Size Matters: Attracting New Immigrants to Canadian Cities

Jennifer Hyndman Simon Fraser University

Nadine Schuurman Simon Fraser University

Rob Fiedler Simon Fraser University

> Montreal, Toronto, and Vancouver have attracted most new immigrants to Canada. Small and medium-sized cities in Canada are keen to share the wealth that new immigrants represent, and federal and provincial governments support a more even distribution of settlement. As a result, the idea of attracting new immigrants to smaller locations is a pressing policy issue. This research weighs the characteristics of place that new immigrants consider on arrival. It uses findings from the Longitudinal Survey of Immigrants to Canada (Statistics Canada, 2003) to construct an index that ranks five medium-sized cities in British Columbia in terms of their potential attractiveness to new immigrants. The index created proves robust and reliable from a statistical viewpoint. The study confirms that immigrants are attracted to cities where friends and family or other immigrants live. Moreover, the increase in attractiveness of a city is primarily related to its size. The index is an indicator of the role that population and the extant number of immigrants in situ plays in determining the appeal of smaller cities. From a policy perspective, if governments wish to "spread the wealth" associated with immigration and an expanded labour force, a proactive policy stance that enumerates and communicates the appeal of less prominent communities is vital. This is an important finding, and we offer policy options that account for the relationship of population size to immigrant retention.

> La grande majorité des immigrants au Canada s'établissent à Montréal, à Toronto ou à Vancouver. D'une part, les petites villes et celles de taille moyenne tiennent à partager les richesses découlant de l'arrivée d'immigrants; d'autre part, les gouvernements fédéral et provinciaux appuient une répartition plus égale des nouveaux immigrants. En conséquence, l'idée d'attirer les nouveaux immigrants vers de plus petits centres s'avère une question stratégique urgente. Cette recherche examine les

Key words/Mots-clefs: New immigrants to Canada/Nouveaux immigrants au Canada; Retention of immigrants/Rétention des immigrants; Attractiveness of small cities/l'Attractivité des petites villes.

caractéristiques liées à l'emplacement que les immigrants prennent en compte lors de leur arrivée. En nous appuyant sur les résultats de l'Enquête longitudinale auprès des immigrants au Canada (ELIC), nous créons un index d'attractivité qui évalue cinq villes de taille moyenne en Colombie britannique en fonction de la mesure dans laquelle les nouveaux immigrants sont susceptibles de les considérer intéressantes. L'index s'est avéré un outil statistique robuste et fiable. L'étude confirme que les immigrants sont attirés vers les villes où ils retrouvent « des amis et de la famille » ou d'autres groupes d'immigrants. De plus, le facteur d'attractivité d'une ville augmente principalement en fonction de sa taille. L'index constitue un indicateur du rôle que jouent la population et le nombre d'immigrants sur place dans l'attractivité des petites villes. Dans une perspective stratégique, si les gouvernements veulent distribuer les richesses découlant de l'immigration et d'une main-d'oeuvre accrue, il est crucial d'adopter une position de principe proactive qui valorise les communautés moins en vue et qui fait connaître leurs attraits. Cette conclusion est importante, et nous offrons des possibilités d'action qui tiennent compte du lien entre la taille de la population et la rétention des immigrants.

Immigrants to Canada select where they will settle on the basis of several factors including the presence of family and friends, employment opportunities, lifestyle, and climate. They tend to choose one of the three largest Canadian cities: Vancouver, Toronto, or Montreal. Federal and provincial governments, however, have preferences as to where immigrants should settle. They employ various policy tools to encourage settlement in smaller cities that are facing population decline or labour shortages. This article illustrates how immigrant concentration is related to the size of urban centres and the characteristics that larger populations afford. Although recognizing the desirability of immigrant settlement in medium-sized British Columbia cities by those who govern these cities and other levels of government, we analyse information about the actual settlement decisions that immigrants make when they come to Canada.

The study explores the desirability of five medium-sized cities in British Columbia by ranking them on the basis of a statistical index, which results in a specific "geography of desirability" from an immigrant perspective. The index is an expression of immigrants' preferences that can then be juxtaposed with the features of specific cities. The index is based on a number of factors, each weighted differently to reflect its importance in relation to immigrants' decision-making as documented in the findings of the *Longitudinal Survey of Immigrants to Canada (LSIC)*, Wave 1 (Statistics Canada, 2003). It draws on the *LSIC* data as a measure of immigrants' preferences. We recognize that the *LSIC* does not reflect a definitive assessment of these locations for settlement purposes; it does, however, serve as a reliable

indicator of relative desirability of the five cities based on past immigrants' choices.

The federal policy of regionalization, or immigrant dispersion, to small and medium-sized cities outside MTV (Montreal, Toronto, Vancouver) is being considered at this time as policy-makers seek to spread the wealth of immigration. In exploring the attractiveness of these five British Columbia cities to immigrants, we do not endorse this policy or analyse its strengths and weaknesses in any detail (Vatz-Laroussi & Walton-Roberts, 2005). Rather, we developed an index based on the five factors and examine them with respect to five medium-sized centres in British Columbia. Not surprisingly, larger cities offer more features that attract immigrants, an observation that speaks to patterns of immigrant concentration.

The index necessarily uses city-level aggregates. Although some may protest that areas within cities are more useful units of analysis with respect to immigrant choice of settlement, we argue that new immigrants to Canada do make settlement choices at the city rather than the neighbourhood level. Once established in a city, immigrants may choose to move to a different area, but such micro-differentiation is not characteristic of newcomers to Canada. The *LSIC* corroborates cities, rather than regions or neighbourhoods, as the basis for differentiation of settlement choice.

The article begins with a sketch of immigration patterns and policy in Canada at present and in the recent past. We then review the criteria for choice of settlement location given by *LSIC* respondents. We use these criteria to develop the statistical index of desirability of smaller centres in British Columbia. The third section assesses the question of whether quality of life or quality of livelihood is more important in immigrants' settlement decisions. In the fourth section, we then explain Multi-Criteria Evaluation (MCE) and describe how we used this tool to generate the index. In the fifth section, we consider factors that were omitted from the study. Finally, we interpret the results based on the index and discuss their implications.

