Immigration
and
Urban Development:
Implications for Greater Cleveland

Sanda Kaufman & William Olson
Maxine Goodman Levin College

1/29/2008

Research funded by the Ruth Ratner Miller Center for Greater Cleveland's Future
The authors thank Mark Rosentraub, Dean, Maxine Goodman Levin College of Urban Affairs, for substantial assistance with the direction and content of this report. In addition, the authors recognize helpful input from Abigail Horn, program manager for the Ruth Ratner Miller Center for Greater Cleveland’s Future.

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Immigration and Urban Economic Development

Executive Summary

Immigration has always played an important role in the economic development of the US. As labor markets have developed, however, the question of whether the influx of immigrants is in the interest of native workers has accompanied immigration-related public discourse. After a precipitous drop in immigration during the economic depression of the 1930s, incremental growth has brought immigration in the past 30 years to a level comparable to that of the turn of the 20th century, igniting the debate over its benefits and costs and the nature of its contribution to the American economy. This report explores the link between immigration and urban economic development and the potential for designing public policies to attract immigrants to urban centers that are not currently their typical destinations.

A handful of US regions have attracted the majority of the latest immigration waves. These immigrant centers have experienced robust economic growth, in comparison to those metropolitan areas receiving fewer immigrants. While the Los Angeles, Houston, New York, and San Francisco areas were taking in hundreds of thousands of new residents, many of the industrial cities of the Midwest and Northeast saw their share of immigration decline, as well as the departure of a considerable proportion of their native population. Within these smaller metropolitan areas, the population loss has sparked a debate regarding the merits of policies and actions to increase immigration.

Available data point to a rather strong relationship between metropolitan economic development and a growing population. However, the direction of causality is unclear: Is economic growth the magnet attracting new residents to an area, or does the influx of immigrants fuel economic growth? The evidence suggests a complex and interdependent interaction between the two, largely confirming that, in economically thriving urban areas, immigrants are attracted to growing areas and spur on further growth by virtue of their contributions to the local economy. The complicated immigration-economic development relationship has to be unpacked, in order to enable regions to invest in strategies likely to yield the greatest benefit, while managing risks. This is especially critical for regions starting from a position of decline rather than one of economic strength, which need the ability to predict with some accuracy the consequences of various economic development policies based on immigration in order to make the best of their scarce resources.

A review of the literature and of existing population and economic trend data suggests that smaller cities may want to carefully consider the option of encouraging in-migration – whether from other regions or from other countries – as part of a comprehensive strategy to reverse their economic decline.
Introduction – A Framework

Throughout American history, immigration has affected culture, politics, and the economy in momentous ways. Essentially a land of immigrants, the US has absorbed numerous waves of newcomers and benefited from their substantial contributions to the country’s economic growth. Immigrants in search of economic opportunity have had a presence in all sectors of the economy (Winnick, 1990; Muller, 1993.)

The arrival of immigrants stimulates consumption of, and demand for services, housing construction, as well as commercial and banking activities, indirectly promoting economic growth. In this respect, the effects of immigration are no different from those of natural population growth (births in excess of deaths and in-migration\(^1\) from other regions of the country.) Arguably, however, the diversity of minds and ways of life immigrants bring to a location have added benefits, such as demand for different products and services and new marketable ideas that can contribute to the diversification of the economy and add to its robustness. In addition, because many immigrants are driven to the US by economic aspirations, their resolve to contribute and be rewarded by the market may exceed that of the native population. Researchers have recognized the role played by immigrants’ personal ambitions and have measured their level of entrepreneurship relative to that of the American population (Winnick, 1990; Borjas, 1990). Results suggest that, on average, immigrants’ drive and place in society leads to a higher rate of self-employment than that of the local population.

While such economic arguments have garnered support for immigration, counter positions exist (Fix & Passel, 1994). Anti-immigrant sentiment often accompanies immigration waves. Sometimes rooted in xenophobic tendencies, in fears over job loss, or wage deflation, resistance to immigration has been a powerful political and social force (Simon, 1989; Borjas, 1990; Muller, 1993.) Regardless of the sources of

\(^1\) In-migration will be the term of choice for designating the arrival of population into a city regardless of whether its origin is some other US region or another country. In contrast, immigration will be used strictly to designate the latter group.
anti-immigrant sentiment, arguments leveled against unimpeded immigration have a certain intuitive appeal, which accounts for periodic moves throughout history to restrict, or to selectively discourage, immigration from certain regions of the world (Fix & Passel, 1994). Immigration-related arguments are at times couched in economic terms, with some of the newcomers predicted to become a burden on the economy and others expected to contribute to it. Illegal immigration, although credited with contributing to the pool of agricultural and construction labor\textsuperscript{2} that helps keep prices low, also attracts intense anti-immigrant sentiment. For example, states such as California, Arizona, and Texas have requested at various times for increased federal funding to help them sustain the burden of education and health care for these immigrants, claiming their presence leads to increased local taxation, while benefiting the rest of the country.

The result of the perennial tension between faith in the economic benefits of immigration and the fear of its effect on the number of available jobs and on social welfare expenditures results in an ambiguous and often inconsistent national policy on immigration. While some elected officials extol the benefits of immigration, others strive to set limits and constrain the flow. These mixed political motives are overlaid on the cyclical nature of the American economy that at times demands more labor than is readily available, and at other times cannot employ all Americans at desirable wage levels.

This report examines the pros and cons of the notion that attracting immigrants to economically declining urban areas such as Cleveland should become a component of metropolitan economic development policies. It looks at these issues from historical, sociopolitical, and decision-making perspectives, using literature on the economic effects of immigration on host localities, existing data on immigration trends in growing and declining metropolitan areas with a focus on Cleveland, and a model that predicts metropolitan areas’ shares of total immigration based on individual immigrant decision factors.

\textsuperscript{2} While illegal immigrants work in many other sectors of the economy, their effect on the prices of produce around the country is salient in public awareness.
Scope
To date, immigration policy has faced a set of issues that remain unresolved:

- Does immigration add to the economic vitality of a region or does it merely strain its social welfare programs? One simple reason why accounts of immigration effects diverge is that they tend to incorporate the narrators’ different political or economic motives. Other reasons relate to the difficulty of capturing and isolating the effects of immigration on an economic region, of distinguishing them from confounding factors (such as background characteristics of the host population and of the host economic region, or the health of the economy), and of identifying whether these effects can be expected to hold at any location or rather hinge critically on local characteristics. This report examines available evidence of immigration effects on local economies.

- If immigration has a positive effect on economic development, can it be fostered through policies? What decision factors should such policies include? Is it possible to safeguard the benefits of public investment in incentives to immigration to a region, given that immigrants can then move elsewhere? To answer these questions, this report explores the components of an individual’s decision to migrate, including the complex array of “push” factors that impel people to leave their current location and “pull” factors that attract them to specific locations in the US. Push factors typically include political and economic hardships in the immigrants’ native countries. Pull factors include work opportunities in general, the demand for specific skills, the business climate, and the presence of like communities. From the perspective of the individual deciding to emigrate to the US, the push factors are overlaid on the individual’s education, skills, language ability, and a set of age-related factors affecting mobility, such as life cycle stage, economic endowment, and subjective likelihood of success. Pull factors combine with the prospects of community and family assistance and the social climate of the target location. Only a subset of the pull factors can be affected by immigration policies at destination.
These questions point to some of the reasons behind the renewed impetus to understand the effects of immigration on the economies of urban areas. Faced with depressed economic bases, older manufacturing cities are searching for policy remedies for their economic decline. This report focuses on data for the Cleveland metropolitan area, an example of metropolitan areas whose population and economy have been declining or stagnating in the last decades.

One correlate of economic health is population growth: regions with declining economies generally lose residents while thriving areas attract people. Policy design requires clarity as to whether population trends are causes or consequences of the economic health of a region. Should they be a cause or even a necessary condition, it would follow that policies designed to attract people to a region – whether from other regions or from other countries – could contribute to a reversal of an economic decline. It is critical to understand the relationship between economic health and a growing population, since policy measures to attract immigrants to a region can be costly and may result in added tax burdens if the presence of immigrants does not improve the local economy. Therefore, when working within the constraints of limited resources, another question facing policy makers in economically declining urban areas (which lies beyond the scope of this report) is:

- How do immigration policies compare to other economic development tools in terms of costs and benefits in time, risks, and the time frame for expected effects?

Section 1 of this report examines the relationship between metropolitan population size and its level of economic activity. Section 2 takes an immigrant’s decision perspective to explore pull factors that could translate into policy elements. Section 3 focuses on population gains and losses in Cleveland and its region and considers the consequences of implementing policies for the Cleveland metropolitan area that would provide an attractive climate for in-migration. The report concludes with a summary of the findings and an assessment of outstanding issues facing policy makers in the Cleveland metropolitan area and other similar regions.
1. Metropolitan population size and level of economic activity

There is a degree of intuitive logic in the proposition that population growth can fuel economic development: every additional person can contribute to an increase in the number of market transactions, and, by his or her participation in the economy, enhance a region’s tax revenue, the local pool of ideas, and the start of new businesses. However, this logic is insufficient to justify the investment of scarce resources into policies encouraging immigration, as new immigrants may fail to find jobs or contribute to local economic growth. In Israel, for example, past practice sent new immigrants to development towns with weak, emerging economies and few employment choices for newcomers; the immigrants who could relocate to faster-growing areas quickly did so, leaving behind a local economy further weakened by the drain of resources and entrepreneurship.

The dynamic relationship between immigration and economic growth can yield various outcomes, not all of them desirable, depending on various characteristics of the immigrants themselves, and on the specifics of particular locations. Policy making requires the ability to predict, for a specific location, the nature of the outcome to be expected. Therefore, it is necessary to understand the relationship between immigration and economic development at the regional level, since immigrants are mobile, and to understand the regional characteristics likely to enhance or moderate the positive effects of immigration on a specific metropolitan area.

