Do They Just Keep on Moving or do They Go Home? Internal Migration of Mexican origin, Puerto Rican origin and Other Hispanics in the U.S.

By

E. Helen Berry
Sang Lim Lee
Eduardo Ortiz
Michael B. Toney
Population Research Laboratory
Utah State University
0730 Old Main Hill
Logan, UT 84322-0730

Corresponding author: E. Helen Berry (Eddy.Berry@usu.edu)
The authors acknowledge the support of CSREES NRICGP # 0101843 & by Utah Agricultural Experiment Station Grants #835 & 843 & WAAESD project #W2001.

Do They Just Keep on Moving or do They Go Home? Internal Migration of Mexican origin, Puerto Rican origin and Other Hispanics in the U.S.[1]

Due to changes in immigration laws in the 1980s, much research on immigration to the U.S. has focused on Hispanic immigration. This has been heavily influenced on by labor market interests, and interests in the segmentation or assimilation of this rapidly growing group into U.S. society. Much less focus has been placed on the internal migration of Latino migrants and, most likely a greater error, generally Hispanics are lumped into a single group and not disaggregated as Mexican heritage; Puerto Rican heritage; or other specific national heritage. The growing literature on Hispanics, particularly by demographers, has focused on the spatial changes in the residence of Hispanics but has not disaggregated the group to understand how there may be differences between each group's migration patterns or the impetus for making internal migrations that have resulted in the spatial changes in residence of the group as a whole. In this paper we examine the internal migration of Mexican Latinos, Puerto Rican Latinos and others of Latino/a heritage utilizing the National Longitudinal Surveys of Youth, 1979. The panel study will allow us to compare and contrast each group's propensity for repeat migration, particularly their likelihood of return or onward migrations. Results indicate that non-Mexican heritage Latinos are more mobile than Mexican heritage Latinos as a whole although the pattern for Puerto Ricans differs from other Latino groups.. All three groups, Mexican heritage, Puerto Rican heritage, and other Latin heritage (mostly South American) are more likely to move toward metropolitan places. Onward migration is more likely to occur for Latinos in general than is return migration.

Mexican, Puerto Rican, and Other Latino Origin Internal Migration in the U.S.
A panel study of migration utilizing the NLSY79

Since the 1980s there has been an explosion of work on Hispanic migrants and Hispanic heritage residents of the U.S. Demographic analysis of this diverse group has tended to focus on its rapid growth, its economic impact, its social and cultural impact; and the group's social and cultural assimilation within the United States. Research that has focused on a single group, such as Mexicans, or Puerto Ricans has tended to be from a case-study perspective and has tended, also, to focus on a particular region of the U.S. A study focused on the migration of the different streams of migrants, especially internally in the U.S., is important because it is likely that those of Mexican heritage tend to move differently or to different destinations or in different patterns than do those of Puerto Rican heritage or, as another example, Cuban heritage. Certainly census data indicates that those of Mexican heritage are distinct from other Hispanic groups, such as Puerto Ricans, and other South Americans in terms of their socioeconomic characteristics and socioeconomic characteristics are among several known factors associated with internal migration.

Much current research continues to focus on Hispanic/Latino migration as a whole, without disaggregating the group into its various components. Why would it matter whether Mexicans move or not or whether the pattern of their moves differs from the patterns of Puerto Ricans or other non-Mexicans? Although the U.S. can be seen as a single country, it has long been observed to be a geographically and multi-culturally diverse one. William Frey's 1995 treatise describing the U.S. as Balkanizing has been much quoted, though in a recent commentary he has noted that such Balkanization does not seem to have taken place (2005). Yet clearly there are areas where Mexican-American internal migration is changing the community landscape, whereas in other areas, like New York City, Puerto Ricans have been a key group, and Miami is known, famously, as "the capitol of South America".

Research on migration methodologies of the non-Hispanic white population of the U.S. is well documented: most youths first undertake a primary migration as they leave home as young adults; but that primary move may be followed by a repeat migration that may be an onward or a return move to a new or an old place of residence (DaVanzo and Morrison 1983; DaVanzo 1981). Such repeat or onward moves are often taken to be methods of equilibrating human capital with job markets or taking advantage of social capital to either return or move on to a different residence.

This concept relates to Hispanic migration in that if one group is moving onward or returning in a particular pattern, it is likely to have consequences for the socio-cultural and economic life of the place of origin or destination. For example, Bogue and Beale (1961) and Weakliem and Biggert (1999) have shown that there is a definable geography of cultural areas in the U.S. that continue to be recognizable across the U.S. landscape (see also, Toney, Keller and Hunter 2003; Stack 1996; Brown and Cromartie 2006). The influence of new internal migrants into and from these economic and cultural areas will have an influence on on the economic and socio-cultural life of origins and destinations.

