CENSUS DESIGNATED PLACES AND INCORPORATED PLACES IN TEXAS: A COMPARATIVE ANALYSIS

Sally Caldwell

This article presents the results of an exploratory demographic comparison of Census Designated Places (CDPs) and incorporated places in Texas. The comparison was made on the basis of several demographic characteristics (*e.g.*, age, employment, housing, education, and racial/ethnic composition). With evidence of a significant difference between the CDPs and the incorporated places in all but two instances, the findings suggest that comparisons of CDPs and incorporated places represent a fruitful area for future research. Several examples of potential research questions are offered. *Key Words: CDP, Census Designated Place, incorporated places, demographic comparison, Texas.*

Trban analysts have long studied human settlements, and the literature is rich with demographic research on counties, metropolitan areas, and incorporated places. For example, Sutton and Day (2004) identified clusters of high-growth counties and classified them on the basis of demographic characteristics, such as the retirement cluster and the suburban white-collar cluster. Glaeser and Vigdor (2003), on the other hand, selected metropolitan statistical areas as the unit of analysis in their examination of racial segregation patterns. For Lang and Simmons (2001), incorporated places served as the basis for their study of *boomburbs* (their term for high-growth suburban areas). As those references suggest, a look at the demographic characteristics or composition of entities such as counties, metropolitan areas, and incorporated places is standard fare for the contemporary urbanist. Largely overlooked, however, have been those curious places known as Census Designated Places (CDPs).

Fundamentally, a CDP is a population concentration that exists without any formal municipal government.

Sally Caldwell is Assistant Professor in the Department of Sociology, Texas State University, San Marcos, TX 78666. E-mail: sc14@txstate.edu.

Ideally, CDPs contain a dense, city-type street pattern and have an overall population density of at least 1,000 people per square mile. However, the Census Bureau recognizes that some CDPs may not meet the density criterion because the selection of available boundary features may result in the CDP including some sparsely settled territory (U.S. Bureau of the Census 1994: 9–26).

As to the purpose behind CDPs and how they are delineated, the Census Bureau notes:

Before each decennial census, CDPs are delineated by State and local agencies, and by tribal officials according to Census Bureau criteria. The resulting CDP delineations are then reviewed and approved by the Census Bureau...Although only about one-fifth as numerous as incorporated places, CDPs are important geographic units; they permit the tabulation of population counts for many localities that otherwise would have no identity within the Census Bureau's framework of geographic areas (U.S. Bureau of the Census 1994: 9–20).

The population residing in a CDP is subject to one or more sub-state governmental units (*e.g.*, a county, a school district, or a utility district), but what is missing in a CDP is the formal municipal government structure common to incorporated areas. Absent a formal municipal government, a CDP is, in one sense, merely a statistical entity. As such, CDPs have been ignored by many students of urban development.

Accordingly, Lang and Dhavale (2003: 1) refer to CDPs as "the Rodney Dangerfields of urban geography—they get no respect." At the same time, however, these authors point out that a CDP may be just as much a community or place as an incorporated municipality.

The public does not understand them and researchers often overlook CDPs because they are seen as census-derived statistical artifacts as opposed to "real" places. Yet a CDP is a residential concentration whose population sees itself as belonging to a specific place, even if the place is not an official city. In that sense, a CDP is a real place and their formation and growth warrant some analysis (Lang and Dhavale 2003: 1).

Prior to 2000, CDP designation was tied to specific population thresholds. In the 2000 Census, however, the notion of a minimum population threshold was discarded, and CDPs were defined simply as geographic entities that serve "as the

statistical counterparts of incorporated places" (U.S. Bureau of the Census 2003: A-18).

When it comes to the origin and longevity of a particular CDP, there is no uniform history or life cycle that necessarily applies. In short, the emergence and continued existence of a particular CDP is subject to a variety of factors. One CDP, for example, might come into existence as the result of historic population growth in an area outside municipal boundaries. Another CDP, however, might be the result of a seemingly overnight emergence of a population concentration in a deliberately created settlement such as a gated community or new town development. Some settlements may remain as CDPs on the census rolls for decades, continuing to grow and develop without any change in how they are classified by the Census Bureau. Other CDPs, however, could disappear from the list if they were annexed by nearby municipalities or if they, themselves, became incorporated places.

