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David A. Schauer

University of Texas at El Paso, dschauer@utep.edu

Elizabeth K. Gibson

University of Texas at El Paso, ekgibson@miners.utep.edu

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**The Economic Impact of Project ARRIBA
on
El Paso, Texas**

Report prepared by:

David A. Schauer, Ph.D.
Elizabeth Gibson

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Institute for Policy and Economic Development
University of Texas at El Paso
El Paso, Texas 79968-0703
Phone 915.747.7974 Fax 915.747.1948
iped@utep.edu

Project ARRIBA Economic Impact Fact Sheet

- As an economic and workforce development program, Project ARRIBA has assisted over 1,400 individuals in building their stock of human capital with the intent of increasing their work-life earning capacity.
- There are 763 Project ARRIBA graduates over mid-1999 through 2009.
- Pre-Project ARRIBA participants average age 31 and earn \$7,500 per year.
- Project ARRIBA program graduates average age 32 and earn \$37,731 per year.
- The current Project ARRIBA annual budget (2009) of \$1.351 million generates directly and indirectly (that is, multiplier effects) the following:

| | |
|----------------------------------|---------------------------|
| Additional Business Volume | \$2.501 million (2009 \$) |
| Additional Regional Employment | 29 jobs |
| Additional Employee Compensation | \$0.935 million (2009 \$) |
| Incremental Direct Wages | \$0.779 million |
| Incremental Benefits | \$0.156 million |

- Project ARRIBA graduates (763) have added \$490.30 million in income to El Paso’s economy on a present value basis (end of 2009).
- Total investment in Project ARRIBA over life of program = \$18.603 million.
- Implied Benefit/Cost ratio = 26.36. A \$26.36 return for each \$1.00 invested.
- 2009 Project ARRIBA graduates (102) alone increase region’s income stream by \$70.70 million. When compared to the 2009 investment by public/private groups to fund a budget of \$1.351 million, this implies a 52.33 Benefit/Cost ratio.

- Each 2009 Project ARRIBA graduate increases their value of future income by \$693 thousand. An improved employer-provided benefit package adds another \$233 thousand.
- Project ARRIBA graduates (763) will pay an additional \$191.68 million in taxes over the remainder of their work years. This amounts to an average of \$18,100 per graduate for each year of remaining work-life. 75 percent is paid to the federal government with the remainder split evenly between state and local government units.
- Continued funding from federal, state, and local sources is strained given current economic conditions.
- Expansion of Project ARRIBA continues to face constraints with respect to key regional service providers: EPCC, UTEP, Texas Tech's Nursing School, and Dona Ana CC. Physical, human, and financial capital constraints in targeted education/training areas may limit Project ARRIBA's ability to grow.

The Economic Impact of Project ARRIBA on El Paso, Texas

El Paso, Texas is the largest metropolitan area along the US-Mexico border. With a population of approximately 750,000 El Paso County is one of the poorest in the nation; ranked the fourth poorest metro region in the nation as of the 2000 Census. El Paso's per capita income is only 63 percent of the national level. Historically, the County ranks low with respect to educational attainment; 28 percent of individuals over 25 do not have a high school diploma and only 20 percent have obtained a college bachelor's degree. The region has a civilian labor force of 315 thousand and has averaged 7 percent in unemployment over the past several years. The unemployment rate has been roughly 1.1 points above those for Texas and the US over the same period.¹

El Paso's unemployed, along with those who have left the labor force, face a significant gap that exists between the skills demanded by the region's labor market relative to those possessed by these individuals. Language limitations, lack of or obsolescence of skills, and lack of job awareness are but some of the obstacles facing this portion of the labor pool. These factors severely hinder the achievement of stable

employment paying a living wage. It is estimated that El Paso County has a poverty rate of 28 percent compared to 17 percent and 13 percent for Texas and the US, respectively.²

Project ARRIBA is an El Paso-based economic and workforce development program. As of the end of 2009, Project ARRIBA has assisted over 1400 individuals in building their stock of human capital with the intent of increasing their work-life earning capacity. The purpose of this report is to identify the extent to which this has occurred and to assess the economic impact of the Project's activities and the program graduates on the regional economic system. The current study is an update of an original analysis completed in 2007.³

The next section of this report presents an overview of Project ARRIBA. This is followed by a discussion of the methodology and assumptions employed in developing the economic impact assessment. The final portion presents the results of our analysis and discusses expansion opportunities for Project ARRIBA along with possible capacity constraints.

