A Tale of Ten Cities: Attracting and Retaining Talent

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Introduction

The International Regions Benchmark Consortium\(^1\), consisting of ten metropolitan regions from around the world, commissioned this report to assist the regions as they develop strategies to attract and retain highly talented individuals. The benchmark regions are all attractive places with dynamic economies that have good prospects for the future. But as will be discussed below, these regions must continue to attract talented people from within their own countries and from other countries, and keep their talented people from moving elsewhere, in order to remain prosperous. All ten regions have experienced net in-migration in recent years, but there is continual competition for talented people, and no region can take its position for granted.

Labor migration is an enormous topic that is explored by many disciplines, including sociology, political science, economics and anthropology. This report, and the accompanying survey, examines just one piece of this larger topic: voluntary migration of highly skilled and talented people to metropolitan areas for career and lifestyle enhancing purposes. The group of migrants that interests us is presumed to have education and skills that are broadly applicable across regions, countries and continents. These individuals reflect the globalization of the economy, as their skills and value transcend national differences in culture and business practice.

It is also assumed that the target individuals have numerous choices of places to move with few legal barriers. Regions in the European Union can hope to attract talented people from up to 25 countries with little administrative burden. The regions in North America, Asia and Australia face more legal barriers to attracting foreign talent, but these countries are large and diverse enough to provide ample talent that can migrate domestically. Thus, while much of the literature on migration is concerned with movement across national boundaries, this report makes no distinction between domestic and international migration. The goal of a talent attraction strategy is simply to draw people from outside the region, whether they come from elsewhere in the country, or abroad.

Finally, this report is most concerned with the question of whether actions can be undertaken at the local level, by city, regional or provincial governments to enhance the attractiveness of the region for in-migration. As a result, much of the discussion will aim toward strategies that focus on regional amenities that contribute to a quality of life that migrants might find attractive. Amenities by themselves cannot create a dynamic economy, but we cannot ignore the observable fact that the most economically successful regions of the developed world are also very nice places to live.

\(^1\) The Benchmark Consortium member regions are: Barcelona, Spain; Daejeon, S. Korea; Dublin, Ireland; Fukuoka, Japan; Helsinki, Finland; Melbourne, Australia; Munich, Germany; Seattle, United States; Stockholm, Sweden; Vancouver, Canada.
I. Migration, Growth and Productivity

Region size and productivity

Studies of the economic dynamics of urban areas have shown a link between the size of an economic region and the productivity of its economy (Bettencourt et al 2007). Larger regions tend to be more productive and therefore have higher per-capita nominal wages. This is somewhat intuitive: if we think about regions we are familiar with, we know that individuals get paid more in New York, Madrid and Toronto than they get paid in Sioux Falls, Santander or Saskatoon. These wages and salaries, in turn, reflect productivity, and not the high cost of living in these cities: people are paid more in large cities because their work is worth more, not because it is expensive to live there (Glaeser and Saiz 2003).

There are many reasons cited for this phenomenon, known as the agglomeration effect, but perhaps most importantly for our purposes is the sharing of information and knowledge among people in close proximity to one another. This is an updated version of Alfred Marshall’s famous observation that where an industry is concentrated, “the mysteries of the trade become no mysteries; but are as it were in the air” (Marshall 1920).

Figure 1 illustrates this phenomenon, showing a strong relationship between the productivity of metropolitan regions in the United States with population larger than 250,000 and the logarithm of the region’s population.

Migration is the path to population growth

Population growth is a good indicator of economic health. Although national growth rates in most developed countries have become quite slow, most of the Benchmark regions are growing faster than their national rate. Figure 2 shows the population of the ten benchmark regions, as well as the rate of population growth for the benchmark regions and for their respective nations.
The central demographic trend of the developed world is the slow or negative rate of natural population growth. Some nations have already begun to shrink and others appear poised to do so in the near future. Figure 3 shows crude birthrates (births per 1,000 population) in the benchmark regions and in their countries, as well as national death rates and the resultant crude natural population growth rate. The final column shows the national fertility rate (average births per woman) which should be over 2.0 to ensure a stable population.

Low birthrates in developed countries reflect a gradual shift in societal values, driven by technology, education and other forces. Absent some major exogenous force, we can expect most developed countries to continue on a path of low or negative natural growth. Net in-migration, then, provides the source of population growth for the benchmark regions that will allow them to capture agglomeration effects and help ensure there is a large enough workforce to support the growing numbers of retirees.

Figure 4 shows the rates of in-migration for the benchmark regions and the share of total population growth accounted for by in-migration. In every one of the benchmark regions except Stockholm and Daejeon, net in-migration accounted for over half of population growth, and in several, in-migration accounted for nearly all growth. Appendix B shows this data from 1996 to 2006 (some data are missing due to reporting frequencies), demonstrating that all the benchmark regions have experienced positive net in-migration nearly every year during this period. This is an indication of the dynamism of the economies of these regions that they can attract...
new residents with employment opportunities year after year, even as annual economic performance varies.

To maintain economic dynamism, regions must attract talent
It is commonly recognized that metropolitan economies in developed countries are increasingly tied to work that requires high levels of knowledge and skill: knowledge-based industries are growing, while those industries based on resources or low-skill work are declining. Knowledge-based industries can be either those whose output is primarily information – media, software, architecture – or those that have introduced a large technology component to traditional industries. In either case, these industries need workforces with high skill and knowledge levels.

