Salt Lake City:
Fair Housing Equity Assessment

Prepared by

Bureau of Economic and Business Research
David Eccles School of Business
University of Utah

James Wood
John Downen
DJ Benway
Darius Li

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Background

- Salt Lake City's minority share nearly doubled from 17 percent in 1990 to 34 percent in 2010. The minority increase exceeded net population growth in the past 20 years.
- While the net population growth in the last decade was only a fifth of the growth from 1990 to 2000, the non-Hispanic white population decrease from 2000 to 2010 was 1.6 times greater than from 1990 to 2000.

Segregation

- The non-Hispanic white homeownership rate has been above the city average of 50 percent in the past 20 years, whereas only a third of minority housing units are owner occupied.
- In 2000, nearly all the census tracts in the west-side neighborhoods of the River District had minority-majorities. By 2010, the minority share in these areas increased to over 60 percent.
- Minority housing units are concentrated heavily in the River District. Given the relatively few bus routes in these neighborhoods, River District residents do not have easy accessibility to low-wage employment centers in the downtown area and at the airport. The opening of the TRAX line to the airport could potentially improve the accessibility of public transit.

RCAP/ECAP

- While two-thirds of the poor on the east side are non-Hispanic white, over two-thirds of the poor in the River District are minorities.
- Salt Lake City has two of the county's three RCAPs. One RCAP is located west of I-15 in the River District, while the other one is situated just east of I-15 at the southern end of the city. Both RCAPs have low employment opportunities with few bus routes.
- The city is also home to the three non-racially concentrated areas of poverty, each along the east side of I-15 leading up to downtown Salt Lake City.

Disparities in Opportunity

- HUD provided an opportunity index that aggregated a variety of factors such as school proficiency, job access, poverty, and housing stability. The farther west a census tract is situated in Salt Lake City, the more likely it is to have a low opportunity index score.
- Opportunities in public schools in Salt Lake City follow a similar trend as the HUD opportunity index, where the highest performing schools are located on the eastern half of the city, whereas the lowest-opportunity schools are in the River District.
- The assessed single-family home values in the city increase rapidly from below $150,000 in the River District to well over $400,000 in the easternmost neighborhoods.
- From 2006 to 2011, 12 percent of approved mortgage loans for non-Hispanic white applicants were high-interest loans—compared to 36 percent of approved loans for Hispanics.

Physical & Fair Housing Infrastructure (forthcoming)

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FAIR HOUSING EQUITY ASSESSMENT ANALYSIS

The demographic changes in Salt Lake City in the past 20 years, especially the rapidly rising minority population, have ostensibly led to segregation within the city. Interstate 15 marks a clear division in socioeconomic status and access to opportunity between the affluent east side and the disadvantaged neighborhoods along the Jordan River corridor, also known as the River District (approximately 1700 W. to I-80 and 600 N. to 1200 S.). Minorities have overwhelmingly resided in River District neighborhoods, including Fairpark, Euclid, Poplar Grove and Glendale. In some tracts, the minority population is as high as 60 percent of the tract population. This segregation can easily be attributed to the wide range of assessed home values, from under $150,000 in the River District to well over $400,000 in the easternmost neighborhoods. This segregation has led to a gap in opportunity.

As a large rental city with a young population, many of whom are minorities, Salt Lake City encounters a high risk of discrimination and unfair lending practices. This is evidenced by the low levels of minority homeownership rates, which are 20 percentage points lower than rates for non-Hispanic whites. The disparity in homeownership rates across racial lines stems from the mortgage approval rate gap between non-Hispanic white and Hispanics. Even in the case of mortgage approvals, Hispanic applicants have a larger share of high-interest loans than non-Hispanic white applicants. High-interest loans could signal a predisposition to foreclosures, especially for low-income homeowners. Furthermore, with increasing minorities, and especially Hispanic families, who on average have larger household sizes, there is a higher demand for the low supply of rental options with enough bedrooms to accommodate large families. Thus, minorities face housing impediments on several fronts—few rental options for large households, low mortgage approval rates, and high-interest mortgage loans.

The comparison of the two sides of Salt Lake City in the context of access to opportunity clearly shows that a majority of minority, renter, and low-income populations are located in the low-opportunity areas of the city. The central strip along I-15 and into the River District has the highest concentrations of poverty in the county, whereas east-side neighborhoods such as Federal Heights, the Avenues, and Foothills, which are mostly populated by non-Hispanic white residents, have the highest-calculated access to opportunity and highest-assessed property values. It is also in these neighborhoods where the higher-ranked elementary and secondary schools are located. However, subsidized housing projects, Section 8 housing, and large affordable rental units are mostly not located in these east-side neighborhoods. Thus, while Salt Lake City is a choice school district, minority children living in the River District are less likely to attend these higher-ranked schools.

The clear infrastructural difference between the two sides of Salt Lake City also creates impediments to employment and transportation. Bus routes and public transit options are much fewer in the River District than in the downtown area and east-side neighborhoods. This could potentially pose difficulties for River District residents to commute to employment centers such as the airport, downtown area, and commercial centers in the southern end of the city. The city has already taken action to improve transportation infrastructure in this area through a $250 million investment in a new TRAX line running from downtown, all the way west down North Temple to the airport.

Without effort to improve housing access and opportunity and a concerted citywide action plan that addresses the needs of the minority concentrated areas in the central city and River District neighborhoods, the opportunity gap in the city will continue to rise along with the shifting demographics.

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BACKGROUND

The geographic disparity by race and ethnicity in Salt Lake County is perhaps most striking in Salt Lake City. I-15 demarcates the separation between the affluent east-side SLC and the River District, which is comprised of several neighborhoods with ethnic minority-majorities, including Hispanic/Latino residents and refugee families.

The racial composition of Salt Lake City has changed drastically from 1990 to 2010. Table 1 shows the demographic trends in Salt Lake City from 1990 to 2010 for selected protected classes. While 82.6 percent of the city's population in 1990 was non-Hispanic white, this proportion decreased to 65.6 percent in 2010. The decrease in the non-Hispanic white population has accelerated from a 2.8 percent decrease in the 1990–2000 period to a 4.7 percent decrease in the past decade. Thus, the minority population increase is the driving force behind Salt Lake City's population increase since 1990.

Family characteristics in Salt Lake City have remained fairly steady from 1990 to 2010. The percent of households with persons older than 65 has steadily decreased from 25.4 percent in 1990 to 18 percent in 2010, whereas the share of households with children under 18 has remained above 25 percent since 1990. In addition, the single-parent families accounted for 8.3 percent of total households in 1990, decreasing to 7.4 percent in 2010.

Figure 1
Large Renter Households by City and Share of Salt Lake County Large Renter Households, 2010

