’s isolation had been overcome.

Because of the high cost of building roads through Appalachia’s mountainous terrain, adequate roads had not been built in much of the Region. When the interstate system was built, large areas of Appalachia were simply bypassed, compounding the problems of the Region’s already troubled economy. The ADHS was designed to link Appalachia with the US interstate system. New jobs have been created as businesses have located along the system. Substantial time savings have occurred as isolation is reduced, and crash and injury rates have dropped as much as 60 percent as two-lane roads are replaced by modern and safe four-lane thoroughfares.

In 1998 ARC completed a study to objectively measure, in retrospect, the extent that completed portions of the ADHS had contributed to the Region’s economy. This study was subsequently updated. Both studies found the ADHS has been instrumental in creating thousands of new jobs and generating economic benefits that will exceed highway construction cost and maintenance cost by more than a billion dollars. The ADHS corridors generate economic development benefits in the Region by improving the competitive position of existing and new industries through lower
transportation costs and higher productivity. In addition, the new corridors will increase access to health care, education, and cultural amenities that improve the quality of life in the Region they serve and will indirectly boost labor productivity.

Moreover, the corridors increase roadside business and significantly boost the opportunities for tourism development in the Region through improved access. The ADHS corridors improve travel efficiency by reducing travel time, lowering vehicle-operating costs, and reducing the number of accidents. These efficiencies are the result of:

- An increase in the number of lanes and lane and shoulder widths,
- Improved grades and road conditions with fewer curves,
- Restricted access and egress and more freeway miles,
- Overall, higher operating speeds, and
- An increased emphasis on highway safety improvements.

The study determined that over the life of the ADHS, each dollar invested is expected to result in $1.32 in economic benefits and $1.10 in travel efficiency benefits.

Over 83 percent (2,585.4 miles) of the total 3,090 miles of the ADHS authorized by Congress for construction are open to traffic, and another 109.2 miles are under construction. The remaining 395.4 miles are in the location or final design stages. Much of this remaining mileage is through some of the most mountainous terrain in the region. The Commission continues its strong commitment to complete the ADHS, the centerpiece of ARC’s Strategic Plan for the Region. Figure 3 on page 42 indicates the location of completed and uncompleted sections and Figure 2 on page 42 show the progress by state on the system and the overall status of the ADHS through FY 2009.

The Commission and the Federal Highway Administration cooperated with the member states to complete a new cost-to-complete study which was delivered in FY 2008. This study, normally done every five years, guides the allocation of ADHS funds to the states to complete the system. It estimated the federal share of the eligible work to complete the ADHS at $6.5 billion. This study updates the 2002 version and includes the cost of the additional 65 miles added to the system by Congress in 2004, includes inflation in highway construction, and incorporates refinements and design changes in the system.

Section 201(a) of the Appalachian Regional Development Act (ARDA) authorized the construction of up to 1,400 miles of local access roads to complement the ADHS by providing new or improved access to local areas. A state may spend a portion of their ADHS funds or Area Development funds each year on access to industrial and commercial sites to create/retain jobs as well as provide access to recreational areas, educational facilities, health care facilities, residential areas, and timber access areas.
The ADHS program is a major factor in the Commission’s success in reducing the Region’s isolation and providing mobility and access to its residents. It is an essential complement to the Commission’s Area Development Program.

**Goal 4: Build the Appalachian Development Highway System to Reduce Appalachia’s Isolation - $470 Million from the Highway Trust Fund**

The economic impetus to complete the system has never been more compelling. A modern system of highways is an essential first step toward fostering economic growth and enabling Appalachia to become a significant contributor to the national economy. Completion of the ADHS will permit the nation to realize the system-wide efficiencies of linking with the interstate highway system and the nation’s intermodal transportation networks. Appalachia’s strategic location between the eastern seaboard and the Midwest enhances the national value of the ADHS as a transportation asset to channel increasing domestic and international freight traffic between metropolitan centers and trade gateways. Forecasts of national freight demand over the next ten to twenty years by the U.S. Department of Transportation underscore the potential of the ADHS to help relieve congestion along major transportation routes and help develop new and more efficient freight flows to trade gateways.

**ARC FY 2009 Accomplishments**

<table>
<thead>
<tr>
<th>ANNUAL PERFORMANCE GOALS</th>
<th>FISCAL YEAR 2009 INTERMEDIATE ESTIMATES</th>
<th>RESULTS ACHIEVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highways</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outcome Goal:</strong> 25 additional miles (net increase) of the ADHS opened to traffic</td>
<td>Opened 10.5 additional miles (net increase) of the ADHS to traffic</td>
<td>Met 42% of goal</td>
</tr>
</tbody>
</table>

**In FY 2011, ARC will:**

- Continue to build the ADHS in close cooperation with state and federal partners as Highway Trust Fund financing becomes available.

