Attracting the Power Cohort to the Tenth District

By Kelly D. Edmiston

A long-debated issue in regional economics is whether "people follow jobs" or "jobs follow people." That is, do people move to where jobs are available, or do employers locate their facilities where potential employees reside? If people follow jobs, an appropriate economic development policy would be to concentrate on luring employers, especially large employers. This view reflects many traditional state and local economic development policies. If, on the other hand, jobs follow people, a better policy would be to focus on luring skilled people by creating an environment that is an attractive place to live.

Increasingly, state and local economic development agents are following the latter policy. In particular, many state and local governments are seeking to attract a "power cohort" of young, childless, college-educated residents.[1] These people are not only attractive to employers but are typically more responsive to the quality of the urban milieu, which can be influenced by policy. Because singles are generally more mobile than families with school-aged children, much of the economic development effort is focused on that subgroup, but the effort also focuses on childless couples.

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In the Tenth District, most cities are relatively weak in attracting this power cohort. Specifically, the district cities as a whole attract fewer migrants from this cohort than would be expected given their populations, wage levels, and housing costs. This fact raises an important question: Why?

This article argues that the relative performance of migration across Tenth District cities—and elsewhere in the United States—is largely a function of two sets of factors. The district does well based on the first set of factors: unemployment, wages, and taxes. The district is relatively weak based on the second set of factors: cultural and recreational amenities, intellectual capital, topography, and crime.

The article begins by discussing why the power cohort plays a key role in the economic development of cities and how quality of life is important in attracting the cohort. The second section describes trends in the migration of the power cohort in the district and the nation. The third section discusses the factors that influence the cohort's migration to cities and explains how each factor can be measured. The fourth section discusses presence of the factors in the Tenth District cities.

I. QUALITY OF LIFE, MIGRATION OF THE POWER COHORT, AND ECONOMIC DEVELOPMENT

Today's knowledge-based economy has reshaped many of the ways that companies, workers, and cities interact. Companies typically no longer seek to locate in places that offer low-cost combinations of labor, raw materials, land rent, taxes, and transportation and utility costs. Instead, most growing companies today seek locations that already have a sufficiently educated and trainable workforce. Such workers have become scarcer, more independent, and more likely to move to places they find attractive, making the competition among cities to attract new businesses focus first on attracting workers.

The competition for attracting talented workers is intensifying. A recent survey by McKinsey & Company found that no other global trend was considered as significant as this competition (Guthridge). Many technology companies are tapping overseas talent markets and have lobbied vigorously to have the H-1B program expanded in an effort to fill voids in skilled technology positions (Deloitte & Touche; Rapoza). A 2007 survey of 1,000 hiring managers by Robert Half International revealed a significant shortage of workers educated in ac-

counting and finance, as well. In a survey by the National Association of Manufacturers in 2007, 80 percent of respondents revealed a shortage of skilled workers (Twarog). Finally, many employers have made increasing efforts to retain older workers in an effort to compensate for an insufficient number of highly skilled workers among younger cohorts (Pethokoukis).

In addition to this shortage, ties are weakening between individual workers and the firms that employ them. In *Free Agent Nation*, Daniel Pink argues that the 21st century has unleashed a new way of working, increasingly dominated by the entrepreneurial "free agent." Such a worker "operates on his or her own terms, untethered to a large organization, serving multiple clients and customers instead of a single boss" (p. 25). Pink's case for a free agent economy may be overstated to some degree (Clark).[2] Still, there is significant evidence that workers are becoming more entrepreneurial and footloose. With these weaker ties, workers are freer to consider quality-of-life issues in where they choose to reside.

Ties between employers and workers are further weakened by more prevalent job-switching. Young, college-educated workers are especially likely to change jobs frequently relative to young workers without a college education (U.S. Bureau of Labor Statistics, 1998/99). Workers in the Millennial generation, born after 1980, are particularly willing to switch jobs, considering their professional careers as "a series of two- to three-year chapters" (Guthridge, p. 51).

As a result of the difficulty in finding highly skilled workers, an increasing trend today is for firms to seek out locations where the workers they need are located rather than places that offer the lowest direct costs. While these firms are not likely to find a sufficiently large pool of potential workers waiting somewhere for the right employer to move in, they can move to the kind of place where they know the employees they need will be attracted. These are places with a high quality of life, usually cities. Glaeser notes that "the future of most cities depends on their being desirable places for consumers to live. As consumers become richer and firms become more mobile, location choices are based as much on their advantages for workers as on their advantages for firms."[3]

Richard Florida argues that certain cities, which he terms "creative centers" are successful not because of access to natural resources or transportation, nor the availability of tax incentives and other firm

location inducements, but rather "because creative people want to live there" (2002, p. 218). Jobs then follow "creative people" to these booming "creative centers," or else jobs are created in these locations by creative entrepreneurs living there.