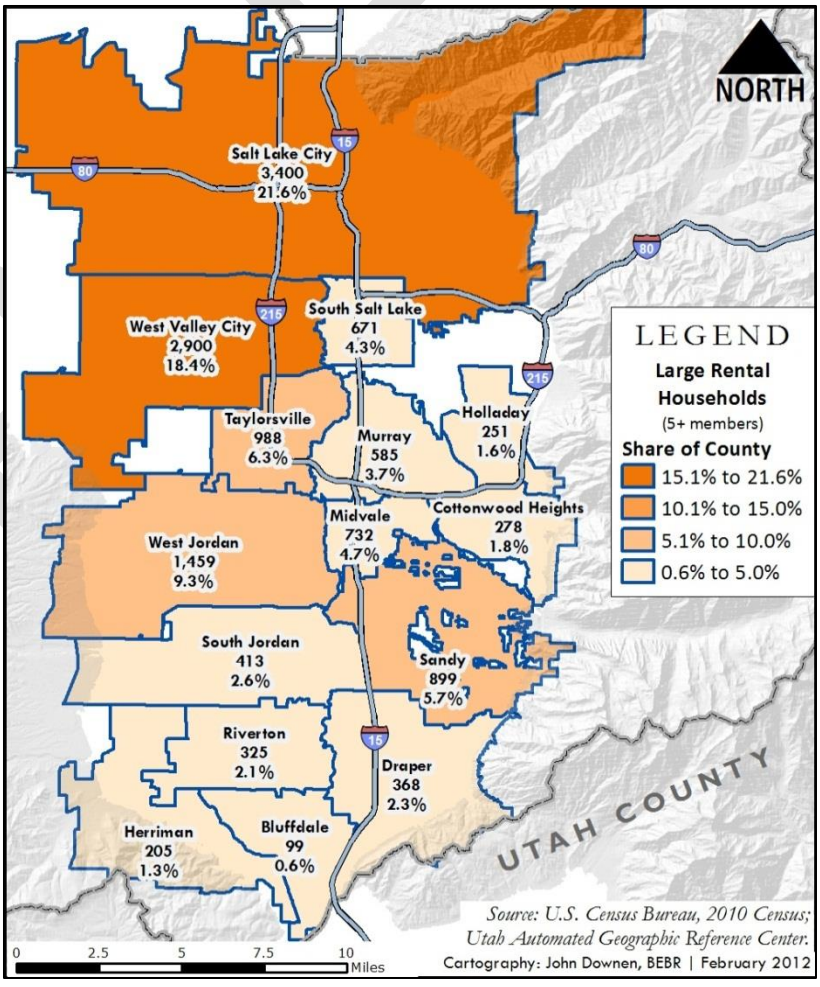

Figure 1 shows each city's share of Salt Lake County's large rental households, which are defined as having five or more persons. Over a fifth of the county's large rental households reside in Salt Lake City. The six entitlement cities—Salt Lake City, West Valley, Taylorsville, West Jordan, Sandy, and South Jordan—constitute nearly 64 percent of the county's large rental households. The non-entitlement cities in the southern and eastern regions of the county each have very minimal county shares. Although not pictured in Figure 1, the unincorporated areas are home to nearly 14 percent of the county's large rental households.

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Table 1
Demographic Trends for Protected Classes in Salt Lake City, 1990–2010

	1990		2000		2010	
	Count	Share	Count	Share	Count	Share
Total Population	159,936		181,743		186,440	
White (not Hispanic)	132,090	82.6%	128,377	70.6%	122,325	65.6%
Black (not Hispanic)	2,492	1.6%	3,108	1.7%	4,613	2.5%
Asian[1]	5,446	3.4%	6,498	3.6%	8,151	4.4%
Hispanic/Latino	15,508	9.7%	34,254	18.8%	41,637	22.3%
Minority (all except non-Hispanic white)	27,846	17.4%	53,366	29.4%	64,115	34.4%
Persons with disabilities[1]	—	—	33,154 ± 839	20.0% ± 0.5%	19,804 ± 1,252	11.5% ± 0.7%
Total Households	66,657		71,461		74,513	
Households with Children under 18 years	19,053	28.6%	21,128	29.6%	20,458	27.5%
Households with Persons 65 years or over	16,924	25.4%	14,601	20.4%	13,382	18.0%
Single Parent with Children under 18 years	5,531	8.3%	5,456	7.6%	5,514	7.4%
Large Families (5 or more persons)	6,186	9.3%	7,817	10.9%	7,730	10.4%
Owner-Occupied Housing Units	32,914	49.4%	36,592	51.2%	36,073	48.4%
Renter-Occupied Housing Units	33,743	50.6%	34,869	48.8%	38,440	51.6%

[1] The Asian population was tabulated by aggregating all the Asian races in the 1990 Census Summary Tape File 1A. This methodology was used into order to disaggregate the Asian and Pacific Islander populations, which were tabulated as one group in the 1990 Census. However, the individual Asian races were not disaggregated by Hispanic origin in the 1990 Census Summary Tape File 1A, so an overlap could exist between the 1990 tabulations for the Asian and Hispanic/Latino populations. This overlap is most likely very small given the relatively few Hispanic Asians in the total population. Note that the Asian category in the table above for 2000 and 2010 are non-Hispanic given the availability of disaggregation by Hispanic origin for the Asian population—separate from the Pacific Islander population—since Census 2000.

[2] The disability data account for only the population ages 5 and older, since Census 2000 did not gather disability data on the population under 5. The 2010 data was derived from the 2009-2011 American Community Survey 3-year estimates by aggregating only the age groups older than 5. The margins of error for the disability data are associated with 90% confidence intervals. The margin of error for the 2010 data was recalculated to account for only the population ages 5 and older. The margin of error for the 2000 data was calculated using the methodology described in the Census 2000 Summary File 3 Technical Documentation. Despite these adjustments to make the 2000 and 2010 data encompass the same age groups, these two data points are not comparable given changes in survey design and revisions in the definition of disability.

Source: U.S. Census Bureau

Table 2
Demographic Trends for Protected Classes
(Absolute Change)

	1990–2000	2000–2010
Total Population	21,807	4,697
White (not Hispanic)	–3,713	–6,052
Black (not Hispanic)	616	1,505
Asian (not Hispanic)	1,052	1,653
Hispanic/Latino	18,746	7,383
Minority	25,520	10,749
Total Households	4,804	3,052
Households with Children <18	2,075	–670
Households with Persons 65+	–2,323	–1,219
Single Parent with Children < 18	–75	58
Large Families (5+ persons)	1,631	–87
Owner-occupied Housing Units	3,678	–519
Renter-occupied Housing Units	1,126	3,571

Source: U.S. Census Bureau.

Table 3
Demographic Trends for Protected Classes
(Percent Change)

	1990–2000	2000–2010
Total Population	13.6%	2.6%
White (not Hispanic)	–2.8%	–4.7%
Black (not Hispanic)	24.7%	48.4%
Asian (not Hispanic)	19.3%	25.4%
Hispanic/Latino	120.9%	21.6%
Minority	91.6%	20.1%
Total Households	7.2%	4.3%
Households with Children <18	10.9%	–3.2%
Households with Persons 65+	–13.7%	–8.3%
Single Parent with Children < 18	–1.4%	1.1%
Large Families (5+ persons)	26.4%	–1.1%
Owner-occupied Housing Units	11.2%	–1.4%
Renter-occupied Housing Units	3.3%	10.2%

Source: U.S. Census Bureau.

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Table 4 lists the average household sizes in Salt Lake City by race and ethnicity. With the exceptions of blacks, all racial and ethnic groups experienced declines in average household sizes from 2000 to 2010. While the average non-Hispanic white household size decreased from 2.25 in 1990 to 2.17 in 2010, the average Hispanic/Latino household size increased from 2.91 in 1990 to 3.85 in 2000 before decreasingly slightly to 3.66 in 2010. Pacific Islanders have the highest average household sizes, increasing from 4.65 in 1990 to 5.16 in 2000 before dropping to 4.63 in 2010.

The higher average household sizes among minority groups could pose difficulties in finding affordable and suitable rental locations in addition to incurring higher rent burden. Thus, limited selection and affordability of rental units with three or more bedrooms could disproportionately affect minority groups, especially Hispanic/Latino and Pacific Islander residents.

Table 4
Average Household Size by Race/Ethnicity in Salt Lake City, 1990–2010

Race/Ethnicity	1990[1]	2000	2010
White (not Hispanic)	2.25	2.23	2.17
Hispanic/Latino	2.91	3.85	3.66
American Indian (not Hispanic)	3.01	3.05	2.67
Asian/Pacific Islander (not Hispanic)	2.94	3.12	2.88
Asian[2]	2.56	2.55	2.43
Pacific Islander[2]	4.65	5.16	4.63
Black (not Hispanic)	2.30	2.58	2.61
Other Race (not Hispanic)	2.57	2.82	2.25
Two or More Races (not Hispanic)	—[3]	2.54	2.35
Total Population	2.33	2.48	2.44

[1] The average household size was not a metric available in the 1990 Census Summary Tape File 2B. Thus, the average household size was calculated by taking the average of the distribution of household sizes for each race/ethnicity. However, since the upper limit of the household size was capped at 9 or more persons, households in this group were assumed to have 9 members for the purposes of calculating the average. This methodology could lead to slight underestimations of the actual average household size. For 2000 and 2010, the average household size was available as a metric without further calculation.