Immigration to Canada and British Columbia

The specific settlement patterns of immigrants to Canadian cities are related to the historical geographies of earlier immigration, contemporary geopolitics, distance from source countries, economic performance of urban economies, and climate (Hiebert, 2000; Ray, 1998; Bourne, 1999). In 2002 British Columbia attracted 15% of all immigrants to Canada, or 34,000 people (Citizenship and Immigration Canada [CIC], 2003). Of those who

came to British Columbia that year, 87% chose to reside in Greater Vancouver, 2.2% chose Victoria, and 9.8% opted to settle in other locations across the province. This pattern reflects similar immigrant settlement preferences over the past decade, during which 17.7% of immigrants to Canada landed in Vancouver. Clearly Vancouver is the immigrant city of choice in British Columbia: 41.3% of immigrants to Vancouver said they settled there because of friends and family (Statistics Canada, 2003). If the presence of a large foreign-born population defines cosmopolitanism, Vancouver is one of the most cosmopolitan cities in the world, with 37.5% of its population born outside the country.

Toronto, Vancouver, and Montreal are Canada's economic centres. Although job growth continues to occur disproportionately in these urban centres, the paring back of the welfare state through neoliberal policies at the provincial and federal levels has reduced social and physical infrastructure in Canadian cities (Teeple, 1995; Walton-Roberts, 2004). Critics of federal immigration policy have even argued that immigrant concentration in Canadian cities will lead to social tensions or public outbreaks of violence (Collacot, 2002), although these predictions have yet to materialize in the Canadian context.

As Walton-Roberts (2004) observes, this "problem" of immigration concentration is largely framed by two perceptions. One is the demand for population growth and skilled workers in areas outside the large metropolitan centres; and the other is the perception that the metropolitan areas cannot manage rapid population growth combined with extensive ethnolinguistic and racial diversity. Walton-Roberts adds that a decline in immigrant economic integration, as measured by average immigrant earnings as a percentage of average Canadian-born earnings, has (too easily) been read off as a decline in social and political integration. More research on the decline in immigrant earnings shown in the 2001 Census is required, but it is premature to argue that this is a sign of increased immigrant segregation or declining participation in Canadian society.

Although still a relatively recent idea in Canada, plans to disperse immigrants geographically have been employed in the European context for some time (Robinson, Andersson, & Musterd, 2003). European countries, however, tend to focus on asylum and refugee resettlement with respect to dispersion policies, as most do not have the large-scale immigration recruitment programs for economic purposes found in Canada and the United States. Hence European governments tend to perceive dispersion (of asylum-seekers) as a share-the-burden proposition, rather than a

share-the-wealth opportunity. Asylum-seekers and refugees are thought to be a humanitarian obligation and responsibility rather than part of an economic strategy to revitalize smaller cities that might be losing population.

In Canada, former Citizenship and Immigration Minister Denis Coderre argued that the government should admit the equivalent of 1% of the Canadian population per year, approximately 316,000 people. The Canadian government has shown interest in increasing the numbers of immigrants who settle outside major Canadian cities. To date, efforts to encourage immigrants to settle in smaller urban centres have met with limited success. It will be important to explore further how to attract immigrants to smaller centres and persuade them to stay in order to reduce pressures on Canada's largest cities (CIC, 2001a).

Sherrell, Hyndman, and Preniqi (2004) show that employment opportunities and the presence of family and friends are important to successful settlement in smaller cities. The presence of family and friends provides valuable support networks in the early stages of settlement, especially given the difficulties many immigrants and especially refugees face in earning sufficient income. This is highlighted by the deteriorating economic welfare of recent cohorts of immigrants to Canada. Recent immigrants face diminishing initial earnings. Notwithstanding Li's (2003) finding that catchup rates for immigrants arriving in the 1990s were faster than for those who arrived in the 1980s, low initial earnings put immigrants at a serious disadvantage until their earnings converge with the Canadian average. According to Li, the earnings gap between immigrants and non-immigrants in 1995 was \$16,260 for immigrant men and \$10,569 for immigrant women, compared with \$6,368 and \$5,342 respectively in 1981. So during the initial period, support from family and friends may be essential.

The number of immigrants settling outside the six largest census metropolitan areas (CMAs) has declined dramatically over three decades from 30.4% during the 1970s to 22.3% during the 1980s to just 17.2% during the 1990s, according to the Canadian censuses. Indeed when Vancouver was included as a sixth city in the index ranking, it surpassed the score of each of the other cities no matter how the variables were ranked. This finding reinforces the thesis that immigrants prefer large urban areas over smaller ones. Insofar as immigration is seen as a share-the-wealth proposition, where immigrants are perceived to add value to particular locations through their skills, employment offerings, tax contributions, and community participation (CIC, 2001b), the current settlement pattern of immigrants is seen as unsatisfactory to many local governments and businesses in British

Columbia cities because they are not attracting a proportional share of new immigrants.

We selected five medium-sized British Columbia cities for the study: Victoria, Kelowna, Prince George, Prince Rupert, and Nanaimo. These cities represent a range of population sizes, coastal and inland locations, economic opportunities, and mild and more acute climatic conditions. Many are the largest cities outside Vancouver. However, their selection does not reflect a judgement that they are the best or worst for immigrant settlement. Our aim is to develop a constructive assessment tool for all British Columbia cities and for prospective immigrants that highlights immigrants' preferences for specific locations, as documented in the first wave of the *LSIC*.

The Longitudinal Survey of Immigrants to Canada

Our study weighs and displays various characteristics of cities to rank which centres outside Greater Vancouver are most attractive to new immigrants. The variables used are based on emerging research about immigrants' preferred settlement locations. In particular, we use results from the first wave of data from the *LSIC* published by Statistics Canada (2003).¹

LSIC results are used as the basis for weighting factors incorporated in the index for two reasons.² First, they represent a recent and reliable sampling of data that *directly* asks why immigrants choose to settle where they do. Although other data may serve a similar purpose (i.e., the landed immigrant database or LIDS), they do not attempt to ascertain motivation per se. Second, the LSIC opens new avenues for comparison across provinces. Until now, such in-depth research at a national scale was beyond the funds and capacity of any researcher or government department. Medium-sized cities in Ontario, for example, could be represented using the same ranking system as provided here.

We present our results with a note of caution: We have developed this index to represent certain values and characteristics of places that make them attractive to immigrants. The index is by definition an incomplete indicator of selected factors that affect locational decision-making by immigrants. It is by no means definitive and static over time. It does, however, attempt to create a policy-relevant basis for comparison across medium-sized centres in British Columbia, and potentially Canada, for policy analysis and planning. This method may be applied to other regions in Canada, especially regions with medium-sized cities.