Much of the research on the link between population and economic growth is based on large cities with thriving economies. Since researchers have mostly investigated whether immigration helps or hurts relatively developed and stable economies, their results may not readily apply to areas with low or flat rates of growth. Further, the economic effects of immigration are not independent of local or regional characteristics, such as the state of the economy at arrival, and the nature of the local demand and supply of certain skills. For example, during the rise of industrialization in the U.S. in the late 19th and early 20th centuries, immigration
helped fuel economic growth by meeting the labor demand of northern manufacturers (Mooney, 1990; Denison, 1962). However, as globalization put increasing pressure on these industries during the 1970s and 1980s, wages and employment opportunities for low-skilled workers at these locations were negatively affected by the presence of immigrants with similar skills (Kuznets, 1977 and Defreitas & Marshall, 1983 as cited in Simon, 1989).

The Chicken or the Egg

Does immigration fuel employment growth, or is it a response to the increased demand for labor in a growing economy? There is empirical evidence to support the position that economic growth is a result of immigration and in turn attracts immigration (Greenwood, 1975). The policy implications are quite different depending on the direction of this relationship.

Empirical research indicates that immigration and employment growth are highly interdependent (Muth, 1968,1971; Greenwood, 1975,1981; Borts & Stein, 1964; Muller, 1993) -- immigrants may tend to move to regions that are experiencing employment growth, they may spur the creation of jobs by virtue of their potential as consumers, employees, and entrepreneurs, or both. Muth (1971) and Borts and Stein (1963) both emphasized the role immigration has on economic growth. They repeatedly observed that interdependence fails to resolve the sequencing puzzle, which is necessary for policy decisions. One challenge to such work is the selection of a point in time as the base from which to study the immigration-economic growth dynamic.

Several key scenarios dot a continuum of hypothetical possibilities. At one end, there is the “economic-opportunities-attract-immigration” scenario, which makes sense based on both observed immigration patterns and the individual’s immigration decision logic (see Section 2). Some of the currently attractive destinations must struggle, however, with establishing whether immigration hurts the host community economically.
It is noteworthy that some of the current immigration centers are not necessarily thriving economically, or no more than other metropolitan areas that receive a smaller share of the yearly immigration into the US. Rather, these magnets attract newcomers by the presence in their midst of large immigrant communities that hold the promise of a receptive social climate and economic assistance from family and friends. Immigrants often gravitate to places where others from the same country of origin already live, with an ensuing snowballing effect that accounts for the clustering of ethnic groups at various locations. For example, some Steel Belt cities attracted such large portions of the Eastern European immigration at the beginning of the 20th century that they became the second largest groupings of those ethnicities after the capital cities of the countries of origin. Chicago was the city with the largest number of Poles after Warsaw, while Cleveland was the city with the largest number of Hungarians after Budapest. Nowadays, immigrants from Cuba gravitate to Florida and those from China often settle in California cities. These patterns tend to hold in time, although the magnets’ economic well-being may fluctuate.

The “immigration-spurs-economic-growth” scenario closes the range at the other end of the spectrum and is not incompatible with the first scenario – it merely applies to different initial conditions, such as those found in other regions that are not currently the destination of most immigration. In this scenario, in addition to stocking the intellectual and labor supply, immigrants also increase demand for affordable housing and low-cost transportation, leading to the revitalization of pockets of blight within central cities. Older cities tend to have neighborhoods just blocks from their downtowns that can provide the first home for new arrivals who might have little capital on hand and might be searching for work readily accessible by public transportation. A number of instances have been documented (Muller, 1993; Winnick, 1990; Neymarc, 1998) where immigrants helped revitalize blighted areas in cities by cleaning and maintaining properties that would have otherwise been abandoned. Further, businesses are more likely to venture into an area, and developers are more likely to consider an area as a better risk for investment, if a
stable residential base emerges. Immigrants with larger disposable incomes are likely to contribute to an increase in the demand for suburban housing.

Since blighted neighborhoods may not attract immigrants – especially if they can afford alternative locations -- the policy consequence that suggests itself in order to capitalize on the possible benefits of immigration is for regions to invest in incentives that compensate for an area’s initial lack of attractiveness. However, the decision to invest in incentives hinges on evidence that the expectation of economic benefits from in-migration are realistic, and on an assessment of the extent of negative economic and social consequences the host community can expect.

It is conceivable that the interplay between specific groups of immigrants, the economic situation at the time of their arrival, and a constellation of other policy and individual variables may result in the coexistence of several scenarios. That is, some locations may attract certain kinds of immigrants by virtue of the economic prospects. Other locations may be social magnets for certain immigrants because of the presence there of others from the same country of origin. Some locations that were initially economic magnets accumulate sizeable enough groups to become social magnets.

The Old and the New
Both wage inflation and deflation due to the presence of immigrants have been found in specific cases. While some research shows positive effects of immigration on employment and on combating urban blight, it is somewhat ambiguous on how it affects overall wage levels. Muller (1998), Camarota (1998), and Chiswick (1982) present strong cases for the depression of wages of similarly skilled citizens, with some caveats. Chiswick, for instance, argues that wage depression may be only temporary, while Muller suggests that the wages of those with complementary skills may be pushed higher as a result of immigration. Borjas (1990) concludes that wage effects are as negligible as employment effects, but finds several years later that immigration has probably led to substantial wage depression for lower-skilled workers (Borjas, 1999). Finally, the natural experiment of the effect the
Mariel Boatlift had on the Miami labor market showed that the influx of immigrants there had virtually no impact on the wages or unemployment rates of less-skilled workers (Card, 1990). Fix and Passel (1994) concluded that large numbers of immigrants tend to have small negative wage effects for low-wage earners in stagnant local economies only. Immigration positively affects the availability of low-skilled jobs in growing economies and diminishes them in declining economies.

It is important to keep in mind that of necessity, even longitudinal studies are bound to the prevailing economy, which, whether weak or strong during the time period of the study, cannot but have affected results. Therefore, observed wage effects are not readily attributable to the presence of immigrants, which might partly account for the ambiguity of research results.

Based on the economic growth and rising per capita incomes following waves of immigration -- whether in economically thriving or in declining regions -- several researchers have found that, in general, immigrants improve the host population’s standard of living (Borts & Stein, 1964; Chiswick, 1982; Kuznets, 1964; Mooney, 1990; Muller, 1998). Fix and Passel (1994) have concluded that in general (as of 1994): immigrants pay more in taxes than they receive in public services; average household incomes surpass those of natives within 10 years of arrival; with some exceptions (where the economy is slack and immigrants are concentrated) immigrants generate more jobs than they take; and, recent immigrants are substantially less likely to be on welfare than natives. Nevertheless, in some cases the costs of immigration may exceed the benefits, as when the immigrants’ (low) skill characteristics drive up income inequalities (Chiswick, 1992) or cause per capita incomes to fall (Borts & Stein, 1964) and poverty to increase (Camarota, 1998).

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3 The author of the study (Card, 1990) cautioned about its theoretical implications, suggesting that the industrial and social structure of Miami may have been a contextually sensitive factor that contributed to his findings.
While the balance is positive on average, costs and benefits of immigration are dependent on the characteristics of both the immigrants and the economy in which they settle. In contrast, the link between population loss and the depression of metropolitan economies is much less ambiguous, based on economic indicators such as housing construction, bank deposits, consumer spending, per capita income, and business starts.

Older, industrialized metropolitan areas face both stagnant (or shrinking) and aging population trends. The debate on immigration follows the aforementioned themes, although attention tends to focus on what new residents can contribute to the economy as consumers and producers, and less on the effect they might have on the wages and employment opportunities of natives. The importance ascribed to immigrant-led population growth in these areas comes at a time of low natural population growth and loss of population to suburbs and to other regions, coupled with low attractiveness for new arrivals. Therefore active recruitment of immigrants appears attractive as part of a long-term strategy to stem population loss and re-ignite economic activity.

Based on available evidence, declining cities are correct in their assessment that a growing population – regardless of growth source – is a necessary attribute of economic growth.

The prospect of immigrant-led population growth should be welcomed, though the potential benefits hinge on the immigrants’ characteristics including education, skills, socio-economic status, and on the costs of absorbing this influx. Policy challenges remain regarding the identification of the types of immigrants most likely to be successfully attracted to a particular region, types and costs of incentives, and the kinds of support required to retain those who can contribute to economic development. The next section addresses some of these issues through an analysis of the individual immigrant’s location decision.
2. Immigrant behavior
Devising policies that attract immigrants, especially to regions that are not usual destinations, requires an understanding of the expected results of an influx of an immigrant population as well as the mechanisms by which individuals make destination choices. The previous section explored the evidence for effects of immigration on local economies. This section examines immigration trends as aggregates of individual choices in growing and declining economies, to derive insights useful to policy decisions. After outlining the essence of individual emigration decisions in terms of push and pull factors, we examine the impacts of immigration with respect to current immigration centers as well as areas that are not traditionally targets of immigration but have seen their recent share of newcomers rise.

Push and pull factors

The decision to immigrate has two components: the decision to leave the country of origin, which is a response mainly to origin push factors, and the choice of a target location, which is a function mainly of destination pull factors. The push factors are relevant to this report only insofar as they determine to some extent the characteristics of the new arrivals and their potential effect on the local economy. The pull factors are candidates for policy decisions as regions attempt to increase or reduce their share of the annual immigration into the US.

The individual decision is based on a comparison of pros at destination and cons at origin, with different weights on each according to specific situations. At times, the origin situation is so extreme because of political persecution, starvation or war that pull factors become irrelevant. The individuals are more concerned with the ability to leave their country and gain admission to the US than with any other consideration. Typically, in such cases international organizations are involved in the process and will send the immigrants to locations willing and organized to absorb and support them, regardless of any individual characteristics or economic
conditions at destination. Some individuals have unique or highly specialized skills and are enticed to immigrate for work reasons, regardless of their home conditions. Both categories constitute, however, a relatively small proportion of the annual immigration to the US (for example, between 1945 and 1990, only a quarter of those entering the US were admitted on a humanitarian basis (Fix & Passel, 1994)). The immigrants of interest here are those whose calculus involves destination factors and who arrive in numbers sufficient to affect the economies of their new hometowns.

