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The Economic Impact of Project
ARRIBA on El Paso, Texas

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Project ARRIBA Economic Impact Fact Sheet

- As an economic and workforce development program, Project ARRIBA has assisted over 1,000 individuals in building their stock of human capital with the intent of increasing their work-life earning capacity.
- There are 427 Project ARRIBA graduates over mid-1999 through 2006.
- Pre-Project ARRIBA participants average age 30 and earn \$7,100 per year.
- Project ARRIBA program graduates average age 34 and earn \$33,100 per year.
- The current Project ARRIBA annual budget of \$1.793 million generates directly and indirectly (that is, multiplier effects) the following:

Additional Business Volume	\$3.135 million (2006 \$)
Additional Regional Employment	55 jobs
Additional Employee Compensation	\$1.252 million (2006 \$)
Incremental Direct Wages	\$1.043 million
Incremental Benefits	\$0.209 million

- Project ARRIBA graduates (427) have added \$185.30 million in income to El Paso’s economy on a present value basis (end of 2006).
- Total investment in Project ARRIBA over life of program = \$11.515 million.
- Implied Benefit/Cost ratio = 16.09. A \$16.09 return for each \$1.00 invested.
- 2006 Project ARRIBA graduates (115) alone increase region’s income stream by \$51.03 million. When compared to 2006 investment by public/private groups to fund budget of \$1.793 million, this implies a Benefit/Cost ratio = 28.46.
- Each 2006 Project ARRIBA graduate increases their value of future income by \$444 thousand. An improved employer-provided benefit package adds another \$192 thousand.
- Project ARRIBA graduates (427) will pay an additional \$87.30 million in taxes over the remainder of their work years. This amounts to \$6,500 per graduate for each year of remaining work-life. 73 is percent paid to the federal government, with the remainder split evenly between state and local government units.
- Expansion of Project ARRIBA faces serious constraints with respect to two key service providers: EPCC and UTEP. 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 over 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. One-third of the area's population is below the poverty line. Historically, the County ranks low with respect to educational attainment; 31 percent of individuals over 25 do not have a high school diploma and only 16 percent have obtained a college bachelor's degree. The region has a civilian labor force of 301 thousand and has averaged 7 percent in unemployment (20,000+ individuals) over the past several years. The unemployment rate is roughly 1.5 points above those for Texas and the US.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 the number facing such barriers ranges from 30,000 to 50,000.²

Project ARRIBA is an El Paso-based economic and workforce development program. As of the end of 2006, Project ARRIBA has assisted over 1000 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 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 ³

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). 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 1000 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 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 a 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. PA does not target this Tier at present, although there are plans to serve this group beginning fall 2007.

PA has a narrow focus relative to many other workforce development programs, especially given that the Tier 3 individuals are not eligible for PA's assistance.

Nevertheless, the population of Tiers 1 and 2 are large (estimated to be 30 to 50 thousand) and face significant challenges in obtaining "living wage" employment.

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 \$5500 in 2006.

Pre-PA participants have the following characteristics:

- Average age 30
- 84 percent female
- 74 percent at/below the poverty line
- 75 percent single
- 64 percent parents
- 90 percent Hispanic
- Average wage of \$7,100 per year with only legally mandated benefits.

PA program graduates are:

- 34 years old
- 86 percent female
- 90 percent Hispanic

- Average post-training wage of \$33,100 per year (\$15.90 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 \$1.793 million. Key expense categories include: Administration Compensation (11 %), Program Compensation (25%), Participant Support (54%), Rent and Office Expense (7%), Other (3%).⁴

Employee compensation, direct pay plus benefits, is for 17 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 the county levels. The present study employs the widely-used IMPLAN model to estimate this component of PA's economic impact on the region.⁵