Project ARRIBA ⁴

Project ARRIBA (PA), a not-for-profit 501 (c)(3) corporation, was founded on December 16, 1998 given the efforts of the El Paso Interreligious Sponsoring Organization (EPISO), Border Interfaith, along with key business executives in the region. PA was established to promote workforce and economic development. Its mission is to provide long-term, high skill training and case management services to eligible residents of El Paso County. Eligibility is based upon education level, language skills, poverty guidelines, and various life barriers faced by prospective participants. PA seeks to increase participants' stock of human capital by providing, directly or indirectly, education, continuous counseling services, and financial support during their time in the PA "curriculum." Since its opening in 1999, PA has assisted over 1400 individuals in obtaining skills that are in demand in the El Paso labor market, leading to employment at a "living wage," defined as a rate of at least \$11.50 per hour along with an employer-provided benefit package. PA has been recognized, both in Texas and nationally, as a premier workforce development program.

PA has identified four groups making up the region's labor pool:

Tier 0: That portion of the El Paso County population which has a college degree but is currently underemployed. PA does not target this group.

Tier 1: Individuals with a high school diploma or a GED. They speak English proficiently and test at an education level of the 12th grade or higher. Thus, this group is already capable of college-level coursework. This population also has significant "life barriers" such as a poverty level of income, heavy reliance on various government assistance programs, and day care needs. PA targets this Tier.

Tier 2: Those who have a high school diploma/GED, speak English at a limited to proficient level, test at an education level of the 9th to 11th grade, and have significant life barriers. These individuals require remedial coursework. PA targets this group and provides 16 weeks of in-house classroom instruction. After completion, a participant moves into Tier 1 and becomes eligible for college level coursework/training and further PA support.

Tier 3: This group does not have a high school diploma/GED, does not speak English proficiently, and is not ready for college-level work given the remediation and language barriers. Significant life barriers are present as well. As of 2007, PA began targeting this Tier through its ESL to Living Wage Pilot Program.

PA works diligently with local employers and various workforce/employment groups and agencies to target in-demand occupations. PA also recognizes and incorporates the capacity of local training providers (for example, El Paso Community College and the University of Texas at El Paso) in determining enrollment constraints with respect to training/education courses leading to employment opportunities in the demand occupations. Current high demand jobs include nursing and allied healthcare, teaching, and information technology positions.

Examples of PA assistance include tuition, books, testing fees, child care, transportation (for example, bus passes), eye exams/eye glasses, and emergency support for rent/utilities. The average full, that is direct plus administrative/overhead, unit cost per participant per year was \$4,371 in 2009.

Pre-PA participants have the following characteristics:

- Average age 31
- 82 percent female
- 58 percent at/below the poverty line
- 68 percent single
- 66 percent parents
- 91 percent Hispanic
- Average wage of \$7,500 per year with only legally mandated benefits.

PA program graduates are:

- 32 years old
- 86 percent female
- 91 percent Hispanic
- Average post-training wage of \$37,731 per year (\$18.14 per hour) plus an employer-provided benefit package.

Economic Impact Analysis: Methodology and Key Assumptions

There are two components to an economic impact analysis of the PA program. Each requires a framework of analysis which is consistent with the disciplines of Economics, Finance and Public Policy Analysis.

(1) Economic Impact of PA Activities

The current annual PA budget is \$1.351 million. Key expense categories include: Administration Compensation (14%), Program Compensation (27%), Participant Support (45%), Rent and Office Expense (9%), Other (5%).⁵

Employee compensation, direct pay plus benefits, is for 11 employees at PA. A portion of this income will be spent by these workers in the El Paso region on various goods and services. The local business sector will therefore experience an increase in business volume over time. Given this, such firms

will need to purchase supplies and materials from other businesses, some in the region, to meet the demand and spending by PA employees. Relatedly, these firms will require additional labor/workers, at some point, to handle the increased business volume. These incremental workers will be paid wages which will be spent in the local economy. And so on. Therefore, PA employee compensation and consequent spending in the area will have an immediate or direct impact upon local economic activity as well as a “ripple” or indirect impact on the region. Proper impact analysis requires that the direct **plus** indirect (sometimes termed multiplier) effects be calculated to measure the total economic impact of this PA spending category.

A similar argument holds for the remaining PA expenditure items, especially those dollars spent on Participant Support and Rent & Office expenses. That is, there will be direct plus indirect impacts on El Paso County business activity, employment levels and worker compensation.