Immigration is a difficult process, fraught with uncertainties and risk, as well as challenges of language, culture, and social status. Therefore, an observed decision to emigrate on the part of individuals not threatened at home and not recruited for specific skills amounts to the pull factors having outweighed by a considerable margin considerations such as risk, uncertainty, the prospect of difficulties at least at the outset, and the psychological aspects of leaving one’s country of birth. For those who arrive to the US in great numbers, the most common push factor is a poor economic situation in the country of origin, while the most powerful pull factor is the perception that at least their offspring will be better off in the country of adoption.

The next important individual decision is the selection of a new location. Given the possibility to settle in any American city and neglecting transportation costs from the point of departure, immigrants from abroad choose their target settlement based on their own individual characteristics and the extent of their match to varying combinations of local economic conditions, the presence of other immigrants from the same country of origin, and relative welfare benefits within each city.

The individual’s age, education, skills, and transferable wealth play a great role in this decision. Those who are older, poorer, or less educated have far fewer choices to contemplate than those who are able to compete against Americans in any job market. Those less endowed are also constrained to rely considerably on assistance from family, community and social services, and will therefore tend to gravitate to
locations that already host others from the same country of origin or are known for generosity in assistance to newcomers.

It is noteworthy, however, that even those able to select and reach any US location tend to prefer metropolitan areas that, by virtue of being immigration targets, are more tolerant of differences, as well as locations with like communities that enhance the cultural climate for newcomers. This is evidenced by the historic gravitation of ethnic groups to a number of large metropolitan areas, and their clustering in the urban space that has yielded Chinatowns and Little Italys in several cities, or Detroit’s Poletown and Cleveland’s Slavic Village. This trend continues although the ethnic composition of immigration has changed.

**Local economic conditions**

Research investigating the role of local economic conditions in inducing immigrants to locate in a region observes a link between the two, but does not unequivocally establish a cause-and-effect relationship. Subsequent research focused on immigrants’ choice of first destination as well as on the mobility of foreign-born men. These results are relevant to any policies designed to attract in-migration at locations that are currently losing population. Greenwood & Sweetland (1972) found that median incomes and government expenditures both affected the choice of immigrant settlement. Bartel (1989) found that foreign-born adult men are more likely to live in Metropolitan Statistical Areas (MSAs) with higher average wages and higher average general assistance payments, and that Hispanic foreign-born are less likely to live in areas with high unemployment rates.

However, Bartel and Koch (1991) found that the probability of foreign-born adult men moving between MSAs between 1975-1980 (a likely push factor) did not rise with the unemployment rate at the initial location; the average wage and level of general assistance benefits also did not affect mobility in their sample. Kritz and Nogle (1994) corroborate the latter finding, noting that higher state unemployment rates.

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4 “Foreign-born” designates residents born in another country, regardless of the time of their arrival in the US; “immigrant” designates a recent arrival. Thus the “foreign-born” category includes the immigrant category.
rates do not prompt foreign-born individuals to move, a result they consider surprising since higher unemployment rates cause natives to migrate. Filer (1992) makes the case for a rather limited role of economics in the location decision, contending that local labor market conditions do not significantly affect where the foreign-born live—initially or anytime after arrival. Finally, a recent Census Bureau survey estimates that less than one third of all inter-county movers between 1999 and 2000 moved due to work-related reasons.

**Presence of others from the same country of origin**

Based on a Census Bureau survey and research by Zavodny (1998), it appears that the most important pull factor in the individual immigrant’s choice of location is the presence of other immigrants from the same country of origin. Other research supports this observation. For instance, Dunlevy (1991) found the number of new legal permanent residents to be positively correlated with the number of persons born in the same country already present in a state (Dunlevy, 1991), as did Buckley (1996). Bartel (1989) had similar findings at the metropolitan level. Kritz and Nogle (1994) found that the presence of groups from the same country of origin at the state level deters interstate migration of individuals from such groups. This suggests that immigrants hesitate to move away from states that offer them social capital in the form of association with others with whom they share a native country. Taken together, this group of findings highlights the influence of social networks in shaping immigrant settlement patterns. Although social and economic criteria play a role in an individual’s location decision, we might expect the social criterion to be much more important.

The preference for proximity to kin combined with the tendency of immigrants to settle in large, growing cities have led to a strong concentration of the foreign-born in a relatively few, mostly coastal, metropolitan areas. Overall, a small number of

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5 From the individual point of view, however, this result is not as surprising: Americans tend to be more mobile than people in other countries; besides being less mobile than Americans on average, for the immigrant, moving from city to city amounts to repeating the difficult emigration experience, which adds to the disincentives even when economic conditions at the current location worsen.
states attract the bulk of immigration every year. For example, between 1980 and 1990, three quarters of newcomers went to California, New York, Texas, Florida, New Jersey, and Illinois. Slightly more than half of the total yearly immigration went to California and New York, while the other four states together receive roughly the same proportion of total immigration (a quarter) as all other states combined (Fix & Passel, 1994). At this rate, had the other 44 states competed, they would have vied for about a quarter of the total number of immigrants, or about 2.1 million.

More recently, nearly 28 percent of foreign-born residents of the US have located in one of the country’s four largest metropolitan areas -- New York, Los Angeles, Chicago, and Houston -- while two-thirds of all immigrants who arrived between 1990 and 1998 settled in just 10 of the nation’s metropolitan areas (US Census Bureau, 2000). Just as dramatic, more than one-fourth of all the foreign-born individuals located in the central cities of urban areas with populations of five million or more. Hence, a factor in both the initial and subsequent locational choices of immigrants is the existence of social networks already present in various metropolitan areas.

Social welfare

The flow of new immigrants to traditional immigrant hubs has been essential to the sustainability and growth of these areas. The United States has a relatively low birth rate but currently ranks seventh among all countries in population growth—a rate comparable to that of developing nations, whose source of population growth is a high birth rate. Eighty percent of the US population growth is a result of immigration (New York Times, 8/20/2002). A few of the cities with the largest numbers of immigrants have recognized the role immigrants play in their economies and have instituted measures to address both the ensuing challenges and opportunities.

For example, nowhere are services for immigrants more extensive than in New York, which continues to receive the largest influx of immigrants. The Mayor's
Office of Immigrant Affairs works with several city departments and hundreds of community-based organizations to provide direct services to immigrants, including employment and training programs, immigration legal services, and citizenship application assistance. The City Department of Youth and Community Development (DYCD) funds free English classes, legal counseling, and orientation to immigrants and their families through various community groups. DYCD also operates Citizenship NYC, a program that assists immigrant recipients of Supplemental Security Income (SSI) and federal food stamps in becoming citizens. The Department of Employment funds counseling services that are training and employment-related. The Department for the Aging has built counseling and citizenship classes for seniors into their contracts with nonprofit organizations. Even the city’s police department has moved on immigration issues by instituting a special New Immigrant Unit staffed by officers who educate immigrant families about the laws and the work of law enforcement. This solicitousness towards immigrants may stem from recognition of their contribution to the local economy, from sensitivity to the voting power of newly minted citizens and their families, or may be a wise preventive strategy to respond to social problems before they become acute and more costly to remedy.

Cities in California experiencing mass immigration have begun to adopt similar policies. In Los Angeles, the Community Development Department's Human Services and Neighborhood Development Division funds many agencies to provide information referral services, legal services, and assistance in obtaining economic benefits to qualifying immigrants. San Francisco has created an immigrants rights commission and, in partnership with San Francisco City College, an intensive English language immersion program focused on teaching the vocabulary, cultural norms, and technology of the San Francisco workplace. Helping both of these cities is a statewide cash assistance program for immigrants (CAPI), which pays cash benefits to lawful non-citizens who do not qualify for Supplemental Security Income/State Supplementary Payment solely due to their immigrant status.
Few other cities have taken formal measures to address the assimilation of new immigrants. In cities such as Miami, San Diego, Las Vegas, and Dallas, all of which have absorbed sizable shares of immigration in recent years, no governmental offices comparable to those in Los Angeles, San Francisco and New York City have yet assumed the responsibility of absorbing new arrivals. At present, non-profit organizations and community groups are filling the void.

**Immigration Trends**

**Traditional Immigration Destinations**

As some of the smaller cities grapple with ways to attract immigrants, the flow of newcomers into the largest metropolitan areas continues. Foreign-born individuals constitute an increasing percentage of the population. In 1970 there were fewer than 10 million foreign-born residents in the US (4.7 percent of the population). By 2000, the number had risen to 20 million (10.4 percent of the population). Although representing a smaller proportion of the total population than at the turn of the past century (14.8 percent in 1890 were foreign-born), the number of foreign-born in 2000 was 28.4 million, approximately three times that of 1890.

The demographic landscape of the largest US cities is changing. According to the US Census Bureau, 7.3 million of the foreign-born in 1960 (over 92 percent) were of European descent (Figure 1), while just less than one million were from Latin America (6.7 percent). In 1970, Italy sent more people to the US than any other country (about one million) followed by Germany (830,000) and Canada (812,000). Mexico ranked fourth among immigrant countries of origin in 1970, sending only 760,000. By 2000 (Figure 2), only 4.4 million immigrants came from Europe (15.3 percent), but 14.5 million came from Latin America (51 percent). The number of foreign-born from Asian countries has also risen sharply, from less than one-half million in 1960 (1 percent) to over seven million (25.5 percent) by 2000.
The majority of immigrants are now arriving from Mexico (U.S. Census Bureau, 2001). In 2000, an estimated 7.8 million people migrated into the US from Mexico, up 3.6 million from 1990. China and the Philippines rounded out the top three sources of immigration at close to 900,000 each.