[2] The 1990 Census Summary Tape File 2B does not further disaggregate Asian and Pacific Islander populations by Hispanic origin. However, this lack of detailed disaggregation in the census raw data only overcounts the total number of households in Salt Lake County by 91, given the relatively few Hispanic Asians and Hispanic Pacific Islanders in the total population. Note that the Asian and Pacific Islander categories for 2000 and 2010 are non-Hispanic given the availability of disaggregation by Hispanic origin for these two races in the last two censuses to avoid overlap with the Hispanic/Latino population.

[3] The 1990 Census did not include "Two or More Races" as an option for race.

Source: U.S. Census Bureau

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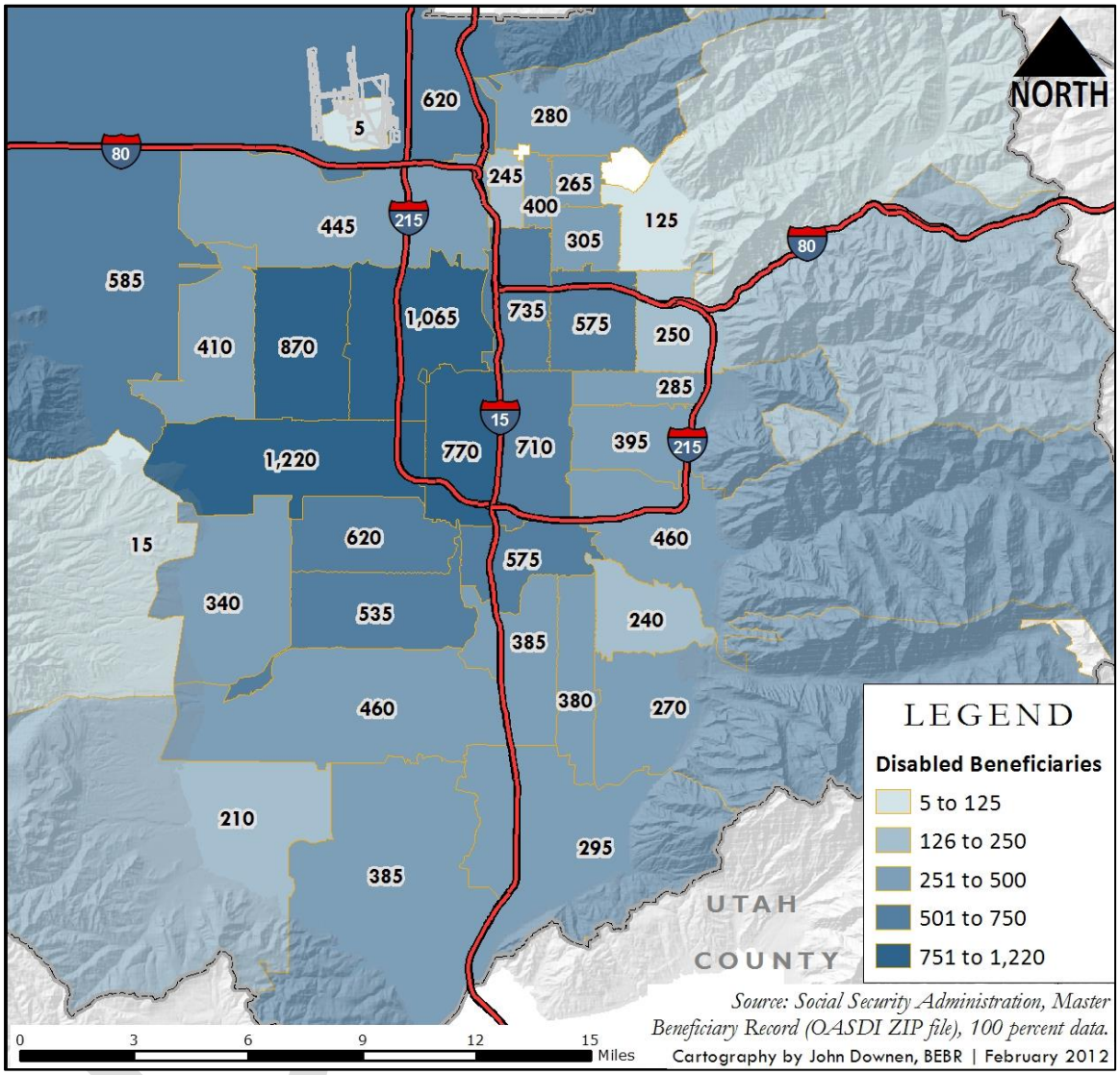
Figure 2
Beneficiaries of Social Security Disability by Zip Code in Salt Lake County, 2010



The number of social security disability beneficiaries in Salt Lake County is shown in Figure 2 at the zip code level. The beneficiaries are heavily concentrated in the central region of the county, including parts of Taylorsville, Murray, West Valley, South Salt Lake, and Kearns. There are roughly 1,065 disabled beneficiaries in the River District compared with 1,620 on the east side of Salt Lake City.

SEGREGATION

For all racial and ethnic groups, the homeownership rates increased from 1990 to 2000 but decreased thereafter in 2010. Table 4 shows that the overall homeownership rate of 48.4 percent in 2010 fell below 1990 levels. However, this overall trend of homeownership rates in 2010 falling below 1990 levels was not reflected within all racial groups. The most notable exception is the African American homeownership rate, which remained steady at 27.3 percent in 1990 and 2000 but plummeted to less than 20 percent in 2010.

Table 6
Homeownership Rate by Race and Ethnicity in Salt Lake City, 1990–2010

Race and Ethnicity	1990	2000	2010
White (not Hispanic)	52.0%	54.7%	52.8%
Minority	31.9%	37.3%	34.8%
Hispanic/Latino	34.4%	38.2%	37.3%
Non-Hispanic Minority	29.1%	36.1%	31.1%
American Indian	11.0%	21.2%	18.0%
Asian or Pacific Islander	34.9%	45.3%	37.5%
Asian	—	41.9%	36.2%
Pacific Islander	—	57.7%	42.7%
Black	27.3%	27.3%	19.6%
Other Race	32.4%	35.5%	35.1%
Two or More Races	—	28.1%	32.3%
Total	49.4%	51.2%	48.4%

Source: U.S. Census Bureau.

Table 5
Rental Rate by Race and Ethnicity in Salt Lake City, 1990–2010

Race and Ethnicity	1990	2000	2010
White (not Hispanic)	48.0%	45.3%	47.2%
Minority	68.1%	62.7%	65.2%
Hispanic/Latino	65.6%	61.8%	62.7%
Non-Hispanic Minority	70.9%	63.9%	68.9%
American Indian	89.0%	78.8%	82.0%
Asian or Pacific Islander	65.1%	54.7%	62.5%
Asian	—	58.1%	63.8%
Pacific Islander	—	42.3%	57.3%
Black	72.7%	72.7%	80.4%
Other Race	67.6%	64.5%	64.9%
Two or More Races	—	71.9%	67.7%
Total	50.6%	48.8%	51.6%

Source: U.S. Census Bureau.

The homeownership rates in Salt Lake City have been historically lower than those at the county level. Even the homeownership rate of non-Hispanic whites is only at 52.8 percent in 2010 compared with the Salt Lake County non-Hispanic white homeownership rate of 71.5 percent, showing that there is a relatively high percentage of renters in Salt Lake City.

Table 7 and Table 8 include the composition of total households and rental households, respectively, by race and ethnicity. The minority share of total households in Salt Lake City has risen from 13 percent in 1990 to nearly 25 percent in 2010. The minority share of rental households has increased from 18 percent in 1990 to nearly 31 percent in 2010. Thus, from 1990 to 2010, minority households have been disproportionately high in the rental household composition. Interestingly, even as the number of non-Hispanic white rental households slightly increased from 2000 to 2010, the rental composition trend for non-Hispanic white households continued to decline from 74 percent in 2000 to 69 percent in 2010. This means that the effect of minority rental household increases in the last decade have overtaken the small increase in non-Hispanic white rental units, creating a shrinking non-Hispanic white share of total rental household despite slight absolute increases.

