

**Survey and Evaluation Research Laboratory**

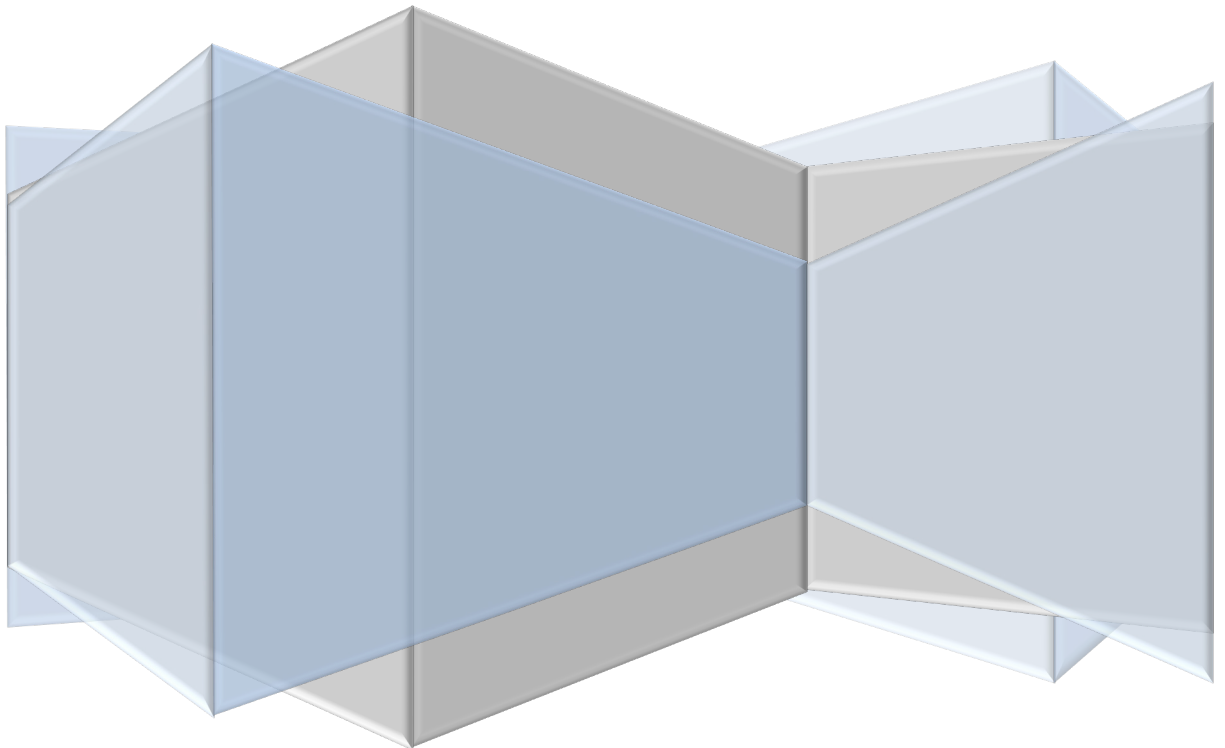
**Virginia Commonwealth University**

Summary Report of Characteristics of  
Foreign Born in Virginia

**Prepared by:**

**Susan White, Ph.D**

**Jennifer Reid, M.S.**



## Executive Summary

Out of Virginia's total estimated 2012 population (N=7,926,192), an estimated eleven percent is foreign born (N=870,084). The Virginia Adult Learning Resource Center (VALRC), a division of the Literacy Institute at Virginia Commonwealth University (VCU), requested the Survey and Evaluation Research Laboratory (SERL) at VCU provide a report based on mining census data of the foreign born population in order to help them assess the educational and naturalization trends of this population. This report has been provided in formats that allow for the further analysis by VALRC via excel data tables, summaries of key findings in each of the 22 Regional Planning District commissions, power point presentation and executive summary of the findings. The executive summary of the foreign born population distribution in the Commonwealth of Virginia based on secondary data analysis is contained herein. Data sources for the report include the most current United States census tables and datasets available (S0502, the American Community Survey s501, DP02, and NP01). Additional information about the data and the collection methodology are included in Appendix I to this report. The data was collected on thirteen variables:

- Population by Nativity Status and Citizenship
- Foreign-born population by region of birth
- Age groups and median age
- Marital status
- Period of entry
- Percent naturalized
- Percent naturalized by period of entry
- House type
- Language spoken at home and English-speaking ability
- Educational attainment
- Labor force participation
- Occupations
- Percent of population with health insurance coverage

This summary examines key variables of origin (nativity), naturalization, educational attainment, labor force participation and growth patterns within the Commonwealth of Virginia, overall, and across the twenty-two planning districts. Some of the questions this report addresses are: *How is Virginia's foreign born population distributed across the state? Is the foreign born population growing? What are the characteristics of the foreign born in Virginia (education level, origin,*

*citizenship status, etc.) across regions?* The answers to these questions will assist VALRC in planning and program development.

### *Distribution of Foreign Born in Virginia*

As previously stated, approximately 11% (N=870,084) of Virginia’s current population originates from outside the United States. The foreign born population are primarily from Asia (40.63%, N=353,509) and Latin American countries (36.81%, N=320,253). These two groups comprise 77.44% of all foreign born in Virginia (Chart 1).<sup>1</sup> The remaining foreign born are from Europe (11.45%, N=99,605) and a mix of other countries (11.12%, N=96,717). The distribution of foreign born by region varies widely (Chart 2). Concentrations are seen in some areas and will be discussed in the context of education level and naturalization later in the report.

Of the total current population of foreign born in Virginia, 45.2% (N=393,323) are naturalized U.S. Citizens. Virginia has actually seen a decrease in recent years in the growth rate of foreign born. Of the current foreign born population (N=870,084), 38.8% (n=337,830) entered since the year 2000 (Chart 3). While this seems to a large percentage, the rate of growth of the foreign born population as shown in the table below is less than reported in the 2000 census data:

<b>Table 1: Percent Increase in Foreign Born In Virginia</b>	<b>% increase</b>	<b>N</b>
<b>Cumulative (2011 estimate)</b>	<b>64.8%</b>	<b>870,084</b>
<b>Cumulative (2000)</b>	<b>86.8%</b>	<b>527,907</b>
<b>Cumulative (1990)</b>	<b>--</b>	<b>282,529</b>

### *Characteristics of Foreign Born in Virginia*

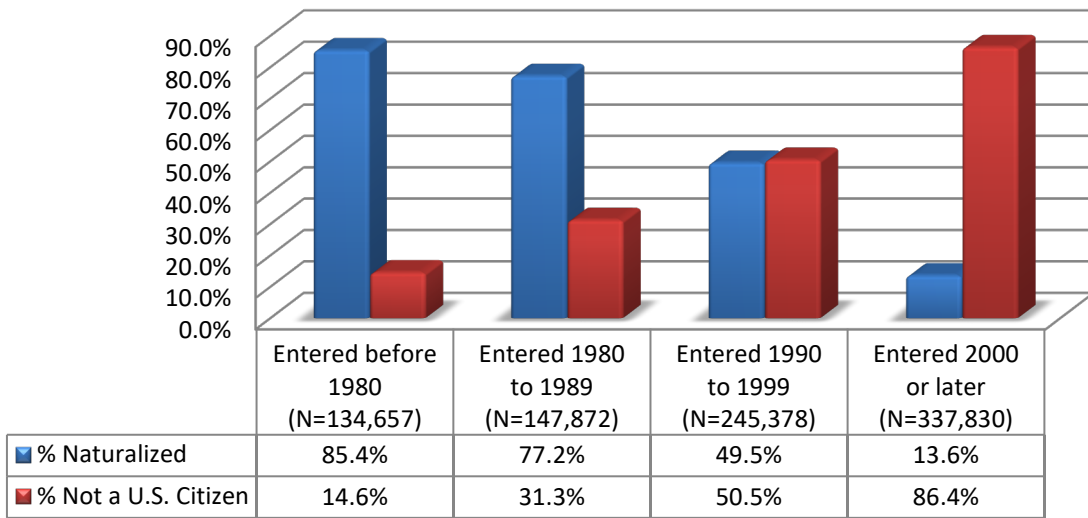
Of particular interest to this report are the educational and naturalization characteristics of Virginia’s foreign born population. Educational attainment in this population is fairly well distributed across categories with 21.0% (n=148,608) having less than a high school degree; high school graduate (including GED) 19.0% (n=134,322); some college/associate degree 20.0% (n=143,800); bachelor’s degree 22.0% (n=155,860); and graduate or professional degree 17.0% (n=123,152). (Chart 4)