Although the largest cities receive the largest share of immigration, a growing number of areas unaccustomed to receiving immigrant flows in the last decade have absorbed a considerable number (Fix & Pessel, 1994). These new immigration havens are located primarily in the South and Midwest, with cities in Georgia, Minnesota, and Kentucky heading the list for new arrivals relative to the existing number of foreign-born (Camarota & Keeley, 2001). The number of the foreign-born in Atlanta, for example, grew from 116,624 in 1990 to 178,641 by 1998, an increase of more than 50 percent. Minneapolis-St. Paul posted a comparable percentage gain, increasing from 88,093 in 1990 to 132,595 by 1998. Other metropolitan areas receiving large numbers relative to their existing foreign-born populations were Washington, D.C., Indianapolis, Raleigh-Durham-Chapel Hill, Louisville, Seattle, Portland-Vancouver, Denver, St. Louis, Baltimore, Sacramento, and New York City. Ohio hosted 70,000 foreign-born individuals in the 1980-1990 decade, and 143,000 in the 1990-2000 decade; the numbers are comparable to those of some of the metropolitan areas mentioned above.
Interstate Migration

Although Kritz and Nogle (1994) found that some immigrant groups are less likely than natives to migrate between states, Belanger and Rogers (1992) concluded that, over a lifetime, in most instances they are less “attached” to their region of residence than are the US-born. Both research teams agreed that the most important factor in shaping the relocation decision is the presence (or absence) of others from the same country of origin at the target location. In fact, the presence of others from the same country of origin appeared more important than individual education level, state economic situation, and language proficiency in the decision to relocate. Other relocation decision factors include where immigrants settled initially, their education level, the income increment they expect at a new location, and their legal status.

For example, when controlling for the presence of others from the same country of origin, immigrants residing in New York State in 1975 were much more likely to migrate to another state than those who initially settled in California (Kritz & Nogle, 1994). To better understand this difference, it would be necessary to explore other characteristics of the immigrants at the two locations, such as education and type of employment. Also important is the presence of other accessible metropolitan areas, in the sense that the distance to new locations is rather short, since immigrants appear to have relatively low (in absolute value) distance elasticities (Greenwood & Sweetland, 1972).

The more formal education that an immigrant possesses, the more likely he/she is to be able to move both within and between states (Kritz & Nogle, 1994). Especially for Hispanics, relocation within the US plays a critical role in the process by which the more educated individuals loosen their ties to their fellow ethnics (Bartel, 1989). Greenwood and Sweetland (1972) found that both higher median incomes and local government expenditures have prodded immigrants to move to specific metropolitan

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6 Incidentally, the research was not able to determine whether the effect should be interpreted as a response to economic conditions in New York State or to social concerns about crime and the quality of life.
areas. Kritz and Nogle (1994) suggest that the legal status of some immigrant groups may act as a deterrent to interstate migration; for example, Mexican immigrants, many of whom arrive illegally or overstay their visas illegally, are less likely to leave the security of their current living and occupational situations in order to move to another state.

We sought to build the information base necessary for policy decisions directed at attracting immigrants to a metropolitan destination by means of a non-linear model (described in Appendix 1). The model predicts the distribution of foreign-born residents from one time period to another, based on the information on how individuals make location decisions, and on two key pull factors. The model has both the advantages and disadvantages of parsimony: it is transparent and economic in its use of data, but it greatly simplifies the reality of immigrants’ location decisions.

The preceding sections suggest a preponderance of evidence for the two variables included in the model. All else being equal, foreign-born individuals choose their location in the United States according to two criteria:

- (The expectation of) employment opportunities
- The existence at the target location of other foreign-born individuals (as an approximation for immigrants’ preference to locate in proximity to others from the same country of origin)

We examined the top 48 PMSAs (according to population size in 2000). We included in the model the total population in the PMSA, the number of foreign-born7 citizens and residents, and the number of non-farming jobs for four U.S. Census years: 1970, 1980, 1990 and 2000. In any time period, the model takes in the total number of immigrants (summed over 48 metropolitan areas) and distributes it among these metropolitan areas in accordance with the two most salient individual location criteria: presence of other foreign-born, and availability of jobs. We began with the

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7 Although at any point in time the foreign-born are a larger group that includes immigrants, we propose that the difference in number of foreign-born residents between two time periods largely captures the number of immigrants during this period (since there is no natural growth for this group – the children of foreign-born are American-born).
1970 data and predicted the number of foreign-born to be found in each PMSA in 1980, 1990 and 2000. The model has one parameter that captures the relative weight of the two criteria. Figure A1 displays (from two angles of view) the actual number of foreign-born in 1970, and the predicted number of foreign-born in each PMSA for the years 1980 – 2000, with the PMSAs ranked in ascending order of number of foreign-born in each in 1970).

The results of the model (presented in detail in Appendix 1) lead us to conclude that job availability at any location counts far less in the foreign-born individual’s location decision than the existence of other foreign-born at that location. One reason may be that, in general, immigrants to the United States come from countries with more difficult economic conditions and often with high unemployment. Upon arrival, many immigrants are willing, at least initially, to consider a broader range of jobs than typical Americans. Thus individuals with a college education may be willing at the outset to take jobs that do not require such qualifications. As a result of immigrants’ willingness to consider a broad range of occupations, they can find jobs even in times of relatively high unemployment, which may account for the lower importance they seem to attach to job availability compared to the presence of other foreign-born residents at the location of their choice.

The interest in this model is two-fold. At a primary level, if it proves effective at prediction, it can serve policy makers by providing valuable information about what is likely to happen in the absence of change. At a secondary level, while it does not in itself validate its underlying assumptions, the model can become a useful exploratory means for testing implications of various policies – a “what if” type of tool.

In this exploration, we have opted for simplicity (2 variables, one parameter), gaining transparency and predictive power. Enhanced explanatory power would require more accurate data on the actual number of immigrants, as well as elaboration of this model. For example, it would be useful to incorporate other
relevant factors, such as existence and level of support services for immigrants at various locations, immigrants' country or region of origin, and characteristics such as age and education level. In addition, the foreign-born communities in each metropolitan area could also be characterized in those terms. This would enable us to find out the importance of the presence of foreign-born from the same country of origin (as opposed to the presence of others who are merely foreign-born at that location) and to explore whether employment opportunities are differentially important across education levels and countries of origin and how much support services matter in the location calculus. All these and more are details that could prove important in the quest to design policies to increase a region’s share of immigrants.

Demographic Composition of the Immigrant Population

Cities with new levels of immigration are receiving a disproportionately large influx of refugees from the former Soviet Union, Vietnam, Iraq, India, and China, fleeing adverse conditions in their countries of origin. That may be a result of resettlement efforts by nonprofit organizations and government entities, rather than the outcome of choices made by the immigrants themselves. In time, these immigrants will form communities able to attract more immigrants from the same countries of origin as themselves (Camarota & Keeley, 2001).

This phenomenon has implications for public policy: it suggests that one way of attracting immigrants to a non-traditional destination may be to provide generous assistance for immigrant groups that will constitute in time, by their sheer presence, a magnet for others.

The changing age structure of the US immigrant population is also noteworthy. Immigrants' median age declined from 52 in 1970 to 38.1 by 2000 (US Census Bureau, 2001). In 1970, 34.7 percent of those aged 65 and over, and 7.3 percent of those under 25, were foreign-born. By 2000, the proportion of the foreign-born in these two age groups had shifted to 26.5 percent and 21 percent, respectively. Further, the addition of millions of young foreign-born adults has led to a
subsequent increase in the number of their children, most of them American-born. The majority (72.5 percent) of the current immigrant cohort is now between ages 25 and 54, up from just 34.7 percent in 1970.

Equally significant to policy makers are the skills and educational levels of new immigrants (Figure 3), since together with labor force participation rates, unemployment rates, and earnings those factors serve as indicators of a population’s potential contribution to a region’s economy. In 2000, 32.9 percent of immigrants from Europe and 44.9 percent of immigrants from Asia had attained a bachelor’s degree or more (US Census Bureau, 2001). Only 11.2 percent of those migrating from the largest region of origin, Latin America (which accounted for 51% of all immigrants in 2000), had attained a bachelor’s degree or higher.

The declining trend in the educational attainment of recent immigrants may necessitate a novel response by public policymakers. Steven Camarota (1998) argues that the lower educational and skill levels of recent immigrants has caused their poverty rates to increase. In 1999, the poverty rate of European-born individuals stood at 9.3 percent, whereas the corresponding rates for Asian and Latin American immigrants were 12.8 percent and 21.9 percent, respectively. Immigrants from Mexico (the largest number from any origin) had the highest poverty rate at 25.8 percent (U.S. Census Bureau, 2001). Educational attainment for U.S., Latin American and Asian-born U.S. residents is depicted in Figure 4.
Earnings and occupational characteristics follow the educational levels pattern (Figure 5). In 2000, 38.1 percent of European immigrants and 38.7 percent of Asian immigrants were employed in managerial or professional specialty professions. Latin Americans working in the same category totaled only 12.1 percent. Nearly one-fourth (24.8 percent) of the latter were employed as operators, fabricators or laborers in 2000; only 10.2 percent of Europeans and 12.0 percent of Asians were similarly employed. In 2000, median income for Europeans (at $44,900) and Asians (at $36,900) was considerably higher than that of Latin Americans (at $20,974, U.S. Census Bureau, 2001.)