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Table 7
Total Households by Race and Ethnicity in Salt Lake City, 1990–2010

Race and Ethnicity	1990 Households	1990 Share	2000 Households	2000 Share	2010 Households	2010 Share
White (not Hispanic)	57,803	86.7%	56,940	79.7%	56,359	75.6%
Minority	8,854	13.3%	14,521	20.3%	18,154	24.4%
Hispanic/Latino	4,748	7.1%	8,481	11.9%	10,737	14.4%
Non-Hispanic Minority	4,106	6.2%	6,040	8.5%	7,417	10.0%
American Indian	671	1.0%	608	0.9%	607	0.8%
Asian or Pacific Islander	2,369	3.6%	3,088	4.3%	3,929	5.3%
Asian	—	—	2,417	3.4%	3,128	4.2%
Pacific Islander	—	—	671	0.9%	801	1.1%
Black	998	1.5%	1,143	1.6%	1,630	2.2%
Other Race	68	0.1%	76	0.1%	134	0.2%
Two or More Races	—	—	1,125	1.6%	1,117	1.5%
Total	66,657	100%	71,461	100%	74,513	100%

Note: For the 1990 data, the number of households by race and ethnicity of householder is not further disaggregated to distinguish between Asian and Pacific Islander.
Source: U.S. Census Bureau.

Table 8
Rental Households by Race and Ethnicity in Salt Lake City, 1990–2010

Race and Ethnicity	1990 Households	1990 Share	2000 Households	2000 Share	2010 Households	2010 Share
White (not Hispanic)	27,717	82.1%	25,770	73.9%	26,595	69.2%
Minority	6,026	17.9%	9,099	26.1%	11,845	30.8%
Hispanic/Latino	3,115	9.2%	5,242	15.0%	6,737	17.5%
Non-Hispanic Minority	2,911	8.6%	3,857	11.1%	5,108	13.3%
American Indian	597	1.8%	479	1.4%	498	1.3%
Asian or Pacific Islander	1,542	4.6%	1,689	4.8%	2,456	6.4%
Asian	—	—	1,405	4.0%	1,997	5.2%
Pacific Islander	—	—	284	0.8%	459	1.2%
Black	726	2.2%	831	2.4%	1,311	3.4%
Other Race	46	0.1%	49	0.1%	87	0.2%
Two or More Races	—	—	809	2.3%	756	2.0%
Total	33,743	100%	34,869	100%	38,440	100%

Note: For the 1990 data, the number of households by race and ethnicity of householder is not further disaggregated to distinguish between Asian and Pacific Islander.
Source: U.S. Census Bureau.

Figure 3 shows Salt Lake City's minority growth in 2000 and 2010. The minority growth is mostly in the River District. The minority growth patterns are distributed very similarly in 2000 and 2010. While the very easternmost neighborhoods had virtually no minority growth from 2000 to 2010, the central downtown area experienced very consistent minority growth over the decade. These growth patterns are also reflected in the minority population share by census tract shown in Figure 4. In 2000, nearly all the census tracts in the River District had minority-majority populations. This pattern continued in 2010 with several tracts surpassing 70 percent minority. The minority share of the population in the east-side census tracts remained fairly stable from 2000 to 2010.

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Figure 3
Change in Minority Population Concentrations in Salt Lake City

