# Civic Contributions: Taxes Paid by Immigrants in the Washington, DC, Metropolitan Area 

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## By

Randy Capps, Everett Henderson
The Urban Institute
Jeffrey S. Passel
Pew Hispanic Center
Michael Fix
Migration Policy Institute


COMMUNITY
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for the National Capital Region

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## Executive Summary

The Washington, DC, metropolitan area is home to over 1 million immigrants, who composed onefifth of the area's total population in 2004. The metropolitan area is relatively affluent and boasts a strong economy that attracts large numbers of immigrants for jobs at both the high- and low-skilled ends of the labor market. Immigrants in the Washington area come from more diverse countries of origin than is the case nationally, and a relatively high share come from origins with above average incomes. Whether higher or lower skilled, immigrants contribute strongly to the region's economy, purchasing power, and tax base.

Immigrant households in the Washington, D.C., metropolitan area had a total income of \$29.5 billion in 1999-2000, and they paid $\$ 9.8$ billion in taxes. This represents 19 percent of the region's total household income and 18 percent of all taxes paid. Our estimate of the amount of taxes paid by immigrants is an underestimate, because it is based on 1999-2000 data, and the number of immigrants in the region has grown from 850,000 to at least 1.2 million since that time.

Although immigrant households on average have lower incomes than native-born Washington, D.C., area households, they pay nearly the same share of their incomes in taxes. Some groups of immigrants-the most educated and highest earners-actually pay more in taxes than natives, on average. On the other hand, lesseducated immigrants and those without permanent legal status have considerably lower incomes and pay a lower share of their incomes in taxes than natives.

This report estimates the taxes paid by immigrants in the Washington, D.C., area in 19992000 and documents their
demographics, household composition, income, and dispersal across jurisdictions in the region. The findings in this report are based mostly on analysis of 2000 U.S. Census data, because the census provides the most recent comprehensive data that allow disaggregation by country of origin groups and by many of the region's local jurisdictions. The demographic data in the report are updated through 2004 using the U.S. Current Population Survey. We calculate taxes at both the individual level (e.g., income and payroll taxes) and the household level (e.g., property taxes), but aggregate them up to the household level. Throughout the report we refer to households headed by immigrants (whether citizens, legal immigrants, or unauthorized migrants) as "immigrant households" and compare their incomes and tax payments to households headed by native-born U.S. citizens. Following are highlights of key findings from the report:

## Immigrant households in the metropolitan area paid almost $\$ 10$ billion in taxes in 1999-2000, and they paid taxes at nearly the same rate as native households.

 For the taxes we calculated at all levels of government, immigrant households paid $\$ 9.8$ billion, or 17.7 percent of total taxes paid by metropolitan-area residents in 1999-2000 (\$55.2 billion). Immigrants' share of taxes was virtually the same as their share of the total population (17.4 percent), but below their share of total income (19 percent) and of all households (21 percent). Immigrant households paid a slightly lower share of their incomes in taxes ( 28 percent) than native households (31 percent), in part because they had lower average incomes. Overall,however, our research suggests that immigrants pay taxes roughly in proportion to their share of the overall population.

Immigrant households in the Washington, DC, metropolitan region had a total income of \$29.5 billion in 1999-2000, and they paid $\$ 9.8$ billion in taxes. This represents 19 percent of the region's total household income and 18 percent of all taxes paid.

The federal government collects nearly three-quarters of taxes paid by both immigrants and natives. In 1999-2000, $\$ 7$ billion, or 72 percent of all taxes paid by immigrant households, were federal: income, Social Security, and Medicare. Another \$1.6 billion (17 percent) were state taxesincome, sales, automobile, cigarettes, and alcohol-and the remaining $\$ 1.1$ billion (12 percent) were local taxes: property, income, sales, automobile, telephone, and utility. The distribution of taxes across federal, state, and local governments was similar for natives. ${ }^{1}$

[^1]Immigrant households in Fairfax and Montgomery counties-the two largest jurisdictions-paid 60 percent of all taxes paid by the metropolitan area's immigrant households. In 1999-2000, immigrant households in Fairfax County paid $\$ 3.2$ billion in taxes, or 32 percent of the regional total. Immigrant households in Montgomery County paid $\$ 2.8$ billion-28 percent of the total. Immigrants in the District of Columbia and Prince George's County each paid about $\$ 1$ billion in taxes (10 percent of the regional total in each jurisdiction). Total tax payments were much lower in other jurisdictions because they had far fewer immigrants. This pattern may change in the future, however, as the population of immigrants is growing most rapidly in outer-ring suburban jurisdictions such as Loudoun County.

## Immigrants accounted for nearly one-quarter of all

 taxes paid by households in Fairfax and Montgomery counties. In 1999-2000, immigrant households paid 24 percent of all taxes paid by households in Montgomery County and 22 percent in Fairfax County. These two jurisdictions also had the highest shares of immigrants in their populations. Immigrant households paid 19 percent of taxes in Arlington, 16 percent in the District of Columbia, 15 percent in Prince George's County, and 13 percent in Alexandria and Prince William County. In all jurisdictions, the share of taxes paid by immigrant households was only slightly below their share of[^2]total income and of all households.

## Immigrant households in Northern Virginia and suburban Maryland pay a significant share of taxes collected by the states of Virginia and Maryland.

 In 1999-2000, immigrant households in the Northern Virginia jurisdictions paid 8 percent of all state taxes paid by all households across the state of Virginia: \$810 million out of \$9 billion. Immigrant households in suburban Maryland also paid 8 percent of all taxes paid by households across the state: \$560 million out of $\$ 6.2$ billion. ${ }^{2}$ Thus, the taxes paid by immigrants in Northern Virginia and suburban Maryland not only support local government services but also strongly support state services across both Virginia and Maryland.
## Households headed by immigrants who are naturalized citizens pay roughly the same taxes as households headed by native-born citizens, while households headed by noncitizens pay lower taxes. In 1999, households headed by naturalized citizens-immigrants who in most cases have been in the United States at least five years and passed the citizenship exam-had an average income of $\$ 91,000$, above that for households headed by native-born citizens ( $\$ 88,000$ ). Naturalized citizen households paid roughly the same amount in taxes as native households (\$31,000). Households headed by legal permanent residents-"green card" holders admitted as refugees, for employment, or to be reunified

[^3]with family members-had slightly lower average incomes ( $\$ 79,000$ ) and paid lower average taxes ( $\$ 27,000$ ). Households headed by unauthorized immigrants (i.e., those who entered the country illegally or overstayed valid visas) or by immigrants with Temporary Protected Status (those granted temporary work authorization based on war or natural disaster in their home countries, mostly El Salvador) had the lowest average incomes $(\$ 53,000)$ and paid the lowest average taxes (\$13,000). Because many unauthorized immigrants are paid in cash and therefore do not pay Medicare, Social Security, or federal, state, or local income taxes, any change in immigration policy that would grant them legal work authorization would significantly raise their tax contributions. ${ }^{3}$

Households headed by immigrants from most regions of the world pay taxes similar to those paid by native households.
In 1999, average incomes were higher for households headed by immigrants from India $(\$ 112,000)$, Europe $(\$ 100,000)$, and the Middle East $(\$ 95,000)$ than for households headed by native-born citizens. Households headed by immigrants from these regions also paid higher taxes than native households. Moreover, households headed by immigrants from South America and from China, Vietnam, and other parts of Asia had only slightly lower incomes and paid only slightly lower taxes than native households. The households with the lowest incomes were those
${ }^{3}$ Our tax models assume that just over onehalf (55 percent) of unauthorized immigrants paid income, Social Security, and Medicare taxes, as many worked under the table. We assume, however, that all unauthorized immigrants paid the other forms of taxes not directly related to work authorization. We also assume 100 percent tax compliance for immigrants with Temporary Protected Status, because they had legal work authorization.
headed by immigrants from El Salvador (\$51,000), other Central American countries ( $\$ 55,000$ ), and sub-Saharan African countries ( $\$ 56,000$ ); these were also the households with the lowest average tax payments. Despite this variation by origin, all groups of immigrants made significant tax contributions in 1999-2000.

## Better-educated households

 pay more in taxes, regardless of whether they are immigrant or native households. The 1999 average income for households headed by immigrants without a high school degree was only $\$ 47,000$-or less than one-half the income of households headed by immigrants with a four-year college degree (\$103,000). The average income for households headed by natives without a high school degree $(\$ 39,000)$ was even lower, and was only about one-third of that for households headed by natives with college degrees $(\$ 122,000)$.Average 1999-2000 taxes were three times lower for households headed by immigrant high school dropouts than households headed by college-educated immigrants ( $\$ 12,000$ versus $\$ 36,000$ ), while
among native households this ratio was about four times lower ( $\$ 11,000$ versus $\$ 45,000$ ). Thus, investments in adult educationfor both natives and immigrantswill likely pay off in terms of higher tax revenues in the future.

## English-speaking immigrant households pay higher taxes than native households, but

 households headed by immigrants who speak little or no English pay much lower taxes. In 1999-2000, the average income of Englishspeaking immigrant households was higher than that for native households (\$97,000 versus $\$ 88,000$ ), and English-speaking immigrant households paid higher taxes on average (\$34,000 versus \$31,000). Immigrant households where English was not the primary language but the household head spoke English very well had average income and tax payments nearly as high as those for native households. On the other hand, immigrant households where the head did not speak English at all had much lower average income $(\$ 41,000)$ and tax payments (\$11,000). These findings suggestthat immigrants from Englishspeaking countries and those who learn English well contribute as strongly to the tax base as nativeborn residents of the Washington region. For those immigrants who do not speak English well, investment in English language instruction will likely raise their future income and tax contributions.

Taken together, these findings show the importance of immigrants to the regional economy and tax base. As the share of immigrants in the region's population increases-from 18 to 20 percent between 2000 and 2004-their contributions to the tax base will continue to increase. All immigrants pay substantial shares of their incomes in taxes, and in most cases these shares are close to those paid by natives. The best-educated immigrantsthose from India, Europe, and the Middle East-actually earn more income and pay higher taxes than natives. Continued flows of these highly skilled immigrants into the region represent an economic and fiscal bonus to the area's state and local governments.

## In 1999-2000, immigrant households in

 Fairfax County paid \$3.2 billion in taxes, or 32 percent of the regional total. Immigrant households in Montgomery County paid \$2.8 billion-28 percent of the total. Immigrants in the District of Columbia and Prince George's County each paid about \$1 billion in taxes
## Foreword

Few issues in the current debate over comprehensive immigration reform are as controversial and contested as the fiscal impacts of illegal immigrants on the communities within which they live and the United States as a whole. The costs and benefits of immigrants have become a hot political topic recently, owing in part to the rapid rise in immigration-both legal and illegal-over the past couple of decades. Costs such as public education, health care, and social services are frequent topics of concern and debate when it comes to recent immigrants (Camarota 2004); however, the sizeable contributions of immigrants to the economy and tax base are often underestimated or overlooked (Kasarda and Johnson 2005). This report does not offer estimates of the overall economic impact of immigration on the Washington, D.C., area; instead, it focuses on one element of immigrants' impact that is very important for local officials and policymakers: their tax contributions. Because immigrants have become such a large population, their tax payments have become a significant part of state and local budgets as well as federal tax revenues generated in the area.

A recent survey from the Pew Hispanic Research and Hispanic Center (Kohut and Suro 2006) finds 56 percent of respondents nationwide believe that immigrants do not pay their fair share of taxes. Only one-third of respondents believe that immigrants do so. ${ }^{4}$ But our analysis in this report suggests that immigrants in the Washington, D.C., metropolitan

[^4]area do pay their fair share of taxes, at least in comparison to natives. In fact, we find no substantial differences in the average tax payments or share of income paid in taxes between natives and immigrants, with one important exception: the unauthorized population.

Our analysis focuses on the Washington metropolitan region, a region that emerged during the 1990s as an important new immigrant gateway and settlement area. Between 1990 and 2000, the foreign-born in Washington grew by almost 70 percent, with much of that growth coming in the large, comparatively wealthy and close-in suburbsespecially Fairfax and Montgomery counties (Price et al. 2005). This rapid growth and suburbanization reflect nationwide patterns in immigrant settlement and give this report a salience beyond the Washington area (Singer 2004).

Moreover, the report is being released at a time of intense political ferment as Congress is debating reforms that could increase the number of both temporary and permanent immigrants entering the country, place a significant share of the unauthorized population on a path to legal status, and stiffen federal and state enforcement of the nation's immigration laws. One question underlying the debate is whether immigrants pay their own way-and the degree to which native taxpayers are subsidizing their presence. Again, our analysis suggests that immigrants in the Washington metropolitan area are paying their own way and are not heavily subsidized by the nativeborn population.

The central purpose of this report is to estimate the amount of taxes paid by immigrants living in the metropolitan area. In the Washington, D.C., area, as nationally, immigrants are predominantly of young working
age and-with the exception of some unauthorized immigrantspay the same income and payroll taxes as native-born citizens. Very few are yet retired or collect pensions, Social Security, or other retirement benefits. Additionally, since the area is home to so many relatively well-paid immigrants, they in most cases pay income and payroll taxes at nearly the same rates as citizens.

Immigrants pay several other types of taxes as well, and these other taxes tend to be more important sources of revenue at the state and local level. Many immigrants own homes and pay state and local property taxes; others-like all renters-pay property taxes indirectly through their rent payments. Immigrants consume the same goods and services as everyone else, and therefore also pay state and local sales taxes. Many immigrants own cars and pay automobile taxes in the jurisdictions that collect them. In this report we sum up all taxes paid by immigrants and natives in the national capital area, including income, Medicare, and Social Security taxes paid to the federal government as well as income, property, sales, automobile, tobacco, alcohol, and utility taxes paid to the District of Columbia, Maryland, Virginia, and most major suburban jurisdictions. While not exhaustive of all taxes and fees, our methodology captures the vast majority of taxes paid by individuals in the metropolitan area. ${ }^{5}$

Several general points that emerge from this study bear emphasizing:

- All immigrant groups, regardless of legal status, pay substantial

[^5]amounts of federal, state, and local taxes.

- Contrary to public perception noted above, on average, immigrant households paid roughly the same share of taxes as they represent of the total regional population. Since there are so many immigrants in suburban Maryland and Northern Virginia, immigrants living in these areas provide substantial support for services across the states of Maryland and Virginia through their state tax payments.
- Tax payments are correlated with citizenship, legal status, education levels, and Englishspeaking ability. Hence, immigrants who are unauthorized, who have less than a high school education, and who are limited English proficient pay lower taxes on average than other immigrant populations. Offering a path to legalization and increasing educational attainment and English skills would probably increase these groups' fiscal contributions.
- While the national capital region is in many ways representative of the nation as a whole, it is also distinct in some ways. Unlike many metropolitan areas, no single national origin group dominates the immigrant population (as Mexicans do in California and Texas, for example). Many members of the region's largest group-Salvadorans-have been granted what is known as Temporary Protected Status, which contemplates their eventual return to their home country but also authorizes them for work and enhances their tax contributions.


## Approach

This study adapts analytic methods used in previous Urban

Institute studies of taxes paid by immigrants in New York State and Los Angeles (Passel and Clark 1998; Clark and Passel 1993). We start with detailed data on individual households drawn from the Census 2000 5-Percent Public Use Microdata Sample-the largest public use data set with information on U.S. households and their income and assets. We use techniques pioneered by the Urban Institute and Pew Hispanic Center to assign legal status to the immigrants in the data set, such as naturalized citizens, legal permanent residents, refugees, legal temporary migrants, unauthorized migrants, and immigrants with Temporary Protected Status.

We estimate the tax contributions for each household based on the household's income, demographic composition, and other characteristics, including home ownership, rent/mortgage payments, other housing expenses, and automobile ownership. We adjust the initial estimates to account for deficiencies in census data (such as underreporting of income and under-sampling of immigrants) and to ensure that the total tax contributions we estimate for each jurisdiction agree with the reported amounts of taxes collected. Using this method, we are able to develop estimates of several different taxes paid by immigrants for each major jurisdiction in the national capital region.

We estimate three broad categories of tax payments, and our estimates are developed for individuals, families, and households depending on the appropriate unit for each tax. Payroll taxes (Social Security and Medicare) are estimated on an individual basis from information on wage and salary income as well as self-employment income. Income taxes (federal, state, and local) are estimated for "filing units" (essentially nuclear family
units) using estimates of taxable income based principally on the census but augmented to account for income undercounted by the census. Property and consumption tax estimates are modeled at the household level based on income data from the census and consumption models developed from the Consumer Expenditure Survey (CES). Consumption taxes we estimate at the state and local level-depending on the jurisdiction-include general sales, automobile, alcohol, and tobacco. The tax estimates for all three categories are aggregated to households and reported at this level.

Income and tax estimates are reported for geographic areas identifiable in the census data that correspond to political jurisdictions within the Washington, D.C., metropolitan area. The District of Columbia is covered as a single area in the study. We report taxes for the following Virginia jurisdictions: Alexandria City, Arlington County, Fairfax County (including the cities of Fairfax and Falls Church), Fredericksburg City (including Spotsylvania and Culpeper counties), Loudoun County (including Fauquier, Clarke, and Warren counties), Stafford County (including King George County), and Prince William County (including Manassas and Manassas Park cities). The Maryland areas reported are Prince George's County, Montgomery County, Frederick County, Charles County, and Calvert County (including St. Mary's County).

The main goal of the study is to estimate all types of taxes in all jurisdictions for households headed by immigrants, and to compare their tax payments with payments of households headed by natives. We also calculate tax payments separately for immigrant households according to their citizenship and legalstatus, and country or region of birth.

## Demographics of the <br> National Capital <br> Region's Foreign-Born Population

The Washington, D.C., metropolitan area is home to over 1 million immigrants, who composed one-fifth of the area's total population in 2004. The metropolitan area is relatively affluent and boasts a strong economy that attracts large numbers of immigrants for jobs at both the high- and low-skilled ends of the labor market. As we will show in this report, immigrants in the Washington area come from more diverse countries of origin than is the case nationally, and a relatively high share of the region's immigrants come from origins with above average incomes.

