

TESTIMONY ON THE IMPACT OF THE LAST REAUTHORIZATION OF THE APPALACHIAN REGIONAL COMMISSION AND ISSUES REGARDING THE UPCOMING REAUTHORIZATION.

HEARING

BEFORE THE

**COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE**

ONE HUNDRED NINTH CONGRESS

SECOND SESSION

APRIL 20 2006—MARIETTA, OH

Printed for the use of the Committee on Environment and Public Works



Available via the World Wide Web: <http://access.gpo.gov/congress.senate>

U.S. GOVERNMENT PRINTING OFFICE

42-277 PDF

WASHINGTON : 2009

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
Fax: (202) 512-2104 Mail: Stop IDCC, Washington, DC 20402-0001

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

ONE HUNDRED NINTH CONGRESS
SECOND SESSION

JAMES M. INHOFE, Oklahoma, *Chairman*

JOHN W. WARNER, Virginia
CHRISTOPHER S. BOND, Missouri
GEORGE V. VOINOVICH, Ohio
LINCOLN CHAFEE, Rhode Island
LISA MURKOWSKI, Alaska
JOHN THUNE, South Dakota
JIM DEMINT, South Carolina
JOHNNY ISAKSON, Georgia
DAVID VITTER, Louisiana

JAMES M. JEFFORDS, Vermont
MAX BAUCUS, Montana
JOSEPH I. LIEBERMAN, Connecticut
BARBARA BOXER, California
THOMAS R. CARPER, Delaware
HILLARY RODHAM CLINTON, New York
FRANK R. LAUTENBERG, New Jersey
BARACK OBAMA, Illinois

ANDREW WHEELER, *Majority Staff Director*
KEN CONNOLLY, *Minority Staff Director*

C O N T E N T S

	Page
APRIL 20, 2006—MARIETTA, OH	
OPENING STATEMENTS	
Voinovich, Hon. George V., U.S. Senator from the State of Ohio	1
WITNESSES	
Grossman, Steve, executive director, Ohio Water Development Authority	29
Prepared statement	69
Hughes, Jeff, director, Environmental Finance Center, University of North Carolina at Chapel Hill, Institute of Government	27
Prepared statement	52
Justice, T.J., director, Governor's Office of Appalachia, Appalachian Regional Commission	7
Prepared statement	45
Little, Gary, president, Information Technology Alliance of Appalachian Ohio	18
Prepared statement	48
Matusoff, David, principal and director of Technology Planning, Whiteboard Broadband Solutions	16
Prepared statement	47
Myers, Don, director, Ohio Mid-Eastern Governments Association	9
Prepared statement	46
Pope, Anne, Federal co-chair, Appalachian Regional Commission	4
Prepared statement	37
Reed, Ken, director, Vinton County Community and Economic Development, Vinton County Courthouse	31
Prepared statement	81
Scholl, David, Ph.D., president and CEO, Diagnostic Hybrid, Inc	22
Prepared statement	51
Stuber, Angela, executive director, Ohio Community Computing Network	20
Prepared statement	49
ADDITIONAL MATERIAL	
Reports:	
Appalachian Regional Commission: Index of County Economic Distress in the United States, Fiscal Year 2006	44
Appalachian Regional Commission: Telecommunications and Technology in Appalachia, Program and Impact Summary, April 20, 2006	84-95
Drinking Water and Wastewater Infrastructure in Appalachia, An Anal- ysis of Capitol Funding and Funding Gaps—Report Summary	56-68
Water and Wastewater Infrastructure in the Appalachian Region of Ohio	71-80
Statement of Jeff Spencer, executive director, Ohio Valley Regional Develop- ment Commission	81

**TESTIMONY ON THE IMPACT OF THE LAST
REAUTHORIZATION OF THE APPALACHIAN
REGIONAL COMMISSION AND ISSUES RE-
GARDING THE UPCOMING REAUTHORIZA-
TION.**

THURSDAY, APRIL 20, 2006

U.S. SENATE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Marietta, OH

The committee met, pursuant to notice, at 10 o'clock a.m., Washington State Community College, Graham Auditorium, 710 Colegate Drive, Marietta, OH. Hon. George V. Voinovich presiding.

**OPENING STATEMENT OF HON. GEORGE V. VOINOVICH,
U.S. SENATOR FROM THE STATE OF OHIO**

Senator VOINOVICH. Good morning everyone. Can you hear me? I am very, very pleased to be here today to conduct this field hearing on reauthorization of the Appalachian Regional Commission. It is nice to be back here in Washington County and at Washington State, and I would like to thank Dr. Hatfield for hosting us today. I know that when you put one of these things together, it is a lot of inconvenience to your staff, and we are very, very grateful for the venue that you provided to us.

I think the last time I was here was back in 2002 when we toured Washington State's nursing program which was set up, supported by the ARC, and Dr. Hatfield said she has a whole list of things that Washington State has adopted in part, I have it right here, for ARC. So it is nice to be in a place where we are having an impact on.

I would also like to thank and recognize Joy Padget, the former director of the Governor's Office of Appalachia, and now your State Senator. I really appreciate the good job that Joy did up at the Governor's office, and we worked together for a long time, and was preceded by someone's else work and that is T.J. Justice.

I would also like to recognize some of our local development district directors, Boyer Simcox with Buckeye Hills which is based here in Marietta, Jeff Spencer the Ohio Valley Regional Development Commission based in Waverly. They do an outstanding job in making a difference in their respective communities.

I am also very, very happy to recognize our first witness, Anne Pope. Ann is our Federal co-chair, and I know that this is a special day for you today, Ann.

Happy birthday to you. Happy birthday to you. Happy birthday dear Ann. Happy birthday to you.

Ann has a background, her nationality is Hungarian, and I said that is the first hungarian—when I met her, the first hungarian I ever met that speaks southern. She has done an outstanding job, and she has been a great advocate of ARC, and I really appreciate all of the cooperation that you have given me over the years.

As many of you know, the reauthorization for ARC that we got back in 2002 is about to expire and so we are going to be introducing legislation to get ARC reauthorized. What we hope to do today is get an overview of the importance of these programs to Appalachia and to closely examine the progress that has been made with respect to the implementation of our programs.

In addition, we will look to identify the challenges that still must be overcome for the region to fully realize its economic potential. I think we always hear in Washington, “We don’t need it anymore. It’s caught up.” The fact of the matter is, you know the statistics. We haven’t caught up.

To help us to meet this objective, we have assembled an impressive array of witnesses who will testify about the ARC and the variety of ways ARC funds can be used to foster local economic and social development.

I want to welcome our witnesses and thank you for coming here today. We are looking forward to your testimony. I want you all to know that your written statements will become part of the record, and that record is available to my colleagues on the Environment and Public Works Committee, and more important, to their staff which they rely upon.

I would like to ask all of the people to keep their opening remarks to no longer than 5 minutes because we do have a lot of witnesses here today.

Since 1965 when Congress established the ARC to bring the Appalachian region—how do—is it Appalachia, the word, Scott, or—he’s not here. Let’s see the hands. Is it Apalasha (phonetic) or Apalayshea (phonetic).

It was 1965 and it was established to improve the lives of 23 million citizens. You know, I do remember the need of this area because I lived here from 1954 to 1958 and I did get out into the community, and I did identify with John F. Kennedy in 1960. I didn’t vote for him, but I did identify with the fact that there was a part of America that wasn’t participating. As you know, he really brought the eyes of America to this part of the country and let folks know that we were not where we were supposed to be.

We have done a great job of reducing infant mortality by two-thirds and increasing the percentage of adults with high school educations by over 70 percent, and creating 1.6 million jobs.

Our region includes 416 counties in 13 States including 29 right here in Ohio. Twenty-nine Ohio counties in Appalachia. The ARC is composed of the Governors of the 13 Appalachian States and a Federal representative who is appointed by the President.

It is a unique partnership between the Federal Government and these 13 States. The ARC runs programs in a wide range of activities, including the highway construction, education and training,

health care, housing, enterprise development, export promotion, telecommunications, and water and sewer infrastructure.

All of these activities help achieve the goal of a viable and self-sustaining regional economy and address the four goals identified by ARC in its strategic plan: The one, increasing job opportunities and per capita income, strengthening the region's physical infrastructure, building a local and regional capacity, and creating a dynamic economic base.

ARC's programs fall into two broad categories. The first is a 3,025 mile corridor highway system to break the regional isolation created by the mountainous terrain, thereby linking the Appalachian communities to national and international markets. I think we should feel very good that roughly 81 percent of the Appalachian Development Highway System is either completed or under construction. Here in Ohio, it's 83 percent. I am hopeful that in the next couple of years it will be 100 percent. As Governor, we really worked on this area to make sure that we did our thing to help make that happen.

The second is an area development program to create a basis for sustained local economic growth. Ranging from highway and sewer infrastructure to worker training to business financing and community leadership development, these projects provide Appalachian communities with the critical resources for future growth and development. The sweeping range of options allows Governors and local officials to tailor the Federal assistance to their individual needs. One of the great things about this program is the flexibility that it provides to communities.

As many of you know, I have been an advocate for funding our Nation's water infrastructure, particularly the Clean Water State Revolving loan program.

In July, the EPW Committee, which I belong to, approved a water infrastructure funding bill which authorized \$20 billion for the Clean Water SRF. I must tell you that I am disappointed that Congress has not passed this bill yet. Quite frankly, it is just being held up on the issue of prevailing wage.

I am also deeply concerned about the Administration's budget request to cut \$310 million from the SRF program from the EPA's annual budget. These proposed cuts will have a devastating impact on the ability of our States and cities to continue upgrading their water infrastructure and meet Clean Water Act requirements. I am going to be interested, from our witnesses today, to find out how the ARC funds have melded with the SRF funds to make a difference in their respective communities. And I really encourage everyone to lobby Congress to make sure that those funds are restored.

The ARC uses the Federal dollars it receives to leverage additional State and local funding in order to undertake a wide variety of projects to help improve the region's economy and its people. In rough figures, every ARC—this is really important, and you really need to drive it home. I call it the yeast that raises the dough. The ARC has leveraged approximately \$3.37 in additional Federal, State and local funds, and over \$4 in associated private investment, which I consider a great public, public-private partnership. People forget about how important those dollars are in leveraging

other dollars in the community. In Ohio, the ARC funds support projects in five areas: skills and knowledge, physical infrastructure, community capacity, dynamic local economies, and health care.

In the fiscal year 2005, ARC provided approximately \$5 million to fund projects in Ohio. Roughly half of this funding was spent exclusively on projects in Ohio's nine distressed counties. This successful partnership enables communities in Ohio and throughout Appalachia to have tailored programs which help them to respond to a variety of grassroots needs.

Today we are going to concentrate on the successes and the future needs of the ARC's telecommunications and water infrastructure programs.

While we still have a long way to go, we have seen some improvement since the last reauthorization legislation passed. In the last 5 years, ARC-funded infrastructure projects have provided clean water and sanitation facilities for over 183,000 households.

In December 1999, 43 percent of zip codes in Appalachia had at least one high-speed Internet provider, and in 2002, 64 percent of zip codes had access to high-speed Internet. We've not more recent statistics on internet access of zip codes.

Despite its successes to date, the ARC has not completed its mission in Southeastern Ohio and throughout Appalachia. The ARC is the type of Federal initiative that the Federal Government should be encouraging.

I know there is a vast reserve of potential in Appalachia that is just waiting to be tapped. I wholeheartedly agree with one of ARC's guiding principles that the most valuable investment that can be made in a region is in its people.

I am anxious to hear the testimony of our witnesses and hear their views as to their experience with the ARC, especially what they believe the ARC should be doing in cooperation with other Federal and non-Federal entities to do the most good for the region's people with limited resources.

I would like to now call on our panel to begin with Anne Pope. Anne, you can begin. We're so happy to see you.

Ms. POPE. Thank you, Senator Voinovich, and I appreciate that birthday song, and I want to just let you know that I am announcing here a significant budget savings as I am going to fire all of my staff.

Senator VOINOVICH. Could you bring that up closer, the mic?

**STATEMENT OF ANNE POPE, FEDERAL CO-CHAIR,
APPALACHIAN REGIONAL COMMISSION**

Ms. POPE. It is wonderful to be here, Senator. I want to thank you for holding this hearing and giving me the opportunity to testify on behalf of the Bush administration. The President is very strongly committed to Appalachia, and I want to take a moment and thank you for being a champion of ARC and a champion of all of Appalachia. Appalachia is a wonderful region of the country. So I want to thank you.

I also want to thank Washington State Community College and Dr. Hatfield for hosting this field hearing. Washington State Community College is a partner to ARC and it has done some great

things with the resources and things that ARC has given this wonderful facility.

The President is strongly committed to Appalachia and he recognizes that this region has not fully participated in the growth of the American economy and that he will not be content until every person who wants to work has a job. He believes ARC can play an important role in this.

Since I have had the pleasure to have traveled around Appalachian Ohio with you and seen firsthand your passion for this region and for its people, I am grateful for your commitment. I'm also pleased to be joined here with T.J. Justice with the Governor's Office of Appalachia. He and Governor Taft have been vigorous and affective advocates for this region and for ARC. He has done a lot to move ARC forward.

Also, I am delighted to be here with Don Myers who is the director of our ARC local development district. When you see this panel sitting here, I think that is what makes ARC work. They represent a Federal, State, and local partnership, and I believe that is what—this model is why ARC has been so effective.

Mr. Chairman, I know that you know that the economic landscape of Appalachia has shifted. With this global economy, we are seeing dramatic changes in every local economy in the Appalachian region. Appalachia has relied on what I called the big four which is manufacturing, mining, tobacco, and steel, but this has shifted to a knowledge-based economy. You know that the knowledge-based economy, 80 percent of these jobs will be knowledge based and therefore require enhanced education and training. We know that Appalachia must match up to this new economy. We know that we are going to have to look for new ways to create jobs. We are going to have to enhance our schools. We will have to home grow some of our own businesses. We have to have innovative, regional strategies that position our communities to compete when, as the book says, the world is flat.

In ARC, we've adjusted our programs to respond to this changed environment. We've become more performance based. We are increasing our leverage, we're expanding our partnerships, and we are focused on innovative regional strategies. All of this will help communities help themselves.

I want to talk a bit about each one of these when we discuss the new ways that ARC is responding to the Appalachia's changing economic landscape.

First, performance based. I believe to be effective, ARC must have a plan, work that plan, and then measure what it has accomplished. For that, we are guided by our strategic plan. We developed that in 2004 in a public way. We went to over 1,000 people across five town hall meetings throughout the region who actually voted on what was important to them. From that, we came up with four goals or four things where we are going to make investments. One, we need to invest in creating jobs. Two, we need to invest in strengthening the capacity of our people. Three, we need to invest in our infrastructure knowing that that infrastructure is one of the building blocks that we need to make our region competitive. And four, you also mentioned, we have to continue to build and com-

plete the Appalachian Development Highway System. That is the linch pin of our economic development strategy.

With that, we have for the first time in 2004 developed 10-year performance goals. We call them “buckets”. We have four areas. I am always asking, “Which bucket does it go into?” So every investment that we make has to be in those four areas. So after 10 years our investments will create and retain 200,000 jobs, will enhance the employability of 200,000 workers, and provide basic infrastructure to 200 households—200,000 households, and open 250 miles of the Appalachian Development Highway System.

Our new strategy and our mission now is that Appalachia should reach parity with the Nation and to measure that, we have developed an economic index that measures Appalachia against the rest of the country. When we reach that mission, Senator, I believe ARC will go out of business. What our index has shown is that Appalachia has more of the worst counties and fewer of the best counties than the rest of the Nation.

Second, leveraging. We know that we can’t do it alone and we must use our resources to leverage other resources, and we are doing that. I am very pleased that this last year we have increased our leverage ratio so that every \$1 the ARC invests, we are leveraging \$11, and out of that, \$8 is from the private sector investment. This is very impressive, I believe, because most of what we do at ARC is predevelopment in nature, and so this private investment is significant because the private sector is risking its own capital in Appalachia.

Next, partnerships. We know that we have to expand our partnerships, and we are doing that with the Government Agencies and with the private sector. I consider that as one of my main jobs, to increase our partnerships within the Federal structure and the private sector. We are doing that. Senator, you and I were together last year, and I was pleased there to announce a major commitment that Microsoft was donating a million dollars of software to the region, but I quickly saw that the demand and need was far greater, and Microsoft doubled that. We have delivered most of that software out in the region, including a significant portion right here in Ohio.

National Geographic recognized that tourism is a key industry and a growing industry here in Appalachia. We have partnered with National Geographic to create the first map of a region, first map ever that National Geographic has done to boost tourism and create jobs. That map had many sites throughout Appalachia, including one right here in the Marietta, and I think it is very fitting that we have a hearing in Marietta, the heartbeat of tourism. I saw this morning, when I was running in downtown Marietta, where Lafayette’s American Tour ended in Marietta. I think that is something that is really important in this area.

The Centers for Disease Control. Since 2001, the CDC has committed well over a million dollars to the partnership of ARC that targets diseases such as diabetes, which I know is something that affects your family, as well as mine, and cancer. These two diseases, as well as others, disproportionately affect Appalachia. I know this is something that is key to moving the region forward.

You and I, Senator, were at Ohio University a few years ago to announce the diabetes initiative. This is critical in dealing with the health issues that face Appalachia.

Innovative regional approaches. We know that we have to look at innovative regional approaches to make our communities work together to be competitive.

Senator VOINOVICH. You are about 10 minutes already.

Ms. POPE. Let me just say, end by saying that we—we thank you for being here and I—many of the things I'm saying I am summarizing from my written statement, so I appreciate you letting me say that. I want to thank you for helping make ARC better. You have done much to push us and to make us look at what we can do to do better, and I think that we are making a difference and we are helping Appalachia move forward. So thank you. I think that ARC has positioned itself to respond to the challenges that face the region, and I thank you for helping us to move Appalachia forward.

Senator VOINOVICH. Thank you. Thank you very much. T.J.

STATEMENT OF T.J. JUSTICE, DIRECTOR, GOVERNOR'S OFFICE OF APPALACHIA, APPALACHIAN REGIONAL COMMISSION

Mr. JUSTICE. Thank you, Senator. Good morning. I too am very thankful to have an opportunity to provide testimony today. I appreciate your willingness and effort to hold this field hearing here in Ohio. I am here on behalf of the 1.4 million people that live in the 29 counties that you mentioned which compose the 13-State Appalachian region throughout the country.

Your leadership on behalf of the ARC is very much appreciated, and it is recognized that you have not been bashful or shy about your appreciation of the program.

I would also like to thank President Bush and Anne Pope for—despite the fact that these are difficult economic times and while many programs are being cut, this is a program that is proposed to be kept whole this year with the \$64.8 million budget request. So I certainly thank them.

I would also like to thank Bob Ney, my Congressman from back home, who equally has been a true advocate and strong supporter of the ARC.

Finally, before I offer my formal testimony as to why I believe the ARC should be reauthorized for another 5 years, I would like to recognize four previous directors of the Governor's office of Appalachia that are in the room. One of them—Senator Joy Padgett. There is also Jennifer Simon. Nancy Hollister was here, former Lieutenant Governor, as well. And Dan Neff. So thank you for joining us today.

Senator the ARC breeds success and fuels partnerships that have led to an organization that I would like to talk about for a moment that excels here in Ohio called OACHE. You will have an opportunity to visit with some of the students tomorrow over in Perry County.

The Ohio Appalachian Center for Higher Education is one example of the ARC at work. This is an organization that begins to work with students as young as in the 6th grade and allows them to

come up with—to dream big and find adequate resources to make their dreams come true.

I would like to share a personal story about a young man that I met a couple of years ago in Scioto County that moved me and I hope that it moves you in the same way it moved myself. While visiting the OACHE students at South Webster High School in Scioto County, a senior approached me and wanted to let me know how the OACHE program affected him and his life. He told me as he was growing up, his own family, including his own father, had discouraged him from even trying to go on to college. He was discouraged to apply. He was discouraged to take placement exams. He was discouraged from visiting campuses. But he knew deep down inside, he wanted to go. He wanted to try. He wanted to succeed and excel.

OACHE found this young man and through their work, this young man who had been discouraged by his own family from going to college, he today is a sophomore at Hocking College in Nelsonville studying to be a police officer. I had hoped that he would be here to join us today, but he was unable to join us. This young man represents the work of the Appalachian Regional Commission and the way that they impact folks and our lives here in the region.

This is a model and successful program that has also been replicated here in Ohio by Governor Taft. We are the only State that replicated that program by providing an equal amount of State money following the same ARC guidelines, goals, objectives and network using the local development districts. So by receiving \$4.1 million in our Federal allocation, the Ohio General Assembly and the Taft administration have matched that—also through difficult budget problems, have maintained that in recent years, including the current biennium. That is a true testament as to how Ohio, including Governor Taft and myself, value the Appalachian Regional Commission.

Their commitment to communities in the region have developed a number of new programs, and you have several in my formal written testimony, but I would like to specifically mention a couple that I believe are of significant value.

When we talk about jobs, the beauty of the ARC program is that they will assist an entrepreneur creating as few as two or three jobs, or they will help to rehabilitate a water plant in Jackson County that will preserve 1,000 jobs, a large, major manufacturing employer. So it is a unique program that supports small business entrepreneurs, as well as large and major employers, and that is very unique.

This is a program that has also allowed a mobile diabetes clinic to be deployed, and it travels throughout five or six counties, including Pike, Vinton, Athens, Hocking and others, through Ohio University. They are reaching out and testing other individuals who otherwise would not be screened to determine if they have diabetes. Another positive, we now have, thanks to ARC, a kit to give them so that they can self-manage their disease and take better care of themselves.

So I believe this is an appropriate program that truly works, and we make very strong efforts that are measurable here in Ohio that

allow us to have a very positive impact on the residents of our region. Senator, this is a program that works. There is no question about that. I appreciate your staunch support of this program and the opportunity to be here today. I hope the few minutes of testimony that I provided will make a difference and allow you to reauthorize this for another 5 years. Thank you.

Senator VOINOVICH. That is very comforting to me to hear that has been involved here, as one of the Governor's regional reps in charge of the ARC for the State of Ohio, because I think that you bring a real insight into the job, and thank you for being here today.

Don, you have been at this a long time, haven't you.

Mr. MYERS. Real long. Too long. I had the privilege of working with you a couple of times. I am going to bring that up in my testimony. I hope that you remember some of the items that I wish to bring before you today.

Senator VOINOVICH. Thank you for staying in there, and I am really interested in your perspective because you have had a chance to kind of watch how things have moved along. I am really interested in if we are holding our own or going forward, or you think we are slipping backward. You're on.

**STATEMENT OF DON MYERS, DIRECTOR, OHIO MID-EASTERN
GOVERNMENTS ASSOCIATION**

Mr. MYERS. I have to be good today in front of Anne Pope. She demands that. I get to tell you the truth today. It is a privilege to be here testifying before you today and your Senate Environment and Public Works Committee. I testify to express my comments and those of the Ohio Mid-Eastern Governments Association's (OMEGA) Board and to seek your consideration and support in securing funding and reauthorization status for the ARC and all of its programs. In addition, we ask that you and the committee support retaining the original mission of the program as a flexible, locally driven program that provides valuable assistance to county commissioners, mayors and development officials working to improve local communities and the needs of those communities.

As Executive Director of OMEGA, I represent an organization that serves as, quote, a Council of Governments (COG), a Local Development District (LDD) and an Economic Development District (EDD) serving a 10-county region with a population of 593,211 plus people in eastern Ohio.

At our most recent Annual Board meeting held last Wednesday, April 12, 2006, 90 officials were in attendance, including commissioners, mayors, county engineers, development officials, educators and private business leaders, and we spoke of the critical importance of continuing funding and securing reauthorization of the ARC program. At this meeting, we held discussion on this hearing today that you are holding, and our Board in its entirety requested your support and leadership in securing proper funding and reauthorization of this most important ARC program.

As a former development director in Belmont County, OH, I've had the privilege of working with you personally as Governor on three separate occasions. They are as follows, the \$80 million Ohio Coatings Electrolytic Tin Plating Plant in Yorkville, a Wheeling

Steel project, the Shadyside Stamping Plant in Shadyside, OH, built a cost of \$32 million, and the Belmont Correctional Institution built at a cost of \$38 million. These three development projects alone were built at a total cost of \$150 million and have approximately, when I left Belmont County in 2001, 900 employees with a payroll of over \$35 million. Belmont County and its people today benefit because of these developments. These special projects could not have happened had it not been for the ARC program and others like it.

Senator we met with Ohio Coatings in your office, Wheeling Pittsburgh Steel, Chairman Song from Sole, South Korea, Nitetsu's (phonetic) chairman, and Jim Antem, Wheeling Pittsburgh Steel, and we put that \$80 million package together. Five Hundred thousand dollars of it came from ARC to build that road when we had no other place to look. And that \$1.3 million road, a mile and a half of it, serves needy people today.

Senator on the side, we gave them a 50 percent tax abatement, and that company today has paid over \$3 million in taxes in this 8-year period of time at a 50 percent tax break. That will go off in 2 years, and they will be doubling that payment, and that's how it is returned to the community. The jobs that are there are \$56,000 a year, the 80 jobs that we have. So I know that you liked that project, and it is very, very special to eastern Ohio. Records at our OMEGA office through 1968 to 2005 in our OMEGA region 10-county area state that we have been able to give out \$75 million in ARC grants, both State and Federal. These grants have enabled us to complete 360 projects addressing health, safety, welfare, and educational projects totaling over \$305 million just for those items themselves. This does not include an \$80 million project like Ohio Coatings. These programs could not have happened, these developments, without the ARC program.

Our infrastructure needs are many, not only here, but throughout the county. Last summer, the American Society of Civil Engineers prepared a report which addresses 12 categories of infrastructure that gives the Nation's transportation, water, and energy system an overall grade of D—D+, excuse me. Both drinking water and waste water received the grade of D. The report states that the Nation's 54,000 drinking water systems are aging rapidly, and some sewer systems and water systems are more than 100 years old. We need quality programs like the ARC that address these issues of concern and importance.

In closing, this program is very, very, very, special to the districts in Ohio. We are in Buckeye Hills District right now, and I just wish we had time to tell you Senator, and I will not because of the sake of time, but in closing, you have done much for the people of Ohio and for economic disadvantaged citizens throughout the United States. We ask that you continue to look out for these individual and those people living in the shadows of light.

It is a very sluggish economy, and three major floods in our region, our 10-county members need your help and that of Congress more than ever. We ask for your continued leadership to support programs like the ARC and to secure the necessary reauthorization that we need for a 5-year period of time, at a minimum. We thank you for everything and for being here in Ohio today.

Senator VOINOVICH. Thanks very much for your testimony. I would be remiss if I didn't introduce the blessing on me, and that is my wife. It's really interesting, last week, or the last week, and I know a lot of you are going to say, it must have been a real deal with the Asset Institute in Honolulu, and I conducted a hearing there. I am chairman of the Oversight of Government Management and the Federal Workforce with Senator Dan Conklin who is a member of the National Security of Personnel System. Here we are in Ohio, and this is just the second hearing that she sat in on since I have been a U.S. Senator, and I just want to thank her for coming along today.

John, you mentioned the Civil Engineering Commission of Infrastructure, and I have introduced a piece of legislation that with Senator Clinton and Senator Harper and several others to look at the infrastructure needs of our country, and I think that maybe Congress has followed the advice that Jim Rhodes gave me one time. Jim Rhodes, some of you remember, was Governor of the State. He said, "Georgie, never put anything in the ground because they don't see it." I think that is the flag that we have been flying.

I think that we really have some real difficult challenges here. Thank God for the ARC, and it has been able to handle this with some of these infrastructure problems particularly. But we need to do a whole lot more in that area or we're going to end up—if you don't have the infrastructure, you just can't be competitive. We need this infrastructure and we also need the intellectual infrastructure more than ever before, and energy.