In the case of Texas, the focus of the investigation reported here, there were 318 CDPs identified in the 2000 Census.¹ Because CDPs have no minimum population threshold, they can range from a barely recognizable human settlement to a population concentration that would equal the number of residents in a fairly large city. In Texas, for example, the smallest CDP recorded in the 2000 Census had eight residents (the CDP of Guerra); the largest had more than 55,000 (The Woodlands, a private, new-town type of development in the Houston area).

Some CDPs are classified as military CDPs by the Census Bureau, and in the case of Texas, there were five listed in the 2000 Census: Reese Center (an Air Force installation), Laughlin Air Force Base, Lackland Air Force Base, and two Army installations (Fort Bliss and Fort Hood). When the military CDPs were removed from the analysis (on the grounds that the population present at a military installation may represent something of a purposeful settlement), the remaining 313 non-military CDPs were home to a total of 842,702 residents in 2000 (Figure 1). That figure of more than 840,000 residents in 2000 is equivalent to slightly more than four percent of the state's total population of nearly 21 million residents. In one sense, that is reason enough to take a closer look at CDPs and to ask questions



Figure 1. Distribution of Texas non-military CDPs. Source: U.S. Census Bureau.

about the nature and composition of these largely overlooked settlements. The central question of this research is: Are CDPs markedly different from incorporated places in a demographic sense, and if so, in what ways are they different? The overarching research hypothesis is that there are, in fact, demographic differences between CDPs and incorporated places, and these differences are evident in several dimensions. Given the exploratory nature of the research, however, non-directional hypotheses were tested.

Variable Selection

Using 2000 Census files as the source of data for the analysis, the two groupings (non-military CDPs and incorporated places) were compared on the basis of seven demographic characteristics: age, income, housing stock, employment, family/household size and composition, education, and racial/ethnic composition. Of the seven characteristics, six were examined by considering more than one measure or variable (*e.g.*, three measures of age, two measures of education) (Table 1).

Table 1. Demographic characteristics of non-military CDPs and incorporated places.

	Age - 3 variables
	Median age (years)
	Percent of the population age 65 and over
	Percent of the population under age 18
	Income – 2 variables
	Median household income (dollars)
	Median family income (dollars)
	Housing Stock – 2 variables
	Percent of structures built in 1990 or later
	Percent of housing units that are occupied
	Employment – 2 variables
	Percent of civilian labor force unemployed
	Mean travel time to work (minutes)
	Family/Household Size and Composition - 3 variables
	Average family size
	Average household size
	Percent of total households having a married couple and own children
	under age 18 present
	Education – 2 variables
	Percent of population age 25+, high school graduate or higher
	Percent of population age 25+, bachelor's degree or higher
	Racial/Ethnic Composition - 2 variables
	Percent of total population identified as "white" (and only one race reported)
	Percent of total population identified as "Hispanic" or "Latino" (of any race)
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The demographic characteristics are typical of the types of variables that are often used to characterize communities, particularly in the field of urban planning, when the goal is to characterize a single community or to compare several communities on a variety of dimensions (Chapin and Kaiser 1979).

Data Analysis

The data analysis involved a series of t-tests for independent samples amounting to 16 separate t-tests, but the analysis was conducted under two scenarios. The first examination of the data involved a comparison of all non-military CDPs with all incorporated places, regardless of population size. This analysis involved 313 non-military CDPs and 1,192 incorporated places. The CDPs ranged in population size from eight to 55,649; the incorporated places ranged in population size from 32 to 1,953,631.

Given the wide disparity between the upper limits of population size for the CDPs and the incorporated places (*i.e.*, 55,649 for the CDPs, but 1,953,631 for incorporated places), a second analysis was undertaken. The second analysis was based upon a comparison of all non-military CDPs with incorporated places that were no larger in population size than the largest CDP. As noted previously, the largest Texas CDP in the 2000 Census was The Woodlands, with 55,649 residents, so the figure of 55,649 was set as the upper population limit for incorporated places included in the second analysis. Thus, the second analysis involved 313 non-military CDPs and 1,150 incorporated places.