Truly dynamic regions will have more than an average share of knowledge-based industries (i.e., a location quotient higher than one), and will, therefore, need an above-average level of knowledge and skills in their workforces. Very few regions in the world, however, can generate sufficient levels of talent just from their local population and education institutions. To be truly on the cutting edge of technology and business, regions will need to attract talented people from elsewhere in their country or from other countries.

Figure 5 shows the percentage of the population of the benchmark regions with the equivalent of a bachelor’s degree or higher, along with the percentage of degree holders nationally. All of the regions have equal or higher levels of college education than their national levels. Metropolitan areas tend to have higher education levels than small cities or rural areas, so this is expected. Nonetheless, these regions have been successful in attracting individuals with college degrees from the rest of their country or from other countries.

**Migrants tend to be young and well educated**
In the developed world, people who move voluntarily to a new and distant community (as opposed to those who are displaced by wars, economic collapse or natural disasters) tend to have three key
characteristics:

**Young.** The age group with the highest propensity to move voluntarily to a new, distant community is the 25-to-34 year olds. They have completed their schooling and have a good idea of what career they will pursue, but they may not have put their own personal roots deep into a community.

**Single.** With only one career to worry about, those who do not have spouses, life partners or children have far more flexibility when it comes to relocation. In addition, single people can find more flexible housing arrangements, allowing them to move to high cost areas while their earnings are still low.

**College educated.** People with college degrees are more likely to find their skills in demand in a new community and, in turn, are more likely to find interesting and unique work opportunities (Kodrzycki 2001). The higher incomes and career advancement opportunities enjoyed by the college educated constitute a worthwhile trade-off for moving away from family, friends and familiar surroundings.

**Conclusion: a welcoming region will become more productive**

A region with a strong flow of net in-migration will become more prosperous for two reasons. First, the agglomeration effects of general growth mean larger regions tend to be more productive, and the only way to get larger is to welcome in-migrants. Second, in-migrants to sophisticated regions such as the benchmark regions will most often bring high education and skill levels, raising the overall quality of the regional workforce.

While it is certainly a good idea for regions to target in-migration on the part of people with high levels of education and in-demand skills, it is also the case that untargeted policies to attract in-migrants will have the effect of attracting individuals with high skill levels anyway. Each of the benchmark regions has a highly skilled workforce and a strong base of knowledge-intensive industries, and, as such, will tend to attract highly skilled people. Some lower skilled people will migrate to these regions to fill service sector jobs generated by the expanding knowledge-based economy, but this flow will be slowed by high housing costs (more on this below).

**II. Drivers of Migration Patterns**

People move to new communities for many reasons, including displacement, family unification or political asylum. But for our purposes, we will primarily consider two main reasons employable adults might voluntarily move to a new region: employment and lifestyles.

**Employment.** Those who move for employment may have already taken a job in a new city, or may have a high degree of confidence that their skills will be in such demand that they can easily find a new job. For those with specialized skills and ambitious personal goals such moves are a natural part of career development. Many others who move for employment purposes simply find that their home regions offer too few opportunities.
Lifestyle. Those who move for lifestyle reasons are primarily interested in quality of life, and are either financially independent or will take their chances with employment. There is a strong cultural component to this motivation, with people in some cultures, such as the U.S. more likely to move for lifestyle reasons, and people from other cultures less likely to migrate if their home region offers reasonable economic opportunity.

The two motivations – employment and lifestyle – suggest two fundamental forces in migration: push and pull.

The “push” and the equilibrium of labor supply and demand
Most people feel comfortable in their native area and would prefer to spend their lives there. But when an area offers too few economic opportunities, some of its residents will feel compelled to leave in pursuit of opportunity elsewhere. Economists view this process simply as the resetting of an equilibrium of supply and demand for labor: if capital does not move to an area with available labor, then the labor must move to the places with capital.

In the past, the “push” was the motivator for the waves of migration from Europe to North America, and today the push brings migrants from developing countries to developed countries as population growth outstrips economic development. The push also occurs in older industrial and resource areas, where factories and mines are either closing or retooling with far fewer jobs. Areas of Central and Eastern Europe have experienced the post-industrial push, as are areas of the Upper Midwestern U.S.

While push factors are mostly related to economic opportunity, cultural and lifestyle factors also come into play. Young people often want to move away from their “boring” hometown, even if it does offer economic opportunity, and to experience life in cultural hubs. Members of minority groups may feel pushed away from a community that is intolerant or uncomfortable. Weather can play an important role in location decisions, with harsh winter weather serving as a push factor.

The “pull” and the lure of economic opportunity and lifestyle
The mirror of the push factors are those that “pull” new residents to regions. All of the benchmark regions have experienced net in-migration in the past decade, and, as such,
have healthy pull factors. Just as push factors can involve both employment and lifestyle considerations, so can pull factors.

People pulled by employment opportunity fall into two categories. First are those seeking career advancement. They likely have specialized skills and knowledge and want to put those to work in businesses that are on the leading edge of their industry. These people will tend to be drawn to larger regions where, if an initial job offer does not result in long-term employment, there will be other opportunities to find career advancing positions.

A second employment pull factor comes from the higher levels of productivity, and therefore, earnings, available in other regions. This is the case for people moving from developing economies to advanced economies. An individual from a country with little capital stock will see his or her productivity, and therefore earnings, increase dramatically by moving to a country with an advanced capital stock: Operating an excavator will pay far more than digging with a shovel.