While we provide more recent data on the demographics of immigrants, we use the 2000 U.S. Census to calculate taxes for several reasons. First, the census provides the most recent data with comprehensive coverage and large samples of immigrant populations. ${ }^{6}$ Second, the census includes geographic detail that permits us to examine the District of Columbia and most major suburban jurisdictions in Maryland and Virginia separately. Third, using the census, we can disaggregate income and taxes paid for several different country and region-of-origin groups within the area's jurisdictions. Fourth, the census offers detail on income, housing characteristics, and automobile ownership-all important inputs for our tax estimation models. Finally, we have assigned legal status to noncitizen immigrants in the census data, allowing us to estimate taxes paid by different groups of

[^6]Between 2000 and 2004, the area's total population grew by 21 percent or about 1 million-from 4.8 to 5.8 million-but the foreign-born
population grew much faster-by 36
percent, from 850,000 to 1.16
million. Immigrants represented 18
percent of all the metropolitan area's
residents in 2000 and 20 percent in 2004.
immigrants according to their status, such as naturalized citizens, temporary legal residents, legal permanent residents, unauthorized migrants, and refugees (for definitions of these groups, see figure 1). ${ }^{7}$

[^7]Figure 1: Definitions of Citizenship and Legal Status Categories Used in the Report

## Non-citizens

- Legal permanent residents (LPRs) are legally admitted to live permanently in the United States through qualifying for immigrant visas abroad or adjustment to permanent resident status in the United States. LPRs are issued documentation commonly referred to as "green cards," although the cards have not been green for many years. Almost all LPRs are "sponsored" (i.e., brought to the United States) by close family members or employers.
- Refugees and asylees are granted legal status due to persecution or a well-founded fear of persecution in their home countries. Refugee status is granted before entry to the United States. Refugee status may be granted to a group of persons, although each individual must also qualify for the status. Asylees must meet the same criteria regarding fear of persecution. Unlike refugees, asylees usually arrive in the country without authorization (or overstay a valid visa), later claim asylum, and are granted their legal status while in the United States. After one year, refugees and asylees are generally eligible for permanent residency, and then for naturalization five years after that. Almost all "adjust" their status and become LPRs, although they retain certain rights-for instance, eligibility for major federal benefit programs-by virtue of their designation as refugees or asylees. In this report, we categorize all immigrants who enter as refugees or are granted asylum as refugees, even after they become LPRs or citizens.
- Temporary legal residents have been admitted to the United States for a temporary or indefinite period, but have not attained permanent residency. Most are people who have entered for a temporary period, for work, as students, or because of political disruption or natural disasters in their home countries. Some seek to stay for a permanent or indefinite period and have a "pending" status that allows them to remain in the country and often to work but does not carry the same rights as legal permanent residency.
- Unauthorized migrants do not possess a valid visa or other immigration document, because they entered the United States illegally (usually across the Mexican border), stayed longer than their temporary visas permitted, or otherwise violated the terms under which they were admitted. A small number eventually adjust their status and attain legal residency after a sponsorship petition has been filed by a relative, spouse, or employer.
- Temporary protected status (TPS) was granted to several hundred thousand migrants who fled wars and natural disasters during the 1980s and 1990s. Most TPS migrants entered the country illegally or overstayed valid visas-and thus were once part of the unauthorized population-but later applied for and received TPS. A large majority of TPS migrants are from El Salvador, although small numbers of migrants from other Central American and African countries have also received TPS.


## Citizens

- Naturalized citizens are former LPRs who have become U.S. citizens through the naturalization process. Typically, LPRs must be in the United States for five or more years to qualify for naturalization, although immigrants who marry citizens can qualify in three years, and some small categories qualify even sooner. LPRs must take a citizenship test-in English-and pass background checks before qualifying to naturalize.
- Native-born citizens. All people born in the United States (including the children of noncitizen parents) are granted birthright citizenship, regardless of their parents' birthplace or legal status. Native-born citizens also include people born in Puerto Rico, U.S. Virgin Islands, other U.S. territories and possessions, and those born in foreign countries to a U.S. citizen parent.


## Trends in the Size of the Region's Foreign-Born Population

Over the past few years the Washington, D.C., area has experienced rapid growth in its total population, and the share of the population composed of immigrants has also risen. Between 2000 and 2004, the area's total population grew by 21 percent or about 1 million-from 4.8 to 5.8 million-but the foreignborn population grew much faster-by 36 percent, from 850,000 to 1.16 million. Immigrants were 18 percent of all the metropolitan area's residents in 2000 and 20 percent in 2004. The Washington, D.C., area also has a higher share of immigrants than the overall U.S. population (12 percent in 2004), but the region's foreign-born share is lower than in such major immigration gateway cities such as New York, Los Angeles, and Miami.

As the foreign-born share of the region's population increases, so will their tax and other economic contributions. Since we use 2000 data to develop our tax estimates, and the immigrant population has grown by more than one-third since that time, our estimates likely underestimate substantially immigrants' current tax contributions.

## Origins of the Region's Immigrants

The national capital area's foreignborn population is somewhat more diverse than the immigrant population nationally, and this diversity has important implications for immigrants' family income and tax contributions. In the Washington, DC, area, the two largest source regions for immigrants were Latin America (40 percent) and Asia (32 percent) in 2000 (figure 2). Central America accounted for 24 percent of the region's immigrants, and EI Salvador was the source country
for 13 percent. Immigrants from Africa and the Middle East made up 15 percent and those from Europe and Canada the remaining 13 percent (for a detailed list of origins for the region's immigrants, see appendix table 1). Nationally, about one-half of immigrants come from Latin American and one-quarter from Asia, but shares from Africa and the Middle East are much lower (under 5 percent). One important contrast between the Washington, D.C., region and the nation is that Mexico is the most common sending country nationally (30 percent), while EI Salvador is the most common country regionally. Another important difference is the relatively high shares of Asian, Middle Eastern, and African immigrants in the area. As we shall see later in the report, Asian and Middle Eastern immigrants earn relatively high incomes, and so their overrepresentation in the Washington, D.C., area is part of why the region's immigrant population is relatively affluent and the tax base relatively strong.

Figure 2: Region of Origin for Washington, DC, Metropolitan Area Immigrants, 2000


Total of 857,000 Foreign-Born in April 2000

## Citizenship and Legal Status of the Region's Immigrants

Washington, D.C.'s immigrant population includes a mix of legal and unauthorized immigrants, as well as those who have become U.S. citizens (for definitions of the citizenship and legal status groups analyzed in this report, see figure 1). In 2000,26 percent of the region's immigrants were unauthorized immigrants and immigrants from Central America who had Temporary Protected Status (figure 3). This share was near the national average in 2000 (27 percent). Unauthorized immigrants are those who enter the United States illegally, overstay valid temporary visas, or otherwise violate immigration laws. The U.S. Congress granted Temporary Protected Status (TPS) to immigrants from Central America who fled civil wars and natural disasters, mostly during the 1980s. TPS was renewed for about 300,000 immigrants-mostly from El Salvador and Honduras-in early 2006 (U.S. Citizenship and Immigration Services 2006). The share of immigrants who have TPS is relatively high in Washington, D.C., because the region has so many immigrants from Central America. ${ }^{8}$ Nonetheless, there is a significant unauthorized population-i.e., those lacking any form of legal documentation-in the metropolitan area, and the vast majority are immigrants from Latin American countries.

[^8]
## Figure 3: Citizenship and Legal Status of Washington, DC, Metropolitan Area Immigrants, 2000



## Total of 870,000 Foreign-Born in April 2000

[^9]Figure 4: Foreign-born Share of Total Population by Jurisdiction, Washington, DC, Metropolitan Area, 2000


Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public Use Microdata Sample with an adjustment for legal and unauthorized immigrants omitted from the Census.

Note: Counties are grouped according to 2000 Census Public Use Microdata Areas. Some groups of counties include counties outside the official Washington, DC, metropolitan statistical area.

The share of immigrants who were legal permanent residents (LPRs) in 2000 ( 27 percent) was nearly the same as the undocumented share and again matched the national pattern. LPRs are "green card" holders or immigrants who have been legally admitted to the country and can apply for citizenship after several years. A higher share of the region's immigrants (32 percent) were naturalized immigrants-those LPRs who had already applied for and received citizenship. Finally, in the national capital area as nationally, very small shares of immigrants were refugees-those who have been admitted based on
fear of persecution-or temporary residents such as students and temporary workers (for a detailed description of the citizenship and legal status of the population and households by jurisdiction, see appendix table 2). Many of the region's students and temporary workers come from Asian countries such as India and China.

## Distribution of Immigrants across the Region

The foreign-born are most highly concentrated in Washington, DC's
most affluent inner-ring suburbs, slightly less concentrated in the District of Columbia and Prince George's County, and least concentrated in outer-ring suburbs. In 2000, immigrants were slightly more likely than the native-born to live in suburban Virginia, but slightly less likely to live in the District of Columbia. About the same share of immigrants and natives (44 percent) lived in suburban Maryland (appendix table 2). The vast majority of immigrants ( 70 percent) lived in the three most populous suburban counties: Fairfax (29 percent), Montgomery (27 percent), and Prince George's (14 percent).

Fairfax and Montgomery County each had more than 100,000 households headed by immigrants; Prince George's County was home to 49,000 immigrant households. The District of Columbia also had a high number of immigrant households: 39,000. The absolute number of immigrant households was much lower in most other jurisdictions. As we shall see later in the report, total taxes paid by immigrant households follow a similar pattern, with the vast majority of taxes generated in Fairfax, Montgomery, and Prince George's counties as well as the District of Columbia.

The share of households headed by immigrants in 2000 was highest and exceeded the metropolitan-area average in inner-ring suburban towns and counties: Montgomery County (31 percent), Fairfax County (29 percent), Arlington (28 percent), and Alexandria (25 percent), Prince George's County (17 percent) and the District of Columbia (16 percent) and had foreign-born household shares below the metropolitan average of 21 percent (figure 4). All the outerring counties except Prince William had foreign-born household shares below the national average of 14 percent. ${ }^{9}$

Other studies have documented the slowing growth of foreign-born population inside the District of Columbia and inner-ring suburbs such as Arlington and Alexandria, along with the rising share of immigrants in the outer-ring suburbs (Singer 2003). Due mostly to the cost of housing, less affluent immigrants tend to concentrate in less expensive housing within the

[^10]District of Columbia, Prince
George's County, eastern
Montgomery County, and parts of Fairfax County. More affluent immigrants, however, are dispersed throughout the more expensive suburban areas, with the largest numbers in Fairfax County, Montgomery County, and Arlington County. Immigrant populations are growing most rapidly, however, in counties farther out in the metropolitan area, for instance Loudoun, Prince William, and Howard. It is likely that the number of immigrants and their tax payments have grown significantly everywhere since 2000, the year on which our tax estimates are based. But the number of immigrants has grown most rapidly in the outer-ring counties, where tax payments of immigrants have also likely grown the most since 2000. ${ }^{10}$

## Immigrant Household Size and Income

The taxes paid by immigrant households are determined in large part by their incomes, which in turn are affected strongly by the number of wage earners in the household. Immigrant households are generally larger than native households-in the Washington, DC, area as nationally-and they include more adults as well as more children on average. The average size of immigrant households in the Washington metropolitan region in 2000 was 3.2 persons, 29 percent higher than the average size of native households ( 2.5 persons). There were an average of 2.3 adults per immigrant household, compared with 1.8 adults in native households (appendix table 3).

[^11]Immigrant households also had more children on average than native households: 0.8 versus 0.6. ${ }^{11}$ Households headed by unauthorized or TPS immigrants were the largest, with an average 3.6 persons ( 2.5 adults and 1.1 children). But all other types of immigrant households were also larger on average than native households.

Larger household size means that immigrant households have more earners than native households on average and that their total incomes receive a substantial boost from the additional earners. In 1999, immigrant households in the Washington metropolitan area had an average income of $\$ 78,000$, about 89 percent of the average income for native households $(\$ 88,000) .{ }^{12}$ But average income per person for immigrant households was just $\$ 24,000$, only 69 percent of the average for natives $(\$ 36,000)$.

There is substantial variation in the average incomes of immigrant households by their citizenship and legal status. Despite their higher average size, households headed by unauthorized immigrants had the lowest average income ( $\$ 53,000$ ), while income for households headed by naturalized citizens $(\$ 91,000)$ was actually higher than that for native households (figure 5). Although naturalized citizen households had a total income that was 104 percent of the average for native households, their average income per person $(\$ 31,000)$ was only 87 percent of the average for native

[^12]Figure 5: Mean Household Income by Household Nativity, Citizenship and Legal Status, Washington, DC, Metropolitan Area, 1999 (Thousands of Dollars)


Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public Use Microdata Sample with an adjustment for legal and unauthorized immigrants omitted from the Census.

Note: Income figures are reported for the year before the census was taken (1999) and are shown here rounded to the nearest thousand dollars.
households per person (appendix table 3). For all types of immigrant households, the ratio of total income to native households is higher than the ratio of personal income to natives, meaning that the larger number of adult workers in immigrant households boosts their income regardless of citizenship and legal status. Nonetheless, unauthorized and TPS households have by far the lowest incomes-mostly because unauthorized immigrants earn the lowest wages (Capps et al. 2003). Legal temporary migrant households also have relatively low incomes, because about onehalf of the temporary residents are students and only work part time, often at relatively low-wage jobs.

Immigrants from all regions of the world except for Europe and Canada live in households that are larger than native households (appendix table 4). In 2000, households headed by immigrants from El Salvador were the largest, with 4.4 persons on average (3
adults plus 1.4 children). Households headed by immigrants from other Central American countries-including Mexico-were the next largest (4.2 persons), followed by Vietnamese households (3.7 persons) and South American households (3.3 persons). Latin American and Asian immigrant households were the largest, followed by African, Middle Eastern, and, finally, European and Canadian households. European and Canadian households were actually slightly smaller than native households ( 2.4 versus 2.5 persons on average). Even European and Canadian households had more adults on average than native households (1.9 versus 1.8); their lower total household size was due to fewer children.

There is also substantial variation in household income by region of birth; in fact, some European and some Asian immigrant groups have average household incomes
that are higher than those of native households (figure 6). In 1999, average incomes were higher than natives' incomes for households headed by immigrants from India $(\$ 112,000)$, Europe and Canada (\$100,000), and the Middle East $(\$ 95,000)$. At the other end of the spectrum, the average income was only about one-half as high for households headed by immigrants from El Salvador (\$51,000), other Central American countries, $(\$ 55,000)$ and sub-Saharan African ( $\$ 56,000$ ). The tremendous variation in income will also be reflected in the amount of taxes paid by immigrants from different parts of the world, as we will see later in this report. For all immigrants from all regions of the world, however, the ratio of household income to natives' income is substantially higher than the ratio of per person income, due to higher average household size.

Figure 6: Mean Household Income by Household Place of Birth, Washington, DC, Metropolitan Area, 1999 (Thousands of Dollars)


Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public Use Microdata Sample with an adjustment for legal and unauthorized immigrants omitted from the census.

Note: Income figures are reported for the year before the census was taken (1999) and are shown here rounded to the nearest thousand dollars.

## Taxes Paid by Immigrants in the National Capital Region

Immigrant households living in the Washington, DC, metropolitan area pay taxes roughly in proportion to their share of total income and of all households in
the region. Immigrant households paid a total of $\$ 9.7$ billion in taxes at the federal, state, and local levels in 1999-2000 (table 1, page 18). This amounted to about 18 percent of the taxes paid by all households in the region (\$55 billion). Immigrant households had a total income of $\$ 29$ billion, or 19 percent of the regional total for all households (\$158 billion), in
1999. There were 380,000 immigrant households, constituting 21 percent of the region's total of 1.8 million households in 2000 (appendix table 5).

# Table 1: Total Taxes Paid by Immigrant Households in the Washington, DC, Metropolitan Area, by Type of Tax, circa 1999-2000 

| Tax | Immigrant $\left.\begin{array}{c}\text { All } \\ \text { Households* Households* Immigrants }\end{array}\right)$ |  |  |
| :---: | :---: | :---: | :---: |
| Total, all taxes | 9,771 | 55,174 | 17.7\% |
| Federal Taxes | 7,030 | 40,183 | 17.5\% |
| Income Tax | 3,924 | 24,366 | 16.1\% |
| Social Security ${ }^{\text {a }}$ | 2,420 | 12,225 | 19.8\% |
| Medicare ${ }^{\text {a }}$ | 686 | 3,592 | 19.1\% |
| State Tax | 1,643 | 9,425 | 17.4\% |
| Income tax | 1,079 | 6,328 | 17.0\% |
| Sales tax ${ }^{\text {b }}$ | 418 | 2,326 | 18.0\% |
| Auto taxes and fees ${ }^{\text {c }}$ | 120 | 592 | 20.4\% |
| Tax on cigarettes and alcohol ${ }^{\text {d }}$ | 26 | 179 | 14.7\% |
| Local Tax | 1,098 | 5,566 | 19.7\% |
| Real property tax ${ }^{\text {e }}$ | 627 | 3,145 | 19.9\% |
| Income tax ${ }^{\text {f }}$ | 226 | 1,254 | 18.0\% |
| Sales tax ${ }^{\text {g }}$ | 76 | 400 | 19.0\% |
| Auto taxes and fees ${ }^{\text {h }}$ | 121 | 511 | 23.6\% |
| Utility and telephone taxes ${ }^{\text {i }}$ | 48 | 256 | 19.0\% |

Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public Use Microdata Sample with an adjustment for legal and unauthorized immigrants omitted from the census.
*Indicates figures in millions of dollars.
a Includes employer-paid share.
${ }^{\text {b }}$ State portions of general sales tax (including food), restaurant tax, and sales tax on alcohol (VA).

- Includes state gasoline tax and state car registration, but does not include excise tax on purchases.
${ }^{\text {a }}$ Includes special state tax on alcohol and cigarettes, but does not include profit from state store sales (VA).
e Includes estimated payments on behalf of renters; includes state portion in Maryland and all of DC's residential property tax.
${ }^{\text {f }}$ Maryland only-county share.
g Includes local cigarette and tobacco tax, and estimated state share of general tax.
${ }^{n}$ Includes "car tax" plus local gasoline tax and local car registration in Virginia, but does not include excise tax on purchase.
${ }^{i}$ Includes 911 fee, local phone tax, and any "tax" on utilities (not operating profit). Does not include federal/state excise taxes. Some of the utility taxes are levied on suppliers but are passed through to the consumer.