Anne, your testimony mentioned the need to improve basic water, water infrastructure in Appalachia and we know it is a complex problem. What I would like to know is, when we passed the last authorization, one of the things that I wanted in there was to have the ARC be the coordinator for the Federal dollars in an area. Have you been able to take advantage of that? Has that helped at all, or has it been in the law but people have not taken advantage of it?

Ms. POPE. Are you talking about the interagency—

Senator VOINOVICH. Yes. The concept of leveraging all of the Federal dollars and bringing them to the table to get the biggest bang for our buck, and then after that interfacing with the State money and with the private sector money.

Ms. POPE. I think the short answer is yes, and I think that the Interagency Council has 15 Federal Agency members that make up the vast majority of the investment within the Appalachian region. I was the Federal person to chair that, and I think that it has been very effective for a number of reasons, not the least of which is, what we have found is that many of the Federal programs—and let's just talk about infrastructure, our main partners, USDA, EPA, the State Agencies as well, TVA for the southern part of Appalachia region, they have difficulty getting into the Appalachia region and getting their programs into the Appalachian region in many places.

We call that a low "take rate;" where for some reason, those Appalachian communities are just not applying for these grants within these areas for several Federal Agencies. So we are helping with the grassroots organization through the local Governments and

State level, as well, to try to bring the Federal Government into the Appalachian region.

So I think that has been something that has been most effective, I think, with this partnership. We have had some concrete results, as well, something that we are going to see, I think, tomorrow. This partnership with the Department of Labor and the private sector working in the utility industry to try to create a highly trained work force, where there is a shortage of it within the utility industry. So we are working with other agencies to try to increase that. It is something that we need to continue to do. We still have a ways to go.

But yes, in answer to your question. I am sorry to—us southern Hungarians talk a little slower, but yes, it has been a very effective tool for us and we have had four meetings—as well as a field meeting, and we will continue to do that.

Senator VOINOVICH. Don, have you seen any of that on the local level as a result of the change in the law?

Mr. MYERS. Senator, we have three projects this year and I—I have got to say this. Our poorest counties are not applying for the ARC program because they do not have the necessary match money, the ones that we really, really want to help. In OMEGA, we have no distressed counties. We have two of them that are very, very borderline, and you know Bob Harron (phonetic), Commissioner Bob Harron, he told me last year that they got 30 projects that they would like to submit. They cannot submit any of them because they don't have the necessary match dollars. If you are a distressed county, you need 20 percent. There has to be something done for those programs that are not where we think they should be. There has got to be a mix between the distressed counties and those that are at attainment, or those right on the borderline.

We lost—we had one up here on Stark for 2 years. It's one of the poorest counties in Ohio. They're not at risk here, or if they are, they just made it. Fourteen thousand people, you lose 1,500 jobs, they need help.

Senator we are doing water projects that are in to the Federal co-chair, Anne Pope, right now for signature consideration. One of the—

Senator VOINOVICH. May I say something? Are you using any SRS funds along with that?

Mr. MYERS. We are. Whenever we get the chance, we are.

Senator VOINOVICH. So that is a case where you are working with the EPA?

Mr. MYERS. Absolutely. They have been a salvation to us on our big water projects. We are doing one in Guernsey County. You'll be there tomorrow and meeting today.

But as we come from Muskingum County, Zanesville to Cambridge to Belmont County, we have three projects, water and sewer. All of them are under citation, and in Muskingum County, 49 people's homes have been trying to get water for 30 years.

In Guernsey County, 112 homes, we have to run 13 miles of water line at \$1.3 million. ARC has \$125,000 in it, but it was enough to put the project over the top to where the people could afford it. In Bridgeport, OH in Belmont County, for 40 years they have been trying to put in a sewer project, \$3.1 million. We have

\$125,000 into that. It is that small amount of money, coupled with EPA and CDBG and USDA that makes these three projects go, the 30, 40, and 50 years of water and sewer projects.

Senator VOINOVICH. And all of them—

Mr. MYERS. Yes.

Senator VOINOVICH. We have a lot of that, and you put them under water and then the community doesn't have the resources to deal with the demand and what we are mandating them to do.

Let's move from water infrastructure to technology and telecommunication. One of the things that we also put in the legislation and anticipated doing it again this time is the issue of divide and the issue of technology. I would be very interested to know how successful that has been and if you could share with us any examples of where you think that that has made a difference, and if you had your druthers, would you look for more money in that area than what we are now spending percentage wise?

Ms. POPE. Let me just say it is a big issue for ARC. The specific authority that you put in the last reauthorization has been very useful. ARC is focusing on the importance of technology. The answer is that it is very helpful. I do believe that the investments that ARC has made have been very positive.

You asked about the numbers. In December 1999, 44 percent of Appalachian zip codes had high speed providers, and in December of 2002, it was up to 63 percent. We are moving forward, just not at the pace that the rest of the country is moving forward, but we are making progress. I would, Senator, like to put in the record the program impact summary of our telecommunications program.

To answer your question, it was very helpful, and if I had my druthers, yes, Senator, I would like to see that language in there again. I believe that telecommunication is very important. If business can be done anywhere, with technology, I think that no region can benefit more than the Appalachian region. Small communities can stay small communities, but can compete with technology.

Senator VOINOVICH. One of the things that we started doing was to build a highway system, and you have to be able to get in and out to the area as you mentioned. Technology-based jobs, you can have computers, but if you don't have broadband or can't get it in, it's just—I don't see how you can possibly survive.

One of the things that we did when I was Governor is we rewired all of the classrooms and started putting the computers in the school, and hopefully they will be computer literate, but the issue at the time, do they have the infrastructure to have broadband.

T.J., could you comment on where we are with broadband in the region? Do you have any information on how it might compare with some other States?

Mr. JUSTICE. Sure, and I think that you will obtain some additional information later today from a couple of other folks that testify to that. The statistics have shown from 2002 to 2004 a more than 50 percent increase in terms of access to the high speed broadband, which is largely by the private sector, like the phone companies running DSL or the cable companies running broadband.

Our emphasis here in Ohio through work with Dave's organization has been to try to identify the communities where it is highly

unlikely that broadband or DSL is ever going to be extended there, even in the foreseeable future. The best 30 second example that I can think of is Chesterhill up in Morgan County, a small village, very little commerce, no major industry. It is isolated. It is probably cost prohibitive for the cable companies to run broadband there. They used the technology from out west through Ohio State University. You will find this amazing. I love telling the story. For \$9,000, they have two towers that they put up. Right, David?

DAVID. Antenna.

Mr. JUSTICE. Antenna. I call them towers. So by way of doing these antenna—

DAVID. Radios, things like—

Mr. JUSTICE. I am not technologically sophisticated. For \$9000, they have these two antennas up, so now the whole village of Chesterhill has wireless high-speed broadband access. We are exploring replicating that using the ARC dollars to other communities in the Appalachian region where it is just very unlikely they are ever going to get this kind of access.

I think the short answer to your question is that we have had some dramatic improvement in terms of areas that have high-speed internet access in their homes.

Ms. POPE. I—

Senator VOINOVICH. The 29—go ahead.

Ms. POPE. I was just wanting to add one other thing. I think the word is getting out to communities, one, that it is important, and they have to know how to use it. I think the word is getting out and I think the reauthorization money is very effective for that.

But I think that one of the things that we were doing—I come from a business background, and we are cross promoting telecom and every other program that we have. We just started this last year, and we are looking at what we call E-infrastructure. Anything we build, any project that we do, any education project that we do, any infrastructure that we add, we are asking the grantees, “Is there a telecom component in there? Does it make sense? If so, how much money do you need?” I think that that is going to be very important, particularly in infrastructure.

As you know, we spend half of our non-highway money in infrastructure, so while we are laying the pipes, we can lay the fiber, as well.

Senator VOINOVICH. Any other comment?

Mr. MYERS. We have the infrastructure in place, the programs, the bands to do the assistance. We have come a remarkably long way in a very, very short period of time with just the little per capita, and we are indebted to that, and we have high hopes for the future. We think that technology improvements are going to assist a lot of this in the very, very, very near future. The money is there. USDA has it, ARC has it, CDG has it, and we are indebted for that. We are taking advantage of it. We are here and very proud of some of our accomplishments. We’re not there yet, but we have come a long way.

Senator VOINOVICH. Do you have a score card, T.J., on broadband in the county? Of the 29 counties, how many of them have broadband?

Mr. JUSTICE. Broadband is present in all 29 counties. We do have an updated map that shows areas that have broadband and areas that don't that we could certainly provide to you or your staff.

Senator VOINOVICH. I want to thank you very much for your testimony, and I can assure you that Congress will spend—pool the money for it. It is not what we originally authorized back in 2002. I want to thank Anne for digging in with the administration a couple of years ago to get about 36 or something like that for the ARC, and you were able to get them to bring it up and at least keep it at a flat-funded amount.

What all of you should realize is that the non-defense portion of the discretionary budget, we have mandatory spending and we have discretionary spending. Mandatory is, about two-thirds of the money goes out for Medicare, Medicaid, Social Security. Veterans programs, and a lot of them the money just automatically shows up, and you are entitled to it.

The discretionary is where we have some options available to us, and because of the war and the Homeland Security, all of which is thrown on the non-defense discretionary, so it is very, very tight today, and the budget that we had, quite frankly, did not do the job.

What I am concerned about is that we are neglecting the infrastructure, our education commitments, and if we don't keep up with those things, we are not going to be able to compete in the global marketplace. In other words, we are now in the most formidable, competitive environment that I experienced in my life, and it is not going to get any better. Our seminar with the Asset Institute was on U.S./China, and you see what is happening in China and see what is happening, and the competition is out there. My dad once said that the reason why we have more of the world's prosperity than any other Nation in the world is we got more out of our people because of education and free enterprise. Frankly, other countries are getting on to it. The issue is, how do we stay in there, and we are seeing it right here, aren't we? The jobs that traditionally were here are gone. We are never going to see them again. What do we do?

There are jobs that are here in Muskingum County training them for the energy industry. I understand there is going to be a great need for more coal mining. New technology, there are a lot of parts of Ohio that we are going to see more mining because of the fact that they are coming down here. We have to have an idea of just where are we going. What is the strategy. Where are we 5 years from now and what are the things that we should be concentrating on then.

I love this part of Ohio. It's beautiful. I've always said the more beautiful it is, the poorer it is. But the fact is that more people are interested in their environment, and if you can have broadband and get a job and live in a beautiful place like this part of Ohio, I think it has got tremendous attraction. So thank you very much for being here.

Our next panel is Mr. David Matusoff, Mr. Gary Little, President of Information Technology Alliance of Appalachian Ohio, Dr. David Matusoff, Principal and Director of Technology Planning for the Whiteboard Broadband Solutions, Ms. Angela Stuber, Executive Di-

rector of Ohio Community Computing Network, and Mr. David Scholl, President and CEO of Diagnostic Hybrid, Inc. Mr. Matusoff, we are going to start off with you.

STATEMENT OF DAVID MATUSOFF, PRINCIPAL AND DIRECTOR OF TECHNOLOGY PLANNING, WHITEBOARD BROADBAND SOLUTIONS

Mr. MATUSOFF. Senator Voinovich, thank you very much for the opportunity to be here. As I was listening to the panelists before me, one of the things that struck really me, and one of the things that I like so much about working in the Appalachian region of Ohio is—you could really hear it in Don's voice—people are really passionate about economic development down here and about sustainability. As you mentioned, I believe you posed the question to Anne Pope about the telecommunication portion of the ARC budget. I believe it is critical. As you mentioned in your comments at the end, with all of the natural assets that we have in this part of the State, improving the broadband infrastructure, I think that we really have something that we can sell here in Appalachia. I think it is something that we can be excited about.

I just want to spend a few quick moments this morning talking about the impact that ARC investment has had on improving broadband access in Ohio, and not only improving access, but changing culture, which I think you talked about—I think that they have done a really good job of that, and I think there are some more opportunities in that area.

I started working with the Governor's Office of Appalachia and the Appalachian Regional Commission back in 1999 when Joy was here and Jennifer Simon, and I think that we were one of the first States in the ARC region to really take a comprehensive snapshot of the supply and demand for broadband services in a region like the ARC region within Ohio. To date I have managed three large-scale broadband assessment improvement projects in the State. As T.J. mentioned, we are currently in discussions about replicating successes like we have seen in places like Chesterhill where we are looking at wireless investments, broadband investments in communities without any access to broadband services today. So the very last of the last mile. In general, I spend a significant amount of my time not just in Ohio, but in many States proselytizing about the importance of the broadband infrastructure and the possibilities that that create for economic development and educational opportunities and workforce development opportunities.

And central to that discussion and any broadband improvement project is what we call a sparkplug. This is someone in a community that gets a hold of this issue and says, "No matter what, I am going to make sure that we have better broadband access in our community." In many instances, it is a public sector official. Sometimes it's a private sector person. They don't have to have any real knowledge or understanding of the technology. They just know what is important and really are passionate about doing something about it.

I kind of view ARC's role in this region as the sparkplug for moving broadband access, because I think what we have been able to do through ARC funded projects in the State of Ohio over the last

6 or 7 years has really raised the overall level of education about the importance of broadband. Through all of the outreach that has been associated with the projects that I have managed in the State and through talking with the development districts—it is funny. When I came here, I had been—I live in Columbus. I have been to this campus probably about 40 times now talking about the importance of broadband and, you know, I believe sincerely that that has made a real difference. As I said when I started, changing culture is more difficult than building the infrastructure.

Building the infrastructure is getting much cheaper today than it was 6 or 7 years ago when we started taking a look at this, and it is much easier. But I think the change in culture thing has been really significant.

I want to give you a few specific examples of, not just the indirect impact that the ARC has had, but the direct impact I believe that the ARC has had on improving broadband access. In 2003 there was a national organization called Technet. A bunch of big Fortune 500 companies, CEO's that participate in this, and they ranked States. There was an index for State broadband access and use. Ohio was ranked, in 2003, fifth nationally, which I was really proud of.

Three of the projects that I worked on specifically were part of the justification for that ranking. One of the projects listed specifically was the Access Appalachian project which was funded through ARC and the Governor's office of Appalachian. So part of it is a perception issue, and I think looking at economic development opportunities, if we are perceived nationally, this region in the State of Ohio, as a place that is focusing on telecommunications and doing interesting things with it, I think that that can really help in the economic development. I think that is important.

The second thing, as T.J. mentioned, between 2002 and 2004, we actually measured it. Broadband access doubled in—or in the ARC region of Ohio. I think that is significant.

Data from the Access Appalachian Project was used to facilitate the providers when they were going to alternate regulations. So I think that is really important. The final thing that I want to mention is that through our last project here in Ohio, we developed plans for broadband improvement in 13 different counties here in Appalachia, so while some of the folks are still going out and looking for funds to implement those projects, having the capacity to have the plans in place allows them to go pursue State and Federal dollars to help implement those.

I cannot speak enough about the importance of ARC's investment in this area, how critical it is. I was with your colleague Senator DeWine earlier this week doing a USDA broadband financing conference here in Ohio. There were almost 300 people there, which was very exciting, folks around the State figuring out how to get these plans implemented.

One of the things that Anne Pope talked about was leveraging other dollars, and some of the folks that the ARC funded to put these plans together are now going to be going to USDA to get low-interest loans to implement some of those. So I think that is a really good example of how the communities are leveraging these ARC investments to go after additional dollars.

So included in my testimony are a few more instances, but as T.J. mentioned, I would be happy to provide more information, specific information for the record about the important contributions that ARC had made in this area.

I will wrap up saying that first, I want to thank you for your championing this program in the past, certainly the last time. I think that it has had a significant impact on the region, and for inviting me to be here today.

Senator VOINOVICH. Thank you very much. Do you think it is cold?

Mr. MATUSOFF. Do I think it is cold? No, but because I am testifying before you—

Senator VOINOVICH. The air conditioning seems to be pretty cold. I don't know who controls it, but—I see the breeze blowing by here. Mr. Little.

**STATEMENT OF GARY LITTLE, PRESIDENT, INFORMATION
TECHNOLOGY ALLIANCE OF APPALACHIAN OHIO**

Mr. LITTLE. Thank you, Senator. I have crammed a lot into 5 minutes, and I am going to try to stick to the script here. I may run over 30 seconds. Please bear with me.

I am going to be speaking to the creation of a new economy and new high-tech industry and high-tech dollars. The IT Alliance of Appalachian Ohio wants to thank you Senator Voinovich and members of the Senate Committee on Environment and Public Works for this opportunity to speak in support of the reauthorization of the Appalachian Regional Commission. ITAAO, the IT Alliance of Appalachian Ohio is a nonprofit organization fostering economic development for the information technology sector of the region. For clarity, this sector includes computer, internet, ecommerce, and related businesses and industries, and also all the various computer applications found in public sector organizations including education.

ITAAO, Ohio's IT Alliance, the State of Ohio, the Governor's Office of Appalachia, and the Appalachian Regional Commission have partnered on several occasions over the past 5 years to create an information technology community, an information technology visibility in Appalachian Ohio where it barely existed before. I often find myself on a soapbox promoting the region. Appalachian Ohio not only has a significant information technology sector, but we are leading the way in some areas.

Shawnee State University in Portsmouth, for instance, is one of the few universities in the country to offer two bachelors degrees in interactive digital technology development; one with a digital arts concentration side and another with computer science and engineering concentration. Student enrollment is now over 100 bright, exceptional students from all around the country and locally. An article recently published by the Associated Press, and was in the USA Today yesterday, told of Michael Zyda's astonishment with the program, the creativity, and enthusiasm for computer game and serious game development in Appalachian Ohio. Zyda was the lead researcher on the U.S. Army's recruitment and instructional game, America's Army, and is Director of the GamePipe Laboratory at the University of Southern California.

Zyda presented at the Shawnee Conference 3.0 on Interactive Digital Technology in 2005. This conference gained national attention in 2004, in part because of the support of the Appalachian Regional Commission. This is an example of great return on your investment. The small, but important, \$5,000 grant generated nearly \$20,000 in support on that specific event in 2004, but the real value is measured in the national publicity for Interactive Digital Technology (IDT) development, for Shawnee State University's IDT degree programs, and also for related degree programs that are developing at Ohio University, Washington State Community College, Hocking College, and an existing computer animation degree program at Kent State University's Tuscarawas campus.

That event in 2004, grew from an original concept of a Region of Excellence in Interactive Digital Technology when ITAAO Board Chairman, Bill Sams; Adena Ventures president, Lynn Gellermann, Shawnee State University Fine and Digital Arts Chairman, Tom Stead, Ohio University Provost, Kathy Krendl, and Shawnee State University President, Rita Rice Morris germinated the idea in 2003. This has now grown to the development of a prototype "cyber park" in the GRID (Game Research and Immersive Design) Lab that you will be seeing this afternoon, Senator, at Ohio University with a \$247,500 Appalachian Regional Commission grant. From the original local match commitment of \$62,000 from Ohio University, they have now expanded that dedication to nearly \$250,000 for this project, with additional funds from various local sources of nearly \$20,000.

The Lab has also developed research and project relationships with the Smithsonian Institute, with a Columbus, OH company, a Massachusetts company, and a New York City game development company to develop educational and instructional games, and recently developed a partnership with Intel. To expand upon this success, Ohio University has now announced its intentions to create an IDT, interactive digital technology, research and development institute seeking Ohio Third Frontier support. Hundreds of thousands, and very possibly millions of dollars of program, research, and education activities are about to explode onto the scene only 2 years after ARC made its initial \$247,000 commitment, and in the previous year a \$5,000 investment. Without these funds you would not see the interaction and possibly the business development in Appalachian Ohio by some of the Nation's leading computer and IDT development companies.

Shawnee State University also has further expansion plans, and is now seeking private and public support to develop a whole new immersive arts and technology center that will include the most advanced motion capture facility for digital animation east of the Mississippi River.

The Appalachian Regional Commission has been instrumental in the blossoming of this concept, and will be a valuable partner in our continued efforts to create an innovation economy for this century.

A huge economy continues to grow nationwide (estimated at \$100 billion this year in computer games, educational and health applications, and corporate and business applications) and worldwide in an interactive digital technology and there is no reason why our

students, our young entrepreneurs, and retrained workforce in our region could not or should not take advantage of it. All we need to do is focus upon the polygon—in IDT terminology—and strive for it. Thank you, Senator.

Senator VOINOVICH. Thank you. Very impressive. Ms. Stuber.

**STATEMENT OF ANGELA STUBER, EXECUTIVE DIRECTOR,
OHIO COMMUNITY COMPUTING NETWORK**

Ms. STUBER. Thank you, Senator. I am very excited to be here. ARC is a Government Agency in which one of its benefactors is Community Technology, so that is pretty exciting.

Community Technology is providing technology access to those who don't have access. ARC actually invests its time and resources and has made a huge difference in the community. So it is very good.

I'm representing the Ohio Community Computing Network and the Community Technology Centers Network. I am the executive director of OCCN which is a State network of Community Technology, which is a non-profit, and I am also Board President for the national network.

ARC is fortunate to have—or the Appalachian region is fortunate to have two strong State networks within the region, West Virginia and Ohio. In West Virginia, they have a program called STEP UP, which for them, ARC's program is instrumental in bringing in new technology to their existing programs and able to improve existing programs for them. What this is is they put labs in the churches and community organizations and they utilize existing space, so it is matching up of existing resources with new technology. They have leveraged funds with the Investment Board and the State Department of Education. Their approach is to partner community assets and create strong relationships.

For OCCN the relationship is to match the Microsoft dollars. So what we did was distribute the Microsoft dollars to Community Technology programs. The Microsoft dollars, we could not distribute them to libraries or to schools, because Microsoft already distributes those to those organizations in other programs, which really limits the distribution to Community Technology Centers. So in Ohio, we distribute them to seven Community Technology Centers, so it's \$90,000 of Microsoft software distributed in Ohio.

What ARC found when distributing the Microsoft software is that there are not Community Technology Centers in all areas of Appalachia. I should note that Community Technology Centers are not Government Agencies. Community Technology Centers can be community centers. They can be labs. They are developed by folks who see the need for community technology. They see the need for folks to have access to technology and the training that is needed. So it is not that they are everywhere. They are not in every county or every community. So when ARC went to distribute the Microsoft software, they found some communities simply don't have Community Technology Centers, and upon realizing this, are now developing a program to develop new community technology programs, and that is hugely commendable and I think that is needed.

One thing that we should note is that the Community Technology Centers in Appalachian are some of the most innovative

programming in Ohio. In Perry County, we are doing multimedia technology, which includes video cameras and then the software to figure out how to use that technology. It's amazing.

In Muskingum County, they are using online learning tools, and in Coshocton County we are doing after school family focused programs.

The youth have become so engaged in their Community Technology Centers that they feel the centers are theirs, as they should. I took a couple of the ARC staff to one of the Community Technology Centers, and we were sitting in the center, and a couple of the kids came in and gave us looks like, "Well, you're sitting in my seat." That is cool, right? That is great because that means that they feel that the center is theirs.

Senator VOINOVICH. These are kids that don't have access at home?

Ms. STUBER. They may or may not have access at home, right. If they have access at home, it is probably not broadband access, and the centers often have broadband access because the centers are created—they've either gotten it through the library or they've gotten it through some sort of network or come up with some sort of creative arrangement with someone else that has access when they're in town. The kids might be out of town, but come in for school, and they stay for the after-school programs. Some of them, if they do have computers at home, then it is an issue of who gets on the computer, the parents or the child.

A lot of the centers, they become training places, also. There is the issue of training. There is also an issue of community building. They are there to hang out with their friends there and it is a safe place to be, while they're also learning skills. ARC has supported OCCN's attempts to find technology programs. Because they are not government funded programs that we know where they are, we have to search for them, and when we find them, we can show them where the resources are so they are not recreating the wheel, so to speak.

Another thing that we found, or found us actually, was Chesterhill that has been mentioned twice now, I think. That is a really amazing project. The really neat thing for me to see there is that not only do they have the project going, but they realized the need for the Community Technology Center also. So they are already developing a public space for community training in association with their wifi network.

We are actually helping them to figure out how they are going to sustain their wifi network. That is the next issue, that they may have this wifi network; how do they keep it going.

The issue of local control is a big issue because there are going to be lots of pressures on them to figure out what to do with the wifi network.

The one thing that I want to note is that the digital divide has not been closed. You might think every now and then, "Oh, well, there has been money allocated. We are done." It is not done. You have been hearing that here today. We still don't have broadband everywhere. That is my whole testimony. I am really excited to be here.

Senator VOINOVICH. Thank you very much. Mr. Scholl.

**STATEMENT OF DAVID SCHOLL, Ph.D., PRESIDENT AND CEO,
DIAGNOSTIC HYBRID, INC.**

Dr. SCHOLL. Thank you, Senator Voinovich, for inviting me to partake in this hearing. A couple of comments before I start. No. 1, I share some similarities with you. I was born in Northeast Ohio, graduated from Ohio University, and stayed there 27 years, and enjoyed the same quality of life and beauty that you cited.

Second, I was fortunate to hear you speak last year about your early activist days as a student at Ohio University, and your aggressive, passionate pursuits and I appreciate that.

The third thing that I would like to suggest is DHI, before I go too much further, is what it is for several reasons, but most, many people in this room have allowed us to grow and thrive. Joy Padgett is one of those. Jen Simon is another. T.J. Justice.

Actually, I remember Anne coming to the innovation center where we are located, and making a commitment, I think, of \$1 million. Without that million dollars, the innovation center wouldn't be here, nor would the 170 employees.

So I would like to start on the script and say I wish to thank you for allowing me to testify on this important issue that affects the vitality of DHI and that of other businesses trying to get a start or maintain their operations and growth in the region.

So that I don't fail to summarize, I would like to begin at the end. Operating as a business enterprise in a global marketplace means having ready access to two major things, a telecommunications infrastructure capable of delivering you to the world, and the world to you, each and every second of the day, 24/7, and two, the necessary human resources to assist business operators like myself with implementing productivity applications such as Enterprise Resource Programming, bar coding technology, web-enabled business applications, EDI for processing business transactions, e-mail, and internet security solutions. That is a requirement whether you are in Athens, Appalachia, Chicago, New York or Tokyo. That is required.

Diagnostic Hybrids has been successful to date for multiple reasons. Underpinning the national recognition we received in 2004, 2005 by being named in consecutive years to Inc. 500 Magazine's list of Fastest Growing Companies in America, we owe that to our people. Our employees are dedicated, committed and talented, and we attract them from within a 50-mile radius of Athens. We invest heavily in workforce development, both inside our organization and within the community, to help us meet our projected need for talent, particularly in the specialized manufacturing and laboratory technician area. This commitment is paying off and it is a great investment for our company.

Meeting our needs at Diagnostic Hybrids for telecommunications infrastructure is a bit more daunting task. Certainly, much progress has been made in focused areas of our region to build the telecommunications infrastructure necessary to meet the two primary needs I mentioned above. For example, The Ohio University Innovation Center, a small business incubator affiliated with Ohio University, is equipped with broadband capability, and is a phenomenal facility. Access to the telecommunications infrastructure

provided by the center is absolutely critical to our past and future growth.

I am sure there are other examples in the region, but I don't know how many.

Unfortunately, I can drive 10 to 15 minutes in any direction from our headquarters in Athens where we employ nearly 170 of the best and brightest biotech employees in the world and likely be without cell phone service for lengthy stretches, wireless internet access, and broadband capability. Actually, I was on a cell phone over by the hospital, and from that location to the top of the hill, we were not connected to the world by cell phone, 3 minutes away from this hearing. Not too surprisingly, the many areas of the Appalachian Region in which this major deficiency, or digital divide, exists are characterized by those that develop telecom infrastructure as rural and underpopulated, and thus economically not feasible to establish proper infrastructure.

Perhaps even more demoralizing, both personally and professionally, is to hear "outsiders" characterize those people that live within these areas, including me, as economically and intellectually impoverished because we are not connected. At a minimum, we are viewed as out-of-step with today's global economy, and perhaps more fundamentally, today's world.