Utilizing a panel study to examine the migration patterns of Hispanics allows greater understanding of the likelihood of onward or return migration. This has been shown to be quite important for other groups as Tolnay's (2003) work showed in his discussion of the relative paucity of research on the return migration of African Americans to the south. Similarly, as noted above, Frey's research has shown that some patterns of internal migration have resulted in some regions of the country becoming more culturally and ethnically heterogeneous while others have become more homogeneous. (Frey 1995, 1996, 2008). The rapid growth of the Hispanic population, brought on by both natural increase and immigration is increasingly associated with a tendency to migrate to new destinations.

Migration itself is generally depicted as not just a case of individual choice, but also as a response to differential opportunities that are available in different places. Generally such opportunities are economic, but climate, natural resources, social or place amenities, social ties, or cultural factors are also noted as important. For example, the distinction between rural and urban is largely a distinction between places with few opportunities and places with many opportunities (Johnson et al. 2006; Long and Nucci 1998). Lee (1966) argued that hat different types of individuals or groups will respond differently to a given set of place characteristics (Lee 1966).

Individual Level Characteristics and Migration

A number of individual level characteristics are consistently correlated with migration, although there are often in how each variable interacts with migration and it should be noted that the influence of a given personal characteristic is likely to vary with respect to setting (Speare, Goldstein and Frey 1975). However, it has been known for some time that age, sex, education, employment status and race are importat to migration differentials (Bogue 1959). Similarly, length of residence and home ownership have been shown to be consistently associated with migration (Haan, 2007; White and Lindstrom 2006; Toney 1976). Similarly, research indicates that individuals who have lived in a place less than three years are several times more likely to migrate, whether return or onward, within the following year than are individuals who have lived in the place for longer amounts of time (Wilson, et al. forthcoming).

Why would there be an interest in repeat Migrants? To begin, there is evidence that they differ from other migrants. Von Reichert (2002) has shown that those who leave, then return to Montana are similar to those they are returning to be among, but DaVanzo and Morrison (1981) found that return migrants, especially those who returned after a short absence, are less educated, less skilled, and more likely to be unemployed. Falk et al.'s (2004) examined African American return migrants finding that they were of *higher* socioeconomic status than blacks remaining in the North and the blacks they were joining in the South. Tolnay and Eichenlaub have also shown that black onward migrants in the West were generally more successful than blacks who moved directly from the South to the West (2006). Lastly, Shumway and Hall (1996) found low income Chicanos were more likely than high income Chicanos to make return than onward migrations. In other

words, repeat migrants seem to be different than those who make a move and stay. Further, those who move onward, as opposed to those who return to a prior place of residence, seem to differ from one another. But how they differ seems to be a function of specific factors

Why Latinos?

In 1979, the Hispanic population of the U.S. was less than 6.5% and was 14.6 million. By 2008, this number had tripled to 45.5 million with its proportion increasing to 15.1% of the total, not including the 3.8 million actually residing in Puerto Rico, a U.S. territory. Among those residing in the territorial U.S., some 58% are of Mexican heritage/origin; 32% are South American; 0.1% claim European Spanish heritage; and 9.6% are of Puerto Rican heritage. Of the South Americans, the next largest group are Cuban heritage who can argue for less than 3% of total Latinos resident in the 50 states.

This rapid increase of the Hispanic population from a relatively small 6.5% to the largest ethnic group helps to account for the absence of a large body of studies on their internal migration, but also explains the sudden increase in analyses of their internal migration. The methodology by which the census identified Hispanics has not been consistent over time (Sandefur and Jeon 1991) resulting in real problems in identifying the Latino population. Worse, the census only defines migrations via five-year time periods – that is, the bureau only asks if the individual is still living in the same place as five years prior (McHugh 1987) resulting in a real lack of analyses on Latino internal migration.

Such analysis matters because recent research has shown that long-term Hispanic residents and native-born Hispanics apparently establish "population nodes" outside traditional Hispanic settlement areas (Leach, Bean and Brown 2004; Zuniga and Hernandez-Leon 2002). Further, as Smith (2002) has described, Hispanic place attachment is very strong, particularly in nonmetropolitan areas. As a result, knowledge of the places where Latino internal migrants are currently located will matter a great deal in understanding where they are likely to end up in the future. In other words, as per evidence from Bachmeier (2007), Leach, Bean and Brown (2004), and Zuniga and Hernandez-Leon (2002), there is evidence that Hispanics already living in the U.S., even 30 years ago, are playing an important role in shaping the migration patterns of recent immigrants.