Labor force participation rates are another indicator of a population group’s economic vitality. Among Asian-born residents, labor force participation is 91.4 percent for males and 68.9 percent for females; 93.5 percent of Latin American males and 63.4 percent of Latin American females are in the labor force; 94.4 percent of Mexican males and 55.1 percent of Mexican females are employed. So while male participation hovers at above 90% for males, there is a 13.7 percent differential between Asian and Mexican females. 3.5 percent of the Asian workforce is unemployed, while Mexicans experience a 7.2 percent unemployment rate (U.S. Census Bureau, 2001).
Table 1 shows the median earnings in 2000 of Asian-, Latin American-, and Mexican-born employed full-time, year-round. Latin American and Mexican workers tend to earn significantly less than Asian workers. The sizeable earnings differential can in large part be attributed to disparities in the skill and education levels of workers. Almost two thirds of Asian workers are employed in the higher-paying Managerial and Professional Specialty and Technical, Sales and Administrative Support occupations, while most Latin American and Mexican workers are employed in the Service Occupations and Operators, Fabricators and Laborers fields, which are lower-skilled and tend to pay lower wages (U.S. Census Bureau, 2001).

Table 1 – Median Earnings of foreign-born workers

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>$36,911</td>
<td>$29,662</td>
</tr>
<tr>
<td>Latin American</td>
<td>$20,974</td>
<td>$17,213</td>
</tr>
<tr>
<td>Mexican</td>
<td>$19,181</td>
<td>$15,149</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2001

Despite some of these seemingly unfavorable trends, labor force participation rates indicate that those entering the country with lower levels of education and skills are nevertheless finding and taking jobs.
Latin Americans were taking jobs at the highest rate of all immigrant groups in 2000, at 93.5 percent; Europeans and Asians had rates of 93.1 percent and 91.4 percent, respectively. In fact, Mexico, which sends the largest and the least educated number of people to the US, had the highest immigrant labor force participation rate of all countries of origin, at 94.4 percent (U.S. Census Bureau, 2001).

The demographic data suggest that the sources and skill levels of immigrants have changed markedly over the last few decades. Although the largest metropolitan areas continue to absorb the vast majority of immigrants, other areas—especially in the South and Midwest—have recently begun to receive a considerable share of the total immigration. In light of current trends and of the outlined location and relocation choice mechanisms, the next section takes a close look at Cleveland’s history of harboring immigrants, and its prospects of attracting immigrants as a means of reversing declining population trends.
3. Declining Metropolitan Areas

Decision makers in metropolitan areas that are not traditional immigrant centers have recently begun to consider the prospect of immigration in terms of its potential to contribute to economic growth. Smaller cities are seeking ways to include immigration into economic revitalization strategies. The appeal of attracting immigration to a region as an economic development device derives from two interrelated arguments.

The first is that replacement migration might constitute a viable means of countering the population loss that followed economic decline. Growth due to immigration has been found to help mitigate blight (Neymarc, 1998), alleviate labor shortages (Winnick, 1990), and boost consumer spending.

The second argument is that the presence of immigrants (rather than in-migrants in general) enhances economic development. While Muller (1993, 1998) found a positive correlation between rates of in-migration and job growth, he also found a positive correlation between the percentage of the foreign-born population and the economic well-being of natives. This strengthens the case for seeking immigrants as part of a metropolitan economic development strategy, in conjunction with Richard Florida’s (2000; 2002) argument that the greater the social diversity of a location, the more attractive it is to industries viewed as growth engines.

Several cities in older industrial areas of the Midwest and Northeast with stagnating populations and economies have already adopted these views. In Philadelphia, which attracted only 1.4 percent of the nation’s immigrants in 1997, members of the city council have sought ways to make the city more attractive to immigrants, such as helping universities recruit foreign students, increasing the number of international flights at the city’s airport, and increasing the availability of affordable housing (Shaffer, 2002). In May 2001, a city councilman suggested creating an Office for New Philadelphians, a
privately financed agency possibly stationed in City Hall. That would encourage new immigrants to move to Philadelphia and provide English classes and translation services (Jennifer Brown, Associated Press, May 17, 2001.) The proposed office would have a director, five staff members, and an annual budget of about $550,000. Also included in the proposal is a requirement for Philadelphia schoolchildren to learn a second language.

Some Cleveland community leaders have argued that encouraging the influx of skilled immigrants and of technology-based companies from overseas might constitute an effective economic development policy. One initiative by the Global Human Capital Team proposes to encourage foreign-based businesses to locate in Northeast Ohio by offering special amenities. It also intends to work toward retention of foreign-born students in the area’s universities and to attract foreign skilled labor in professions experiencing shortages (such as nursing). Another initiative aims to attract 10,000 educated immigrants to Cleveland from countries including Ireland, Russia, Hungary, India, and several other Asian countries (Bartimole, 2002).

In Iowa, both urban and rural areas bid for immigrants. Iowa hoped to increase its population by 310,000 by 2001 by retaining Iowans and attracting new residents, including immigrants (Iowa 2010, 2002). State officials contemplating the shortage of skilled workers and the aging population resolved to double the current population growth rate to sustain its current quality of life. In 2000, Iowa’s governor selected three cities -- Mason City, Fort Dodge and Marshalltown -- and awarded each $50,000 to develop plans to make themselves attractive to immigrants (Kompas, 2001). The cities were expected to share their strategies with the rest of the state. Initially, the Iowa plan had even considered lobbying the federal government to lift quota restrictions for the state, but interest declined when it became clear that the initiative would encounter political opposition. Iowa’s leaders envision the state as becoming “an international leader in immigration, welcoming people from around the
world to its neighborhoods and communities.” (Iowa 2010, 2002).

Donahue (2002) recognizes the signs that Pittsburgh, like other older cities, is heading toward a severe workforce shortage and proposes that immigration should become part of any solution. Though still without a formal decision-making and implementation process, an informal coalition is looking at ways to turn the city of Pittsburgh into an immigrant magnet. Key measures would include preparing the region for immigrants, welcoming international visitors, and linking people to jobs (Lord, 2001). The 2000 Census indicates that Pittsburgh ranked last among the nation's 25 largest population centers in terms of the number of immigrants it received immigrants during the 1990s (8,935). Chris Briem, a demographer at the University of Pittsburgh's Center for Social and Urban Research, argued that the failure to lure immigrants had led to the region's population slippage compared with other urban areas. He also observed that growing regions are those attracting international immigrants. The Pittsburgh Council of International Visitors, supported by a Heinz Endowments grant, has begun to address the issue by hosting a website (www.globalpittsburgh.org), where visitors can access cultural information, find English classes, research housing opportunities, and get legal help. Don Carter, a principal of the architecture firm Urban Design Associates, suggested billboards posted in world cities bearing, in various languages, the message that "The grass is greener in Pittsburgh." The effort to attract immigrants remains, however, rather uncoordinated. The responsibility for addressing the immigration drought is spread among several regional decision makers (Brian Kelly, Director of Economic Opportunity Programs at the Heinz Endowments). A related problem is the lack of formal, institutionalized responsibility for immigration issues (Lord, 2001).
Case study: Cleveland—Trends and Prospects

This section focuses on Cleveland – its past and its future in terms of population trends, its potential as an immigration destination, and the likelihood of success for policies that encourage in-migration in light of the national patterns of immigration and the components of individuals’ decisions to emigrate and to select a target location in the US.

The previous sections indicate that a number of contextual variables can affect the potential success of immigration policies (Fix & Passel, 1994). In the words of Julian Simon (1989):

The extent to which the immediate effect of immigrants is distributed among unemployment of natives, unemployment of immigrants, [or] wage declines...cannot be sorted out at this time. The pattern probably varies considerably from place to place and time to time, depending upon the nature of the economy and of the economic conditions.

Immigration may contribute to the development of a region plagued by slow employment growth and a stable or declining population, but carries a risk of imposing additional strains on limited resources. Research suggests that policies toward immigration must be place-responsive, taking into account local economic conditions, the scale of the investment needed to attract population from other regions or countries, and the attendant benefit-to-cost ratio compared to other feasible economic revitalization alternatives. Decision makers must assess the characteristics of immigrants they are likely to attract in order to predict the extent to which immigration will contribute to economic development goals.

In Cleveland’s case, the downside to immigration – the prospect of increasing competition for jobs or of lowering average earnings – may be less likely than elsewhere, if national and local trends in terms of a relatively low immigration volume are to continue. Encouraging immigration might therefore be a component of a broader strategy to reverse neighborhood blight, increase
housing and consumer demand, and supply an entrepreneurial base for the future.

Demographic trends

The recent civic interest in encouraging immigration into the Cleveland metropolitan area as a component of an economic development strategy has been sparked by the continued population decline over the past 30 years. Between 1930 and 1960, Cleveland was home to approximately 900,000 people (US Census Bureau). Since then, the city’s population base has declined sharply: in 1990, only 500,000 residents lived in the city, and by 2000, there was a further drop of 5.4 percent (see Figure 6). Census Bureau statistics from 2000 indicate that, compared to other metropolitan areas, Cleveland had birth, death, domestic migration, and international migration rates unfavorable to population growth during the 1990s. The population trend closely tracks the area’s economic decline.

Clevelanders’ average age has increased during the past 30 years compared to other metropolitan areas (see Figure 7), reducing the labor pool from which employers may draw, and increasing the burden that social service workers must carry. The median age in the Cleveland PMSA in 2000 was 37.3. Other metropolitan areas with higher growth rates in 2000 had relatively younger populations, as for instance Dallas with a median age of 31.8, Chicago (33.7), Denver (34.1), Minneapolis-St. Paul (34.2), and Seattle (35.5).

A negative correlation (-0.65) between the 2000 median age and 1992-2002 jobs for selected cities confirms that age trends are, to some extent, indicators of economic health, even though an older population is not necessarily a sign of a stagnating economy and the presence of a younger population does not guarantee job growth. In the age (Figure 7) and job growth graphs (Figure 8) several cities stand out for having with older population and moderate rates of job growth (e.g., San Francisco, Miami, Boston, Seattle) and others with
younger populations and weaker job growth (e.g., Los Angeles and New York City). Nevertheless, the cities with the most robust rates of job growth were among those with the youngest population (Houston, Dallas, San Antonio, San Diego).