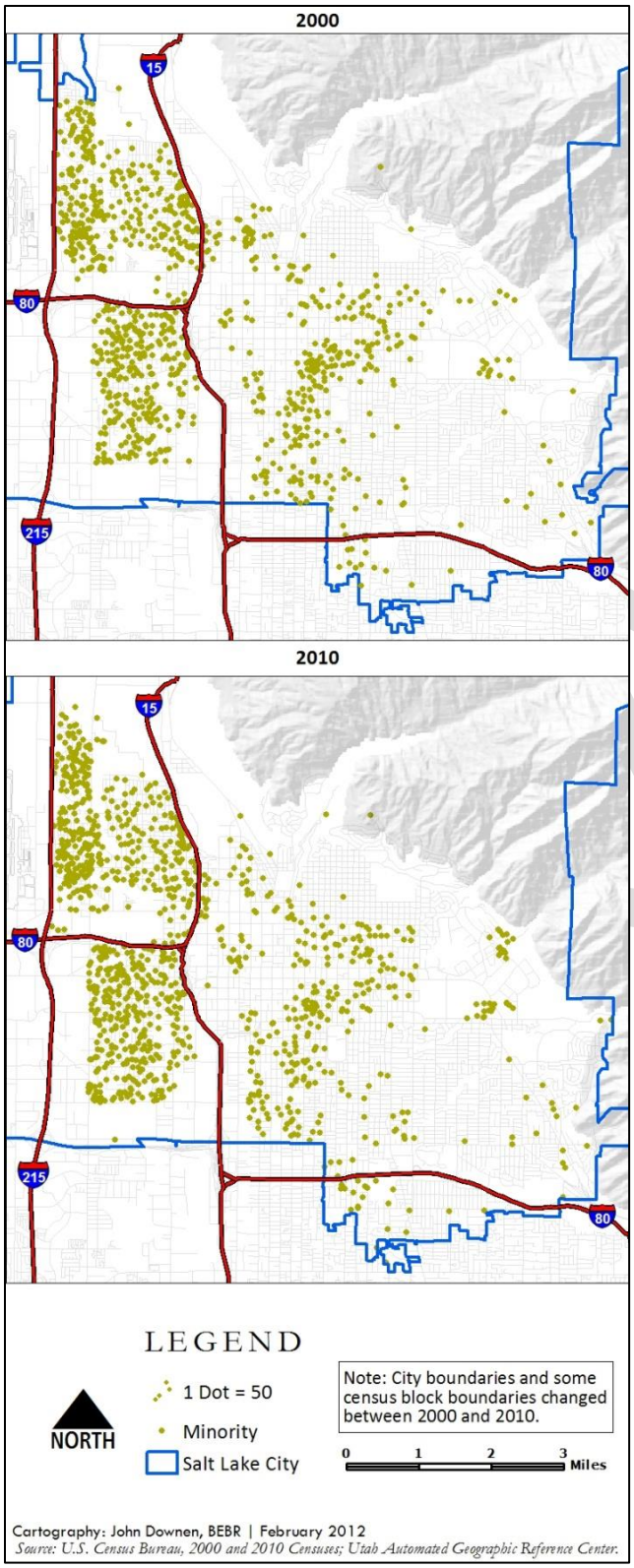


Figure 4
Change in Minority Population Share by Tract in Salt Lake City

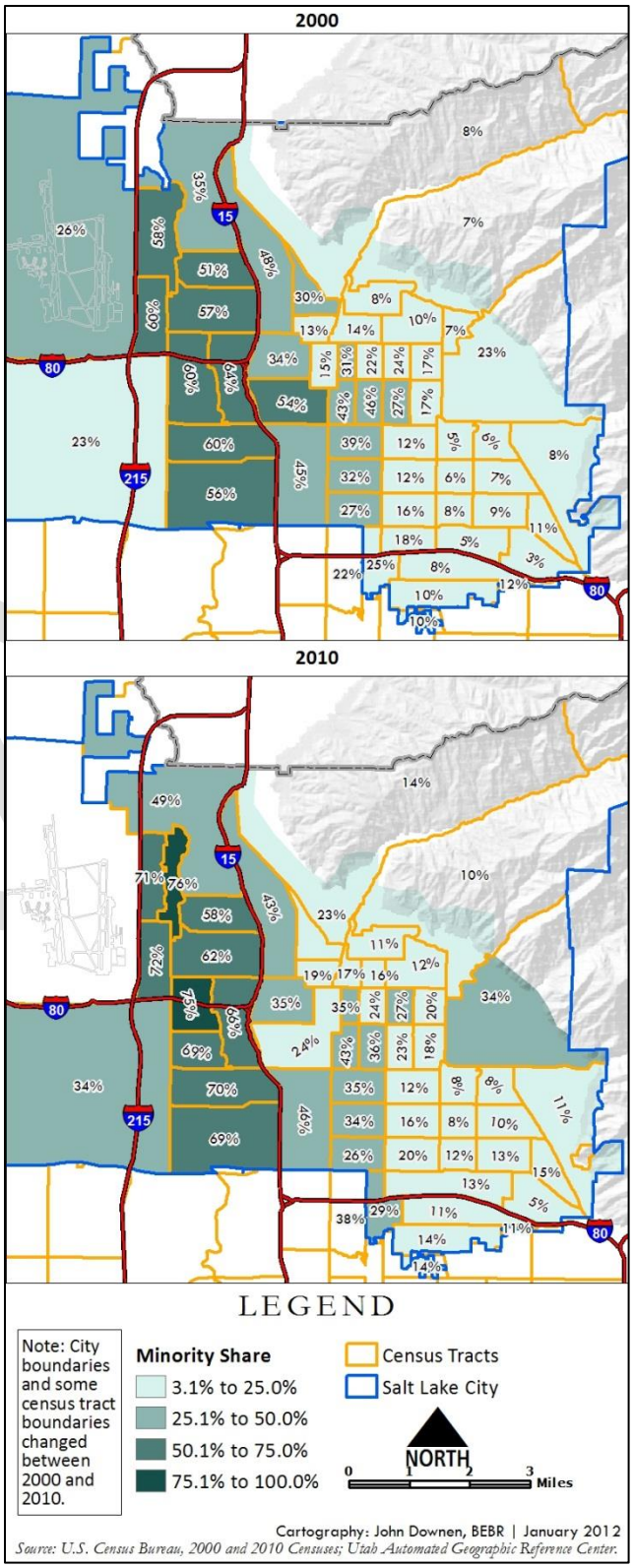
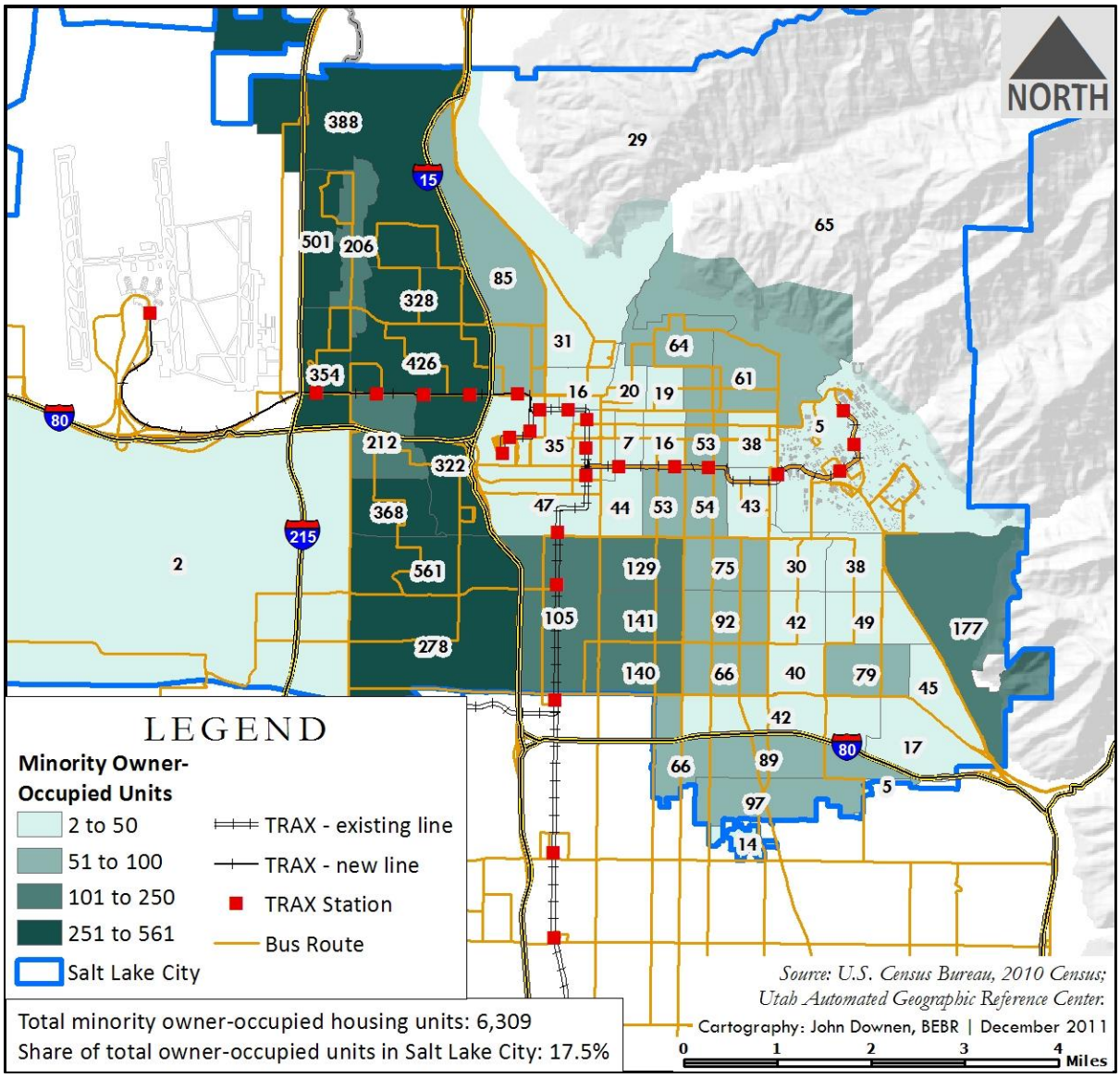


Figure 5 shows the number of minority owner-occupied units by census tract in Salt Lake City. Figure 6 provides the percent of owner-occupied units that are minority households. The minority owner-occupied households in Salt Lake City are concentrated in the River District and very sparse in the residential areas of the east side. The southern region of the city, near the TRAX line running north to south, has more minority owner-occupied households than the other areas east of I-15.

Figure 5
Minority Owner-Occupied Units in Salt Lake City, 2010



As shown in Figure 6, while the minority shares of owner-occupied units are significantly higher in the River District, in almost none of the census tracts west of I-15 do minority owner-occupied households constitute a majority. In other words, even though most of the census tracts west of I-15 are minority-majority, non-Hispanic white owner-occupied households still have a slight majority in the River District.