Lifestyle questions play a role in the pull of individuals to regions. There is a growing body of academic research on the role of consumption, as opposed to productivity factors in migration decisions. Production decisions – can I be more productive and earn more money? – have long dominated thinking about migration patterns, but now consumption factors – how is the weather and what kinds of restaurants can I find? – seem to be playing a larger role. (Glaeser, Kolko and Saiz 2000; Albouy 2008; Albouy 2009; Shapiro 2006; Carlino and Saiz 2008; Chen and Rosenthal 2008)

### Conclusion: a mix of motivations to migrate

The combination of push and pull, and employment and lifestyles, yields the following simple map of possible motivations for people to migrate (again, setting aside economic displacement and personal motivations such as family reunification, political asylum and education). Migrants will be motivated by some or all of these.

<table>
<thead>
<tr>
<th>Push</th>
<th>Pull</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employment</strong></td>
<td>General lack of employment, or a lack of career-specific opportunities. Low productivity and earnings.</td>
</tr>
<tr>
<td><strong>Lifestyle</strong></td>
<td>Lack of exciting cultural scenes or recreational opportunities. Unwelcoming or intolerant attitudes. Poor weather and undistinguished natural or built environments.</td>
</tr>
</tbody>
</table>
III. Relationship of Employers and Employees

As discussed, individuals who are considering moving are motivated by some combination of push and pull factors related to their employment and lifestyle needs. We cannot forget, however, that employers face their own push and pull factors that are not the same as those faced by individuals (Glaeser 2007; Chen and Rosenthal 2008).

In selecting locations for business operations, employers focus on maximizing profitability. This has traditionally meant examining “hard” factors such as land and development cost, labor availability, wages, transportation, taxes, regulations, and utilities that determine the productivity of a location. Employers would assume that the local labor pool would provide most of the talent needs, and that specialized talent could be brought in from the corporate stock. This traditional production-oriented view has changed, as employers have realized that attracting and retaining specialized talent requires some consideration of the consumption features of a location: do highly-prized employees really want to live there?

The question is, then, how do employer location decisions fit with the location decisions of high-value employees? One can imagine a virtuous cycle, shown in Figure 7, in which a region begins by attracting capable people through existing employers, its university system and an attractive local lifestyle. A growing talent pool then attracts new employers who seek a skilled workforce. This growth in knowledge-based industries, in turn, attracts even more well-educated and skilled people, and so on. Meanwhile, local governments, driven by an expanding tax base, work to create a pleasant and safe living environment with good schools, while entrepreneurs tap into the new high incomes to build attractive housing and open restaurants, entertainment venues and services businesses.

One can equally imagine a declining cycle with opposite forces. A region with stagnant or shrinking industries provides little opportunity for young people, the most talented of whom leave (Glaeser and Redlick 2008). With new university graduates and the most capable members of the workforce leaving, dynamic new industries will not locate in the region. A shrinking tax base takes its toll on local services and schools, diminishing the quality of life in the region, and lower incomes make it difficult to sustain private sector services.

Figure 8, adapted from Albouy (2009) shows the relationship between the productivity factors that have traditionally been important to business and the quality of life factors that are thought to be important to high-value employees, resulting in four basic types of regions. Let’s look at each quadrant.
A. Superstar Cities. These regions are both highly productive and offer attractive lifestyles. The term “Superstar Cities” was coined by researchers who note that these cities can continue to grow and thrive despite high housing costs, long commutes from affordable areas and often a high cost of doing business (Gyourko, Mayer and Sinai 2006). These regions are typically large, with a diverse array of employment opportunities for those with high skill levels.

B. Solid Performers. These regions have retained their basic productivity, often as government or business service centers or with more traditional industries that have retained their competitiveness. These regions, however, may be handicapped by some combination of poor weather, an unattractive natural or built environment and an unexciting cultural scene. While they offer high wages, they may struggle to attract and retain the high value employees who have many choices of where to live.

C. Downward Spirals. These regions are in trouble. They suffer from the negative feedback of declining industries and shrinking populations. Because of the challenge of attracting and retaining high value employees, they will not attract knowledge-based industries. What were often unattractive industrial areas to begin with become even more unattractive and unsafe as sites are abandoned. Declining populations leave behind half-empty neighborhoods which attract crime that the city, with a declining tax base, cannot address.

D. Retirement Havens. These regions offer a high quality of life, but less economic opportunity. These are frequently smaller regions that lack key economic drivers such as major industries, research universities and international airports. Their size makes them less likely to gain agglomeration benefits. Lifestyle attractiveness in these regions comes mostly from climate, natural surroundings and an interesting built environment, rather than from leading edge cultural scenes. These areas are most attractive to retirees, tourists and those of independent means (Chen and Rosenthal 2008). These areas often have moderate housing costs, making them affordable for those working in service industries.

Conclusion: Not all regions will be “superstars”
Data from recent research in the U.S. (Albouy 2009) shows that there is little relationship between quality of life and population growth, while there is a strong relationship between productivity and population growth. Productivity, which may be determined by traditional “hard” factors as well as the availability of specialized talent, is a necessary precondition for growth. As we will discuss below, a high quality of life can determine the type of growth a region receives, but not whether it actually grows. A
region that concentrates too much on quality of life factors and not enough on basic business productivity factors risks becoming a Quadrant D region, attracting visitors and retirees, but not leading edge industries and the high value employees who want to work in those industries (Chen & Rosenthal 2008).

IV. The Role of Amenities in Regional Development

As discussed above, a growing body of research suggests that consumption amenities and the overall notion of the quality of life, play an increasing role in urban development and growth. Since businesses, and therefore their employees, are rarely tied to natural resources or specific geographic features, both employers and workers have choices about where to locate. It makes sense for them to locate in pleasant places. Such shifts are, however, not cost-free.