Why would place factors matter?

Remember early on that we made the argument that individual factors are likely modified by place factors? Lee's push-pull theory of migration assumed that such would be the case, as did Ravenstein's original thesis in re migration (Lee 1966; Ravenstein 1885). Both perspectives on migration assume that place matters. It should also be noted that the evidence on the internal migration of in-migrants has already shown that there is a propensity for new immigrants to reside in particular states, with those from South America arriving in New York and Miami; Those from Mexico residing in Texas, California and New Mexico, and those who are non-immigrants, the Puerto Ricans,

tending toward the east coast of the U.S. Of greatest interest since the 2000 census, however, has been the influx of Latinos into "new destination" states and regions (Kandel and Cromartie ????). In fact, the Kandel and Cromartie typology indicates that there are a fairly striking proportion of nonmetropolitan counties across the U.S. that have become new destinations for Latinos.

The reasons for these changes are many. First, there is the fact of migration streams and chains: once a person has found a given place conducive to his/her settlement, they are likely to suggest that same place to others, regardless of his/her ethnicity (CITATION??) This will entice others to join them. The effect of chain migration to the area, assuming that the individual is a "new ethnicity" for that region, will be to produce a "new destination" for that particular ethnic group.

Second, there are industries that have traditionally been employment centers for particular ethnic/immigrant groups. Historically, these were the English as roofers in Toronto; the Irish as police in New York and Boston. Today these are the Somalians and Ethiopians as taxi drivers in large U.S. cities; Mexicans in meat packing plants in rural areas of the U.S.; and so forth. Such industries tend to be place-based. As a result, the spatial nature of such employment results in larger or smaller concentrations of one or another ethnic group in one or another place.

Hypotheses:

Keeping in mind the above reasons to focus on (1) repeat migration (2) Hispanics and (3) spatial placement of internal migrants, we propose the following hypotheses:

(1) Return and onward migrants will differ from stayers, controlling for individual level and place characteristics

(2) Latino migrants with different ethnic backgrounds will differ from other Latino migrants of other backgrounds, largely because of different individual level characteristics

(3) Place characteristics will internal migrants, even with ethnicity and type of migration controlled.

The Data

To analyze internal migration longitudinally, we will utilize the National Longitudinal Studies of Youth 1979 (NLSY79). The NLSY79 is a nationally representative panel survey initiated in 1979 by the Department of Labor, of individuals between the ages of 14 and 22. Respondents were followed yearly thereafter until 1994 and have been followed biannually since that year. Our analysis will cover the years between 1979 and 2004. The NLSY is particularly useful for analysis of Hispanic migration the survey

because it is the first national panel to over-sample for Hispanics; it covers the ages when most migrations are made by youths and young adults; it allow individuals to self-identify their ethnicity at several points in time; and the survey includes extensive information on place of residence or family background and labor market characteristics. The data utilized here include the geocode files that allow researchers to examine migration on a yearly basis, as opposed to the every five year method utilized by many other studies including the U.S. census.

The reader will note that utilizing the NLSY79 indicates that the respondents are not representative of the most recent immigrants to the U.S., although a number of the respondents can be said to be generation 1.5, or those born in a native country, and then immigrated to the destination. The age of this sample also indicates that it was born at the height of the U.S. baby boom and hence can be described as a sort of "indicator group" for the types of internal migrations that can be anticipated in the future.

Variables:

Migration will be measured as a move from one county to another. A migrant is defined as someone who has changed counties from one interview to the next during the panel study. This can be ascertained by comparing the county-codes for place of residence for each year of interview for the respondents. A person can only be a migrant if they have moved at least once: the first move is defined as a primary migration; any moves beyond that are repeat migrations. The respondent can only be a return migrant if he or she has been a primary migrant. But a migrant can be a return migrant or an onward migrant or both as their life circumstances change and they move to or from new or old destinations. That is, they count as repeat migrants if they move back to any prior place of residence. They count as onward migrants if they move to any new county of residence. Thus, the same person can be both a repeat and an onward migrant. Because our interest is in repeat migration, we will focus on only those who have made at least a primary migration. If they do not then move again, they are referred to as "stayers."

We employ two dependent variables in a person period analysis. Person periods are common units of analysis and represent units of time over which individuals are observed. The first, repeat migration, is developed for respondents who had made only one migration by the beginning of a given migration interval or person period. This variable is coded as 0 for primary migration in the subsequent interval and 1 for a repeat migration during the subsequent interval. The second dependent variable, repeat migration, is a three category measure coded as 0 for did not make a repeat migration during a given interval, 1 for migrated to new destination or "onward" and 2 for returned to a county of prior residence or "return."