Of the total foreign born population, 45.2% (n=393,323) have been naturalized (U.S. citizenship) and 54.8% (n=476,761) are not currently a U. S. citizen. Trends in obtaining U.S. citizenship have been declining as is evidenced by the data and visualized in the Chart 5 below:

---

<sup>1</sup> Charts that are not embedded in the body of the report are proved in Appendix II.

**Chart 5: % Naturalized by Entry Period**



One can see there has been a dramatic drop in naturalization of foreign born in Virginia. Although beyond the scope of this analysis, one must ask whether naturalization has become more difficult to obtain or whether naturalization is less desirable for foreign born entering Virginia. This change correlates with changes in the United States following the events of 9/11. This report did not consider whether this trend is specific to Virginia or whether this pattern is replicated in other regions of the United States.

The data show that 74.0% (n=605,047) of Virginia’s foreign born population are employed, while 26.0% (n=211,481) are not employed. Ninety-nine percent of those employed are in the civilian labor force, with roughly 1.0% employed by the military. Within occupation type, management, business, science and art occupations (37%, n=208,909) were most frequently reported, followed by service occupations (22%, n=125,008) and sales/office occupations (19%, n=104,736) (Chart 6). When looking at the data by industry type, the highest categories were “professional, scientific, and management, administrative and waste management services” (17%, n=95,727) and “educational services, and health care and social assistance” (16%, n=92,348) (Chart 7). (A complete distribution of both occupation and industry type are provided in the excel worksheets submitted separately.)

Additionally, of those who are naturalized, 86.0% (n=344,259) report they have health insurance (in this group 14.0%, n=56,508, do not have health insurance). Of those who are not U.S. citizens, 57.0% (n=272,195) report they have health insurance and 43.0% (n=209,507) do not have health insurance. Approximately 61.5% (n=506,057) currently report being married.

Approximately 17% (n=143,726) of the foreign born population in Virginia report that they only speak English, while 33% (n=281,644) speak Spanish, 24% (n=206,920) speak Asian and Pacific Island languages, 19% (n=165,255) other Indo-European languages, and 8% (n=66,126) some other language (Chart 8). Approximately 40% of those who speak Spanish reported their ability to speak English as “not well” or “not at all”. A much lower percentage of Asian and Pacific Islander speakers (21%), Indo-European speakers (10%), and Other language speakers (10%) report speaking English “not well” or “not at all.” (Chart 9)

Of the total foreign born population in Virginia the highest percentage report being between the ages of 25 and 44 (45.9%, n=399,732), with the next highest percentage between 45 and 54 (17.3%, n=150,367) (Chart 10). Less than one percent is reported as being younger than five years of age. Approximately 7% (n=60,797) of the foreign born population is school age (i.e. elementary, middle, high school), this percentage includes those individuals who are 5 to 17. Housing units reported totaled 333,578, of those approximately 60% (n=198,792) are owner-occupied units rather than renter-occupied.