- Consider any necessary changes in terminal points or alignments within the system.
Figure 2: Status of Completion of the ADHS (Miles)
as of September 30, 2009

<table>
<thead>
<tr>
<th>State</th>
<th>Complete</th>
<th>Remaining Stage Construction</th>
<th>Miles Open to Traffic</th>
<th>Miles Not Open to Traffic</th>
<th>Total Miles Eligible for ADHS Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALABAMA</td>
<td>166.7</td>
<td>53.3</td>
<td>7.6</td>
<td>4.4</td>
<td>63.7</td>
</tr>
<tr>
<td>Georgia</td>
<td>100.9</td>
<td>0.0</td>
<td>9.8</td>
<td>11.1</td>
<td>20.5</td>
</tr>
<tr>
<td>Kentucky</td>
<td>395.2</td>
<td>0.0</td>
<td>0.0</td>
<td>11.1</td>
<td>20.5</td>
</tr>
<tr>
<td>Maryland</td>
<td>77.0</td>
<td>3.7</td>
<td>0.0</td>
<td>0.0</td>
<td>2.5</td>
</tr>
<tr>
<td>Mississippi</td>
<td>97.0</td>
<td>0.0</td>
<td>12.2</td>
<td>8.3</td>
<td>0.0</td>
</tr>
<tr>
<td>New York</td>
<td>211.6</td>
<td>1.3</td>
<td>3.6</td>
<td>5.5</td>
<td>0.0</td>
</tr>
<tr>
<td>North Carolina</td>
<td>175.4</td>
<td>4.2</td>
<td>6.6</td>
<td>9.8</td>
<td>8.3</td>
</tr>
<tr>
<td>Ohio</td>
<td>178.2</td>
<td>0.0</td>
<td>0.0</td>
<td>16.2</td>
<td>7.1</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>301.8</td>
<td>2.9</td>
<td>35.1</td>
<td>13.4</td>
<td>99.9</td>
</tr>
<tr>
<td>South Carolina</td>
<td>18.6</td>
<td>0.0</td>
<td>0.0</td>
<td>4.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Tennessee</td>
<td>220.9</td>
<td>77.1</td>
<td>11.2</td>
<td>2.6</td>
<td>17.5</td>
</tr>
<tr>
<td>Virginia</td>
<td>160.7</td>
<td>0.0</td>
<td>1.6</td>
<td>14.3</td>
<td>15.6</td>
</tr>
<tr>
<td>West Virginia</td>
<td>338.0</td>
<td>0.9</td>
<td>21.5</td>
<td>19.0</td>
<td>30.2</td>
</tr>
<tr>
<td><strong>System Totals</strong></td>
<td><strong>2,442.0</strong></td>
<td><strong>143.4</strong></td>
<td><strong>109.2</strong></td>
<td><strong>122.0</strong></td>
<td><strong>273.4</strong></td>
</tr>
</tbody>
</table>

Appalachian Development Highway System
Status of Completion as of 9/30/2009
3,090 Eligible Miles
Figure 3

APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM

September 30, 2009
SALARIES & EXPENSES
Appalachian Regional Commission
Salaries and Expenses

The Federal Co-Chair requests $6.275M for Salaries and Expenses to implement the Area Development program and its associated costs. Table 4 summarizes ARC’s total request for salaries and expenses in FY 2011, compared with prior years. Please refer to Appendix C for the ARC organizational chart which shows the federal and non-federal staff organization of the Commission.

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Salaries and Expenses (Thousands of dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009 Actual</td>
</tr>
<tr>
<td>Appropriation</td>
<td>5,727</td>
</tr>
</tbody>
</table>

The request for salaries and expenses provides for the full costs of the Office of the Federal Co-Chair, its immediate staff, and the Office of the Inspector General. The request also includes the 50 percent federal contribution to the Commission’s Trust Fund for administrative expenses of the non-federal Commission staff. Subtotals for each can be seen in Table 5.

<table>
<thead>
<tr>
<th>Table 5</th>
<th>Salaries and Expenses (Thousands of dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009 Actual</td>
</tr>
<tr>
<td>1. Federal Co-Chair</td>
<td></td>
</tr>
<tr>
<td>Immediate Staff</td>
<td>1,476</td>
</tr>
<tr>
<td>Inspector General</td>
<td>.489</td>
</tr>
<tr>
<td><strong>Subtotal:</strong></td>
<td>1,965</td>
</tr>
<tr>
<td>2. Commission Administrative Expenses (50% federal contribution)</td>
<td></td>
</tr>
<tr>
<td>3,762</td>
<td>3,979</td>
</tr>
<tr>
<td><strong>Total Request:</strong></td>
<td>5,597</td>
</tr>
</tbody>
</table>
As required by the Appalachian Regional Development Act, member states collectively contribute the other 50 percent of the Commission’s non-federal staff and related costs.

Office of the Federal Co-Chair

The request of $1.507 million for the Office of the Federal Co-Chair provides for an immediate staff of eight positions, with related benefits, rent, travel, services, and other expenses. This includes the estimated cost associated with the Administration’s legislative proposal of having agencies show the full costs of retirees’ annuities and health benefits.

The Federal Co-Chair’s staff is paid entirely by the federal government and assists in carrying out the Federal Co-Chair’s responsibilities. These include working with federal agencies and chairing an interagency organization as provided in the ARDA; serving as the Commission’s liaison to the Congress and the Administration; representing the Administration in working with the Member states to formulate regional strategies and other policy; and reviewing projects for final approval by the Federal Co-Chair.

Office of Inspector General

The Inspector General Act Amendment of 1988 (P.L. 100-504) requires ARC to maintain an independent Office of Inspector General (OIG), which reports directly to the Federal Co-Chair. The OIG workload includes a variety of headquarters and grantee reviews, inquiries, and investigations that are performed by permanent and contract staff. For certain investigations and legal issues, the OIG uses reimbursable agreements and Memoranda of Understanding with other federal OIGs.