Obviously, defining migration by a move across a political boundary, such as a county line, is problematic: this type of measure misses great numbers of smaller moves. It also can magnify the impact of a short distance move that just happens to cross a county boundary. However, in the U.S., much aggregate and contextual data is available at the county-level that is not available at lower levels of geography. As a result, using a move

across the county-boundary, has become something of a standard measure for migration. More importantly, however, the NLSY79 data allows us to look at forward and backward moves, and allows us to look at them in one or two year intervals, over the course of an individual's lifetime. Thus, despite the limitation of using the county as the base measure for migration, this data allows us much more detail than would otherwise be possible using only census data or even other panel studies.

Race and ethnicity are clearly social constructs, so that the most appropriate way to incorporate individuals into one group or another is to allow them to self-identify. In 1979, individuals in this panel self-identified by answering the question "WHAT IS YOUR ORIGIN OR DESCENT?" 1,924 total individuals identified as of Hispanic origin, of whom 1112 identified as Chicano, Mexican-American or Mexican; 308 identified as Puerto Rican; and 228 identified as Cubans, other Spanish or Other Hispanic.

When these are transformed into person periods, as can be seen inTable 2, there are 9821 Mexican heritage person-periods, 2441 Puerto Rican person-periods, and 6675 other Latin heritage person-periods, taking into account losses attrition from the panel. It should be noted that as of the 2004 panel, more than 8???__% remained intact.
It should also be noted that no individual is included in this analysis unless they have reached age 18 and have also entered the labor force.

The demographic variables to be analyzed will include sex, age, employment status, education, marital status, rural/urban residence, childhood language, home ownership, parents' country of birth; and length of residence in the place of each residence. Sex and age are included as males and females have somewhat different migratory patterns in the first place and those under age 30 are known to be more likely to move. It is presumed that migration is a way of handling problems such as unemployment, so that employment status is included, and certainly it is true that those currently residing in an urban area have more opportunities so may choose to stay in a place whether they have a job or not while those residing in a rural place may be more likely to move due to fewer opportunities.. Language used at home during childhood serves as a control for acculturation while length of residence in current place and home ownership are measures of social capital that individuals acquire as they "settle down".

A number of geographic typologies have been created in recent years that will allow the analysis of the types of places that migrants are choosing as destinations. Some, however, are surprisingly not useful in a nationwide data set. For example we attached the Kandel and Cromartie (2004) geographic indicators for Hispanic county types, showing "Substantial Hispanic representation; Rapid Hispanic Growth; Rapid Growth non-Hispanic; and Slow Growth and Declining Non-Hispanic." Unfortunately, that the NLSY79 is a nation-wide panel survey, there were too few cases in each of the non-metropolitan counties to make use of the typology. However, we were able to attach the so-called Beale Codes to the data (ERS, USDA 2004) . The Beale codes allow the characterization of counties by a dummy code indicating the county's overall economic dependence.

Table 1. County Typology Codes.

metro	Metro-nonmetro county indicator. 0=nonmetro 1=metro (2003 Metro classification)
farm	Farm-dependent county indicator. 0=no 1=yes
mine	Mining-dependent county indicator. 0=no 1=yes
manf	Manufacturing-dependent county indicator. 0=no 1=yes
fsgov	Federal/State government-dependent county indicator. 0=no 1=yes
serv	Services-dependent county indicator. 0=no 1=yes
nonsp	Non-specialized-dependent county indicator. 0=no 1=yes
house	Housing stress county indicator. 0=no 1=yes
loweduc	Low-education county indicator. 0=no 1=yes
lowemp	Low-employment county indicator. 0=no 1=yes
perpov	Persistent poverty county indicator. 0=no 1=yes
poploss	Population loss county indicator. 0=no 1=yes
rec	Nonmetro recreation county indicator. 0=no 1=yes
retire	Retirement destination county indicator. 0=no 1=yes

These are reverse coded in the present analysis so as to make interpretation of results more intuitive.
Source: August 26, 2004 release
Contact Tim Parker for more information,
tparker@ers.usda.gov
USDA, Economic Research Service, http://www.ers.usda.gov

After preliminary analysis, we excluded the dummy variable categories for mining, manufacturing, non-specialized, low education, and population loss counties. These county types did not indicate large proportions of respondents in this analysis and are not county types that are historically, nor currently, places with large proportions of Hispanic residents.