Florida defines creativity as "the ability to create meaningful new forms" and characterizes it as the attribute required to function in knowledge jobs (pp. 4–5). Thus, "creative people" include not only artists and musicians, but also information technology specialists, financial analysts, and engineers. He defines a "creative environment" as a place that offers not only "opportunities and amenities, but openness to diversity, where [creative workers] can express themselves and validate their identities" (p. 11). A survey of over 27,000 people conducted by the Gallup Organization found location to be nearly as important as job satisfaction in determining happiness (Florida 2008).

This article explores some of the factors that attract the power cohort in this environment of high-skilled labor scarcity, increasingly knowledge-based work, and weaker ties between employees and employers.

II. DATA

To identify the factors that influence the migration of the power cohort, this section uses relatively simple statistical methods and a variety of data on U.S. metropolitan areas. The primary data used in the analysis are migration flows, or the movement of residents from one location to another.

An area's annual population growth is determined by the effects of migration, along with the rate of natural increase of the population:

$$\textit{Population Change} = \textit{Births} - \textit{Deaths} + \textit{In-Migration} - \textit{Out-Migration} \quad (1)$$

In-migration represents the flow of movers into an area, while out-migration represents the flow of movers out of the area. The rate of natural increase (births less deaths) is positive in every community of significant size in the United States. Thus, if a location is losing population, the cause is negative net migration (the difference between in-migration and out-migration).

Migration studies typically examine net flows of migrants, but this article focuses on gross inflows of migrants for several reasons. First, this analysis requires data on the metro areas, and recently aggregated data on net migration below the state level are not readily available.

Second, the *Current Population Survey's March Supplement*, published by the U.S. Census Bureau, contains data on movers and the metro areas where they live at the time of the survey, but their previous locations are revealed only at the state level, preventing a study of net migration at the metro level. As a result, this analysis uses data from the *Current Population Survey*, which is available annually. The analysis focuses on migration data from 2003-04 to 2007-08, the latest data available when this article was written.

Another problem might arise if the factors that a mover considers in choosing where to live are fundamentally different than the criteria the mover uses in deciding whether or not to leave in the first place. The use of in-migration would capture the former, while data on out-migration would capture the latter. Net migration would likely capture both. If those who live in, say, New York, consider the same set of factors in deciding to leave New York that they do in deciding where to move, the problem is not likely to be severe. This article, by analyzing data on in-migration specifically, takes the perspective of someone who has already made the decision to leave and now is deciding where to move.

III. MIGRATION TRENDS FOR THE POWER COHORT IN THE TENTH DISTRICT

Millions of Americans make major moves every year, including thousands in the Tenth District. From 2007 to 2008, almost 5.6 million Americans moved from their state of residence (U.S. Census Bureau, Current Population Survey). During the same period, roughly 533,000 people moved to Tenth District states.[4] These migration figures for 2007-08 were significantly less than in recent years due to the recession.

Much of the cross-state migration in recent years has been due to the power cohort—that is, the young and college-educated, especially those without children. The 25-34 age group moved the most (the 18-24 age group was actually more mobile, but this group includes many students attending college outside of their hometowns). Roughly 10.4 percent of the 25-34 population moved outside of their county of residence in 2004-05, compared to 7.9 percent in the recession year 2007-08. Consistently, across years, about half of migrants move out-of-state. The next most mobile age group (35-44 years old), moved away from their county of residence at less than half the rate of the younger group in 2007-08.

The mobility rate of the young with a college degree is almost twice that of those without a college degree. The mobility rate for those with advanced degrees is even higher (Kodryzycki).

Among the young and college-educated, the mobility rate is highest for those who are childless. From 2007 to 2008, the rate was 2.4 percent for singles, 2.0 percent for married couples with no children, and 1.4 percent for families with children between the ages of six and seventeen years.

Migration to Tenth District cities

A critical issue for policymakers, businesses, and economic development practitioners in the Tenth District is the performance of its cities in attracting the power cohort. One way to measure this performance is to compare migration across Tenth District cities to migration for cities across the U.S. As an initial point of analysis, a basic equation was estimated to show how the migration of the power cohort relates to wages, housing costs, and population:[5]

$$\text{Migration} = \underset{(1{,}940)}{-6{,}156} + \underset{(2.26)}{10.1}[\text{wage}] - \underset{(21.1)}{49.8}\,[\text{housing costs}] + \underset{(0.0005)}{0.012}[\text{population}] + \text{remainder}\partial \quad (2)$$

As expected, higher wages induce more power cohort migration, and higher housing costs lead to less power cohort migration. Metro areas with larger populations attract the most power cohort in-migrants.