Input-output models have been constructed to measure the effects noted above. The first such models were designed to calculate impacts on the US national economy. More recent models allow such analysis at the state and county levels. The present study employs the widely-used IMPLAN model to estimate this component of PA’s economic impact on the region.⁶

(2) Impact of Increased Stock of Human Capital (Table 1)

The second component of PA’s economic impact on El Paso is by far the more significant of the two. As an individual acquires more education/training over time, their so-called stock of human capital will rise. This, in turn, will increase one’s earning capacity; that is, the individual’s reasonably probable earnings stream will rise over their work-life years. This proposition is generally accepted in economics and finance and has been validated numerous times at the national, state, and local levels.⁷

PA has documented that a graduate from their program experiences an increase in their income to \$37,731 per year. This compares to an income

level of \$7,500 for a non-PA individual. These values are consistent with national earnings data by age, education, sex, and ethnicity (US Census Bureau). The \$30,231 net or incremental improvement in annual earning capacity will continue over an individual's remaining work-life. In fact, this annual difference will likely increase over time as cost of living, productivity, merit, and promotion adjustments occur for the PA graduate compared to the non-PA program person. One can calculate the present value of these future income differentials by discounting them to their current value equivalent. This figure will represent the value at present of the incremental or marginal change in the stock of human capital resulting from "graduation" from PA's program.

An increase in one's earning capacity and consequent income stream is, clearly, a benefit to the individual. The regional economy will benefit as well. Increased earnings imply increased spending over time, and additional income implies more tax revenue (or less government subsidy) at the national, state, and local levels.

Finally, the increase in earnings on an incremental basis can be compared to PA's operating cost of providing their programs and financial support to participants. Such a comparison allows for a return on investment (ROI) or Benefit/Cost analysis of PA.

The specific assumptions employed in calculating the values associated with these concepts are presented below. Again, these assumptions are consistent with information provided by PA and national data sources.

Non-PA Individual:

- Age = 31
- Earnings in 2009 = \$7,500
- At age 40, earnings adjust to a full-time equivalent level of \$24,000 annually (2009 \$)
- Average tax rate (includes FICA, federal, state, and local taxes) = 20.0 percent of income

- Employer-provided benefit package valued at 8.0 percent of direct pay
- Annual growth in compensation = 3.0 percent
- Work-life to 62.0 years of age.

PA Participant/Graduate:

- Age = 32
- Earnings in 2009 = \$37,725
- Average tax rate = 34.0 percent of income
- Employer-provided benefit package valued at 25.0 percent of direct pay
- Annual growth in compensation = 5.0 percent
- Work-life to 62.0 years of age.

Additional Assumptions:

- PA Graduates

| | |
|------|-----|
| 2001 | 17 |
| 2002 | 42 |
| 2003 | 70 |
| 2004 | 100 |
| 2005 | 83 |
| 2006 | 115 |
| 2007 | 122 |
| 2008 | 112 |
| 2009 | 102 |

- PA Expenditures

| | |
|------|-----------|
| 1999 | \$ 314k |
| 2000 | \$ 1,143k |
| 2001 | \$ 1,280k |
| 2002 | \$ 1,076k |
| 2003 | \$ 1,144k |
| 2004 | \$ 1,185k |
| 2005 | \$ 1,598k |
| 2006 | \$ 1,793k |

| | |
|------|-----------|
| 2007 | \$ 1,600k |
| 2008 | \$ 1,435k |
| 2009 | \$ 1,351k |

- Annual financing/opportunity cost (or rate) of PA Expenditures or “Investment” = 6.5 percent (a blend of tax-free and short-term financing rates)
- Future dollar flows discounted to present value (end of 2009) at a 5.5 percent annual rate; consistent with returns currently available on a structured portfolio of low risk securities.

Economic Impacts

(1) Economic Impact of PA Activities

The IMPLAN model calculates the following total (that is, the sum of direct plus indirect/multiplier) effect on the El Paso County economy:

| | |
|---|------------------|
| Additional Business Volume (2009 \$) | \$ 2.501 million |
| Additional Employment in Region | 29 jobs |
| Additional Employee Compensation (2009 \$) | \$ 0.935 million |
| Incremental Direct Wages | \$ 0.779 million |
| Incremental Benefits | \$ 0.156 million |

(2) Increase in Region's Stock of Human Capital

A present value analysis of the incremental change in earnings as outlined in the previous section reveals significant impacts on El Paso. PA has spent \$13.92 million on its operation and financial support of its participants over the 1999 through 2009 period. When this value is adjusted for the explicit or implicit financing costs associated with this "investment" over the past 10.5 years, the adjusted total investment value is \$18.60 million as of the end of 2009. As shown in Table 1, the 17 graduates of PA's class of 2001 increased the region's human capital stock by \$9.31 million as of 2009. If one considers these graduates only, a benefit/cost ratio (B/C) of 0.50 emerges ($\$9.31/\18.60).

The 42 graduates of the 2002 class added another \$23.29 million to the income stream of workers in the region on a present value basis. As noted earlier, this amount is net of what 42 non-PA individuals would earn over their work-life experience. The 2001-2002 graduates together have added \$32.60 million to the region's income base. The B/C ratio increases to 1.75 at the end of 2009. The 10.5 year investment in PA by public and private entities generated more than a \$1.75 to \$1 return on investment when considering only the first two graduating classes.