We include descriptive data for stayers, return, and onward migrants, as well as for Mexican heritage, Puerto Rican heritage and Other Latin heritage migrants (of whom better than 63% nationwide are South Americans.). Our primary analysis, however, is multinomial regression of the stayer/onward/return variable on the independent variables. Because the question alluded to in the title of this paper is whether or not the migration patterns of different groups result in their continuing to move or in their return to home, we examine whether the different groups have varying propensities for migration once key determinants are taken into account and to understand the effects of socioeconomic and contextual (spatial) characteristics on the migration of individuals.

Results:

As can be seen from table 2, although Puerto Ricans have a low proportion of person periods in return migrations, while Other Latinos have a slightly higher percentage of onward migrations, the heritage status of three groups does not seem to be particularly associated with type of migration. Excluding Puerto Ricans, one can note that Mexican heritage individuals have a 10 percent higher proportion of the non-native born parents and were substantially more likely to speak a language other than English at home than were other Latinos. Puerto Ricans were similarly highly likely to speak another language

during childhood. Mexicans are also somewhat more male than the other two groups and somewhat less "married, but the age proportions of the three groups, as well as the employment status of the three groups seem to be the same. Mexicans have many fewer children, much less education, and less home ownership than the other groups, with Puerto Ricans showing the highest levels of education and home ownership and the lowest level of urban residence, as well as the longest duration at current residence.

Table 2 about here.

Table 3 provides an analysus set of descriptive data for migration type for 2 year person periods. Mexicans are most likely to move once then stay; Puerto Ricans are least likely to be stayers; and other Latinos fall in between. Other variables show little difference between stayers, onward and return migrants, although those who are stayers are somewhat more likely to be married, employed, and own a home.

Table 3 about here.

Table 4 gives rather more interesting results. This multinomial regression of onward and return migrations by person period, in relationship to stayers, (run without a constant so that the first set of odds indicate the likelihood of each of the heritage groups actually making an onward or return migration, relative to being a stayer, net of the effect of other variables), shows that while all three heritage groups are more likely to stay, they are dramatically more likely to be onward migrants than return migrants, but if their parents are foreign born, they are more likely to make a return migration. Of course, youths are more likely to make each type of migration, but those with no children are substantially and statistically significant more likely to move onward than to make a return migration.

Those with a college education are much more likely to make an onward move, relative to staying or to those with less education, but there seems no effect on repeat migrants. The unemployed are more likely to move onward or make a repeat migration, as are those who have lived in a place for shorter periods of time and those who own their own homes.

Where the County-level variables come in provides an even more spectacular set of differences: If the individual is in a nonmetro county, they are likely to make an onward migration, but not a repeat migration. But if they are in a non-farm county they are less likely to do so. If they are in a government dependent county, they are statistically more likely to make an onward move, but not a return move. But if they were in a housing deficit county, they were less likely to move onward or return

Although research is increasingly showing that Latinos are part of the booming work fore in retirement communities, they seem slightly less likely to have moved onward to one. There is no association between being in a recreation related county, a persistent poverty county or a low employment ratio county.

Table 4 about here.

Conclusions:

The results of the analysis show that, as per segmented assimilation theory, various groups of Hispanics are following quite different methods of migration. Although other research (Wilson, et. al., forthcoming) indicates that Hispanics are more likely to make repeat migrations than other minorities in the U.S., it is apparently that not all Latinos move in the same fashion, and it is also quite clear that their differences will likely ccontinue to result in strong differences in where groups settle.

Puerto Ricans, of course, have had a long history of migration to the east coast of the U.S., and their migration pattern shows that they are less likely to make an onward migration than they are to stay. Other Latin American heritage persons (mostly of South American heritage) are also less likely to make an onward or return migration, but are more likely than either Mexicans or Puerto Ricans to move onward or to return. Mexican internal migrants are someplace in between these two groups.

Bibliography

Adelman, R. M., C. Morett & S.E. Tolnay (2000). "Homeward Bound: The Return Migration of Southern-born Black Women 1940 to 1990." *Sociological Spectrum* 20:433-463.

Bogue, D. J. and Calvin L. Beale. *Economic areas of the United States.* (1961) New York: Free Press of Glencoe.

Brown, Robert N. and John Cromartie. "Black Homeplace Migration to the Yazoo-Mississippi Delta: Ambiguous Journeys, Uncertain Outcomes. *Southeastern Geographer (*2006)46:189-214.

Chun, Sung-Chang, "The 'Other Hispanics'—What are their National Origins?: Estimating the Latino-Origin Populations in the United States", *Hispanic Journal of Behavioral Sciences* (May, 2007) 29:133-55.