Attracting Newcomers: Quality of Life versus Quality of Livelihood

Economic immigrants to British Columbia are selected on the basis of their official language abilities, skills, education, age, and experience. They tend to represent a relatively educated and privileged elite in their home countries and have certain expectations about the quality of life they can expect in Canada. People also immigrate to a new country to find employment opportunities and remuneration that exceed those in their home countries. We refer to the potential to develop better employment conditions as improved *quality of livelihood*.

Bauder (2004) argues that recent immigrants to British Columbia who settle in Victoria, Nanaimo, or Prince George tend to do better in the labour market than those in Greater Vancouver and that their average incomes are higher in the smaller cities. Recent immigrant men averaged well above \$22,000 per annum outside Greater Vancouver, as opposed to only \$17,350 in Vancouver. Recent immigrant women in Victoria earned almost \$16,000 per year, whereas their counterparts in Vancouver made on average slightly more than \$12,000. This suggests that quality of livelihood, once established, may well be better for new immigrants in cities outside Vancouver.

Bauder's (2004) study does not, however, include an analysis of labour force participation by immigration class, which might show, for example, that a disproportionate number of family class immigrants settle in Vancouver whereas economic immigrants are most likely to settle outside the province's largest metropolis. The study does not control for visible-minority status and related group differences among immigrants, nor does it examine income patterns at the household level, which Ley (1999) suggests may vary significantly. It is possible that the earnings of whites in smaller cities are being compared with those of non-whites in Greater Vancouver, or that higher individual incomes in smaller cities are offset by the ability to generate higher household incomes in Greater Vancouver. Bauder's numbers do suggest that quality of livelihood for immigrants is on average better outside Vancouver than in Vancouver.

Quality of life, we contend, is quite different from quality of livelihood. One can debate at length the indicators to be included in such a category. Certainly the presence of family and/or friends in a given place, the quality of education available for one's family (as well as the educational attainment of the community on average), climate, and the lifestyle associated with the city are all important considerations. Quality of life also incorporates many other factors, but these are idiosyncratic. For example, Florida

and Gertler (2003) argue that a thriving arts community (measured statistically as the number of artists, writers, and other "Bohemians") and a tolerant social character (measured in part by high numbers of immigrants) are the basis of a creative, competitive, vibrant urban economy. Bauder's (2004) study potentially corroborates Florida's (2002) analysis of the *creative class*: that the significant presence of immigrants among other variables is correlated with that of highly paid knowledge workers in the highend service sector. According to Florida, however, cities that rank highest in terms of creative economic strength, measured in part by large immigrant populations, also rank highest in income inequality. Florida's correlations are not based on any direct surveys or interviews with members of the creative class themselves. Rather, aggregate data are modelled in a way that serves his argument. As Schuurman (2002) has argued, modelling is an iterative process in which the researcher tweaks the model until it is validated by external indicators (which he or she seeks to model).

We use variables that according to LSIC are major factors for immigrants in deciding location. Where no data are available to measure these variables directly, we have created proxy measures as described in Appendix A. Settlement related to the presence of family and/or friends drives immigrants' decisions about where to settle throughout British Columbia (Walton-Roberts, 2004). Employment prospects are often tied to these connections, making it difficult to separate one criterion from one another. Immigrants also note that they are attracted to a city for its beauty and climate (Statistics Canada, 2003; Henin & Bennett, 2002). One's perception of affordable, quality housing might be another criterion, although we have not included it in our index. Prospective immigrants might be attracted to a particular place by the presence of a symphony orchestra, the availability of recreational facilities, or the number of parks. Education is also a driving force behind parents' decisions to settle in a particular location (Waters, 2001). Each of these variables is incorporated into the final index using multi-criteria evaluation.

Multi-Criteria Evaluation (MCE): How is it Used to Create an Index?

The index is based on a technique used widely in the social sciences called multi-criteria evaluation (MCE). MCE is a tool that allows users to combine several criteria (attributes) in order to derive a suitability index for location of a spatial entity, or in this case to derive a choice of city for

immigration. The first step in MCE is to define the problem and relevant criteria. Then each criterion is weighted depending on its relevance to the spatial solution (Satay, 1980).

The scoring remains a subjective process; its strength lies in the availability of scoring criteria commensurate with the goals of the analysis. High levels of relevance are associated with higher weights, which are in turn used to enhance the effect of that particular factor in the suitability equation. The value of MCE is that it allows the user to weight numerous criteria in order to fine-tune the index (Jiang & Eastman, 2003). Moreover, contradictory criteria can be used, allowing the index to incorporate more than one point of view and still provide results. MCE is often used to assess the suitability of particular locations in relation to one another. In this context, it is a stock geographic information systems (GIS) tool, although its use far exceeds geography (Schuurman, 2004). Sociologists, social epidemiologists, and urban planners are among the professionals who take advantage of the ability of MCE to integrate multiple-weighted criteria for rational (or political) decision-making.

The list of factors included in this project, like many developed for MCE, is not associated with absolute objective values. Rather, MCE attempts to accommodate multiple perspectives, and the results of analysis vary depending on how factors and constraints are ranked in relation to each other (Satay, 1990). In this case, the incoming immigrants report how important each factor was to their choice of location, and the weighting in MCE reflects the relative importance of each factor. The final step is to combine all the information in order to develop a composite index of attraction to prospective immigrants. This index will identify which medium-sized cities in British Columbia are most and least attractive potential sites of immigration based on the findings of Wave 1 of the *LSIC* (Ruddick, 2004). Data for Wave 2 of the *LSIC* were collected between December 2002 and January 2004 and for Wave 3 between November 2004 and October 2005.