The OIG requests $635,000 for the expenses of a three-person staff, related expenses, and required contract audit, investigative, training, legal support and support for the Council of the Inspectors General on Integrity and Efficiency as required by the Inspector General Reform Act (PL 110-409) passed by Congress in 2008. This legislation placed increased requirements on the office of each Inspector General. Inspector General activities will continue to emphasize the effectiveness and efficiency of program operations and compliance with laws and regulations affecting grant programs. This includes review and evaluation activities in connection with the GPRA, the Single Audit Act, and GISRA, as well as coordination and cooperation with other oversight offices on crosscutting issues and legislated reviews. Audit activities enable the Commission to produce audited financial statements, as other agencies are required to do under the Accountability of Tax Dollars Act. The request will cover expenses for necessary investigative and legal support, which will be obtained through reimbursable agreements and Memoranda of Understanding with other federal Offices of Inspector General.

Tables 6 and 7 show object class estimates for the request for the Offices of the Federal Co-Chair and the Inspector General, respectively.
Table 6 - Federal Co-Chair’s Office Administrative Expenses  
(Thousands of dollars)

<table>
<thead>
<tr>
<th></th>
<th>2009 Actual</th>
<th>2010 Enacted</th>
<th>2011 President's Budget</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Compensation</td>
<td>1,179</td>
<td>979</td>
<td>984</td>
<td>5</td>
</tr>
<tr>
<td>Personnel Benefits</td>
<td>297</td>
<td>254</td>
<td>256</td>
<td>2</td>
</tr>
<tr>
<td>Travel &amp; Transportation</td>
<td>54</td>
<td>95</td>
<td>90</td>
<td>-5</td>
</tr>
<tr>
<td>Rent, Communications</td>
<td>151</td>
<td>116</td>
<td>126</td>
<td>10</td>
</tr>
<tr>
<td>Printing</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Services</td>
<td>253</td>
<td>25</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Supplies</td>
<td>10</td>
<td>11</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Equipment</td>
<td>0</td>
<td>10</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>1,945</strong></td>
<td><strong>1,495</strong></td>
<td><strong>1,507</strong></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Table 7 - Inspector General’s Office Administrative Expenses  
(Thousands of dollars)

<table>
<thead>
<tr>
<th></th>
<th>2009 Actual</th>
<th>2010 Enacted</th>
<th>2011 President's Budget</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Compensation</td>
<td>312</td>
<td>328</td>
<td>334</td>
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<tr>
<td>Personnel Benefits</td>
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<td>61</td>
<td>61</td>
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</tr>
<tr>
<td>Travel &amp; Transportation</td>
<td>6</td>
<td>5</td>
<td>5</td>
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</tr>
<tr>
<td>Rent, Communications</td>
<td>27</td>
<td>26</td>
<td>28</td>
<td>2</td>
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<tr>
<td>Printing</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
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<tr>
<td>Services</td>
<td>98</td>
<td>184</td>
<td>199</td>
<td>15</td>
</tr>
<tr>
<td>Supplies</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Equipment</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>508</strong></td>
<td><strong>612</strong></td>
<td><strong>635</strong></td>
<td><strong>23</strong></td>
</tr>
</tbody>
</table>

Commission Non-Federal Operating Expenses

Annual appropriations for ARC fund half of the costs to maintain a professional staff to provide technical support to the states and the federal staff in implementing Commission programs. These funds, and an equal contribution from member states, are deposited into a Treasury trust fund account. Together with prior year balances, these resources finance all non-federal Commission operating expenses.

The Commission’s authorizing legislation specifies that ARC staff employed under the Trust Fund shall not be considered federal employees for any purpose. Accordingly, these professionals are neither state nor federal employees, even though they work directly for the joint federal-state partnership agency. An Executive Director, who is appointed by the states and the Federal Co-
Chair, manages this staff and is the Chief Executive Officer of the Commission. Table 8 shows the plan for financing Commission operations.

The request would provide minimum operations to support regional planning and programs at the requested level and to manage the approximately 2,000 ARC grants in force. Staff operations have included a significant effort by ARC to assure performance accountability and strong financial management, as well as to implement e-government business processes.

Table 8 - Financing for ARC Non-Federal Operating Expenses
(Thousands of dollars)

<table>
<thead>
<tr>
<th></th>
<th>2009 Actual</th>
<th>2010 Enacted</th>
<th>2011 President's Budget</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Contribution</td>
<td>3,762</td>
<td>3,979</td>
<td>4,133</td>
<td>154</td>
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<tr>
<td>Federal Contribution</td>
<td>3,762</td>
<td>3,979</td>
<td>4,133</td>
<td>154</td>
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<tr>
<td>Prior year balances used</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>7,524</strong></td>
<td><strong>7,958</strong></td>
<td><strong>8,266</strong></td>
<td><strong>308</strong></td>
</tr>
</tbody>
</table>

Each year, the states and the Federal Co-Chair must approve the Commission’s operating budget. Following completion of appropriations action, final non-federal staffing decisions are made and must be approved at a Commission meeting of the member states with the Federal Co-Chair. Please refer to Table 9 below which shows ARC Non-Federal Operating Expenses. As a result of this consultative process, final allocations may differ from the estimates of operating expense amounts by object class for 2011.

ARC continues its management goal to develop effective and efficient management systems and processes and to promote a high-performance organizational culture supporting the Strategic Plan. Commission staff will continue to use available resources to promote innovation, improve core competencies and internal communications, enhance technical assistance, improve the monitoring and evaluation of project operations, stress customer service, and deploy affordable technology wherever possible.

Personnel compensation for Commission staff generally follows that of federal employees in the metropolitan area and benefits are budgeted accordingly. The FY 2011 budget includes an increase in personnel compensation necessary due to the $10 million increase in funding enacted over the last three fiscal years. This request reflects costs associated with the Commission’s responsibility for funding its own private Defined Benefit pension plan for Commission staff. During fiscal 2011 the pension plan will require additional funding based on actuarial projections.