DaVanzo, Julie. "Repeat Migration in the United States: Who Moves Back and Who Moves On?*"The Review of Economics and Statistics*, Vol. 65, No. 4 (Nov., 1983) 552-559

DaVanzo, Julie and Peter A. Morrison. "Return and Other Sequences of Migration in the United States." *Demography* (1981) 18:85-101.

Frey, W. H. (2008). "Race, Immigration and America's Changing Electorate." Brookings Institution Metropolitan Policy Program, Washington DC.

Frey, W. H. (1996)."Immigration, Domestic Migration, and Demographic Balkanization in America: New Evidence for the 1990s." *Population and Development Review* 22:741-763.

Frey, W. H. (1995). "Immigration and Internal Migration 'Flight' from U.S. Metropolitan Areas: Toward a New Demographic Balkanization." *Urban Studies* 32:733-57.

Goldstein, S. (1954). "Repeated Migration as a Factor in High Mobility Rates." *American Sociological Review* 19:536-541.

Haan, M. (2007). "The Homeownership Hierarchies of Canada and the United States, The Housing Patterns of White and Non-White Immigrants of the Past Thirty Years." *International Migration Review* 41:433-465.

Johnson, K. M., P.R. Voss, G. Fuguitt & S. McNiven (2006). "Temporal and Spatial Variation in Age-specific Net Migration in the United States." *Demography* 42:791-812.

Kandel, William and John Cromartie. "New Patterns of Hispanic Settlement in Rural America" Rural Development Research Report #99. (2004.)

Lee, Everett. S. "A theory of migration." *Demography* (1966) 3: 47-57. ...

Lindstrom, D.P. (1996). "Economic Opportunity in Mexico and Return Migration from the United States." *Demography* 33:357-374.

Lloyd, Kim M. "Latinas' Transition to First Marriage: An Examination of Four Theoretical Perspectives." *Journal of Marriage & the Family* (November, 2006): 993-1014.

Long, L. H. & A. Nucci (1998). "Accounting for two Population Turnarounds in Nonmetropolitan America." *Research in Rural Sociology and Development* 7:47-70.

McHugh, K.E. (1987). "Black Migration Reversal in the United States." *Geographical Review,* 77:171-182.

Morrison, Peter A. 1967. "Duration of Residence and Prospective Migration: the evaluation of a stochastic model." Demography 4(2): 553-561

Newbold, K.B. (1997). "Race and Primary, Return, and Onward Interstate Migration." *Professional Geographer* 49:1-14.

Stack, Carol. *Call to Home: African Americans Reclaim the Rural South* Harper Collins. 1996.

Tolnay, S.E. (2003). "The African American Great Migration and Beyond." *Annual Review of Sociology* 29:209-32.

Tolnay, S. E. & S.C. Eichenlaub (2006). "Southerners in the West: The Relative Well-being of Direct and Onward Migrants." *Social Forces* 84:1639-1663.

Toney, M.B. (1976). "Length of Residence, Social and Economic Opportunities." *Demography* 13:297-308.

Toney, Michael B., Chalon Keller, Lori M. Hunter. "Regional cultures, persistence and change: a Case Study of the Mormon Culture Region" T*he Social Science Journal (*2003) 40:431-445.

Ravenstein, E. G. "The Laws of Migration" *Journal of the Royal Statistical Society* (1885) 48: 167-227.

Reichert, C. von (2002). "Returning and New Montana Migrants: Socio-economic and Motivational Differences." *Growth and Change* 33:133-151.

Weakliem, D. L. and Biggert R. "Region and Political Opinion in the contemporary United States. *Social Forces* (1999) 77:

Zuniga, V. & R. Hernandez-Leon (2002). A New Destination for an Old Migration: Origins, Trajectories, and Labor Market Incorporation of Latinos in Dalton, Georgia. (In A.D. Murphy)