The Index and its Variations

We consider the index based on the *LSIC* findings the best indicator of immigrant decision-making in relation to settlement location. By calculating more than one index (we present 3 weightings, see Figure 1 for an explanation of the index calculation), our aim is to test the sensitivity of the LSIC index, that is, whether results change based on increased emphasis of (a) employment and business prospects; (b) presence of family and friends; (c) education (in the prospective place of settlement); and (d) lifestyle, taken here to refer broadly to climate and its implications for activities

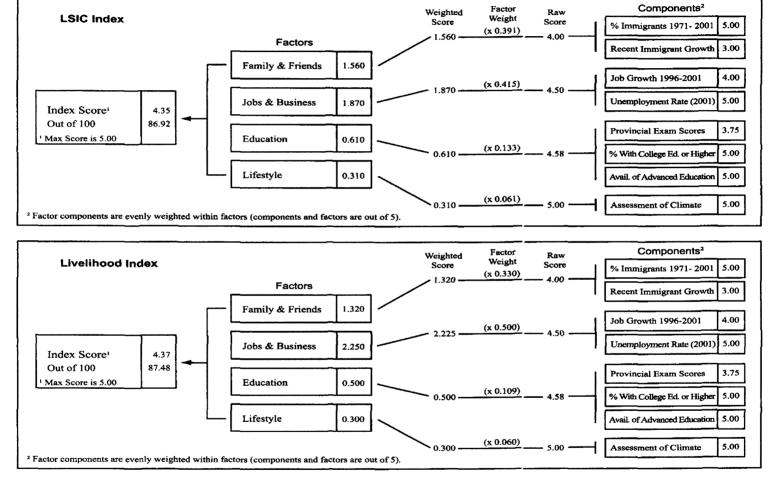


Figure 1. Sample index calculations.

based on Henin and Bennett (2002) and Walton-Roberts (2004). Data analysed to assess *employment and business prospects* and the *presence of family and friends* (factors 1, 2, and 3) refer not only to the five cities, but to the "universe" of all medium-sized cities in British Columbia (24 in total).³ We do this to avoid skewing the results for the five selected cities by contextualizing them in a more realistic range of values. This approach also allows one to assume that prospective immigrants choose not only from among the five study sites, but from all British Columbia cities outside the Vancouver census metropolitan area (CMA).

The LSIC Index

The first index or ranking is based on the *LSIC* (Statistics Canada, 2003) findings that enumerate settlement factors for immigrants who establish themselves outside the CMAs of Vancouver, Montreal, and Toronto. Economic immigrants to these cities cited the following as the main five motivations for moving there.

- 1. the presence of family and friends (35.6%);
- 2. job prospects (32.3%);
- 3. education prospects (12.1%);
- 4. lifestyle (5.6%);
- 5. business prospects (5.5%).

The index does not add up to 100% because the *LSIC* report (Statistics Canada) published only the top five most important reasons for settlement location choice, which account for 91.1% of responses; we have re-scaled the top five reasons to add up to 100%.

- The index combines job and business prospects (weighted at 41.5%) to gauge employment-related prospects and measures them through job growth and unemployment rates (equally weighted).
- The presence of family and friends (weighted at 39.1%) is measured by a proxy that combines equally a measure of all immigrants who have arrived since 1971 (at which time the Census registers the introduction of the points system into Canadian immigration policy) with the city's ranking as the destination for numbers of recent immigrants who arrived in British Columbia between 1996 and 2001.
- The education variable is a measure of three data points, each weighted equally (at one third) for a total of 13.3% of the index: the rank of proportion of population with university degrees; the rank of

- the city against the four others on standardized test scores for high school students in each city's secondary schools; and the presence and degree of postsecondary education available in the city (i.e., university, university college, college).
- Lifestyle is perhaps the most subjective factor to measure and indicate. We weight it at 6.1% in accordance with the *LSIC* findings. We used climate as a proxy based on information gleaned from qualitative academic research (Henin & Bennett, 2002; Walton-Roberts, 2004) and on our interpretation of published *LSIC* results (in which climate plays a major role, 20%, in determining settlement in Vancouver). The ratings for climate were compiled from an informal survey of undergraduate students and necessarily include location bias. It should be noted, however, that even if the lifestyle factor is removed, the index returns the same ranking for the five cities.

The Livelihood Index: Jobs and Business Prospects Weighted at 50% If securing a job somewhere is central to immigrant settlement there, then livelihood is a major variable in determining city of settlement (see Appendix B). For this index jobs and business prospects are weighted at 50% (compared with 41.5% for the LSIC index) with the quality of life variables (presence of family and friends, education, and climate) making up the other 50%.

Index of Equally Weighted Variables

In order to illustrate the sensitivity of the index, we generated a map showing the five study sites as if each variable (presence of family and friends, job and business prospects, education, and lifestyle) mattered equally (see Appendix B). This index does not reflect current research findings, but is illustrative of the robustness of the index. That is, there is little change in the ranking of the cities regardless of the weighting of the variables selected.

Individual Factors

In addition to the three indices generated, the four component factors are provided separately for clarity (see Appendix B). Each assumes that a sole variable (e.g., education) is the only consideration in terms of immigrants' choice in settlement location illustrating how cities rank based on the use of single variables in the decision-making process. For family-class immigrants, the presence of family and friends is likely to be the single greatest determining factor in selecting settlement locations. Thus the index

showing the presence of family and friends at 100% may be useful for analysis pertaining to this group.

Missing from the Study

In creating any index or ranking, a number of variables are excluded. Some are simply not characteristics of the cities themselves, but are abstract qualities of a city's relationship, for example, to a larger centre like Vancouver. In this context, proximity to Vancouver is an important consideration that is not integrated into the index, but one we discuss below. We have assumed that some variables not mentioned in the LSIC are secondary, not primary considerations in relation to choice of settlement location. We briefly discuss three such variables here to note their potential relevance to choice of settlement location.

Housing availability and affordability are not integrated into the index. Most immigrants know where they will be living on landing in Canada (Ruddick, 2004), which leads us to believe that housing needs are strongly tied to the presence of family and friends in a given place (Ley & Tutchener, 1999). In the five study sites, average house prices varied from \$243,970 (in Victoria) to \$118,995 (in Prince Rupert). Average house prices are positively correlated with the appeal of each city as reflected in the *LSIC* index outlined below. Kelowna, for example, has the second highest average house price at \$192,715 and is ranked the second most desirable city for immigrants (see Table 1). In this case, a variable not integrated into the index is nonetheless totally consistent with it, arguably reflecting the reliability of the index. A positive correlation between house prices and a city's desirability suggests that housing costs may not be a deterrent to potential immigrants.