The 2003 graduates (70) have added an additional \$39.72 million to the income stream of the area's workers. The cumulative B/C figure rises to 3.89.

After the 2004 graduating class of 100 is considered, the incremental change in the area's earning power has accumulated to \$133.76 million generating a B/C ratio of 7.19.

Incorporating the 2005 graduating class of 83 individuals continues the trend. An additional \$52.71 million is generated to the community on a present value basis. The cumulative B/C ratio rises to a 10.02 value. Over the mid-1999 through 2005 period, PA has generated a return on the total investment in the program of over \$10.00 per \$1 contributed by public/private groups.

The annual contribution of PA graduates and the accumulated benefits continue to increase at a significant pace for the years 2006, 2007, 2008, and 2009.

The 2009 class brought over \$70 million in incremental, present value earnings to El Paso. The B/C value continues to rise to over 26 to 1.

If one views just the year 2009 in terms of funds invested in PA that year (\$1.351 million) relative to the marginal change in income stream value from the 102 graduates, a B/C ratio of 52.33 is generated. Whether one views the B/C ratio or return on investment rate on an average (that is, over the life of PA) or on a marginal basis (that is, for the most recent year), the returns generated by public/private investment in PA and the program's investment in its participants are considerable and impressive.

By 2010, PA graduates will have increased the region's earning and spending power by well over \$500 million; in excess of one-half billion dollars!

TABLE 1: INCREMENTAL EFFECTS ON EL PASO STOCK OF HUMAN CAPITAL AND BENEFIT/COST RATIOS

| Year | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|--|------|-------|-------|--------|--------|--------|--------|--------|--------|
| Number of Graduates | 17 | 42 | 70 | 100 | 83 | 115 | 122 | 112 | 102 |
| Present Value (2009 \$, Millions) of Net Increase in Human Capital Stock | 9.31 | 23.29 | 39.72 | 61.44 | 52.71 | 75.12 | 81.61 | 76.42 | 70.70 |
| Cumulative Increase in Human Capital Stock (2009 \$, Millions) | 9.31 | 32.60 | 72.32 | 133.76 | 186.46 | 261.58 | 343.19 | 419.60 | 490.30 |
| Cumulative Benefit/Cost Ratio (Public/Private Investment in PA: \$18.603 in 2009 \$, Millions) | 0.50 | 1.75 | 3.89 | 7.19 | 10.02 | 14.06 | 18.45 | 22.56 | 26.36 |
| Benefit/Cost Ratio for 2009 (Net Increase in Human Capital Stock from 2009 Graduates/PA Investment in 2009 of \$1.351 million) | | | | | | | | | 52.33 |

As noted, the 2009 PA graduating class increased the present value of future net income in the region by over \$70 million . This translates to a net, present value increase of approximately \$693 thousand per graduate. This value does not include reasonably anticipated improvements in benefit package values. When this factor is considered, another \$233 thousand is added to one graduate's earning capacity (the sum of direct wages and benefit package value).

The higher income levels and improved employer-provided benefit package values experienced by PA graduates implies less cost to government agencies over future years in the form of reduced subsidies or increased tax revenues. The incremental, direct earnings estimates generated in this analysis along with the tax rate assumptions noted earlier imply that the 763 total PA graduates to date will pay an additional \$191.68 million in taxes over the remainder of their working years. Taxes include those paid to the federal (for example: income, FICA, and excise), state (for example: sales and excise), and local governments (for example: sales and property). This amount translates to an average annual amount (technically, an equivalent annuity value) of \$18,100 per PA graduate for each year of remaining work-life. It is estimated that 75 percent of this amount will go to the federal government with the remaining 25 percent split evenly between state and local government units.⁸

The PA economic impact values generated in this study indicate a strategy for expanding the program. An additional 100 participants would cost an estimated \$450 thousand per year. But when this cost is compared to the benefits of increased earnings, improved benefits, and reduced government subsidy or increased tax payments, the investment decision is quite clear. However, at present, there are significant obstacles faced by PA such as the cultivation of complex funding streams to ensure program sustainability. For example, local government has come to recognize, value, and support PA but recent budget shortfalls due to the economic downturn have reduced their funding commitments. At the state and federal levels, funding has become extremely competitive. An additional challenge is to develop marketing and outreach strategies that effectively communicate the program's scope and outcomes for stakeholders.

Furthermore, there are continuing capacity issues with key regional service providers to PA: the El Paso Community College, the University of Texas at El Paso, the new Texas Tech Nursing School, and indirectly, Dona Ana Community College. This is especially the case in the Registered Nurse (RN), Licensed Vocational Nursing (LVN), other Allied Health programs, teacher education, and information technology education/training facilities. Physical, human, and financial capital constraints may well limit PA's ability to expand a clearly worthwhile, valuable work force development program.⁹

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