Wilson, Berry, Toney and Kim. Forthcoming. *PRPR*

Table 2: Summary Statistics by Heritage-type, in 2-year person periods

		Mexican Heritage		Puerto Rican Heritage		Other Latin Heritage	
		n	%	n	%	n	%
Migration Status							
	Stayers	8777	89.4	2201	90.2	5857	87.7
	Onward Migrant	576	5.9	149	6.1	523	7.8
	Return migrant	468	4.8	91	3.7	295	4.4
		9821		2441		6675	
Parents born outside U.S.							
	non-native born	2932	34.1	2090	95.8	2511	44.1
	native born	5669	65.9	91	4.2	3183	55.9
	(PR is a U.S. territory)	8601		2181		5694	
Language other than English spoken at home during childhood							
	No	457	4.7	22	0.9	1360	20.4
	Yes	9364	95.3	2419	99.1	5315	79.6
		9821		2441		6675	
Age of Respondent, at Time of Migration							
	18~21	1273	15.5	344	15.6	896	15.3
	22~25	1707	19.4	415	18.9	1179	20.1
	26~30	2386	27.2	565	25.7	1528	26.1
	31~35	1860	21.2	478	21.7	1216	21.1
	36+	1551	17.7	399	17.7	1038	17.7
		8777		2201		5857	
Gender							
	female	4350	44.3	1168	47.8	3237	48.5
	male	5471	55.7	1273	52.2	3438	51.5
		9821		2441		6675	
Marital Status							
	not married	3720	42.4	1138	51.7	2783	47.5
	married	5055	57.6	1063	48.3	3074	52.5
		8775		2201		5857	
Number of children at time of migration							
	0	4318	44	1212	49.7	3625	54.3
	1	1782	13.1	517	21.2	1156	17.3
	2~3	3290	33.5	656	26.9	1648	24.7
	4+	431	4.4	56	2.3	246	3.7
		9821		2441		6675	
Education							
	less than HS	2759	31.6	589	27	990	17
	HS	4838	55.5	1338	61.3	3530	60.5
	some College	585	6.7	143	6.6	421	7.2
	BA/BS or more	537	6.2	112	5.1	896	15.4
		8719		2182		5837	
Employment Status							
	Employed	7931	90.4	1899	86.3	5471	93.4
	not Employed	846	9.6	302	13.7	386	6.6
		8777		2201		5857	

	Mexican Heritage		Puerto Rican Heritage		Other Latin Heritage	
	n	%	n	%	n	%
Home ownership						
no	6079	69.8	1752	81.1	4192	70.8
yes	2629	30.2	407	18.9	1726	28.4
	8708		2159		5918	
Residential Duration (at current place)						
0~3 years	1887	19.2	389	15.9	1321	19.9
3~5 years	1859	18.9	447	18.3	1321	10
6~10 years	2027	20.6	505	20.7	1372	20.6
10+ years	4044	41.2	1100	45.1	2635	39.6
	8774		2111		5833	
Current residence Urban/Rural						
Rural	732	8.7	61	3	452	8
Urban	7688	91.3	1994	97	5189	92
	8420		2055		5641	

Table 3: Summary Statistics by Migrant type, in 2-year person periods

		Stayer		Onward migration		Return migration	
		n	%	n	%	n	%
Heritage Status							
	Mexican heritage	8777	52.1	576	46.2	468	54.8
	Puerto Rican heritage	2201	13.1	149	11.9	91	10.7
	Other Latin heritage	5857	34.8	523	41.9	295	34.5
	sum	16835		1248		854	
Parents born outside U.S.*							
	non-native born	7533	45.7	593	48.6	476	57.6
	native born	8943	54.3	627	51.4	351	42.4
	*PR is a U.S. territory	16476		1220		827	
Language other than English spoken at home during childhood							
	No	1563	9.3	159	12.7	117	13.7
	Yes	15272	90.7	1089	87.3	737	96.3
		16835		1248		854	
Age of Respondent,							
	18~21	2513	14.9	215	17.2	152	17.8
	22~25	3301	19.6	291	23.3	202	23.7
	26~30	4479	26.6	303	24.3	228	26.7
	31~35	3554	21.1	229	18.3	178	20.8
	36+	2988	17.7	210	16.8	94	11
		16835		1248		854	
Gender	female	8997	43.8	693	41.5	492	43.7
	male	7838	56.2	555	58.5	362	54.2
		16835		1248		854	
Marital Status							
	not married	7641	45.4	682	54.6	464	54.3
	married	9192	54.6	566	45.5	390	45.7
		16833		1248		854	
Number of children at time of migration							
	0	7907	47	743	59.5	505	59.1
	1	3097	18.4	199	15.9	159	18.6
	2~3	5149	30.6	278	22.3	167	19..6
	4+	682	4.1	28	2.2	23	2.7
		16835		1248		854	
Education							
	less than HS	4338	25.9	278	22.4	216	25.4
	HS	9706	58	684	55.1	507	57.9
	some College	1149	6.9	95	7.6	49	5.8
	BA/BS or more	1545	9.2	185	14.9	77	9.1
		16738		1242		849	

Table 3 continued next page.