Another statistic lending limited support for a policy to encourage in-migration to Cleveland is the relationship between the growth in the number of immigrants in a city and the growth in employment opportunities (Figure 9). The positive but weak correlation (0.22) between PMSA job growth and the percentage growth rate of immigrant population suggests indeed that metropolitan areas with greater growth rates in immigrant populations tend, on average, to experience greater growth rates in employment.
Given the negative relationship between job growth and median age, and the positive relationship between growing immigrant populations and employment, the prospect of younger immigrants settling in a city such as Cleveland would
be desirable (immigrants are younger on average than the US population). A policy of attracting these immigrants has to take into account recent national immigration trends and should have realistic goals and expectations for what immigration strategies can accomplish, over specific periods of time. In what follows, we provide an assessment of the present state of immigration to Cleveland and of recent in-migration trends.
The loss of foreign-born residents in Cleveland in the last 30 years mirrored the general population trend: between 1970 and 1990, Cleveland’s population declined by 36 percent. The corresponding drop in the number of the city’s foreign-born was almost double – over 60 percent (Figure 10), from 54,859 to 20,975. By 2000, the number of foreign-born residing in the city edged up to
21,372. During the same period, the Cleveland-Lorain-Elyria CMSA went from 150,313 to 100,005 foreign-born residents. In the 1990s, the number of foreign-born individuals entering the CMSA rose by almost 15,000 to 114,625 by 2000. During the decade preceding the 2000 census, 143,000 foreign-born individuals settled in Ohio; Cleveland claimed only 0.2 percent of that cohort.

Another trend in the Cleveland area, which has also been documented in a number of other cities across the nation, is the tendency of the foreign-born residents to opt for homes in the suburbs instead of the central city (Figure 13). The trend is significant in that it breaks with the tradition of immigrants initially settling the central city. Thus, while the number of the foreign-born residents declined substantially in Greater Cleveland during the 1970s, their suburban count increased slightly. The number of foreign-born in the suburbs also declined during the 1980s, but recovered to its 1970 level by 2000 – at slightly less than 90,000 (US Census Bureau, 2001). By comparison, the number of foreign-born residents of the central city in 2000 was less than 40 percent of its 1970 count.
While the aggregate number of foreign-born residents over time provides a measure of the magnitude of immigration in an area, the actual number of new immigrants into the area is more telling. That number for the Cleveland PMSA
has been stagnant since the early 1960s (US Census Bureau.) Not until the late 1980s did the trend in the number of foreign-born entering the area register a slight increase (Figure 14). The same modest trend is also discernible in the city (Figure 15).

Interestingly, the model described in Appendix 1 for predicting the number of immigrants expected to go to each of 48 metropolitan areas in 1980, 1990, and 2000 offered a particularly poor fit (Figure A3) in Cleveland’s case. Since the model results presented here have weighted the presence of foreign-born residents much more heavily than the availability of jobs as an attraction factor for new immigrants, it is not surprising that Cleveland’s fit is poor. The city started out in 1970 with a relatively high rank -- 26 out of 48 PMSAs in terms of number of foreign-born residents and failed to attract immigrants over subsequent periods at a level commensurate with its sizeable foreign-born population. The model indicates that Cleveland (like the other Midwestern cities included in the model -- Milwaukee (rank 21) and Detroit (rank 30), (the only other cities for which the number of foreign-born has declined in two of the three study periods.) failed to attract its “rightful” share of the immigration in the last 30 years. There are several possible, and even likely, reasons for this result, although this simple model cannot help distinguish between competing plausible accounts. The low attractiveness of the declining economy may have combined with the fact that, although Cleveland has a relatively large number of foreign-born, they are mostly from different countries of origin than the current immigration (compare Figure 2 to Figure 16), and thus exert less social “pull” than their number warrants.

Immigration as a Strategy for Economic Development: Prospects for Cleveland

Cleveland’s low share of total immigration is due to several causes, including the economic, cultural and social attractiveness of the urban areas currently attracting the bulk of immigration. National and local trends suggest that policies that include attracting new residents to the area can contribute to
economic revitalization, provided the costs are manageable and do not come at the expense of more effective strategies. However, an important policy question is whether it should matter if the in-migrants to Cleveland come from other countries or other US regions, or whether the outcome to be sought is increased population due to in-migration, regardless of origin. Answers to this question have consequences for the incentives, costs, and likelihood of success, which may be quite different for the different in-migration sources.

One approach might be to attract to Cleveland recent immigrants who first chose other US locations, have already managed to leave their source countries, and are willing to move to a new area within the US for various reasons, such as family ties, or an affordable cost of living. Proximity, legal status, and acculturation might make the in-migration of these foreign-born individuals into Cleveland more likely than immigration from abroad. The foreign-born groups already present in the area should help predict which immigrant groups are most likely to come. Since in previous sections we concluded that a key factor in an immigrant’s location decision is the presence of communities from the same country of origin (see Zavodny, 1998), concentrating on immigrants from countries already represented in the Cleveland area may prove especially effective in identifying and trying to attract immigrants to the area.

Data are not yet available for determining the country-specific composition of the present and likely future sources of immigrants to the city. Furthermore, only estimates are available at the city level for 1990 ancestry data. In addition, census questions regarding ancestry offer the interviewee the choice of identifying a single ancestry, first, second, multiple, and so on. It is possible to determine the present racial composition of the city, but ascertaining the countries from which immigrants are coming and estimating the magnitudes of the cohorts may only be possible based on an extrapolation from 1990 data.

Based on 1990 data, the largest ancestral group in the Cleveland PMSA is German. An estimated 22,800 Cleveland residents claimed German as their
single ancestry.\textsuperscript{8} This may not be very meaningful for the task at hand for two key reasons. First, Germany is not currently a significant source of immigrants into the US. (Italian, Polish, Irish, and Slovak, in that order, round out the top five ethnic categories represented among Ohio residents, Figure 18). Second, most residents with German ancestry came to Ohio at the turn of the 20\textsuperscript{th} century and thus have lived in the US for several generations and no longer offer the kind of cultural haven sought by new immigrants. However, some Eastern European groups have preserved their cultural and institutional identities and language, and could therefore be of assistance to newcomers from the same region.

In 2000 Cleveland was home to 34,728 Hispanics or Latino residents. The largest proportion consists of those who identified themselves as Puerto Rican. Residents who identified themselves as Mexican formed the second largest group, followed by a number of much less represented Central and South American countries. Between 1990 and 2000, the number of Hispanics in Cleveland increased by an estimated 12,398, or approximately 56 percent. The following Figures (17, 18) show the growth in the Hispanic population by country of origin between 1990 and 2000.\textsuperscript{9}

\textsuperscript{8} Single ancestry is chosen here as a proxy of sorts in order to gauge immigration. The overall number of those who identify themselves as Germans is therefore much higher than the single ancestry figures reported here.

\textsuperscript{9} Again, this does not discount the natural rate of increase due to persons born to Hispanic parents.
The magnitude and growth of the Puerto Rican and Mexican populations stands out among the Hispanic groups. In accord with national trends, Mexico is the country sending the largest cohort of immigrants into the US, while immigration from the US territory of Puerto Rico has been unfettered by the legal barriers typically facing immigrants from other source countries. The Dominican, Cuban, and Salvadoran presence in Cleveland also increased substantially in percentage terms during the same time period, though it remains of comparably small magnitude.

A second sizable source of foreign immigration in recent years has been Asian. Census Bureau estimates of Asian or Pacific Islanders in Cleveland were 4,885 in 1990 and 6,444 in 2000.\textsuperscript{10} The increase of 1,559 was a gain of nearly 32 percent. In 1990 the Chinese represented approximately 30 percent, Indians 15 percent, Vietnamese 14 percent, and Filipinos 12 percent of the Asian total. (Figures are not yet available for the 2000 census.) Assuming proportional increases for each country out of the total Asian population, those that identify themselves as single race Chinese, Indian, Vietnamese, and Philippino are

\textsuperscript{10} Thus the categorical nomenclature changed from Asian or Pacific Islander in 1990 to Asian race in 2000. The difference is minimal; only 178 persons in Cleveland were counted as Pacific Islanders in 2000.
estimated at approximately 1,966, 937, 926, and 793, respectively, in the city of Cleveland in 2000 (Figure 17).

Figure 17
Hispanic and Latino Population, Cleveland: 1990*, 2000
(US Census Bureau)

Figure 18
(US Census Bureau)
Overall, Asian immigrants are more highly educated than natives and than Latin American immigrants. They have the largest percentage of individuals with bachelor’s degrees or higher, and could be a potential source of highly-skilled labor for Cleveland’s technology-intensive industries. Latin Americans, particularly Mexicans, on the other hand, are less educated than natives: 66.2% of Mexican immigrants have less than a high school education, while only 4.2% have a Bachelor’s degree or more (U.S. Census Bureau, 2001). Mexican-American residents therefore may tend to supply low-skilled labor in the Cleveland area. In order to ensure their long-term viability as productive residents, the city may need to focus on educational issues facing Mexican-Americans and on potential language barriers faced by all immigrant groups.

The considerable influx of immigrants into the Cleveland area in the early part of the 20th century fueled population growth that eventually trailed off and then reversed itself dramatically. The decline in manufacturing led to heavy job losses and population flight to nearby areas as well as to other regions. Consequence persist decades later, as the city built to house, transport, and support socially and culturally a population roughly twice the current size has seen under-use of public transportation, vacant land, and public maintenance costs that exceed the capability of the current residents.
The population of Cleveland has lately shown signs of stability. After decades of decline, the number of people entering and remaining in the city and the PMSA has begun to equal, and in some parts exceed, the number leaving – due in part to the number of foreign-born individuals immigrating into the area. Consistent with national trends, immigrants from Latin America now represent the largest group of people entering Cleveland. The non-Hispanic population of the city declined between 1990 and 2000 by over 8 percent, while the population counted as Hispanic grew by nearly 50 percent. Another salient trend is that the foreign-born choose suburban residences. As a consequence, the foreign-born count rose from 1990-2000 in the suburbs by 18 percent, compared to less than two percent in the city. The percentage decline in foreign-born in the city between 1970 and 1990 was over four times as large as the suburbs.