Federal taxes account for almost three-quarters of taxes collected from both immigrant and native households in the metropolitan area. In 1999-2000, 72 percent of all the taxes paid by immigrants in the region went to the federal government (figure 7). These taxes included income, Social Security,
and Medicare. ${ }^{13}$ State taxesincome, sales, automobile, and cigarettes/alcohol-accounted for another 17 percent of all taxes paid by immigrant households. Local income, property, automobile, utility, and telephone

[^13]taxes accounted for the remaining 11 percent. (For a complete listing of the taxes we calculated and how we calculated them, see the methodology section of this report.)

Figure 7: Federal, State, and Local Shares of Taxes Collected from Immigrant Households in the Washington, DC, Metropolitan Area, circa 1999-2000


Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public Use Microdata Sample with an adjustment for legal and unauthorized immigrants omitted from the census.

Immigrant households paid a relatively low share of income and other progressive taxes, but a higher share of taxes that are less progressive. In 1999-2000, immigrant households paid 16 percent of all federal, 17 percent of state, and 18 percent of local income taxes (figure 8, page 20). Immigrant households on average have lower incomes than native households, so they pay a lower share of these progressive taxes because the tax rates are higher at higher income levels. Immigrant households paid a higher share of Medicare and Social Security taxes (19 and 20 percent); these are flatrate taxes that are capped at a certain income level. Immigrant households also paid a relatively high share of state and local sales and other consumption taxes-with the exception of state taxes on alcohol and tobacco. Despite these variations, however, immigrant households paid taxes roughly in proportion to their share of total regional income (19 percent) and all households (21 percent).

Overall, immigrant households pay taxes at roughly the same rate as native households in the national capital region. Their tax rates are
slightly lower because their incomes are lower, and this lowers the rates on the progressive income taxes. ${ }^{14}$ The average immigrant household paid \$26,000 in federal, state, and local taxes in 1999-2000 (appendix table 6). The average total tax payment by immigrant households amounted to 83 percent of the average for native households: \$31,000. Immigrant households paid 28 percent of their incomes in taxes, compared to an average of 31 percent for native households. ${ }^{15}$

[^14]
## Immigrant Contributions to the Federal, State, and Local Tax Bases across Jurisdictions in the National Capital Region

Immigrant households are a significant part of the tax base in all parts of the Washington, DC, region, but they are the largest share and contribute the most in taxes to the region's two largest jurisdictions: Fairfax and Montgomery counties. In 19992000, immigrant households in Fairfax and Montgomery counties accounted for 60 percent of all taxes paid by immigrant households in the region (figure 9). Immigrant households living in Fairfax County paid a total of \$3.2 billion in federal, state, and local taxes in 1999-2000, while those in Montgomery County paid \$2.8 billion in taxes (appendix table 7). These two counties also have the largest absolute numbers and highest shares of immigrants, as discussed in the previous section of this report.

Figure 8: Share of Taxes Paid by Immigrant Households in the Washington, DC, Metropolitan Area, by Type of Tax, circa 1999-2000


Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public Use Microdata Sample with an adjustment for legal and unauthorized immigrants omitted from the census.

Figure 9: Distribution of Taxes Paid by Immigrant Households across Jurisdictions in the Washington, D.C., Metropolitan Area, circa 1999-2000


District of Columbia 10\%
Less than 1 percent of taxes paid in each of:
MD: Frederick, Calvert, Charles
VA: Fredericksburg, Stafford

[^15] unauthorized immigrants omitted from the census.

The District of Columbia and Prince George's County each accounted for 10 percent of all the taxes paid by immigrant households. In 1999-2000, immigrant households living in each of these two jurisdictions paid about $\$ 1$ billion in taxes. Immigrant households in the smaller jurisdictions of Alexandria and Arlington generated relatively low shares of the total because they had fewer immigrant households. The lowest shares of taxes came from the outlying jurisdictions, where immigrants represented a relatively low share of the total population.

Fairfax and Montgomery counties have among the highest average household incomes for both
immigrants and natives, and that is another part of the explanation for the large share of taxes collected from these jurisdictions. Immigrant households in these two jurisdictions had average 1999 incomes (\$89,000 in Fairfax and \$83,000 in Montgomery County) that were higher than the average for the region $(\$ 78,000)$. Native households, however, had far higher incomes, averaging \$120,000 in Fairfax and \$112,000 in Montgomery Countythese were by far the highest average incomes of any jurisdiction in the region (figure 10). The relative affluence of these two districts, combined with the sheer size of their foreign-born populations, explains why
immigrants there contribute so much to the region's tax base.

Immigrant households in the next two largest regions had relatively low average 1999 incomes (\$73,000 in the District of Columbia and \$61,000 in Prince George's County), but native households also had lower than average incomes in these jurisdictions. In fact, the average income of native households in the District of Columbia $(\$ 68,000)$ was actually lower than that for immigrant households. Immigrant households also had incomes higher than native households in many outlying jurisdictions (such as Frederick, Calvert, Charles, and Loudoun counties).

Figure 10: Mean Household Income for Immigrant and Native Households in the Washington, DC, Metropolitan Area, by Jurisdiction, circa 1999-2000 (Thousands of Dollars)


[^16]Note: Income figures are reported for the year before the census was taken (1999) and are shown here rounded to the nearest thousand dollars.

The relative gap in native versus immigrant household income was highest, by contrast, in Arlington and Alexandria, which are home to relatively affluent native but relatively poor immigrant populations. In Alexandria, the average income for immigrant households $(\$ 53,000)$ was only about one-half the average for native households $(\$ 101,000)$ in 1999.

Immigrant households pay taxes in rough proportion to their shares of all households in those jurisdictions where their incomes are about the same as natives, but a lower proportion where they have substantially lower incomes. In 1999-2000, immigrant households paid nearly onequarter of all taxes paid by households in Montgomery and Fairfax counties (figure 11).

However, their share of taxes paid was below their share of all households in these two jurisdictions (24 versus 31 percent in Montgomery County and 22 versus 28 percent in Fairfax County). The large gap in income between immigrant and native households in these jurisdictions is part of the explanation. Immigrant households made up 28 percent of all households in Arlington but only paid 19 percent of taxes generated there. In Alexandria, they represented 25 percent of all households but only paid 13 percent of all taxes. The gap between immigrants' share of taxes paid and their share of households is largest in Arlington and Alexandria because the gap in income between immigrants and natives is largest in these two jurisdictions.

Immigrant households pay taxes roughly equivalent to their shares of all households in the other jurisdictions, where their incomes are similar to that of native households. In the District of Columbia, immigrants paid the same share of taxes as their share of households in 2000 (16 percent). Immigrant households also paid taxes in the same proportion as their share of all households in many of the outlying counties, including Loudoun (12 percent), Frederick (7 percent), Charles (5 percent), and Fredericksburg (5 percent). In Prince George's County, immigrant households paid 15 percent of taxes and made up 13 percent of all households, and in Prince William County they paid 13 percent of taxes and made up 16 percent of all households.

Figure 11: Share of Taxes Paid by Immigrant Households in the Washington, DC, Metropolitan Area, by Jurisdiction, circa 1999-2000


[^17]Immigrant households pay taxes roughly according to their share of the population, whether these are taxes at the federal, state, or local level. In fact, immigrant households tend to pay a slightly higher share of local taxes than state or federal taxes, because the local taxes are less progressive. In 1999-2000, immigrant households paid 17 percent of all federal and state taxes paid by households; they paid 20 percent of local taxes (appendix table 8). In the District of Columbia, immigrant households paid 16 percent of federal and state but 17 percent of local taxes. In suburban Maryland, they paid 18 percent of federal and state but 19 percent of local taxes. In Northern Virginia, they paid 17 percent of federal, 18 percent of state, and 21 percent of local taxes. Thus, immigrants contribute most strongly to the tax base at the local level.

Immigrants living in suburban Washington jurisdictions also contribute strongly to the tax bases of both Maryland and Virginia. In 1999-2000, immigrant households living in the
suburban Maryland counties paid $\$ 560$ million in state taxes; this was equivalent to 8 percent of the $\$ 6.2$ billion in state taxes paid by all households across the state of Maryland. Similarly, immigrant households in Northern Virginia paid about 8 percent of all household taxes collected by the state of Virginia ( $\$ 810$ million out of $\$ 9$ billion). When immigrant households in jurisdictions outside the Washington metropolitan were included in the total, the share of state taxes paid by immigrant households was 11 percent in Virginia and 12 percent in Maryland.

## Variation in Tax Payments by Household Citizenship and Legal Status

Households headed by naturalized citizens pay roughly the same amount in taxes and at the same rate as households headed by U.S.-
born citizens in the Washington metropolitan area. In 1999-2000, the average immigrant household headed by a naturalized citizen paid \$31,000 in taxes-the same as the average native-headed household (figure 12). Naturalized citizen households paid 30 percent of their income in taxes, only slightly below the rate for native households (31 percent, see appendix table 6). Naturalized citizens are the immigrants who have been in the United States the longest and are the best integrated: they must in most cases reside in the country at least five years and take an English language test before becoming citizens. As shown earlier in the report, naturalized citizen households also have the highest income among immigrant households-their average income actually exceeded that for nativeborn households in 1999. Thus, the most integrated immigrants pay taxes at the same rate as natives, suggesting that over time immigrants' tax contributions will reach parity with natives.

Figure 12: Taxes Paid by Households in the Washington, DC, Metropolitan Area, by Household Nativity, Citizenship, and Legal Status, circa 1999-2000 (Thousands of Dollars)


[^18]Figure 13: Taxes Paid by Households in the Washington, DC, Metropolitan Area, by Household Place of Birth, circa 1999-2000 (Thousands of Dollars)


Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public Use Microdata Sample with an adjustment for legal and unauthorized immigrants omitted from the census.

Note: Average tax payment rounded to the nearest thousand dollars.

Legal permanent residents (i.e., green card holders) and legal temporary migrants-students and temporary workers-also pay taxes at nearly the same rate as natives. In 1999-2000, households headed by permanent residents paid $\$ 27,000$ in taxes, while those headed by temporary migrants paid $\$ 26,000$. The average income of these households was substantially below that for native households in 1999. Permanent resident households paid 29 percent of their income in taxesjust below the rate for native households-while temporary migrant households paid 33 percent of their income in taxeshigher than the rate for natives.

Unauthorized and Temporary Protected Status (TPS) migrants are the one group of immigrants
that pay substantially lower amounts of tax. In 1999-2000, households headed by unauthorized and TPS migrants paid $\$ 13,000$ in taxes, and this amounted to only 19 percent of their average household income. Unauthorized and TPS migrants had substantially lower average incomes in 1999 (\$53,000 versus \$78,000 for immigrant households overall). Furthermore, our tax models assume that only 55 percent of unauthorized individuals pay Social Security, Medicare, and federal, state, and local income taxes, since many of them work under the table and are paid in cash. ${ }^{16}$ Our tax models also assume that 100 percent of

[^19]the unauthorized pay the other taxes we calculated, because these other taxes are not collected through employment.
Nonetheless, the likelihood that many unauthorized immigrants do not pay income or payroll taxes substantially reduced their tax contributions at the federal, state, and local levels. Thus, any extension of legal work authorization-whether temporary or permanent-would give a substantial boost in tax revenue to jurisdictions across the Washington metropolitan area.

## Variation in Tax Payments by Immigrants' Country and Region of Origin

Immigrants from several different regions of the world pay higher taxes than natives in the Washington, DC, area. In 19992000, the largest average tax contribution came from households headed by Indian immigrants ( $\$ 39,000$ ), followed by European and Canadian immigrant households $(\$ 35,000)$ and Middle Eastern immigrant households (\$33,000); all these households paid higher taxes on average than native households (figure 13).

The share of income paid in taxes was also just about as high for Indian immigrants (30 percent), European and Canadian immigrants (30 percent), and Middle Eastern immigrants (31 percent) as it was for native households (appendix table 6). Average tax payments from
households headed by Chinese immigrants $(\$ 28,000)$ and South American immigrants $(\$ 27,000)$ were not far below the average for natives; they paid 28 and 29 percent of their income in taxes, respectively. The pattern of tax payments by region of origin reflects the pattern of household income, as Indian, European, and Middle Eastern immigrants had the highest average household incomes in 1999.

The lowest tax payments came from households headed by immigrants from El Salvador, other Central American countries, subSaharan Africa, and the Caribbean. In 1999-2000, Salvadoran households paid \$14,000 in taxes, and other Central American households paid $\$ 15,000$; both these groups paid 21 percent of household income in taxes, on average. Sub-Saharan African immigrant households paid $\$ 18,000$ and about 26 percent of their average income in taxes, while Caribbean households paid \$22,000 (28 percent of their income in taxes). Once again, the pattern of tax payments matches
the pattern of income, with the lowest-income households paying the lowest share of their income in taxes. Moreover, immigrants from El Salvador and other Central American countries pay a still lower share of taxes because a relatively high share of this population is unauthorized, and the unauthorized pay a relatively low share of income in taxes.

## Variation in Tax Payments by Educational Attainment and English Proficiency

Differences in human capital are also strongly associated with variations in income and tax payments, as households headed by well-educated immigrants who speak English have the highest incomes and tax payments. In fact, the variation by education in income and tax payments follows the same pattern for both native and immigrant households in the national capital region (figure 14).

Figure 14: Mean Household Income by Nativity and Educational Attainment of Household Head, Washington, DC, Metropolitan Area, 1999 (Thousands of Dollars)


[^20]
# Figure 15: Average Tax Payment for Households in the Washington, DC, Metropolitan Area, by Nativity and Educational Attainment of Household Head, circa 1999-2000 (Thousands of Dollars) 



Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public Use Microdata Sample with an adjustment for legal and unauthorized immigrants omitted from the census.

Note: Tax payments are rounded to the nearest thousand dollars.

In 1999, households headed by immigrants with a four-year college degree or more education had an average income of $\$ 103,000$, more than twice the income for households headed by immigrants without a high school degree ( $\$ 47,000$ ). Native households show an even steeper income gradient across educational categories: average income was about three times as high as for households headed by natives with a college degree $(\$ 122,000)$ as those headed by high school dropouts (\$39,000). Among households headed by college graduates, average income was substantially higher for native households than immigrant households. On the other hand, average income was actually higher for immigrants than natives in households headed by high school dropouts.

Tax payments follow a similar pattern: better-educated households pay higher taxes whether they are headed by immigrants or natives. In 19992000, the average tax payment was three times as high for households headed by immigrants with a four-year college degree as
for those headed by immigrants without a high school degree: \$36,000 versus \$12,000 (figure 15). Among native households, those headed by college graduates paid four times as much tax on average as those headed by high school dropouts ( $\$ 45,000$ versus \$11,000). Differences in tax payments between native and immigrant households were very slight at lower levels of educational attainment; the only substantial difference was among the best educated-and highest income-group of households.

The share of income paid in taxes was also similar between immigrant and native households within these educational attainment categories. Immigrant households headed by college graduates paid 30 percent of their income in taxes, versus 32 percent of comparable native households (appendix table 9). At the other end of the spectrum, immigrant households headed by high school dropouts paid 21 percent of income in taxes, compared with 24 percent of native households. A significant share of the leasteducated immigrant households were unauthorized and therefore
less likely to pay income and payroll taxes.

Income and tax payments also vary significantly by the English proficiency of immigrants, as English proficiency is an important measure of immigrant integration and correlates strongly with educational attainment. In 1999, average income for Englishspeaking immigrant households exceeded that for natives: $\$ 97,000$ versus $\$ 88,000$ (figure 16). The average income for households headed by immigrants who speak another language but also speak English very well ( $\$ 84,000$ ) was almost as high as that for native households, but income dropped off steeply with declining English proficiency. ${ }^{17}$ The average income for immigrant households whose heads did not speak English at all $(\$ 41,000)$ was less than one-half the average for

[^21]those whose head spoke English very well.

Due to their relatively high incomes, English-speaking immigrant households pay more in taxes than native households in the Washington, D.C., area. In 1999-2000, English-speaking immigrant households on average paid \$34,000 in taxes, versus \$31,000 for native households (figure 17). Immigrant households whose heads spoke English very well paid $\$ 29,000$ in taxes, near the average for natives. Tax payments for immigrant households whose heads did not speak English well $(\$ 13,000)$ or at all $(\$ 11,000)$ were only about onethird to one-half as high as taxes paid by households with higher levels of English proficiency. English-speaking immigrant households paid 30 percent of their income in taxes, compared with 29 percent for households whose head spoke English very well and just 21 percent for those whose head did not speak English well or at all (appendix table 9). Thus, immigrants' income and tax payments vary greatly with their English proficiency and educational attainment.

Figure 16: Mean Income for Immigrant Households in the Washington, DC, Metropolitan Area, by English Proficiency of Household Head, 1999 (Thousands of Dollars)


Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public Use Microdata Sample with an adjustment for legal and unauthorized immigrants omitted from the census.

Note: Income figures are reported for the year before the census was taken (1999) and are shown here rounded to the nearest thousand dollars.

Figure 17: Average Taxes Paid for Immigrant Households in the Washington, DC, Metropolitan Area, by English Proficiency of Household Head, circa 1999-2000 (Thousands of Dollars)


[^22]Note: Tax payments are rounded to the nearest thousand dollars.

## Conclusions

## In 1999-2000,

## immigrant households

## in the Washington, DC

## metropolitan area paid

## nearly $\$ 10$ billion, or

about 18 percent of all
taxes paid by
households in the
region-roughly in
proportion to their
share of the
population...
immigrants have, on
the whole, successfully
integrated into the
region's economy and
tax base.