Figure 6
Minority Share of Owner-Occupied Units by Tract in Salt Lake City, 2010

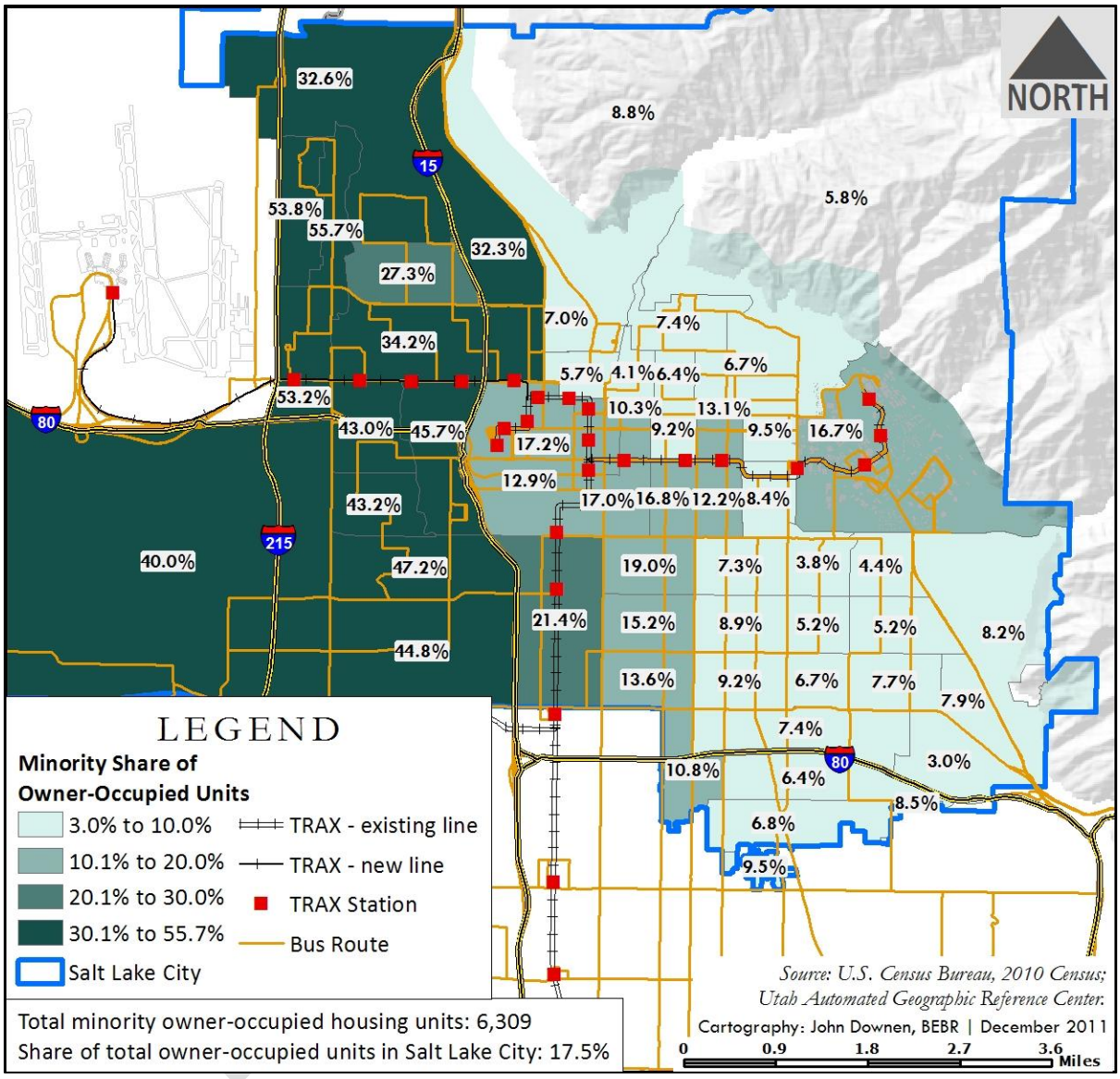
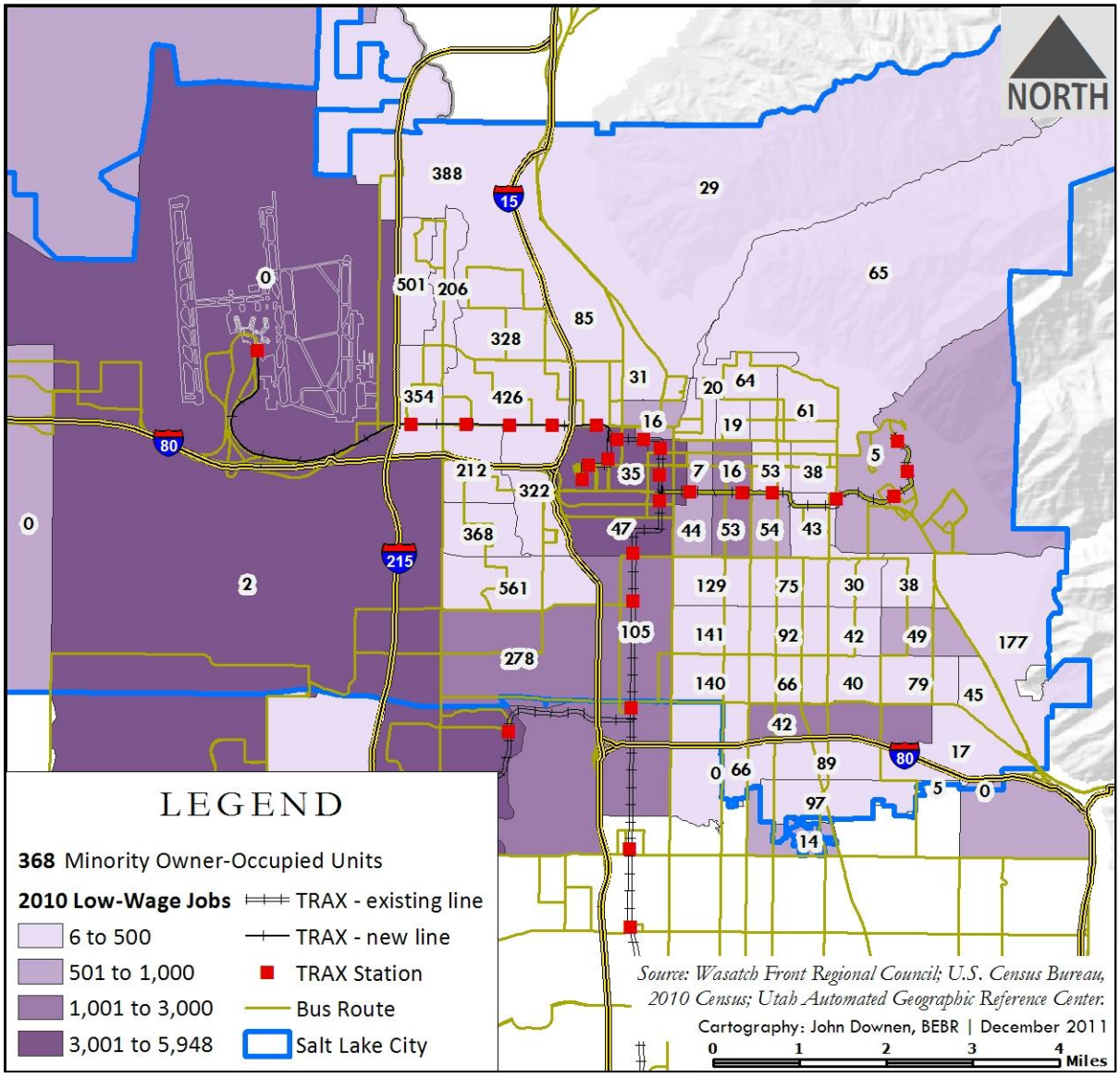


Figure 7 juxtaposes the number of minority owner-occupied units with the density of low-wage jobs.[1] Most of the low-wage jobs are located west of I-215, which includes the Salt Lake City International Airport north of I-80 and the industrial area south of I-80. Other areas with low-wage jobs are in the central downtown area and the commercial areas in the southern part of the city on both sides of I-15. The region that includes the easternmost TRAX station is the University of Utah campus, which has many low-wage jobs, including student employment.

Figure 7
Minority Owner-Occupied Housing Units and Proximity to Low-Wage Jobs, 2010



[1] Low-wage jobs are defined as those in the Retail, Administrative and Waste Management, Arts and Entertainment, and Food and Lodging sectors. Average annual wages in these sectors in 2010 were: Retail: $29,592; Administrative & Waste Mgmt.: $28,620; Arts & Entertainment: $24,372; and Food & Lodging: $16,032.

The yellow lines in Figure 7 show the bus routes in the city. The east side has more bus routes running north to south than the River District. The relatively lower number of bus routes in the River District could pose difficulties for residents trying to commute to employment centers in downtown, at the airport, or throughout the commercial areas further south in the city. While the TRAX line is well positioned to connect the downtown area with the airport and the University of Utah campus, the residents in the River District may not have easy access to TRAX unless they live near the few bus routes that have stops near TRAX stations.