Results

Interestingly, the two analyses yielded the same results in general. Significant results in 14 of the 16 hypothesis tests were achieved in both sets of analyses. Only mean travel time to work and racial composition failed to demonstrate evidence of significant differences. Even though the general findings were the same in both analyses, the following results are based upon the comparisons of the demographic characteristics of all non-military CDPs with *all* incorporated places (Table 2).

	CDPs			
Variable	Mean	Mean	t value	pr value
ъл. I'	22.0	26.1	7.04	000
Median age	32.0	30.1	/.94	.000
Percent of population	10.7	14.2	0.20	000
age 65 and over	10.7	14.5	8.39	.000
Percent of population	20 (20.0	0.50	000
under age 18	32.6	28.0	-9.52	.000
Median household income	\$31,744.90	\$38,215.94	5.08	.000
Median family income	\$34,948.35	\$44,190.24	6.59	.000
Percent of structures				
built 1990 or later	29.7	16.6	-11.06	.000
Percent of housing				
units occupied	83.3	88.0	5.52	.000
Percent of civilian				
labor force unemployed	10.0	5.8	-7.85	.000
Mean travel time to work	26.3	25.4	-1.51	.133
Average family size	3.6	3.2	-13.19	.000
Average household size	3.3	2.7	-14.60	.000
Percent of total households,				
married with children				
under 18 present	35.9	26.9	-11.56	.000
Percent population 25+,				
high school graduate				
or higher	55.1	72.9	12.15	.000
Percent of population 25+,				
bachelor's degree or higher	11.4	16.3	5.77	.000
Percent of total population				
identified as "white" (and				
only one race reported)	79.1	80.6	1.60	.110
Percent of total population				
identified as "Hispanic" or				
"Latino" (of any race)	62.4	22.9	-17.97	.000
identified as "Hispanic" or "Latino" (of any race)	62.4	22.9	-17.97	.000

Table 2. Demographic comparisons of non-military CDPs and incorporated places.

Age

CDPs reflected a younger population than incorporated places. For example, the median age for CDPs (32.0 years) was significantly lower than the median age for incorporated places (36.1 years). The suggestion of a younger population in CDPs, as opposed to incorporated places, was also supported when the upper and lower ends of the age distribution were examined. The mean percentage of the population age 65 and older was significantly lower in CDPs (10.7 percent) than for incorporated places (14.3 percent). When it came to the population under the age of 18, the mean percentage was higher in the CDPs (32.6 percent) than in the incorporated places (28.0 percent).

Income

Both household and family incomes were higher in incorporated places than in CDPs. For example, the median household income was \$31,744.90 for the CDPs, but it was \$38,215.94 for the incorporated places. The median family income was \$34,948.35 for CDPs, but it was \$44,190.24 for incorporated places.

Housing Stock

Significant differences between CDPs and incorporated places were found with respect to the two housing variables included in the analysis. As to the age of the housing stock, the percentage of housing units built since 1990 was significantly higher in CDPs than in the incorporated places (29.7 percent for CDPs and 16.6 percent for incorporated places). As to the overall level of occupancy, the percentage was significantly higher in incorporated places (88.0 percent) than in CDPs (83.3 percent).

Employment

With an unemployment rate of 10.0 percent, CDPs evidenced a level of unemployment that was significantly higher than the rate for incorporated places (5.8 percent). CDPs and incorporated places failed to show a significant difference in terms of commuting time to work.

Family/Household Size and Composition

Measures of housing-unit size were found to be significantly higher in the CDPs than in the incorporated places. For example, the average family size was higher in CDPs (3.6 persons) than in incorporated places (3.2 persons). Similarly, average household size was higher in the CDPs than in the incorporated places (3.3 persons and 2.7 persons, respectively). On the measure of household composition (percent of total households with married couple with presence of children under age 18), the percentage was higher in CDPs than in incorporated places (35.9 percent, compared to 26.9 percent).

Education

Two measures of educational level were used in the analysis, and a significant difference between CDPs and incorporated places wasfound in each instance. In terms of the percentage of the population (age 25 and over) with an educational attainment of a high school diploma or greater, it was the incorporated places that evidenced the higher percentage (72.9 percent for the incorporated places, compared to 55.1 percent for the CDPs). The same was true with respect to the percentage of the population (age 25 and over) having attained a bachelor's degree or greater (16.3 percent for incorporated places, compared to 11.4 percent for CDPs).