Immigrant households in the Washington, D.C., metropolitan area paid nearly $\$ 10$ billion, or about 18 percent of all taxes paid by households in the region (\$55 billion), in 1999-2000. Immigrants at that time represented about 18 percent of the total population, so they paid taxes roughly in proportion to their share of the population. Immigrants paid almost onequarter of all household taxes generated in the region's two largest jurisdictions-Fairfax and Montgomery counties-but they contributed substantially to the tax bases of the region's smaller jurisdictions as well. Moreover, immigrant households in suburban Maryland and Northern Virginia contributed a significant share of all household taxes collected by the states of Maryland and Virginia (about 8 percent in each state). Since 2000, the number of immigrants has grown dramatically-from 850,000 to over 1.2 million-and their share has increased from 18 to 20 percent of the region's population, suggesting their tax contributions have risen dramatically as well.

The Washington metropolitan area has attracted a diverse group of immigrants from regions across the globe, and has been particularly successful in attracting well-educated immigrants. Immigrants have on the whole successfully integrated into the region's economy and tax base. The average household income for immigrants in 1999 was almost as high as that for natives (\$78,000 versus $\$ 88,000$ ), and average tax payments for 1999-2000 were also similar: \$31,000 for native versus \$26,000 for immigrant households. The most integrated households paid taxes at the same level and rate as native households. This included households where the head had become a naturalized U.S. citizen as well as English-speaking households and those headed by
immigrants with college degrees. These findings suggest several overall recommendations.

## Recommendations

- Continue to welcome immigrants to the Washington, DC, area, because they are a significant and growing part of the region's economy and tax base. A large majority of the region's immigrants are citizens or legal non-citizens, and they pay taxes at nearly the same rate as native households.
- Continue support for expansion of biotechnology, telecommunications, and other highly skilled sectors of the economy that attract the highest-paid immigrants.
- Allow time for immigrants to become integrated into the region's economy. As immigrants spend more time in the United States, they mostly learn English and become U.S. citizens. Once they become citizens and learn to speak English very well, immigrants pay taxes at the same levels and rates as U.S. natives.
- Support English as a second language, adult education, and other workforce development programs for immigrants because they have the potential to raise immigrants' earnings and tax contributions. The additional state and local tax contributions of immigrants who obtain higherpaying jobs will more than offset the costs of these programs.
- Grant temporary or permanent work authorization to undocumented immigrants, because, once authorized, a higher share would pay income and payroll taxes. State and local governments would also benefit because their income tax collections would increase alongside those of the federal government.


## Methodology

The general approach used in this study is a microsimulation of tax payments for 1999-2000 using data for individuals and households from the 2000 Census. We use a tax simulator for estimating income tax payments and models developed from survey data as a basis for sales and other consumption taxes. Administrative data on taxes collected from federal, state, and local governments provide control totals to ensure that the estimates for each tax, totaled by area across all households, conform to actual tax collections.

We estimate three broad categories of tax payments, and our estimates are developed for individuals, families, and households depending on the appropriate unit for each tax. Payroll taxes (Social Security and Medicare) are estimated on an individual basis from information on wage and salary income as well as self-employment income. Income taxes (federal, state, and local) are estimated for "filing units" (essentially nuclear family units) using estimates of taxable income based principally on the census but augmented to account for income undercounted by the census. Property and consumption tax estimates are modeled at the household level based on income data from the census and consumption models developed from the Consumer Expenditure Survey (CES). Consumption taxes we estimate at the state and local level-depending on the jurisdiction-include general sales, automobile, alcohol, and tobacco. The tax estimates for all three categories are aggregated to households and reported at this level.

Income and tax estimates are reported for geographic areas identifiable in the census data that correspond to political jurisdictions within the Washington, D.C., metropolitan area. The District of

Columbia is covered as a single area in the study. We report taxes for the following Virginia jurisdictions: Alexandria City, Arlington County, Fairfax County (including the cities of Fairfax and Falls Church), Fredericksburg City (including Spotsylvania and Culpeper counties), Loudoun County (including Fauquier, Clarke, and Warren counties), Stafford County (including King George County), and Prince William County (including Manassas and Manassas Park cities). The Maryland areas reported are Prince George's County, Montgomery County, Frederick County, Charles County, and Calvert County (including St. Mary's County).

The main goal of the study is to estimate all types of taxes in all jurisdictions for households headed by immigrants, and to compare their tax payments with payments of households headed by natives. We also calculate tax payments separately for immigrant households according to their citizenship and legal status, country or region of birth, educational attainment, and English proficiency.

## Data Obtained from the 2000 Census

The population data for this study come from the 2000 Census 5percent Public Use Microdata Sample (PUMS). This data set has individual records for a 5-percent sample of the entire U.S. population with detailed information on demographic and housing characteristics. Although not the most recent data, the 5percent PUMS is by far the largest data set available, making disaggregation by jurisdiction and country of origin possible. While the Census Bureau's American Community Survey, which started in 2003, has collected comparable and more recent data, sufficient data to produce analyses similar to those described in this report will not be available until at least 2008.

The census is divided into household and individual-level records. We used the following household-level items for this study, mostly to calculate property taxes:

- housing tenure (owner/renter)
- type of housing
- mortgage payments
- rent
- estimated housing value
- household spending on mortgages, utilities, insurance, and property taxes

The individual-level socioeconomic data we used include the following:

- age
- sex
- marital status
- race/Hispanic origin
- relationship to household
head
- school enrollment
- information on employment, including labor force participation, class of worker (self-employed or working for an employer), occupation, and industry of employment

We estimated income and payroll taxes as well as consumption patterns-used later to calculate consumption taxes-based on the eight types of income counted in the census:

- wages, salary, commissions, bonuses, and tips
- net self-employment income
- interest, dividends, net rental income, royalty, estate, and trust income
- Social Security income including disability and Railroad Retirement
- Supplemental Security Income (SSI)
- public assistance income (other than SSI)
- retirement, survivor, or disability income (other than Social Security)
- all other income.


## Assignment of Legal Status to Non-citizens in the Data

The census provides some information related to immigration and citizenship, but no direct information on the legal status of non-citizens. The data items in the census include:

- country of birth;
- year of entry to the United States; and
- U.S. citizenship (but not legal status).

Starting with these census data items, the methodology for developing estimates by legal status proceeds in several steps. (See Passel, Van Hook, and Bean 2004, 2006; and Passel and Clark 1998.) The first stage involves making demographic estimates of legal foreign-born residents of the United States and key states. These estimates are discounted for legal immigrants omitted from the census and compared with the initial census-based estimates of the immigrant population to measure the number of unauthorized migrants included in the census. In this variant of the "residual" methodology, we produce estimates by age, sex, and period of entry for 35 countries or regions of birth and six states (California, New York, Texas, Florida, Illinois, and New Jersey) and the balance of the United States. Using information on census coverage of the foreignborn population, we inflate the estimates of legal and unauthorized migrants for census omissions to produce estimates of those included in the census as well as the total number in the country (or state), by up to 10 percent.

Note that there are no special control totals or estimates for immigrant populations for the Washington, D.C., metropolitan area. The control totals used in this report are based on our national-level estimates.

In the second stage of the estimation process, individual respondents in the census are assigned to various legal statuses using a combination of (1) deterministic edits based on correspondence between the respondent's characteristics and admission criteria; (2) inference based on family relationships, country or region of origin, and date of arrival in the United States; and (3) probabilistic methods. The iterative assignment process produces national and state-level estimates consistent with the demographic estimates of legal and unauthorized migrants included in the census. After the assignment process, each individual in the census has been assigned to one of the following statuses:

1. Legal permanent resident (LPR) alien- persons admitted for permanent residence or persons with "green cards."
2. Naturalized citizens-persons admitted as LPRs who have acquired U.S. citizenship through the naturalization process.
3. Refugee and asylee alienspersons admitted for permanent residence as refugees or through the asylum process (regardless of current status).
4. Naturalized refugees and asylees-persons admitted as refugees or through the asylum process who have acquired U.S. citizenship through the naturalization process.
5. Legal temporary migrants or "non-immigrants"-persons legally admitted on a temporary basis for specified periods and specified purposes (including work). The largest groups of nonimmigrants are foreign students and various types of "guest workers." The visa categories counted as legal for the estimates include A, F, G, H-1B, some H-2s, some Js, L, $\mathrm{M}, \mathrm{N}, \mathrm{O}, \mathrm{P}$, and R.
6. Unauthorized migrants-foreign-born persons who are not in groups 1-5. This category includes individuals who entered the U.S clandestinely, individuals who entered with fraudulent documents, and individuals who entered legally but either overstayed the period of their visa or otherwise violated their terms of admission.
7. U.S. natives-persons born as U.S. citizens regardless of place of birth. Most are born in the United States or its territories or possessions, but some are born in foreign countries to parents who are U.S. citizens.

The assignment process is designed so that the number of individuals assigned as legal immigrants (i.e., the sum of groups 1-4) and unauthorized (i.e., group 6) agrees as closely as possible with the demographic and residual estimates at the state level (for six states and the balance of the nation), for adults by sex and children, and for four country-ofbirth groups.

The final stage of the estimation process involves adjusting the weights for legal and unauthorized migrants to account for census undercounts of these populations. The adjustment factors are based on the demographic residual estimation process described earlier. The resulting adjusted population figures for legal immigrants and unauthorized migrants are equal to the demographic estimates developed in the first stage of the estimation process. As with the status assignments, the resulting estimates incorporate the demographic estimates for six states and the balance of the nation, for adults by sex and children, and for four country-ofbirth groups.

## Identification of Temporary Protected Status Migrants.

Persons with Temporary Protected Status (TPS) are included among the persons classified as "unauthorized migrants" in the
estimation and assignment process. Persons with TPS generally entered the United States without permission, but have been allowed to stay in the country on a temporary basis because conditions in their home country are too dangerous or unstable for them to return. In the late 1990s, the U.S. Congress granted TPS to immigrants from Central America who fled civil wars and natural disasters. TPS was renewed for about 300,000 immigrants-mostly from El Salvador and Honduras-in early 2006 (U.S. Citizenship and Immigration Services 2006). The share of immigrants who have TPS is relatively high in Washington, D.C., because the region has so many immigrants from Central America.

The various TPS populations have not been classified as "legal" because deficiencies in the available data do not permit accurate tracking of the groups and because of other measurement problems. Further, individuals with TPS would generally want to take part in the various legalization programs being proposed in 2006. However, the TPS group differs from almost all other unauthorized migrants in that the TPS group has work authorization and is "known" to immigration officials. Some observers (e.g., Martin 2005) have argued that the TPS group should be grouped with the LPRs and refugees.

Immigrants from El Salvador are the single largest group of TPS migrants as well as the largest single nationality group in the Washington, D.C., metropolitan area. We estimated the number of immigrants with TPS in the Washington, D.C., area based on the share of unauthorized immigrants from El Salvador that we believe had TPS in 2000. The U.S. Immigration and Naturalization Service (2002) estimated that, nationally, about 263,000 immigrants from EI Salvador had applied and were eligible for TPS as of June 10, 2002. This amounted to 54 percent of all the immigrants from

El Salvador to whom we assigned unauthorized status to in our 2002 data from the U.S. Current Population Survey. We applied this percentage to the number of unauthorized immigrants from El Salvador we calculated in the 2000 Census $(65,000)$ to get an estimate of 35,000 TPS migrants. We consider the remaining 30,000 unauthorized. In the census data for the Washington region, there were very small numbers of unauthorized migrants from other countries that were eligible for TPS (less than 1,000), and so we did not develop an estimate of the TPS population for any other country.

Despite their legal work authorization, we group Salvadorans who may have TPS with the unauthorized migrants. They require some special treatment in some of the tax estimation procedures noted below.

## Assignment of Household Nativity, Citizenship, and Legal Status

Since we aggregate taxes to the household level, we created a summary variable for the nativity and legal status of each household based on the nativity and legal status of the household head and the spouse (if one is present). The assignments proceed hierarchically such that each household is assigned a single nativity/status group even if the household contains adults with different legal statuses. The hierarchy is as follows:

- unauthorized migranteither the head or spouse is unauthorized;
- refugee alien-either the head or spouse is a refugee alien, but neither is unauthorized;
- legal permanent resident (LPR) alien;
- naturalized refugee;
- naturalized non-refugee;
- native;
- legal temporary migrant or nonimmigrant-both head and spouse (if present) are legal temporary migrants.

Thus, a household where the head is a naturalized citizen and the spouse is a refugee is classified as a refugee household. However, if the spouse is native, then the household is classified as a naturalized citizen household. In most households with spouses, the spouse has the same status as the household head. Virtually all native households with spouses have native spouses. If the head is native and the spouse is foreignborn, the household is given the status of the spouse in all cases except those with legal temporary migrant spouses. However, for individual cases where a foreignborn individual has characteristics that would lead to classification as a legal temporary migrant, marriage to a native would lead to classification of the migrant as something other than a legal temporary migrant.

## Assignment of Region and Place of Birth to Immigrant Households

We also disaggregate tax payments by immigrants' place of birth in this report. In order to do this, we calculate a "household country of birth" based on the country of birth of either the household head or spouse. The household country of birth is the head's country of birth if and only if the head's legal status is the same status that we assigned to the entire household. If the household head has a different legal status than the household overall, then the household's country of birth is the spouse's country of birth, since, by definition, we assigned the spouse's legal status to the entire household in such cases. For example, an LPR household with the head born in Mexico and the
spouse in El Salvador is classified as a Mexican LPR household if the head is an LPR. On the other hand, an LPR household where the head is Mexican but a naturalized citizen and the spouse is an LPR born in El Salvador would be classified as an LPR household and assigned EI Salvador as the household country of birth.

## Identification of Geographic Areas

Metropolitan areas are defined by the Census Bureau according to standards defined by the Office of Management and Budget (OMB). For the District of Columbia, Maryland, and Virginia, the geographic "building blocks" for metropolitan areas are counties and, in some cases in Virginia, independent cities. In this report, we use the term "Washington, D.C., metropolitan area" to refer to the Census Bureau's "Washington-Arlington-Alexandria, DC-VA-MDWV Metropolitan Statistical Area." The jurisdictions included in the metropolitan area are listed to the right.

In the 2000 Census 5-percent PUMS, it is not possible to delineate areas that correspond exactly to the metropolitan area. Each household in the 5-percent PUMS is assigned to a Public-Use Microdata Area (PUMA). The PUMAs in the 5-percent data are defined so that each contains at least 100,000 persons. Each PUMA is wholly contained within a single state. In general, PUMAs consist of census tracts within a single county (or city), entire counties (or cities), or aggregations of entire counties (or cities). In this report, we aggregate PUMAs to correspond approximately to political jurisdictions within the Washington, D.C., metropolitan

## Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area

Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division

District of Columbia, DC
Calvert County, MD
Charles County, MD
Prince George's County, MD
Arlington County, VA
Clarke County, VA
Fairfax County, VA
Fauquier County, VA
Loudoun County, VA
Prince William County, VA
Spotsylvania County, VA
Stafford County, VA
Warren County, VA
Alexandria City, VA
Fairfax City, VA
Falls Church City, VA
Fredericksburg City, VA
Manassas City, VA
Manassas Park City, VA
Jefferson County, WV

Bethesda-Frederick-Gaithersburg, MD Metropolitan Division

Frederick County, MD
Montgomery County, MD
(See http://www.census.gov/population/estimates/metrocity/03mfips.txt for definitions and constituent areas.)
area. (See U.S. Census Bureau 2005 for description of the PUMS and definitions of the areas and variables; maps of PUMAs are available at
http://www.census.gov/geo/www /maps/puma5pct.htm.) The 13 reporting areas we use, their constituent political jurisdictions, and corresponding PUMAs are defined to the right.

These areas form a very close approximation to the officially designated Washington, D.C., metropolitan area. We omit Jefferson County, WV, which had a population of 42,190 according to 2000 Census Summary File 3 data available on American Factfinder (U.S. Census Bureau n.d.). The areas designated as "**" in the list to the right (St. Mary's County, MD; Culpeper County, VA; and King George County, VA) are not part of the official Washington, D.C., metropolitan area. These three counties contain 132,276 persons according to the Summary File 3 data. Thus, the official metropolitan area contains 4,796,183 persons whereas our areas contain 4,891,269 persons or 2.0 percent more people. The correspondence for the foreignborn population is even closer because the marginal areas contain very few immigrants. Our reporting areas include 832,284 immigrants according to the census tabulations, or only 0.4 percent more than the 829,310 in the official area.

## Estimation of Income Taxes

Federal and state income taxes were estimated using IncTaxCalc (Bakija 2004). IncTaxCaIc is a SAS program that calculates taxes using "all major features of federal and state income tax laws" for years from 1900 through 2002. We used the October 10, 2004, version of the program (with the author's permission) to compute income taxes with data from the 2000 Census 5-percent PUMS. To ensure that the tax estimates
agreed with official data for taxes paid, we compared the results of IncTaxCalc with data from Internal Revenue Service (IRS) data for tax year 1999. These data, from Statistics of Income (SOI), provide data at the state level broken down by reported income level on the number of returns files, types of returns, income reported (by type), amount of deductions and exemptions, and income tax liability (Internal Revenue Service 1999). Use of IncTaxCalc requires that the data be arrayed by filing units (not households). The income data reported in the census does not correspond exactly to the types of income reported on tax returns. Further, the aggregate income in the census tends to be less than the amounts of income reported on tax returns, with most of the shortfall coming on high-income and very high income tax returns. Accordingly, we first constructed tax filing units and then allocated the income reported in the census to the types of income required by tax returns. Finally, we adjusted the reported incomes so that the aggregate totals for the District of Columbia, Maryland (the entire state, not just the Washington, D.C., metropolitan area), and Virginia (the entire state) agreed closely with the reported SOI totals. These adjusted incomes were used in the rest of the study to calculate spending patterns and consumption taxes.