Table 1
Average Dwelling Value (2001 Census)

| City | Average Dwelling Value | | | |
|-------------------|------------------------|--|--|--|
| CA Prince Rupert | \$118,955 | | | |
| CMA Prince George | \$130,012 | | | |
| CMA Nanaimo | \$154,996 | | | |
| CMA Kelowna | \$192,715 | | | |
| CMA Victoria | \$243,970 | | | |
| CMA Vancouver | \$294,847 | | | |

Related to real estate markets is the relative location of each study site to the province's largest city and economic centre, Greater Vancouver. Access to Greater Vancouver as a potential market, client, service provider, and so forth may well shape immigrants' choice of settlement location. Economic integration across geographical distance is facilitated by transport corridors and communications technology (Dicken, 2003). Three of our study sites—Victoria, Nanaimo, and Kelowna—are more integrated in this context than the others, Prince George and Prince Rupert. Victoria and Nanaimo are separated from Vancouver by water, but are linked by multiple convenient modes of transport. For example, an informal survey of the number of daily floatplane flights to Victoria and Nanaimo from Vancouver suggests a high-end mode (i.e., relatively expensive, for white collar workers) and high degree of integration: Victoria has 28 flights daily to Vancouver, and Nanaimo nine. Kelowna, on the other hand, offers a good, not as weather-dependent ground link (four hours by vehicle) that is relatively cheap, especially if a business requires one to transport cargo from Vancouver to Kelowna.

A cursory exploration of transport links between 22 cities in British Columbia illustrates that Vancouver and Kelowna are the best connected with respect to routes in and out of the city. If every city is a vertex or node and major highways are links, then Vancouver is served by three links, whilst a medium sized city such as Kamloops is served by six. The large discrepancy in the number of routes flowing into these cities is influenced as much by the unique geography of the province as by size of settlement. Although connectivity indices are useful determinants of size and connectivity in provinces such as Ontario (e.g., Toronto is served by more roads than Peterborough), it would be difficult to use a transport network as the sole determinant of connectivity or size in British Columbia.

Potential for economic integration can be measured in a number of other ways that include the availability of business services, fibre-optic telecommunications, and proximity of suppliers. The indices could include weighting for connectivity that reflects economic integration with Vancouver or the largest city in any region. This would, however, require a much more systematic and in-depth qualitative study of what linkages matter most and to whom. Such variables are likely to be far more relevant to entrepreneurs and business-class immigrants than professionals, assuming that they find work in the occupation for which they are trained. Refugees who settle outside Vancouver, for example, are likely to be more concerned about employment prospects in a given location than a city's degree of economic integration with Vancouver and its road or air links.

Another dimension of settlement that has been largely ignored in the literature on immigration (for an exception, see Hiebert, 2003) and is not included in the generation of the index is the proclivity of a given city's population to welcome and accept new immigrants. Settlement services are likely to make a place more welcoming to new immigrants through counselling and interpretation services, host programs, and official language instruction by immigrant-specific agencies or as part of mainstream organizations such as schools, colleges, and hospitals. Many economic immigrants score highly on official language ability and do not necessarily avail themselves of as many settlement services as those who come in family and refugee classes (Statistics Canada, 2003). The importance of such services will vary across immigrant classes and source countries.

Settlement is also facilitated in a better or worse fashion depending on the host cities' attitudes to outsiders. This involves tolerance of ethnic or racial difference and acceptance of other nationalities, as most recent and current immigrants to Canada and British Columbia are persons of colour from East and South Asia. Although a city's Chamber of Commerce or municipal council may wish to increase its labour force and population, it is unlikely to be successful in attracting immigrants if the attitudes of its residents and employers are not open to outsiders and their differences. Thus a missing element in our index is a systematic measurement of attitudes toward prospective immigrants in these cities of potential settlement. Hiebert's (2003) Vancouver community study illustrates the generally high levels of support for immigrants to the city, with little variation across foreign-born and native-born respondents. Vancouver is, however, a major metropolis with a highly diverse and cosmopolitan population, as noted above. Although we cannot address this gap in current research here, we highlight it as a weakness in our own analysis and endorse the idea of research to document this dimension of settlement potential.

Results and Interpretation

The results of each of iteration of the index are illustrated in Figure 2. Several preliminary conclusions that can be drawn from the analysis.

Our interpretation of the index is that population differences among the five study sites determine the ranking of individual cities: size matters. Population in a given place is indicative of service and amenities to some extent. In terms of CMA or CA population, Victoria has roughly 311,902 (of 325,754 in the CRD) people compared with Kelowna's population of

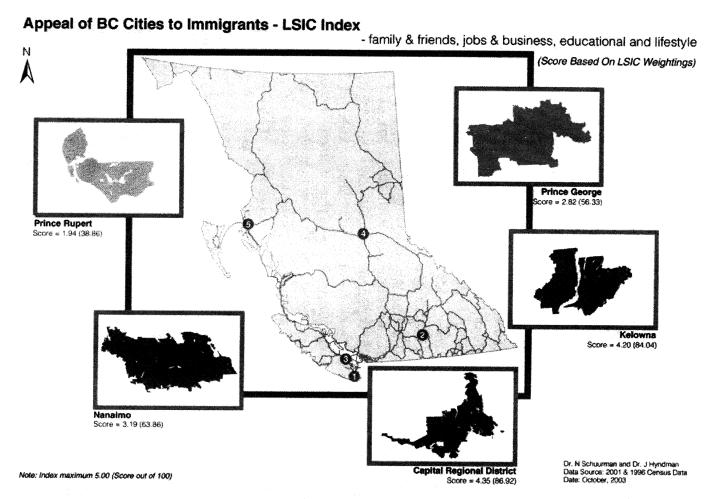


Figure 2. Appeal of BC cities to immigrants: LSIC index.

147,739, Nanaimo's 85,664, Prince George's 85,035, and Prince Rupert's 15,302. Larger city size is consistently correlated with attractiveness to immigrants based on the *LSIC* findings. The Capital Regional District (CRD), including Victoria and its environs, remains the most attractive mediumsized centre. Its larger population size is correlated with its attractiveness. Kelowna is the next most attractive city; again, its larger population correlates with its desirability. Nanaimo competes with Prince George for third place despite its higher ranking on all but one indicator: job and business prospects.

The index is not sensitive to varying weightings of the variables, because variables that make a centre attractive tend to aggregate (e.g., high presence of family and friends is likely to correspond to more likelihood of jobs and better business prospects in larger centres, which drives the likelihood of better educational prospects). The availability of good job, business, and education prospects and the likelihood of family and friends being present tend to increase with size. The *LSIC* did not explicitly ask respondents about their preferred city size, but de facto the qualities that attract them to particular places tend to aggregate and concentrate in larger cities more than in smaller centres.