The impact of this situation sooner or later ends up as a non-viable outcome for those without access. The impact is first felt with reduced educational aspirations on the part of our young people and ends with a lack of opportunity on the economic side, forcing many to move to somewhere that has the infrastructure and thus the opportunity. My recommendation for you to act upon would include providing incentives or grants to communities and/or businesses to acquire towers to increase the density within the region to enable DSL and wireless connectivity, underground cable to provide for greater access to broadband, and consulting service talent to enable implementation of important productivity IT applications to help businesses run more efficiently and cost-effectively.

In summary, telecommunications infrastructure has become a vital utility to the global educational and business community in a fashion similar to the value placed on water, sewer, and hybrids. Without immediate and aggressive attention paid to this regional need, residents of the very beautiful and scenic region known as the Appalachian Region are destined to fall behind even further. Thank you very much for your time.

Senator VOINOVICH. Thank you. Mr. Little, I was very impressed with what you had to say in terms of what is going on. I think the real issue is how is what is going on in the educational institutions, how much of a spin off are you getting in terms of creating businesses like Mr. Scholl's?

Mr. LITTLE. In the region right now, there are seven companies that are involved in computer game or educational game development. Three of those are local companies, four are companies outside of the region that are working with organizations.

The entire focus of this effort, to create a region of excellence in interactive digital technology, is to not only attract an educational or series of educational companies to the region, but to grow our own. Continued support by the Appalachian Regional Commission

with market access visibility for any new business that may start-up in this area is going to be vitally important.

We have spent 3 years in this effort, and we are finally starting to get the national attention with this associated press article that has gone nationwide now. In it, incidentally, the author mentions that the world may be flattened in Appalachia, because the people that were interviewed for that article did talk about the low cost of business startup, the low cost of operating a business in the region, and the quality of life here, and with broadband access, they can do business anywhere.

Senator VOINOVICH. The point is that you have got three or four businesses from outside that have found out about what you are doing, and they have established themselves or are in the process of establishing themselves?

Mr. LITTLE. They are working with research facilities on software modifications and on upgrades. One company out of New York City has a computer game that is focused on improving Algebra II skills, but they did not have that in an Apple format. They had it in a PC format. So the Grid Lab with Ohio University is working with that company to convert it.

Senator VOINOVICH. The Grid Lab, I guess so I understand, that is located at the university and the university, through their resources, have some very bright people that are there and are they doing research work or are they doing research and education?

Mr. LITTLE. It is a multipurpose facility. The college of communications

Senator VOINOVICH. Does that create jobs?

Mr. LITTLE. That is what our intent is.

Senator VOINOVICH. On the campus you have more people and more teachers.

Mr. LITTLE. It is located on Court Street beside the courthouse, and the reason that it was put there in a storefront facility where the Chamber of Commerce's office used to be is so that middle school and high school students could have access to the facility, and also so that upstart computer companies—and there are three students, two undergrad and a grad student at Ohio University right now that are working with the Dean of Interest starting a computer game company. They can use the facility for special equipment and software that they may not have access to.

So that facility is to capture and bring into this new technology middle school and high school students. They can be a part of the demonstration process of games that are in their data phase and are being tested. The students can get involved with that process with the research staff at Ohio University. We want to encourage the students then to improve their math skills, improve their science skills, so if they like this kind of activity, which most kids do with computer games, they can have a career in the computer game work or serious game development. So we are working

Senator VOINOVICH. You have that interest, the universities are putting in the people that in the event that you have got—they have courses in the subject.

Mr. LITTLE. That is right. Through the College of Communications, they have some degree programs that are beginning to evolve

into classes that are in computer game development, animation development and so on, so—

Senator VOINOVICH. Ventured capital—

Mr. LITTLE. One of the lead partners in this effort from the beginning has been a Adena Ventures and the concept grew out of Lynn Gellermann's, Adena's president involvement with a computer game development company, butterfly.net, one of the first companies that the Adena Ventures invested in, in West Virginia, and it is now being purchased by Sony. They saw that this could be a new industry for our region, and with very little capital initially, companies could start, and students fresh out of college and even while they are in college could begin the development of the companies, and the market is expanding greatly.

You hear a lot of negative comments about the computer game industry, the shoot-them-up programs that are out there, but that is a very small segment of the industry, about \$10 billion per year. Nearly \$90 million is tied to education, research, simulations, military per year.

Senator VOINOVICH. When I first heard about it, my wife said, "These guys are in the gaming business." You know how I feel about gambling. It is the way to get people turned onto technology for educational purposes, you play a game on it and spin off into the other applications.

Mr. LITTLE. There are two existing companies in our region that are doing very well with educational, online education and using the gaming technology, and with cooperate education. Visum in Marietta does corporate education with this same technology, and Electronic Vision in Athens—

Senator VOINOVICH. So actually, you are building up—it is starting to build—

Mr. LITTLE. An entire industry.

Senator VOINOVICH [continuing]. An entire industry, right. Obviously, where they are locating, they have the broadband, so you were saying—I understood that you could compete because you were saying to me that there are places that could potentially be—that have a potential, but they are not there at all in terms of the

Mr. SCHOLL. I think at Ohio University we are really blessed with a significant amount of activity within the State and the educational institution itself. There is an issue of doing an incubator and doing a full scale constructional outlay for early startups and young companies. I think it is showing a tremendous amount of reward and benefit. I think it's the same model we are trying to apply in Gary's case, and I think that is also very good.

What I would think is that region needs to decide whether regional hot spots, sparkplugs, not ARC as a sparkplug, but regional sparkplugs is the way to go because, you know, you have got to be careful to not get spread too thin, and there is not enough to go around anyway. How can you take some of those Centers of Excellence that are starting to kind of come out of a significant amount of time—23 years we tried to grow to this level. Sometimes people would say a typical slow, bad management team, but I think in some respects, the startup companies generally take time. They take that 12 to 15-year period.

So I think it would be useful to take an inventory of what has happened, and then try to identify things that are nationally, and certainly regional highlights and see how it can kind of spin off of that and go into the region.

Senator VOINOVICH. Who would do that?

Mr. LITTLE. Who would do that? Not me. I think the place is look into—let's look at Ohio for a second. I think Ohio is very interesting because it has a major network of operations and has these three huge cities 70 miles away from Appalachia. So it seems

Senator VOINOVICH. By the way, I think nationally that Ohio and Cleveland, in terms of broadband capacity, is like right at the top.

Dr. SCHOLL. Yes. I have a map here that actually is from Time Warner that shows the Appalachian States in color. This is overstated, because if one home in the zip code has access, then it counts. Anyhow, I guess the digital divide is common in Ohio because if you think of just those distances that we travel, we do it everyday to get to Columbus, but—I think in the region, if you look at the regional hot spots, you learn a lot. I think Governor Taft in his program, the Office of Appalachian, I think they would be somebody that would be very much interested in trying to—

Senator VOINOVICH. Trying to get a task force together, look at the region, see what the strengths are, and start talking and figuring out how it all works together. That is what I miss about not being Governor, because I like that stuff—

Dr. SCHOLL. If I might add, speaking of leverage, in 2004, we raised \$10 million for the Palo Alto Fund. So what that does is tell you that if the opportunity is there, the money will come. Creating that opportunity I think is really what has happened in Athens.

Senator VOINOVICH. I am excited about it. You have the center there. Its—I just—the potential is fantastic.

Dr. SCHOLL. I think that model needs to be discovered.

Senator VOINOVICH. I thank you very much. I am very impressed. And the real—we put this technology thing into the ARC, and we specified that, we focused in on it, and what I am hearing from you is that that helped, so we should continue it and maybe even do more, understanding that there are also other needs that are in the communities and we have limited resources. So it is a question of, where do you get the biggest return on your investment for the area, and the bottom line is people want to work and keep jobs. Thank you.

We are going to take a little recess before we start with the next panel.

[Break taken—11:50 a.m. through 12:01 p.m.]

Senator VOINOVICH. We are going to resume the hearing and have our last panel. We are pleased to have with us Mr. Jeff Hughes who is the Director of the Environmental Finance Center at the University of North Carolina at Chapel Hill. We are very, very happy you are able to come over here from the wonderful location over there.

And Mr. Steve Grossman, the Executive Director of the Ohio Water Development Authority, which is near and dear to my heart.

And Mr. Ken Reed who is the Director of the Vinton County Community and Economic Development organization. Vinton County is one of my favorite counties, and my wife's. We spent a lot of

time at the State forest and have been there on several occasions. I think it is the smallest county.

Mr. REED. Yes.

Senator VOINOVICH. I will be interested to hear what you have to say. We will start out with Mr. Hughes.

STATEMENT OF JEFF HUGHES, DIRECTOR, ENVIRONMENTAL FINANCE CENTER, UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL, INSTITUTE OF GOVERNMENT

Mr. HUGHES. Thank you very much, Senator Voinovich, for giving me the opportunity to present today. As you said, I am the Director of the Environmental Finance Center at the University of North Carolina. We are one of nine environmental finance centers across the country that focus on the "how-do-we-pay-for-it" question. The ARC has that question thrown at them a lot. How do you pay for it is really the critical question in the case of planning for infrastructure.

We recently completed a project for the ARC where we examined the current status of water infrastructure throughout Appalachia. Over a period of 2 years, we visited numerous communities, interviewed and surveyed literally hundreds of State, Federal, and local officials, and analyzed data from dozens of organizations.

I am going to take the few minutes I have to give you the highlights from that study especially in regard to the assistance that ARC provides.

While we focused on the 410 counties in the ARC region, we realized quite quickly that from a water quality standpoint, you really cannot separate out ARC from the rest of the country. Appalachian is the home to the head waters of many of the eastern United States rivers, and clearly their water quality successes and water quality failures flow downstream. So assistance in this region is really assistance that cuts across political boundaries, and that was a big finding for us.

There is a saying that what goes on in Las Vegas stays in Las Vegas. What goes on in the ARC relative to water quality does not stay in the ARC. It has a big impact far from the boundaries of the region. Our work involved a series of fundamental basic policy questions. I'm just going to go over those now quickly. Are water and wastewater services in Appalachia much different from other areas of the country? The answer is yes. We found that while community water system coverage has expanded quite a bit in the region over the last 15 years, the region as a whole still lags approximately 10 percent behind the rest of the Nation in terms of coverage by community water systems (pipe water systems as opposed to a private wells).

The difference is even more pronounced on the wastewater side. 1990 was the last time that good data was collected on this issue, and 75 percent of the United States reported being served by the public sewers and only 50 percent reported being served by public sewers in Appalachia. Not being served by public sewers is not necessarily a problem, except that studies in Appalachian show that folks not served by sewers have a lot of problems with their septic systems and in some cases have direct discharge (strait-piping).

Are there sizable infrastructure needs in the region? Yes. The documented need is quite significant. If you look at the EPA studies, you will see some large numbers. These numbers do not even include a lot of the needs that are disproportionately high in Appalachia like failing septic systems and the cost of running lines to people that are not currently served. We estimate that the capital needs are probably \$35 to \$40 billion, and this is larger than some of the estimates you might see coming out of the surveys.

How significant is public funding in Appalachia for water and sewer? Very. Relatively few communities in this part of the country have access to commercial credit. They rely on public funding. During a 4-year period between January 1, 2000 and December 30, 2003, we documented \$4.6 billion in funds went to water and wastewater in Appalachia from public sources.

“Public sources” does not equate to “grants”. \$3.1 billion of the funds were in the form of subsidized loans. This public funding is not simply “handouts.”

We found that the manner in which disbursements are made and for what purpose they are made quite important. Very little of that public money is accessible for certain types of projects, particularly projects involving decentralized systems. So where half of the population is served by decentralized wastewater systems, very little public funds can go toward these systems.

It is important to point out that in my home State (North Carolina), the ARC has stepped in and been eager to correct failing septic systems in areas where other funding sources couldn't.

We looked at some of the financial management funding strategies that are likely to have the biggest impact on service in the region. There are a lot of national policy prescription being suggested—some of those will work in the ARC region and some won't. The core factor in all of these strategies is that they require capacity. The idea of regionalization, the idea of improved asset management, the idea of privatization. All of these have benefits, but they require educated staff and they require some basic resources which in some cases in the Appalachian region are still lacking. There is not very much money going into the development in these areas. ARC is one of the few organizations that focuses on this area and we saw some big impacts.

Just to finish up, the word “leveraging” has come up over and over again today. We have found that leveraging does hold a lot of promise in the ARC region. Leveraging is really hard work. You need someone on the ground pulling all of these groups together. So often we found it is not necessarily the “big guys” (big funders) doing that leveraging, it is the little guy, and I do not mean that in a derogatory sense at all. You can look at the funding sources, and sometimes the ARC will be a relatively small percentage of an overall project, but it is their effort behind the scenes leveraging that really makes the whole project go. We found this over and over in our study.

I think that is a good place to leave. I thank you for the opportunity to present and I will be happy to answer any questions.

Senator VOINOVICH. Thank you very much. Mr. Grossman.

**STATEMENT OF STEVE GROSSMAN, EXECUTIVE DIRECTOR,
OHIO WATER DEVELOPMENT AUTHORITY**

Mr. GROSSMAN. It is a privilege to be here this morning. The Ohio Water Development Authority has existed for 38 years. We have to date funded \$7.3 billion worth of projects. Currently a little bit under half of all of the funding for water and wastewater projects in the State comes through the Ohio Water Development Authority.

We are extremely proud, Senator, that you had the insight to help create the authority, and we are proud that U.S. EPA used the work of the Authority as its model to create the State Revolving Fund Program in the mid 1980's. It is with an extensive background and numerous experiences in funding water and wastewater projects and a strong interest in knowing and understanding all of the funding sources for water and wastewater in the State that I come before you today. I have submitted with my testimony some attachments which document what I am going to be saying.

During the period of 2000 to 2004 throughout the State, approximately \$4.15 billion was invested in Ohio's community water and wastewater projects. Of this amount, 12 percent came from grants, 45 percent came from loans with an interest rate that had been subsidized by a governmental body, and 43 percent came from loans at a market rate of interest.

Funding during the 5-year period of 2000–2004 has averaged \$830 million, and that is compared to a 10-year average starting in 1990 of approximately \$500 million. This is an increase of 64 percent. While there was an increase in funding of 37 percent in grants and 43 percent in loans at a market rate of interest, the greatest increase of 120 percent came from loans at an interest rate that had been subsidized by a governmental body.

Further analysis reveals that the SRF programs, both for water and wastewater, primarily accounted for this increase; thus enabling Ohio to keep up with the 64 percent increase in demand.

Having set the overall State picture, one needs to look at what is happening in the Appalachian region. A breakdown by funding types is significantly different in Appalachia as compared to the rest of the State. Where the rest of the State received 9 percent of its funding from grants, Appalachia received 32 percent. As the rest of the State received 46 percent of its funding from loans at a market rate of interest, Appalachia received 15 percent. The difference for loans with an interest rate that has been subsidized by a governmental body is not as dramatic; the rest of the State received 45 percent compared to 53 percent for Appalachia.

Appalachia also is significantly different from the rest of the State in terms of program participation in funding water and wastewater projects. Historically, bonds issued by a local Government and the SRF Programs account for more than 75 percent of project funding outside of Appalachia. Within Appalachia they account for only 34 percent.

Ohio, as compared to many other States, has a relatively large variety of programs to assist communities in funding their water or wastewater projects. While this is good, with this variety comes complexities and an increased need for program coordination, especially at the small community level. This is clearly shown in two

of the attachments provided where the role of each program is shown. There is no one dominant program. Each community, with the assistance of its technical assistance provider and/or consulting engineer, sorts through a variety of programs, choosing the group of programs that the leadership of the community believes is best suited for its needs.

While 5 percent of total funding comes from the Appalachia Regional Commission, this is 15 percent of all grant money, a critical component for funding projects in Appalachia. As one looks toward the future, and by the future, please assume a period of no more than 4 years, it is clear that there will not be a let up on demand for project funding in Appalachia. Using a variety of sources from Ohio EPA's Intended Use plans to an Appalachia Bulletin Board which was initiated at the stimulus of Joy Padgett when she was Director of the Governor's Office of Appalachia and carried on through T.J. Justice, I estimate that the next 4 years would need \$340 million. I believe this is a minimum demand for funding that will be requested over the next 4 years. As noted earlier, the total demand has grown in the State and will continue to grow.

If the number of \$340 million proves to be accurate for a period of 4 years at \$85 million per year, it would exceed the annual average of \$80 million for the period of 2000 to 2004. The estimates are not precise and, as I have discovered in my 17 years with the Authority, the seriousness about any one project comes and goes. But one thing is certain, decreases in any grant funding will provide an increasing financial burden on any community.

One only has to look at the increasing water and sewer rates as compiled by the Ohio Environmental Protection Agency to see that user fees for both water and wastewater are increasing at a faster pace than inflation, and this increase, given today's economic conditions and environmental demands, is only going to continue to increase at this higher pace.

If one was to look at all sources of funding in the State, one would conclude that, at best, it will remain the same during the next 4 years. While grant funds from the Ohio Public Works Commission will increase by approximately 20 percent, this will not happen until 6 years from now. There is continuing pressure on the U.S. Department of Agriculture's Rural Development Program to reduce the percentage of grants it provides to communities, and this decrease has been occurring in recent years, and the Community Development Block Grant Program is under continuous pressure to have its funding reduced. Besides the U.S. Department of Commerce's Economic Development Program, which really just plays a minimum but significant role in the Appalachian region of the State, the only other program source of grant money is from the Appalachian Regional Commission.

Decreasing these funds would have a significant impact on Appalachia. I might add that a major unknown in all of this is Federal appropriations coming from Ohio's congressional delegation to Ohio communities through State and Territorial Assistance grants and through the Army Corps of Engineer's 594 Program. While I recognize this is congressional prerogative, I believe that funding for this is not going to increase.

So I think that the increase in actual demand is going to continue. It will not be as dramatic as all the national studies proclaim it will be, but it will increase. Where will the funding come from for this? There only are three possible sources, debt issued by the community which infrequently occurs in Appalachia, OWDA's market Rate of Interest Loan Program and it's Community Assistance Program, or the SRF programs.

Regardless of which of the three financial programs is selected in the future, users in the communities will be paying more. Obtaining a 5-year reauthorization of the ARC will be a significant alleviating financial factor in Appalachia.

Thank you.

Senator VOINOVICH. Thank you. Mr. Reed.

STATEMENT OF KEN REED, DIRECTOR, VINTON COUNTY COMMUNITY AND ECONOMIC DEVELOPMENT, VINTON COUNTY COURTHOUSE

Mr. REED. Thank you, Senator. I welcome the opportunity to be able to testify this morning about the effects of ARC in my communities.

You are aware of Vinton County, and I don't know if you and Mrs. Voinovich have heard, that beautiful lodge of the State park burnt down a couple of months ago.

The good news is that the State of Ohio has assured us that they insured a replacement value, and they want to try to build something back similar to all of the wood. It was a beautiful place. But as you have noted to me, I think Vinton County is probably, if not the most rural, the most economically depressed county in the State of Ohio. With this comes a lot of challenges.

Jeff gave the regional perspective for many States. Steve kind of brought down the State of the Ohio and Appalachian region, but I am the little guy that Jeff speaks of. I am the guy with the boots in the ground, to use a common phrase, implementing ARC projects in my community.

I am the one trying to get water up City Run Road and up State Route 278. I am the one that folks stop at the ball game at the school and ask, "When are they going to get Vinton County water?" I am the one. I hear it all of the time. "We are working on it," and we are working on it.

With ARC funding, we've made a huge impact in implementing rural water projects in Vinton County. As I came in on US 50 out of Vinton County today, the USDA Rural Development big signs are still up from the project that we completed last year in which \$300,000 in ARC funds was used to leverage \$3.5 million to run 53 miles of water line in Vinton County. The folks who hauling water was a way of life are no longer hauling the water. That was made possible through the ARC. There are folks out there that stop me—she had bought a new washer and dryer. She was tickled to death to be able to do laundry at home. So we see the impact, the human face.

There are projects that we've done where we went and ran water, and then later in our housing program were able to put in bathrooms for people, putting in flush toilets for somebody that lived on \$400 a month Social Security, but because of the rural waterway,

we put in a septic system and a bathroom. There are a lot of basic human needs we are trying to meet.

I appreciate young, smart guys like David in the technology end and things. We are still trying to get folks water out there. Sometimes when I see the billions of dollars going for water and sewer infrastructure in Iraq, I wish that we had some of that in our community to be able to extend those lines.

In Vinton County and all over southern Ohio are dotted with small villages that simply don't have the affordability to go in to put in municipal sanitary sewer systems. I have seen that. We are working with a village in Vinton County, 800 folk. We need some \$300,000 in ARC funds to put together a \$6 million funding package to do sanitary sewer. A huge impact with a relatively small amount of ARC funding.

We are able to use the ARC money. It does take somebody in the community. It does take that little guy on the ground to be able to put these types of things together, and I have seen some communities in our area that do not have that person.

I have been doing this for 16 years. It is a good program. It is able to help people. We really put a human face on it.

One thing that I liked about the ARC—I have went through a wide variety of Federal and State grant programs, so I see them. ARC is an impacting program. There is a good partnership with the State of Ohio to the Governor's Office of Appalachian, our local development district, our local county caucus. We do work together in identifying local needs, prioritizing local projects. We have that flexibility to address our local needs. I think that the system works in Ohio. My on-the-ground experience, it works well in the State and the local and the regional.

But the ARC funding has had an impact on the quality of life in Vinton County. It has made a difference in our community. I implore you and the committee to continue the reauthorization of the ARC so we can continue to improve the lives in our community.

In our written remarks, I close by saying "The Bible says 'a man reaps what he sows.' How true that is of the ARC." It says that, "The local projects that have been seeded with ARC funds have resulted in a harvest of improved living conditions for the residents of Vinton County. If you continue to furnish us with the seeds, we at the local level will continue to plant, water, and cultivate, and we as a society will reap all the benefits."

Thank you.

Senator VOINOVICH. Thank you. I think that Vinton County is very fortunate to have you. I appreciate your input today. You are the kind of person that Mr. Hughes talked about that needs to be on the ground. That is human capital that you need to kind of organize. You were saying, Mr. Hughes, that a lot of communities do not have those individuals. They do not have the capacity from an organizational point of view to put these things together, and then I suspect you have to have the volume of the capacity of the community to pay for the rate increases that are necessary to go ahead and get the job done.

I should know this, but in terms of the paying for your salary, who pays for your salary?

Mr. REED. I am glad you brought that up.

Senator VOINOVICH. Can you get any ARC money for yourself?

Mr. REED. No. The county commissions do not pay me a dime, or my staff. I live off of the programs I administer. It is kind of like a business. I cannot show up everyday and get a paycheck. I have to produce. I am only as good as my last project and last program, and in our community, they don't have the resources. The county commissioners, they have to come up with money to buy tires for the ball field truck. It's a budget issue in a small county.

So we operate off of the administrative dollars, and fortunately, the CDBG and some of the other programs, there are sufficient administrative dollars.

Senator VOINOVICH. You don't have the administrative dollars that you can take off of ARC.

Mr. REED. No. Many times though we blend the ARC and CDBG and there are some administrative dollars there. That would help increase the capacity. When it's the local ground spending the money, I think we should be able to have a portion of it. I think ARC will get a better product also, if somebody is getting paid.

Senator VOINOVICH. That might be something to look into because it is the issue of having somebody who has the knowledge to put this together. As I mentioned to Ms. Pope, one of the things that we want to see is coming together of these various programs, but you need someone with the capacity to understand what the programs are and how you can bring them together, and I suspect that—I know that you are one of those people.

So what you do in terms of your cost would be off the CDBG. By the way, come hell or high water, we are not going to cut CDBG. We didn't do it last time. I think the CDBG is one of the finest programs that we have in terms of throughout of the county dealing with the problems with the small cities and big cities, and it is one of those programs that just leverages a whole bunch of money. You can get something out of that.

How about the USDA? I keep hearing that. That is money that comes from the Department of Agriculture? What program is that?

Mr. GROSSMAN. That is a project, a program that divides water-works loans and grants. It's been in existence for several decades now.

Senator VOINOVICH. It is part of the Department of Agriculture?

Mr. GROSSMAN. Yes, it is. It provides in the neighborhood of \$40 to \$50 million in loans and grants. Over the years it was changed from approximately 60 percent grant money and 40 percent loans to now 30 percent grant money and 70 percent loan money.

Senator VOINOVICH. The loans are paid off from user fees.

Mr. GROSSMAN. Correct. Yes.

Senator VOINOVICH. I would like to know, and maybe—I would like to see how some examples of Appalachia in ARC, how some of the water projects are funded. In other words, the various sources of funds and how they are blended, and I suspect that you might have some from the rural, from the Department of Agricultural. You probably would have some money from the revolving loan fund.

Mr. GROSSMAN. Correct. I have developed an extensive data base going back to 1989 through 2005, which can show you by county, by community—

Senator VOINOVICH. I would be interested to see how this all blends together.

Mr. GROSSMAN. I can provide that to you.

Senator VOINOVICH. If you increased one of them, where would you have the largest impact? The SRF, as you know, has just been frozen, and we need to put more money into it. But you have got—just melding together a bunch of stuff—How about the OWDA, where do you fit into the picture. Do you—does the community come to you and say, “We want to do something,” and you issue the bonds?

Mr. GROSSMAN. We only issue the bond. First of all, from the SRF we are the financial administrators of that, the Ohio EPA is the program administrator, but we still have our own program.

Senator VOINOVICH. So any of the money that comes from the SRF program to the State, you are the one that would administer

Mr. GROSSMAN. Yes.

Senator VOINOVICH. In other words, the allocation out of that money to Ohio, you guys, you run it.

Mr. GROSSMAN. We run it, and if we need more money, we issue bonds. We have a leverage program to get more money that way. All of our programs, while OEPA has a better sense of what is about to happen than we do, the money is there, they come to us for a loan and we make the loans, and

Senator VOINOVICH. Again, the money is paid off through user fees.

Mr. GROSSMAN. That is correct. We are an extremely sound financial body. I am proud to say that through our three major programs, they have rated a triple A from standard and poors; and Mondays and the strength of all of our programs lies in the fiscal responsibility of all of Ohio communities. Not the State of Ohio, the Ohio communities.

Senator VOINOVICH. Do other States do it that way? Do they—that is how

Mr. GROSSMAN. Most of the States operate the same way. I am part of the trade associate of State Agencies, similar agencies, I can speak to that. More than half of the States, for the SRF programs, issue bonds to leverage the program.

The beauty of the SRF is when you do run out of money, you do have the ability to issue interest payment on the bonds. When you're lending money at a lower rate of interest than the bonds, eventually that cannot go on. But to the extent that you can do it, in Ohio we have issued over \$1.6 billion of bonds in the SRF program in wastewater alone to enable more loans to be made.

About half of the States do it that way. The other half of the States do not do that and just loan the money out without leveraging.

Senator VOINOVICH. You have to compete with other tax exempt bonds in terms of the rate. You have to get people to buy your bonds.

Mr. GROSSMAN. We do, but we don't compete. I am not a licensed broker, so I cannot market our bonds, but I can tell you when the bonds are issued, they go fast and they go at competitive levels.

Senator VOINOVICH. So the point is that you end up having—you said some of them are at market rate and some are subsidized. Where does the subsidy come from?

Mr. GROSSMAN. The subsidy is built into the SRF program. We are lending money out at a lower rate of interest than interest payments on the bonds.

Senator VOINOVICH. Money from the SRF money coming, and when that money comes in, they don't require—what is the interest rate they set on that or is that just—

Mr. GROSSMAN. It is based on a market rate of interest. For most communities, the lowest rate it can be is 3.25 percent. For small communities or impoverished communities, it can be a 1 percent level or 0 percent level.

Senator VOINOVICH. That is based on the formula coming out on the SRF, if they have different categories—

Mr. GROSSMAN. This is a State decision. Each State sets its own interest rates.