The results of this analysis can be used to judge the relative performance of Tenth District cities in attracting the power cohort. For each city, the average wage, value of the housing costs index, and population are inserted into the model to reveal the expected amount of migration. The actual level of migration is then compared to this figure.

For most of the Tenth District's larger metro areas (defined here as those with populations that exceed 500,000), the attraction of power cohort movers was weaker from 2004 to 2008 than would be expected given their populations, average wages, and housing costs (Table 1).[6] Denver was the exception. Denver's actual annual migration of the power cohort in the period was 41 percent higher than would be expected given its population, average wages, and housing costs (column F). Other metro areas in the district fell far short of expectations over the period. Wichita's annual power cohort migration was 52 percent lower than expected, while Colorado Springs was 43 percent lower.

Table 1

BASIC ATTRIBUTES OF LARGE TENTH DISTRICT METROPOLITAN AREAS AND ACTUAL VS. EXPECTED MIGRATION OF THE YOUNG, COLLEGE-EDUCATED, AND CHILDLESS

Metropolitan Area	Migration (Estimate)	2004 Population	Monthly Wage† (Avg)	Housing Cost Index (Avg)	Expected Migration (Estimate)	Net‡ *Relative Performance*
	A	B	C	D	E	F
Albuquerque, NM	7,294	780,775	$1,101	99.8	8,897	(1,603) 82%
Colorado Springs, CO	4,023	589,067	$1,149	91.0	7,056	(3,033) 57%
Denver, CO	45,886	2,407,846	$1,482	110.2	32,465	13,421 141%
Kansas City, MO-KS	24,118	1,936,717	$1,364	88.6	25,638	(1,520) 94%
Oklahoma City, OK	8,849	1,144,371	$1,070	79.6	13,024	(4,175) 68%
Omaha, NE-IA	8,254	805,966	$1,252	74.0	10,767	(2,513) 77%
Tulsa, OK	11,046	901,101	$1,052	67.8	10,481	565 105%
Wichita, KS	3,211	588,032	$1,066	79.8	6,685	(3,474) 48%

† Adjusted for cost of living

‡ The net is actual migration less expected migration (column A less column E); Relative Performance is the ratio of actual migration to expected migration

Colorado Springs is geographically very close to Denver and shares many of its natural amenities, but the analysis below shows that the two cities differ in many ways as well. Oklahoma City migration was 32 percent lower than expected, and Omaha was 23 percent lower. Tulsa and Kansas City performed about as expected.

IV. ANALYTICAL RESULTS

Why have most Tenth District cities fallen so short in attracting the power cohort over the past few years? And why has Denver performed so well? To answer these questions, this section examines the economic factors and quality-of-life issues (amenities in particular) that attract these people.

The section uses regression analysis with principal components. The principal components methodology enables a large number of re-

lated factors to be aggregated into a single composite. At the same time, it is possible to identify the relative importance of each related factor, while maintaining precision in the estimates.

The metropolitan economy

The young and college-educated commonly are thought to be less sensitive to the economic environment in making migration decisions than some other cohorts, concentrating instead on general quality-of-life issues, such as climate, topography, and cultural and recreational amenities (Dougherty). Examining the effects of unemployment rates, wage levels, and tax burdens, however, reveals that economic factors are in fact critical determinants of the location preferences of the power cohort.

Conceptually, the likelihood of finding work, and economic opportunities more generally, is a decisive factor in migration decisions. According to data from the Current Population Survey, from 2003 to 2008, about 40 percent of the power cohort that moved out of state did so to take a new job or accept a job transfer. About 4 percent moved specifically to look for work. Moreover, for those deciding whether to move for noneconomic reasons, say to be closer to family, the difference in current and expected incomes may be a deciding factor. In addition, for married couples without children, job opportunities for spouses were likely a common factor.

This analysis uses the unemployment rate as a measure of economic opportunities in destination cities. A potential mover would likely compare current and expected income in the location decision. The higher the unemployment rate in the potential new location, the lower an expected income would be for any given level of wages. Much of the research on the relationship between unemployment and geography suggests that migrants would accept higher unemployment rates, and therefore a greater potential to be unemployed, in return for potentially higher wages. If true, then migration may not be correlated with unemployment rates. Indeed, most empirical migration studies find weak links at best between unemployment and migration. However, this analysis accounts for differences in wages in measuring the effect of unemployment on migration. Thus, the unemployment rate would be expected to be negatively related to migration.