The geographic distribution of minority renter-occupied units shown in Figure 8 is very similar to that of minority owner-occupied units shown in Figure 5. The only noticeable differences are the sizeable number of minority renter-occupied units near the University of Utah campus and the central downtown area. These areas have fewer owner-occupied homes and unsurprisingly very few minority owner-occupied households.

Figure 8
Minority Renter-Occupied Units by Tract in Salt Lake City, 2010

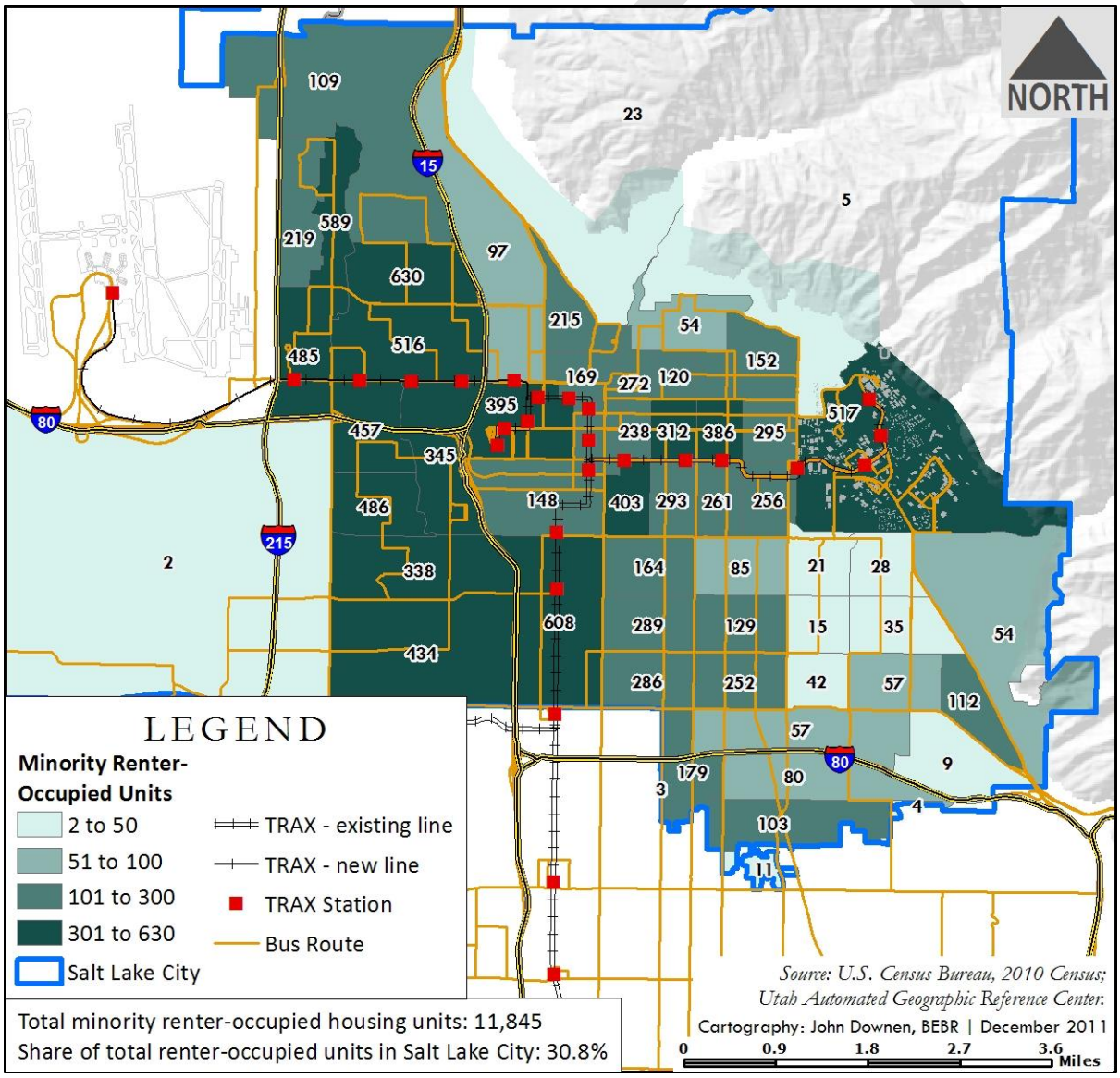


Figure 9 shows the minority share of renter-occupied units in Salt Lake City. Minority households constitute an overwhelming majority of rental units in the River District. The 40 percent minority rental share in the area surrounding the University of Utah for the most part can be attributed to college and graduate students, most of whom do not have the same demographic characteristics as the minority residents in the River District.

Figure 9
Minority Share of Renter-Occupied Units by Tract in Salt Lake City, 2010