Senator VOINOVICH. So you decide how that is. What happens is if the ones that are getting the lower interest rate, the other ones are picking up on the tab on that, too.

Mr. GROSSMAN. They are picking up the tab or running it, but the overall thing is that we are still borrowing money at a higher rate of interest than we are lending it out, but given that we've made over \$3 billion in loans, even in the mid-term, Ohio is in good shape with respect to funds to lend out. The long-term, it is going to be a problem.

Senator VOINOVICH. Mr. Hughes, you have been studying this.

Mr. HUGHES. I think this is an excellent place to have a dialog. We started our study thinking that we were going to be focusing mostly on the needs, but that, in my opinion, is not the most interesting story. They are big numbers. They are scary numbers. What are we going to do? Somebody has to document those. What we found which was fascinating was that there are 13 States in the ARC region, and there are 13 approaches at each State level, and we were able to look at in our study where the public funds go in each individual State, how much is spent, how much is loaned, how the things are packaged together.

There are some States like Ohio that have a pretty high degree of coordination. There are other States where it is four or five, sometimes six or seven different funders out there, folks like Ken on the ground. We are fortunate people to have someone like Ken that can understand those six, but put yourself in—the mayor of a small town steps up to the plate and tries to figure out six or seven programs. We found States where—Ohio, West Virginia, and Kentucky come to mind, where they did great jobs pulling this all together.

In our study, this is where we probably spent the bulk of our time. We collected information from 50 or 60 different funding programs, all with different rules. I am not a critic of this because on the ground you see that these funding programs have different objectives. The EPA programs, as you know, are environmentally oriented. USDA is a rural development program. So the trick is, you have water and wastewater. It is a public service and it is an economic development. The trick is at the local levels, how do you put

all of these together. I think that the ARC as a leveraging element has been instrumental in that. I think there is still a lot of work to be done.

I think having an across State organization like the ARC let's the folks from Mississippi and Alabama hear what the folks in Ohio and West Virginia and North Carolina are doing. I am particularly passionate about this because I think my home State has a lot to learn from what you do in Ohio.

Senator VOINOVICH. The ARC is the yeast in a lot of these projects. That is where it begins, then you build from there.

Mr. HUGHES. It's a small—both on the technical assistance side it is the yeast, and then also, as a couple of people mentioned, it sometimes can be that \$300,000 that can be missing from a \$4 million project. One thing I didn't say

Senator VOINOVICH. This is mostly we are talking about safe drinking water. We are not talking about clean water.

Mr. HUGHES. I think the ARC has been instrumental in wastewater. They took out more straight piping systems in North Carolina than any other organization in the State. But if you look at the region as a whole, I am an advocate of loan financing. I think that grants can get communities in trouble. I came in somewhat a skeptic of the study. I am leaving the study feeling like without some targeted grant money, these project will not work.

People in the ARC already pay a higher percentage of their income on water and wastewater than any other place in the county. West Virginia is by far the highest per capita basis, what people currently pay. There are counties—and McDowell County is one of our case studies in West Virginia, they are paying more in absolute terms than Orange County where I come from, a very wealthy county in North Carolina, in absolute terms.

Senator VOINOVICH. It is interesting, we were able to get—we authorized a billion and a half—do you remember? A billion and a half dollars, I think back when I was chairman of—I was chairman of the Infrastructure Tax Division my first 2 years. The thing is, we got the money authorized, but we did not get it appropriated.

I would be really interested if you could sit down with some of your colleagues to look at where you put—how do you really, you know, once you identify—and we are going to come to the number, but the question is how do you go about funding the thing. You do need the grants, because we have seen from the testimony here today that these counties and areas do not have the wherewithal to do it as you would have in the larger, urban area, and the septic tanks and all of the other stuff you have to contend with.

The question that I have is, if we are talking about wastewater, which is probably the big number, wouldn't you say?

Mr. HUGHES. It is high, but it is not

Senator VOINOVICH. Now we are talking about the lines, not just the treatment facilities.

Mr. HUGHES. We are talking about both.

Senator VOINOVICH. In your study, you did the treatment, too.

Mr. HUGHES. We were looking at everything. But there is a very large type view of wastewater; sewers are it. The ARC really suffers nationally because half of the population is septic systems. So when someone comes in to document the need, what do they do?

They start by going to the local sewer plant and asking, "What is your need?" Those numbers are the numbers that you see. Nobody goes to the individual people with failing septic systems and says, "What is it going to cost to run you to the city system or fix your system?"

All of the estimates to the ARC are grossly under estimated, in my opinion, on the wastewater side.

Senator VOINOVICH. It is interesting that the major improvement in waste treatment in the country occurred during the early seventies. My first resolution for bond issue when I came to the legislature was \$375 million to do waste treatment facilities. When the Federal program came in, it was 75/25.

I will bet you if you go back and look at that program, that Appalachia fell behind then because that money was going to the larger cities, and you had no—you didn't have any governmental entity to deal with it. I bet they were just completely kind of ignored during that period of time.

If you came up with a new program, I believe if you want to make progress, you need to come up with something like that 75/25 for a while, or 50-50, something that would have a special ingredient or program to deal with the situation in the Appalachia.

I want to thank you very much for being here. It has been a great hearing, and I got a lot out of it and I'm hoping some of your thoughts this morning, this afternoon, we can fold into the legislation. We are going to try to get it done, and I thank all of you for what you are doing in your respective positions. It makes a big difference to our country and to your respective communities. Thank you.

Hearing adjourned.

[Whereupon, the hearing was adjourned at 12:37 p.m.]

[Additional statements submitted for the record follow.]

STATEMENT OF ANNE POPE FEDERAL CO-CHAIR, APPALACHIAN
REGIONAL COMMISSION

Thank you, Senator Voinovich. It is indeed a pleasure to be with you here in Appalachian Ohio to review the work of the Appalachian Regional Commission (ARC). We appreciate your strong personal commitment to the future of the Appalachian region and the work of ARC. Since I have traveled with you several times around Appalachian Ohio, I know that this is a subject that you feel passionately about. All of us in Appalachia appreciate your leadership.

This hearing affords us a chance to assess the effectiveness of the 2002 reauthorization, review how ARC's programs are working, and examine the economic development challenges facing rural communities across Appalachia.

I am particularly pleased that you have chosen to hold this hearing in the heart of Appalachia. Southeast Ohio shows both the significant payoffs of prior ARC investments and the continuing need for the Commission's assistance as a profound restructuring sweeps across the economy of Appalachia. I am delighted to be here at Washington State Community College, which has partnered with ARC on a number of important projects.

The region's traditional reliance on low-skilled jobs—particularly in manufacturing, natural resources, and extractive industries—is rapidly shifting to more knowledge-based employment. While this transformation offers the promise of higher incomes and improved standards of living, many Appalachians—and their communities—are at risk of being unable to compete for these new jobs and businesses.

Education and workforce development programs geared to high-growth high-demand jobs, entrepreneurial strategies to capitalize on local assets, access to broadband technology, and adequate basic infrastructure are essential if Appalachia's communities are to compete in the global economy. ARC's flexibility, its

ability to adapt quickly, and its expertise in crafting regional approaches make it an effective partner in helping communities put these critical components in place.

ARC OVERVIEW

I should take just a minute to review ARC's mission and structure, as I think that is a key to ARC's success. The Commission has been charged by Congress with helping bring Appalachia's 410 counties and their 23 million people into socioeconomic parity with the rest of the Nation. The Commission represents a vital partnership between the Federal Government and the 13 Appalachian States. The 13 Governors and the Federal co-chair collectively set policy and allocate ARC's dollars in a true partnership that requires a consensus on priorities. I am pleased to be joined today by T.J. Justice, Director of the Governor's Office of Appalachia and Governor Taft's Alternate to the Commission. Throughout his 8 years in office, Governor Taft has been a vigorous advocate for Appalachian Ohio and the ARC, and T.J. has been effective in carrying out the Governor's vision for Appalachian Ohio.

While the formal policies of the Commission are established by the Governors and the Federal co-chair, the real strength of ARC rests in our local partners, the local development districts. These multi-county planning organizations act as our local eyes and ears, identifying potential projects, providing technical assistance to small communities, piloting innovative development approaches. They are indispensable to our effort to move Appalachia into economic parity with the Nation.

Every Appalachian county is served by one of the 72 local development districts (LDDs) in our region. You have three excellent ones here in Ohio: the Ohio Mid-Eastern Governments Association, the Buckeye Hills-Hocking Valley Regional Development District, and the Ohio Valley Regional Development Commission. I am glad that Don Myers is here this afternoon to represent the LDDs. He is a forceful advocate for innovative regional development.

2002 REAUTHORIZATION

Mr. Chairman, I am pleased to report that the reauthorization that you sponsored—and that President Bush signed—in 2002 has worked quite well. As a result of the legislation, and bolstered by the Administration's support for the work of ARC, we have become more performance-based, we have increased our leveraging, we have expanded our partnerships, and we have focused on innovative, regional approaches to economic development.

Performance-based Agency

ARC is a performance-based organization, with clear goals and performance measures driving everything that we do. I believe that successful organizations are ones that develop a plan, implement it, and then measure what they have accomplished. Last year we implemented a new strategic plan to guide the Agency for the next 5 years. We did not just sit in Washington and write a document. Rather, we went out into the region to listen to the people of Appalachia and hear how they thought ARC could best help their communities. We held five town hall meetings across the region, with participation and voting by more than a thousand Appalachian citizens. Then our States, the local development districts, and I sat down to shape these comments into a new plan to govern our investments. That plan articulates four major goals:

- Increase job opportunities and per capita income through business development and diversification strategies that will capitalize on the region's unique assets, foster local entrepreneurship, expand trade, and encourage technology-related jobs.
- Strengthen the capacity of the people to compete in the global economy through increased workforce participation and productivity, with emphases on improving educational attainment and training and reducing disproportionately high rates of certain chronic diseases.
- Develop and improve regional physical infrastructure, particularly in economically distressed areas, as an essential step to increase potential for private sector growth by addressing the need for clean water and wastewater treatment facilities and advancing the access to and use of high-speed telecommunications.
- Build the Appalachian Development Highway System, designed to reduce the historic physical isolation of the region and link Appalachia to national and international commerce.

Performance measurement is an integral component of the strategic plan. The Commission has outlined annual and 10-year performance targets that are aligned with these four goals. We analyze each project to see what it contributes to one of these targets.

Those 10-year regional performance targets are as follows:

- Create and/or retain 200,000 jobs in Appalachia
- Position 200,000 Appalachians for enhanced employability
- Provide 200,000 households with basic infrastructure services
- Open 250 miles of the Appalachian Development Highway System

I am pleased to report that we are well on our way to meeting these 10-year targets.

Leveraging

Meeting these targets will require the investment not just of ARC dollars but of funds and resources from other Government Agencies and the private sector. We have worked to increase our leverage of outside dollars. Last year, the \$66.3 million in grants that we funded attracted \$170 million in additional project funding, a ratio of almost 3 to 1, and \$560 million in leveraged private investment. That means that for every dollar that ARC invested in a project, the private sector invested \$8. Since many of our projects are in areas with weak economies, and they often meet needs that are almost pre-development in nature, this private investment is particularly striking and has a significant economic impact.

In our role as advocate for the region, we have been the catalyst for other investments as well. Parametric Technology Corporation (PTC), a leading developer of sophisticated engineering and design software for industry, NASA, and the Defense Department, has worked with ARC to make their Pro-DESKTOP software available for free to all high schools and colleges in the Appalachian region that have a faculty member trained in using the software. So far 31 community colleges, 4 technology centers, 44 high schools, and 1 middle school across 9 ARC States have participated in the project. To date, the market value of the software PTC has donated is \$24 million.

Partnerships

Achieving the goals of our strategic plan requires an extensive network of partnerships with the private sector, the non-profit community, and other Government Agencies. Expanding our partnerships has been one of my primary goals at the Commission. I think we are making excellent progress in this area.

The Interagency Coordinating Council on Appalachia, which the 2002 legislation created, has been an effective tool for strengthening our partnerships with other Federal Agencies. Last fall, for example, Labor Deputy Assistant Secretary Mason Bishop and I convened a field meeting of the Council at Zane State College in Zanesville to discuss strategies to prepare Appalachia's workers for high growth, high demand jobs. Presidents of 17 community colleges from across Appalachia, along with economic development and business leaders, participated in the conversation.

At that time we announced an innovative pilot program to train workers for jobs in the electric utility industry. An interstate partnership between Zane State here in Ohio, Ashland Community College in Kentucky, and West Virginia State Community and Technical College will yield a rich curriculum, open to students in all three colleges. A key private sector partner, AEP, will work with the colleges to make sure that the curriculum matches the jobs that AEP offers. AEP will also offer internships that are integrated into the program. This regional approach to workforce development is just the sort of innovative collaboration that both ARC and the Department of Labor are seeking to foster.

Our relationship with the Centers for Disease Control and Prevention is another innovative Federal partnership. Since 2001 the CDC has committed over \$1.4 million to special work in Appalachia targeted to certain diseases, such as diabetes and cancer, that disproportionately affect our region. That partnership has led to three successful ongoing projects: a jointly funded initiative to reduce the high rate of cervical cancer mortality in Appalachia, a partnership with East Tennessee State University to implement a comprehensive cancer control program, and a collaboration with Marshall University to reduce the impact of diabetes on people in Appalachia. For each of these, the CDC has looked to ARC as its connection to local communities and local needs.

We also understand the importance of the private sector and sectors, and we have worked to create new partners here as well. In a first-of-its kind collaboration, ARC worked with the National Geographic Society to develop a geotourism mapguide to Appalachia, boosting the tourism industry and the jobs that flow from it. The map features 356 sites, including 24 sites in Ohio. Marietta is one of them. This special map is the kind of activity that could only be accomplished through an organization that has a specific, regional focus.

Over the past 2 years we have worked with Microsoft Corporation to make computer software available to more than a hundred organizations across our 13 States.

Microsoft initially committed \$1 million in software donations, but when they saw the enormous need there was for this across our region, they quickly increased it to \$2 million. At this point Microsoft has distributed \$1.5 million of that, and an additional \$400,000 is in process. Microsoft has been a great partner for us, and we appreciate their commitment to Appalachia.

Innovative Regional Approaches

ARC stresses innovation and regionalism in building thriving local economies. One of our model innovative programs, the highly successful Appalachian Higher Education Network, originated here in Ohio. It provides funding, training, and assistance to high schools to encourage students to undertake postsecondary education. We know that the jobs of tomorrow are going to require enhanced training and education, yet the “college-going” rate for high school students in Appalachia lags behind the rest of the Nation. Our Appalachian Higher Education Network speaks directly to this gap.

We have taken the Ohio model, which won an “Innovations in Government” Award from Harvard, and are replicating it across Appalachia. There are now 10 centers in 9 States. Since 1998, the network’s programs have reached nearly 11,000 high school seniors in Appalachia, of whom 68 percent have enrolled in college. This is an increase of almost 20 percentage points over pre-intervention college-going rates.

We seek opportunities by which our States and communities acting regionally can accomplish more than if they were acting on their own. A good example of regional innovation is the Southern Appalachian Fund. In response to ARC studies that documented the lack of equity capital in Appalachia, five States Tennessee, Kentucky, Mississippi, Alabama, and Georgia came together and ARC invested \$1 million to help capitalize a venture capital fund focused on Appalachia. This attracted \$11.6 million in funds from other public and private sources, including BankOne and Wachovia, to yield an overall pool of \$12.5 million of venture capital that can only be invested in Appalachian businesses.

The Southern Appalachian Fund is off to a great start. It has now made investments in eight companies, totaling \$4.4 million, resulting in the creation of 100 jobs and leveraging \$18.3 million of additional equity and debt investment. All the money has been invested in low-income census tracts. Here again, without ARC’s special regional focus, these venture capital dollars would not be available to grow businesses in Appalachia.

Another area where we have fostered innovation is telecommunications and technology, one of the key elements of the 2002 legislation. Through the first 4 years of the program (we are now in the fifth year), the Commission spent \$32.2 million on activities related to this important initiative. This has been matched by \$6.5 million in other Federal funds, \$10.3 million in State dollars, and \$41.3 million in local support. These activities are projected to leverage an additional \$61.7 million in private investment.

ARC’s program has been built around four broad areas: increasing affordable access to broadband services, providing training and educational opportunities related to telecommunications and technology, increasing the use of e-commerce throughout the region, and increasing entrepreneurial activities within Appalachia in the technology sector. Projects in these areas stress innovation and regionalism.

The direct economic impact of the telecom program has been substantial:

- 2,600 jobs created and 2,100 jobs retained
- 45,000 students served with enhanced academic offerings through distance learning and new technology
- 65 community and regional plans for telecommunications networks and applications

In Ohio, ARC funds have supported a widespread community outreach and strategic planning effort, a technical assistance “circuit rider” traveling across the region to work with communities and private-sector providers, and 5 cluster demonstration projects. The number of telephone central offices that are enabled with DSL services jumped from 46 in 2002 to 168 in 2004, while the number of counties with cable modem access grew from 8 to 28. In addition, 16 Appalachian Ohio counties now have some form of limited wireless broadband. That is significant progress, led by the private sector and supported by ARC, in expanding broadband access in the region.

A couple of examples from other States suggests the range of ARC’s work in the telecom area. In Delhi, New York, in partnership with Motorola we used a wireless canopy demonstration system to provide the first broadband access to the community. Working through the local college, the project created a network among village and county Government offices, the high school, a senior citizens’ center, the State

Department of Transportation regional office, the community library, and the SUNY Delhi campus. As a result of the broadband access provided by the project, Delhi is now considering establishing a technology-oriented business incubator to spur new businesses and jobs. This option would never have been possible without ARC's wireless telecom project.

Last month I joined Mississippi Governor Haley Barbour in officially "lighting" a new fiber network that will serve the bulk of northeast Mississippi. ARC provided \$2 million of a total \$7 million project, in partnership with TVA, HUD, and the private sector, to install a fiber loop that will link major State universities, the largest rural teaching hospital in the Nation, several small cable companies, and a growing number of private businesses. This project has the potential to transform the economy of that part of Mississippi.

As you can see, Mr. Chairman, the telecom authority provided in the 2002 legislation has enabled us to make significant progress in connecting Appalachia to the information highway, and I encourage you to continue this authority.

HIGHWAYS

While the primary focus of today's hearing is ARC's nonhighway program, I do want to touch briefly on the status of the Appalachian Development Highway System, since it is the linchpin of our efforts to connect Appalachia with the international economy. As of September 30 of last year, 2,632 miles 85 percent of the 3,090 miles authorized were open to traffic or under construction.

We are only a few miles away from one of our important corridors, Corridor D, which you know as U.S. 50. Construction is now underway on the bridge across the Ohio River at Parkersburg, which is the last remaining work to be done on this important east-west corridor.

Last year's Highway bill provides funding for the ADHS out of the Federal highway trust fund at \$470 million per year. This will enable us to make significant progress in completing our highway system, and I thank you and your colleagues for your leadership in ensuring that the ADHS was included in SAFETEA-LU.

STRATEGIES FOR THE FUTURE

As you look to the future, Mr. Chairman, I want to discuss briefly the steps ARC is taking to ensure that our programs respond to the challenges of Appalachia's changing economic landscape.

Targeting.— First, we are continuing our focus on the areas of Appalachia that have the greatest need. To help us do that, we recently developed an economic condition index that enables us to directly compare the condition of our counties with those of the rest of the Nation. Using unemployment, poverty, and per capita market income, the index assigns a score to every county in the country, and then divides those counties into quartiles. Attached to my testimony is a map that shows the distribution of counties across the Nation according to the index. The index reveals that Appalachia has more of the worst counties and fewer of the best than it would if the region was at the national average.

We have traditionally focused special attention on those counties that are formally classified as economically distressed. This year there are 77 of those across the region, with four (Athens, Meigs, Pike, and Vinton) in Ohio. But many of our counties are just on the cusp of being distressed; and therefore, ARC is focusing attention and resources on them to ensure that they do not become distressed.

The Commission now has begun formally designating these "at-risk" counties. In FY 2006, there are 81 of them, including six in Ohio. Under our current statute, projects in these distressed counties are subject to the same match requirements (50 percent) as those in counties with stronger economies, though projects in distressed counties are eligible for up to 80 percent ARC funding. We believe that targeting funding to those counties that continue to have weak economies and limited financial resources is the most effective way for ARC to help move the region to economic parity with the country.

Telecommunications.— As I noted earlier, over the past 5 years we have had a robust telecommunications program that has significantly expanded the access and use of telecom and technology in Appalachia. But the region continues to lag behind the Nation in access to broadband, and businesses and communities too often fail to capture the economic potential offered by new technology.

According to a study we conducted initially in 2002 and updated in 2004, *Links to the Future*, in December 1999 there were 44 percent of Appalachian zip codes with at least one high-speed provider, compared to 60 percent for the Nation. In December 2002, the Appalachian percentage had increased to 63 percent. That is defi-

nite progress, but the national rate had grown to 88 percent, actually increasing the gap between Appalachia and the rest of the Nation.

We expect to continue our work in this area. We are pursuing several strategies. One is ensuring that whenever we do a basic infrastructure project, we consider whether there is value in including a telecommunications component as well. Another is to continue our focus on e-commerce, training our small businesses to take full advantage of the business opportunities and efficiencies offered by the Internet. Finally, we will continue our commitment to distance learning, telemedicine, and demand aggregation projects.

Asset-Based Development.— ARC is now in the second year of a special initiative designed to help tap the full potential of the region's natural, cultural, leadership, and structural resources. Too often we in Appalachia tend to focus on our deficits, on the barriers to economic development. And much of what ARC does is help overcome those barriers. But I come from the business world, where the balance sheet has two sides the deficits, or liabilities, AND the assets or revenue streams. ARC is working with our communities to help them identify their assets and put in place strategies that will capitalize on them.

This initiative has sparked considerable enthusiasm around the region, as communities take a new look at the economic development resources they have within their own borders. Some examples include the following:

- Mingo County, West Virginia has used water in abandoned mines as the basis for a thriving aquaculture business that grows and sells arctic char to high-end restaurants along the East Coast.
- In Virginia, the 250-mile "Crooked Road" driving trail links 8 music venues in 10 counties in an exploration of the region's rich musical heritage.
- Appalachian Pennsylvania is capitalizing on some of the finest hardwood forests in the world to promote sustainable agriculture, value-added wood products, and job creation.

Both ARC and our communities believe that this asset-based approach to local economic development affords a realistic opportunity to diversify our local economies.

Patterns in global trade and technology have shaken Appalachia's historic reliance on traditional manufacturing, extractive industries, and tobacco, threatening many communities whose local economies were already fragile. For example, Appalachian coal mining, long a mainstay of the economy of central Appalachia, has fallen from 101,500 workers in 1987 to 46,000 in 2003, largely because of productivity gains. Similar employment declines have occurred in manufacturing, with significant Appalachian job losses in textiles and apparels and primary metals. Our asset-based approach offers an additional tool for communities as they refocus their economies.

Energy.— One asset class to which we are dedicating special attention is energy. Appalachia is rich in energy resources fossil fuels, renewables, and the research capacity to develop alternative energy sources. From coal to oil and gas to wind to biomass, all of the Appalachian States have significant energy assets.

Earlier this year the Appalachian Governors and I committed the Commission to developing an "energy policy blueprint" for Appalachia that can boost the region's economy. We are currently conferring with energy experts, as we work to have our regional energy blueprint ready to unveil at our annual conference this fall.

The challenge is to craft regional strategies that will use these resources to spur widespread economic growth and job creation. Tapping Appalachia's energy potential for economic development is about more than just getting additional coal out of our mines. Rather, it requires looking at the entire energy supply chain research, commercialization, manufacturing, exporting and seeing it all as one comprehensive economic development strategy for our region.

Basic Infrastructure.— The bulk of ARC's funding continues to go to basic infrastructure. Lack of adequate water and wastewater systems is frequently a major impediment to local economic growth.

ARC recently commissioned a study to document the region's funding resources and gaps for drinking water and wastewater infrastructure. It 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. According to the study, Appalachia's water and wastewater service lags behind the United States, and local technical, managerial and financial capacity is significantly lower in Appalachia. On average, community water systems in distressed counties have greater financial needs per person served than systems in non-distressed counties.

ARC will continue to help communities with these challenges in a number of ways:

- Targeting our infrastructure investments. ARC will continue to focus its funding on those communities with the greatest economic need and those with critical public health and safety issues.
- Strengthening our partnerships with other Federal Agencies. We have historically had a strong relationship with Rural Development at the Department of Agriculture, and we have been expanding our partnership with the Environmental Protection Agency.
- Fostering regional approaches to water and wastewater service. Economies of scale and improved service reliability occur when small communities come together to develop interconnected systems that operate on a county-wide or regional basis. ARC will continue to emphasize a regional approach to basic infrastructure.
- Encouraging innovative solutions to infrastructure needs. The combination of rugged terrain and low incomes puts traditional systems beyond the financial reach of some of the more remote, distressed communities. This calls for alternative approaches, such as the Self-Help program in Virginia, innovative financing options, and alternative technologies. ARC will examine ways of deploying these alternative solutions across Appalachia.

CONCLUSION

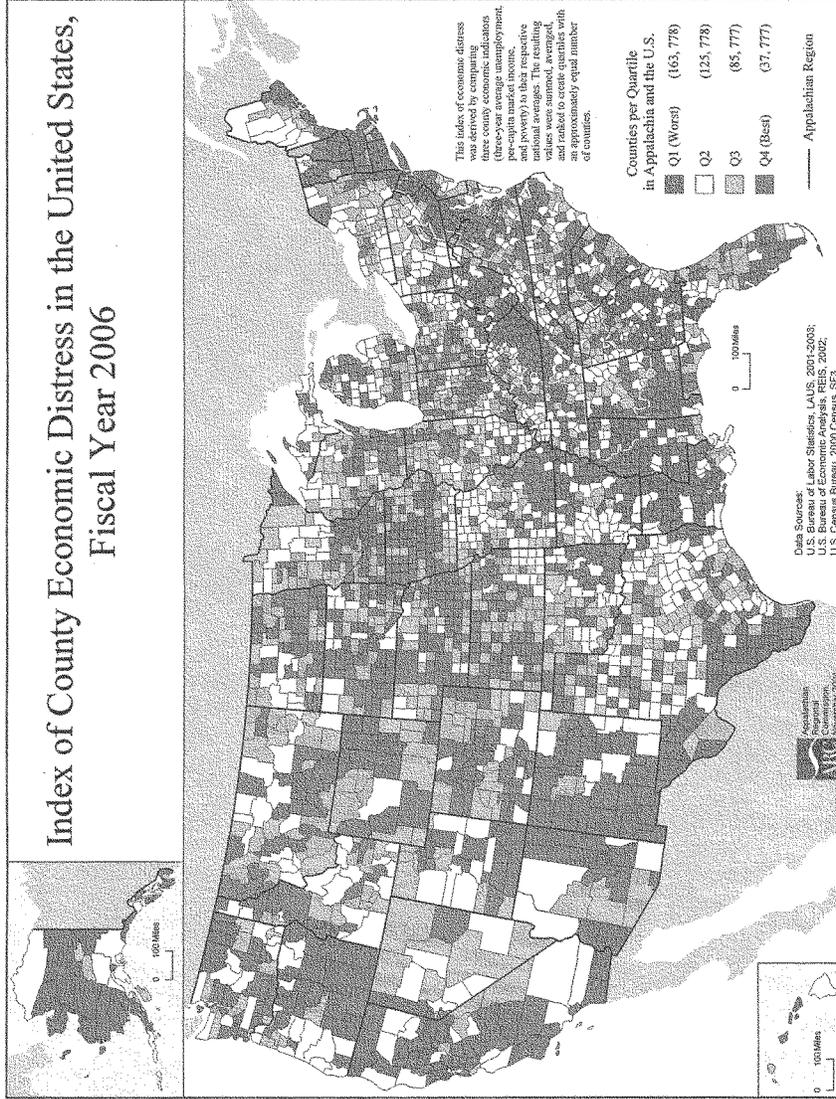
Mr. Chairman, since ARC was created, Appalachia has experienced significant economic improvement:

- The number of economically distressed counties has been cut by more than half, from 223 distressed counties in 1965 to 77 counties in 2006.
- The per capita income gap between Appalachia and the United States has been reduced from 22 percent below the national average in 1965 to 18 percent in 2001, and the poverty rate has been cut more than half, from 31 percent to 13 percent.
- Appalachia's infant mortality rate has been cut by two-thirds, and more than 400 ARC-funded rural health facilities have expanded access to health care across Appalachia.
- The percentage of Appalachian adults with a high school diploma has increased by over 70 percent (from 45 percent in 1960 to 77 percent in 2000), and ARC has helped build and equip 700 vocational education facilities.
- In the past 5 years alone ARC grants have provided clean water and sanitation facilities for over 183,000 Appalachians.
- Since 1977 ARC has invested \$36.7 million in revolving loan funds that generated \$115 million in loans for small businesses and leveraged \$8.59 in other investment for each ARC dollar, helping create over 30,000 jobs.