The truism that geography matters is relevant here. The CRD around Victoria enjoys high levels of services and amenities for its size, including relative proximity to and integration with the province's largest urban agglomeration. Settlements such as Prince Rupert and Prince George are smaller, more geographically isolated, and climatically challenged, which shapes their respective desirability to new immigrants. Variables that may be positively correlated with larger settlement are therefore less likely to accrue.

An index provides a ranking based on research, which points to the importance of variables and on available data to approximate these variables. In this case, the *LSIC* (Statistics Canada, 2003) provides a basis for weighting factors identified as important to immigrants surveyed. These methods have limitations. Despite our quantitative calculations that suggest that Kelowna is the second most attractive city to immigrants (outside Greater Vancouver), qualitative research has shown that on-the-ground immigrant experience of Kelowna is quite different. Walton-Roberts (2004) cites this interview excerpt.

F6: I have experienced a lot of racism in this town and even though I did experience racism in Edmonton when I came to Canada, but not so much as I have in the last 6 years in this town.

Q: What kinds of things make you feel that way?

F6: I find that people are very paternalistic, condescending, and I think it's just the whole atmosphere. That's my personal opinion, I know some people think I'm crazy and that I'm overreacting, but I find this city very, the people are very different. (Non-European women's focus group, Kelowna, October 2002) (p. 19).

Similarly, Sherrell et al. (2004) cite interviews that highlight the economic mismatch between (industrial) immigrant skill sets and the service sector jobs that dominate the Kelowna labour market.

[In] Gjakova we had ... seven or eight [factories]. It was a very industrial town ... there were big factories: 5000 people in one [factory] [101—Kosovar—Vancouver]. Kelowna is tourist place, it is not for engineers (Interview 109, Kosovar, Kelowna). The promotion of Kelowna like "Silicon Vineyard" is highly exaggerated. High-tech companies usually are small. Very small. And they are able to employ up to ten people. And no industry, no big manufacturing companies. ... Here, generally, I believe it's mainly hospitality industry. ... [The] highly promoted bridges.com ... does do very well, but still not big enough to be big employer. [The] only manufacturer is Sunrype, [a] food processing kind of company. But I'm afraid they don't need any high-tech personnel so far (Interview 108, Kosovar, Kelowna).

There are clear discrepancies between the quantitative index derived here and immigrants' perceptions on the ground. This project cannot ground truth—or test the veracity of—the indices we have generated. We acknowledge, however, that they represent part of the picture; in no way do they account for the more subtle and subjective assessments of discrimination or employment suitability alluded to here. We use such indices as one step in a multi-methods approach to assessing the attractiveness of medium-sized cities in British Columbia and elsewhere.

Although the *LSIC* index is arguably the best for assessing the appeal of smaller cities to prospective immigrants, the variation among the supplementary indices—weighting each of the variables at 100%—is small. This strengthens the analytical value of the index and demonstrates its robust character. Nonetheless, we caution that other factors not included in the index may also shape decisions about where to settle.

Conclusions

The most straightforward conclusion of this research is that the *LSIC*-based index is robust and reliable from a statistical viewpoint. A number of variables correlate with one another, especially family and friends and economic prospects. Two other variables, population and average housing prices, are strongly correlated with the results. Population size is a reliable surrogate because weighted factors measure increases in absolute numbers rather than proportions, which ensures that larger centres will fare better. Other Canadian research on the relationship of population size to immigrant retention also points to higher retention rates in larger cities (Abu-Laban, Derwing, Krahn, Mulder, & Wilkinson, 1999; Krahn, Derwing, & Abu-Laban, 2003).

More broadly speaking, the study confirms that immigrants are attracted to cities with friends and family, including other immigrant groups. Large immigrant populations in cities like Toronto or Vancouver are not accidental; they accrue because immigrants consistently choose to settle in areas where they find the people, livelihoods, and quality of life they seek. Opportunities in the fields of education and employment not surprisingly exist in greater number in larger, more diversified urban centres. The logic is tautological: making a place attractive to immigrants requires an existing immigrant population.

From a policy perspective, this circularity can be overcome only by strong incentives. The *LSIC* results illustrate that immigrants prefer the features correlated with larger cities in the British Colombia context. So extraordinarily attractive prospects are probably the only way that immigrants—who have the right to move within Canada—will voluntarily choose smaller centres. One such draw might be a future option for family unification not normally allowed under Canada's Immigrant and Refugee Protection Act. Another might include offers of tax credits or exemptions from provincial governments if new immigrants are willing to relocate in areas without dense immigrant populations. A more enforcement-oriented measure would be to use temporary work status instead of full immigration status to control settlement patterns by making admission to Canada conditional on settlement in a specified smaller urban centre.

Further studies might evaluate clusters of smaller cities (e.g., Trail, Castlegar, Nelson) that constitute functional medium-sized cities when coordinated as a unit. Results from such assessments may be more realistic and inclusive in appraising quality of life outside Canada's largest cities. Moreover, assessment of functional centres or corridors rather than formal

municipal bodies could allow cities to better represent their assets and virtues in attracting immigrants. Such a strategy could enable a shift from the evaluation of existing appeal (as measured in this study) to a program that allowed communities to engage actively in programs to attract immigration. Variables in a subsequent study based on functional centres might include (a) degree of integration, including transportation and communication connectivity; (b) housing and rental prices (allowing smaller centres to score better); (c) proportion of immigrants in situ to total population rather than a ratio of absolute numbers; and (d) recreational amenities and/or shopping opportunities (based on proxy variables such as presence or absence of key stores) in addition to the existing variables.

The index presented here is an indicator of the role that population and the extant number of immigrants in situ plays in determining the appeal of smaller cities. From a policy perspective, if governments wish to spread the wealth associated with immigration and an expanded labour force, a proactive policy stance that enumerates and communicates the appeal of less prominent communities is vital.

Acknowledgements

A version of this report was submitted to the BC Ministry of Community, Aboriginal and Women's Services in November 2003. The authors thank Roy Chan for his research assistance.

Appendix A Immigration MCE: Methodology

Factors

Factors were determined based on Statistics Canada's (2003) release the *Longitudinal Survey of Immigrants to Canada*. The survey included data on the five most important reasons principal applicants in the economic class choose to settle." The MCE used data from the results given for all other CMAs or non-CMAs (other than Vancouver, Toronto, and Montreal).