(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.⁶

PA has documented that a graduate from their program experiences an increase in their income to \$33,100 per year. This compares to an income level of \$7,100 for a non-PA individual. These values are consistent with national earnings data by age, education, sex, and ethnicity (US Census Bureau). The \$26,000 net or incremental improvement in annual earning capacity will continue over an individual's remaining work-life. In fact, the \$26,000 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 = 30
- Earnings in 2006 = \$7,500
- At age 40, earnings adjust to a full-time equivalent level of \$24,000 annually (2006 \$)
- Average tax rate (includes FICA, federal, state, and local taxes) = 20.0 percent of income
- Employer-provided benefit package valued at 5.5 percent of direct pay
- Annual growth in compensation = 3.0 percent
- Work-life to age 62.0

PA Participant/Graduate:

- Age = 34
- Earnings in 2006 = \$33,000
- 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 age 62.0

Additional Assumptions:

- PA Graduates

2001	17
2002	42
2003	70
2004	100
2005	83
2006	115

- 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

- 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 2006) 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 (2006 \$)	\$ 3.135 million
Additional Employment in Region	55 jobs
Additional Employee Compensation (2006 \$)	\$ 1.252 million
Incremental Direct Wages	\$ 1.043 million
Incremental Benefits	\$ 0.209 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 \$9.53 million on its operation and financial support of its participants over the 1999 through 2006 period. When this value is adjusted for the explicit or implicit financing costs associated with this "investment" over the past 7.5 years, the adjusted total investment value is \$11.52 million as of the end of 2006. As shown in Table 1, the 17 graduates of PA's class of 2001 increased the region's human capital stock by \$7.06 million as of 2006. If one considers these graduates only, a benefit/cost ratio (B/C) of 0.61 emerges ($\$7.06/\11.52).

The 42 graduates of the 2002 class added another \$17.53 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 \$24.59 million to

the region's income base. The B/C ratio increases to 2.14 at the end of 2006. The 7.5 year investment in PA by public and private entities generated more than a \$2 to \$1 return on investment when considering only the first two graduating classes.

The 2003 graduates (70) have added an additional \$29.84 million to the income stream of the area's workers. The cumulative B/C figure rises to 4.73.

After the 2004 graduating class of 100 is considered, the incremental change in the area's earning power has accumulated to \$97.79 million generating a B/C ratio of 8.49.

Incorporating the 2005 graduating class of 83 individuals continues the trend. An additional \$36.48 million is generated to the community on a present value basis. The cumulative B/C ratio rises to a 11.66 value. Over the mid-1999 through 2005 period, PA has generated a return on the total investment in the program of over \$11.60 per \$1 contributed by public/private groups.

The 2006 class brings over \$50 million in incremental, present value earnings to El Paso. The B/C value continues to rise to over 16.

If one views just the year 2006 in terms of funds invested in PA that year (\$1.793 million) relative to the marginal change in income stream value from the 115 graduates, a B/C ratio of 28.46 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.

Table 1: Incremental Effects on El Paso Stock of Human Capital and Benefit/Cost Ratios						
Year	2001	2002	2003	2004	2005	2006
# Graduates	17	42	70	100	83	115
Present Value (2006 \$, Millions) of Net Increase in Human Capital Stock	7.06	17.53	29.84	43.36	36.48	51.03
Cumulative Increase in Human Capital Stock	7.06	24.59	54.43	97.79	134.26	185.3
Cumulative Benefit/Cost Ratio (Public/Private Investment in PA:\$11.515 in 2006 \$ Millions)	0.61	2.14	4.73	8.49	11.66	16.09
Benefit/Cost Ratio for 2006 (Net Increase in Human Capital Stock from 2006 Graduates/PA Investment in 2006 of \$1.793 million)						28.46

As noted, the 2006 PA graduating class increased the present value of future net income in the region by over \$51 million . This translates to a net, present value increase of approximately \$444 thousand per graduate. This value does not include reasonably anticipated improvements in benefit package values. When this factor is considered, another \$192 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 427 total PA graduates to date will pay an additional \$87.30 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 \$6,500 per PA graduate for each year of remaining work-life. It is estimated that 73 percent of this amount will go to the federal government with the remaining 27 percent split evenly between state and local government units.⁷

The PA economic impact values generated in this study indicate a strategy for expanding the program. An additional 100 participants would cost an estimated \$550 to \$600 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 serious capacity issues with two key service providers to PA: the El Paso Community College and the University of Texas at El Paso. 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.

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