Despite these significant improvements, Appalachia still does not enjoy the same economic vitality and living conditions as the rest of the country. I have already outlined some of the challenges in telecommunications, infrastructure and employment, but let me suggest a few more of the region's continuing needs.

- Widespread poverty. One fourth of Appalachia's counties have a poverty rate more than 150 percent of the national average.
- Persistent unemployment. A majority of Appalachian counties have a higher unemployment rate than the national average.
- Lower per capita income. Appalachia trails the rest of the Nation by 18 percent in per capita income.
- Educational attainment gaps. The number of Appalachian residents with a college degree is less than three-fourths of the national average and the gap is widening.
- Health disparities. Appalachia has higher rates of cancer, heart disease, diabetes and chronic obstructive pulmonary disease compared with the Nation as a whole.

Mr. Chairman, we are on the right track; the region is moving forward, but we still have key obstacles to overcome if we are to move Appalachia to economic parity with the Nation. We believe that ARC can be a key partner in helping achieve this ultimate goal, and we look forward to working with you and other Members of Congress.



STATEMENT OF T.J. JUSTICE, DIRECTOR, OHIO GOVERNOR'S OFFICE OF APPALACHIA,
APPALACHIAN REGIONAL COMMISSION

Good afternoon. I am thankful to you—Senator Voinovich—for providing me with the opportunity to present formal testimony regarding the re-authorization of the Appalachian Regional Commission on behalf of Ohio's 1.4 million Appalachian residents located across a 29-county area. I would like to thank you for your exceptional support of the ARC as well as your leadership and dedication to this part of Ohio and the other 12 States that create the Appalachian Region of the United States.

Senator, I am privileged to have had the chance to work for you while you served 8 years as Governor of Ohio and I want to make certain you are aware of the appreciation the people in eastern and southern Ohio have for the "dear colleague" letters you initiate to members of the U.S. Congress in Washington, DC. You have not been reserved in your interest to maintain and expand the level of funding for the ARC.

I also want to thank President Bush and ARC Federal co-chair Anne Pope. It is no secret that domestic spending is tight for obvious reasons. To ensure our country's safety the Administration has been constrained to look more closely at how and where it spends Federal dollars in our homeland. Although many programs are proposed to be cut, the Bush administration has recommended flat funding of \$64.8 million for the ARC. This is a testament of Miss Pope's ability to represent us within the White House and also reflects the measurable success of the ARC.

Before I share my views on why reauthorization of the ARC is warranted, I want to recognize Congressman Bob Ney. A close friend of mine as well as my own Congressman in Jackson county, where I reside. Bob knows what is important to his constituents, whether it's advocacy for the ARC, the community development block grant program or other successful programs for his district and the region as a whole.

This Appalachian Regional Commission breathes success and it fuels partnerships that have led to organizations such as the Ohio Appalachian Center for Higher Education—Or OACHE—being formed. This program focuses on encouraging students to go to college and aims to increase the low educational attainment level of Appalachian citizens. The OACHE provides career planning and financial aid funding, starting as early as 6th grade to help kids dream big and find adequate resources to make those dreams come true.

On a more personal note, I would like to share an OACHE story with you in hopes that it will move you in the same way that it moved me. While visiting with some of the OACHE students at South Webster High School 2 years ago, a senior approached me and wanted to let me know how this program had impacted his life. He told me that he came from a family who discouraged him from going to college. His very own father told him to not even try—that he should take his high school diploma and get a job at a local auto or body shop. OACHE found him. He told me that despite what his father had told him, he knew inside—that he had always wanted to try college. Today, he is a sophomore at Hocking College in Nelsonville, OH training to become a police officer.

This young man is the work of the Appalachian Regional Commission. This is how the investments of this entity make a difference for people of all walks of life.

ARC's model and success here in Ohio has been so highly regarded that Governor Taft not only recognized that early in his first term, but he replicated it. Ohio's allocation of ARC funds has generally been in the \$4.1-\$4.5 million range excluding highway funds. The Taft administration created its own State Appalachian Program with an equal amount of funds operating under the same guidelines and goals of the ARC thus doubling the amount of investments able to be made each year by the Governor's office of Appalachia and the Appalachian Regional Commission in Ohio.

Senator, this program works. It creates jobs and stimulates health care in areas like southern Perry County near Corning and New Straitsville where a new health clinic partially funded by the ARC is providing health care services that otherwise would not be provided. It supplies dental services in Meigs County for uninsured and underinsured individuals. It offers a mobile diabetes unit at Ohio University that screens residents in Pike, Vinton, Athens, Meigs, Hocking and other Appalachian counties.

The ARC's commitment to communities in the Appalachian Region has led to the development of new programs. For example, the Ross County Child Development and Family Service Center at Ohio University in Chillicothe is now able to furnish and equip its facility to accommodate educational, rehabilitative and social welfare services to 360 children and their families. As a direct result of the ARC, the city of Wellston, in Jackson County retained more than 1,000 jobs with the upgrade of a water treatment plant. The foundation for healthy communities can assist 11 hos-

pitals in Appalachian Ohio and acquire the diagnostic equipment needed to conduct hearing screenings for all newborns. These projects have all been made possible, and in most cases, would not have occurred had it not been for the ARC's involvement.

This is a program that has produced countless employment opportunities, whether it's entrepreneurs creating 2 and 3 jobs at a time at Hickory Ridge in Morgan County or Acenet's agribusiness incubator in Athens County. It also generates hundreds of jobs at other large manufacturers by supporting the necessary infrastructure in places like Zanesville's industrial park where Wendy's bakery and the Dollar General Distribution Center are located or Buckingham coal in Perry County.

The Appalachian Regional Commission is also a dependable resource in times of need. Ohio used \$1 million of ARC funds for flood recovery efforts during catastrophic flood events that occurred 18 months ago. I can tell you that repairs were made in critical areas that otherwise would not have occurred due to FEMA policies. An example is the restoration of a shortline railroad in Guernsey County that supported 180 jobs at a manufacturing facility in Byesville.

On behalf of Governor Taft and the residents, employers, and local Government officials of Appalachian Ohio, I submit to you—Senator Voinovich—that there are few, if any other, Federal programs that are as effective and worthy as the ARC. I am very proud to represent the people of this region—a region that my 14-year old daughter and I live in and believe in—and I'm hopeful that my remarks today will help you in obtaining a 5-year reauthorization of the ARC. Thank you.

STATEMENT OF DON MYERS, DIRECTOR, OHIO MID-EASTERN
GOVERNMENTS ASSOCIATION

I thank you for the invitation and privilege of testifying today, to you and the Senate Environment and Public Works Committee, at this field hearing being held at Washington State Community College in Marietta, OH. The primary purpose of this hearing is to receive testimony on the Appalachian Regional Commission (ARC) and the impact of the last reauthorization of this program and issues regarding the upcoming reauthorization.

I testify to express my comments and those of the Ohio Mid-Eastern Governments Association's (OMEGA) Board and to seek your consideration and support in securing funding and reauthorization status for the ARC and its programs. In addition, we ask that you and the committee support retaining the original mission of the program as a flexible, locally driven program that provides valuable assistance to county commissioners, mayors and development officials working to improve local communities and the needs of those communities.

As Executive Director of OMEGA, I represent an organization that serves as a Council of Governments (COG), a Local Development District (LDD) and an Economic Development District (EDD) serving a 10-county region with a population of 593,221 residents in eastern Ohio.

At our most recent Annual Board meeting (April 12, 2006), 90 officials, including commissioners, mayors, county engineers, development officials, educators and private business leaders spoke of the critical importance of continuing funding and reauthorization of the ARC program.

At this meeting, we held discussion on this hearing today and our Board in its entirety requested your support and leadership in securing proper funding and reauthorization of this most important ARC program.

As a former development director in Belmont County, Ohio, I have had the privilege of working with you when you were Governor of the State of Ohio on three (3) separate development projects and they were: the \$80 million Ohio Coatings Electrolytic Tin Plating Plant in Yorkville, OH, the Shadyside Stamping Mayflower Plant built at a cost of \$32 million and the Belmont Correctional Institution built at a cost of \$38 million. These three (3) development projects were built at a total cost of \$150 million and when I left Belmont County in 2001, these three (3) development projects had approximately 900 employees with an annual payroll and benefit package of over \$35 million. Belmont County and its people benefit today because of these developments. These special projects could not have happened had it not been for the ARC program and others like it.

Records that we have in the OMEGA office from 1968 through 2005 report the OMEGA region of 10 counties has received a total of \$75.4 million in Federal and State ARC grant awards. These grants have enabled us to complete 360 projects addressing local health, safety, welfare and education projects totaling over \$305.385 million. These ARC grants are so important to our region and to the individual counties and cities they benefit.

Our infrastructure needs are many not only here but also throughout the country. Last summer, the American Society of Civil Engineers prepared a report which addresses 12 categories of infrastructure that gives the Nation's transportation, water and energy system and overall grade of "D" plus. Both drinking water and wastewater received a grade of "D". The report states the Nation's 54,000 drinking water systems are aging rapidly and some sewer systems are 100 years old. We need quality programs like the ARC that address these issues of concern and importance.

In closing, I would like to reiterate my strong support for the ARC and its model for service delivery. It is clear that the administration of the ARC program by the Agency's staff and the Federal co-chair's office is not conducted in a manner that many would consider to be "typical Washington bureaucracy". The ARC has shown that it is a program that seeks to simplify rather than complicate. It does not try to operate under a rigid or lengthy review or approval process that in many other agencies tend to frustrate and confuse the applicant. Of extreme importance is that the ARC administration operates with a programmatic mindset that seeks to work with the States and local Governments in order to get their priorities funded.

You have done much for the people of Ohio and for economically disadvantaged citizens throughout the United States. We ask that you continue to look out for those in need and in the shadows of life. With a sluggish economy and three (3) major floods that occurred recently, our 10 member counties need your help and that of Congress more than ever. We ask for your continued support of this most worthy program and we ask for your leadership in securing reauthorization status and proper funding needed for so many projects within the ARC region.

We thank you for your consideration of this report and for all that you do for the OMEGA region.

STATEMENT OF DAVID MATUSOFF, PRINCIPAL AND DIRECTOR OF TECHNOLOGY
PLANNING WHITEBOARD BROADBAND SOLUTIONS

Senator Voinovich and other distinguished colleagues, thank you for the invitation to speak with you this morning regarding the reauthorization legislation of the Appalachian Regional Commission. It is my pleasure to come before you to discuss the importance of the ARC and the critical role the ARC has played in the improvement of broadband availability in the Appalachian Region of Ohio. Your role and leadership regarding ARC's last reauthorization has been a critical factor in the successes I'll be discussing today.

My partnership and consulting with the ARC started in 1999 through a project called Access Appalachia and has continued through today. To date, I've managed three large-scale broadband assessment and improvement projects over a six year period and I'm currently in discussions with ARC to begin implementing some exciting new wireless broadband projects in communities without any current access to broadband services.

I spend a significant amount of time proselytizing about the importance of broadband services to improve economic development opportunities throughout rural America. Central to that discussion and critical to any rural broadband improvement project is the role of the "sparkplug." It does not matter if this individual comes from the public or private-sector, or if this person understands much about broadband technologies, but without their determination and persistence, rural broadband projects won't work. These sparkplugs are responsible for creating broadband availability in spite of all the market-based factors that suggest, "This is not a place to invest in broadband services." Without these local visionaries, rural broadband efforts would go the way of other rural communities that lost economic opportunities as the result of lack of access to other forms of vital infrastructure like adequate water, roads and sewers.

It is my sincere belief that the ARC has served as a regional sparkplug for broadband efforts in the Appalachian Region of Ohio. Without the financial support and programmatic focus on broadband improvement by the ARC, the Appalachian Region of Ohio would be woefully underserved with respect to broadband availability and lack educated public officials who aspire to improve broadband access in rural Ohio. The impact of the last part of that sentence can not be underestimated. Through the ARC's education efforts, the culture regarding the importance of broadband availability has changed throughout the region. In many instances, changing culture is much more meaningful than a new investment in broadband service and will serve the region for years to come. The ARC's efforts in this area have made significant impacts both directly and indirectly.

Although it's not always an easy task to measure the exact or direct impact of ARC investments on the quality of life and business climate in the Appalachian Re-

gion of Ohio, here are a few examples of broadband improvements that I believe are a result of ARC investment in the region:

- 2003 TechNet Survey ranked Ohio 5th nationally with respect to Broadband deployment and use policies- The ARC funded Access Appalachia project was sited as a critical factor to that ranking
- Between 2002-2004, DSL availability doubled in the Appalachian Region of Ohio- PUCO requirements were given to telecom companies as a result of data collected through the Access Appalachia project
- The region now has Thirteen counties/communities with broadband improvement plans that are currently seeking funding

As an example, Marietta, the lovely City we are in this morning makes an excellent case for both the direct and indirect benefits of ARC investment on broadband availability within the Appalachian Region of Ohio. Mayor Michael Mullen, or Moon as he is commonly referred to down here heard me speak at a meeting in Chillicothe that was part of the outreach I was conducting for the Access Appalachia project. Through that educational process, he became a sparkplug for broadband improvement locally. Eventually, the Mayor responded to an RFP for a broadband planning grant funded through the ARC. He was successful in that effort and today, Moon has a plan to create a wireless broadband network within Marietta that will enhance municipal, educational, safety services, business and economic opportunities within Marietta. Although he is still pursuing funding to implement the project, I guarantee his persistence will lead to eventual success for his project and the region will benefit as a result.

I can't stress enough about the importance of ARC's investments and leadership with respect to broadband improvement within Ohio. Without their assistance, the Appalachian region of Ohio would not have the coordinated effort to improve broadband services we've seen to date. The ARC's investment started first with providing the benchmarking of broadband supply and demand, and then transitioned to education and local broadband planning projects. Through your leadership with the reauthorization, my sincere hope is that we will be discussing implementation projects next.

I appreciate your commitment to the ARC and would be happy to answer any questions. Thank you.

TESTIMONY OF GARY LITTLE, PRESIDENT, INFORMATION TECHNOLOGY ALLIANCE OF
APPALACHIAN OHIO

Thank you Senator Voinovich and members of the Senate Committee on Environment and Public Works for this opportunity to speak in support of the reauthorization of the Appalachian Regional Commission. I am Gary Little, President of the Information Technology Alliance of Appalachian Ohio, Inc., a nonprofit organization fostering economic development for the information technology sector of the region. For clarity, this sector includes computer, internet, ecommerce, and related businesses and industries, and also all the various computer applications found in public sector organizations including education.

ITAAO, the State of Ohio, Governor's Office of Appalachia, and the Appalachian Regional Commission have partnered on several occasions over the past 5 years to create an information technology community, an information technology visibility in Appalachian Ohio where it barely existed before. I often find myself on a soapbox promoting the region. Appalachian Ohio not only has a significant information technology sector, but we are leading the way in some areas.

Shawnee State University in Portsmouth, for instance, is one of the few universities in the country to offer two bachelors degrees in interactive digital technology development; one with a digital arts concentration and another with computer science/engineering concentration. Student enrollment is now over 100 bright, exceptional students from all around the country and locally. An article recently published by the Associated Press told of Michael Zyda's astonishment with the program, the creativity, and enthusiasm for computer game and serious game development in Appalachian Ohio. Zyda was the lead researcher on the U.S. Army's recruitment and instructional game, America's Army, and is Director of the GamePipe Laboratory at the University of Southern California. Zyda presented at the Shawnee Conference 3.0 on Interactive Digital Technology in 2005. This conference gained national attention in 2004, in part because of the support of the Appalachian Regional Commission. This is an example of great return on your investment. The small, but important, \$5,000 grant generated nearly \$20,000 in support on that specific event in 2004, but the real value is measured in the national publicity for Interactive Digital Technology (IDT) development, for Shawnee State University's IDT

degree programs, and also for related degree programs that are developing at Ohio University, Washington State Community College, Hocking College, and an existing computer animation degree program at Kent State University's Tuscarawas campus.

That event in 2004, grew from the original concept of a Region of Excellence in Interactive Digital Technology (IDT) when ITAAO Board Chairman, Bill Sams; Adena Ventures president, Lynn Gellermann, Shawnee State University Fine and Digital Arts Chairman, Tom Stead, Ohio University Provost, Kathy Krendl, and Shawnee State University President, Rita Rice Morris germinated the idea in 2003. This has now grown to the development of a prototype "cyber park" in the GRID (Game Research and Immersive Design) Lab at Ohio University with a \$247,500 ARC grant. From an original local match commitment of \$62,000., Ohio University has now dedicated nearly \$250,000 to this project, with additional funds from various local sources of nearly \$20,000. The Lab has also developed research and project relationships with the Smithsonian Institute, with a Columbus, OH company, a Massachusetts company, and a New York City serious game development company to develop educational and instructional games, and recently developed a partnership with Intel. To expand upon this success Ohio University has now announced its intentions to create an IDT research and development institute seeking Ohio Third Frontier support. Hundreds of thousands, and very possibly millions of dollars of program, research, and education activities are about to explode onto the scene only two years after ARC made its initial \$247,500 investment, and in the previous year a \$5,000 investment. Without these funds you would not now see the interaction and possibly business development in Appalachian Ohio by some of the nation's leading computer and IDT development companies.

Shawnee State University also has further expansion plans, and is now seeking private and public support to develop a whole new immersive arts and technology center that will include the most advanced motion capture facility for digital animation east of the Mississippi River.

The Appalachian Regional Commission has been instrumental in the blossoming of this concept, and will be a valuable partner in our continued efforts to create an innovation economy for this century.

A huge economy continues to grow nationwide (estimated at \$100 billion this year in computer games, educational and health applications, and corporate/business applications) and worldwide in interactive digital technology and there is no reason why our students, our young entrepreneurs, and retrained workforce cannot and should not take advantage of it.

All we need to do is focus upon the polygon—in IDT terminology—and strive for it.

STATEMENT OF ANGELA STUBER, EXECUTIVE DIRECTOR, OHIO COMMUNITY
COMPUTING NETWORK

SUMMARY

ARC's understanding of technology literacy has led to ARC investment of time and resources to improve the digital literacy skills and broadband access of Appalachian residents and businesses. They are excellent at connecting organizations and individuals with complementary goals. ARC recognizes the benefit of utilizing existing infrastructures while also leveraging local funds with federal funds. All of which is accomplished in projects controlled locally, not by the ARC.

ARC also recognizes there is a continuing need to expand broadband access and digital literacy programs in Appalachia. The continually expanding resources online are profound, from medical information, to financial resources to homework assistance, those without broadband must wait for pages to download, taking hours to complete tasks that should only require minutes. ARC is a great supporter of Community Technology Centers. They have seen the connection users form to their Centers and the variety of tech skills they obtain from the CTCs.

MY QUALIFICATIONS

I have been the Executive Director of the Ohio Community Computing Network (OCCN, www.ohioccn.org) for six years. I have served on the Community Technology Centers Network (CTCNet, www.ctcnet.org) Board of Directors for four years and as the Board President for one and a half years. I also serve as the Board Secretary for Grassroots.org (www.grassroots.org) and on the Board of Advisors of the Association of Community Networking (www.afcn.org). In addition, I blog about community technology issues at www.angelastuber.blogspot.com.

OCCN AND CTCNET

The Ohio Community Computing Network (OCCN) is a member-driven organization supporting community technology to promote full participation in a digital world. OCCN is committed to ensuring that every Ohioan can make full use of modern computing and networking technology for personal and community empowerment and enrichment.

OCCN was originally established in 1995 as the oversight and evaluation organization for the 14 community computing centers created and funded by the Ameritech Advantage Ohio alternative regulation case settlement. This was the first time in this country that a settlement before a state public utility commission included the funding of community computing centers in low-income neighborhoods. It was an important breakthrough in the effort to make computers and telecommunications technology accessible to people of all incomes. Community technology centers provide basic computer training and support to people with limited opportunities to learn about or use computer technology. CTCs are not developed by any Government Agency or program. They are developed by communities who see a need for technology access and training, usually focused on low income, disabled or rural populations. OCCN has distributed over \$5 million to community technology programs through agreements between the Public Utilities Commission of Ohio, regulated telecommunications companies and interested community organizations.

In June of 2005, the OCCN membership accepted the board and staff's recommendation to expand OCCN's mission beyond support to CTCs. OCCN now supports community technology efforts that include public access centers, mobile labs, computer refurbishing programs, online trainings and broadband access programs.

Our expanded mission led to OCCN helping form the Ohio Digital Divide Working Group (ODDWG). The Ohio Digital Divide Working Group is a unified effort to incorporate the goals of universal basic digital literacy & ubiquitous, affordable high-speed Internet access in regulatory, development and educational policies.

The Community Technology Centers' Network (CTCNet) was founded on the recognition that in an increasingly technologically dominated society, people who are economically disadvantaged will be left further behind if they are not provided access to and training on information tools. CTCNet envisions a society in which all people are equitably empowered with these tools. CTCNet is a national network of over 1000 Community Technology Centers.

ARC SUPPORT OF COMMUNITY TECHNOLOGY

Without ARC's support, the STEP UP program of Mission West Virginia's E-Impact initiative would not have been possible. STEP UP provides modern computer labs and high speed Internet access—for free—to some of the most rural areas of southern and central West Virginia. These labs utilize existing space in churches and community organizations while also leveraging the funds spent by Workforce Investment Board and state Department of Education officials, who use these labs to teach their curricula. The approach to partnering with community assets already in place also helps create a strong stakeholder relationship—again, improving sustainability and creating stronger communities through the use of ARC dollars.

ARC secured a million dollar Microsoft software donation, twice. Eligible applicants are nonprofits providing computer access or trainings. Microsoft limited distribution of the software from libraries and schools because they were already participating in Microsoft distribution programs, which leaves Community Technology Centers (CTCs) to receive the free software licenses. Partners in various states helped eligible organizations submit applications to ARC who would ensure the applications were complete and forward on to Microsoft. OCCN helped with the distribution in Ohio. To date, seven CTCs in the Appalachian region of Ohio have received free Microsoft software at a total retail value of over \$90,000.

ARC, in working with Microsoft and CTCNet, would like to expand CTCs in more areas of Appalachian Ohio. Distributing the Microsoft software licenses resulted in ARC realizing many Appalachian communities do not have CTCs. The ARC staff is currently discussing the development of a new program with CTCNet to create CTCs where there are none. This is a very exciting program which could intensely impact the lives of Appalachian residents in the target states. In Ohio we have seen tremendous success among the youth served by the CTCs in the Appalachian region of Ohio. The CTCs in this region have been very innovative in using online learning tools (Muskingum County), multimedia technology such as video cameras (Perry County), and after school family focused programs (Coshocton County). The youth have become engaged in the CTCs to such an extent that they feel the centers are "theirs". As they should.

ARC has supported OCCN's attempts to find community technology programs we are not currently aware of in order to introduce them to existing resources and provide assistance to them. One exciting initiative found is the community technology efforts in Chesterhill, OH. Utilizing an OSU developed transportable satellite dish, Ohio State University installed a wifi network in Chesterhill. To maximize use of the new broadband and to ensure residents have the opportunity to learn digital skills, the community is also creating a CTC. OCCN will continue to work with the community members and project partners to point them to resources and provide advice for them to choose their own path. Chesterhill now has a wifi network. They will be deciding whether to sustain it as a community network, a municipal network or a public/private network. OCCN very much supports local control and the opportunity for communities to choose what is best for themselves.

THE DIGITAL DIVIDE HAS NOT BEEN CLOSED

The attention of local leaders and the ARC to broadband access and digital literacy issues is commendable but this in no way should allow one to declare the digital divide now closed. Many residents of Appalachia still do not have access to broadband. When you are given statistics of how many do have access, I encourage you to ask how those numbers were derived. Most likely you will be told the data comes from Internet Service Providers (ISPs) reports to the FCC. ISPs may report they provide service to a zip code if they provide service to at least one customer with a particular zip code. In rural areas, zip code regions can be quite large. This is not a method by which to determine actual broadband access in the rural United States. To determine where broadband access in rural America actually exists, a true research study would need to be conducted.

To expand broadband to all, we must not restrain broadband competition and expansion. There is much discussion currently about national franchising creating broadband competition. We need to keep in mind that allowing national franchising without equitable buildout will only provide competition in neighborhoods most likely to provide high profit margins to the providers. In addition, if we restrict the rights of municipalities to create their own broadband networks, we are reducing one more potential source of broadband access.

We must remember that access to broadband is only half of the problem. We must also ensure our citizens know how to use a computer and the Internet. There are no focused sources of financial support for technology training. For a digitally literate workforce and citizenry, we need a continued source of funding for community technology programs. And we need to help local organizations create community technology programs in regions where there are currently none available.

STATEMENT OF DAVID SCHOLL, PH.D., PRESIDENT AND CEO, DIAGNOSTIC HYBRID, INC.

I wish to thank you for allowing me to testify on this important issue that affects the vitality of Diagnostic Hybrids and that of other businesses trying to get a start or maintain their operations and growth in the Appalachian Region.

So that I do not fail to summarize, I would like to begin at the end—operating as a business enterprise in a global marketplace means having ready access to:

- 1) A telecommunications infrastructure capable of delivering you to the world, and the world to you, each and every second of the day, 24/7; and
- 2) The necessary human resources to assist business operators with implementing productivity applications such as Enterprise Resource Programming (ERP), bar coding technology, web-enabled business applications, EDI for processing business transactions, e-mail, and internet security solutions.

Diagnostic Hybrids has been successful to date for multiple reasons. Underpinning the national recognition we received in 2004 and 2005 by being named in consecutive years to Inc. 500 Magazine's list of the Fastest Growing Private Companies in America are our people. Our employees are dedicated, committed and talented, and we attract them from within a 50 mile radius of Athens, OH.

We invest heavily in workforce development, both inside DHI and within the community, to help us meet our projected need for talent, particularly in the specialized manufacturing and laboratory technician area. This commitment is paying off and is a great investment for our Company.

Meeting our needs at Diagnostic Hybrids for telecommunications infrastructure is a bit more daunting task. Certainly, much progress has been made in focused areas of our region to build the telecommunications infrastructure necessary to meet the two primary needs I mentioned above. For example, The Ohio University Innovation

Center, a small business incubator affiliated with Ohio University, is equipped with broadband capability. Access to the telecommunications infrastructure provided by The Innovation Center is absolutely critical to our past and future growth.

I am sure there are other good examples.

Unfortunately, I can drive 10–15 minutes in any direction from our headquarters in Athens, OH where we employ nearly 170 of the best and brightest biotech employees in the world and likely be without (1) cell phone service for lengthy stretches, (2) wireless internet access, and (3) broadband capability.

Not too surprisingly, the many areas of the Appalachian Region in which this major deficiency, or digital divide, exists are characterized by those that develop telecom infrastructure as rural and under-populated, and thus economically not feasible to establish proper infrastructure.