Assignment of Tax Filing Units. For tax filing units, we constructed "minimal household units" (MHUs) by editing census data on relationship to household heads and families. Minimal household units are defined as nuclear families-married couples or single individuals with dependent children (if present). MHUs differ from census-defined family units in that related adults other than spouses are considered part of a census family, but not an MHU. For example, a husband, wife, two minor children, and the wife's mother are considered a single family, but are treated as two

## PUMAs

Washington
Washington, DC (State 11) PUMAs (5): 00101-00105
Montgomery
Montgomery County, MD (State 24) PUMAs (7): 01001-01007

## Prince George's

Prince George's County, MD (State 24) PUMAs (7): 01101-01107

Frederick
Frederick County, MD (State 24) PUMAs (1): 00300

Calvert
Calvert County, MD (State 24) St. Mary's County, MD (State 24)** PUMAs (1): 01500

## Charles

Charles County, MD (State 24) PUMAs (1): 01600

Arlington
Arlington County, VA (State 51) PUMAs (1): 00100
Alexandria Alexandria City, VA (State 51) PUMAs (1): 00200

## Fairfax

Fairfax County, VA (State 51) Falls Church City, VA (State 51) Fairfax City, VA (State 51) PUMAs (5): 00301-00305

Loudoun
Loudoun County, VA (State 51)
Clarke County, VA (State 51)
Fauquier County, VA (State 51) Warren County, VA (State 51) PUMAs (1): 00600

Fredericksburg
Fredericksburg City, VA (State 51)
Spotsylvania County, VA (State 51) Culpeper County, VA (State 51)** PUMAs (1): 00900

## Stafford

Stafford County, VA (State 51) King George County, VA (State 51)** PUMAs (1): 00800

## Prince William

Prince William County, VA (State 51) Manassas City, VA (State 51) Manassas Park City, VA (State 51) PUMAs (2): 00501-00502

MHUs. (The wife's mother is a separate MHU, but not a separate "family.") In defining MHUs, we treat all children under 18 as part of the parent's MHU regardless of the child's income; also, children up to age 25 who are enrolled in school or have minimal income are treated as part of the parent's MHU. All children (under 18) are placed in an MHU, even if there is no parent in the household. Specifically, such children are considered part of the household head's MHU.

In general, each MHU is a tax filing unit. However, when the children (or other dependents) in an MHU have income of their own, an MHU may file more than one return. In general, the additional returns filed by children are so-called "0exemption" returns. The tax simulator does not actually simulate all the separate returns filed by minors and does not generate a return for every MHU with no net tax liability.

In the aggregate, the tax simulator generates about 5.9 million returns (weighted) from the 2000 Census 5-percent PUMS for D.C., Maryland, and Virginia combined. This figure is 2.4 percent below the
6.0 million shown by the SOI. The major source of this (small) discrepancy is a shortfall of about 360,000 returns from filing units with incomes less than \$20,000 and, especially, low-income returns from the District of Columbia. Since these filing units have little or no tax liability in the aggregate, this discrepancy in returns does not translate into large discrepancies in tax liability.

The results from IncTaxCalc (with the income adjustments noted below) show a simulated federal income tax liability of $\$ 46.6$ billion; this figure is only 0.9 percent below the $\$ 47.1$ billion in tax payments for the three states from the SOI. The simulated values for each state are also quite close to the SOI data: 0.8 percent higher than the SOI figure for Washington, D.C.; 0.7 percent lower in Maryland; and 1.3 percent lower in Virginia. Only data for the MHUs in PUMAs within the Washington, D.C., metropolitan area are reported in this study.

Adjustment of Reported Income. Several different adjustments are required to the reported income in the census to bring the income data (and the resulting tax
estimates) into line with the data reported in the SOI. First, some types of income are not reported separately in the census. Interest income and dividends are combined into a single census income type, but they are reported separately and receive different treatment in the tax code. Capital gains income is not collected separately in the census; it is sometimes grouped with interest income and is often ignored in census reports. Several types of income (including wage and salary income) are "top coded" in the census. As a result, the aggregates of these incomes fall well short of the adjusted gross income (AGI) reported by SOI. A number of different assumptions were tested before we arrived at the following adjustment to reported income.

Interest, Dividends, and Capital Gains. In the aggregate, these three types of income are severely underreported in the census. Further, they are not disaggregated. To bring the totals in line with the SOI reports and to generate the different types of income, we made the following adjustments to the census data:

Multiplier for Total Interest, Dividend, Capital Gains:
Adjusted Gross Income DC MD VA

| $<\$ 30 K$ | 1.8 | 2.0 | 1.7 |
| :--- | :--- | :--- | :--- |

\$30-150K $1.9 \quad 1.4 \quad 1.5$
$\begin{array}{llll}\text { \$150K+ } & 2.1 & 2.6 & 2.45\end{array}$

## Allocation of Adjusted Total to Types of Income:

| Type of Income | DC | MD | VA |
| :--- | :--- | :--- | :--- |
| Interest | $41 \%$ | $44 \%$ | $48 \%$ |
| Dividend | $23 \%$ | $22 \%$ | $21 \%$ |
| Capital Gains | $35 \%$ | $34 \%$ | $31 \%$ |

Business (Self-Employment) Income. There is considerably more self-employment income reported in the census than on federal income tax returns. Accordingly, the reported incomes must be adjusted downward to agree with the SOl figures:

Multiplier (Discount Factor) for Total Self-Employment Income:

| Adjusted Gross Income |  | $\underline{\text { DC }}$ |  | $\underline{\text { MD }}$ | $\underline{\text { VA }}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | .86 |  | .82 | .84 |
| $\$ 30-150 K$ | .61 | .61 | .63 |  |  |
| $\$ 150 K+$ |  | .48 | .47 | .48 |  |

Wage and Salary Income. Again, adjustments are required to bring the census figures in line with the SOI totals. At the lower end of the income spectrum, the adjustments account for a small degree of over-reporting in the census:

Low-end Wage and Salary Income Multipliers:

| Adjusted Gross Income |  | DC |  | MD |
| :--- | :--- | :--- | :--- | :--- |
|  |  | 1.0 |  | VA |
| $\$ 30 \mathrm{~K}$ |  | .95 | .95 |  |
| $\$ 30-75 \mathrm{~K}$ |  | 1.0 |  | .95 |
| $\$ 75-150 \mathrm{~K}$ |  | 1.0 | 1.0 |  |
| $\$ 150-300 \mathrm{~K}$ |  | 1.1 | 1.0 | 1.0 |

Then, filing units with AGI in the range of \$75,000-\$150,000 had their wage and salary income increased somewhat and "spread out" using the following adjustments:

```
For DC & Virginia:
New W&S = $75,000 + 2.0 * (Old W&S - $75,000) if Old W&S > $75,000;
New W&S = Old W&S if Old W&S <= $75,000.
For Maryland:
New W&S = $75,000 + 1.25 * (Old W&S - $75,000) if Old W&S > $75,000;
New W&S = Old W&S if Old W&S <= $75,000.
```

At the high end of the income distribution, however, two factors must be taken into account. First, there is a significant amount of underreporting, so the incomes must be adjusted upward. Second, because of "top-coding," there is a clustering of incomes at a single value. Accordingly, the second part of the adjustment process is designed to spread out the high incomes across a broader range of values. The adjustment changes the census wage and salary income to a new value defined as:

New W\&S = \$100,000 + Multiplier

* (Old W\&S - 100,000)

The multipliers vary from 0.333 , which reduces wage and salary income to a value close to where the top coding begins, at $\$ 175,000$, to 25.0 , which produces wage and salary income near $\$ 6$ million. For each jurisdiction, this adjustment is applied to units with (a) initial AGI of \$300,000-\$500,000; and (b) wage and salary income of $\$ 300,000-\$ 450,000$. The multiplier for each filing unit that qualifies for an adjustment is chosen using a random number. The average multiplier is about 1.4.

Tax Compliance of Unauthorized Immigrants. For native and legal immigrant MHUs, all filing units with an estimated tax liability are
assumed to file tax returns. However, for unauthorized migrant MHUs, we assume that only some of the taxes are paid. There is a significant amount of evidence that many unauthorized migrants are working "on the books." That is, they have Social Security numbers, either fake or belonging to someone else, and are having income and payroll taxes taken out of their wages. This evidence includes an accumulation of tax payments in accounts with the Social Security Administration that either do not exist or where the name of the filer does not match the name on the account. In addition, a significant number of income tax returns are being filed with Individual Tax Identification Numbers, but these numbers do not entitle the holder to work in the United States (Milbourn 2004). See Camarota (2004) and Passel and Clark (1998) for a review of the evidence.

Based on the available evidence and values used by similar studies, we assumed that 55 percent of unauthorized migrant filing units actually paid income taxes (and had payroll taxes withheld). We implemented this adjustment through the weights used to compute aggregate taxes paid and the average income tax payment per household or payroll tax per individual. Because a significant share of the migrants we classified
as "unauthorized" in the Washington DC, area are actually authorized to work because they have TPS, we adjust the compliance rate for unauthorized filing units from El Salvador. For immigrants with TPS, we assume a compliance rate of 100 percent. Since our calculations estimate that about 54 percent of Salvadorans we classified as undocumented actually had TPS in 2000, we use a compliance rate of 79 percent for unauthorized Salvadorans overall.

Estimation of State Income Taxes. State income taxes are estimated for filing units with the same tax simulator as used for federal income taxes. The adjustments noted above were incorporated into the state tax models. The same compliance rates were implemented for unauthorized migrant filing units. No additional alignment was required for these taxes.

Estimation of Local Income Taxes. There are no additional local income taxes in Washington, D.C., or Virginia. In Maryland, however, local income taxes are paid with state taxes. They are calculated as fixed rates and shares of state taxes paid, with the rates and fractions varying by county. The local rates and shares of state taxes are as follows:

| Area | Rate | Share of State Tax |
| :--- | :--- | :--- |
| Montgomery | $3.01 \%$ | $65.393 \%$ |
| Prince George's | $3.01 \%$ | $64.476 \%$ |
| Frederick | $2.52 \%$ | $53.736 \%$ |
| Charles | $2.52 \%$ | $53.639 \%$ |
| Calvert-St. Mary's | $2.71 \%$ | $57.801 \%$ |

To align the tax collections with administrative data, the local taxes were discounted by about 1 percent.

## Estimation of Payroll Taxes

Payroll taxes on wage and salary income are calculated with a straightforward formula. The Social Security tax on wage and salary income for 1999 is computed as 6.2 percent of wage and salary income, up to a maximum take of $\$ 4,501.20$ (equal to 6.2 percent of $\$ 72,600$ ). The employer pays an equal amount, and we include this in our calculations as a tax paid by the employee. For self-employment income, the individual pays both the employee and employer share. No more than \$72,600 (of combined wage-salary and selfemployment income) is subject to this tax.

The Medicare tax is 1.24 percent of wage and salary income, but unlike the Social Security tax, there is no maximum. Again, the employer share is equal to the employee share. For selfemployment income, the individual pays both shares.

The Social Security and Medicare taxes are also discounted for unauthorized migrants to account for payment "off the books" using the same assumptions as we use for income taxes.

## Estimation of Property

 TaxesThe census collected data on property tax payments by households who own their own homes. We used these figures straight from the census without
any major adjustments. For renters, however, we calculated property tax as a share of the rent paid. We estimated the amount of tax paid on rental units and credited the tenant with payment of these taxes. The value of rental property is estimated using a capitalization rate of 8.5 percent and assuming that half the rent paid goes for upkeep. The tax rates for each jurisdiction were then applied to the estimated market value to obtain the estimated property tax payments attributable to renters.

In Maryland, property tax payments are split among the state, counties, and some smaller jurisdictions. Our calculation of property tax takes into account all three governmental levels. However, in allocating real property tax payments to jurisdictions we treat all the real property tax in Maryland as a "local" (not "state") tax.

Virginia has a personal property tax on automobiles. The tax rate is set by each city and county. We computed the average tax paid per car by estimating the number of cars in each jurisdiction from the census data and the aggregate taxes paid from administrative data. Each household was assumed to pay the average tax on each car owned by members of the household.

## Estimation of State and Local Consumption Taxes

We calculated sales and other consumption taxes based on estimates of household spending patterns along with state and local tax rates for the particular spending items. Spending patterns
were estimated using data from census and the 2000 CES.

Estimation of Household Spending. We began by estimating the total income available to households for consumption after they paid income taxes, payroll taxes, and housing costs. We used total household income as adjusted for our income tax calculations (see section on income tax estimation above). Household expenditures on mortgage or rent, utilities, property taxes, and insurance were deducted. We also deducted payroll along with federal, state, and local income taxes. Using the remaining income available to households ("after-tax" income), we estimated their spending on various items using average values from the CES. The spending categories we estimated are the following:

- food away from home (restaurants)
- alcohol
- telephone
- tobacco
- household expenditures
- medical and education expenses
- food at home
- charitable contributions
- pensions and retirements
- gasoline
- vehicle expenses
- public transportation

We calculated average household expenditures for each category for households with and without automobiles, disaggregated along the following dimensions:

## Household race/ethnicity

- White, non-Hispanic*
- Black, non-Hispanic
- Hispanic
- Asian-Pacific Islander, nonHispanic
- American Indian-Alaska Native, non-Hispanic

Household "type"

- married couple without children*
- married couple with children
- married couple, other
- single parent (with children)
- single person
- other

Household income

- Net loss*
- \$0-10,000
- \$10,000-\$20,000
- \$20,000-\$30,000
- \$30,000-\$40,000
- \$40,000-\$50,000
- \$50,000-\$60,000
- \$60,000-\$75,000
- \$75,000-\$100,000
- \$100,000 or more

Because of sample-size limitations in the CES, three two-way tables with average shares of after-tax income spent in each category were estimated with the CES microdata. For each table, dummyvariable regression equations were computed (omitting the categories designated as " "*" in the list above). The three regressions were averaged to provide a single
equation to estimate the shares of after-tax income that each household spent in the designated categories. Because some households have extremely high incomes, maximum spending values were set for each category so that aggregate spending was in line with the available administrative data for the District of Columbia, Maryland, and Virginia.

Consumption Taxes Estimated. The following state and local taxes were estimated using our household spending estimates:

- general sales tax
- alcoholic beverages (taxes on beer, spirits, wine, and champagne, but not profit from state-owned stores in Virginia)
- cigarette tax
- sales tax on food (Virginia only)
- sales tax on restaurant meals (above regular sales tax)
- gasoline tax
- automobile registration, inspection, and drivers' licenses
- automobile sales tax (but not excise tax)
- utility taxes (gas, water, electricity, heating oil, including "pass-through" of taxes on suppliers, but not profits of government-owned utilities)
- telephone tax (911 fees and local phone tax, but not federal/state excise taxes)

Tax rates for each state and locality, where applicable, were applied to the estimated amounts spent for each household to provide initial estimates of each tax collected for each jurisdiction. These tax rates were adjusted slightly (by factors ranging from 0.80 to 1.25 ) to bring the estimates of taxes collected in line with the actual tax collections. The final amounts of taxes paid were then estimated with the adjusted rates. Every household is assumed to pay the same tax rate on estimated amounts spent. Unlike the payroll taxes, there is no discount for unauthorized migrant households.

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## Appendix Tables

## Appendix Table 1: Detailed Country and Region of Origin for <br> Washington, D.C., Metropolitan Area Immigrants, 2000

(Populations in thousands)

| Country or Region of Birth | Metropolitan Area |  |  |  | Maryland Counties@ |  | Virginia Counties@ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | District of Columbia | Maryland Counties | Virginia Counties | Montgomery | Prince George's | Arlington | Fairfax+ |
| All Foreign-Born | 857 | 76 | 367 | 414 | 233 | 109 | 55 | 251 |
| Europe/Canada/Other | 114 | 15 | 48 | 51 | 35 | -- | 5 | 29 |
| Europe | 99 | 12 | 42 | 44 | 32 | -- | -- | 25 |
| Germany | 17 | -- | -- | -- | -- | -- | -- | -- |
| United Kingdom | 19 | -- | -- | -- | -- | -- | -- | -- |
| Former USSR | 15 | -- | -- | -- | -- | -- | -- | -- |
| Other Europe | 48 | -- | -- | -- | -- | -- | -- | -- |
| Canada* | 12 | -- | -- | -- | -- | -- | -- | -- |
| Oceania/Other | (b) | -- | -- | -- | -- | -- | -- | -- |
| Latin America | 338 | 38 | 146 | 154 | 82 | 59 | 29 | 78 |
| Central America** | 202 | 23 | 78 | 101 | 41 | 34 | 18 | 49 |
| El Salvador | 111 | 15 | 41 | 55 | 24 | 16 | 11 | 28 |
| Mexico | 38 | -- | 17 | 19 | -- | 10 | -- | -- |
| Guatemala | 21 | -- | -- | 11 | -- | -- | -- | -- |
| Honduras | 14 | -- | -- | -- | -- | -- | -- | -- |
| Other Central Amer. | 16 | -- | -- | -- | -- | -- | -- | -- |
| Caribbean | 51 | -- | 34 | -- | 15 | 17 | -- | -- |
| Jamaica | 18 | -- | 13 | -- | -- | -- | -- | -- |
| Other Caribbean | 33 | -- | 21 | -- | -- | -- | -- | -- |
| South America | 85 | -- | 34 | 44 | 25 | -- | 10 | 25 |
| Bolivia | 20 | -- | -- | 15 | -- | -- | -- | -- |
| Colombia | 11 | -- | -- | -- | -- | -- | -- | -- |
| Peru | 21 | -- | -- | 12 | -- | -- | -- | -- |
| Other South Amer. | 34 | -- | 17 | 12 | -- | -- | -- | -- |
| Asia \& Africa | 406 | 24 | 173 | 209 | 116 | 50 | 20 | 144 |
| Asia (South \& East) | 277 | 12 | 111 | 154 | 79 | 25 | 14 | 112 |
| China\# | 44 | -- | 25 | 17 | 19 | -- | -- | 12 |
| India | 48 | -- | 23 | 24 | 16 | -- | -- | 18 |
| Korea | 49 | -- | (x) | 31 | 13 | -- | -- | 25 |
| Pakistan | 17 | -- | -- | 13 | -- | -- | -- | -- |
| Philippines | 34 | -- | 15 | 17 | -- | -- | -- | 11 |
| Vietnam | 40 | -- | 12 | 26 | -- | -- | -- | 21 |
| Other S. and E. Asia | 45 | -- | 16 | 27 | -- | -- | -- | 17 |
| Middle East\#\# | 49 | -- | 18 | 29 | 15 | -- | -- | 20 |
| Iran | 19 | -- | -- | 10 | -- | -- | -- | -- |
| Other Middle East | 31 | -- | 10 | 18 | -- | -- | -- | -- |
| Africa (Sub-Saharan) | 79 | -- | 45 | 26 | 21 | 23 | -- | 12 |
| Ethiopia*** | 18 | -- | -- | -- | -- | -- | -- | -- |
| Nigeria | 13 | -- | 10 | -- | -- | -- | -- | -- |
| Other Africa | 48 | -- | 27 | 17 | -- | -- | -- | -- |

Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public-Use
Microdata Sample (PUMS) with an adjustment for legal and unauthorized immigrants omitted from the Census.
Notes:

* Includes North America. \# Includes Hong Kong, Taiwan, and some smaller islands.
** Includes Mexico. \#\# Includes North Africa and Southwest Asia (to Iran).
*** Includes Eritrea. @ Only counties with 50,000 or more foreign-born population shown separately.
-- Fewer than 10,000 persons (weighted).
(Share of County Foreign-Born Population)

| Country or Region of Birth | Metropolitan Area |  |  |  | Maryland Counties@ |  | Virginia Counties |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | District of Columbia | Maryland Counties | Virginia Counties | Montgomery | Prince George's | Arlington | Fairfé |
| All Foreign-Born | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100 |
| Europe/Canada/Other | 13.3\% | 19.1\% | 13.0\% | 12.4\% | 15.0\% | -- | 9.9\% | 11 |
| Europe | 11.5\% | 16.4\% | 11.6\% | 10.6\% | 13.6\% | -- | -- | 9 |
| Germany | 2.0\% | -- | -- | -- | -- | -- | -- |  |
| United Kingdom | 2.2\% | -- | -- | -- | -- | -- | -- |  |
| Former USSR | 1.7\% | -- | -- | -- | -- | -- | -- |  |
| Other Europe | 5.6\% | -- | -- | -- | -- | -- | -- |  |
| Canada* | 1.4\% | -- | -- | -- | -- | -- | -- |  |
| Oceania/Other | (b) | -- | -- | -- | -- | -- | -- |  |
| Latin America | 39.4\% | 49.7\% | 39.7\% | 37.2\% | 35.3\% | 54.0\% | 52.7\% | 31 |
| Central America** | 23.5\% | 29.8\% | 21.2\% | 24.5\% | 17.7\% | 31.2\% | 32.6\% | 19 |
| El Salvador | 13.0\% | 19.2\% | 11.3\% | 13.4\% | 10.5\% | 15.1\% | 20.1\% | 11 |
| Mexico | 4.5\% | -- | 4.5\% | 4.7\% | -- | 9.2\% | -- |  |
| Guatemala | 2.5\% | -- | -- | 2.7\% | -- | -- | -- |  |
| Honduras | 1.6\% | -- | -- | -- | -- | -- | -- |  |
| Other Central Amer. | 1.9\% | -- | -- | -- | -- | -- | -- |  |
| Caribbean | 5.9\% | -- | 9.3\% | -- | 6.6\% | 16.0\% | -- |  |
| Jamaica | 2.1\% | -- | 3.6\% | -- | -- | -- | -- |  |
| Other Caribbean | 3.9\% | -- | 5.7\% | -- | -- | -- | -- |  |
| South America | 9.9\% | -- | 9.2\% | 10.7\% | 10.9\% | -- | 18.9\% | 10 |
| Bolivia | 2.3\% | -- | -- | 3.7\% | -- | -- | -- |  |
| Colombia | 1.3\% | -- | -- | -- | -- | -- | -- |  |
| Peru | 2.4\% | -- | -- | 2.8\% | -- | -- | -- |  |
| Other South Amer. | 3.9\% | -- | 4.8\% | 2.8\% | -- | -- | -- |  |
| Asia \& Africa | 47.3\% | 31.2\% | 47.3\% | 50.4\% | 49.7\% | 46.0\% | 36.1\% | 57 |
| Asia (South \& East) | 32.4\% | 16.4\% | 30.2\% | 37.2\% | 34.1\% | 23.0\% | 24.4\% | 44 |
| China\# | 5.2\% | -- | 6.7\% | 4.1\% | 8.3\% | -- | -- | 4 |
| India | 5.6\% | -- | 6.2\% | 5.7\% | 7.1\% | -- | -- | 7 |
| Korea | 5.7\% | -- | (x) | 7.4\% | 5.4\% | -- | -- | 10 |
| Pakistan | 2.0\% | -- | -- | 3.0\% | -- | -- | -- |  |
| Philippines | 4.0\% | -- | 4.1\% | 4.2\% | -- | -- | -- | 4 |
| Vietnam | 4.7\% | -- | 3.2\% | 6.4\% | -- | -- | -- | 8 |
| Other S. and E. Asia | 5.2\% | -- | 4.3\% | 6.4\% | -- | -- | - | 6 |
| Middle East\#\# | 5.7\% | -- | 4.8\% | 7.0\% | 6.4\% | -- | -- | 7 |
| Iran | 2.2\% | -- | -- | 2.5\% | -- | -- | -- |  |
| Other Middle East | 3.6\% | -- | 2.7\% | 4.4\% | -- | -- | -- |  |
| Africa (Sub-Saharan) | 9.2\% | -- | 12.3\% | 6.2\% | 9.2\% | 21.2\% | -- | 4 |
| Ethiopia*** | 2.1\% | -- | -- | -- | -- | -- | -- |  |
| Nigeria | 1.5\% | -- | 2.8\% | -- | -- | -- | -- |  |
| Other Africa | 5.6\% | -- | 7.4\% | 4.0\% | -- | -- | -- |  |

Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public-Use
Microdata Sample (PUMS) with an adjustment for legal and unauthorized immigrants omitted from the Census.
Notes:

* Includes North America. \# Includes Hong Kong, Taiwan, and some smaller islands.
** Includes Mexico. \#\# Includes North Africa and Southwest Asia (to Iran).
*** Includes Eritrea. @ Only counties with 50,000 or more foreign-born population shown separately.
-- Fewer than 10,000 persons (weighted).


# Appendix Table 2: Citizenship and Legal Status by Jurisdiction for Washington, D.C., Metropolitan Area Immigrants, 2000 

| Jurisdiction | Total | NativeBorn | Foreign-Born |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | ForeignBorn Total | Percent of Total | Naturalized Citizens | Legal Permanent Residents | Legal Temporary Migrants | Unauthorized and TPS |
| Population by Individual Status |  |  |  |  |  |  |  |  |
| Metropolitan Area | 4,925 | 4,068 | 857 | 17.4\% | 310 | 271 | 47 | 229 |
| Washington, DC | 574 | 498 | 76 | 13.3\% | 20 | 26 | 6 | 23 |
| Maryland | 2,166 | 1,799 | 367 | 16.9\% | 142 | 115 | 19 | 91 |
| Virginia | 2,185 | 1,771 | 414 | 19.0\% | 147 | 130 | 22 | 115 |
| Maryland Counties |  |  |  |  |  |  |  |  |
| Montgomery | 877 | 644 | 233 | 26.6\% | 93 | 72 | 14 | 54 |
| Prince George's | 806 | 690 | 117 | 14.5\% | 41 | 37 | 5 | 34 |
| Frederick | 197 | 188 | 9 | 4.5\% | 4 | 3 | 1 | 1 |
| Calvert | 164 | 159 | 4 | 2.7\% | 2 | 1 | 0 | 1 |
| Charles | 121 | 117 | 4 | 3.0\% | 2 | 1 | 0 | 0 |
| Virginia Counties \& Cities |  |  |  |  |  |  |  |  |
| Arlington | 194 | 138 | 55 | 28.6\% | 13 | 20 | 4 | 18 |
| Alexandria | 129 | 96 | 34 | 26.0\% | 8 | 11 | 1 | 12 |
| Fairfax | 1,010 | 759 | 251 | 24.8\% | 97 | 76 | 14 | 63 |
| Loudoun | 270 | 245 | 25 | 9.2\% | 10 | 8 | 1 | 6 |
| Fredericksburg | 143 | 138 | 5 | 3.3\% | 2 | 1 | 0 | 2 |
| Stafford | 108 | 104 | 4 | 4.1\% | 3 | 1 | 0 | 0 |
| Prince William | 332 | 291 | 41 | 12.3\% | 14 | 12 | 1 | 14 |

Distribution Across Areas of Population by Individual Status

|  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Metropolitan Area | $100 \%$ | $100 \%$ | $100 \%$ | $(x)$ | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ |
| Washington, DC | $12 \%$ | $12 \%$ | $9 \%$ | $(x)$ | $7 \%$ | $10 \%$ | $12 \%$ | $10 \%$ |
| Maryland | $44 \%$ | $44 \%$ | $43 \%$ | $(x)$ | $46 \%$ | $42 \%$ | $41 \%$ | $40 \%$ |
| Virginia | $44 \%$ | $44 \%$ | $48 \%$ | $(x)$ | $48 \%$ | $48 \%$ | $47 \%$ | $50 \%$ |
| Maryland Counties |  |  |  |  |  |  |  |  |
| Montgomery | $18 \%$ | $16 \%$ | $27 \%$ | $(x)$ | $30 \%$ | $27 \%$ | $29 \%$ | $24 \%$ |
| Prince George's | $16 \%$ | $17 \%$ | $14 \%$ | $(x)$ | $13 \%$ | $14 \%$ | $10 \%$ | $15 \%$ |
| Frederick | $4 \%$ | $5 \%$ | $1 \%$ | $(x)$ | $1 \%$ | $1 \%$ | $1 \%$ | $1 \%$ |
| Calvert | $3 \%$ | $4 \%$ | $1 \%$ | $(x)$ | $1 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| Charles | $2 \%$ | $3 \%$ | $0 \%$ | $(x)$ | $1 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| Virginia Counties \& Cities |  |  |  |  |  |  |  |  |
| Arlington | $4 \%$ | $3 \%$ | $6 \%$ | $(x)$ | $4 \%$ | $7 \%$ | $9 \%$ | $8 \%$ |
| Alexandria | $3 \%$ | $2 \%$ | $4 \%$ | $(x)$ | $3 \%$ | $4 \%$ | $3 \%$ | $5 \%$ |
| Fairfax | $21 \%$ | $19 \%$ | $29 \%$ | $(x)$ | $31 \%$ | $28 \%$ | $30 \%$ | $28 \%$ |
| Loudoun | $5 \%$ | $6 \%$ | $3 \%$ | $(x)$ | $3 \%$ | $3 \%$ | $2 \%$ | $2 \%$ |
| Fredericksburg | $3 \%$ | $3 \%$ | $1 \%$ | $(x)$ | $1 \%$ | $0 \%$ | $0 \%$ | $1 \%$ |
| Stafford | $2 \%$ | $3 \%$ | $1 \%$ | $(x)$ | $1 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| Prince William | $7 \%$ | $7 \%$ | $5 \%$ | $(x)$ | $5 \%$ | $5 \%$ | $1 \%$ | $6 \%$ |

Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public-Use Microdata Sample (PUMS) with an adjustment for legal and unauthorized immigrants omitted from the Census.

## Notes:

Some "counties" contain small populations from additional jurisdictions. See text for definitions.

* Legal temporary (nonimmigrant) population not shown separately, but included in totals.

Means shown in light text based on fewer than 5,000 weighted households; those in italics on 5,000-10,000 weighted households.
(x) Not applicable.
(Share of County Foreign-Born Population)

| Jurisdiction | Total | NativeBorn | Foreign-Born |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | ForeignBorn Total | Percent of Total | Naturalized Citizens | Legal Permanent Residents | Legal Temporary Migrants | Unauthorized and TPS |
| Households by Status of Head/Spouse |  |  |  |  |  |  |  |  |
| Metropolitan Area | 1,845 | 1,467 | 379 | 20.5\% | 157 | 124 | 18 | 80 |
| Washington, DC | 249 | 210 | 39 | 15.6\% | 12 | 14 | 3 | 10 |
| Maryland | 783 | 623 | 160 | 20.4\% | 70 | 53 | 7 | 31 |
| Virginia | 813 | 633 | 180 | 22.1\% | 75 | 57 | 8 | 40 |
| Maryland Counties |  |  |  |  |  |  |  |  |
| Montgomery | 327 | 225 | 102 | 31.1\% | 45 | 33 | 4 | 19 |
| Prince George's | 288 | 239 | 49 | 17.0\% | 19 | 17 | 2 | 11 |
| Frederick | 70 | 65 | 5 | 6.5\% | 3 | 1 | 0 | 0 |
| Calvert | 57 | 54 | 3 | 4.5\% | 2 | 1 | 0 | 0 |
| Charles | 42 | 39 | 2 | 5.3\% | 1 | 1 | 0 | 0 |
| Virginia Counties \& Cities |  |  |  |  |  |  |  |  |
| Arlington | 87 | 63 | 24 | 27.9\% | 7 | 8 | 2 | 7 |
| Alexandria | 63 | 47 | 16 | 25.4\% | 5 | 5 | 1 | 5 |
| Fairfax | 368 | 263 | 105 | 28.6\% | 47 | 32 | 5 | 21 |
| Loudoun | 97 | 86 | 12 | 12.1\% | 6 | 4 | 0 | 2 |
| Fredericksburg | 51 | 49 | 3 | 4.9\% | 1 | 1 | 0 | 0 |
| Stafford | 36 | 33 | 3 | 7.3\% | 2 | 1 |  | 0 |
| Prince William | 111 | 93 | 18 | 15.9\% | 8 | 5 | 0 | 4 |
| Distribution of Households by Status Across Areas |  |  |  |  |  |  |  |  |
| Metropolitan Area | 100\% | 100\% | 100\% | (x) | 100\% | 100\% | 100\% | 100\% |
| Washington, DC | 14\% | 14\% | 10\% | (x) | 8\% | 12\% | 16\% | 12\% |
| Maryland | 42\% | 42\% | 42\% | (x) | 44\% | 43\% | 37\% | 38\% |
| Virginia | 44\% | 43\% | 48\% | (x) | 48\% | 46\% | 47\% | 49\% |
| Maryland Counties |  |  |  |  |  |  |  |  |
| Montgomery | 18\% | 15\% | 27\% | (x) | 29\% | 27\% | 25\% | 23\% |
| Prince George's | 16\% | 16\% | 13\% | (x) | 12\% | 13\% | 10\% | 14\% |
| Frederick | 4\% | 4\% | 1\% | (x) | 2\% | 1\% | 1\% | 1\% |
| Calvert | 3\% | 4\% | 1\% | (x) | 1\% | 1\% | 0\% | 0\% |
| Charles | 2\% | 3\% | 1\% | (x) | 1\% | 1\% | 0\% | 0\% |
| Virginia Counties \& Cities |  |  |  |  |  |  |  |  |
| Arlington | 5\% | 4\% | 6\% | (x) | 5\% | 7\% | 12\% | 8\% |
| Alexandria | 3\% | 3\% | 4\% | (x) | 3\% | 4\% | 3\% | 6\% |
| Fairfax | 20\% | 18\% | 28\% | (x) | 30\% | 26\% | 29\% | 26\% |
| Loudoun | 5\% | 6\% | 3\% | (x) | 4\% | 3\% | 2\% | 2\% |
| Fredericksburg | 3\% | 3\% | 1\% | (x) | 1\% | 1\% | 1\% | 1\% |
| Stafford | 2\% | 2\% | 1\% | (x) | 1\% | 1\% | 0\% | 0\% |
| Prince William | 6\% | 6\% | 5\% | (x) | 5\% | 4\% | 1\% | 6\% |

Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public-Use
Microdata Sample (PUMS) with an adjustment for legal and unauthorized immigrants omitted from the Census.
Notes:
Some "counties" contain small populations from additional jurisdictions. See text for definitions.

* Legal temporary (nonimmigrant) population not shown separately, but included in totals.

Means shown in light text based on fewer than 5,000 weighted households; those in italics on 5,000-10,000 weighted households.
(x) Not applicable.

## Appendix Table 3: Household Type and Composition for Foreign-Born Households in the Washington, D.C., Metropolitan Area, by Household Legal Status and Country of Birth, 2000

(Populations and households in thousands)

| Population and Measure | Total | NativeBorn | Foreign-Born Households |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | ForeignBorn Total | Naturalized Citizens | Legal Permanent Residents | Legal Temporary Migrants | Unauthorized and TPS |
| Households | 1,845 | 1,467 | 379 | 157 | 124 | 18 | 80 |
| Couples | 938 | 696 | 242 | 102 | 90 | 10 | 41 |
| Male Heads | 355 | 292 | 63 | 19 | 15 | 5 | 25 |
| Female Heads | 552 | 478 | 74 | 37 | 20 | 3 | 14 |
| Persons | 4,824 | 3,617 | 1,208 | 462 | 413 | 45 | 287 |
| Heads/Spouses | 2,784 | 2,163 | 621 | 259 | 214 | 28 | 121 |
| Other Adults Males | 428 | 280 | 148 | 45 | 48 | 4 | 50 |
| Other Adult Females | 381 | 261 | 119 | 46 | 40 | 3 | 30 |
| Children | 1,232 | 912 | 320 | 112 | 111 | 11 | 85 |
| Native-Born | 1,152 | 907 | 245 | 103 | 88 | 2 | 52 |
| Foreign-Born | 80 | 6 | 74 | 9 | 24 | 9 | 33 |
| Percent Native |  |  |  |  |  |  |  |
| All Persons | 82\% | 99\% | 31\% | 40\% | 32\% | 6\% | 20\% |
| Adults | 79\% | 99\% | 15\% | 24\% | 15\% | 1\% | 3\% |
| Children | 94\% | 99\% | 77\% | 92\% | 79\% | 21\% | 61\% |
| Persons per Household |  |  |  |  |  |  |  |
| Total | 2.61 | 2.47 | 3.19 | 2.94 | 3.33 | 2.55 | 3.59 |
| Adults | 1.95 | 1.84 | 2.34 | 2.23 | 2.43 | 1.94 | 2.52 |
| Children | 0.67 | 0.62 | 0.84 | 0.71 | 0.90 | 0.62 | 1.07 |
| Mean Income |  |  |  |  |  |  |  |
| Per Household | 85,700 | 87,700 | 77,900 | 91,000 | 78,600 | 66,500 | 53,300 |
| Per Person | 32,800 | 35,600 | 24,400 | 30,900 | 23,600 | 26,100 | 14,800 |
| Ratio to Natives |  |  |  |  |  |  |  |
| Household Income | 98\% | 100\% | 89\% | 104\% | 90\% | 76\% | 61\% |
| Income Per Person | 92\% | 100\% | 69\% | 87\% | 66\% | 73\% | 42\% |

Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public-Use Microdata Sample (PUMS) with an adjustment for legal and unauthorized immigrants omitted from the Census.