The basic utility function of regional choice

The Rosen-Roback model, which has become central to urban economics, assumes a utility function for metropolitan areas that takes into account the four major factors of individual choice that cannot be traded, and will therefore vary among regions (Rosen 1979; Roback 1982; Glaeser 2007). It is assumed that consumer goods can be traded easily, and will, therefore, be priced similarly everywhere.

Wages (W). It is assumed that wages are based on productivity, so the more productive a region, the higher its average wages.

Amenities (A). As discussed below, this includes natural features as well as built features and services. Amenities are central to the notion of the quality of life.

Housing cost (H). Housing is a consumption good that cannot be traded, so the housing stock and price of housing will vary widely by region, depending on population growth and housing supply elasticity.

Transportation cost (T). Development patterns, housing markets and infrastructure all contribute to the cost of transportation within a region. Variation will tend to concern mostly commute trips. The cost of transportation includes not just hard costs but also the time taken to commute.

The utility function is:

\[ W + A - H - T = U \]

The key insight here is that in a country or group of countries with free movement of people and capital, \( U \) will be the same everywhere. After all, if one region suddenly becomes a better place to live overall (i.e the total \( U \) becomes higher than in other regions) people will move to that city and, in doing so, change some or all of the four factors until \( U \) is lowered back to the equilibrium level. But while \( U \) is constant across regions, the relative values of \( W, A, H \) and \( T \) will vary widely by region, giving people choices of where to live based on their own individual values.
We can imagine some dynamics if any of the four factors were to change. For example, consider:

**Rise in wages.** If new, very productive employers arrive, pushing up wages, the likely result will be an increase in housing prices.

**Increase in amenities.** If a region has a major improvement in its environment, for example after hosting an Olympic games, the region will attract residents which, in turn, will drive wages down and housing prices up.

**Drop in housing prices.** If a region becomes friendlier to homebuilders, and the supply of affordable housing increases, workers will be attracted and wages are likely to decline.

**Reduction in commute times.** Opening of a new rail transit system will lower commute costs from distant areas, making them more attractive and driving up housing prices.

We can also suggest the magnitude of these factors in the four types of regions, as shown in Figure 9

This utility function, and the equilibrium it requires, is critical to identifying the pull factors that will draw migrants to a region, and to understanding the role that amenities play in attracting and retaining a high value workforce. If migration is the mechanism through which equilibrium in $U$ is maintained, then raising amenity levels to attract migrants will have some offsetting change to $W$, $H$, and $T$.

**Equilibrium and housing prices in the Benchmark Regions**

The Benchmark regions would all seem to fit in Quadrant A, where high wages and a high quality of life are offset by high housing and/or commute costs. Using an amenity strategy to attract more talented people to the benchmark regions will put pressures on the housing supply. If housing supply elasticity is low, the result will be further increases in housing and commute costs. (Gyourko, Mayer and Sinai 2006). On the other hand, if a region has abundant land available for housing, along with infrastructure and a regulatory climate that makes construction easy, the housing supply can quickly expand to accommodate in-migrants, thereby keeping prices moderate and taking pressure off wages. Thus, housing supply elasticity, which is a local policy matter, drives an economically successful region toward either higher wages or higher population. (Glaeser and Gottlieb 2009)

The outcome of this decision process in superstar regions is most often towards a low housing supply elasticity, in order to lessen urban sprawl. It is widely believed that compact, attractive, center-oriented regions are preferred by high-wage workers in
knowledge-based industries. Thus, the political climate in superstar regions tends toward restrictive housing policies and, therefore, high housing prices. That is, housing prices in economically successful regions tend to be high not for economic, but for political reasons, reflecting the policy preferences of the residents (Gyourko, Mayer and Sinai 2006).

The superstar region research suggests that continued increases in housing and commute costs are sustainable as long as high wage, knowledge-based industries continue to grow nationally and internationally, and the superstar regions attract more than their share of them (Gyourko, Mayer and Sinai 2006). The downside, however, is that superstar regions are very unwelcoming to low-wage service workers. The high wage knowledge workers in superstar cities generate significant demand for service workers, but their policy preferences make housing very expensive for those workers. Thus, a talent attraction strategy that does not allow for an increased housing supply will result in a shortage of service workers.

Conclusion: Talent attraction strategies have demographic and economic impacts
The success of the Benchmark regions and other superstar regions, and the challenging position of Quadrant B regions, clearly demonstrate the necessity of attracting talented people to increase the productivity of the workforce and to encourage high value, knowledge-based industries. But this process has consequences for wages, housing prices and commutes, as indicated in the basic equilibrium equation.

An amenity-based strategy, as will be discussed next, may increase the attractiveness of a region to talented people, and perpetuate the virtuous cycle of growth seen in Figure 7. It will, however, have implications for the other three factors, especially housing and commute costs. Because the high value employees being recruited to a region will be, in some sense, exempt from these higher costs, it is easy to ignore them. The impact, however, is felt by service and other low wage workers who may be relatively indifferent to the quality of life that the amenity strategy provides. Given a choice, low skilled workers may prefer a Quadrant B or Quadrant D region where they can have a more affordable home. Many people who are born and grow up in superstar regions can find themselves forced out of their hometowns by the success enjoyed by the region in attracting high value workers.