The analysis reveals an important relationship between the unemployment rate and power cohort migration, despite the tenuous rela-

tionship in the existing empirical literature. Specifically, a 10 percent higher unemployment rate (about a half percentage point, on average) is associated with 2.8 percent fewer in-migrants in the metro area. The effect of unemployment on power cohort migration was moderately stronger than on comparison cohorts: the young without college educations and those aged 40 and over.

Tenth District metro areas generally enjoy lower unemployment rates than most other metro areas in the United States, which helps them attract the power cohort. The unemployment rate across the Tenth District's larger metro areas averaged 7.6 percent in August 2009, compared to 9.7 percent for the United States as a whole (Table 2). Unemployment rates were particularly low in Omaha (5.3 percent) and Oklahoma City (5.9 percent). Wichita, with its large, highly cyclical manufacturing base, is the only large metro area in the Tenth District with an unemployment rate (slightly) above the U.S. average. With the exception of Kansas City, all Tenth District metro areas had unemployment rates below the national average during its recent low in March 2007.

Unemployment rates are especially dispersed across metropolitan areas during recession periods such as the one beginning near the latter part of the period covered in this analysis. Thus, unemployment was likely an especially critical factor in migration decisions during this period.

An equally important and related economic factor in explaining migration patterns of the power cohort is wage levels. Early literature considered migration to be entirely an economic phenomenon—that is, people move to places with relatively high wages and relatively low housing costs. Indeed, the analysis in the last section revealed an important relationship between migration levels and wages across cities. The more complete analysis in this section, however, reveals that for every 1 percent increase in the average weekly wage, power cohort migration increases by about 2 percent. This responsiveness of migration to wages is fairly large, considering that the average weekly wage in the sample is $1,077, and thus a 1 percent increase is about $11, on average.

Average weekly wages in most large metro areas in the Tenth District exceed the average weekly wage for U.S. metro areas as a whole, in some cases by substantial amounts. Average weekly wages in Denver and Kansas City, for example, are higher by 38 percent and 27 percent, respectively. The metro areas in the district with average weekly wages below the national average—Oklahoma City, Tulsa, and Wichita—all

Table 2

ECONOMIC FACTORS AND MIGRATION IN THE TENTH DISTRICT

Metropolitan Area	Average Wage	Unemployment Rate (August, 2009)†	Property Tax Rate
Albuquerque, NM	$1,101	7.8	0.65
Colorado Springs, CO	$1,149	8.2	2.15
Denver, CO	$1,482	8.0	1.40
Kansas City, MO-KS	$1,364	8.9	1.17
Oklahoma City, OK	$1,070	5.9	0.63
Omaha, NE-IA	$1,252	5.3	1.57
Tulsa, OK	$1,052	6.8	0.73
Wichita, KS	$1,066	9.9	1.05
All U.S. Metro	$1,077	9.7	3.10

† Data are for July 2009; Source is U.S. Bureau of Labor Statistics

have wages close to the national average. The relatively high wages in most Tenth District metro areas, a critical migration factor in this analysis, gives these cities an economic advantage over most other U.S. cities in attracting the power cohort.

A final important economic factor considered in this analysis is the level of taxes, as measured by effective property tax rates. An extensive literature exists on the role of taxes in explaining growth in both population and employment. Much of the results are mixed, however. Still, much recent research finds that higher taxes reduce migration into a community (or increase migration out of a community). Property taxes, in particular, encourage migration from high-tax to low-tax jurisdictions (Cebula; Islam and Rafiquzzaman).

This analysis finds that higher property taxes are associated with lower rates of power cohort migration in U.S. metro areas.[7] Specifically, a 1 percent increase in per capita property tax collections is associated with a 1.8 percent decrease in in-migrants per 100,000 residents. For the comparison cohorts, no relationship was found between property taxes and migration. Tenth District cities as a whole have significantly lower per capita property tax collections than U.S. metro areas as a whole, providing another economic boost to the attractiveness of Tenth District cities to the power cohort (Table 2).