Table 3 continued

	Stayer		Onward migration		Return migration	
	n	%	n	%	N	%
Employment Status						
Employed	15301	90.9	1090	87.3	736	86.2
not Employed	1534	9.1	158	12.7	118	13.8
	16835		1248		854	
Home Ownership						
no	10403	70	935	81.9	685	86.7
yes	4450	30	207	18.1	105	13.3
	14853		1142		790	
Residential Duration (at current place)						
0~3 years	2747	16.3	338	27.1	512	60
3~5 years	3107	18.5	318	25.5	202	23.7
6~10 years	3587	21.3	227	18.2	90	10.5
10+ years	7367	43.8	362	29.1	50	5.9
	16808		1245		854	
Current residence Urban/Rural						
Rural	1245	7.7	116	9.8	83	10.5
Urban	14871	92.3	1073	90.2	708	89.5
	16116		1189		791	

Table 4. Multinomial regression of onward, return vs. stayers on heritage, individual, and county characteristics.

		Onward Migration					Return		
Individual-level variables		B	se	df	Sig.	Exp(B)	B	se	d
Heritage variables									
Mexican heritage		-2.063	0.246	1	0.000	0.127	-5.533	0.355	
Puerto Rican heritage		-2.148	0.263	1	0.000	0.117	-5.587	0.376	
Other Latin heritage		-0.186	0.242	1	0.000	0.156	-5.596	0.351	
Parents born outside U.S.									
foreign-born		0.011	0.077	1	0.888	1.011	0.313	0.092	
native born (comparison)									
Language other than English									
English only	0.029	-0.003	0.115	1	0.803	1.029	-0.059	0.135	
language other than English									
Age at move									
18-21		-0.294	0.139	1	0.034	0.745	-0.358	0.183	
22-25		-0.105	0.125	1	0.402	0.901	-0.113	0.168	
26-30		-0.169	0.120	1	0.161	0.844	0.080	0.161	
31-35		0.001	0.122	1	0.994	1.001	0.426	0.164	
36+ (comparison)									
Sex									
male		0.026	0.070	1	0.704	1.027	0.105	0.086	
female (comparison)									
Marital status at move									
not married		0.089	0.083	1	0.286	1.093	-0.014	0.099	
married									
Number of Children at move									
1		-0.251	0.106	1	0.018	0.778	0.003	0.123	
2-3		-0.260	0.104	1	0.012	0.771	-0.265	0.127	
4+		-0.463	0.232	1	0.046	0.629	-0.161	0.255	
0 (comparison)									

Table 4 continued next page.

Table 4,cont'd. Multinomial regression of onward, return vs. stayers on independent variables

	Onward Migration					Return Migration		
Individual-level variables	B	se	df	Sig.	Exp(B)	B	se	d
Education at move								
less than high school	-0.578	0.126	1	0.000	0.561	0.133	0.172	
high school	-0.524	0.108	1	0.000	0.592	0.201	0.152	
some college	-0.353	0.158	1	0.025	0.703	0.121	0.214	
college or more (comparison)								
Employment status at move								
employed	-0.378	0.100	1	0.000	0.685	-0.366	0.121	
unemployed (comparison)								
Duration of residence up to move								
0-3 years	0.752	0.093	1	0.000	2.121	3.278	0.178	
3-5 years	0.642	0.093	1	0.000	1.901	2.313	0.187	
6-10 years	0.273	0.098	1	0.005	1.314	1.404	0.205	
10+ years (comparison)								
Homeownership								
no	0.689	0.098	1	0.000	1.991	0.840	0.125	
yes (comparison)								
Urban rural residence at move								
rural resident	0.035	0.133	1	0.791	1.036	0.138	0.154	
urban resident								
County-level Variables								
Metropolitan county								
Metro county	-0.365	0.130	1	0.005	0.694	0.155	0.163	
nonmetro county (comparison)								
Rural non-farm dependent county county								
farm county	0.352	0.259	1	0.174	1.422	0.622	0.259	
nonfarm county (comparison)								
Government dependent county								
fed/state govt dependent	0.363	0.104	1	0.000	1.438	0.184	0.128	
not fed/state govt dependent (comparison)								
Housing deficit county								
housing deficit county	-2.870	0.087	1	0.001	0.751	-0.345	0.101	
non-housing deficit county (comparison)								
Retirement county								
retirement county	-0.224	0.114	1	0.050	0.799	0.032	0.123	
non-retirement county (comparison)								
Recreation county								
recreation county	0.750	0.329	1	0.819	1.078	.097-	0.387	
non-recreation county (comparison)								
Persistent Poverty County								
persistent poverty	0.216	0.142	1	0.130	1.24.1	0.065	0.178	
not persistent poverty county (comparison)								
Low Employment Rate County								
Low Employment Rate	0.011	0.108	1	0.917	1.011	-0.084	0.136	
Not Low Employment rate (comparison)								

Pseudo R-square Cox & Snell =.76529 Nagelkerke = ..854 McFadden = ..649

a. The reference category is: stayers