

Testimony of Stephen J. Appold
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Immigration, Citizenship, Refugees, Border Security, and International Law
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In 2005 the Frank Hawkins Kenan Institute Of Private Enterprise at the University of North Carolina at Chapel Hill undertook a comprehensive study of the demographic and economic impacts of the Hispanic population on the state of North Carolina. The study was conducted under the direction of John D. Kasarda and James H. Johnson, Jr. I was a member of the project team.

The results of that study were published in January 2006. Copies of the study report are available from the Institute's website (www.kenaninstitute.unc.edu) or from me. This testimony is adapted from that report.

North Carolina was a key "expansion state" for Hispanic immigrants during the 1990s and in the first half of this decade. A large proportion of North Carolina's Hispanic population consists of recent immigrants and their families.

Among the study's key findings:

- North Carolina's Hispanic population totaled 600,913, or 7 percent of the state's total population, in 2004, and accounted for 27.5 percent of the state's population growth from 1990 to 2004.
- Between 1995 and 2004, 38.2% of North Carolina's Hispanic newcomers migrated from abroad, 40.2 percent migrated from another U.S. jurisdiction, and 21.6 percent were born in North Carolina.
- Nearly half (45 percent) of North Carolina's Hispanic residents in 2004, and over three-quarters (76 percent) of those migrating to the state from abroad between 1995 and 2004, did not have authorized documentation.
- From school years 2000-01 to 2004-05, Hispanic students accounted for 57 percent of the total growth in the North Carolina Public Schools.
- The average Hispanic household contains 3.7 persons (compared to 2.4 persons in the average non-Hispanic household) and earns about \$32,000 annually (compared to \$45,700 for non-Hispanics).
- Prime working-age adults (18-44) make up a significantly higher percentage of the population in Hispanic (55.3 percent) than in non-Hispanic (37.3 percent) households.
- Hispanics filled one in three new jobs created in North Carolina between 1995 and 2005, with a significant concentration in construction.
- North Carolina Hispanics had an estimated total after-tax income of \$8.3 billion in 2004. With about 20 percent of that total sent home to Latin America, saved, or used for interest payments, the remaining spending had a total impact of \$9.2 billion on the state—much of

which is concentrated in the major metropolitan areas along the Interstate 40/Interstate 85 corridor, but which also supports businesses in every part of the state.

- Hispanics annually contribute about \$756 million in taxes (direct and indirect) while costing the state budget about \$817 million annually for K-12 education (\$467 million), health care (\$299 million), and corrections (\$51 million) for a net cost to the state of about \$61 million.
- The net cost to the state budget must be seen in the broader context of the aggregate benefits Hispanics bring to the state's economy. Above and beyond their direct and indirect impacts on North Carolina business revenues, Hispanic workers contribute immensely to the state's economic output and cost competitiveness in a number of key industries. Without Hispanic labor, for example, the state's construction industry output would likely be considerably lower and the state's total private-sector wage bill as much as \$1.9 billion higher.

This testimony will focus on the methodologies used to obtain the last several key points. In assessing the economic impact of Hispanic immigrants on North Carolina, we addressed four key issues:

- The impact of Hispanic consumer spending on the state and its communities.
- The net balance of North Carolina Hispanic population's contributions and costs on the state budget.
- The effect of Hispanic workers on the total economic output and competitiveness of the state.
- The potential business opportunities North Carolina's expanding Hispanic presence provides.

Figure 1 depicts our conceptual framework for assessing the overall economic impact of Hispanics on North Carolina. On the contributions side, we focus largely on those that accrue to the state from:

- **Consumer Spending.** This is the total Hispanic after-tax personal income available for local spending on goods and services. Such spending has both direct and indirect effects on North Carolina business
- **Revenues and Employment.** Hispanic purchases also contribute to a host of state and local taxes including, among others, sales tax, highway use tax, motor fuel tax, alcohol tax, and cigarette tax.
- **Payroll and Property Taxes.** Hispanics directly contribute to North Carolina's revenue base through taxes on their earnings and property.¹