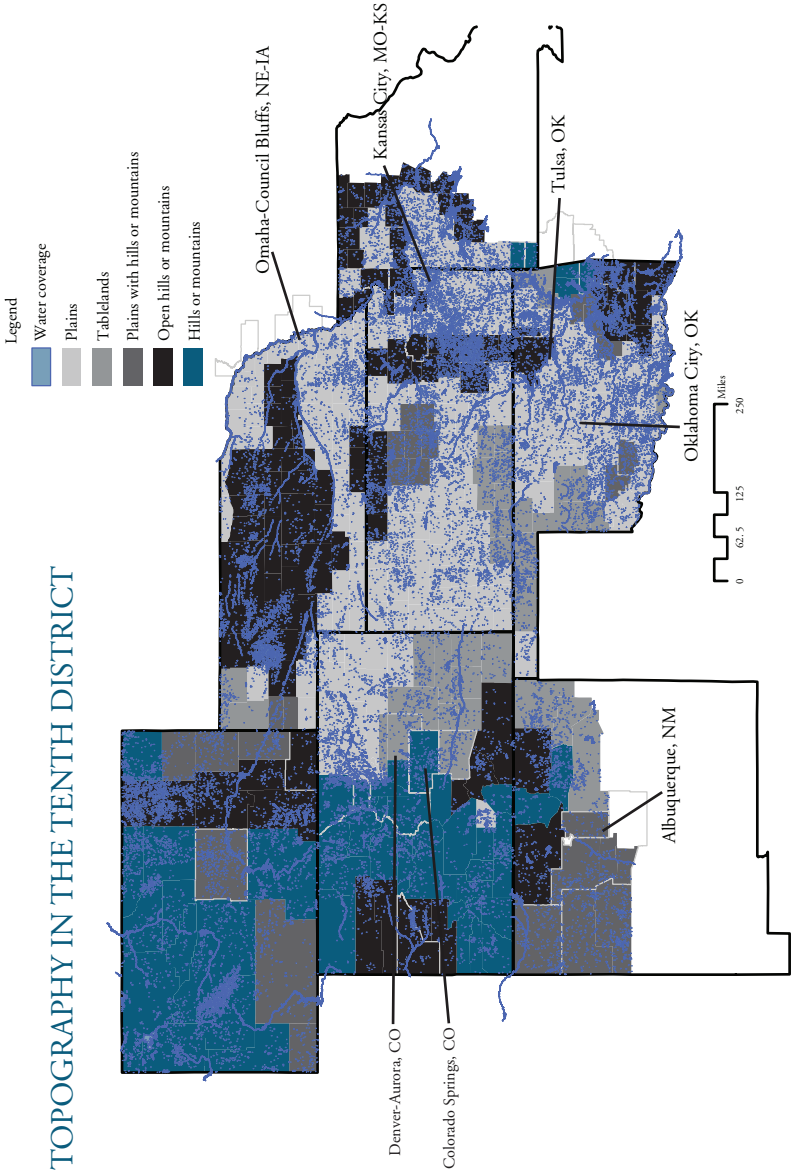
TOPOGRAPHY'S ROLE IN ATTRACTING THE POWER COHORT TO THE TENTH DISTRICT

Many young people seek mountainous climates for their aesthetic value and recreational opportunities, while others prefer areas with access to fresh water or coastlines. Of course, little can be done to change topography, but its role should be well-understood by policymakers.

Land surface topographic features include plains, hills or mountains, and tablelands. Plains are land surfaces with no visible depressions or elevations. Tablelands are plateaus, or wide level areas relatively high in elevation. Much of the eastern portion of the Tenth District is plains, while much of the western portion of the district has hills or mountains (Map). Tablelands in the district are most common on the eastern slope of the Rocky Mountains and in western and southern Kansas. While there are few major bodies of water in the district, most areas have small lakes, rivers, and some large rivers.

Evidence shows that the presence of hills, mountains, or tablelands is especially attractive relative to an area characterized by plains.[10] A metro area with twice the land area covered by hills, mountains, and tablelands as the average metro area is expected to have a 7.7 percent larger migration of the power cohort, all else equal. This effect is more pronounced than among the comparison cohorts. The western part of the Tenth District benefits substantially from this topography, particularly Denver and Colorado Springs.

Map
SURFACE TOPOGRAPHY IN THE TENTH DISTRICT



Culture and recreation

One of the most important factors to consider in analyzing migration is the level of cultural and recreational amenities. These factors have received a great deal of attention in the economics literature, in economic development circles, and in the popular press. One reason for the interest in cultural and recreational amenities is the increasing focus of cities on attracting people rather than jobs. But another is that public resources can be allocated to creating and improving many of the amenities important in creating quality of life. Thus, public policy is an alternative to tax abatements, for example, to affect economic development goals

This analysis considers the role of a number of these amenities in explaining power cohort migration and evaluates the capacity of Tenth District metro areas to provide these amenities.

Arts and culture are a critical component of quality of life, especially for those with higher educations. For example, the arts and cultural services contribute to a full and meaningful life and offer positive lifestyle choices, especially for youth (Comstock). Arts and culture provide social benefits, such as community pride, and leadership opportunities—all of which build strong communities. The economic benefits include increased tourism. Research has shown a significant relationship between participation in the arts and quality of life.[8]

Evidence suggests that the arts are important to the young and college-educated. Volunteers in the arts communities tend to come from higher socioeconomic levels, which in turn tend to be more educated (Armbrust). Further, arts groups have increasingly marketed their activities to younger audiences by, for example, offering discounts, promoting a more "hip" environment by offering cocktails or a "party atmosphere," or developing programs that would appeal to younger tastes (Daspin; Bliss).