Perhaps even more demoralizing, both personally and professionally, is to hear “outsiders” characterize those people that live within these areas (including me) as economically and intellectually impoverished because we are “not connected” ? at a minimum, we are viewed as out-of-step with today’s global economy and perhaps more fundamentally, today’s world!

The impact of this situation sooner or later ends up as a non-viable outcome for those without access. The impact is first felt with reduced educational aspirations on the part of our young people and ends with a lack of opportunity on the economic side ? forcing many to “move” to somewhere that has the infrastructure and thus the opportunity.

My recommendations for you to act upon would include providing incentives or grants to communities and/or businesses to acquire:

- Towers to increase the density within the region to enable DSL and wireless connectivity.
- Underground cable to provide for greater access to broadband.
- Consulting service talent to enable implementation of important productivity IT applications to help businesses run more efficiently and cost-effectively.

In summary, telecommunications infrastructure has become a vital utility to the global educational and business community in a fashion similar to the value placed on water, sewer, and transportation infrastructure. Without immediate and aggressive attention paid to this regional need, residents of the very beautiful and scenic region known as the Appalachian Region are destined to fall behind even further.

Thank you, and most sincerely.

STATEMENT OF JEFF HUGHES, DIRECTOR, ENVIRONMENTAL FINANCE CENTER,
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL, INSTITUTE OF GOVERNMENT

My name is Jeff Hughes and I am the Director of the Environmental Finance Center at the University of North Carolina. We are one of nine environmental finance centers across the country created to identify and address the finance challenges related to protecting and managing our nation’s environmental resources.

Our center currently works primarily on drinking water and wastewater infrastructure issues. We recently completed an applied research project in which we examined the current status of water infrastructure services, needs, and funding throughout Appalachia. Over a period of two years, we visited numerous communities; interviewed and surveyed hundreds of local, state, and federal officials; and analyzed needs, funding, environmental, and demographic data from throughout the region.

I would like to briefly present what we uncovered, particularly in relationship to the type of water and wastewater support provided by the ARC.

BACKGROUND

As you know, the way in which water and wastewater services are funded in the United States changed dramatically from the 1970s to the 2000s. The country moved from a sizable federal wastewater grant program that accompanied the passage of the 1972 Clean Water Act to a more complex system in which a smaller amount of funding is delivered through grants and loans administered by a wide variety of Federal and State Agencies including the ARC.

Around 2000, several national studies concluded that the level of spending on water and wastewater services in this new, more complex system is inadequate to meet the nation’s needs. Some studies quantified the needs, other quantified the gap between the need and what was likely to be available to meet the need. These numbers were quite large and as they were intended to do, caught the attention of many policy makers, funding agencies, and the media. Looking at these state level and

nationwide studies, it was difficult to disaggregate the situation in a region like the ARC that cuts across state boundaries.

While we began by trying to look at the 410 county ARC region as a unit independent of the rest of the country, one of the first things that became obvious to us was that from a water quality standpoint, the boundaries of the water resources of the region can not be separated from the rest of the country. The familiar saying “What goes on in _____, stays in _____!” definitely can not be applied to water quality in the ARC. Water quality protection successes and failures flow downstream without regard to political boundaries. Federal policy makers should realize that Appalachia is home to the headwaters of almost all the important rivers of the eastern United States. Thus whatever happens to Appalachian waters has major consequences far beyond the 410 counties within the ARC region.

Our work and findings revolved around a series of policy questions as follows:

What is the Current State of Water and Wastewater Services in Appalachia?

- Coverage by community water systems—that is, systems that provide water to the public for human consumption and serve at least 25-year-round residents—has expanded significantly in the last 15 years in Appalachia (to reach 74 percent of the population) but still lags significantly behind national coverage (85 percent of the population). Wells remain the primary source in some subregions (more than 75 percent of households in portions of the Appalachian Highlands).

- More people in Appalachia (33 percent) are served by small and medium-sized systems than people in the nation (20 percent) are. In general, the smaller the system, the higher the costs.

- Community water systems in Appalachia rely much more heavily on surface-water sources than systems in the nation as a whole do?18 percent versus 11 percent. Systems that rely on surface water tend to have significantly higher operating and capital costs than systems that treat groundwater.

- Proportionately more people in Appalachia than in the nation as a whole rely on onsite wastewater disposal. In 1990, the last year in which national data were collected by the Census Bureau, about 75 percent of U.S. households reported being served by public sewers, versus 52 percent of Appalachian households.

- In the scattered Appalachian places where careful surveys have been made, substantial numbers of people have failing onsite systems or no wastewater treatment systems at all. In many parts of the region, some individual systems are nothing more than “straight piping” (discharge of waste directly into a stream).

- Some of the highest-quality and most outstanding resource waters in the eastern United States are in Appalachia, but in many areas, surface water and groundwater are seriously impaired. For example, West Virginia has 878 impaired streams, covering approximately 6,170 stream miles.

- Water and wastewater infrastructure and services in Appalachia are intrinsically linked to and influenced by the natural environment of the region. Most of the environmental factors in Appalachia lead to higher costs, especially in the Highlands.

What are the Critical Infrastructure Needs in the Region?

- Appalachia accounts for about \$26 billion of the drinking water and clean water needs documented or projected in recent EPA surveys completed in 1999 and 2000. These survey numbers clearly represent a lower limit on the entire water and wastewater needs of the region, and even the EPA does not assume they are an accurate representation of true need. The surveys omit or underreport many needs either because of their definitions of what constitutes “need,” their methodologies, or their rate of nonparticipation.

- This estimate does not fully include many categories of needs that are disproportionately high in Appalachia, such as improvements to failing septic systems, extension of service to people with inadequate or no central water and wastewater treatment, watershed restoration for areas impaired by historic resource extraction and industrial activity, and better stormwater handling. Nor does the estimate include the funds necessary to operate and maintain new facilities or facilities that been neglected. Including these other needs likely raises the region’s total capital requirements to \$35-\$40 billion.

- Several states carry out needs surveys that are separate from the EPA surveys. Their definitions of “need” and their methodologies differ widely. The more comprehensive surveys that some states have carried out have uncovered needs not reported in the EPA surveys.

What Public Funding Options Are Currently Available to Meet Critical Infrastructure Capital Needs?

- Relatively few communities in Appalachia, especially in economically distressed counties, have credit ratings for water and wastewater purposes from major rating agencies. This lack of credit worthiness limits their direct access to the private capital market.
- Federally supported and coordinated programs disbursed about \$3.6 billion to Appalachian communities for water and wastewater projects between January 1, 2000, and December 30, 2003, and state programs disbursed about \$1 billion. More than \$1.5 billion was provided to communities as grants, and about \$3.1 billion took the form of loans.
- The special programs established by individual states accounted for 22.8 percent of the public fund investments. Such programs have been important in some states and nonexistent in others. States in Appalachia employ vastly different funding strategies, which lead to major differences in the types of assistance and incentives that reach local communities.
- Capital funding comes from a wide variety of independent and autonomous sources, making planning and management of applications, and timing of grants, loans, and matches a significant challenge for communities.
- The number of public funding programs and the amount of public funding to upgrade existing decentralized wastewater systems in Appalachia or build new, decentralized ones are extremely limited.
- Funding sources for project planning and other up-front aspects of water and wastewater projects are relatively few. ARC remains one of the few sources of grants funds available for planning.

What Types of Gaps Exist, and What Is the Capacity to Bridge Them?

- At the system level, many small utilities have insufficient revenues to cover future cash-flow requirements, once debt repayments and increased operating costs linked to necessary planned facilities are taken into account. These utilities are characterized by small and often shrinking customer bases. In some cases, even if grants for capital were available, the utilities would be unable to meet the operating costs associated with their facilities.
- In comparison with the nation as a whole, households in many Appalachian counties are paying a higher proportion of their income for water and wastewater services, so high in several areas for large numbers of households that asking them to pay more for improved service is infeasible. This household affordability gap has become the critical challenge for many utilities.
- Management shortfalls in the region range widely. At one end of the spectrum, some small systems are unable to support trained and educated staff. At the other end, some large systems have yet to shift from a reaction-oriented paradigm characterized by high maintenance costs and continual capital stock crises, to a more aggressive approach that includes asset management systems, proactive investments, and continual staff training.

What Financial Management and Funding Strategies Are Likely to Have the Biggest Impact on Service in the Region?

- In general, no single strategy or group of strategies identified in recent national studies of water and wastewater infrastructure will close the gap between services and needs in Appalachia as a whole. Instead, strategies must be designed and deployed on the basis of particular community characteristics.
- Regionalization—with its attendant consolidation of providers—offers widely varying possibilities for achieving economies of scale in Appalachia. It has helped some communities pool their resources and reduce costs enough to remain viable. However, some states have a history of regional entities and have institutional and regulatory frameworks favorable to regional systems. Other states have a go-it-alone culture, a historic model of a single provider prevalent in their system of government, and a relative lack of tested regional models. Promoting regionalization in these latter states requires addressing the structural obstacles. ARC funding has played a role in many complicated regionalization projects.
- Appalachia has shown that many communities can contribute to meeting their needs but many cannot generate adequate revenue to meet future needs with price increases alone. The ability to implement “full-cost pricing”—that is, setting rates at a level that generates sufficient revenues to cover all the capital and operating costs of providing service—offers only limited promise for bridging the capital gap in many parts of Appalachia, particularly in small and low- or negative-growth communities. Without external subsidization, many of these systems may collapse completely or slowly decline because of lack of system maintenance and investment.

- Some funding programs encourage or require communities to follow the principles of full-cost pricing to the extent possible before receiving funding. Such inducements or requirements often result in greater community contributions, showing that affordability constraints were less than previously stated.
- Privatization offers some communities a way to attain the economies of scale that regionalization brings, as well as access to greater technical and managerial capacity than is likely in a go-it-alone approach. However, private systems often have few financial incentives to reach the most remote and difficult-to-serve communities in Appalachia.
- Improved management strategies and expanded capital investments often carry a cost in terms of higher customer rates. “You get what you pay for” is a dangerous public health truism.

What Steps Can Funding Agencies and Technical Assistance Providers Take to Improve and Expand Service in the Region?

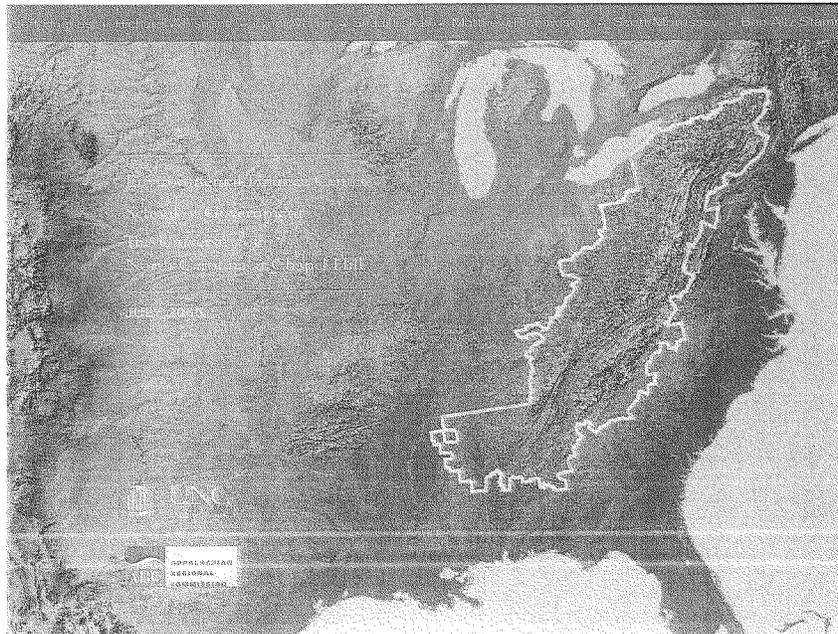
- For many communities with marginal fiscal capacity, careful manipulation of funding terms may offer the best hope of stretching limited public dollars. In some situations, long-term loans (for thirty or forty years) can make a capital project feasible for a community.
- The degree of cooperation and coordination among different funding programs varies significantly across Appalachia. Some states have coordination strategies and institutions that streamline local funding requests and assist in matching and optimizing different funding sources. In other areas of the region, the go-it-alone approach requires individual communities to navigate the complex funding options and seek the best deal they can get.
- External grant funding remains an essential component of an overall funding strategy. Without a significant amount of such funding, a certain number of communities would be unable to generate sufficient revenue to protect the public health and their surface-water quality. Some states in the region have integrated funding programs and strategies that rely on small amounts of grants to leverage loan funds, enabling communities to access the capital they need while covering the majority of the costs themselves.
- Some individual funding programs and some groups of funding programs carefully design funding packages that include a mix of grant and loan funding. In states where such coordination is weak and grants are not strategically linked to loans, communities consistently seek out grant funding even if they clearly have the ability to take on loan financing.

WATERWORKS



Drinking Water and Wastewater Infrastructure in Appalachia

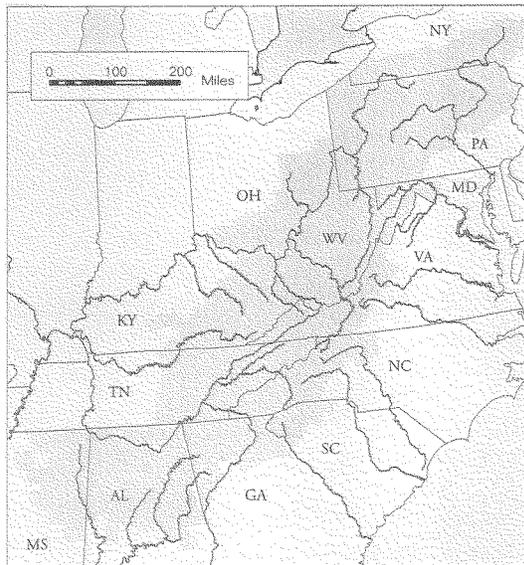
AN ANALYSIS OF CAPITAL FUNDING AND FUNDING GAPS—
REPORT SUMMARY



Introduction

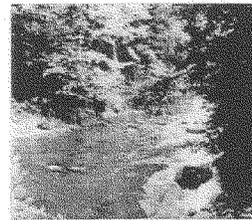
The way in which water and wastewater services are funded in the United States changed dramatically from the 1970s to the 2000s. The country moved from a sizable federal grant program that accompanied the passage of the 1972 Clean Water Act to a more complex system in which a smaller amount of funding is delivered through grants and loans administered by a wide variety of federal and state agencies. Around 2000, several national studies concluded that the level of spending on water and wastewater services in this new, more complex system was inadequate to meet the nation's needs.

FIGURE 1
U.S. Rivers Originating in Appalachia



In light of these conclusions, the Appalachian Regional Commission (ARC), one of the remaining important sources of federal grants for water and wastewater infrastructure in Appalachia, contracted with a team led by the University of North Carolina Environmental Finance Center (UNCEFC) to assess the needs and the gaps in funding for water and wastewater infrastructure in Appalachia*. The overall goal of the study was to help ARC and other policy makers understand how these services were being provided and funded and what might be done to meet the needs of the region more effectively.

Appalachia is home to the headwaters of almost all the important rivers of the eastern United States (see Figure 1). Thus whatever happens to Appalachian waters has major consequences for the nation as a whole.



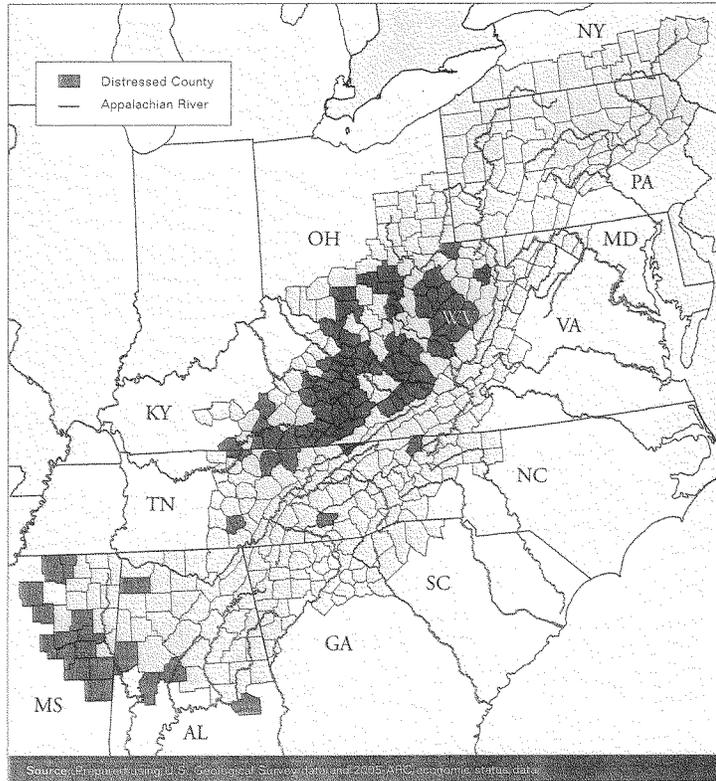
An Appalachian mountain stream.

*The other team members were the Blue Grass Area Development District, the Syracuse University Environmental Finance Center, and the University of Maryland Environmental Finance Center.

Introduction (continued)

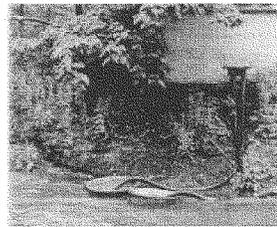
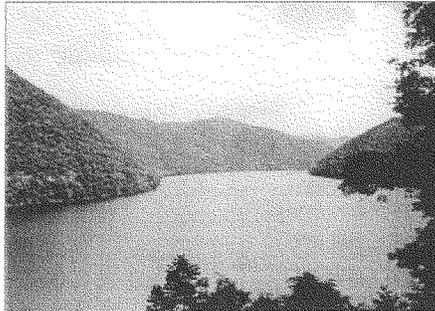
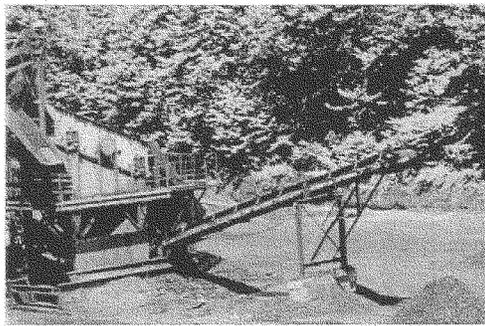
For ARC purposes, Appalachia consists of 410 counties, encompassing all of West Virginia and parts of Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, and Virginia—an area of 200,000 square miles and about 23 million people (8 percent of the U.S. population) (see Figure 2).

FIGURE 2
A Map of Appalachia as Defined by ARC, Highlighting the Counties Designated in 2005 as Distressed



Introduction *(continued)*

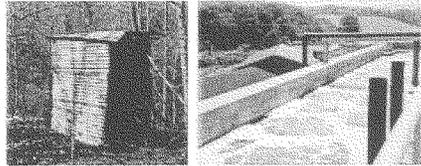
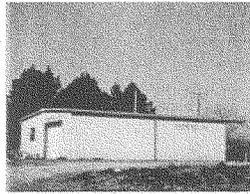
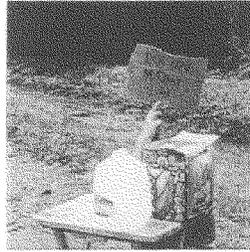
By any definition Appalachia is a rugged land of extremes. Its generally ample rainfall and, in some subregions, its groundwater resources bless it with water for drinking and wastewater assimilation. But its topography, its legacy of water pollution from economies built around resource extraction, and the extremely low fiscal capacity of many of its communities make funding water and wastewater improvements difficult.



CLOCKWISE FROM TOP LEFT: An abandoned coal processing facility, part of Appalachia's legacy of resource extraction; a picturesque stream, possibly impaired by mine drainage, bacterial contamination, or acid rain; standard housing, typical in some distressed counties of Appalachia; a water intake, illustrative of Appalachia's communities' dependence on their streams for drinking water; one of Appalachia's many rivers, home to a rich diversity of freshwater fish.

What Is the Current State of Water and Wastewater Services in Appalachia?

- Coverage by community water systems—that is, systems that provide water to the public for human consumption and serve at least twenty-five year-round residents—has expanded significantly in the last fifteen years in Appalachia (to reach 74 percent of the population) but still lags significantly behind national coverage (85 percent of the population). Wells remain the primary source of water in some subregions (more than 75 percent of households in portions of the Appalachian Highlands).
- More people in Appalachia (33 percent) are served by small and medium-sized systems than people in the nation (20 percent) are. In general, the smaller the system, the higher the costs.
- Community water systems in Appalachia rely much more heavily on surface-water sources than systems in the nation as a whole—18 percent versus 11 percent. Systems that rely on surface water tend to have significantly higher operating and capital costs than systems that treat groundwater.
- Proportionately more people in Appalachia than in the nation as a whole rely on onsite wastewater disposal. In 1990, the last year in which national data were collected by the Census Bureau, 52 percent of Appalachian households reported being served by public sewers, versus about 75 percent of U.S. households.



Wastewater disposal and treatment facilities, found in varying conditions and numerous sizes in Appalachia, ranging from septic outflows to municipal centralized systems.

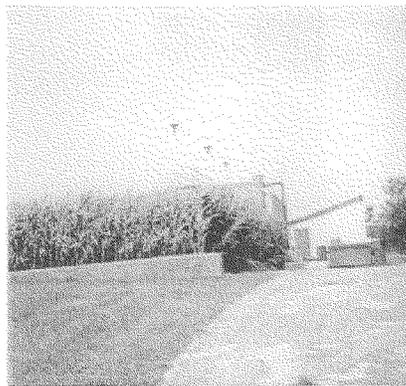
TOP TO BOTTOM: Youthful entrepreneurship; a storage facility of the Northwest Kemper Water Association; the water tower in Gaffney, South Carolina, home of the state's Beach Festival.

The Current State of Water and Wastewater Services in Appalachia *(continued)*

- In the scattered Appalachian places where careful surveys have been made, substantial numbers of people have failing onsite systems or no wastewater treatment systems at all. In many parts of the region, some individual systems are nothing more than "straight piping" (discharge of waste directly into a stream).
- Some of the highest-quality and most outstanding resource waters in the eastern United States are in Appalachia, but in many areas, surface water and groundwater are seriously impaired. For example, West Virginia has 878 impaired streams, covering approximately 6,170 stream miles.
- Water and wastewater infrastructure and services in Appalachia are intrinsically linked to and influenced by the natural environment of the region. Most of the environmental factors in Appalachia lead to higher costs, especially in the Highlands.



Courtesy of North Carolina Department of Environment and Natural Resources

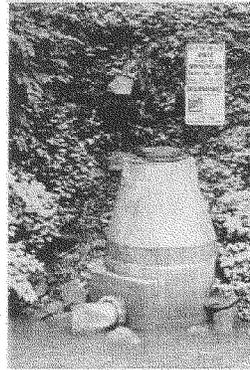


CLOCKWISE FROM TOP LEFT: A residential discharging waste into surface water via pipe (black) visible in the brush in adjacent flooded lake in western Appalachia. (See caption on page 4)



What Are the Critical Water Infrastructure Needs in the Region?

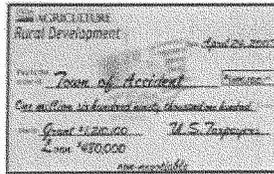
- Appalachia accounts for about \$26 billion of the drinking water and clean water needs documented or projected in recent EPA surveys. This number is clearly a lower limit on the entire water and wastewater needs of the region. The surveys omit or underreport many needs, either because of their definitions of what constitutes "need," their methodologies, or their rates of nonparticipation.
- This estimate does not fully include many categories of needs that are disproportionately high in Appalachia, such as improvements to failing septic systems, extension of service to people with inadequate or no central water and wastewater treatment, watershed restoration for areas impaired by historic resource extraction and industrial activity, and better storm-water handling. Nor does the estimate include the funds necessary to operate and maintain new facilities or facilities that have been neglected. Taking these other needs and underreporting into consideration raises the region's total capital requirements to at least \$35–\$40 billion.
- Several states carry out needs surveys that are separate from the EPA surveys. Their definitions of "need" and their methodologies differ widely. The more comprehensive surveys that some states have carried out have uncovered needs not reported in the EPA surveys.



ABOVE: The overflow mechanism of a system designed to discharge both sanitary sewage and storm-water runoff directly into streams, now recognized to threaten public health. LEFT: a water system in decline.

What Public Capital-Funding Options Are Currently Available to Meet Critical Infrastructure Needs?

- Relatively few communities in Appalachia, especially in economically distressed counties, have credit ratings for water and wastewater purposes from major rating agencies. This lack of creditworthiness limits their direct access to the private capital market.



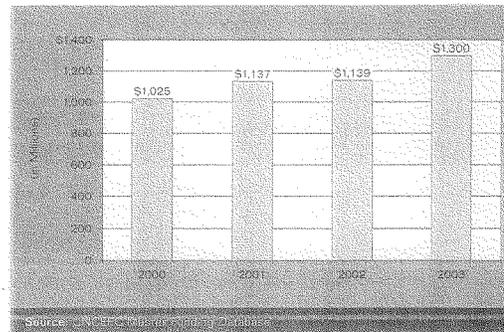
- From 2000 through 2003, federally supported and state-supported programs disbursed about \$4.6 billion in grants and loans for water and wastewater infrastructure in Appalachia (see Figures 3 and 4).
- The special programs established by individual states accounted for 22.8 percent of the public fund investments. Such programs have been important in some states and nonexistent in others. States in Appalachia employ vastly different funding strategies, which lead to major differences in the types of assistance and incentives that reach local communities.

- Capital funding comes from a wide variety of independent and autonomous sources, making planning and management of applications, and timing of grants, loans, and matches a significant challenge for communities.
- The number of public funding programs and the amount of public funding to upgrade existing decentralized wastewater systems in Appalachia or build new decentralized ones are extremely limited.
- A statistical analysis conducted as part of the study indicated that the distribution of water and

wastewater infrastructure funding in Appalachia was significantly and positively related to needs identified by the EPA's 2000 Clean Watersheds Needs Survey. (A "significant" relationship is one that could not have occurred by chance.) The distribution of funding also was significantly and positively related to violations of the National Pollutant Discharge Elimination System and incidences of waterborne diseases.

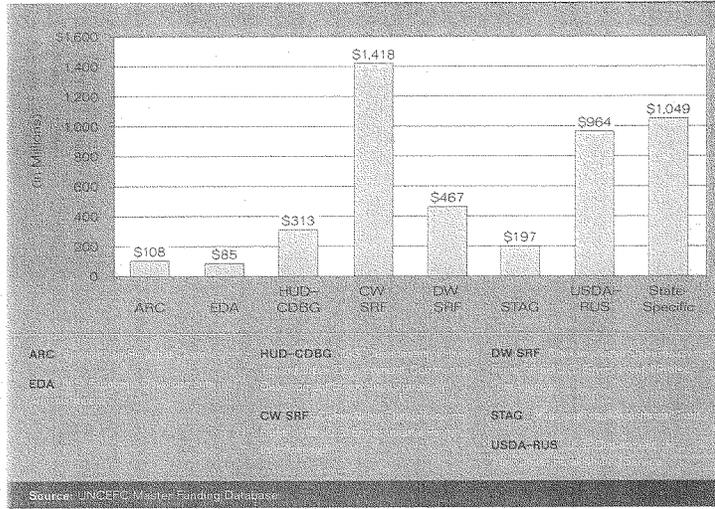
- Funding sources for project planning and other up-front aspects of water and wastewater projects are relatively few.