Cleveland continues to rank relatively low among urban areas as a destination for immigrants. The present rate at which immigrants are entering the city merely offsets out-migration. The challenge for policy makers is to weigh investment in immigration policies against other economic development tools in terms of costs, benefits, and risks and the time required to enjoy the results.
Conclusions

This report has reviewed evidence for the contribution of immigration to local economic development. It has explored the individual decision to emigrate and choose a US location, in order to help inform policies designed to attract immigrants to specific regions. It has drawn a demographic profile for Cleveland that focuses on population and immigration trends.

By all accounts, Cleveland needs to reverse its declining population trend. Successfully attracting new residents to the region would both contribute to economic development and serve as an indicator of its success. Policies aiming to attract residents to the area have to be informed by push-pull notions that account for individuals’ decisions to migrate, by the degree of match between immigrants’ skills and the kinds of jobs likely to be available in the region, as well as by current economic and demographic trends, which need not be considered immutable.

The national and Cleveland population and immigration trends provide a rough image of the current situation and possibilities in terms of the origins, number, and characteristics of potential in-migrants. Given the educational and skill levels of the majority of recent immigrants, massive immigration, even if it were possible to attract a portion to Cleveland, may be predictably associated with relatively high costs of absorption and a lower expected short-term contribution of the immigrants to entrepreneurship and to job creation in the region.

However, the need to ensure an adequate labor force and sustain social obligations in the long run remains a concern that can be alleviated through immigration policies even under such conditions, whether the new residents are citizens from other regions, recent immigrants, or “second-wave” immigrants. The legal, linguistic, and cultural barriers that stand in the way of recent arrivals are all greatly attenuated in the case of “second-wave” immigrants, who
could be attracted to the Cleveland area by ethnic and social networks that are already in place.

Recent political events may cause at least in the short run a sharp reduction in immigration to the US, as entry conditions have been tightened for security reasons. One interesting result of this turn of events may be that the education and endowment profile of immigrants might change in the direction of more educated and wealthier newcomers, who are better able to prevail against such obstacles. As pointed out in Section 2, however, immigrants who are stronger on either of those counts have more location choices and would only consider sites such as Cleveland if offered specific incentives. If Cleveland succeeds in its attempt to build strength in areas such as biotechnology and health-related services or home security technology and services, private entities might actually find it in their interest to invest in the incentives that would bring an educated immigrant cohort to Cleveland. However, although beneficial, this turn of events can hardly be relied upon to happen at the scale necessary for turning around Cleveland’s declining economy.

If these events do not materialize, and instead current trends will continue in the future along recent lines (regarding the sources, number and educational characteristics of immigrants), then in order to claim a share of the current immigration Cleveland might have to compete with large cities that are already well-organized to absorb immigrants and are therefore attractive to them. Nevertheless, since these cities do feel the fiscal burden of immigrant absorption, which creates resentment among the host communities, Cleveland may be able to capture a portion of this stream of newcomers.

The immigrant profile of Cleveland, together with the national immigration patterns and the evidence regarding individual decision making as well as the linkage to economic development, have to be taken into account when devising policies. Although an influx of immigrants might help the Cleveland economy, policies that foster this influx would have to rely on weak ties between decisions
and results and require investments with a high degree of uncertainty with respect to returns. Therefore, the challenge for the Cleveland region is to design strategies that compete successfully with other cities that are positioned to attract immigration, as well as enable Cleveland to target those immigrant groups with the highest likelihood of succeeding at their new location, either because of their skills matching local demand or because existing immigrant communities might assist in their absorption.

A key component of such strategies is to help build the social networks that immigrants are known to favor in order to ease the transition to their country of adoption. To this end, several complementary streams of action should be considered:

- First, learn from the experience of larger immigration magnets about absorption services local governments can offer, focusing on those most likely to assist newcomers and become an incentive for choosing of the Cleveland region.

- Second, capitalize on already-existing immigrant communities in the region and assist them in becoming adept at welcoming newcomers by strengthening existing nonprofits and private local initiatives to attract immigrants from specific countries.

- Third, education efforts, whether government-initiated or sponsored by non-profit and private groups, are necessary to alleviate the inevitable tensions created by the arrival to a region of people with different languages and cultures.

It seems that once the seeds of such efforts are planted, they have a tendency to snowball as positive experiences with intercultural contacts lead the local population to be more welcoming of immigrants and, in turn, become incentives for newcomers to come to the region seeking the positive climate, and the advantages of developed social networks.
References


Electronic Resources

Center for Immigration Studies


http://www.cis.org/articles/poverty_study/index.html


http://www.cis.org/articles/1999/selfemployment/


Brookings Institution


The Urban Institute


http://www.urban.org/Template.cfm?Section=ByTopic&NavMenuID=62&template=/TaggedContent/ViewPublication.cfm&PublicationID=6239

OECD


http://www.olis.oecd.org/olis/1997doc.nsf/3d0f5ae71b96add38025656400595b54/e4d3dbb3192dc70bc125653d004461ff/$FILE/10E75613.ENG

http://www.oecd.org/pdf/M00008000/M00008031.pdf

The Cato Institute

Griswold, Daniel T. (2002, Feb.). NO: Immigrants have enriched American culture and enhanced our influence in the world. 
http://insightmag.com/main.cfm/include/detail/storyid/185225.html

. (2002, April). Should the US Reduce by 50% the Number of Legal Immigrants and 'Immigrant' Students? 
http://www.freetrade.org/pubs/articles/dg-4-23-02.htm

. FAIR ads unfairly blame immigrants for urban sprawl, traffic jams. 
http://www.freetrade.org/pubs/articles/dg-10-04-00.html

. Lift the Congressional Quota on High-Skilled Workers. Originally appeared in the Journal of Commerce. 
http://www.freetrade.org/pubs/articles/dg-quotas.html

http://www.freetrade.org/pubs/briefs/tbp-007es.html

the immigration – economic development link

http://www.freetrade.org/pubs/pas/pa-299es.html


Cato Institute – “FAIR ads unfairly blame immigrants for urban sprawl, traffic jams “
http://www.freetrade.org/pubs/articles/dg-10-04-00.html

National Immigration Forum

America's Openness Gives Us a Competitive Edge (2000, March).
http://www.immigrationforum.org/currentissues/articles/032700_openness.htm

http://www.immigrationforum.org/currentissues/articles/030300_economists.htm

Governor's Task Force Suggests Making Iowa an "Immigrant Enterprise Zone" (2000, June).
http://www.immigrationforum.org/currentissues/articles/062300_iowa.htm

http://www.immigrationforum.org/currentissues/articles/041400_heartland.htm


Labor and Business Unite on Importance of Immigration. (2000, Feb.).
http://www.immigrationforum.org/currentissues/articles/021800_labor.htm

National Center for Policy Analysis

Dallas Federal Reserve: Immigrants are a diverse group. (2001).
http://www.ncpa.org/pd/immigrat/oct98c.html

http://www.ncpa.org/pd/immigrat/effects.html

http://www.ncpa.org/pd/immigrat/pd080101e.html

Immigration fueling US population boom.
http://www.ncpa.org/pd/immigrat/pdimm/pdimm1.html

http://www.ncpa.org/pd/immigrat/pdimm/immapril98a.html

http://www.ncpa.org/studies/s196/s196.html

**Immigration and Economic Development:**  
Urban Institute  
http://www.urban.org/Template.cfm?Section=ByTopic&NavMenuID=62  
Interplan – “Immigration and World Cities”  
http://interplan.org/immig/immig.html  
http://www.usais.org/  
Committee for Economic Development -- “US Immigration Policy: Helping meet American’s need for a skilled workforce”  
http://www.ced.org/projects/immigration.htm  
Dowell Myers, University of Southern California – Immigrant adaptation and assimilation  
http://www.rcf.usc.edu/~dowell/imad.htm  
The Federation for Immigration Reform  
http://www.fairus.org/html/msas/042ohcle.htm

**Data (U.S. and Cleveland-specific)**  
US Census Bureau  
http://www.census.gov/population/www/socdemo/foreign.html  
Immigration and Naturalization Services Statistics  
http://www.ins.usdoj.gov/graphics/aboutins/statistics/  
Fair Ohio – Cleveland-Lorain-Elyria Metropolitan Area  
http://www.fairus.org/html/msas/042ohcle.htm  
Fair Ohio – Ohio Immigrant Admissions  
http://www.fairus.org/html/042ohins.htm  
Immigration Policy Reports  
http://www.ailf.org/polrep/2002/pr003.htm
Notes

(1) In-migration will be the term of choice for designating the arrival of population into a city regardless of whether its origin is some other US region or another country. In contrast, immigration will be used strictly to designate the latter group.

(2) “Foreign-born” designates residents born in another country, regardless of the time of their arrival in the US; “immigrant” designates a recent arrival. Thus the “foreign-born” category includes the immigrant category.

(3) This result is not entirely unexpected, when seen from the individual’s point of view: besides being less mobile than Americans on average, the individual moving from city to city repeats the difficult emigration experience, which adds to the disincentives even when economic conditions at the current location worsen.

(4) Incidentally, the research was not able to determine whether the effect should be interpreted as a response to economic conditions in New York State or to social concerns about crime and the quality of life.