The role of the arts community and other cultural institutions in attracting young, childless, and college-educated people was evaluated by comparing migration to the number of performing arts establishments per 100,000 residents. Performing arts establishments were used as a proxy for arts and cultural attractions more generally. The analysis revealed that metro areas with a greater number of performing arts establishments per 100,000 residents enjoyed greater levels of power cohort migration. Specifically, an additional performing arts establish-

ment per 100,000 residents in the average metro area would likely result in a 0.9 percent increase in the number of in-migrants.[9] Arts and cultural venues were not important in explaining the migration of young people who are not college-educated, and the magnitude of the effect was smaller for the over-40 comparison cohort.

In the Tenth District, however, the larger metro areas have fewer performing arts companies than other metro areas. Metro areas in the district have 4.8 companies per 100,000 residents, compared to 7.5 companies for the average metro area nationwide (Table 3). Given the importance of such venues in attracting the power cohort, Tenth District cities have an important weakness.

Sporting and recreational activities have gained popularity over the last few decades, in part because work has become less demanding physically and leisure time has increased. Young, college-educated people are particularly likely to participate in these activities (Steffen and others).

To evaluate the role that venues for physical activity play in migration decisions, the analysis includes a composite measure termed "Sporting Establishments." This statistical composite represents golf courses and country clubs, skiing facilities, marinas, fitness and recreation centers, and bowling centers. Surprisingly, the number of sporting establishments was negatively related to the in-migration of the power cohort: Cities with a greater number of such establishments, all else equal, experienced lower levels of migration in the 2003–2008 period. One possible explanation for this result is that some of the sporting amenities may have more appeal for less-educated individuals than others (Glaeser and others, 2001). Further, the demand for sporting activities depends in part on the availability of alternative amusements (Outdoor Foundation). Some of these amusements, especially high-tech activities such as video games, often appeal to younger, and sometimes more-educated, consumers. While some alternative entertainment options, such as performing arts and museums, are accounted for in the analysis, others are not. Glaeser and others (2001) found a negative relationship between population growth and movie theaters and bowling alleys per capita.

The importance of sporting establishments in explaining power cohort migration is not likely in the presence of these establishments per se, but in the degree to which the proliferation of such establishments reveals a lack of other amusements more amenable to the power cohort. The number of sporting establishments in most Tenth District cities is

Table 3

AMENITIES IN THE TENTH DISTRICT (PER 100,000 RESIDENTS)

Metropolitan Area	Performing Arts Companies	Sports Establishments	Eating and Drinking Establishments	Colleges and Universities
	A	B	C	D
Albuquerque, NM	4.8	15	150	0.5
Colorado Springs, CO	3.6	26	156	1.2
Denver, CO	5.6	25	127	0.3
Kansas City, MO-KS	4.9	33	153	1.3
Oklahoma City, OK	4.5	24	166	2.2
Omaha, NE-IA	4.7	40	175	2.5
Tulsa, OK	5.3	26	165	1.6
Wichita, KS	5.1	26	178	1.5
All U.S. Metro (population 500,000+)	7.5	28	159	1.6

Source: U.S. Census Bureau, 2002 Economic Census

about on par with the national average, suggesting that this factor is not a significant inducement for or deterrent to migration in the district (Table 3).

Eating and drinking establishments serve as the core of nighttime entertainment in the United States, and the numbers and varieties of these establishments in a city prove to be a critical factor in assessing quality of life. While spending time at bars and coffeehouses has traditionally been seen as a social activity, dining is also an important form of entertainment. About half of diners in the 2005 *Restaurants and Institutions* American Diner Study said they expect an "experience" when they go out to dinner, and 61 percent reported that they celebrate special occasions at restaurants (Perklik).

The young, childless, and college-educated are an especially critical clientele for eating and drinking establishments. Roughly 21 percent of meals are taken away from the home for the population at large, but eating away from home is especially common among young people and those without children (Liddle; *Foodservice Equipment and Supplies*) While spending on food away from home is highest among those aged 45-54, younger cohorts eat out more often. Dining outside the home is a less-common entertainment option for families with children (Liddle).

Eating and drinking establishments were included in the analysis in the form of a statistical composite of restaurants, coffee shops, and bars. Larger numbers of eating and drinking establishments were associated with greater in-migration of the young, childless, and college-educated. This result is consistent with the importance of these establishments as entertainment options for the power cohort and as less relevant to families with children. For the comparison cohorts, this composite was negatively associated with migration of the young and not college-educated, and unrelated to migration for those 40 and over.