V. Amenities and Talent Attraction

It is reasonable to assume that when a person who must earn a living makes a decision to move to a new region, their first consideration will be the employment prospects of their destination. Research in the U.S. where mobility is high, found that “cities with improving business environments acquire increasing shares of workers, especially workers with high levels of human capital.” (Chen and Rosenthal 2008). Regions represented by three of the four quadrants of Figure 8 offer good employment prospects (although Quadrant D regions will not pay very well) and Figure 9 shows that individuals can choose regions that offer different combinations of benefits in terms of wages, amenities, housing costs and commutes. Some migrants may choose the boring
but comfortable lifestyle of a Quadrant B region, while others may choose the relaxed but less ambitious lifestyle of a Quadrant D region.

For our purposes, however, we will consider those potential migrants that value both the high quality of life and excellent career prospects offered in Quadrant A regions, the "superstars." They are willing to see a large share of the high wages they earn soaked up in high housing costs and/or long commutes in order to enjoy the amenities available in the superstar region. So, let’s look at the amenity question and see what sorts of amenities might fit into a regional talent attraction strategy.

**Four categories of amenities**
The amenities offered by a region can be divided into four basic categories:

**Natural environment.** The most significant of these is the weather – people tend to prefer locations with mild, coastal climates. It also includes the natural setting of the region, its topography, flora and fauna. Natural environmental amenities also include access to natural features in the wider region, such as mountains, seashores, countryside and forests.

**Social environment.** An in-migrant will want to move to a place they will feel comfortable. Social environment considerations include attitudes towards outsiders (whether from within the country or outside) and those with varying lifestyles, ethnicities, sexual orientation or native language. It is also important to note whether a region has a strong support network for expatriates.

**Built environment.** This includes both public and private buildings and spaces. Many of those researching local amenities place an emphasis on urban design, walkability, historic preservation and generally interesting architecture. The quality of the built environment also measures the functionality of infrastructure, the mobility of people and goods, and the quality of air and water.

**Public and private services.** This includes a wide range of public services offered to residents, including schools, police and emergency services, public cleanliness, recreation, libraries and community centers, museums etc. It also includes privately provided services such as stores, restaurants and entertainment venues.

These four categories are listed in order of the ease of improving upon them. There is very little a local government can do to improve upon its natural environment, other than ensuring that it is clean, views are protected, and important features are accessible. The social environment is the product of history and local custom, and can be a challenge to alter. Local governments can change the built environment, and often do. Changes to the built environment are, however, frequently expensive, and governments often have limited ability to shape privately-owned buildings and spaces.

Services are the easiest to change, as they usually involve less fixed investment. Improvements to public services do, however, require expenditures of tax money and possibly changes within government organizations. Privately-offered services are often the province of small businesses that require a favorable business climate: the services
that seem most valued by highly skilled workers – bars, restaurants, galleries, clubs – are among the most fragile of business enterprises.

**Which amenities are most important?**

Ideally we would like to have a menu of amenities that we could be confident would have the desired effect of attracting the high skilled workers that the benchmark regions want. It would be nice if it were so simple. The fact is, however, that individuals have widely differing preferences, based on their personal values, the subcultures they may inhabit, and the stage of life they find themselves in.

A group of researchers at the University of Chicago have expanded the idea of amenities to get beyond the question of individual features (Silver, Clark and Rothfield 2005). They believe it is possible to combine built elements and social attitudes with cultural and commercial features to create “scenes” that appeal to specific demographic groups. This is related to Florida’s emphasis on Bohemian lifestyles, but indicates that Florida’s Bohemian urban fabric is just one of many scenes that a region might host (Florida 2002). After all, while some valuable workers are drawn to Bohemian scenes, others are drawn to more conservative or more family-oriented scenes. If Florida is correct that the creative class encompasses 30 percent of the workforce, there is ample room in any region to foster many distinct scenes that will appeal to the diverse workforce that falls under the “creative” rubric. Furthermore, individuals are not tied to a single scene, but can sample multiple scenes, going to a punk club on Friday night and attending an opera on Sunday afternoon.

The evolution of a scene is mostly organic: authenticity is a key feature of a scene, so it is difficult to create a scene from nothing. It is possible, however, to build on existing assets that have inherent authenticity to create a coherent scene. For example, Markusen (2006) found that artists are drawn to a region by institutions and infrastructure which can be provided strategically. Thus, by providing support networks, necessary space and employment opportunities, a community with an existing base of artists could create a thriving arts scene with national or international renown.

The Chicago work describes 12 distinct scenes, and no region can or should expect to offer residents the opportunity to immerse themselves in all 12. Nor, however, can a region expect to attract a wide range of talented people by having a monochromatic culture, no matter how cutting edge it may be. A region with a healthy base of amenities can package them into multiple, varying scenes that will appeal to individuals and families from different backgrounds and allow them to shift their scenes as their personal preferences change throughout their lives. As will be discussed below, the concept of scenes can provide a helpful framework for building an amenity strategy to attract and retain a high value workforce.

**Disamenities that keep people away**

Much of the discussion of labor mobility concerns the many barriers that keep people from moving, especially language and cultural issues. A review of talent attraction
strategies shows an emphasis on making in-migrants from foreign countries feel welcome and providing social and business networks for expatriates.

These issues are, however, very country and region-specific. Four of the benchmark regions are in Anglophone countries with long traditions of immigration, presenting few cultural barriers to hundreds of millions of potential migrants. Most of the benchmark regions are in countries that have large enough populations that they can draw significant talent domestically, avoiding language and cultural issues. Some of the benchmark regions are in small countries and must look outside their national borders for talented migrants, and, therefore, must consider culture and language issues.