## Appendix Table 4: Household Type and Composition for Foreign-Born Households in the

 Washington, D.C., Metropolitan Area, by Household Country and Region of Birth, 2000| Population and Measure | All Foreign- Born | Asia | China* | India | Korea | Vietnam | Other Asia** | Latin <br> Amer. | El Salv. | Cent Amer. \& Mexico | Caribbean | South America | Other | Africa+ | Middle <br> East++ | Europe Canada, Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Households | 379 | 117 | 20 | 21 | 21 | 14 | 41 | 127 | 36 | 29 | 27 | 36 | 134 | 36 | 25 | 73 |
| Couples | 242 | 84 | 14 | 16 | 15 | 10 | 30 | 75 | 22 | 18 | 13 | 22 | 83 | 18 | 17 | 47 |
| Male Heads | 63 | 15 | 3 | 3 | 2 | 2 | 5 | 24 | 9 | 6 | 4 | 5 | 23 | 9 | 4 | 10 |
| Female Heads | 74 | 18 | 3 | 2 | 4 | 2 | 7 | 28 | 5 | 4 | 9 | 9 | 28 | 9 | 3 | 16 |
| Persons | 1,208 | 369 | 56 | 63 | 63 | 53 | 133 | 476 | 157 | 120 | 81 | 118 | 362 | 111 | 73 | 178 |
| Heads/Spouses | 621 | 202 | 34 | 36 | 36 | 24 | 71 | 202 | 57 | 47 | 40 | 58 | 217 | 54 | 43 | 120 |
| Other Adult Males | 148 | 41 | 5 | 7 | 7 | 9 | 14 | 79 | 30 | 25 | 9 | 15 | 28 | 12 | 6 | 11 |
| Other Adult Females | 119 | 36 | 5 | 5 | 6 | 7 | 13 | 55 | 19 | 13 | 9 | 14 | 29 | 13 | 5 | 11 |
| Children | 320 | 91 | 12 | 15 | 15 | 13 | 35 | 140 | 51 | 36 | 23 | 31 | 88 | 33 | 20 | 36 |
| Native-Born | 245 | 68 | 10 | 12 | 11 | 10 | 25 | 108 | 39 | 26 | 20 | 22 | 70 | 25 | 16 | 30 |
| Foreign-Born | 74 | 23 | 2 | 3 | 4 | 3 | 10 | 33 | 11 | 9 | 4 | 9 | 19 | 8 | 4 | 6 |
| Percent Native |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All Persons | 31\% | 27\% | 26\% | 25\% | 27\% | 25\% | 30\% | 31\% | 28\% | 29\% | 39\% | 30\% | 36\% | 30\% | 34\% | 41\% |
| Adults | 15\% | 12\% | 10\% | 9\% | 12\% | 9\% | 15\% | 12\% | 5\% | 11\% | 20\% | 16\% | 22\% | 11\% | 17\% | 31\% |
| Children | 77\% | 75\% | 80\% | 77\% | 73\% | 76\% | 72\% | 77\% | 78\% | 74\% | 85\% | 71\% | 79\% | 75\% | 80\% | 82\% |
| Persons per Household |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 3.19 | 3.14 | 2.82 | 3.05 | 3.03 | 3.68 | 3.22 | 3.75 | 4.41 | 4.16 | 3.02 | 3.31 | 2.70 | 3.10 | 2.92 | 2.43 |
| Adults | 2.34 | 2.37 | 2.20 | 2.33 | 2.30 | 2.80 | 2.36 | 2.64 | 2.99 | 2.92 | 2.15 | 2.44 | 2.04 | 2.19 | 2.13 | 1.93 |
| Children | 0.84 | 0.77 | 0.62 | 0.72 | 0.74 | 0.88 | 0.85 | 1.11 | 1.42 | 1.23 | 0.87 | 0.87 | 0.66 | 0.91 | 0.78 | 0.49 |
| Mean Income |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Per Household | 77,900 | 82,800 | 82,500 | 112,000 | 70,300 | 74,800 | 77,300 | 63,200 | 50,800 | 55,400 | 65,300 | 80,400 | 87,500 | 56,200 | 94,500 | 100,400 |
| Per Person | 24,400 | 26,300 | 29,200 | 36,700 | 23,200 | 20,300 | 24,000 | 16,900 | 11,500 | 13,300 | 21,600 | 24,300 | 32,400 | 18,100 | 32,400 | 41,400 |
| Ratio to Natives |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Household Income | 89\% | 94\% | 94\% | 128\% | 80\% | 85\% | 88\% | 72\% | 58\% | 63\% | 74\% | 92\% | 100\% | 64\% | 108\% | 114\% |
| Income Per Person | 69\% | 74\% | 82\% | 103\% | 65\% | 57\% | 68\% | 47\% | 32\% | 37\% | 61\% | 68\% | 91\% | 51\% | 91\% | 116\% |

[^23]
## Appendix Table 5: Total Household Income and Taxes Paid in the Washington, D.C., Metropolitan Area, by Household Nativity, Legal Status, and Place of Birth circa 1999-2000

| Household Nativity, Legal Status and Place of Birth | Household Taxes* |  |  | Household Income |  |  | Households |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amt.** | Pct. | $\begin{gathered} \text { Ratio } \\ \text { to } \mathrm{HH} \% \\ \hline \end{gathered}$ | Amt.** | Pct. | $\begin{gathered} \text { Ratio } \\ \text { to } \mathrm{HH} \% \end{gathered}$ | No.\# | Pct. |
| Total | 55,174 | 100.0\% | (x) | 158,160 | 100.0\% | (x) | 1,845 | 100.0\% |
| Native-Born | 45,402 | 82.3\% | 104\% | 128,674 | 81.4\% | 102\% | 1,467 | 79.5\% |
| Foreign-Born | 9,771 | 17.7\% | 86\% | 29,486 | 18.6\% | 91\% | 379 | 20.5\% |
| Naturalized Citizens | 4,933 | 8.9\% | 105\% | 14,299 | 9.0\% | 106\% | 157 | 8.5\% |
| Legal Permanent Residents | 3,360 | 6.1\% | 91\% | 9,752 | 6.2\% | 92\% | 124 | 6.7\% |
| Legal Temporary Migrants | 460 | 0.8\% | 87\% | 1,179 | 0.7\% | 78\% | 18 | 1.0\% |
| Unauthorized and TPS | 1,019 | 1.8\% | 43\% | 4,255 | 2.7\% | 62\% | 80 | 4.3\% |
| Asia | 3,285 | 6.0\% | 94\% | 9,723 | 6.1\% | 97\% | 117 | 6.4\% |
| China*** | 563 | 1.0\% | 94\% | 1,652 | 1.0\% | 96\% | 20 | 1.1\% |
| India | 802 | 1.5\% | 129\% | 2,321 | 1.5\% | 131\% | 21 | 1.1\% |
| Korea | 481 | 0.9\% | 77\% | 1,472 | 0.9\% | 82\% | 21 | 1.1\% |
| Vietnam | 360 | 0.7\% | 84\% | 1,070 | 0.7\% | 87\% | 14 | 0.8\% |
| Other Asia\#\# | 1,079 | 2.0\% | 87\% | 3,207 | 2.0\% | 90\% | 41 | 2.2\% |
| Latin America | 2,467 | 4.5\% | 65\% | 8,029 | 5.1\% | 74\% | 127 | 6.9\% |
| El Salvador | 494 | 0.9\% | 46\% | 1,816 | 1.1\% | 59\% | 36 | 1.9\% |
| Other C. Amer., Mexico | 428 | 0.8\% | 49\% | 1,604 | 1.0\% | 65\% | 29 | 1.6\% |
| Caribbean | 586 | 1.1\% | 73\% | 1,747 | 1.1\% | 76\% | 27 | 1.5\% |
| South America | 959 | 1.7\% | 90\% | 2,863 | 1.8\% | 94\% | 36 | 1.9\% |
| Other | 4,019 | 7.3\% | 100\% | 11,735 | 7.4\% | 102\% | 134 | 7.3\% |
| Sub-Saharan Africa | 649 | 1.2\% | 61\% | 2,014 | 1.3\% | 66\% | 36 | 1.9\% |
| Middle East+ | 834 | 1.5\% | 111\% | 2,367 | 1.5\% | 110\% | 25 | 1.4\% |
| Europe Canada, Other | 2,536 | 4.6\% | 116\% | 7,353 | 4.6\% | 117\% | 73 | 4.0\% |

Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public-Use
Microdata Sample (PUMS) with an adjustment for legal and unauthorized immigrants omitted from the Census.

## Notes:

* Includes employer-paid FICA and Medicare tax.
** In millions of dollars.
\# In thousands.
*** Includes Hong Kong and Taiwan.
\#\# Countries east of and including Aghanistan and Pakistan.
+ North African countries and southwest Asian countries west of and including Iran and Iraq.


# Appendix Table 6: Mean Household Income and Taxes Paid in the Washington, D.C., Metropolitan Area, by Household Nativity, Legal Status, and Place of Birth, circa 1999-2000 

| Household Nativity, Legal Status and | Mean <br> Household <br> Income | Mean <br> Household <br> Taxes Paid* | Percent of <br> Income <br> Paid** |
| :--- | ---: | ---: | ---: |
| Native-Born | $\mathbf{8 7 , 7 0 0}$ | $\mathbf{3 0 , 9 5 7}$ | $\mathbf{3 1 \%}$ |
| Foreign-Born | $\mathbf{7 7 , 9 0 0}$ | $\mathbf{2 5 , 8 0 4}$ | $\mathbf{2 8 \%}$ |
| Naturalized Citizens | 91,000 | 31,405 | $30 \%$ |
| Legal Permanent Residents | 78,600 | 27,094 | $29 \%$ |
| Legal Temporary Migrants | 66,500 | 25,948 | $33 \%$ |
| Unauthorized and TPS | 53,300 | 12,756 | $19 \%$ |
|  |  |  |  |
| Asia | $\mathbf{8 2 , 8 0 0}$ | $\mathbf{2 7 , 9 6 2}$ | $\mathbf{2 8 \%}$ |
| China*** | 82,500 | 28,134 | $28 \%$ |
| India | 112,000 | 38,697 | $30 \%$ |
| Korea | 70,300 | 22,997 | $28 \%$ |
| Vietnam | 74,800 | 25,141 | $27 \%$ |
| Other Asia\#\# | 77,300 | 25,994 | $28 \%$ |
| Latin America | $\mathbf{6 3 , 2 0 0}$ | 19,416 | $25 \%$ |
| El Salvador | 50,800 | 13,835 | $21 \%$ |
| Other Central America, Mexico | 55,400 | 14,782 | $21 \%$ |
| Caribbean | 65,300 | 21,901 | $28 \%$ |
| South America | 80,400 | 26,914 | $29 \%$ |
| Other | $\mathbf{8 7 , 5 0 0}$ | 29,965 | $30 \%$ |
| Sub-Saharan Africa | 56,200 | 18,100 | $26 \%$ |
| Middle East+ | 94,500 | 33,295 | $31 \%$ |
| Europe, Canada, Other | 100,400 | 34,635 | $30 \%$ |

Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public-Use Microdata Sample (PUMS) with an adjustment for legal and unauthorized immigrants omitted from the Census.
Notes:

* Includes employer-paid FICA and Medicare tax.
** Excludes employer-paid FICA and Medicare tax.
*** Includes Hong Kong and Taiwan.
\# Countries east of and including Aghanistan and Pakistan.
+ North African countries and southwest Asian countries west of and including Iran and Iraq.


## Appendix Table 7: Total Household Income and Taxes Paid for Immigrant Households in the Washington, D.C., Metropolitan Area, by Jurisdiction, circa 1999-2000

| Jurisdiction | Household Taxes Paid* |  |  |  | Household Income |  |  | Households |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amt.** | Pct. | $\begin{array}{r} \text { Ratio } \\ \text { to } \mathrm{HH} \% \end{array}$ | $\begin{array}{r} \hline \text { \% Pd. In } \\ \text { Taxes\# } \end{array}$ | Amt.** | Pct. | $\begin{array}{r} \text { Ratio } \\ \text { to } \mathrm{HH} \% \end{array}$ | No.*** | Pct. |
| Metropolitan Area | 9,771 | 100.0\% | (x) | 28.1\% | 29,486 | 100.0\% | (x) | 379 | 100.0\% |
| Washington, DC | 1,006 | 10.3\% | 100\% | 30.8\% | 2,858 | 9.7\% | 94\% | 39 | 10.3\% |
| Maryland | 3,972 | 40.7\% | 96\% | 27.5\% | 12,135 | 41.2\% | 98\% | 160 | 42.2\% |
| Virginia | 4,793 | 49.0\% | 103\% | 28.0\% | 14,494 | 49.2\% | 103\% | 180 | 47.5\% |
| Maryland Counties |  |  |  |  |  |  |  |  |  |
| Montgomery | 2,769 | 28.3\% | 106\% | 27.9\% | 8,419 | 28.6\% | 106\% | 102 | 26.8\% |
| Prince George's | 961 | 9.8\% | 76\% | 26.5\% | 2,983 | 10.1\% | 78\% | 49 | 12.9\% |
| Frederick | 112 | 1.2\% | 96\% | 26.7\% | 345 | 1.2\% | 97\% | 5 | 1.2\% |
| Calvert+ | 77 | 0.8\% | 117\% | 28.6\% | 225 | 0.8\% | 114\% | 3 | 0.7\% |
| Charles | 52 | 0.5\% | 91\% | 26.4\% | 162 | 0.5\% | 93\% | 2 | 0.6\% |
| Virginia Counties \& Cities+ |  |  |  |  |  |  |  |  |  |
| Arlington | 536 | 5.5\% | 85\% | 27.6\% | 1,658 | 5.6\% | 87\% | 24 | 6.5\% |
| Alexandria | 271 | 2.8\% | 66\% | 26.9\% | 842 | 2.9\% | 68\% | 16 | 4.2\% |
| Fairfax | 3,151 | 32.2\% | 116\% | 28.6\% | 9,374 | 31.8\% | 115\% | 105 | 27.7\% |
| Loudoun | 356 | 3.6\% | 117\% | 28.1\% | 1,065 | 3.6\% | 116\% | 12 | 3.1\% |
| Fredericksburg | 46 | 0.5\% | 71\% | 25.5\% | 150 | 0.5\% | 77\% | 3 | 0.7\% |
| Stafford | 56 | 0.6\% | 84\% | 25.4\% | 182 | 0.6\% | 89\% | 3 | 0.7\% |
| Prince William | 376 | 3.8\% | 82\% | 25.0\% | 1,223 | 4.1\% | 89\% | 18 | 4.7\% |

Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public-Use Microdata Sample (PUMS) with an adjustment for legal and unauthorized immigrants omitted from the Census.

Notes:

* Includes employer-paid FICA and Medicare tax.
\# Excludes employer-paid FICA and Medicare tax.
** In millions of dollars.
*** In thousands.