### *Regional Trends*

Data were compared across planning districts on educational attainment, naturalization and origin of foreign born in Virginia to discern where the greatest needs were for both adult education and civics based programs. Regions (planning districts) were identified based on the level of education of foreign born residents for the initial analysis. All levels above a high school graduate (or GED) were grouped together for this analysis. Table 2 shows that twelve regions fell into this grouping where the education level was high school, GED, or above. Then data on naturalization rates for each district were added and finally, nativity (origin) of foreign born within the higher educational attainment regions are presented. Finally, the highest four percentages for each variable are highlighted in order to determine if any pattern presents itself. Adding the data in layers in this manner allowed the data to be examined for patterns that might emerge. As can be seen, generally, high education is related to those whose origin is “Asia” although that is not always true. Region 10 has a higher educational attainment of 64.1% and the foreign born population is relatively evenly distributed (Asia=35.8%; Latin America=25.8%; Europe/Other=38.4%). Another interesting pattern emerges in that the highest percentages of naturalization correspond to a higher “Asia” origin twice, “Europe/Other” once, and in Region 21 with a naturalization rate of 51.4%, there is an even dispersion of the foreign born population across this region (Asia=37.1%; Latin America=32.3%; and

Europe/Other=30.6%). This indicates that each region may have unique factors that influence both educational attainment and naturalization that are not necessarily related to origin.

Table 2:	<b>Higher Levels of Education and Naturalization by District</b>	<b>Distribution of Foreign Born Within District</b>
----------	--	---

Planning District	% More Than HS	% Naturalized	Asia	Latin America	Europe/Other
2	67.8%	61.8%	50.6%	14.3%	35.0%
4	80.3%	32.1%	50.6%	16.2%	33.2%
5	54.4%	38.0%	31.4%	37.8%	30.9%
8	61.9%	46.0%	43.6%	36.5%	19.8%
9	50.7%	40.2%	16.8%	51.7%	31.5%
10	64.1%	37.4%	35.8%	25.8%	38.4%
11	58.7%	36.7%	40.7%	22.3%	37.0%
15	53.5%	39.2%	36.8%	37.6%	25.6%
16	52.7%	50.4%	27.3%	47.2%	25.5%
18	56.5%	54.0%	13.8%	35.1%	51.1%
20	63.9%	55.7%	46.7%	27.7%	25.6%
21	58.9%	51.4%	37.1%	32.3%	30.6%

Looking at the data from the viewpoint of those with less than a high school education, patterns are also identifiable. Table 3 groups the same variables, but this time begins by layering in the lowest education levels, first. In this instance, in the “Less than HS” column, the percentages represent how much of the FB population in that region do not have at least a high school equivalent education. For example, in planning district 7, 43.6% of the FB population do not have a high school equivalent education, and 30.5% of the FB are naturalized (e.g., 69.5% are not U.S. citizens) and 63.5% are of Latin America origin. This analysis indicates that low educational attainment and low rates of naturalization correspond to a higher Latin America origin in these eight regions.

Table 3:	<b>Lowest Levels of Education and Naturalization by District</b>	<b>Distribution of Foreign Born Within District</b>
----------	--	---

Planning District	% Less Than HS	% Naturalized	Asia	Latin America	Europe/Other
3	30.2%	27.6%	14.6%	58.1%	27.3%
6	39.2%	31.9%	21.1%	51.7%	27.2%
7	43.6%	30.5%	17.3%	63.5%	19.3%
12	36.9%	28.3%	17.3%	61.5%	21.2%
13	35.7%	45.8%	27.7%	45.3%	27.0%
14	32.8%	40.7%	17.3%	54.7%	27.9%
19	40.8%	39.0%	20.9%	50.5%	28.6%
22	30.2%	22.1%	7.8%	78.3%	14.0%

Regions 1 and 17 were not included in these tables. Region 17 did not have any educational attainment data reported. Region 1 fell into the “high school or GED” educational level and reported a naturalization rate of 46.2%, which is a somewhat higher rate comparatively, with the distribution of origin Asia=29.7%; Latin America=51.8%; and Europe/Other=18.4%. Maps have been provided that help to visualize how the foreign born population is distributed across the Commonwealth. In sum, the distribution of the foreign born in Virginia indicates that local factors are likely to play a role in the distribution. High Asian populations are often found in regions where higher education institutions are located. Northern Virginia shows a very diverse distribution and more rural areas tend to lower education levels and more concentrated Latin America origins of the foreign born.