FIGURE 3
Disbursements in Appalachia by Federally Supported and State-Supported Programs, 2000–2003



Public Capital-Funding Options (continued)

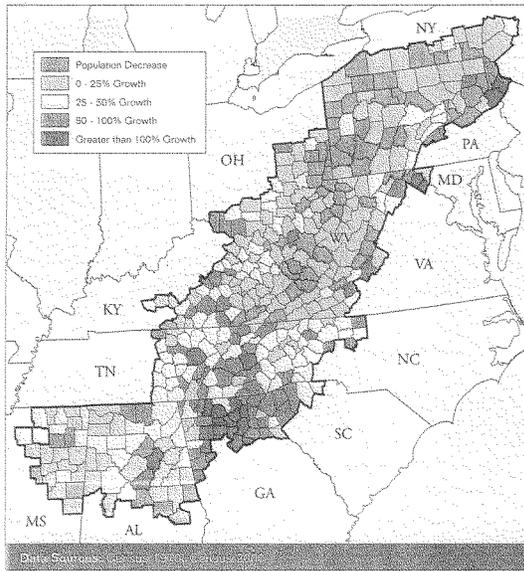
FIGURE 4
Disbursements in Appalachia by Major Water and Wastewater Programs, 2000–2003



What Types of Gaps Exist, and What Is the Capacity to Bridge Them?

- At the system level, many small utilities have insufficient revenues to cover future cash-flow requirements, once debt repayments and increased operating costs linked to new facilities are taken into account. These utilities are characterized by small and often shrinking customer bases. In some cases, even if grants for capital were available, the utilities would be unable to meet the operating costs associated with their facilities. These utilities are characterized by small and often shrinking customer bases (see Figure 5).
- In comparison with the nation as a whole, households in many Appalachian counties are paying a higher proportion of their income for water and wastewater services, so high in several areas for large numbers of households that asking them to pay more for improved service is infeasible. This household affordability gap has become the critical challenge for many utilities.
- Management shortfalls in the region range widely. At one end of the spectrum, some small systems are unable to support trained and educated staff. At the other end, some large systems have yet to shift from a reaction-oriented paradigm characterized by high maintenance costs and continual capital-stock crises, to a more aggressive approach that includes asset management systems, proactive investments, and ongoing staff training.

FIGURE 5
Population Change in the Appalachian Counties from 1970 to 2000



Population Change	1970-2000	1990-2000
Population Decrease	12.5%	15.2%
0 - 25% Growth	28.3%	31.1%
25 - 50% Growth	35.7%	38.4%
50 - 100% Growth	18.9%	16.7%
Greater than 100% Growth	5.7%	4.6%

A household water bill. Assessing the full cost of water and sewer provision through water bills would result in prices far beyond the financial capacity of many Appalachian households.

What Financial Management and Funding Strategies Are Likely to Have the Biggest Impact on Service in the Region?

- In general, no single strategy or group of strategies identified in recent national studies of water and wastewater infrastructure will close the gap between services and needs in Appalachia as a whole. Instead, strategies must be designed and deployed on the basis of particular community characteristics.
- Regionalization—with its attendant consolidation of providers—offers widely varying possibilities for achieving economies of scale in Appalachia. It has helped some communities pool their resources and reduce costs enough to remain viable. However, some states have a history of regional entities and have institutional and regulatory frameworks favorable to regional systems. Other states have a go-it-alone culture, a historic model of a single provider prevalent in their system

of government, and a relative lack of tested regional models. Promoting regionalization in these latter states requires addressing the structural obstacles.

- Appalachia has shown that many communities can contribute to meeting their needs but many cannot generate adequate revenue to meet future needs with price increases alone. Implementing “full-cost pricing”—that is, setting rates at a level that generates sufficient revenues to cover all the capital and operating costs of providing service—offers only limited promise for bridging the capital gap in many parts of Appalachia, particularly in small and low- or negative-growth communities. The additional revenue from even large price increases will never cover the funding gap for many Appalachian systems. Without external subsidization,

many of these systems will either collapse completely or slowly decline because of lack of system maintenance and investment.

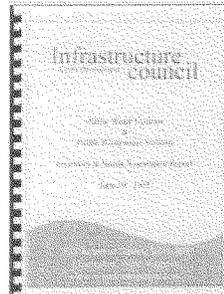
- Some funding programs encourage or require communities to follow the principles of full-cost pricing to the extent possible, before receiving funding. Such inducements or requirements often result in greater community contributions, showing that affordability constraints were less than previously stated.
- Privatization offers some communities a way to attain the economies of scale that regionalization brings, as well as access to greater technical and managerial capacity than is likely in a go-it-alone approach. Equally important, large multiple-jurisdiction for-profit providers offer rate-setting and institutional options not readily available to isolated single-jurisdiction systems.
- Private companies often do not have incentives for entering into the most remote and impoverished areas of Appalachia. Although they have clearly helped bridge the infrastructure capital gap in many communities, a number of their bridging strategies ultimately carry a significant cost to the customer.



Private water companies, heralded by some as a potential means of improving water provision, dismissed by those who want water provision to remain in public hands.

What Steps Can Funding Agencies and Technical Assistance Providers Take to Improve and Expand Service in the Region?

- For many communities with marginal fiscal capacity, careful manipulation of funding terms may offer the best hope of stretching limited public dollars. In some situations, long-term loans (for thirty or forty years) can make a capital project feasible for a community.
- The degree of cooperation and coordination among different funding programs varies significantly across Appalachia. Some states have coordination strategies and institutions that streamline local funding requests and assist in matching and optimizing different funding sources. In other areas of the region, the go-it-alone approach requires individual communities to navigate the complex funding options and seek the best deal they can get.
- External grant funding remains an essential component of an overall funding strategy. Without a significant amount of such funding, a certain number of communities would be unable to generate sufficient revenue to protect the public health and their surface-water quality. Some states in the region have integrated funding programs and strategies that rely on small amounts of grants to leverage loan funds, enabling communities to access the capital they need while covering the majority of the costs themselves.
- Some individual funding programs and some groups of funding programs carefully design funding packages that include a mix of grant and loan funding. In states where such coordination is weak and grants are not strategically linked to loans, communities consistently seek out grant funding even if they clearly have the ability to take on loan financing.



TOP RIGHT: A publication of the West Virginia Infrastructure and Jobs Development Council, one of the region's most effective funding and coordinating agencies, helping other funding programs reach their beneficiaries more effectively and efficiently. RIGHT: an Appalachian town that, its modest size notwithstanding, has the capacity to implement sophisticated management techniques.



Contact Information



ARC is a federal-state partnership created in 1965 by the Appalachian Regional Development Act to promote the economic and social development of Appalachia. The act, as amended in 2002, defines the region as 410 counties, encompassing all of West Virginia and parts of Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, and

Virginia—an area of 200,000 square miles and about 23 million people. For more than 40 years, ARC has funded a wide range of programs in Appalachia, including highway corridors; community water and wastewater facilities and other physical infrastructure; health, education, and human resource development; economic development programs and local capacity building; and leadership development.

For more information about ARC and its other projects, visit www.arc.gov call (202) 884-7700 or write to ARC, 1666 Connecticut Avenue N.W., Suite 700, Washington, DC 20009-1068.



The Environmental Finance Center based at the School of Government at the University of North Carolina at Chapel Hill is an interdisciplinary organization for teaching, assisting communities, and conducting policy analysis. Faculty and students working with the center concentrate on helping improve the financing and the delivery of environmental goods and services.

For more information on the center, or for a copy of the full report on funding gaps and needs in Appalachia, visit www.efc.unc.edu call (919) 843-4956 or write to Environmental Finance Center, CB# 3330 Knapp-Sanders Building, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-3330.

The UNC center is one of a group of university-based centers that concentrate on problems in the financing of environmental services. The Environmental Protection Agency originally established the centers to bring the work of researchers in the universities directly to bear on local environmental problems. For more information on the Environmental Finance Center Network, visit www.efcnetwork.org.

STATEMENT OF STEVE GROSSMAN, EXECUTIVE DIRECTOR, OHIO WATER
DEVELOPMENT AUTHORITY

My name is Steve Grossman, and I am the Executive Director of the Ohio Water Development Authority (OWDA). The Authority has existed for 38 years and is proud that Senator Voinovich had the insight to help create the Authority, and that the USEPA used the work of the Authority as its model when it created the State Revolving Fund Program in the mid 1980's.

Since its inception, the Authority has made over \$7.3 billion in loans to Ohio communities. From 2000 to 2004, loan programs that are financially managed by the Authority accounted for approximately 47 percent of all funding for water and wastewater construction in Ohio.

In cooperation with the leadership from several State Agencies, OWDA helped create the Small Communities Environmental Infrastructure Group (SCEIG), an association of Federal and State Agencies, local Governments and groups, service organizations, and educational institutions, designed to help small communities in meeting their environmental infrastructure needs.

One of the key committees of SCEIG is the Appalachian Environmental Infrastructure Strategy Workgroup, whose mission is to strengthen an effective delivery of technical and financial assistance from multiple sources, to areas in Appalachia most in need of wastewater and water infrastructure improvements.

It is with this background and my strong interest in knowing and understanding all the funding sources for water and wastewater in the state that I come before you today.

Referring to Attachment 1, during the 2000 to 2004 period, approximately \$4.15 billion was invested by Ohio communities in water and wastewater projects. All the sources for this money are shown in Appendix 1. Of this amount, 12 percent came from grants, 45 percent came from loans with an interest rate that has been subsidized by a governmental body, and 43 percent came from loans at a market rate of interest. As noted in Attachment 1, for the preceding 10-year period, the percentages were 14 percent, 37 percent and 49 percent respectively.

While the percentages have gone down, actual funding has increased. Attachment 2 shows an annual average for the five year period of 2000 to 2004 to be \$829.5 million, compared to the ten year average (1990-1999) of \$505.7 million. This is an increase of 64 percent. While there was an increase in funding of 37 percent in grants and 43 percent in loans at a market rate of interest, the greatest increase of 103 percent came from loans with an interest rate that has been subsidized by a governmental body. Further analysis reveals that the SRF programs, both for water and wastewater, primarily accounted for this increase; thus enabling the state to keep up with the 64 percent increase in demand.

Having set the overall state picture, one needs to address what has happened in the Appalachian region of Ohio. As Attachment 3 demonstrates, the breakdown by funding types is significantly different in Appalachia as compared to the rest of the state. Where the rest of the state received 9 percent of its funding from grants, Appalachia received 32 percent. As the rest of the state received 46 percent of its funding from loans at a market rate of interest, Appalachia received 15 percent. The difference for loans with an interest rate that has been subsidized by a governmental body is not as dramatic; the rest of the State received 45 percent compared to 53 percent for Appalachia.

Appalachia also is significantly different from the rest of the state in terms of program participation in funding water and wastewater projects. Historically, bonds issued by a local Government and the SRF Programs account for more than 75 percent of project funding outside of Appalachia. Within Appalachia (Attachment 5) they account for only 34 percent of funding.

Ohio, as compared to many other states, has a relatively large variety of programs to assist communities in funding their water or wastewater projects. With this variety come complexities and an increased need for program coordination. This is clearly shown in Attachment 4 and 5, where the role of each program is shown. There is no one dominant program. Each community, with the assistance of its technical assistance provider and/or consulting engineer, sorts through a variety of programs, choosing the group of programs that the leadership of the community feels is best suited for its needs.

While 5 percent of total funding (Attachment 5) comes from the Appalachia Regional Commission, Attachment 6 shows that this is 15 percent of all grant money, a critical component for funding projects in Appalachia.

As one looks toward the future (and by future; assume a period of no more than 4 years), it is clear that there will be no let up on the demand for project funding in Appalachia. Based upon the Ohio EPA's intended use plans for both water and

wastewater, recent applications to the Ohio Public Works Commission, information entered into the Appalachia Bulletin Board (an initiative of the Appalachian Environmental Infrastructure Strategy Workgroup) and recent quarterly project planning reports submitted by communities to OWDA, there is already a demand for approximately \$340 million. I believe that this is the minimum demand for funding that will be requested during the next four years. As noted in Attachment 2, the total demand has grown in the state and it will continue to grow.

If the number of \$340 million proves to be accurate for a period of four years at \$85 million/year; it would exceed the annual average of \$80 million (Attachment 3) for the period of 2000 to 2004. The estimates are not precise and, as I have discovered in my 17 years with the Authority; the seriousness about any one project comes and goes. But one thing is certain; decreases in any grant funding will provide an increasing financial burden on any community.

One only has to look at the increasing water and sewer rates as compiled by the Ohio Environmental Protection Agency (Attachments 7 and 8) to see that user fees for both water and wastewater are increasing at a faster pace than inflation; and this increase, given today's economic conditions and environmental demands, is only going to continue to increase at this higher pace.

If one was to look at all sources of grants in the state, one would conclude that, at best, it will remain the same during the next four years. While grant funds from the Ohio Public Works Commission will increase by approximately 20 percent, this will not occur within the next 6 years. There is continuing pressure on the US Department of Agriculture's Rural Development Program to reduce the percentage of grants it provides to communities (a decrease has been occurring in recent years), and the Community Development Block Grant Program is under continuous pressure to having its funding reduced. Besides the US Department of Commerce's Economic Development Program (which plays an important but minimum role in the Appalachian region of the State), the only other program source of grant money is from the Appalachian Commission.

Decreasing these funds would have a significant impact in Appalachia. I might add that a major unknown in all of this is federal appropriations (See Attachment 6) coming from Ohio's congressional delegation to Ohio communities, through State and Territorial Assistance grants and through the Army Corps of Engineer's 594 Program. While I recognize this is a Congressional prerogative, I believe that it is not going to increase.

I think that the increase in actual demand, as demonstrated in Attachment 2, is going to continue. It will not be as dramatic as all the national studies proclaim it will be, but it will increase. Where will the funding sources to meet the demand come from? There only are three possible sources.

- Debt Issued by the Community, which (See Attachment 5) infrequently occurs in Appalachia;
- OWDA's Market Rate of Interest Loan Program and its Community Assistance Program; or
- The SRF Programs.

Regardless of which of the three financial programs is selected in the future, users in the communities will be paying more. Obtaining a five year reauthorization of the ARC will be an alleviating financial factor in Appalachia.

Water and Wastewater Infrastructure in the Appalachian Region of Ohio

71

Steve Grossman, Executive Director
Ohio Water Development Authority
April 20, 2006

Environmental Infrastructure 1990-2004

Fund Type	1990-1999 Amount (\$000,000)	Percentage	2000-2004 Amount (\$000,000)	Percentage
Grant	\$ 708.1	14%	\$ 486.4	12%
Loan - Market Rate	\$ 2,490.6	49%	\$ 1,775.8	43%
Loan - Subsidized	\$ 1,858.5	37%	\$ 1,885.4	45%
Total	\$ 5,057.2		\$ 4,147.6	

Environmental Infrastructure Funding A Yearly Average Comparison Change in Funding

	1989-1999 Amount (\$ 000,000)	2000-2004 Amount (\$ 000,000)	Percentage Increase
Fund Type			
Grant	\$ 70.8	\$ 97.2	37%
Loan - Market Rate	\$ 249.1	\$ 355.2	43%
Loan - Subsidized	\$ 185.8	\$ 377.1	103%
TOTAL IN (000,000)	\$ 505.7	\$ 829.5	64%

Attachment 2

FUNDING SUMMARY COMPARISON

Ohio Appalachian and Non-Appalachian Counties
2000 - 2004

FUND TYPE	APPALACHIAN COUNTIES*	NON-APPALACHIAN COUNTIES
Amount (\$000,000)	Amount (\$000,000)	Amount (\$000,000)
Grant	\$127.5	\$ 358.9
Loan-Subsidized	\$213.9	\$1,671.5
Loan-Market	\$ 61.9	\$1,713.9
Total	\$403.3	\$3,744.3
Annual Average	\$ 80.7	100%

*Appalachian Counties include:
 Adams, Athens, Belmont, Brown, Carroll, Clermont, Columbiana, Coschocton, Gallia, Guernsey,
 Harrison, Highland, Hocking, Holmes, Jackson, Jefferson, Lawrence, Meigs, Monroe, Morgan,
 Muskingum, Noble, Perry, Pike, Ross, Scioto, Tuscarawas, Vinton, Washington

Funding Program Participation in Appalachia

GRANTS	ACE	\$ 3,106,000
	ARC fed	13,738,650
	ARC state	5,600,435
	CDBG state	13,343,100
	EDA	10,351,608
	EPA Approp	12,514,365
	ER	60,692
	OPWC CE	2,153,176
	OPWC Gr	32,870,777
	RD.Gr	33,718,860
		<u>\$127,457,663</u>
LOANS	CA	\$ 33,854,922
SUBSIDIZED	SRF*	104,547,846
	OPWC Ln	19,791,648
	RD Ln	55,715,000
		<u>\$213,909,416</u>
LOANS MKT. RATE	Bonds	\$ 32,206,880
	OWDA Ln	29,685,420
		<u>\$ 61,892,300</u>
GRAND TOTAL		<u>\$403,259,378</u>

*Includes both the Water Pollution Control Loan Fund (WPCLF) and the Drinking Water Assistance Fund (DWAF) Programs.

Funding Program Participation in Appalachia By Percentages

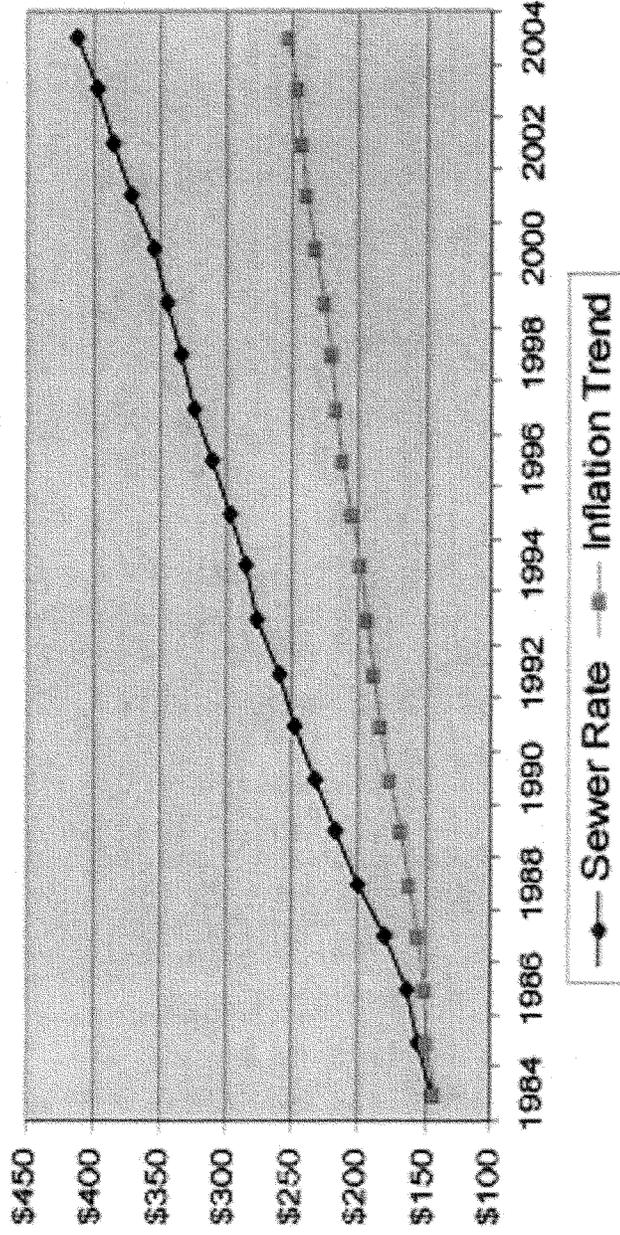
GRANTS	ACE	1%
	ARC fed*	4%
	ARC state*	1%
	CDBG state	3%
	EDA	3%
	EPA Approp	3%
	OPWC CE**	1%
	OPWC Gr**	8%
	RD Gr***	8%
LOANS	CA	8%
SUBSIDIZED	SRF****	26%
	OPWC Ln**	5%
	RD Ln***	14%
LOANS MKT. RATE	Bonds	8%
	OWDA Ln	7%
All ARC *		4%
All OPWC **		14%
All RD ***		22%

Includes both the WPCLF and the DWAF ****

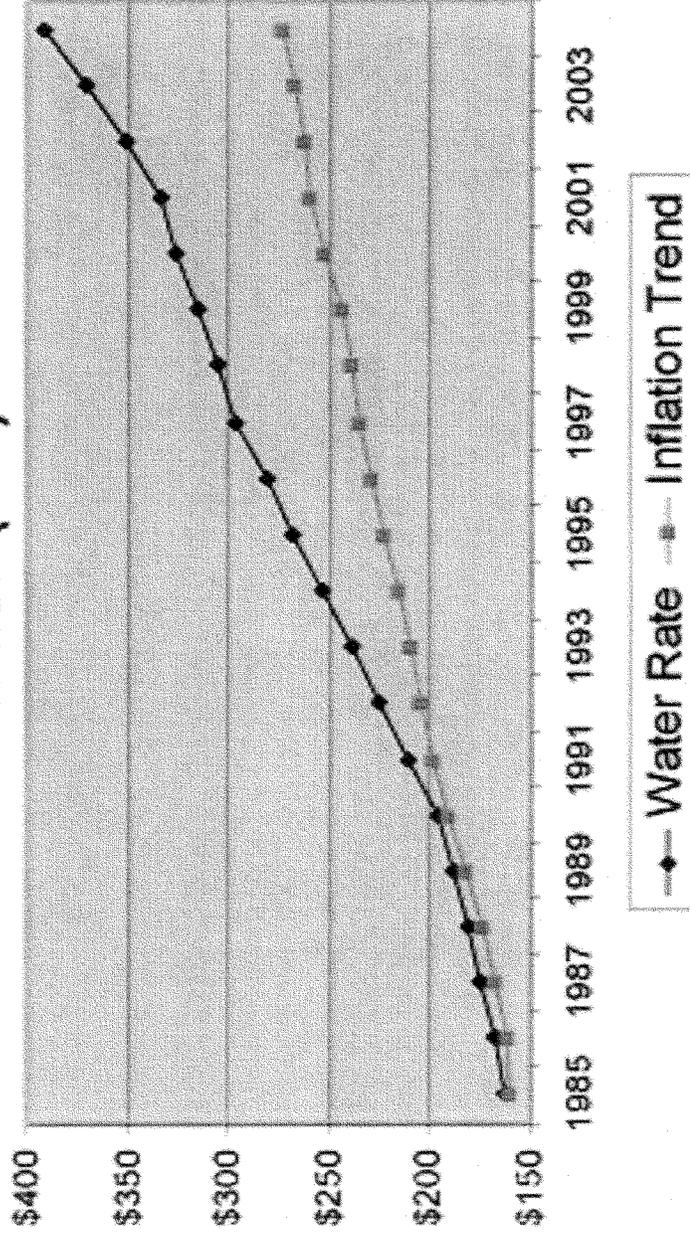
Grant Funding Program Participation in Appalachia By Percentages

ACE	2%
ARC fed	11%
ARC state	4%
CDBG state	11%
EDA	8%
EPA Approp	10%
OPWC CE	2%
OPWC Gr	26%
RD Gr	26%

Average Ohio Sewer Rates and Inflation (CPI)



Average Ohio Water Rates and Inflation (CPI)



PUBLIC PROGRAMS FUNDING ENVIRONMENTAL INFRASTRUCTURE

	<u>Funding Source</u>	<u>Public Agency</u>
ACE	Army Corp of Engineers	US Army Corp of Engineers
ARC	Governor's Office of Appalachia	Ohio Dept of Development
Bonds	Municipal Bonds	Local Government
CA	Community Assistance Fund	Ohio Water Development Authority (OWDA)
CDBG	Community Development Block Grant	Ohio Dept of Development and US Housing and Urban Development
DWAF	Drinking Water Assistance Fund	Joint Ohio Environmental Protection Agency (Ohio EPA) & (OWDA)
EDA	Economic Development Administration	US Dept of Commerce
EPA	Environmental Protection Agency	Ohio & US Environmental Protection Agency
ER	Emergency Relief	OWDA
LED	Local Economic Development	OWDA
OPWC	Ohio Public Works Commission	Ohio Public Works Commission
OWDA	Ohio Water Development Loans	OWDA
RD	Rural Development	US Dept Of Agriculture
ROT	Water & Sewer Rotary Fund	Ohio Dept of Development
SAFER	Security Assistance Fund	OWDA
WPCLF	Water Pollution Control Loan Fund	Joint OEPA & OWDA

STATEMENT OF KEN REED, DIRECTOR, VINTON COUNTY COMMUNITY AND ECONOMIC
DEVELOPMENT, VINTON COUNTY COURTHOUSE

My name is Ken Reed and I serve as the Development Director for the Vinton County Board of Commissioners. I would like to thank the committee for giving me this opportunity to share with you the impact Appalachian Regional Commission funding has made in my community.

Vinton County is one of the most economically distressed, most rural counties in Ohio. For the last 16 years I have been a community and economic development practitioner working to improve the quality of life there. Daily, I face the challenge of trying to address many basic human needs with limited resources.

Over the years, ARC funding had been an invaluable resource in implementing new projects in my community. Without ARC funds Vinton County would not have 911 service, our only dental clinic would not have equipment, and many residents would not have a reliable, affordable source of potable water.

Vinton County has been successful in using ARC funds to leverage additional State, Federal, and private funds. Without ARC funds Vinton County would not be able to access these additional financial resources. In a community such as mine, with very limited local resources, ARC has been an invaluable source of matching funds for many projects that would not have happened had it not been for ARC funds.

Having administered a wide variety of State and Federally funded programs over the years, I can testify to the efficacy of ARC funding. Working in tandem with the State of Ohio, through the Governor's Office of Appalachia, and the local development district, we at the local level are able to develop potential ARC projects and prioritize them. This local input ensures that local needs are identified and addressed by those who are most familiar with the area.

ARC funding has had a quantifiable impact on the quality of life in Vinton County. I implore this Committee to reauthorize the ARC so that we can continue to improve conditions in my community. The Bible says "a man reaps what he sows". How true that is of the ARC. The local projects that have been seeded with ARC funds have resulted in a harvest of improved living conditions for the residents of Vinton County. If you continue to furnish us with the seeds, we at the local level will continue to plant, water, and cultivate, and we as a society will all reap the benefits.

STATEMENT OF JEFF SPENCER, EXECUTIVE DIRECTOR, OHIO VALLEY REGIONAL
DEVELOPMENT COMMISSION

I appreciate the opportunity to express some of my views regarding the impact of the current program of the Appalachian Regional Commission (ARC) and regarding pending ARC reauthorization legislation.

First of all, I am Director of the Ohio Valley Regional Development Commission (OVRDC) which is the largest of Ohio's 3 Appalachian Local Development Districts (LDD'S) with 11 Appalachian counties and 1 non-Appalachian County. Secondly, I am currently the First Vice President of the Development District Association of Appalachia (DDAA) which represents 72 Development Districts throughout the 13-State region.

The Appalachian program has had an enormous positive economic and community development impact on southern Ohio during its existence. One example that indicates this significant impact on just one distressed county, Pike County, is that ARC grant assistance has enabled the construction over 55 miles of rural water lines to thousands of residents who did not previously have a safe, reliable source of water. ARC has provided hundreds of miles of key waterlines to un-served rural residents throughout our region. In addition, all 11 of our Appalachian counties have developed at least 1 key industrial park with the help of infrastructure grant assistance from ARC. These industrial parks have created an average of over 200 jobs per park in just the last 2-3 years, which totals approximately 2,500 jobs.

Our southern Ohio region, it is clear would not have made the economic advances that it has over the last 5 years without the key infrastructure grants provided by ARC. ARC grants have helped provided not only improvements in the traditional water and wastewater infrastructure but other key community infrastructure as well. For instance, ARC grant assistance has been key in developing several new comprehensive day care and child development centers in our region. Since fiscal year 2001, ARC grants have assisted in the development of 4 new child development centers. These centers have been key to providing quality day care for working parents as well as key preschool educational development skills for the regions children.