The most significant potential disamenity, and the one regions can do nothing about, is weather. Research has shown that weather can play a large part in domestic migration decisions. In studying U.S. regions, Rappaport (2007) finds that “the movement to nice weather [cannot] be primarily explained by shifting industrial composition or by elderly migration. Instead, a large portion of weather-related moves appear to be the result of an increased valuation of nice weather as a consumption amenity, probably due to broad-based rising per capita income.” Cheshire and Magrini (2004) similarly found that regions with better weather attract migrants domestically, but they also found that weather was not a factor in decisions to migrate to other members of the EU12.

Figure 10 shows the annual temperature range and annual rainfall for the benchmark regions (Melbourne's high and low months are reversed). For comparison, Figure 10 also shows weather patterns in San Diego, a city often thought to have the most attractive climate in the U.S. With the prevalence of air conditioning, high summer temperatures have become less of a concern, but low January temperatures and high annual rainfall can be cause for concern. Rappaport's study (2007) of the relationship between weather and migration in the U.S. placed the Seattle region among the least attractive locations for weather, due to its high number of cloudy days.
VI. Creating a Talent Attraction Strategy

To begin the discussion of how to create a talent attraction strategy, let’s review some of the basic ideas about talent migration from the discussion above. These conclusions are far from settled fact, and given that most of the research on this topic is relatively recent, they will not be completely tested for a while. But these notions do provide useful guidance for policy-makers as they work toward talent attraction strategies.

1. **Migration is critical for future economic success**
   Migration is necessary for prosperity for two reasons. First, more populated regions will tend to be more productive and have higher incomes than smaller regions, so unless there are challenging natural barriers, it should be to a region's advantage to grow. And with natural population growth near zero in much of the developed world, the only way to grow is to attract in-migrants. Second, a highly productive region requires a highly educated workforce, and no region has the capacity to provide enough educated people. Migrants tend to be more highly educated, so in-migration to regions in developed countries will tend to increase the share of the population with college education.

2. **Economic opportunity takes precedence over lifestyle**
   In developed countries, labor mobility is a product of two main factors: economic opportunity and lifestyle enhancement. Regions, in turn, compete for talent based on the productivity of their industries and the quality of life they offer. Although lifestyle considerations and consumption values are becoming increasingly important, productivity and job growth are necessary for overall economic growth. In other words, simply enhancing the quality of life of a region will not, by itself, contribute to economic or population growth beyond an increase in resident retirees.

3. **Competition for talent is waged among high productivity regions**
   The competition for talent pits highly productive regions against one another. Less productive regions cannot get into the game until they find a way to attract high value jobs and employers to launch the cycle in Figure 7. For those highly productive regions that can offer economic opportunity, the competition becomes based on quality of life. Mobile high-value workers will have choices among highly productive regions and will choose a region based, in part, on the degree to which that region offers an attractive lifestyle.

4. **"Superstar" regions have both high productivity and high quality of life**
   Superstar regions can maintain the virtuous cycle shown in Figure 7, where the presence of high-productivity employers attracts a pool of high-value talent, and, in turn, that pool of talent attracts more employers. In providing an attractive lifestyle, such regions often have natural advantages, but even if those advantages are modest, all superstar regions will provide fertile ground for public, private and non-profit “entrepreneurs” to offer a compelling built and service environment.

5. **Migration decisions have a push and a pull component**
   Individual decisions to migrate to a new region are the result of both a push and a pull. Before deciding where to move, people need a compelling reason to leave the region...
where they currently live. Thus, the most likely way to recruit talent will be to target regions that have weak employment opportunities and/or unattractive lifestyle options. The regions in Quadrant A of Figure 8 can recruit high value workers from the other three quadrants by offering better opportunities, a more attractive lifestyle, or both.

6. Households trade off housing costs and commute times against wages and amenities
Success comes at a price. As regions become economically successful with growth in employment and wages, they will see two potential market responses. In a region where housing construction is easy and land prices are low, there will be population growth, as employers with a range of wage levels move in. In regions where housing construction is difficult, housing prices will rise and only high-productivity employers will move in. In the latter case, the price is paid by service workers who cannot afford the high housing prices and must live in distant communities and endure long commutes.

7. Amenities can be packaged into “scenes” that appeal to specific demographic groups
Consumers of culture tend to look for a package of services and amenities that make up a comprehensive “scene” that they enjoy and can participate in. These can range from the most avant garde music and arts scene to the most conservative, child-oriented or retirement-focused scenes. Individuals can immerse themselves in a single scene, or can participate in multiple scenes. Regions that are targeting certain demographic groups for in-migration can concentrate on fostering the scenes most appealing to those groups.

Components of a talent attraction strategy

1. Conduct a SWOT analysis
This simple analytic tool, illustrated in Figure 11, can be used to identify priority actions for a talent attraction strategy.

2. Define the economic opportunity the region offers
It cannot be overemphasized that the first thing a potential migrant looks for is economic opportunity: a job. The strategy, therefore, must begin by identifying the economic opportunities that the region can realistically offer. In what ways can employers in the region offer migrants the chance to make their labor more valuable than it is in their current location? What sectors and firms are growing, and what specific fields and skills are expected to experience shortages?