This budget reflects an increase in the Commission service category due to inclusion of additional audit costs necessary to comply with Circular A-136 requirements.
Table 9 - ARC Non-Federal Operating Expenses
(Thousands of dollars)

<table>
<thead>
<tr>
<th></th>
<th>2009 Actual</th>
<th>2010 Enacted</th>
<th>2011 President's Budget</th>
<th>Change</th>
</tr>
</thead>
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<tr>
<td>Personnel Compensation</td>
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<td>4,503</td>
<td>4,731</td>
<td>228</td>
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<td>Personnel Benefits</td>
<td>1,534</td>
<td>1,871</td>
<td>1,919</td>
<td>48</td>
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<tr>
<td>Travel &amp; Transportation</td>
<td>92</td>
<td>109</td>
<td>98</td>
<td>-11</td>
</tr>
<tr>
<td>Rent, Communications, Utilities</td>
<td>717</td>
<td>680</td>
<td>703</td>
<td>23</td>
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<tr>
<td>Printing</td>
<td>21</td>
<td>36</td>
<td>36</td>
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<tr>
<td>Services</td>
<td>610</td>
<td>667</td>
<td>686</td>
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<tr>
<td>Supplies</td>
<td>57</td>
<td>60</td>
<td>60</td>
<td>0</td>
</tr>
<tr>
<td>Equipment</td>
<td>35</td>
<td>32</td>
<td>32</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>7,143</strong></td>
<td><strong>7,958</strong></td>
<td><strong>8,265</strong></td>
<td><strong>308</strong></td>
</tr>
</tbody>
</table>
ARC Performance Assessment & Evaluation

ARC assesses the overall progress of the Region over the long term through special research, fine-grained analyses of decennial census data, and monitoring the number of severely distressed counties over time. That information is essential for understanding remaining gaps between the Region and the rest of the country in terms of jobs, income, educational attainment, and quality of life. In addition to long term assessments, the Commission has conducted a program of performance measurement linked to the Strategic Plan under the GPRA process. ARC’s performance measurement program can be discussed in three areas:

- Return on investment, documenting how well ARC leverages other resources;
- Project performance, using data collection and analysis in a management information system validated by site visits to document actual outcomes; and
- Independent project evaluations.

ARC performance is published annually in the Performance and Accountability Report, which is available to the general public on the ARC website.

Leveraged Public and Private Investment

ARC has a statutory responsibility to use its advocacy and grant activities to increase investment of public and private funds in the Region. Underinvestment of federal program funds and private sector resources in Appalachia was a fundamental concern when the Commission was founded, and it continues to be a barrier to self-sustained economic growth. Accordingly, the Commission stresses leveraging of all other resources to the maximum extent possible in its grant initiatives and undertakes to regularly monitor leveraging efficiency within and across grant areas by goal. ARC values how well its grants provide seed money for local investments that leverages other federal, state and local funds as well as private funds. For example, a recent evaluation of infrastructure projects funded by ARC between 1998 and 2004 leveraged total private-sector investment of $1.7 billion.\(^6\) As shown in Figure 8, in 2009 each dollar of ARC funding across all investment areas leveraged $3.70 in non-ARC funding and leveraged $8.75 in private investment attracted as a result of the project.

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Project Performance

ARC has structured a systematic program of performance measurement for its grants in accordance with the Strategic Plan, and it tracks individual grant information and performance in an intranet database available to program managers. Data elements for specific project grants are linked to the measures in the annual performance plan for each strategic goal. The system not only provides a means to document output and outcome performance for each fiscal year and over time, but also provides management information that strengthens project oversight and troubleshooting. In addition, the system provides a means to identify lessons learned and best practices that can be shared across the Region. Site visits two years after funding are used to validate performance information reported in the project management system, based on a sample of 50–60 projects annually.

The Commission is developing web-based resources for grant development that will be enable prospective grantees to incorporate strong project performance measurement in project designs. This innovative effort will not only improve performance measurement and outcomes, but support efficiency in ARC grant business processes and enhance reporting capabilities at all levels.

Since initiating its project measurement system under GPRA, the Commission has established a solid record of performance. Appendix B includes a summary of many of the measurements used in the past several years for various program objectives.

Independent Evaluations

Closely aligned with project performance tracking is a multi-year plan whereby ARC uses independent or external evaluations to determine how well projects have achieved their objectives. These evaluations place a special emphasis on assessing the utility and validity of output and outcome measures. Results provide important management information to the Commission for policy development purposes. Findings are also made available to state and local organizations that are in a position to affect future programming. Evaluation reports are typically published on ARC’s website. Research under way in FY 2010 includes:

Education
- An examination how ARC education investments have impacted literacy rates and access to jobs, information, resources, and technology.
- An analysis of the economic costs and benefits of closing the educational attainment gap between Appalachia and the nation.

Energy
- An analysis of the impact of energy and environmental policies that are likely to be adopted by the current Congress, and an examination of how the Appalachian region will fare with respect to the rest of the nation when these policies are implemented.

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7 Development of Web-Based Resources for Grant Development, Performance Measurement, and Business Process Improvements, with contract assistance from Silosmashers, Inc.
Asset-Based Development
- An examination of the economic growth in the area of sustainable forest resources management and wood product development.

Health
- An economic impact analysis of medical care access and cost disparities in Appalachia.