Another important type of critical need addressed with ARC grants is the need to update college and vocational school curriculum and equipment. In order for our southern Ohio students and residents to compete with comparable job skills with the rest of the state and nation it is imperative that our schools have the resources to update their equipment and curriculum to address the higher skill job requirements. During the last five (5) years an average of 1 education project per year has received ARC grant assistance to provide critical new equipment needed to keep courses, curriculum, and students up to date on their training and jobs skills.

One of the important types of grant assistance which the ARC program provides is the Annual Administrative grants to the 72 Local Development Districts, who provide the regional development leadership, planning and technical assistance to enable their local communities to receive grants and develop resources and infrastructure. Each LDD's is actively involved and provides staff assistance to local communities to plan and address their key community and economic development needs. Many small communities and villages simply do not have the financial and staff resources to address their key needs without the assistance of the staff of their LDD's.

These administrative grants to LDD's allow them to support and use their staff to pursue other federal, state and foundations funding that will help address important needs of each region. LDD staff not only help local communities plan and secure grants, but for many small communities they will also administer the grant and meet all reporting requirements. A recent report developed by the DDAA cites a key statistic regarding federal, local and state grants administered by LDD's: "Between 1990 and 2005, our LDD's administered almost 7,700 grants and projects totaling more than \$5.5 billion in pass through and programmatic funds." These LDD administrative grants provide the critical support to LDD's so that they can remain regional leaders and assist their communities with development needs. With increasing LDD professional staff salaries and health care costs it is important that these LDD Administrative grants be increased in the next few years.

Although the region's infrastructure and economic develop prospects have improved over the last 5 years, continued improvements are needed in southern Ohio in order for us to reach parity with the rest of the state and nation. Unemployment still remains higher in most our counties, poverty rates remain higher, average salaries in almost all sectors remain significantly lower and average educational attainment remains lower. All of these key statistics indicate that much still remains to be addressed in order to bring the region to a par with the nation. Therefore, ARC reauthorization legislation is critically needed in order for us to continue to address the needs of the region.

Some of our southern Ohio counties have improved in economic conditions just enough during the last 4-5 years to be removed from the ARC designated list of distressed counties. The OVRDC region has seen the number of distressed counties reduced from 7 to 2 counties during this period. However, we need to look more closely at the statistics in order to more comprehensively assess the economic situation of these counties. Many of these counties saw improvements in poverty rates or per capita income of just a few percent. The changes were just enough, however, to move them from the ARC distressed county designation. These counties economically, however, remain closer to their sister distressed counties than the other more prosperous transitional counties.

It has creating a hardship the last few years for these 5 counties that left the distressed county category and yet still have serious economic problems. The current ARC legislation requires a 50 percent match for any potential ARC projects. ARC has classified 4 of OVRDC counties as at-risk for fiscal year 2006 (Adams, Jackson, Lawrence, and Scioto) and Ohio Appalachian has 6 counties at-risk (Morgan and Perry also). In the 13 state Appalachian region there are 81 counties classified as at-risk.

Under current ARC legislation, the at-risk counties still have to provide 50 percent local match. I am urging you to address the need of these at-risk counties in the ARC reauthorization legislation by enabling them to receive 70 percent grants with a 30 percent local match. This will make it significantly easier for our at-risk counties to develop ARC grants to address their critical community and infrastructure needs.

Another need I would like to see addressed in the ARC reauthorization bill is to designate entrepreneurship as a special regional initiative with funds set aside for entrepreneurship facilitation projects. Since all national and regional economic development studies have consistently show that 80 percent of new job development comes from existing employers and new start-up businesses it is critical that ARC funds are available for entrepreneurship assistance. I realize that ARC project guidelines do currently allow for entrepreneurship assistance to be eligible projects.

However, the reality is that most entrepreneurship projects do not compete successfully with the larger industrial park infrastructure projects at the regional or state level. I think it is important that ARC put more emphasis on entrepreneurship assistance especially in smaller communities. A special regional initiative with a set aside of funds would help emphasize entrepreneurship in the region.

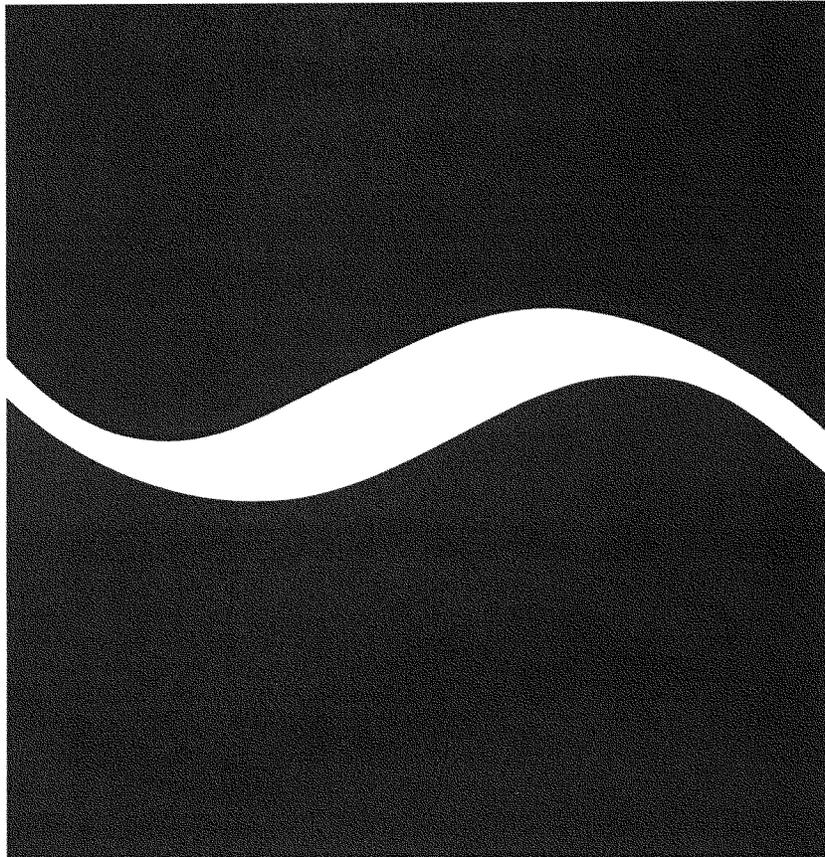
In closing, I want to emphasize that the ARC program has been one of the most effective and successful development assistance programs in the country. It has certainly had a significant positive impact on our southern Ohio region. ARC assistance, however is still needed and I support legislation to reauthorize ARC for 5 years. Thank you for your time and consideration.



Appalachian Regional Commission

**Telecommunications and
Technology in Appalachia
Program and Impact Summary**

April 20, 2006



PROGRAM AND IMPACT SUMMARY**TELECOMMUNICATIONS AND TECHNOLOGY IN APPALACHIA**

Recognizing the importance of telecommunications and technology to the economic future of Appalachia, the Appalachian Regional Development Act Amendments of 2002, which reauthorized the Appalachian Regional Commission (ARC), created a special program authority for ARC in telecommunications and technology. The legislation outlined four broad areas for ARC's work: increasing affordable access to broadband services, providing training and educational opportunities related to telecommunications and technology, increasing the use of e-commerce throughout the region, and increasing entrepreneurial activities within Appalachia in the technology sector.

Funding History

The 2002 legislation authorized \$33 million over five years for the telecom program. Through the first four years of the program, the Commission spent \$32.2 million on activities related to the special authorization. This has been matched by \$6.5 million in other federal funds, \$10.3 million in state dollars, and \$41.3 million in local match. The activities funded through these grants are projected to leverage an additional \$61.7 million in private investment.

Consequently, ARC's \$32.2 million has leveraged an additional \$119.8 million in public and private funds for telecom activities in Appalachia—a leverage ratio of almost \$4 for every \$1 of ARC money.

Program Accomplishments

Through more than 250 projects over the past four years, ARC's investments have had a significant impact in strengthening and diversifying the region's economic base. These projects are projected to have the following outcomes upon completion:

- 2,600 jobs created and 2,100 jobs retained
- 21,000 workers with improved skills
- 45,000 students served with enhanced academic offerings

- 65 community and regional plans for telecommunications networks and applications
- 300,000 citizens participating in telecommunications programs
- More than 100 non-profit and public organizations with updated software from Microsoft.

Program Activities

ARC has funded a broad range of activities to carry out the telecommunications program authority. Projects emphasize innovative, regional approaches.

➤ *Improving Telecommunications Access*

ARC projects expand access to telecommunications within Appalachia by helping create community broadband networks that can be used by all sectors within the community, piloting the use of emerging technologies, installing fiberoptic rings, and equipping industrial parks and business incubators with broadband technology. In doing so, ARC has encouraged the use of all types of technologies—cable, DSL, fiber, wireless, and satellite.

Projects include a regional fiber network across Northeast Mississippi; wireless demonstrations in rural New York, Ohio, Pennsylvania, Virginia, West Virginia, and Georgia; and a regionwide effort in Kentucky to compile an inventory of broadband access across the 51 Appalachian counties and work with the private sector to substantially increase broadband coverage. In Maryland, a county-wide high-speed wireless network, funded by ARC over several years, now serves over 4500 customers, and over the past several months, an average of 6-8 new businesses have joined the network each week. In addition, two Internet Service Providers have announced plans to serve the county.

The agency has also implemented a robust program of strategic planning, “demand aggregation,” and technical assistance that enhances the ability of communities to attract private investment for deploying broadband services and prepares communities to take economic advantage of the technology. As a result of these efforts, in Ohio the number of telephone central offices that are enabled with DSL jumped from 46 in 2002 to 168 in 2004, while in New York three local development districts are working with local telephone companies to create a regional broadband network reaching across the state’s southern tier.

Finally, ARC encourages all basic infrastructure projects to consider whether a telecommunications component would enhance the value of the project.

➤ *Deploying Telecommunications Applications*

Much of ARC’s funding has gone for telecommunications applications that enable communities to capitalize on broadband access. *Distance learning, telemedicine/telehealth, workforce development, and e-government* activities frequently garner Commission support. By demonstrating concrete uses of technology, these application-oriented projects also help generate increasing demand for technology within the community. This increased demand, when

coupled with other telecommunications activities in the community, frequently spurs private competition and enhanced service.

To help make these projects sustainable, ARC requires that networks include more than one type of service. In Delhi, New York, for example, a wireless broadband network, anchored at the local college, links the high school, a senior citizens' center, the state Department of Transportation regional office, the community library, village and county government offices, and the SUNY Delhi campus. Because of the availability of broadband, the town is now considering establishing a technology-oriented business incubator.

Slightly more than half of ARC's telecommunications projects have included a telemedicine or telehealth component, often linking rural clinics with the medical staffs and resources of more urban hospitals. These grants improve access to health care, reduce health care costs, and improve the quality of health care by facilitating collaboration between general practitioners in rural settings and specialists in more urban environments.

Distance learning projects are often used by rural school districts to help meet the requirements of the No Child Left Behind Act while e-government encourages the use of technology by local governments to more efficiently deliver services to their citizens. In Pickens County, Alabama, an economically distressed county, an ARC-funded fiber network combines both distance learning (linking the only Spanish teacher in the county with three rural schools), and e-government (networking the sheriff's office, criminal justice facilities, and human services).

ARC also provides technical assistance to communities and non-profit organizations in developing and customizing applications that will improve their ability to provide services over the Internet. Through ARC funding, a local development district in Pennsylvania has helped create almost 40 new websites for organizations across an 11-county area.

➤ ***Fostering E-Commerce and Business Development***

ARC has taken a number of steps to boost e-commerce in the region. A grant competition in 2002 focused on helping small arts and crafts businesses boost their sales and income through e-commerce. The ARC-funded website of North Carolina's Handmade in America now lists almost 350 local artists and 100 galleries in its searchable database, along with a robust calendar of craft-related events. The website has become the primary site for the burgeoning arts and crafts industry in a multi-state region anchored around western North Carolina.

In 2005 ARC pioneered a special E-commerce workshop to help small businesses on Main Street transition to the Internet for business services. The hands-on sessions teach local businesses how to establish a website presence

and develop an Internet business plan and marketing effort. The workshop has been offered in Georgia, Ohio, Pennsylvania, and West Virginia, with several others planned for the spring of 2006.

ARC emphasizes technology as a tool for diversifying local economies. In a distressed Tennessee county, a technology-based program is helping farmers explore agricultural techniques and market opportunities for new specialty crops, reducing the county's historic dependence on tobacco.

➤ ***Strengthening IT Sector Jobs***

ARC has seeded a number of training activities, working with the region's universities and community colleges, to boost the technology skills of tomorrow's workers. The Interactive Digital Technology Center for Excellence at Ohio University is training students to design, program, and test interactive computer games and software that have applications in education, gaming, and business product development. Sophisticated computer gaming is now a \$7 billion business, and is projected to create an average of 150,000 new jobs per year. The Center will increase Appalachia's ability to capture a significant number of the new jobs in this industry. The program operates in partnership with Shawnee State University and Washington State Community College.

Advanced technology is a common component in ARC's workforce development projects, which often feature engineering, computer-aided design, and health technology. With ARC support, for example, the community colleges that serve Appalachian South Carolina have significantly upgraded their technology offerings, in part to capitalize on the region's growing automotive industry.

➤ ***Forging Private Sector Partnerships***

ARC believes that engaging the private sector is a critical component to meeting Appalachia's telecommunications and technology needs, and the agency has forged strong partnerships with a number of major technology companies.

As an outgrowth of an ARC wireless demonstration project in Delhi, New York, ARC established a partnership with **Microsoft Corporation** that has provided state-of-the-art computer software to more than a hundred organizations across all 13 Appalachian states. Microsoft initially committed \$1 million in software, but they subsequently increased it to \$2 million. At this point Microsoft and ARC have distributed \$1.5 million of software, and another \$400,000 is in process. ARC works with local groups in identifying software needs. In Ohio, the Ohio Community Computing Network has facilitated the distribution of over \$112,000 in software to 8 community computer labs, while in West Virginia, Mission West Virginia, a faith-based organization, has coordinated the distribution of \$68,000 in

software to church-based community computer facilities across the state, focusing particularly on economically distressed counties.

Parametric Technology Corporation—a leading developer of sophisticated engineering and design software for industry, NASA, and the Department of Defense—has worked with ARC to make their Pro-DESKTOP software available for free to all high schools and colleges in the Appalachian region that have a faculty member trained in using the software. The software is seen as a perfect design tool for inspiring the next generation of innovators, particularly in science, technology, and engineering. So far 31 community colleges, 4 technology centers, 44 high schools, and 1 middle school across 9 ARC states have participated in the project. The market value of the software PTC has donated to date is \$24 million.

➤ ***Conducting Regional Research***

Research on the nature of telecommunications challenges and opportunities helps inform ARC's funding decisions. The legislative history of the 2002 legislation suggested that ARC continue to examine the region's telecommunications assets and needs. As a result, the Commission undertook an update of its path-breaking 2002 assessment of telecommunications in Appalachia, *Links to the Future*.

The update focused on analyzing changes in access to advanced information technologies and telecommunications services over the 2001-2003 period. The findings suggest that the pace of change in the adoption of information and communication technologies has been extremely rapid. However, Appalachia still lags significantly behind the rest of the nation in access to cable modem services, DSL services, and other forms of high-speed internet access. In December 1999, 44 percent of Appalachian zip codes had at least one high-speed provider, compared to 60 percent for the nation. In December 2002, the Appalachian percentage had increased to 63 percent—definite progress—but the national rate had grown to 88 percent, actually increasing the gap between Appalachia and the rest of the nation.

ARC Telecommunication and Technology Projects, 2002-2005

Project Type	ARC \$	Local \$	Federal \$	State \$	Total \$	Foundation\$	Private\$	LPI* (projected)
Business Incubators	\$1,592,097	\$3,398,118	\$3,598,000	\$1,110,000	\$9,698,215	\$695,830	\$0	\$9,880,000
Career Ed/Voc. Ed & Teacher Training	\$3,390,631	\$14,511,255	\$251,500	\$134,033	\$18,287,419	\$0	\$0	\$9,200,000
Workforce & Custom Training	\$3,342,327	\$1,661,222	\$23,525	\$958,670	\$5,985,744	\$32,000	\$0	\$0
Telecommunications	\$14,242,231	\$10,531,735	\$2,327,202	\$5,296,973	\$32,398,141	\$17,100	\$300,558	\$28,225,000
Telemedicine & Primary Care	\$3,352,950	\$4,854,742	\$50,000	\$1,850,930	\$10,108,622	\$0	\$0	\$0
Distance Learning & Drop Out Prevention	\$3,689,369	\$3,951,877	\$5,000	\$664,378	\$8,310,624	\$0	\$0	\$0
Math Science	\$433,600	\$57,500	\$200,000	\$35,016	\$726,116	\$0	\$0	\$0
Entrepreneurship, Tech Transfer, Tourism	\$1,057,240	\$1,500,211	\$65,000	\$70,000	\$2,692,451	\$1,256,000	\$38,500	\$0
Technical Assistance	\$987,641	\$809,593	\$30,000	\$206,775	\$2,034,009	\$79,500	\$0	\$14,431,750
Community Facilities	\$143,056	\$78,270	\$0	\$0	\$221,326	\$0	\$0	\$0
Total	\$32,231,142	\$41,354,523	\$6,550,227	\$10,326,775	\$90,462,667	\$2,080,430	\$339,058	\$61,736,750

Region-wide Projects

Funding by State

State	No. Projects	ARC \$	Local \$	Federal \$	State \$	Total \$	LPI* (projected)
Alabama	36	5,991,994	14,992,829	56,500	1,772,124	22,813,447	33,425,000
Georgia	13	1,953,263	1,647,430	648,000	590,488	4,839,181	0
Kentucky	16	3,174,428	1,953,214	40,000	783,250	5,950,892	0
Maryland	9	1,286,641	1,118,509	50,000	2,105,100	4,560,250	0
Mississippi	11	3,659,605	4,279,565	3,171,000	225,016	11,335,186	9,000,000
New York	20	1,594,509	1,354,870	0	241,098	3,190,477	9,100,000
North Carolina	5	746,200	1,088,624	1,000,000	513,265	3,348,089	0
Ohio	29	3,335,133	3,442,048	0	1,547,152	8,324,333	0
Pennsylvania	30	1,565,415	3,217,990	1,000,000	1,365,200	7,148,605	0
South Carolina	14	622,295	855,104	0	0	1,477,399	4,500,000
Tennessee	14	2,426,557	3,378,167	0	192,000	5,996,724	4,000,000
Virginia	20	1,596,603	1,395,354	111,202	925,736	4,028,895	961,750
West Virginia	19	2,637,918	2,307,729	48,525	66,346	5,060,518	750,000
Commission	17	1,640,581	323,090	425,000	0	2,388,671	0
Total	253	32,231,142	41,354,523	6,550,227	10,326,775	90,462,667	61,736,750

* LPI=Leveraged Private Investment

Appalachian Regional Development Act Amendments of 2002**§ 203. Telecommunications and technology initiative¹.**

(a) In general.--The Commission may provide technical assistance, make grants, enter into contracts, or otherwise provide funds to persons or entities in the region for projects --

- (1) to increase affordable access to advanced telecommunications, entrepreneurship, and management technologies or applications in the region;
- (2) to provide education and training in the use of telecommunications and technology;
- (3) to develop programs to increase the readiness of industry groups and businesses in the region to engage in electronic commerce; or
- (4) to support entrepreneurial opportunities for businesses in the information technology sector.

(b) Source of funding.--

- (1) In general.-- Assistance under this section may be provided- -
 - (A) exclusively from amounts made available to carry out this section; or
 - (B) from amounts made available to carry out this section in combination with amounts made available under any other Federal program or from any other source.
- (2) Federal share requirements specified in other laws.-- Notwithstanding any provision of law limiting the Federal share under any other Federal program, amounts made available to carry out this section may be used to increase that Federal share, as the Commission determines to be appropriate.

(c) Cost sharing for grants.-- Not more the 50 percent (or 80 percent in the case of a project to be carried out in a county for which a distressed county designation is in effect under section 226) of the costs of any activity eligible for a grant under this section may be provided from funds appropriated to carry out this section.

¹ Codified at 40 U.S.C. § 14504.

Type of Funding	Agency***	Funding Program	Local Government Agency	County	Project description	Year	Amount
Grant	ODOD	Appalachian Regional Commission	Adams Co Reg Water Dist	Adams	Expansion of Waterline Line	2000	\$ 194,275
Loan-MKTRate	OWDA	Market Rate of Interest Loan Program					\$ 8,321,100
		Total					\$ 6,516,375
Grant	ODOD	Appalachian Regional Commission	Albany**	Athens	New Sewer Treatment/Collection System		\$ 300,000
Grant	ODOD	Community Development Block Grant					\$ 600,000
Grant	USDA	Rural Development Grant					\$ 2,833,000
Loan-Subsidized	USDA	Rural Development Loan					\$ 4,124,000
		Total					\$ 7,857,000
Grant	ODOD	Appalachian Regional Commission	Athens County (Buchie)	Athens	Wastewater Collection	2000	\$ 300,000
Grant	ODOD	Community Development Block Grant					\$ 4,500,000
Grant	ODOD	CDBG County Formula					\$ 100,000
Grant-CreditEnh	OPWC	OPWC Credit Enhancement					\$ 25,236
Grant	OPWC	OPWC Grant					\$ 400,000
Grant	USDA	Rural Development Grant					\$ 1,061,000
Loan-Subsidized	USDA	Rural Development Loan					\$ 732,000
		Total					\$ 3,116,236
Grant	ODOD	Appalachian Regional Commission	Belmont	Belmont	Wastewater Collection	2005	\$ 100,000
Grant	ODOD	Community Development Block Grant					\$ 500,000
Grant-CreditEnh	OPWC	OPWC Credit Enhancement					\$ 163,440
Loan-Subsidized	OPWC	OPWC Loan					\$ 200,000
Grant	USDA	Rural Development Loan					\$ 561,000
Loan-Subsidized	USDA	Rural Development Loan					\$ 713,000
Grant	USEPA	State and Territorial Assistance Grant					\$ 650,500
		Total					\$ 2,887,940
Grant	ODOD	Appalachian Regional Commission	Chesterhill**	Morgan	Water Tank and Distribution Improvements	2001	\$ 100,000
Grant	ODOD	Community Development Block Grant					\$ 270,500
Loan-Subsidized	OWDA	Community Assistance Program					\$ 190,939
		Total					\$ 561,439
Grant	ODOD	Appalachian Regional Commission	Clarrington	Monroe	Water System Improvements	2000	\$ 90,450
Grant	ODOD	Community Development Block Grant					\$ 335,000
		Total					\$ 425,450
Grant	ODOD	Appalachian Regional Commission	Holmesville**	Holmes	Wastewater Collection and Treatment	2000	\$ 233,000
Grant	ODOD	Community Development Block Grant					\$ 500,000
Loan-Subsidized	OPWC	OPWC Loan					\$ 200,000
Grant	USDA	Rural Development Grant					\$ 1,456,000
Loan-Subsidized	USDA	Rural Development Loan					\$ 1,305,000
		Total					\$ 3,694,000

Repay Type	Agency	Funding Program	Local Government Agency	County	Project description	Year	Amount
Grant	ODOD	Appalachian Regional Commission	Jackson	Jackson	Water Tower Rehabilitation Project	2000	\$ 130,500
Grant	OPWC	OPWC Grant					\$ 76,450
		Total					\$ 206,950
Grant	ODOD	Appalachian Regional Commission	Leesburg**	Highland	Wastewater treatment	2005	\$ 300,000
Loan-Subsidized	OWDA	Community Assistance Program					\$ 2,776,000
Grant	OPWC	OPWC Credit Enhancement					\$ 93,500
Grant	OPWC	OPWC Grant					\$ 400,000
Loan-Subsidized	OPWC	OPWC Loan					\$ 246,500
		Total					\$ 3,816,000
Grant	ODOD	Appalachian Regional Commission	Muskingum Co. (Bartlett)	Muskingu	Wastewater collection	2004	\$ 250,000
Grant	OPWC	OPWC Loan					\$ 300,000
Loan-Subsidized	USDA	Rural Development Loan					\$ 5,000,000
		Total					\$ 5,550,000
Grant	ODOD	Appalachian Regional Commission	Racine**	Meigs	Wastewater Treatment Plant Improvements	2004	\$ 457,000
Grant	ODOD	Community Development Block Grant					\$ 500,000
Loan-Subsidized	OWDA	Community Assistance Program					\$ 770,559
Grant	OPWC	OPWC Grant				2004	\$ 375,000
Grant	USEPA	STAG Grant					\$ 481,000
		Total					\$ 2,853,559
Grant	ODOD	Appalachian Regional Commission	Roswell**	Tuscarra	New Water Distribution System	2003	\$ 300,000
Grant	ODOD	Community Development Block Grant					\$ 564,000
Grant	OPWC	OPWC Grant					\$ 249,900
Grant	USDA	Rural Development Grant					\$ 512,000
Loan-Subsidized	USDA	Rural Development Loan					\$ 512,000
		Total					\$ 2,137,900
Grant	ODOD	Appalachian Regional Commission	Sardinia**	Brown	Waste Water Treatment Plant	2005	\$ 300,000
Grant	ODOD	Community Development Block Grant					\$ 500,000
Loan-Subsidized	OWDA	Community Assistant Program					\$ 2,337,302
Grant	OPWC	OPWC Grant					\$ 312,740
Loan-Subsidized	OPWC	OPWC Loan					\$ 469,110
		Total					\$ 3,919,152
Grant	ODOD	Appalachian Regional Commission	Scioto County	Scioto	Sanitary Sewer Extensions	2002	\$ 200,000
Grant	OPWC	OPWC Grant					\$ 209,000
Grant	USDA	Rural Development Grant					\$ 174,000
Loan-Subsidized	USDA	Rural Development Loan					\$ 322,000
		Total					\$ 905,000

Repay Type	Agency	Funding Program	Local Government Agency	County	Project description	Year	Amount
Grant	ODOD	Appalachian Regional Commission	Shawnee**	Perry	New Sewer Treatment/Collection System	2003	\$ 300,000
Grant	ODOD	Community Development Block Grant					\$ 600,000
Grant	USDA	Rural Development Grant					\$ 2,008,000
Loan-Subsidized	USDA	Rural Development Loan					\$ 1,505,000
	Total						\$ 4,414,000
Grant	ODOD	Appalachian Regional Commission	Syracuse	Meigs	Water System Improvements	2004	\$ 100,000
Grant	ODOD	Community Development Block Grant					\$ 210,000
Grant	OPWC	OPWC Grant					\$ 246,501
	Total						\$ 556,501
Grant	ODOD	Appalachian Regional Commission	Trimble	Athens	Water Tank Improvement	2004	\$ 292,000
Grant	OPWC	OPWC Grant					\$ 14,375
	Total						\$ 306,375
Grant	ODOD	Appalachian Regional Commission	Vinton**	Gallia	New Sewer Treatment/Collection System	2001	\$ 200,000
Grant	ODOD	Community Development Block Grant					\$ 600,000
Grant	USDA	Rural Development Grant					\$ 963,000
Loan-Subsidized	USDA	Rural Development Loan					\$ 693,000
	Total						\$ 2,456,000
Grant	ODOD	Appalachian Regional Commission	W. Maata Rural Water Dist**	Morgan	Water Distribution Project	2001	\$ 300,000
Grant-CreditEnh	OPWC	OPWC Credit Enhancement					\$ 125,000
Loan-Subsidized	OPWC	OPWC Loan					\$ 300,000
	Total						\$ 725,000
	Total	Appalachian Regional Commission*					\$ 4,447,225
	Total						\$ 54,637,877
	*	Federal Funds					
	**	Received Planning and Design Loans Prior to funding (see next sheet)	See next page				
	***	Agency					
		ODOD	Ohio Department of Development				
		OPWC	Ohio Public Works Commission				
		OWDA	Ohio water Development Authority				
		USDA	United States Department of Agriculture				
		USEPA	United States Environmental Protection Agency				