## Appendix I

### METHODOLOGY

#### Adult Literacy Secondary Data Collection and Analysis

Secondary data collection was conducted to gather information on foreign born individuals living in Virginia for the Adult Literacy project. Data was collected between November 25, 2012 and

January 15, 2013 by the Survey and Evaluation Research Laboratory at Virginia Commonwealth University. The data obtained was gathered into 14 excel worksheets. Each worksheet addresses one of the variables of interest to the Virginia Adult Literacy Council organized by Planning Districts and one that contains information on all the variables of interest on Virginia as a whole.

An internet search was conducted to locate the most recent and reliable data concerning foreign born in Virginia. The data that was ultimately used came from the United States Census Bureau website. Data was pulled from the following US Census tables and datasets: S0502, the American Community Survey s501, DP02, and NP01 summaries.

Table S0502 was used to gather 5 year estimates by planning district, and included each town, county and independent city in that planning district. Table DP02 (Selected Social Characteristics) of the ACS was used to collect information on towns, counties and cities with populations under 50,000.

Data was not available for every variable for all localities within each planning district. If we were not able to obtain information for each and every locality within a planning district, an asterisk will appear next to the planning district name in the top row of the spreadsheet. A list of those localities where no data was available is then included in the spreadsheet for the corresponding variable. Data for each of the twenty-two planning districts represented is either for the region as a whole, some locations within the region, or none of the region. For those regions where partial data was obtained an asterisk appears next to the region name (on top line) followed by the locations that may not be represented. "May not be represented" refers to instances in which the coding of the Census data did not allow us to access a specific locale as defined by VALRC and in which case the Census data regions were defined slightly different. Those regions where no data was found will contain NA in the cells indicating no data was found for that location.

Planning District Breakdowns:

Planning District One: Lee, Scott, Wise, Norton



Planning District Two: Dickerson, Buchanan, Russell, Tazewell

Planning District Three: Washington, Bristol, Bland, Wythe, Galax, Carroll, Grayson, Smyth

Planning District Four: Giles, Pulaski, Radford, Montgomery, Floyd

Planning District Five: Alleghany, Covington, Clifton Forge, Botetourt, Craig, Salem, Roanoke City, Roanoke County

Planning District Six: Rockingham, Harrisonburg, Highland, Bath, Lexington, Buena Vista, Waynesboro, Augusta, Staunton

Planning District Seven: Frederick, Winchester, Clarke, Warren

Planning District Eight: Loudoun, Manassas Park City, Manassas City, Falls Church, Prince William, Arlington, Alexandria, Fairfax

Planning District Nine: Madison, Orange, Culpeper, Fauquier, Rappahannock

Planning District Ten: Greene, Albemarle, Charlottesville, Fluvanna, Louisa, Nelson

Planning District Eleven: Amherst, Appomattox, Bedford, Bedford City, Lynchburg, Campbell

Planning District Twelve: Franklin County, Patrick, Martinsville, Henry, Danville, Pittsylvania

Planning District Thirteen: Halifax, Mecklenburg, South Boston, Brunswick

Planning District Fourteen: Nottoway, Amelia, Buckingham, Cumberland, Prince Edward, Charlotte, Lunenburg

Planning District Fifteen: Goochland, Powhatan, Chesterfield, Colonial Heights, Richmond City, Henrico, Hanover, Charles City, New Kent

Planning District Sixteen: Stafford, Fredericksburg, King George, Spotsylvania, Caroline

Planning District Seventeen: Westmoreland, Northumberland, Richmond County, Lancaster

Planning District Eighteen: Essex Middle sex, Mathews, Gloucester, King and Queen, King William

Planning District Nineteen: Greensville, Emporia, Sussex, Surry, Prince George, Petersburg, Hopewell, Dinwiddie

Planning District Twenty: Southhampton, Isle of Wight, Franklin City, Suffolk, Portsmouth, Chesapeake, Norfolk, VA Beach

Planning District Twenty-One: James City, Williamsburg, York , Newport News, Hampton, Poquoson City

Planning District Twenty-Two: Northhampton, Accomack