GOAL 1: Increasing Job Opportunities and Per Capita Income

Energy
In FY 2009, the Appalachian Regional Commission issued the report *Energy Efficiency in Appalachia: How Much More is Available, at What Cost, and by When? 2009* (Revised May 2009). This report, completed by the Southeast Energy Alliance, indicated that energy consumption in the region is expected to increase 28 percent between 2006 and 2030, compared with a 19 percent increase forecast for the United States as a whole. Research indicates that strong policy interventions will be needed to promote energy-efficient purchases and practices that could help the Region meet its future energy needs while ensuring its continued economic and environmental health. This study assesses the long-term energy-efficiency gains that could be achieved by implementing an ambitious package of energy-efficiency policies throughout Appalachia. It examines the breadth of energy-efficiency resources in Appalachia; the timeframe for harnessing these resources; and the policies and programs that could most effectively translate these resources into energy savings, as well as the impact those policies and programs could have on jobs and wages in Appalachia. The engineering-economic modeling conducted in the study concludes that such policies could result in significant energy savings and positively impact the Appalachian economy.

Entrepreneurship
In FY 2008, the Appalachian Regional Commission issued the report *Creating an Entrepreneurial Appalachian Region: Findings and Lessons from an Evaluation of the ARC’s Entrepreneurship Initiative 1997-2005*, prepared by the Rural Policy Research Institute (RUPRI), the RUPRI Center for Rural Entrepreneurship, EntreWorks Consulting, and RTI International. The report evaluated ARC’s Entrepreneurship Initiative (EI) in terms of both outcomes achieved by a sample of funded projects and broader policy impacts across the Region.

As identified through project final reports submitted to ARC, the EI led to the creation of at least 9,156 jobs, the retention of a further 3,022 jobs, the formation of 1,787 new businesses, and the provision of services to 8,242 businesses. ARC’s cost per job created was $4,693, which compares favorably with other economic development efforts.

From 1997 to 2005, the EI made investments in 340 unique projects across the Region at an average investment of $3.3 million per state and a per capita investment of $1.82. The EI investment in projects that were completed as of 2005 leveraged an additional $72.8 million in private investment. When all the projects in the Entrepreneurship Initiative have been completed, the value of private investment leveraged is expected to rise to $109.9 million.
A sample of 88 projects was selected for an in-depth investigation of outcomes. Additional metrics were reported for these projects, including the following: more than 11,500 students and teachers participated in or received training in entrepreneurship education projects; 1,500 entrepreneurs took part in sector- focused activities; and another 1,620 entrepreneurs received training and technical assistance.

The evaluation team assessed the qualitative impacts of the sample projects through interviews with project leaders familiar with the investments, and from regional stakeholders and entrepreneurship experts with in-depth experience both in the Region and in entrepreneurship development. Common themes identified were that ARC EI investments:

- raised the profile of entrepreneurship as a development strategy in the Region;
- provided start-up funding for innovative projects;
- leveraged additional resources that helped some projects achieve scale and impact;
- facilitated networking and collaboration among practitioners; and
- helped change attitudes, particularly among youths and their teachers.

The evaluation team offered three sets of recommendations for ARC:

1. Entrepreneurship development initiatives should include assessments of existing capacity and capacity-building activities as part of the project design; they should be designed with a focus on the long term; they should be market driven and practice continuous improvement; and they should emphasize forming regional partnerships and collaborations.

2. The use of job creation as the sole performance measurement for entrepreneurship development investments paints an incomplete picture of the outcomes. Performance measurement would be enhanced by using additional metrics designed specifically for entrepreneurship projects.

3. ARC’s “regional initiative” process should be standardized so that state program managers can more effectively plan for and promote the use of the resources; ARC should apply its proven experience to developing and delivering effective, region-wide education programs to help make the case for entrepreneurship as a core economic development strategy; and ARC should invest long-term in a “Next Generation Entrepreneurship Innovation Initiative” using lessons learned from the original EI and building on its momentum.

Tourism and Asset-Based Development
In FY 2007, Regional Technology Strategies (RTS) undertook a program evaluation of ARC’s tourism, cultural heritage, and asset-based development projects. The evaluation will verify project outcomes and assess the utility and validity of specific performance measurements for monitoring and evaluating these types of projects; as well as identifying future policy options, reporting concerns, and lessons learned. RTS has completed examinations of approximately 100 tourism, cultural heritage, and asset-based development projects through surveys, interviews with ARC staff and stakeholders in the thirteen Appalachian states, and visits to selected sites. A draft report of the evaluation will be completed in 2010.
Capacity Building

In FY 2004, the Appalachian Regional Commission issued the report *Evaluation of the Appalachian Regional Commission’s Community Capacity-Building Projects*, prepared by the Westat Corporation. The purpose of the evaluation was to assess factors associated with successful capacity-building projects and to recommend a range of performance measures that could be used to document the impact of successful initiatives. One hundred projects were examined in the study, all of which were funded by ARC between 1995 and 2003.

Total ARC funding for the projects was roughly $7 million. The report’s evaluation includes both quantitative and qualitative findings on outcomes, based on multiple sources (i.e., documentary evidence, interviews, and case studies) and incorporated lessons learned about community capacity building, including studies conducted by various foundations, private nonprofits, academic researchers, and federal agencies. Findings of the study are summarized below.

**Findings:** Most (70 percent) of the 179 outcomes proposed by interviewed projects were successfully achieved. Of the remaining outcomes, 9 percent had not been achieved, 10 percent were still open, and 11 percent lacked information on attainment.