Presence of family and friends (interpreted as presence of relatively recent immigrants):

- 1. Total of all immigrants in each CMA or CA in British Columbia who immigrated from 1971 (first Census that points system took effect) to 2001 (50% weighting);
- 2. Growth in recent immigrants from 1996 to 2001 (Census 2001 recent immigrants—Census 1996 recent immigrants)/Census 1996 recent immigrants *100). Note: recent immigrants are defined as persons who have immigrated to Canada in the inter-census period, the five-year period between censuses (50% weighting).

Job prospects and business prospects (Economic factors):

- 1. Measured as the growth in employment from 1996 to 2001 (Census 2001 employed—Census 1996 employed)/Census 1996 employed *100). Note: employed refers to the number of persons 15 years old and over who were in paid work (50% weighting);
- 2. The unemployment rate (Census 2001 data, 50% weighting).

Educational Prospects

- 1. The availability of postsecondary educational institutes in each CMA (university = 5, university college = 4, community college = 3,331/3% weighting).
- 2. Population with college diploma/certificate or university bachelor's degree or higher (33 1/3% weighting).
- 3. Grade 12 provincial exam scores (average determined from basic subjects) (33 1/3% weighting).

Lifestyle

1. Subjective assessment of most and least desirable climate (100% weighting).

Scoring

To create scores each factor was ranked into quintiles with five categories (20% of the data falls within each class). If the factor comprised subfactors, these were ranked using the same method and the average of the subfactors was used as the factor score.

Weights

After scoring, each factor was multiplied by a weight. Several weights were used to test the sensitivity of the MCE, but the variables are based on LSIC factors.

Weights from LSIC 2003—all other CMAs and non-CMAs: family and friends (35.6%), job and business prospects (37.8%), education prospects (12.1%), and lifestyle (5.6%). The weights derived from the LSIC do not add up to 100% (91.1%) as the LSIC report published only the top five most important reasons in settlement location choice (separately) for Montreal, Vancouver, Toronto, and all other CMAs and non-CMAs (Statistics Canada, 2003).

Note: Job prospects (32.3%) and business prospects (5.5%) were combined into a single factor.

Appendix B
Index and Individual Factor Results

| Factors | Components / Index Scores | Victoria (CRD) | Kelowna | Nanaimo | Prince George | Prince Rupert |
|---------------------------|--|----------------|---------|---------|---------------|---------------|
| Family & Friends | % of CMA/CA Populaton Immigrants 1971-2001 | 5.00 | 3.00 | 4.00 | 2.00 | 5.00 |
| | Recent Immigrant % Growth 1996-2001 | 3.00 | 5.00 | 3.00 | 2.00 | 1.00 |
| | Individual Factor Score (out of 5) | 4.00 | 4.00 | 3.50 | 2.00 | 3.00 |
| Jobs and Business | Job Growth 1996-2001 | 4.00 | 4.00 | 3.00 | 5.00 | 1.00 |
| | Unemployment Rate (2001) | 5.00 | 5.00 | 2.00 | 2.00 | 1.00 |
| | Individual Factor Score (out of 5) | 4.50 | 4.50 | 2.50 | 3.50 | 1.00 |
| Education | Provincial Exam Scores | 3.75 | 4.25 | 3.25 | 2.75 | 2.25 |
| | % of Population with College Education or Higher | 5.00 | 5.00 | 5.00 | 4.00 | 1.00 |
| | Availability of Advanced Education Institutions | 5.00 | 4.00 | 4.00 | 5.00 | 2.00 |
| | Individual Factor Score (out of 5) | 4.58 | 4.42 | 4.08 | 3.92 | 1.75 |
| Lifestyle | Individual Factor Score (out of 5) | 5.00 | 3.00 | 4.00 | 1.00 | 2.00 |
| LSIC Index | Family & Friends (weight = 0.391) | 1.56 | 1.56 | 1.37 | 0.78 | 1.17 |
| | Job & Business Prospects (weight = 0.415) | 1.87 | 1.87 | 1.04 | 1.45 | 0.42 |
| | Education (weight = 0.133) | 0.61 | 0.59 | 0.54 | 0.52 | 0.23 |
| | Lifestyle (weight = 0.061) | 0.31 | 0.18 | 0.24 | 0.06 | 0.12 |
| | Total Index Score (out of 5.00) | 4.35 | 4.20 | 3.19 | 2.82 | 1.94 |
| | Out of 100 | 86.92 | 84.04 | 63.86 | 56.33 | 38.86 |
| Livelihood Index | Family & Friends (weight = 0.330) | 1.33 | 1.33 | 1.17 | 0.67 | 1.00 |
| | Job & Business Prospects (weight = 0.500) | 2.25 | 2.25 | 1.25 | 1.75 | 0.50 |
| | Education (weight = 0.109) | 0.50 | 0.48 | 0.45 | 0.43 | 0.19 |
| | Lifestyle (weight = 0.060) | 0.30 | 0.18 | 0.24 | 0.06 | 0.12 |
| | Total Index Score (out of 5.00) | 4.38 | 4.24 | 3.10 | 2.90 | 1.81 |
| | Out of 100 | 87.63 | 84.87 | 62.01 | 58.06 | 36.20 |
| Equal Weights Index | Family & Friends (weight = 0.250) | 1.00 | 1.00 | 0.88 | 0.50 | 0.75 |
| | Job & Business Prospects (weight = 0.250) | 1.13 | 1.13 | 0.63 | 0.88 | 0.25 |
| | Education (weight = 0.250) | 1.15 | 1.10 | 1.02 | 0.98 | 0.44 |
| | Lifestyle (weight = 0.250) | 1.25 | 0.75 | 1.00 | 0.25 | 0.50 |
| | Total Index Score (out of 5.00) | 4.52 | 3.98 | 3.52 | 2.60 | 1.94 |
| | Out of 100 | 90.42 | 79.58 | 70.42 | 52.08 | 38.75 |

1. The LSIC data represent approximately 12,000 of 164,200 immigrants aged 15 and older who arrived in Canada between October 2000 and September 2001. Of those admitted to Canada, roughly 67% enter as economic-class immigrants (including both principal applicants and their families), 27% enter as family-class immigrants, and just 6% enter as refugees. For a specific study

of the regionalization policy on government-assisted refugees, see Sherrell et al. (2004).