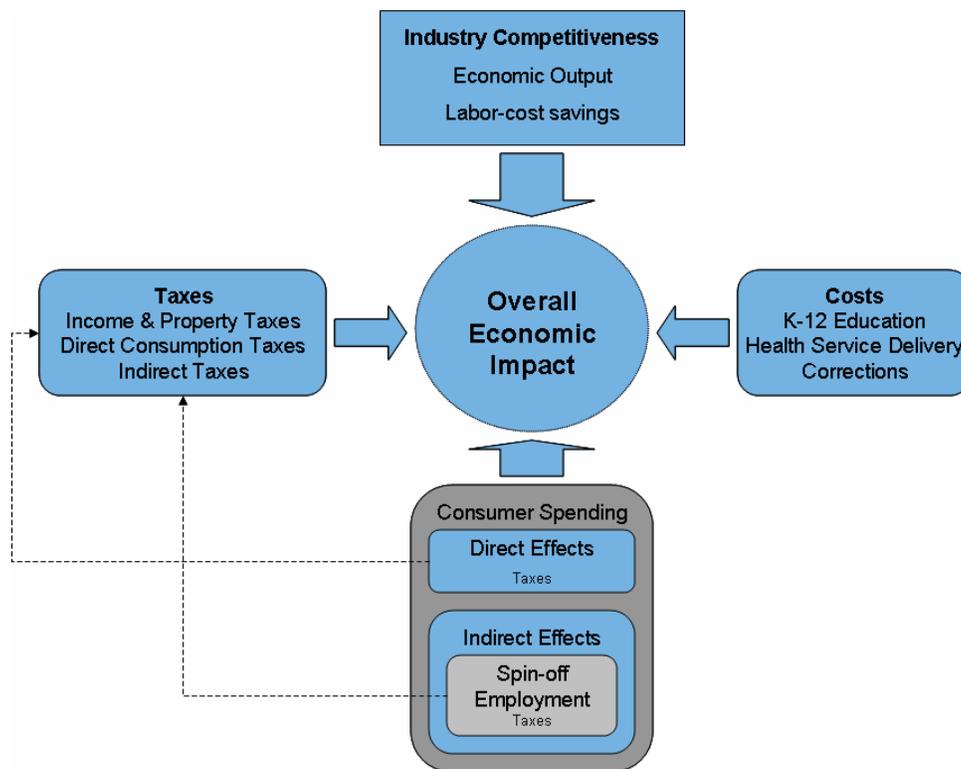
¹ The state and its localities also receive revenues from flow-backs of portions of federal income taxes paid by Hispanics, but these are not considered in our technical analysis.

- **Industry Competitiveness.** Hispanic workers benefit North Carolina industries by augmenting the labor supply and economic output at competitive wages and salaries.

On the cost side, we estimate the financial impact of Hispanics on three major public costs that are typically considered in immigrant impact studies: K-12 education, health service delivery and corrections.

For much of our analysis, we utilized an input-output model known as IMPLAN. This model is based on inter-industry purchasing patterns, consumption patterns, and local production, retail, and service availability. IMPLAN traces consumer spending through over 500 sectors of North Carolina’s economy to generate a variety of economic impacts at the state, metropolitan area, and county levels.²

Figure 1
Conceptual Framework for Assessing the
Economic Impact of Hispanics in North Carolina



² The IMPLAN model is broadly used in economic impact analyses. It uses data provided by the U.S. Bureau of Economic Analysis, the Bureau of Labor Statistics, and various state and federal agencies. The model generates, among other results, the number of jobs, labor income, and taxes created by a specified input. It also generates economic output, roughly equated to business revenue, resulting from a group’s direct, indirect, and induced economic impacts. The IMPLAN software can combine any number of counties into one study area. Computations were done by the Kenan Institute’s Carolina Center for Competitive Economies.

Buying power data for N.C. Hispanic residents were the primary inputs to the IMPLAN model.³ Generally, such income is spent locally. However, North Carolina's Hispanics (especially more recent immigrants) typically remit substantial portions of their income back to their country of origin. Based on recent research on Hispanic immigrants in North Carolina and other states,⁴ we deflated Hispanic buying power by 20 percent before beginning our analysis. This reduction takes into account not only remittances, but also savings and interest payments that also reduce local spending.⁵

Methods and data used to estimate Hispanic tax contributions, labor output, and wage savings to North Carolina's industries, as well as Hispanic public costs, are described later in the testimony.

North Carolina's Hispanics had an estimated \$8.35 billion in buying power (after tax income) in 2004. Even after discounting their buying power by 20 percent to account for remittances, savings, and interest payments, Hispanic purchases rippled through the state's economy, creating an overall economic impact in 2004 of \$9.19 billion.