Racial/Ethnic Composition

Two measures of racial/ethnic composition were used in the analysis. For racial composition, the descriptor was the percentage of the population indicating only one race and specifying "white" as that race. As an indicator of ethnic concentration, the percentage of the total population classified as "Hispanic"/"Latino" was used. In the case of the racial descriptor, no significant difference was found between CDPs and incorporated places. The ethnic descriptor, however, did reflect a significant difference (62.4 percent for CDPs and 22.9 percent for incorporated places).

Given the extremely high mean level of "Hispanic"/"Latino" population concentration for the CDPs (62.4 percent), a closer look at the data was undertaken. When all the CDPs and incorporated places were arrayed in descending order, on the basis of the "Hispanic"/"Latino" population concentration, the top 25 reflected concentrations from 100 percent to 99.11 percent. Of those settlements, all but one were CDPs (Table 3).

%			
"Hispanic"/ "Latino"	Settlement	Population	
100	Willamar CDP	15	
100	Cuevitas CDP	37	
100	Concepcion CDP	61	
100	New Falcon CDP	184	
100	Roma Creek CDP	610	
99.8	Santa Maria CDP	846	
99.7	West Pearsall CDP	349	
99.7	Santa Cruz CDP	630	
99.6	Lago CDP	246	
99.5	Mila Doce CDP	4,907	
99.5	Sparks CDP	2,974	
99.4	Los Alvarez CDP	1,434	
99.4	Las Lomas CDP	2,684	
99.4	Granjeno City	313	
99.3	Salineno CDP	304	
99.3	South Point CDP	1,118	
99.3	Cameron Park CDP	5,961	
99.3	La Rosita CDP	1,729	
99.2	Scissors CDP	2,805	
99.2	El Camino Angosto CDP	254	
99.2	Doffing CDP	4,256	
99.1	Faysville CDP	348	
99.1	Tornillo CDP	1,609	
99.1	La Casita–Garciasville CDP	2,177	
99.1	La Victoria CDP	1,683	

 Table 3. Top 25 "Hispanic"/"Latino" population concentrations.

Some of the CDPs with the rather extraordinary levels of "Hispanic"/"Latino" population concentration were extremely small (*e.g.*, Willamar, with a population of 15; Cuevitas, with a population of 37; and Concepcion, with a population of 61). It would be premature to label those settlements as ethnic concentrations, however, given that they could become more diversified over time.

On the other hand, some of the settlements with extraordinarily high concentrations of "Hispanic"/"Latino" population were sizeable. The Mila Doce CDP, for example, had a population of more than 4,900, and the population of the Cameron Park CDP was more than 5,900. With extremely high "Hispanic"/"Latino" population concentrations (*i.e.*, concentrations in excess of 99 percent) in communities nearing the 5,000 or 6,000 population mark, it is hard to escape the notion that some CDPs amount to rather sizable ethnic concentrations.

Discussion and Conclusion

This exploratory look at demographic differences between CDPs and incorporated places in Texas suggests that the two types of places are, in fact, very different, at least with respect to several characteristics. This general finding, however, should be approached with caution for several reasons. First, a research design that is based upon multiple comparisons (*e.g.*, multiple t-tests) on the same data set runs the risk of pointing to significant results that are, in a sense, unjustified. At the same time, however, significant results were found in 14 of the 16 tests, and each was significant at the .000 confidence level. This was true in both analyses. As such, the results can be considered as indicative of patterns, even though they may be far from definitive.

Secondly, the research reported here represents a somewhat gross comparison of the two types of settlements. The second part of the analysis involved a comparison of CDPs and incorporated places of roughly the same population size range; beyond that, no effort was made to control for population size. Comparisons within more specific population categories might have yielded very different results. For example, some or all of the demographic differences between CDPs and incorporated places might diminish, or evaporate altogether, if the focus were on settlements having between 5,000 and 10,000 residents. The same might be true for comparisons made within other population-size categories.