**Recommendations:** ARC application materials for community capacity-building projects should provide information and examples to help applicants execute and document their approach and outcomes more accurately; ARC should work more closely with applicants during this process. In addition, ARC should provide grantees with written materials on data collection and analysis practices.

**GOAL 2: Strengthening the Capacity of the People to Compete in the Global Economy**

**Education**

A March 2006 evaluation of the ARC–Oak Ridge National Laboratory Math-Science-Technology Summer Institute by the Academy for Educational Development assessed the effectiveness of the program in encouraging more Appalachian high school students to continue their studies beyond high school and to pursue careers in science, technology, engineering, and math. It also assessed how the program helped participating high school teachers raise the level of math, science, and technology instruction in their schools. The findings are based on data collected from eight groups of participants attending the summer institute between 1997 and 2004.

The study found that participation in the summer institute influenced 24 percent of students to take more science classes and 22 percent to take more math classes when they returned to high school. Slightly more than half the students reported that their summer institute experience reinforced prior decisions about the science and math courses they had already chosen to take. Students also reported that the summer institute had reinforced their intention to go to college and reduced some of the barriers. Ninety-six percent of the student participants who had graduated from high school at the time of the survey had continued their formal education beyond high school, with more than half receiving degrees in science, technology, engineering, or math fields.
Participating teachers reported that they had incorporated activities and approaches learned at the summer institute into their classrooms: 77 percent reported that they drew on the experience for explanations and examples; 52 percent reported that they drew on the experience for classroom demonstrations; and 50 percent reported that they had incorporated new knowledge into their lab experiments.

**GOAL 3: Develop and Improve Appalachia's Infrastructure to Make the Region Economically Competitive**

**Infrastructure and Public Works**
In FY 2007, the Brandow Company and Economic Development Research Group completed the ARC report *Evaluation of the Appalachian Regional Commission’s Infrastructure and Public Works Program Projects, 2006*. The evaluation examined a sample of 104 completed ARC infrastructure projects that had been funded between 1998 and 2004, including industrial parks and other industrial sites, access roads, business incubators, water and sewer systems, housing, and telecommunications. The sample projects represent 25 percent of the completed infrastructure projects that had been funded during this period. Of the 104 projects sampled, 78 were non-residential economic development projects; 22 were community development projects, including residential water and sewer projects; and four were housing projects. The number of infrastructure projects funded during this period accounted for about 49 percent of ARC area development projects.

Findings of the evaluation included the following:

- **Jobs.** The sampled projects, which received $29.4 million in ARC funding, directly produced 17,795 new jobs and retained 9,580. In addition, an estimated 25,341 new jobs were created by the indirect effects of the project. ARC funds created an average of one new direct job for every $1,652 of ARC investment. On average, industrial parks created 1,086 jobs per project; commercial water and sewer improvements created 304 jobs per project; business incubators created 271 jobs per project; telecommunications created 230 jobs per project; and access roads created 212 new jobs per project.

- **Personal Income.** The new jobs created or retained by these projects led to an increase of $638 million annually in new wages for the jobs created directly by the projects, $325 million annually in wages for retained jobs, and another $692 million in wages from indirect jobs.

- **Tax Revenue.** The new projects yield $13.3 million per year in state income tax revenue, $16.5 million per year in state and local sales tax revenue, and $14.2 million per year in local property tax revenue. The total of annual state income tax and local property tax revenue almost equals the amount of the ARC investment.

- **Private Investment.** The new projects have leveraged total private-sector investment of $1.7 billion: $947 million in direct private non-project investment and $753 million in induced non-project private investment.
GOAL 4: Building the Appalachian Development Highway System

ADHS Economic Impact
In October 2006, Economic Development Research Group completed the study The Impact of Highway Investments on Economic Growth in the Appalachian Region, 1969–2000: An Update and Extension of the Twin County Study. The report updated the 1995 “twin county” study by Andrew Isserman and Terance Rephann, which found statistically significant differences in economic growth rates between Appalachian counties and their non-Appalachian counterparts during the years 1965 to 1991, and also found that counties served by the Appalachian Development Highway System had higher rates of income, population, and per capita income growth than similar non-Appalachian counties. The new study extended the analysis to the year 2000 and assessed whether the amount, characteristics, and timing of ADHS investments can explain some of the differences in economic outcomes. The study, which used survey-based data, showed that there is a robust statistical link between ADHS investments and differential income and earnings growth between Appalachian counties and similar non-Appalachian counties. A key finding of the study was that Appalachian counties with open ADHS segments had higher income growth than their twin counties, with the ADHS counties posting 200 percent more income growth over the 1969–2000 period. In comparison, income growth for all Appalachian counties during the period was 131 percent higher than income growth in the non-Appalachian twin counties.

The overall performance during this period of the Appalachian counties studied, however, should not mask the struggles that some areas of the Region have experienced: performance of the northern Appalachian counties lagged behind the non-Appalachian twins’, and, across the Region, the performance of smaller metropolitan areas fell far behind their non-Appalachian counterparts’.

In FY 2008, Cambridge Systematics completed a report on the economic impact of completing the Appalachian Development Highway System. Specifically, the report assessed how the corridor improvements will enhance the connectivity of Appalachia’s people and businesses to other highway facilities, multimodal transportation, and markets. The work included building a regional travel demand model to estimate travel demands, as well as user benefits that would be realized by the completion of ADHS corridors and the resulting network improvements in moving goods and people to, from, within, and across the Region.