The indirect effects of Hispanic spending in North Carolina include 89,600 spin-off jobs and \$2.4 billion in additional labor income in 2004. Hispanic spending also was responsible for \$455 million in additional state tax receipts and \$661 million in federal taxes, of which some of the latter eventually flows back to the state.

The effects of Hispanic consumer spending were calculated for the state, each metropolitan area, and each county for 1990, 2000, 2004, and 2010.

We then focused on measuring the major public costs of Hispanics to the State of North Carolina and its localities.

In estimating the costs to the state of the Hispanic population, we focused on three of the major and most often discussed public sectors in immigrant studies: K-12 public education, health services delivery, and corrections. There are no doubt other significant costs, but these three are generally agreed to be the primary ways to measure the impact of an immigrant group on state budgets.

After subtracting Federal transfers, North Carolina spent \$10.1 billion on education in 2004. Approximately 61 percent of this amount was spent on K-12 education. For our K-12 educational cost estimates, we assumed that the percentage of expenditures attributable to Hispanics was

³ Humphreys, J. M. (2004). African American, Asian, Hispanic, and Native American Buying Power in North Carolina: Estimates for 1990-2004 & Projections through 2009. Durham, NC, North Carolina Institute of Minority Economic Development: 1-180.

⁴ De Vasconcelos, P. (2004). Sending Money Home: Remittances to Latin America from the United States. Washington, DC, Inter-American Development Bank.; Suro, R., R. Fry, et al. (2005). Hispanics: A People in Motion. Washington, D.C., The Pew Hispanic Center: 1-20; Woodward, Douglas P. (2005). The Economic and Business Impact of Hispanics (Latinos). University of South Carolina. <http://www.sph.sc.edu/cli/papers.htm>.

⁵ We further reduced the buying power and economic impact estimates by 5.6 percent to account for the fact that our estimate of the state's Hispanic population in 2004 was 5.6 percent less than that used by our data source for buying power.

proportional to their representation in the student population (7.5 percent). This amount in 2004 was estimated to be \$466,847,000.⁶

To calculate net healthcare delivery costs to the state, we used our estimate of the state's Hispanic population, the Medical Expenditure Panel Study (MEPS) health service expenditure data, and the Centers for Medicare and Medicaid Services (CMMS) information on costs and sources of payments by race/ethnicity. These data show that Hispanics have a high dependence on public funding for their healthcare services, but they use such services less frequently than most other major racial/ethnic groups and, when they do, incur relatively lower costs. This may reflect their younger age distribution and, despite their low average income, a propensity to self-pay at least a portion of their costs. Our estimate of the net cost (after payments) to the state for health services to Hispanics in 2004 is \$298,988,000.

For our estimate of costs to the state correctional system, we began with the total expenditures in the state budget. The Department of Corrections supplied the data on the total number of individuals in the system, whether in prison, on parole, or on probation, and the number of Hispanics as well. We then calculated the percentage of expenditures on Hispanics based on their percentage in the prison, parole, and probation populations in the state. That percentage is 5.2 percent, less than their share of North Carolina's total population (7.0 percent). The resulting estimated cost of Hispanics in 2004 to North Carolina's correction system is \$50,724,000.

Against the costs, we measured the tax contributions.

We considered three different categories of taxes accruing to the state government as a result of Hispanics' presence in North Carolina in 2004.

The taxes on income and property are not considered disposable income and thus do not enter into the accounting of Hispanic buying power discussed above. State payroll tax contributions of the Hispanic population were calculated by computing the tax owed by the average Hispanic household, multiplying that amount by the estimated number of Hispanic households, and then adjusting that figure by a tax compliance rate of 65 percent.⁷ The total annual amount of personal income tax paid by North Carolina Hispanics is estimated to be \$145,082,000.

An estimate of business tax owed by Hispanic-owned small businesses in the state was calculated from information on the number of businesses, their average earnings, and the effective tax rate. The total annual amount of small-business tax paid by North Carolina Hispanics is estimated to be \$85,920,000.

⁶ We note that the large majority of Hispanic school children are citizens of the United States, even if their parents are not.

⁷ In reviewing previous reports on taxes paid by undocumented Hispanics (see Clark, R. L., J. Passel, et al. (1994). *Fiscal Impact of Undocumented Aliens: Selected Estimates for Seven States*. Washington, D.C., The Urban Institute: 1-200.), most authors assumed a compliance rate of 55 to 60 percent, with the remainder being paid under the table. Our discussions with North Carolina Hispanics indicate that more workers are obtaining social security numbers and/or tax identification numbers, legally or illegally, to obtain jobs on the payroll. These workers are paying taxes, which leads us to assume a higher compliance rate.