Similarly, no effort was made to control for the location of CDPs and incorporated areas, but an analysis along those lines might yield interesting results. For example, different results might emerge in a comparative analysis of CDPs and incorporated places located within metropolitan counties (*i.e.*, counties that comprise a Metropolitan Statistical Area), just as there might be different results in a comparative analysis of CDPs and incorporated places located outside of metropolitan counties. By the same token, the analysis reported here provides a view of CDPs and their incorporated counterparts in Texas. The picture may be very different in other states, particularly in light of the fact that the road to incorporation is partly a function of statutory requirements.

Finally, the variables involved in this analysis may be typical of indicators that are used to describe or characterize communities, but they hardly exhaust the many possibilities. The selection of a different set of variables or indicators could have easily produced very different results.

Even with the foregoing limitations noted, the findings are useful in at least two regards. First, the findings underscore the need for continued research on the matter of CDPs, given the evidence in support of the notion that they are noticeably different than incorporated places in a number of respects. Secondly, the very nature of some of the findings raises a larger theoretical issue—namely, where CDPs might fit into traditional urban/rural typologies. For example, it would have been easy to assume at the outset that CDPs would turn out to be areas populated with higher-status, retirement-age individuals, in married-couple households, without the presence of children—perhaps alongside golf courses or inside the walls of gated communities. Images along those lines are hard to escape, given the manner in which suburban lifestyles are often portrayed in the popular media.

The analysis reported here did not consider any data on the presence of gates, walls, golf courses, and such. On the other hand, the analysis rested on some useful indicators, and the picture that emerged suggests that it would be unwise to accept any preconceived images of CDPs without a closer look at the

data. For example, the CDPs exhibited higher levels of unemployment, younger populations, lower levels of family and household income, and lower levels of education than the incorporated places. Additionally, there was strong evidence that some CDPs exist as ethnic enclaves. Given findings along these lines, it is clear that there is still a lot to learn about CDPs.

From a longitudinal or historical perspective, several questions immediately come to mind. Possible areas of inquiry might include: Are CDPs' population growth rates equivalent to the growth rates of incorporated places or the state, as a whole? Is the CDP population an increasing or decreasing percentage of the total population in a state or region? Do CDPs, over time, become more, or less, homogeneous in a demographic sense? There is no question that longitudinal or historical research on CDPs is made difficult by the manner in which CDPs are designated, as well as by the fact that they can disappear (as a result of annexation or incorporation). At the same time, however, the methodological problems are not insurmountable. For example, the case-study approach, resting on an in-depth examination of specific CDPs over time, could prove to be very illuminating, particularly when the focus is on CDPs that moved toward incorporation and what issues may have given rise to the move toward incorporation in the first place.

From a comparative perspective (and extending the approach used in the analysis reported here), a variety of additional questions come to mind. For example:

- How does the matter of metropolitan county status influence the picture? What happens when metropolitan CDPs are compared with metropolitan incorporated places? What happens when metropolitan CDPs are compared with non-metropolitan CDPs?
- How do CDPs and incorporated places compare on the matter of diversification? Are CDPs and incorporated places significantly different with respect to various measures of heterogeneity (*e.g.*, age, income, race/ethnicity, or occupation)?
- How do observed differences between CDPs and incorporated places hold up when subjected to a regional analysis? Are the observed differences more peculiar to certain regions, or do they hold across all regions?
- · How do observed differences between CDPs and incorporated places hold

up when subjected to stratification on the basis of variables such as population, density, land area, and distance to a major metropolitan center.?

These are just some of the questions that remain. Other researchers will have their own.

In conclusion, it is clear that CDPs are worthy of continued analysis along a number of fronts. At the same time, however, the discovery of demographic differences between CDPs and incorporated places is merely the first step. In the final analysis, the most meaningful questions may have to do with where CDPs fit into the typological scheme of things and whether they deserve their own spot along the rural/urban continuum. Additional investigations, particularly those that deal with the emergence and growth of given CDPs, may turn out to be especially meaningful.

Notes

¹The data set used in the analysis was assembled from the 2000 Census files made available from the Texas State Data Center. More specifically, the data on the demographic variables came from the Census Profiles 2–4 data file, and the data on the geographic status (*i.e.*, CDP or incorporated place) came from the STF3 Whole Place Geographic file.

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