- Completion of the ADHS would generate 80,500 jobs by 2035, and $3.2 billion annually in increased wages.
- Greater market accessibility would result in $2.1 billion annually in value-added activity in Appalachia.
- More than 65 percent of the benefits to freight movement would accrue to areas outside of Appalachia, suggesting the importance to the national economy of completing the ADHS.
- Savings in travel time, fuel and non-fuel operating costs, and increased safety would reach $1.6 billion annually by 2020.

Analysts estimated user benefits for freight, commuting, tourism, and other business and non-business traffic; then, using these data, estimated the regional economic development benefits from the enhanced competitive position of industry in the Region, increased roadside business and tourism, increased transportation reliability, and increased commuting areas, as well as national

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benefits due to congestion relief. The study also developed several types of benefit-cost assessments, including an overall assessment of regional travel efficiency and economic development benefits, as well as national efficiency benefits.
APPENDIX A
Designated Distressed and At-Risk Counties

The Commission has targeted special assistance to severely distressed counties in the Region since 1983. For the 2010 program year, there are 82 counties so designated, and they receive a special allocation of one-third of all the ARC grant funds allocated to the states. States invest additional funds in these areas from their allocations under the Area Development program. At the same time, ARC allows up to 80 percent participation in grants in the severely distressed areas, 50 percent in areas considered transitional, 30 percent in areas that are considered competitive, and it virtually eliminates funding to areas that have attained at least parity with the rest of the country.

In 2005, the Commission further designated counties that are considered at risk of becoming severely distressed. This policy acknowledges that, while the distressed county designations are important for focusing on the counties most clearly in need of pre-developmental assistance, there is also a need to monitor the economic performance of areas that are relatively disadvantaged but not considered severely distressed.

In FY 2006, the Commission adopted a new policy for the economic classification to its counties. While the previous system is valid, ARC now utilizes an index-based county economic classification system which more closely aligns with the agency mission to achieve economic parity with the nation and is easily computable on an annual basis. The index monitors the economic status of the Appalachian counties relative to all counties in the nation. The Commission’s previous distress measures: the three-year average unemployment rate, the per capita market income, and the poverty rate are used to compute the index.

In its 2008 reauthorization, 10 new counties were added to the ARC region. Of these new counties, three are located in Ohio, three in Kentucky, two in Tennessee and two in Virginia.

Figure 1 is a map of the Region that shows the location of distressed, at-risk, transitional, competitive, and attainment counties for fiscal year 2009.

Distressed Counties

Distressed counties are determined by taking the worst 10 percent of the nation’s counties and then identifying the Appalachian counties within this part of the worst quartile group.

For FY 2010, 82 counties, or 19 percent of the 420 counties in the Appalachian Region, are designated as economically distressed. This is an increase of 1 county since FY 2009. Counties designated for FY 2010 are as follows:

Distressed Counties

- **Alabama** (2) - Hale and Macon
- **Kentucky** (40) – Adair, Bath, Bell, Breathitt, Carter, Casey, Clay, Clinton, Cumberland, Elliott, Estill, Floyd, Harlan, Hart, Jackson, Johnson, Knott, Knox, Lawrence, Lee, Leslie,
Letcher, Lewis, Lincoln, Magoffin, Martin, McCreary, Menifee, Metcalfe, Monroe, Morgan, Owsley, Perry, Powell, Robertson, Rockcastle, Russell, Wayne, Whitley, and Wolfe

- **Mississippi** (12) - Benton, Chickasaw, Choctaw, Clay, Kemper, Marshall, Montgomery, Noxubee, Panola, Webster, Winston, and Yalobusha

- **Ohio** (6) - Athens, Meigs, Monroe, Morgan, Pike, and Vinton

- **Pennsylvania** (1) - Forest

- **Tennessee** (9) - Clay, Cocke, Fentress, Grundy, Hancock, Johnson, Lawrence, Pickett, and Scott

- **Virginia** (1) - Dickenson

- **West Virginia** (11) - Braxton, Calhoun, Clay, Lincoln, McDowell, Mingo, Roane, Summers, Webster, Wirt, and Wyoming

**At-Risk Counties**
ARC recognizes and closely monitors transitional counties that are “At Risk” of distress. At-risk counties are identified by taking the residual of the worst quartile counties and designating them accordingly.

- **Alabama** (2) - Bibb and Pickens
- **Georgia** (3) – Chattooga, Elbert, and Hart
- **Kentucky** (8) - Edmonson, Fleming, Green, Laurel, Nicholas, Pike, Pulaski, and Rowan
- **Mississippi** (8) - Alcorn, Calhoun, Lowndes, Monroe, Oktibbeha, Prentiss, Tippah, and Tishomingo
- **New York** (1) - Allegany
- **North Carolina** (6) - Cherokee, Graham, Mitchell, Rutherford, Swain, and Yancey
- **Ohio** (9) - Adams, Gallia, Guernsey, Jackson, Jefferson, Lawrence, Noble, Perry, and Scioto
- **Pennsylvania** (1) - Fayette
- **South Carolina** (1) - Cherokee
• **Tennessee** (15) - Bledsoe, Campbell, Carter, Claiborne, Grainger, Jackson, Lewis, Meigs, Morgan, Overton, Rhea, Union, Van Buren, Warren, and White

• **Virginia** (5) - Buchanan, Lee, Russell, Scott, and Wise

• **West Virginia** (20) – Barbour, Boone, Doddridge, Fayette, Gilmer, Greenbrier, Lewis, Logan, Mason, Mercer, Monroe, Nicholas, Pocahontas, Ritchie, Taylor, Tucker, Tyler, Upshur, Wayne, and Wetzel
Figure 1

County Economic Status in Appalachia, Fiscal Year 2010
(Effective October 1, 2009 through September 30, 2010)

The Appalachian Regional Commission uses an index-based county economic classification system to identify and monitor the economic status of Appalachian counties.