2. We did not analyse LSIC microdata. The weights used in the LSIC index are from results published in the report Longitudinal Survey of Immigrants to Canada: Process, Progress and Prospects (Statistics Canada, 2003). The report's results indicate the quality level of estimates (based on a minimum sample size and the coefficient of variation) as acceptable, marginal, or unacceptable. Of the estimates used as weights in the LSIC index, all were considered acceptable. For further information about LSIC survey methodology see Statistics Canada (2003).

3. We have not included the statistical output for these 24 cities, but contact schuurman@sfu.ca

for more information.

This project did not examine the provision of settlement services in the five study sites. We did note, however, that Prince Rupert is the only city without stream 1 settlement services, that is, an immigrant-specific agency that provides counselling and interpretation in the early stages of settlement.

References

Abu-Laban, B., Derwing, T., Krahn, H., Mulder, M., & Wilkinson, L. (1999). The settlement experiences of refugees in Alberta. Study prepared for Citizenship and Immigration Canada (rev. ed.). Edmonton, AB: Prairie Centre of Excellence for Research on Immigration and Integration and Population Research Laboratory.

Bauder, H. (2004). Immigrants in urban labour markets: Place of birth and immigrant concentra-

tions in British Columbia. Canadian Journal of Urban Research, 12(2), 179–204.

Bourne, L.S. (1999). Migration, immigration, and social sustainability: The recent Toronto experience in comparative context. Unpublished document, Centre of Excellence for Research on Immigration Studies (CERIS)

Collacot, M. (2002). Canada's immigration policy: The need for major reform. Public policy sources

No. 64. Vancouver, BC: Fraser Institute.

- Citizenship and Immigration Canada (CIC). (2001a). Pursuing Canada's commitment to immigration: The immigration plan for 2002. Ottawa: Minister of Public Works and Government Services
- Citizenship and Immigration Canada (CIC). (2001b). Towards a more balanced geographic distribution of immigrants, A special study by Strategic Planning, Policy and Research. Retrieved October 12, 2003, from: http://www.cic.gc.ca/english/srr/pdf/res3fv.pdf.
- Citizenship and Immigration Canada (CIC). (2003). Facts and figures 2002: Immigration overview. Cat. No. MP43-333/2003-1E, ISBN 0-662-34188-0. Ottawa: Minister of Public Works and Government Services Canada.
- Dicken, P. (2003). Global shift: Reshaping the global economic map in the 21st century. London; New York: Sage
- Florida, R. (2002). The rise of the creative class: And how it's transforming work, leisure, community and everyday life. New York: Basic Books.

Florida, R., & Gertler, M. (2003). Cities: Talent's critical mass. Globe and Mail, January 3.

- Henin, B., & Bennett, M.R. (2002). Immigration to Canada's mid-sized cities: A study of Latin Americans and Africans in Victoria, BC. Metropolis working paper series, No. 02-22.
- Hiebert, D. (2000). The social geography of immigration and urbanization in Canada: A review and interpretation. Working paper #00-12.

Hiebert, D. (2003). Are immigrants welcome? Introducing the Vancouver Community Studies Survey, *RIIM working paper 03-06*, March.

Krahn, H., Derwing, T.M., & Abu-Laban, B. (2003). The retention of newcomers in second-and third tier cities in Canada. Working Paper No. WP #01-03. Edmonton, AB: Prairie Centre of

- Excellence for Research on Immigration and Integration (PCERII). Ley, D. (1999). Myths and meanings of immigration and the metropolis. Canadian Geographer,
- 1(1), 2-19.
- Ley, D., & Tutchener, J. (1999). Immigration and metropolitan house prices in Canada. Metropolis Working Paper Series, WP#99-09. Retrieved September 30, 2004, from: http://www.riim.metro polis.net/frameset_e.html.

Li, P. (2003). Initial earnings and catch-up capacity of immigrants. Canadian Public Policy, 29(3), 319-337.

Ray, B. (1998). A comparative study of immigrant housing, neighbourhoods and social networks in Toronto and Montreal. Ottawa: Canadian Mortgage and Housing Corporation.

Robinson, V., Andersson, R., & Musterd, S. (2003). Spreading the "burden"? A review of policies to

disperse asylum-seekers and refugees. Bristol, UK: Polity Press.

Ruddick, E. (2004, February). Longitudinal survey of immigrants to Canada: Highlights from Wave 1, meeting of the working group for the enduring federal role for research. Paper presented at SFU Harbour Centre, Vancouver.

Satay, T.J. (1980). The analytic hierarchy process. New York: McGraw-Hill.

Saaty, T.J. (1990). How to make a decision: The analytic hierarchy process. European Journal of Operational Research, 48, 9-26.

Schuurman, N. (2002). Reconciling social constructivism and realism in GIS. *ACME: An International E-Journal for Critical Geographies*, 1(1), 75–90. Schuurman, N. (2004). *GIS: A short introduction*. Oxford, UK: Blackwell.

Sherrell, K., Hyndman, J., & Preniqi, F. (2004). Sharing the wealth, spreading the "burden"? The settlement of Kosovar refugees in smaller BC cities. RIIM working paper #04-06.

Statistics Canada. (2003). Longitudinal survey of immigrants to Canada: Process, progress, and prospects. Catalogue No. 87-611-XIE, ISSN 1708-7740. Ottawa: Ministry of Industry.

Teeple, G. (1995). Globalization and the decline of social reform. Toronto, ON: Garamond Press. Vatz-Laroussi, M., & Walton-Roberts, M. (2005). Introduction. Canadian Ethnic Studies, 37, pp. 1–5.

Walton-Roberts, M. (2004). Regional immigration and dispersal: Lessons from small and medium-sized urban centres in British Columbia. *RIIM working paper #04-03*. Retrieved November 25, 2005, from: http://riim.metropolis.net/frameset_e.html.

Waters, J.L. (2001). Migration strategies and transnational families: Vancouver's satellite kids. RIIM working paper #01-10. Retrieved September 15, 2003, from: http://www.riim.metropolis.net/Virtual%20Library/2001/wp0110.pdf.

Useful Links

Metropolis Canada (includes links to the various regional sites): http://canada.metropolis.net/www immigrantsandrefugees.ca

Citizenship and Immigration Canada (CIC): http://www.cic.gc.ca/

Statistics Canada (LSIC Reports): A Portrait of Early Settlement Experiences: http://www.statcan.ca/english/freepub/89-614-XIE/89-614-XIE2005001.htm

Process, Progress and Prospects: http://www.statcan.ca/english/freepub/89-611-XIE/index.htm