# Appendix Table 8: Taxes Collected in the Washington, D.C., Metropolitan Area, by Type of Tax and Jurisdiction, circa 1999-2000 

|  |  | Federal Taxes |  |  |  | State Taxes |  |  |  |  | Local Taxes |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jurisdiction | All Taxes | Total | Income | Social Security ${ }^{\text {a }}$ | Medicare ${ }^{\text {a }}$ | Total | Income | Sales tax ${ }^{\text {b }}$ | Auto taxes/ fees ${ }^{\text {c }}$ | Tobacco/ Alcohol | Total | $\begin{gathered} \text { Real } \\ \text { property } \end{gathered}$ | Income ${ }^{\text {f }}$ | Sales tax ${ }^{9}$ | Auto taxes/ fees ${ }^{\text {h }}$ | Utility/ telephone |
| Taxes Paid by All Households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Metropolitan Area | 55,174 | 40,183 | 24,366 | 12,225 | 3,592 | 9,425 | 6,328 | 2,326 | 592 | 179 | 5,566 | 3,145 | 1,254 | 400 | 511 | 256 |
| Washington, DC | 6,200 | 4,160 | 2,652 | 1,166 | 341 | 1,728 | 1,177 | 480 | 49 | 21 | 312 | 229 | 0 | 0 | 0 | 84 |
| Maryland | 21,764 | 15,800 | 9,208 | 5,141 | 1,450 | 3,147 | 2,016 | 755 | 277 | 100 | 2,817 | 1,473 | 1,254 | 0 | 0 | 90 |
| Virginia | 27,209 | 20,223 | 12,505 | 5,918 | 1,801 | 4,550 | 3,134 | 1,091 | 266 | 59 | 2,436 | 1,443 | 0 | 400 | 511 | 82 |
| Maryland Counties |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Montgomery | 11,737 | 8,628 | 5,587 | 2,313 | 728 | 1,647 | 1,121 | 362 | 114 | 51 | 1,462 | 718 | 705 | 0 | 0 | 39 |
| Prince George's | 6,207 | 4,396 | 2,197 | 1,755 | 444 | 905 | 548 | 232 | 96 | 28 | 907 | 506 | 353 | 0 | 0 | 48 |
| Frederick | 1,555 | 1,127 | 576 | 437 | 114 | 243 | 142 | 65 | 28 | 9 | 185 | 107 | 76 | 0 | 0 | 1 |
| Calvert+ | 1,279 | 940 | 489 | 359 | 93 | 190 | 118 | 42 | 23 | 7 | 149 | 80 | 68 | 0 | 0 | 1 |
| Charles | 987 | 709 | 360 | 278 | 71 | 163 | 87 | 54 | 16 | 5 | 115 | 62 | 52 | 0 | 0 | 1 |
| Virginia Counties and Cities+ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Arlington | 2,863 | 2,176 | 1,406 | 589 | 182 | 480 | 337 | 113 | 23 | 7 | 207 | 116 | 0 | 40 | 49 | 2 |
| Alexandria | 2,043 | 1,520 | 1,009 | 390 | 122 | 333 | 237 | 76 | 16 | 5 | 190 | 86 | 0 | 29 | 34 | 41 |
| Fairfax | 14,527 | 10,795 | 6,953 | 2,911 | 931 | 2,413 | 1,688 | 572 | 123 | 30 | 1,319 | 787 | 0 | 222 | 282 | 28 |
| Loudoun | 2,975 | 2,208 | 1,295 | 702 | 210 | 503 | 339 | 123 | 35 | 6 | 265 | 162 | 0 | 38 | 60 | 5 |
| Fredericksburg | 993 | 729 | 378 | 278 | 73 | 176 | 111 | 45 | 18 | 2 | 88 | 52 | 0 | 16 | 19 | 0 |
| Stafford | 891 | 661 | 349 | 246 | 66 | 154 | 101 | 39 | 13 | 2 | 76 | 45 | 0 | 17 | 13 | 0 |
| Prince William | 2,916 | 2,133 | 1,116 | 802 | 215 | 490 | 322 | 123 | 39 | 6 | 293 | 195 | 0 | 38 | 53 | 7 |

(Taxes in millions of dollars)

| Jurisdiction | $\begin{gathered} \text { All } \\ \text { Taxes } \end{gathered}$ | Federal Taxes |  |  |  | State Taxes |  |  |  |  | Local Taxes |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Income | Social Security ${ }^{\text {a }}$ | $\begin{aligned} & \text { Medi- } \\ & \text { care }^{\text {a }} \end{aligned}$ | Total | Income | Sales $\operatorname{tax}{ }^{\mathrm{b}}$ | Auto taxes/ fees ${ }^{\text {c }}$ | Tobacco/ Alcohol | Total | Real property ${ }^{\text {e }}$ | Income ${ }^{\text {f }}$ | $\begin{aligned} & \text { Sales } \\ & \operatorname{tax}^{9} \end{aligned}$ | Auto taxes/ fees ${ }^{\text {h }}$ | Utility/ tele- <br> phone ${ }^{i}$ |
| Taxes Paid by Immigrant Households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Metropolitan Area | 9,771 | 7,030 | 3,924 | 2,420 | 686 | 1,643 | 1,079 | 418 | 120 | 26 | 1,098 | 627 | 226 | 76 | 121 | 48 |
| Washington, DC | 1,006 | 678 | 416 | 202 | 60 | 276 | 186 | 80 | 7 | 3 | 53 | 40 | 0 | 0 | 0 | 13 |
| Maryland | 3,972 | 2,874 | 1,556 | 1,031 | 287 | 562 | 357 | 135 | 55 | 14 | 536 | 292 | 226 | 0 | 0 | 19 |
| Virginia | 4,793 | 3,478 | 1,952 | 1,187 | 339 | 806 | 536 | 203 | 58 | 9 | 509 | 295 | 0 | 76 | 121 | 17 |
| Suburban Maryland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Montgomery | 2,769 | 2,015 | 1,138 | 682 | 195 | 384 | 251 | 88 | 35 | 9 | 370 | 199 | 159 | 0 | 0 | 11 |
| Prince George's | 961 | 682 | 327 | 281 | 74 | 141 | 84 | 37 | 16 | 4 | 138 | 77 | 55 | 0 | 0 | 7 |
| Frederick | 112 | 82 | 41 | 33 | 9 | 17 | 10 | 5 | 2 | 0 | 13 | 8 | 5 | 0 | 0 | 0 |
| Calvert+ | 77 | 57 | 32 | 20 | 6 | 11 | 7 | 3 | 1 | 0 | 8 | 4 | 4 | 0 | 0 | 0 |
| Charles | 52 | 38 | 17 | 16 | 4 | 9 | 5 | 3 | 1 | 0 | 6 | 4 | 3 | 0 | 0 | 0 |
| Northern Virginia |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Arlington | 536 | 395 | 235 | 126 | 35 | 94 | 63 | 23 | 6 | 1 | 47 | 25 | 0 | 8 | 13 | 1 |
| Alexandria | 271 | 190 | 97 | 73 | 19 | 46 | 29 | 12 | 4 | 1 | 35 | 15 | 0 | 5 | 9 | 7 |
| Fairfax | 3,151 | 2,289 | 1,319 | 750 | 220 | 525 | 354 | 130 | 35 | 6 | 337 | 198 | 0 | 51 | 81 | 7 |
| Loudoun | 356 | 263 | 145 | 91 | 27 | 59 | 39 | 15 | 4 | 1 | 34 | 21 | 0 | 5 | 7 | 1 |
| Fredericksburg | 46 | 34 | 17 | 13 | 4 | 8 | 5 | 2 | 1 | 0 | 4 | 3 | 0 | 1 | 1 | 0 |
| Stafford | 56 | 41 | 19 | 17 | 4 | 10 | 6 | 3 | 1 | 0 | 5 | 3 | 0 | 1 | 1 | 0 |
| Prince William | 376 | 266 | 120 | 116 | 30 | 65 | 40 | 18 | 6 | 1 | 45 | 30 | 0 | 6 | 9 | 1 |


|  |  | Federal Taxes |  |  |  | State Taxes |  |  |  |  | Local Taxes |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jurisdiction | $\begin{gathered} \text { All } \\ \text { Taxes } \end{gathered}$ | Total | Income | Social Security ${ }^{\text {a }}$ | Medicare ${ }^{\text {a }}$ | Total | Income | $\begin{aligned} & \text { Sales } \\ & \operatorname{tax}^{\mathrm{b}} \end{aligned}$ | Auto taxes/ fees ${ }^{\text {c }}$ | Tobacco/ Alcohol | Total | Real property ${ }^{\text {e }}$ | Income ${ }^{\text {f }}$ | $\begin{aligned} & \text { Sales } \\ & \operatorname{tax}^{g} \end{aligned}$ | Auto taxes/ fees ${ }^{\text {h }}$ | Utility/ telephone ${ }^{i}$ |

Percent of taxes paid by immigrants across jurisdictions, levels of government

| Metropolitan Area | 18\% | 17\% | 16\% | 20\% | 19\% | 17\% | 17\% | 18\% | 20\% | 15\% | 20\% | 20\% | 18\% | 19\% | 24\% | 19\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Washington, DC | 16\% | 16\% | 16\% | 17\% | 18\% | 16\% | 16\% | 17\% | 15\% | 14\% | 17\% | 17\% | N/A | N/A | N/A | 15\% |
| Maryland | 18\% | 18\% | 17\% | 20\% | 20\% | 18\% | 18\% | 18\% | 20\% | 14\% | 19\% | 20\% | 18\% | N/A | N/A | 21\% |
| Virginia | 18\% | 17\% | 16\% | 20\% | 19\% | 18\% | 17\% | 19\% | 22\% | 16\% | 21\% | 20\% | N/A | 19\% | 24\% | 21\% |
| Maryland Counties |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Montgomery | 24\% | 23\% | 20\% | 29\% | 27\% | 23\% | 22\% | 24\% | 31\% | 19\% | 25\% | 28\% | 23\% | N/A | N/A | 29\% |
| Prince George's | 15\% | 16\% | 15\% | 16\% | 17\% | 16\% | 15\% | 16\% | 17\% | 13\% | 15\% | 15\% | 16\% | N/A | N/A | 15\% |
| Frederick | 7\% | 7\% | 7\% | 8\% | 8\% | 7\% | 7\% | 7\% | 6\% | 5\% | 7\% | 7\% | 7\% | N/A | N/A | 7\% |
| Calvert+ | 6\% | 6\% | 7\% | 5\% | 6\% | 6\% | 6\% | 6\% | 5\% | 4\% | 6\% | 5\% | 6\% | N/A | N/A | 5\% |
| Charles | 5\% | 5\% | 5\% | 6\% | 6\% | 5\% | 5\% | 5\% | 6\% | 4\% | 6\% | 6\% | 5\% | N/A | N/A | 5\% |
| Virginia Counties and Cities+ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Arlington | 19\% | 18\% | 17\% | 21\% | 19\% | 20\% | 19\% | 21\% | 27\% | 18\% | 23\% | 22\% | N/A | 21\% | 26\% | 28\% |
| Alexandria | 13\% | 13\% | 10\% | 19\% | 16\% | 14\% | 12\% | 16\% | 25\% | 13\% | 19\% | 17\% | N/A | 16\% | 25\% | 18\% |
| Fairfax | 22\% | 21\% | 19\% | 26\% | 24\% | 22\% | 21\% | 23\% | 29\% | 20\% | 26\% | 25\% | N/A | 23\% | 29\% | 27\% |
| Loudoun | 12\% | 12\% | 11\% | 13\% | 13\% | 12\% | 11\% | 12\% | 12\% | 11\% | 13\% | 13\% | N/A | 12\% | 12\% | 13\% |
| Fredericksburg | 5\% | 5\% | 5\% | 5\% | 5\% | 5\% | 4\% | 5\% | 5\% | 5\% | 5\% | 5\% | N/A | 5\% | 5\% | N/A |
| Stafford | 6\% | 6\% | 6\% | 7\% | 7\% | 6\% | 6\% | 7\% | 7\% | 6\% | 7\% | 8\% | N/A | 7\% | 7\% | N/A |
| Prince William | 13\% | 12\% | 11\% | 15\% | 14\% | 13\% | 12\% | 14\% | 16\% | 13\% | 15\% | 15\% | N/A | 15\% | 16\% | 16\% |

Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public Use Microdata Sample with an adjustment for legal and unauthorized immigrants omitted from the census.
** First column is percentage of federal taxes within the jurisdiction. State and local taxes are combined for the District of Columbia.
a Includes employer-paid share.
b State portion of general sales tax (including food), restaurant tax, and sales tax on alcohol (VA).
c Includes state gasoline tax and state car registration, but does not include excise tax on vehicle purchases.
d Includes special state tax on alcohol and cigarettes, but does not include profit from state store sales (VA).
e Includes estimated payments on behalf of renters; includes state portion in Maryland and all of DC's residential property tax.
f Maryland only-county share of state income tax.
g Includes local cigarette and tobacco tax, and estimated local share of general tax.
h Includes "car tax" plus local gasoline tax and local car registration in Virginia, but does not include excise tax on purchase.
i Includes 911 fee, local phone tax, and any "tax" on utilities (not operating profit). Does not include federal/state excise taxes. Some of the utility taxes are levied on suppliers but are treated as pass-throughs to the consumer.

## Appendix Table 9: Mean Household Income and Taxes Paid in the Washington, D.C., Metropolitan Area, by Nativity, Educational Attainment, and English Proficiency of Household Head, circa 1999-2000

| Nativity, Educational Attainment, <br> and English Proficiency of <br> Household Head | Mean <br> Household <br> Income | Mean <br> Household <br> Taxes Paid* | Percent of <br> Income <br> Paid** |
| :--- | ---: | ---: | ---: |
| Native-Born | $\mathbf{8 7 , 7 0 0}$ | $\mathbf{3 0 , 9 5 7}$ | $\mathbf{3 1 \%}$ |
| $\quad$ No High School Degree | 39,187 | 10,846 | $24 \%$ |
| $\quad$ High School, Some College | 63,165 | 21,295 | $28 \%$ |
| 4- Year College Degree or More | 122,048 | 44,668 | $32 \%$ |
| Foreign-Born | $\mathbf{7 8 , 6 0 0}$ | $\mathbf{2 5 , 8 0 4}$ | $\mathbf{2 8 \%}$ |
| $\quad$ No High School Degree | 46,789 | 12,148 | $21 \%$ |
| High School, Some College | 59,683 | 18,995 | $26 \%$ |
| 4- Year College Degree or More | 103,354 | 36,145 | $30 \%$ |
|  |  |  |  |
| Speaks English at Home | 96,916 | 33,634 | $30 \%$ |
| Speaks Another Language |  |  | $29 \%$ |
| $\quad$ Speaks English Very Well | 84,286 | 28,889 | $29 \%$ |
| $\quad$ Speaks English Well | 58,909 | 17,655 | $25 \%$ |
| $\quad$ Speaks English Not Well | 49,676 | 13,099 | $21 \%$ |
| $\quad$ Speaks English Not at All | 40,834 | 11,360 | $21 \%$ |
|  |  |  |  |

Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public-Use Microdata Sample (PUMS) with an adjustment for legal and unauthorized immigrants omitted from the Census.

Notes:

* Includes employer-paid FICA and Medicare tax.
** Excludes employer-paid FICA and Medicare tax.

For More Information:

## The Urban Institute

2100 M Street, N.W.
Washington, DC 20037
(202) 833-7200
http://www.urban.org

The Washington Area Partnership for Immigrants
A funding collaborative of
The Community Foundation for the National
Capital Region
1201 15 th Street NW, Suite 420
Washington, DC 20005
(202) 955-5890
http://www.thecommunityfoundation.org

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[^1]:    ${ }^{1}$ Counties collect income taxes in Maryland, but the Virginia jurisdictions do not collect income taxes; all income taxes collected in the District of Columbia were categorized as state taxes. Virginia (but not Maryland) counties collect sales and automobile taxes.

[^2]:    Some counties but not others in both states collect taxes on telephones and utilities, as does the District of Columbia. For a full listing of taxes calculated at the federal, state, and local levels, see table 1.

[^3]:    ${ }^{2}$ When households in jurisdictions outside the Washington metropolitan area were included, the share of state taxes paid by immigrant households was 11 percent in Virginia and 12 percent in Maryland.

[^4]:    ${ }^{4}$ The survey also had a subsample in the Washington, D.C., metropolitan area, where 46 percent of respondents said that immigrants do not pay their fair share in taxes, but 41 percent said they believe that immigrants do pay their fair share.

[^5]:    ${ }^{5}$ Where possible, we adjust our tax estimates to match reported total individual tax contributions across jurisdictions. For a full list of taxes included in our analysis and how they are calculated, see the methodology section of this report.

[^6]:    ${ }^{6}$ Nonetheless, our estimates build in an assumed undercount of up to 10 percent for certain immigrant groups in the 2000 Census.

[^7]:    ${ }^{7}$ For a full description of our legal status assignment methodology, see the methodology section of the report.

[^8]:    ${ }^{8}$ We estimated that 54 percent of all the immigrants from El Salvador we assigned "unauthorized" status actually had TPS. Thus, out of the 65,000 "unauthorized" migrants from El Salvador in the Washington, D.C., metropolitan area in 2000, we consider 35,000 to have TPS and the remaining 30,000 to be truly unauthorized. There were very small numbers of unauthorized migrants from other countries, and so we did not develop an estimate of the TPS population for any other country.

[^9]:    Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public Use Microdata Sample with an adjustment for legal and unauthorized immigrants omitted from the Census.

    Note: The data displayed in this chart are adjusted for estimated undercount of immigrants in the census and therefore vary substantially from the official census data used elsewhere in this report.

[^10]:    ${ }^{9}$ The outer-ring suburban counties were grouped using 2000 Census Public Use Microdata Areas (PUMAs), and in some cases these PUMAs include counties outside the official Washington, DC, metropolitan statistical area. We drew our boundaries based on PUMAs to be as inclusive as possible. For a full list of counties and groups of counties included in the report, see the methodology section of this report.

[^11]:    10 Unfortunately, there are no data comparable to the 2000 Census that would enable us to develop more recent tax estimates for all the jurisdictions in this report. The Census Bureau has been conducting the American Community Survey (ACS) every year since 2002, and the data are directly comparable to the 2000 Census. County and city-level estimates from the ACS will not be available until 2007 or 2008, however.

[^12]:    ${ }^{11}$ These averages include households without children, so the average for households with children would be substantially higher.
    12 In our analysis we calculated mean income instead of median income. Mean income is necessary in order to calculate the average share of taxes paid by households (which is equivalent to mean taxes paid divided by mean income). The mean income is substantially higher than the median income for all households, regardless of nativity, because the highest income households are weighted more heavily when calculating the mean than the median.

[^13]:    ${ }^{13}$ We included the employer contributions to Social Security and Medicare in these totals.

[^14]:    ${ }^{14}$ Tax payments are also lower for immigrant households because some unauthorized immigrants work under the table and do not pay income or payroll taxes. We assume that 55 percent of unauthorized immigrants pay Medicare, Social Security, and federal, state, and local income taxes. We also assume that 100 percent of unauthorized immigrants pay property and consumption taxes. ${ }^{15}$ When calculating the share of household income paid in taxes, we exclude the employer share for Medicare and Social Security.

[^15]:    Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public Use Microdata Sample with an adjustment for legal and

[^16]:    Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public Use Microdata Sample with an adjustment for legal and unauthorized immigrants omitted from the census.

[^17]:    Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public Use Microdata Sample with an adjustment for legal and unauthorized immigrants omitted from the census.

[^18]:    Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public Use Microdata Sample with an adjustment for legal and unauthorized immigrants omitted from the census.

[^19]:    ${ }^{16}$ We assume, however, that 100 percent of TPS migrants pay these taxes, because all TPS migrants have temporary work authorization.

[^20]:    Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public Use Microdata Sample with an adjustment for legal and unauthorized immigrants omitted from the census.

[^21]:    ${ }^{17}$ The census asks respondents whether English or another language is spoken in the home, and for all those households where another language is spoken, how well each household member over age 5 speaks English. We did not analyze data on English proficiency for native households, because English is the language spoken in almost all native households.

[^22]:    Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public Use Microdata Sample with an adjustment for legal and unauthorized immigrants omitted from the census.

[^23]:    Source: Urban Institute and Pew Hispanic Center tabulations from Census 2000 5-Percent Public-Use Microdata Sample (PUMS) with an adjustment for legal and unauthorized immigrants omitted from the Census.

    Notes:

    * Includes Hong Kong and Taiwan.
    ** Countries east of and including Aghanistan and Pakistan.
    + Sub-Saharan countries.
    ++ North African countries and southwest Asian countries west of and including Iran and Iraq.