County Economic Levels
- Distressed (82)
- At-Risk (79)
- Transitional (229)
- Competitive (24)
- Attainment (6)

Map Created: January 2009.
APPENDIX B
Project Performance Review

ARC’s project performance measurement program was designed to accomplish two primary objectives. The first is compliance with the GPRA in measuring the outputs and outcomes of ARC projects. The second objective is creation of a process that allowed for both feedback from grantees and analysis of funded projects in an effort to help improve programming.

Measuring project performance involves three components:

- Project data collection and analysis through use of a management information system;
- Site visits to validate actual outcomes of a sample of projects; and
- Independent project evaluations.

These three components together support GPRA reporting and compliance, as well as help ARC glean “lessons learned” from previously funded grants. By structuring the program in this manner, ARC has made the GPRA a management tool and a valuable resource in determining program effectiveness.

Performance results for each of ARC’s goal areas across recent years are presented in the following pages.
SUMMARY OF ACHIEVEMENTS

Performance Goals and Results for Fiscal Year 2009 Projects

<table>
<thead>
<tr>
<th>ANNUAL PERFORMANCE GOALS</th>
<th>FISCAL YEAR 2009 INTERMEDIATE ESTIMATES</th>
<th>RESULTS ACHIEVED</th>
</tr>
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<tbody>
<tr>
<td><strong>Jobs and Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcome Goal: 20,000 jobs created or retained</td>
<td>21,183 jobs created or retained</td>
<td>Exceeded goal</td>
</tr>
<tr>
<td>Leverage Goal: Achieve a 4:1 ratio of leveraged private investment to ARC investment for projects in General Goal 1</td>
<td>Achieved a 3:1 ratio</td>
<td>Met 75% of goal</td>
</tr>
<tr>
<td>Targeting Goal: Direct 50% of grant funds to benefit stressed counties or areas for projects in General Goal 1</td>
<td>Directed 47% of funds*</td>
<td>Met 94% of goal</td>
</tr>
<tr>
<td><strong>Competitiveness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcome Goal: 20,000 students/trainees with improvements</td>
<td>23,764 students/trainees with improvements</td>
<td>Exceeded goal</td>
</tr>
<tr>
<td>Matching Goal: Achieve a 1:1 ratio of non-ARC to ARC investment for projects in General Goal 2</td>
<td>Achieved a 1:1 ratio</td>
<td>Met goal</td>
</tr>
<tr>
<td>Targeting Goal: Direct 50% of grant funds to benefit stressed counties or areas for projects in General Goal 2</td>
<td>Directed 61% of funds*</td>
<td>Exceeded goal</td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcome Goal: 20,000 households served</td>
<td>25,081 households served</td>
<td>Exceeded goal</td>
</tr>
<tr>
<td>Matching Goal: Achieve a 2:1 ratio of non-ARC to ARC investment for projects in General Goal 3</td>
<td>Achieved a 6:1 ratio</td>
<td>Exceeded goal</td>
</tr>
<tr>
<td>Targeting Goal: Direct 50% of grant funds to benefit stressed counties or areas for projects in General Goal 3</td>
<td>Directed 61% of funds*</td>
<td>Exceeded goal</td>
</tr>
<tr>
<td><strong>Highways</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcome Goal: 25 additional miles (net increase) of the ADHS opened to traffic</td>
<td>Opened 10.5 additional miles (net increase) of the ADHS to traffic</td>
<td>Met 42% of goal</td>
</tr>
</tbody>
</table>

* ARC exceeded its overall goal of investing 50% of total ARC nonhighway funds in projects that benefit stressed counties or areas. Project funds are included if the project primarily or substantially benefits distressed counties or areas.

Investment Summary for FY 2009 Projects

| LEVERAGING, MATCHING, AND TARGETING SUMMARY for All ARC Nonhighway Projects Fiscal Year 2009 |
|-----------------------------------|-----------------------------------------------|-----------------------------------------------|
| Leveraged private investment     | $657,103,000*                                | 9:1 ratio of leveraged private investment to ARC investment |
| Non-ARC matching project funds   | $277,414,457                                 | 4:1 ratio of non-ARC project investment to ARC project investment |
| ARC project funds targeted to distressed counties or areas | $44,107,753**                                | 59% of total ARC project funds directed to projects that benefit distressed counties or areas |

* One large-scale project that had limited ARC participation was not included in the calculations for this ratio.
** Project funds are included if the project primarily or substantially benefits distressed counties or areas.
Progress toward ARC Strategic Plan Ten-Year Performance Goals
Fiscal Years 2005–2014

Goal 1: Jobs Created or Retained (Cumulative)

Ten-Year Performance Goal:
200,000 jobs will be created or retained.

Goal 2: Students/Trainees with Improvements (Cumulative)

Ten-Year Performance Goal:
200,000 citizens will benefit from enhanced education and job-related skills.

Goal 3: Households Served (Cumulative)

Ten-Year Performance Goal:
200,000 households will be served with new or improved water and sewer infrastructure.

Goal 4: ADHS Miles Opened to Traffic (Cumulative)

Ten-Year Performance Goal:
250 additional miles (net increase) of the Appalachian Development Highway System will be opened to traffic.
APPENDIX D

High-Poverty Counties in the Appalachian Region
(Counties with Rates At Least 1.5 Times the U.S. Average)

1960
295 High-Poverty Counties

FY 2010
116 High-Poverty Counties