Separate property tax calculations were estimated for Hispanic homeowners and renters. In both cases, estimates of the average tax owed were calculated using information about home value and rent paid, average effective North Carolina tax rates, and the number of households in each tenure category. A similar procedure was used to calculate non-real estate property tax. The total annual amount of property tax paid by North Carolina Hispanics is estimated to be \$62,772,000. The three sub-categories (personal income, small business income, and personal property taxes) total to \$293,774,000.

Hispanics also pay taxes on their consumer spending. These were calculated by using information on Hispanic household spending patterns derived from national data and multiplying average spending by North Carolina's tax rates, with the two major categories being the state sales tax and the motor vehicle use tax. Together these total an estimated \$114,062,000 paid by North Carolina's Hispanics in 2004.

The final, and largest, tax contribution category includes all state and local taxes generated as an indirect result of Hispanic consumer spending. These include the estimated \$221,536,000 additional income and property taxes paid by businesses as a result of their operation, and the estimated \$126,148,000 additional income, property, and consumer taxes paid by their employees. Calculated using the input-output model described above, these total an estimated \$347,684,000.

Collectively, Hispanic residents were responsible for an estimated \$293,774,000 in personal current taxes, \$114,062,000 in sales and other consumption taxes, and \$347,684,000 in taxes on the increased business and earning resulting from Hispanic spending. This totals \$755,520,000 in North Carolina state and local taxes paid by N.C. Hispanics in 2004.

We then compared the major costs and contributions to the state's fiscal balance.

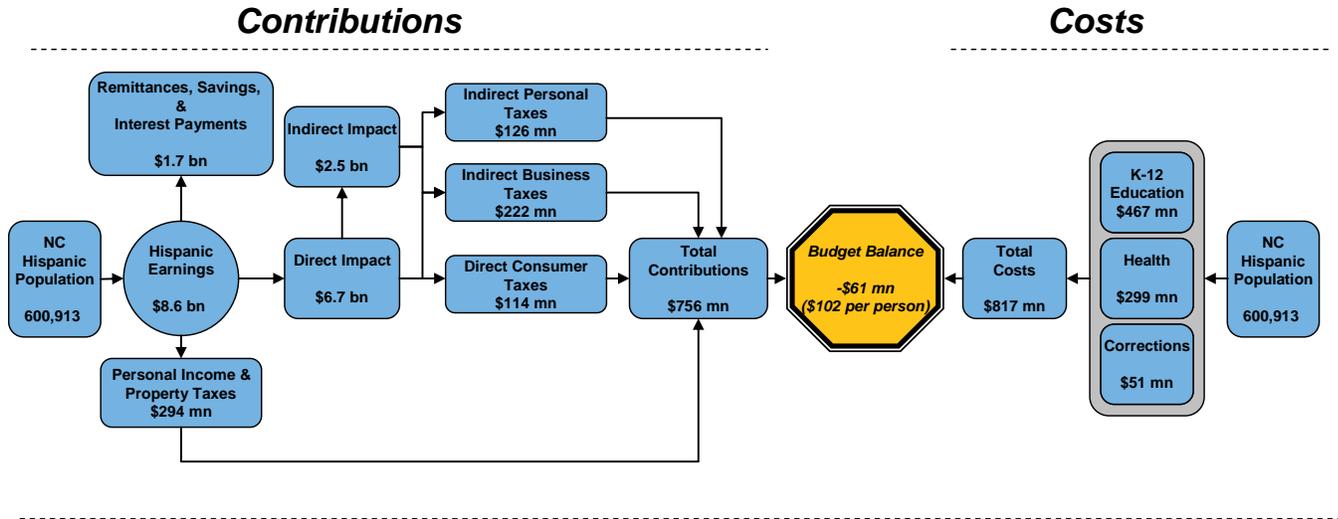
Determining the net cost or benefit of Hispanics to the state budget is a multifaceted and complex effort. It also is fraught with potential oversights and sometimes questionable assumptions. Studies conducted elsewhere of net public costs or benefits of Hispanics on states have often resulted in conflicting analyses, depending on the assumptions and models used.

Given these strong caveats, we developed a series of reasonable estimates of the primary direct and indirect contributions and costs of North Carolina's Hispanics to state and local budgets in 2004.