3. Identify sources of potential talent: who is experiencing a “push.”
As noted, most people would like to stay in their home region, so the most likely sources of new talent will be regions that are experiencing a "push." The factors that are pushing talented people out of their region may be structural, such as a generally declining industrial base, or more temporary, such the closing of a major employer. In looking for regions that have a structural or temporary surplus of skilled labor, it is helpful to target those that have major universities, the graduates of which will have few good job prospects. It is also helpful to look first to regions that present the fewest
<table>
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| **Strengths** | Universities  
Global recognition – high top-of-mind recall  
Favorable overall image  
Economic growth and overall job opportunities  
Leading edge industries – high productivity and wages  
Attractive central city  
Wide range of cultural and entertainment offerings – multiple "scenes"  
Varied and affordable housing, easy commutes  
Open, welcoming culture  
Pleasant climate and natural setting  
Strong expatriate networks and institutions such as schools |
| **Weaknesses** | Stagnant economic growth  
Prevalence of traditional manufacturing industries  
Low global recognition – low recall  
Poor or outdated image  
Cold, wet climate, few natural features of interest  
Emphasis on traditional cultural offerings – only conservative “scenes”  
High housing prices, difficult commutes  
Closed culture, not welcoming to outsiders or non-traditional lifestyles  
Language and cultural barriers – region-specific language  
Lack of opportunity for spouse employment |
| **Opportunities** | Retain university graduates  
Attract students to university  
Target potential migrants from Quadrant B and C regions  
“Package” industry clusters with high location quotients to enhance identity  
Enhance existing “scenes” to build national and international identity  
Create new “scenes” from existing assets  
Utilize existing social and professional networks to provide in-migrant support  
Learn from employee transfer practices of existing multi-national firms |
| **Threats** | University brain-drain  
Competing Quadrant A regions  
Losing productive employers and becoming a Quadrant D region  
Allowing amenities to degrade and becoming a Quadrant B region  
Negative images in media from uncontrollable events  
Image-builders with short life spans – becoming “yesterday’s news”  
Nativist movements – anti-globalization sentiment  
Anti-growth sentiments, leading to restrictive housing policies  
Political friction driven by the social inequity of high housing prices |
barriers to mobility, such as language and cultural differences, and varying treatment of professional credentials.

4. Catalog the region's positive "pull" factors
The "strengths" part of the SWOT analysis will yield a list of assets that the region can use to distinguish itself from other regions that offer similar economic opportunities. These assets will form the core of communications products, but must first be tested with key audiences to find out which are most important.

5. Identify the region's barriers to "pull"
The "weaknesses" part of the SWOT analysis will yield a list of factors that make the region less attractive to potential migrants. Some structural impediments, such as weather, cannot be mitigated, while other structural issues, such as language or legal immigration barriers, can be mitigated partially. Other impediments, such as a lack of support for expatriates, can be changed through specific programs.

This list of impediments will result in a prioritized list of strategic actions designed to overcome the identified barriers. This could include infrastructure improvements, enhancements to the built environment of the region, new or enhanced government services, and programs specifically designed to meet the needs of in-migrants.

6. Assess the region's current image and positioning and describe the preferred image
Every region has some image in the eyes of the world. That image may be fair or unfair, it may be current, or out-of-date, and it may be flattering or unflattering. But in any case, it is real and must be addressed honestly. Image assessment can be done through formal research, or may be done through informal inquiries and media searches. The results of this research will be a "brand image" statement, which serves as the starting point for any rebranding that must be done.

If the current image of the region is not accurate or flattering, a new, preferred image can be described. This new image must, however, be based on a realistic assessment of the region’s strengths. It must also be unique and "sticky" enough to distinguish the region from other, competing regions. Remember, other regions are competing for the same pool of talent and likely have a similar notion of what factors attract that talent.

A region may also consider undertaking a major positioning project or event. The most obvious such effort is to host an Olympic games, but other less ambitious events or projects can serve the same purpose, such as Bilbao’s hosting of the Guggenheim museum.

7. Communicate!
With a target audience identified, and a clear set of advantages to promote, it is time to launch a communications program. The details of a communications program are beyond the scope of this report, but should include both traditional and social media. The ultimate goal of the communications program is to create a “buzz” about the region that reinforces the brand positioning. The “air cover” of the overall communications
program should support layers of information about specific opportunities and relocation assistance.

8. Be prepared for unintended consequences
If the strategy is successful, and new people move to the region, there will be consequences for housing, transportation and public services. There may also be social tensions as new high-wage in-migrants displace current residents.

Conclusion
The ten benchmark regions have been successful economically and have, for the most part, grown faster than their nations. They are attractive places to live and offer good economic opportunity to talented people. But as the superstar city research makes clear, only a limited number of regions in the world can continually outperform the rest and attract the highest level of talent and entrepreneurship. There is a great deal of competition for the enviable position enjoyed by the benchmark regions, and that competition is seen in the efforts of regions to attract the world’s most talented people.

The larger challenge for the benchmark regions will be to sustain a high level of talent attraction effort in the face of continued success. But the regions must sustain this effort, because things can change so rapidly. Regions that have been dependent on heavy industry declined over decades as equipment and processes gradually became obsolete. The process of decline in the knowledge age can be much faster, since all that is required for decline is the departure of people and, more importantly, the disinclination of new talented people to arrive. In our era, a brain drain can happen quickly.

The strategic framework described in this report is not complicated, and much of the information needed is readily available. Most of the target audiences are far more attuned to electronic and social media than to traditional media, so information delivery can be inexpensive. The strategic actions designed to make a region more attractive to in-migrants will, of course, benefit existing residents and help retain talented people. So, in the end, a talent attractions strategy serves the larger purpose of making the region a good place for everyone to live and work.
Citations


Appendix A - Is the “Creative Class” Different?