For the most part, the Tenth District's metro areas fall about in line with the (weighted) average for all U.S. metro areas with populations of at least 500,000. U.S. metro areas as a whole average 159 eating and drinking establishments per 100,000 residents, while Tenth District cities range from 127 establishments per 100,000 residents in Denver to 178 in Wichita.

Intellectual capital serves a critical function in educated societies. Colleges and universities not only provide employment opportunities for the educated, but many entrepreneurial enterprises, especially high-

tech firms, are created around university settings. Florida and others found a strong empirical relationship between the presence of universities and the location of the "creative class." Further, many young, college-educated people demand opportunities to further enhance their education and training, and colleges and universities provide an important mechanism for achieving those goals.

This analysis finds that all else equal, metro areas with more colleges and universities attract more power cohort migrants. Specifically, for each additional college or university per 100,000 residents, the average metro area in the study (679,618 residents) increased the power cohort migration 5.1 percent. By contrast, the presence of colleges and universities had no effect on the migration of young people who are not college-educated and actually had a negative association with the migration of the over-40 cohort.

A potential limitation of the study is the inability to control for the quality of these institutions and to account for colleges and universities that are near the metro areas being examined. A university with the stature of Stanford or Harvard, for example, is likely to be a greater force in migration than a small college. The Tenth District's largest cities are all near major state universities.

The average U.S. metro area is home to 11 college and universities, or about 1.6 per 100,000 residents. Many of the Tenth District's larger metro areas have a similar ratio of colleges and universities, but there are exceptions. Albuquerque and Denver have less than a third of the average number of colleges and universities per 100,000 residents, while Oklahoma City and Omaha have considerably higher ratios. Although Denver has performed well in attracting the power cohort in this decade, the lack of colleges and universities relative to its population has likely moderated its attractiveness. Omaha and Oklahoma City have not fared as well in attracting the power cohort, but the presence of large numbers of colleges and universities relative to their populations has likely boosted their attractiveness.

Crime rates can be characterized as a "disamenity" because they are undesirable. Crime rates have fallen significantly over the last two decades but still remain persistent and pervasive in urban areas. To examine the impact of crime on migration of the power cohort, this analysis uses the murder rate, or the number of homicides in a year per 100,000 residents.

Crime rates vary across Tenth District metro areas. In 2008, U.S. metro areas with populations greater than 250,000 experienced an over-

Table 4

CRIME STATISTICS IN THE TENTH DISTRICT, 2008

City	Violent crimes per 100,000 residents	Property crimes per 100,000 residents	Total crime rate	Population
Albuquerque, NM	895	6,049	6,944	527,464
Colorado Springs, CO	528	4,246	4,774	378,403
Denver, CO	595	3,258	3,853	592,881
Kansas City, MO	1,389	6,264	7,653	451,454
Oklahoma City, OK	978	5,894	6,872	552,452
Omaha, NE	606	4,298	4,904	437,238
Tulsa, OK	1,285	5,946	7,231	382,954
Wichita, KS	850	5,509	6,359	362,602
Cities > 250,000 residents	895	4,435	5,330	54,390,034

all crime rate (the sum of the property crime rate and violent crime rate) of 5,330 per 100,000 residents. In the Tenth District, 2008 crime rates were lower than the national average in Denver, Colorado Springs, and Omaha (Table 4). They were significantly higher in Kansas City, Albuquerque, Oklahoma City, and Wichita. Of course, many suburban areas have relatively low crime rates, which can reduce the crime rates for entire metro areas.

The analysis finds that crime is negatively related to in-migration, suggesting that the power cohort considers crime rates in making location decisions. The crime rate does not appear to be a factor for the comparison cohorts, who may have more means for finding low-crime enclaves within a metro area.

V. CONCLUSIONS

This article identifies the factors that influence migration into U.S. metropolitan areas by the young, childless, and college-educated—referred to as the power cohort. The article discusses the presence of these attributes in the Tenth District's larger metro areas and identifies several attributes that appear especially important for attracting the power cohort to the district.

The analysis first examines the economic determinants that attract the power cohort—unemployment, wages, taxes, and housing costs. From 2003 to 2008, metro areas in the Tenth District did not perform as well as other metros across the nation. Specifically, the economic factors in most district metro areas should have induced more in-migration than they did, even after considering differences in population.

If economic factors do not explain why the district's metro areas are not attracting the power cohort, what can? The analysis suggests the answer to this question lies in the levels of amenities and disamenities across metro areas. Cultural amenities and recreation opportunities include venues for the arts and culture events, eating and drinking establishments, and colleges and universities. The primary disamenity is crime. These factors are important, not only because they can attract the power cohort, but also because their quality and levels can be influenced by policy.