Our model is illustrated in Figure 2. We begin, on the left side of the figure, with the state's Hispanic population as tax contributors. Hispanic earnings are reduced by remittances, which leave the state's economy, and by taxes on income and property (sometimes termed personal current taxes or statutory taxes), which go directly into state and local coffers. Hispanic spending generates direct and indirect business revenue and employment, which generates three types of taxes: direct sales taxes, indirect business taxes, and indirect personal taxes. Altogether, as noted above, these totaled to an estimated \$755,520,000.

On the right side of the figure, we consider the state's Hispanic population as consumers of state services. As noted above, North Carolina's Hispanic population is responsible for an estimated \$816,559,000 in state public costs for K-12 education, health service delivery, and corrections.

Figure 2
Primary Direct and Indirect Contributions and Costs of North Carolina
Hispanics to State and Local Budgets. 2004



The difference in 2004 between Hispanics’ estimated major tax contributions of \$755,520,000 and their estimated major public costs of \$816,559,000 results in a net cost to the state of \$61,039,000, or approximately \$102 per Hispanic resident.

We then put the fiscal balance into the context of the labor power benefits to the state.

Hispanics comprise 7 percent of North Carolina’s overall workforce and considerably more in certain key sectors. This labor has allowed the state’s economic output to expand. In its absence, a substantial portion of North Carolina’s economic vitality would likely disappear.

Determining the net effects of a withdrawal of Hispanic immigrant workers on North Carolina industries is virtually impossible. For illustration purposes, however, we looked at North Carolina’s construction industry. Throughout North Carolina, this industry has become heavily dependent upon Hispanic workers, with Hispanics making up 29 percent of the state’s construction workforce.

Ignoring labor substitution effects, construction work could be cut by up to 29 percent if Hispanic workers were withdrawn. The hypothetical impact in 2004 would have been the loss of up to \$10 billion in value of construction done in the state, including: a revenue loss of up to \$2.7 billion for companies supplying construction materials and supplies; a loss of up to \$149 million in revenue for companies renting buildings, machinery and equipment; and up to 27,000 houses not being built.

A withdrawal of Hispanic construction workers would also mean up to a 29 percent reduction in non-building construction, including the installation of guardrails and signs, bridge construction, paving, and water and sewer construction. Even if the net effect were a fraction of the above upper-limit estimates—which, again, do not take labor substitution effects into account—there would be a

dramatic impact on North Carolina's construction sector (and other sectors, such as banking, through ripple effects) if Hispanics were to substantially withdraw from the state's workforce.

Another way to look at the impact of Hispanic workers on North Carolina's industries is in terms of wage savings, costs to consumers, and overall competitiveness of the industries. Hispanics have added substantially to North Carolina's supply of cost-effective labor. This has resulted in an estimated statewide wage savings of almost \$1.9 billion (1.4 percent of the total wage bill).⁸ The benefits are enjoyed by every county and by virtually all industries that export from the state and by many firms that serve local needs. In many cases, labor-cost savings are passed on to local consumers.

The Hispanic wage advantage is concentrated in two industries, agriculture and construction, where Hispanics comprise 31 and 29 percent of the labor force, resulting in savings of \$147 million (6.6 percent) and \$980 million (7.4 percent), respectively. Hispanics thus benefit the state by making an important rural export industry (agriculture) more competitive and by substantially reducing costs in an industry that fuels metropolitan area growth (construction).

On the other hand, it has been shown that Hispanic immigrants often depress wage levels of non-Hispanics, especially in lower-wage, labor-intensive sectors. Given the downward pressure less-educated Hispanics place on wages in these sectors, not everyone in North Carolina benefits from the influx of Hispanic workers.

Since writing this report on North Carolina, we have performed similar analysis on the State of Arkansas. We used similar methods and obtained somewhat different results. We do not expect that we can arrive at a final answer the question of net fiscal and economic impacts but believe they will vary from situation to situation.

Thank you for your attention.

⁸ Using data from the March 2005 Current Population Survey, the total wage bill for the state was estimated by multiplying the number of Hispanics and non-Hispanics with low levels of education (less than a high-school diploma) and high levels of education (a high-school diploma or higher) in each industry by their respective average hourly wage rates and mean number of hours worked over the previous year. The calculation was then repeated using the average non-Hispanic hourly wage for each industry-education category to estimate what the total wage bill would be without the immigrant wage advantage. Capital substitution and labor shortage effects were not taken into account.