In his first book, "The Rise of the Creative Class," (2002) and in subsequent books and articles, Richard Florida created a framework for thinking about talent attraction and retention. Critical to this framework is the role of place. Florida sees the creative class as mobile and cosmopolitan, able to locate in regions that will offer the best combination of economic opportunity and lifestyle. Contrary to books like "The World is Flat," that suggest geography does not matter, Florida asserts that "place has become the central organizing unit of our time" (6). In previous eras, businesses were the organizers of talent, assembling and assigning people to the most appropriate jobs, whereas today pools of talent assemble themselves in regions, with the local job market distributing individuals to firms. If employment is contingent, place becomes more permanent.

Florida offers specific descriptions of what members of the creative class are looking for when they decide where to live: “the Creative Class lifestyle comes down to a passionate quest for experience . . . a creative life packed full of intense, high-quality multi-dimensional experiences . . . They like indigenous street-level culture – a teeming blend of cafes, sidewalk musicians, and small galleries and bistros, where it is hard to draw the line between participant and observer or between creativity and its creators” (166).

Economic development professionals around the world were immediately attracted to Florida's work, sensing that it provided an easy prescription for attracting a high value workforce (Lang and Danielson 2005). Regions began to look at themselves in terms of Florida’s formulations, such as the “Bohemian index,” and the degree to which they are perceived as offering the sorts of experiences that Florida claims are necessary to attract a creative workforce. As an academic writing for practitioners and a popular audience, Florida came under considerable criticism for his methodology. Of concern here, however, is the basic question of whether his prescriptions make sense for metropolitan regions and whether he provides a useful framework for talent attraction strategies.

The first challenge when trying to apply Florida’s formulations is defining the creative class and isolating its needs from the needs of other groups. He begins with a creative “core” that comprises about 12 percent of the U.S. workforce, and then adds other occupations that have some creative component, and ends up with a creative class comprising about 30 percent of the U.S. workforce. The remaining 70 percent of the workforce falls into three other classes: “working class” (25 percent); “service class” (43 percent); “agricultural class” (2 percent). Can we generalize anything meaningful about a group this large? Although much of the attention to Florida’s work has centered on his prescriptions for attracting young, mobile people who are looking for an exciting urban environment, he does take pains to note that a successful region will offer a variety of settings that appeal to not just the young and fashionable, but also to those looking for a more sedate suburban environment. Glaeser (2005) in particular disputes Florida's claim that “creative” people are somehow different from everyone else: “I’ve studied a lot of creative people. Most of them like what most well-off people like.”
The creative class as described by Florida seems to require higher education for entry: the professions described nearly all require at least a bachelor’s degree. Given that 26 percent of the working age population of the U.S. holds at least a bachelors degree, we can ask whether there is a meaningful distinction between Florida’s creative class and the population of degree holders. Glaeser (2005) analyzed Florida’s own data and found, in fact, that rates of higher education explain nearly all of the differences that Florida found between various regions of the country.

Markusen (2006) takes issue with the generalization of a large creative class, noting that within Florida’s definition are sub-groups that tend to have very different tastes and preferences. Her study of artists shows that rather than responding to the general urban features that Florida claims attract people in the creative professions, "Artists’ spatial distribution is a function of semi-autonomous personal migration decisions, local nurturing of artists in dedicated spaces and organizations, and the locus of artist-employing firms." She further argues "the implausibility of [artists’] common cause with other members of Florida’s creative class, such as scientists, engineers, managers and lawyers."

A second challenge to applying Florida’s work is understanding the relationship between quality of life and economic growth. Florida seems to suggest that if regions pay enough attention to attracting talented people, they can achieve economic growth. Albouy (2009), however, finds that there is little relationship between quality of life and population growth, whereas there is a strong relationship between productivity and population growth. This suggests that it is the quality of the existing firms in a region that determine whether it will grow, and not the quality of the living environment.

Indeed, each of the regions that Florida cites as successful have a strong base of existing businesses that continually attract talent. For example, Silicon Valley was built on a base of military contractors and large manufacturers such as Hewlett Packard. Florida does not provide any examples of regions that have grown purely because they were able to attract talent through quality of life factors.

The extensive surveys conducted by the international research project ACRE (Accommodating Creative Knowledge – Competitiveness of European Metropolitan Regions within the Enlarged Union) found that the location decisions of creative and knowledge workers were mostly motivated by job availability and family considerations, with "soft" factors playing a relatively small role.

Florida seems correct that place is very important to the distribution of talent, but may overstate the importance of lifestyle factors. The quality of the existing base of businesses will be more determinative of economic success than the quality of life. As noted above, too much attention to quality of life with too little attention to productivity will result in a Quadrant D region that attracts visitors and retirees, but will offer little to high value workers. Florida is also correct in his emphasis on appealing to younger workers. While the creative class will encompass workers of all ages, those between 25 and 34 years old are the most likely by far to move to a new region, so an extra effort to attract young people is warranted.
Background

In 2008, the Puget Sound Regional Council and Trade Development Alliance of Greater Seattle developed the first-ever International Regions Benchmarking Consortium. This Consortium is a network of sophisticated city-centered metropolitan regions that find it mutually beneficial to compare and learn from each other through economic and social data statistics and in-depth research into specific issues of common interest. Microsoft and Boeing each provided substantial funding to launch the Consortium.

The member regions of the Consortium are:

- Barcelona, Spain
- Daejeon, South Korea
- Dublin, Ireland
- Fukuoka, Japan
- Helsinki, Finland
- Melbourne, Australia
- Munich, Germany
- Seattle, USA
- Stockholm, Sweden
- Vancouver, Canada

The International Regions Benchmarking Consortium is administered by the Puget Sound Regional Council and Trade Development Alliance in Seattle, USA.

For more information, visit www.internationalregions.org

Acknowledgments

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