APPENDIX

Estimation Results

Variable	Parameter/Elasticity (Std. Error)		
	Young, Childless, and College-Educated	Young, Not College-Educated	Age 40+
Intercept	- 52.8*** (19.9)	18.7 (14.4)	27.6* (14.9)
Average Wage	2.16** (1.07)	- 1.26 (0.770)	- 1.78** (0.795) (3,303.6)
Unemployment Rate	- 2.76*** (0.966)	- 2.42*** (0.698)	(0.721) - 1.92***
2004 Population	2.75*** (0.376)	0.511* (0.272)	1.027*** (0.280)
Average January Temperature	- 2.05** (0.808)	- 0.649 (0.584)	0.826*** (0.603)
Average July Temperature	5.68 (4.21)	1.35 (3.04)	-4.71 (3.14)
Average July Humidity	- 1.98** (0.804)	0.947* (0.581)	-0.905 (0.600)
Murder Rate (per 100,000 residents)	- 0.741** (0.365)	0.687 (0.264)	0.246 (0.272)
Per Capita Property Tax	- 1.81*** (0.621)	- 0.407 (0.449)	- 0.463 (0.463)
Per Capita Spending on Law Enforcement	1.06* (0.632)	0.560 (0.457)	0.075 (0.471)
Sporting Establishments per 100,000 residents (composite)†	- 0.096* (0.053)	- 0.054 (0.038)	- 0.058 (0.040)
Eating and Drinking Establishments per 100,000 residents (composite)†	0.084* (0.045)	- 0.099*** (0.033)	- 0.051 (0.034)
Performing Arts Establishments per 100,000 residents	0.388*** (0.097)	0.060 (0.070)	0.294*** (0.073)
Gambling Establishments per 100,000 residents	0.023 (0.089)	- 0.006 (0.065)	0.088 (0.067)
Churches per 100,000 residents	0.079 (0.565)	- 1.13*** (0.408)	0.441 (0.421)
Colleges and Universities per 100,000 residents	0.557** (0.284)	0.094 (0.205)	- 0.416** (0.212)
Share of Land Area Covered by Hills, Mountains, or Tablelands†	1.15* (0.700)	0.838* (0.506)	0.286 (0.522)
Share of Land Area Covered by Plains with Hills or Mountains†	0.303 (0.884)	-1.89*** (0.638)	-1.28* (0.656)

Notes: *, **, *** indicate statistical significance at the 10%, 5%, and 1% confidence levels; † indicates that the parameter estimate is not an elasticity

ENDNOTES

[1]The term "power cohort" is derived from the term "power couples;" a term commonly used to describe married couples where both are college-educated and in the professional workforce. Often, as is the case here, the term is restricted to young couples, particularly those without children. Costa and Kahn examine the locational preferences of power couples in a relatively recent article.

[2]The self-employed share of total nonfarm employment fell from 6.7 percent in 2003 to 6.3 percent in 2008 (U.S. Bureau of Labor Statistics), and self-employment tends to increase during recessions (Evans and Leighton).

[3]As cited in Florida (2002).

[4]This number includes those moving from one Tenth District state to another. Importantly, the number includes people moving between Kansas and Missouri within the Kansas City metropolitan area.

[5]The adjusted R^2 is 0.61. Standard errors are in parentheses. The coefficients on the wage and population are statistically significant at the 99 percent confidence level, while the coefficient on housing cost is statistically significant at the 95 percent confidence level.

[6]The period analyzed in this article partially covers the current recession. Because the analysis largely consists of comparisons across cities rather than over time, the same factors affecting migration should be in play in all years. As noted earlier, the model takes the perspective of an individual who has decided to move and is considering a specific location. The potential difference is that some factors, such as unemployment rates and housing costs, may be relatively more important in recession years. A recent examination by the *Wall Street Journal* suggests that the power cohort continues to populate high-amenity cities during the recession, even those with relatively high unemployment rates (Dougherty). The analysis covers the period through March, 2008. The recession began in December 2007, and as of November 2009, no end date had been established by the National Bureau of Economic Research.

[7]A measure of government expenditure was included in the analysis to isolate the effect of taxes from spending. Local law enforcement spending was found to be positively related to migration.

[8]Several studies have been conducted on this issue through The Arts and Quality of Life Research Center at the Boyer College of Music and Dance at Temple University. See *http://www.temple.edu/boyer/ResearchCenter/.*

[9]The average metropolitan area was home to 45 performing arts establishments in the 2003–2008 period, or 3.3 performing arts establishments per 100,000 residents.

[10]The population of the Great Plains states is growing faster than the nation as a whole, although the topography is relatively unattractive (Wilson, 2009). Most counties in the Great Plains have lost population, so growth has been restricted to metropolitan areas in the Great Plains.

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