(5) The use of foreign-born instead of immigrants is made necessary by the availability of data. However, this is quite reasonable since it is likely that, with respect to location decisions, the foreign-born are similar to the immigrants they were once.
APPENDIX 1 -- A model for allocating immigration to MSAs
(in collaboration with Miron Kaufman)

Table A1 – Correlations of number of foreign-born in 48 PMSAs with number of non-farming jobs, and with total population

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Foreign-born and non-farming jobs</td>
<td>0.92</td>
<td>0.87</td>
<td>0.82</td>
<td>0.82</td>
</tr>
<tr>
<td>Foreign-born and population</td>
<td>0.88</td>
<td>0.85</td>
<td>0.84</td>
<td>0.86</td>
</tr>
</tbody>
</table>

(all correlations significant at .000)

Table A2 – Correlations of added foreign-born in 48 PMSAs with number of foreign-born already there and with number of jobs

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Foreign-born 1970</td>
<td>0.63</td>
<td>0.83</td>
<td>0.81</td>
</tr>
<tr>
<td>Foreign-born 1980</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign-born 1990</td>
<td></td>
<td>0.67</td>
<td>0.67</td>
</tr>
<tr>
<td>Jobs, 1980</td>
<td>0.67</td>
<td>0.67</td>
<td>0.86</td>
</tr>
<tr>
<td>Jobs, 1990</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Jobs, 2000</td>
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</tbody>
</table>

(all correlations sigs .000)

Model

All else being equal, foreign-born individuals choose their location in the United States according to two criteria:

- (The expectation of) employment opportunities
- The existence at the target location of other foreign-born individuals (as an approximation for immigrants’ preference to locate in proximity to others from the same country of origin)

If these assumptions are indeed reflective of immigrant choice behavior, we would expect the model to perform reasonably well (considering its parsimony) in predicting the distribution of newcomers across the country.

We examined the top 48 PMSAs (according to population size in 2000). We included in the model the total population in the PMSA, the number of foreign-born citizens and residents, and the number of non-farming jobs for four U.S. Census years: 1970, 1980, 1990 and 2000. In any time period, the model takes in the total number of immigrants (summed over 48
metropolitan areas) and distributes it among these metropolitan areas in accordance with
the two most salient individual location criteria: presence of other foreign-born, and
availability of jobs. We began with the 1970 data and predicted the number of foreign-born
to be found in each PMSA in 1980, 1990 and 2000. The model has one parameter that
expresses the relative weight of the two criteria. Figure A1 displays (from two angles of
view) the actual number of foreign-born in 1970, and the predicted number of
foreign-born in each PMSA for the years 1980 – 2000, with the PMSAs ranked in
ascending order of number of foreign-born in each in 1970).

Our assumptions are consistent with the observed correlations displayed in Table A1.
While there is a relatively strong significant correlation between the number of jobs and the
presence of foreign-born individuals in a metropolitan area at all four time points, the
correlation is not perfect, and decreased in 1990 and 2000. This correlation is quite
comparable in level to the correlation between foreign-born and metropolitan population
size, suggesting other criteria besides employment play a role in location. The significant
and relatively high positive correlation between foreign-born residents and metropolitan
population is consistent with the literature suggesting that the foreign-born tend to prefer
large cities, though not at the exclusion of other criteria.

Table A2 correlates the presence of foreign-born at three time points (t) with the number of
added foreign-born between t and t+1 in the 48 metropolitan areas, supporting the model
assumption that immigrants are attracted to locations where other foreign-born are
present. The correlation between number of jobs at time t and the number of added
foreign-born between t and t+1 is positive but relatively weak for two of the three time
periods considered, also supporting the model assumption that immigrants consider
employment opportunities in their location decision, but not at the exclusion of other
concerns.

In any time period, the model takes in the total number of immigrants (summed over 48
metropolitan areas) and distributes it among these metropolitan areas in accordance with
the two most salient individual location criteria: presence of other foreign-born and
availability of jobs. We began with the 1970 data and predicted the number of foreign-born
to be found in each PMSA in 1980, 1990, and 2000. The model has one parameter that
expresses the relative weight of the two criteria. Figure A1 displays (from two angles of
view) the actual number of foreign-born in 1970, and the predicted number of foreign-born
in each PMSA for the years 1980 – 2000, with the PMSAs ranked in ascending order of
number of foreign-born residents in each in 1970). Note the seeming exponential
dependence of the predicted number of foreign born in a city on its rank order among the 48
PMSAs.

The four graphs in Figure A2 show the relationship at the four Census times between the
actual (discrete points) and the predicted number (line) of foreign-born in each PMSA
(ranked in ascending order of foreign-born population in 1970), using a high value for the m
parameter. These graphs are “slices” (at each of the four points in time) through the three-
dimensional graphs of Figure A1. As would be expected, the fit between observed and
predicted points decreases from one time period to another. In other words, using 1970
data to predict 1980 patterns yields a very good fit, as does using 1980 data to predict 1990
patterns; however, using 1970 data to predict patterns in 2000 yields a weaker fit. Note
that such a prediction would cover 30 years, which is notoriously more difficult than
predicting over shorter horizons -- and in fact, even a 10-year span (as from 1970 to 1980) is
relatively long for reliable prediction. Therefore, using 2000 Census data to predict the
2010 distribution of foreign-born among PMSAs, we should expect a relatively good fit between model and reality.

We denote:

- $J_{t,j}$ the number of jobs at time $t$ (one of the four Census years, '70, '80, '90, '00, so $t = 1 \ldots 4$), at location $j$ (one of the 48 PMSAs, so $j = 1 \ldots 48$)
- $FB_{t,j}$ the number of foreign-born individuals at time $t$, at location $j$
- $I_{t,t+1}$ the total number of foreign-born added to all 48 PMSAs between time $t$ and time $t+1$ (so for example, $I_{70}$ is the difference between the total number of foreign-born in 1980 and the total for 1970 over all 48 PMSAs)
- $M$ a fitting parameter that captures the balance between the presence of other foreign-born at a specific location and the attraction of employment; so:

  - $M = 1$ would mean the two criteria matter equally in an individual’s selection of a location
  - $M < 1$ the presence of other foreign-born is less important than job availability in an individual’s selection of location
  - $M > 1$ would mean the presence of other foreign-born is more important than job availability in an individual’s selection of location
- $FB_{t+1,j} - FB_{t,j}$ the added number of foreign-born at location $j$ between time $t$ and time $t+1$

Then, based on our assumption, we propose that the fraction of the total number of foreign-born individuals added between times $t$ and $t+1$ to location $j$ (proxy for immigration), is proportional to the fraction of jobs and foreign-born already present at that location (out of the total jobs and foreign-born at time $t$):

$$
\frac{FB_{t+1,j} - FB_{t,j}}{I_t} = \frac{J_{t,j} + M \times FB_{t,j}}{\sum_j (J_{t,j} + M \times FB_{t,j})}
$$

Testing the goodness of fit for various values of the $M$ parameter (which captures the relative importance of foreign-born versus job availability at each location), we found that the higher this value, the better the fit in time between observed and predicted points.

$$
\chi(t) := \sqrt{\frac{1}{M} \sum_{j=0}^{M-1} \left( \frac{FB_{t,j}}{fb_{t,j}} - 1 \right)^2}
$$

where:

- $\chi(t)$ is mean square error at time $t$ (1980, 1990 or 2000)
- $M$ is the fitting parameter that captures the balance between the presence of other foreign-born at a specific location and the attraction of employment
- $fb_{t,j}$ is the number of foreign-born individuals at time $t$, at location $j$
- $FB_{t,j}$ is the number of foreign-born individuals at time $t$, at location $j$

We selected and graphed (Figure A3) the observed vs. predicted number of foreign-born.
born in a number of PMSAs differing in size, to explore the fit quality: New York (largest number of foreign-born in 1970, rank 48); Boston (rank 29); Cleveland (rank 26); San Antonio (rank 18); Las Vegas rank 8) and Nashville (lowest number of foreign-born in 1970 rank 1). The quality of the fit varies for reasons for which this model cannot account in its current form. Since the model results presented here have weighted the foreign-born presence much more than the availability of jobs, it is not surprising, for example, that Cleveland’s fit is poor, since it started out with a relatively high rank in 1970 and failed to attract foreign-born in subsequent periods.
**Figure A1:** Two views of the foreign-born presence in the 48 PMSAs at 4 points in time, ranked by PMSA population in 1970.
Figure A2: Model predictions vs. actual data in 48 PMSAs, in 1970, ’80, ’90, ‘00
Figure A3 – Model predictions vs. actual data in selected PMSAs, 1970, ’80, ’90, ’00: New York, Boston, Cleveland, San Antonio, St. Louis, Nashville

<table>
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<tr>
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New York Immigration, Rank 48

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Boston Immigration, Rank 43

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Cleveland Immigration, Rank 40

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San Antonio Immigration, rank 28

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<td>1980</td>
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St Louis Immigration, Rank 26

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</tr>
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<td>2000</td>
<td>6 \times 10^4</td>
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</table>

Nashville Immigration, Rank 1
APPENDIX 2 --Demographic Characteristics of Immigrant Population

- The Legal Permanent Resident (LPR) is the largest foreign-born population and comprises nearly 9.3 million, or 30 percent of all immigrants. LPRs represent only 3.3 percent of the entire U.S. population.
- Foreign-born population of Ohio: 70,000 in the decade before the 1990 Census; 143,000 in the decade before the 2000 Census.
- Naturalized citizens comprise roughly 9.2 million, or another 30 percent of total immigrant population, and account for merely 3.2 percent of entire U.S. population.
- 85 percent of immigrant families are "mixed," meaning at least one or both parents are non-citizens and one or more children are citizens.
- Recent immigrants are just as likely to possess bachelor's degree as natives- 27 percent of total U.S. immigrant population.
- 30 percent of all LPRs are better educated than native population whose totals are 3 percent less.
- 42 percent of all naturalized immigrants since 1988 have completed a bachelor's degree or higher, 15 percent greater than the native average.
- Income gap is relatively small between natives and LPRs. Only 2 percent lower for LPRs than national mean.


Source: Analysis of Census Bureau CPS data by The Federation for Immigration Reform (www.fairus.org/html/msas/042ohcle.htm)