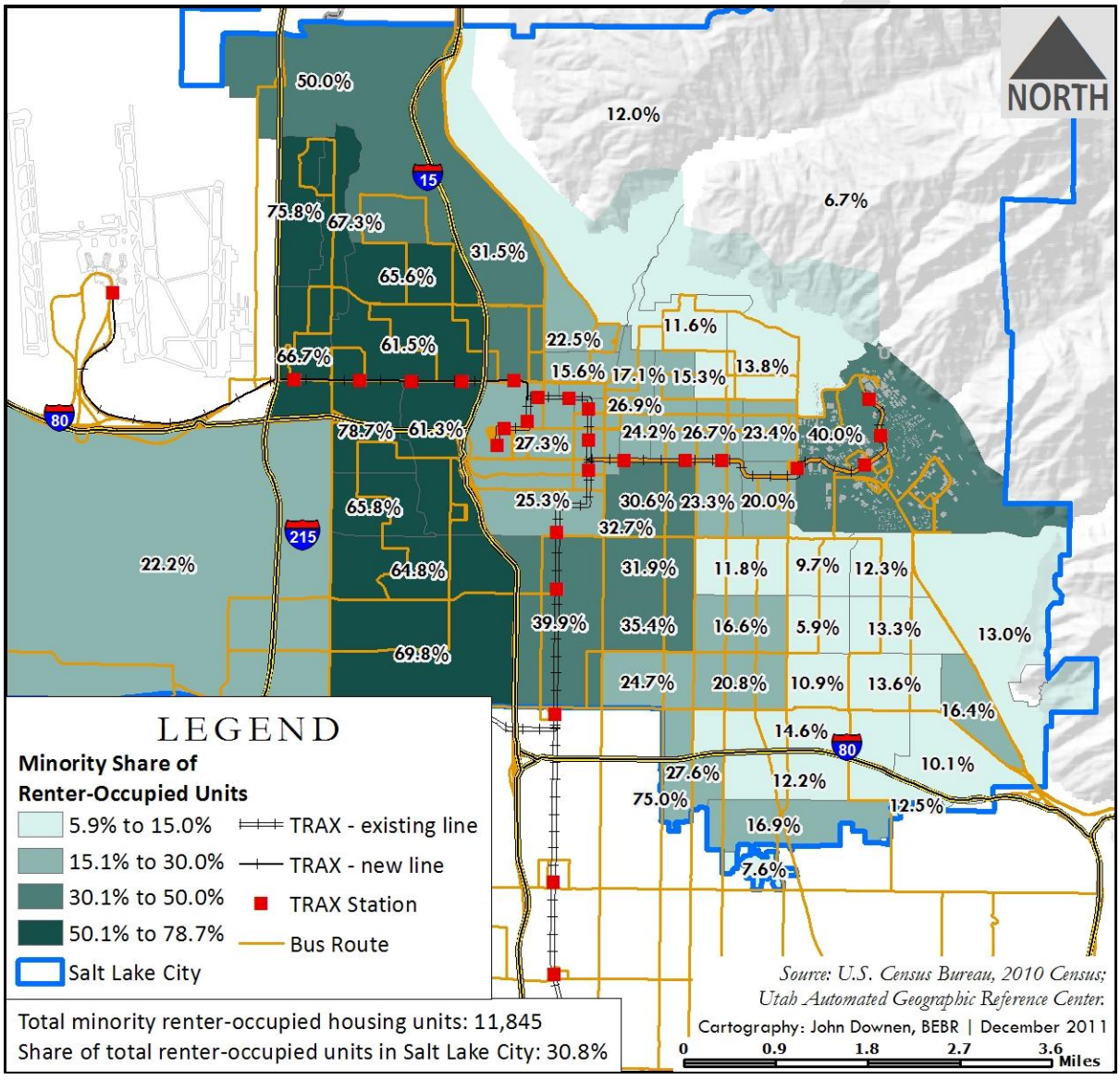
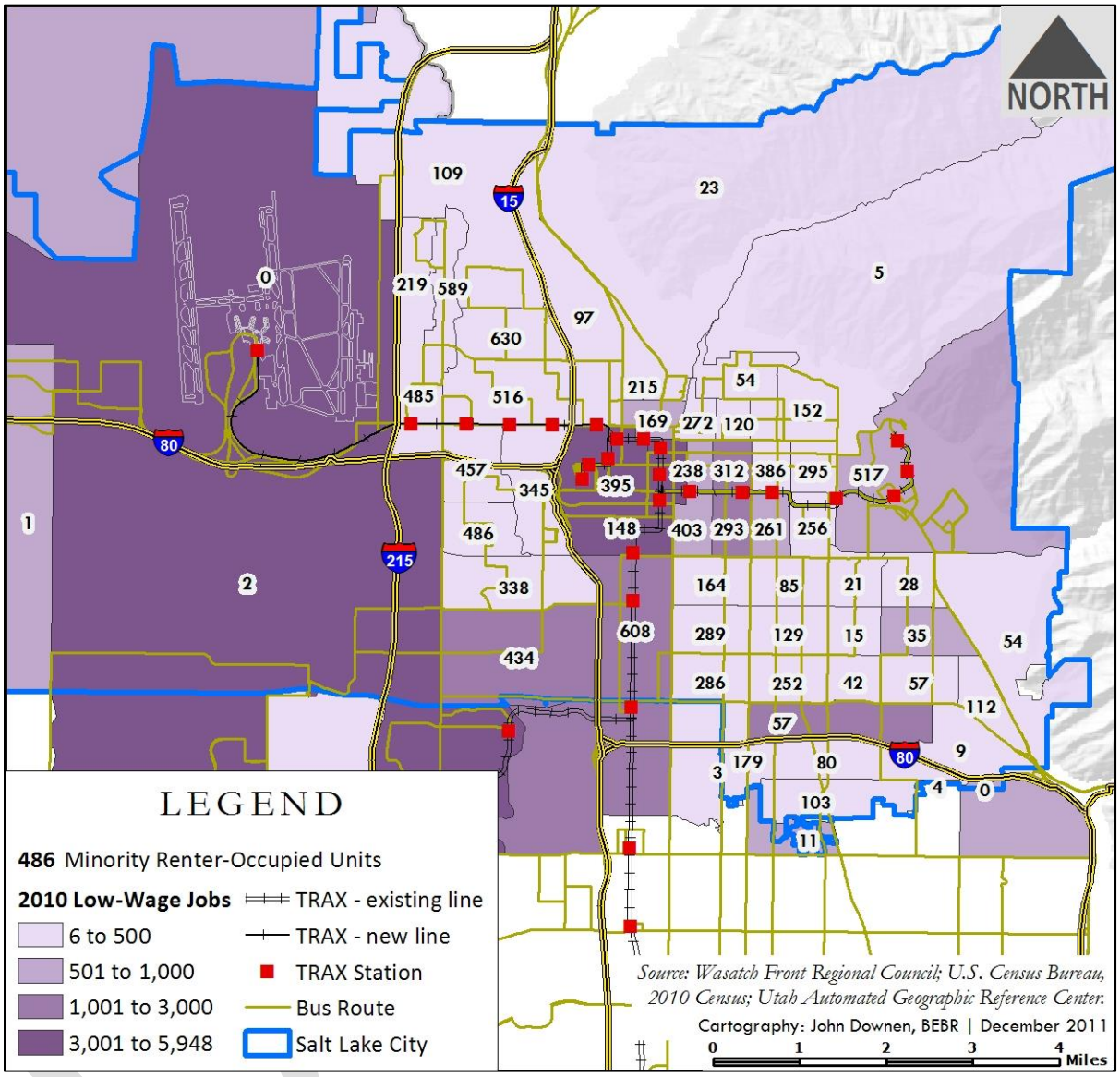


Figure 10
Minority Renter-Occupied Units and Proximity to Low-Wage Jobs, 2010



The narrative behind Figure 10, which overlays the density of low-wage jobs with the number of minority renter-occupied units, is similar to that of Figure 7. The minority rental residents in the River District do not have easy accessibility to employment centers such as the airport, downtown, and other commercial areas. However, minority residents renting units in the downtown area would have fairly accessible means of commuting with the TRAX line and numerous bus routes. Minority rental residents near the University of Utah are mostly college and graduate students, who have subsidized access to public transportation in the city. The infrastructural barriers to opportunity facing minorities in the River District are not reflected among the minority population renting units near the University of Utah.

Table 9 shows the ratio between predicted and actual racial/ethnic composition in Salt Lake City. The predicted percent of minority households is the expected composition based on the income dis-

Table 9
Predicted Racial/Ethnic Composition Ratio in Salt Lake City

	Percent of Households		Actual/ Predicted Ratio
	Actual	Predicted	
Minority	23.1%	16.3%	1.42
Asian	3.9%	2.2%	1.74
Black	2.4%	1.2%	1.93
Hispanic/Latino	14.0%	10.8%	1.29

Source: HUD Spreadsheet for Sustainable Communities Grantees.

Actual/Predicted Ratio Scale

Value Ranges	Interpretation of Actual Share
0–0.5	Severely Below Predicted
0.5–0.7	Moderately Below Predicted
0.7–0.9	Mildly Below Predicted
0.9–1.1	Approximates Predicted
> 1.1	Above Predicted

tribution in the metropolitan area by race and ethnicity. The actual composition is based on estimates in the 2005–2009 American Community Survey 5-year estimates.

For all minority groups, the actual/predicted composition ratio is greater than 1.1, meaning that the minority shares in Salt Lake City are above the predicted composition based on the city's household income.

Table 10 compares the affordability of rental housing units in Salt Lake City with the metro area for rental prices based on AMI. Affordability is based on the threshold that rent would not amount to more than 30 percent of total income.

Only 4 percent of Salt Lake City's total housing units are deemed affordable below the 30 percent AMI level. The percent of fair-share need below the 30 percent AMI level is 67 percent, meaning that the city's share of affordable rental units at this income level is only 67 percent of the metro area's share. According to HUD's scale for the fair share affordable housing index, this means that Salt Lake City's housing stock is moderately unaffordable for those with incomes below the 30 percent AMI threshold. On the other hand, the city has a higher percentage of affordable housing units than the metro area for all AMI-based income levels above 30 percent.

Table 10
Fair Share Affordable Housing Index, Salt Lake City

	A	B	C	D	E	F
Income Level	Total Housing Units	Number of Affordable Rental Units	Share of Affordable Rental Units in City *(A/B)*	Share of Affordable Rental Units in Metro Area	Fair Share Need *(D × A)*	Share of Fair Share Need *(C/D)*
<30% AMI	79,603	3,284	4%	6%	4,868	67%
30%–50% AMI	79,603	11,963	15%	12%	9,201	130%
50%–80% AMI	79,603	20,277	25%	19%	15,029	135%

Note: The affordability for each income level is based on the threshold that gross rent will not amount to more than 30 percent of total income.
Source: HUD Spreadsheet for Sustainable Communities Grantees.

Percent of Fair Share Need Scale

Value Ranges	Interpretation of Actual Share
0–50%	Extremely Unaffordable
50–70%	Moderately Unaffordable
70%–90%	Mildly Unaffordable
90%–110%	Balanced Affordability
> 110%	Above Fair Share, Affordable

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Figure 11
Single-Family Homes Affordable at 80% AMI in Salt Lake City, 2011

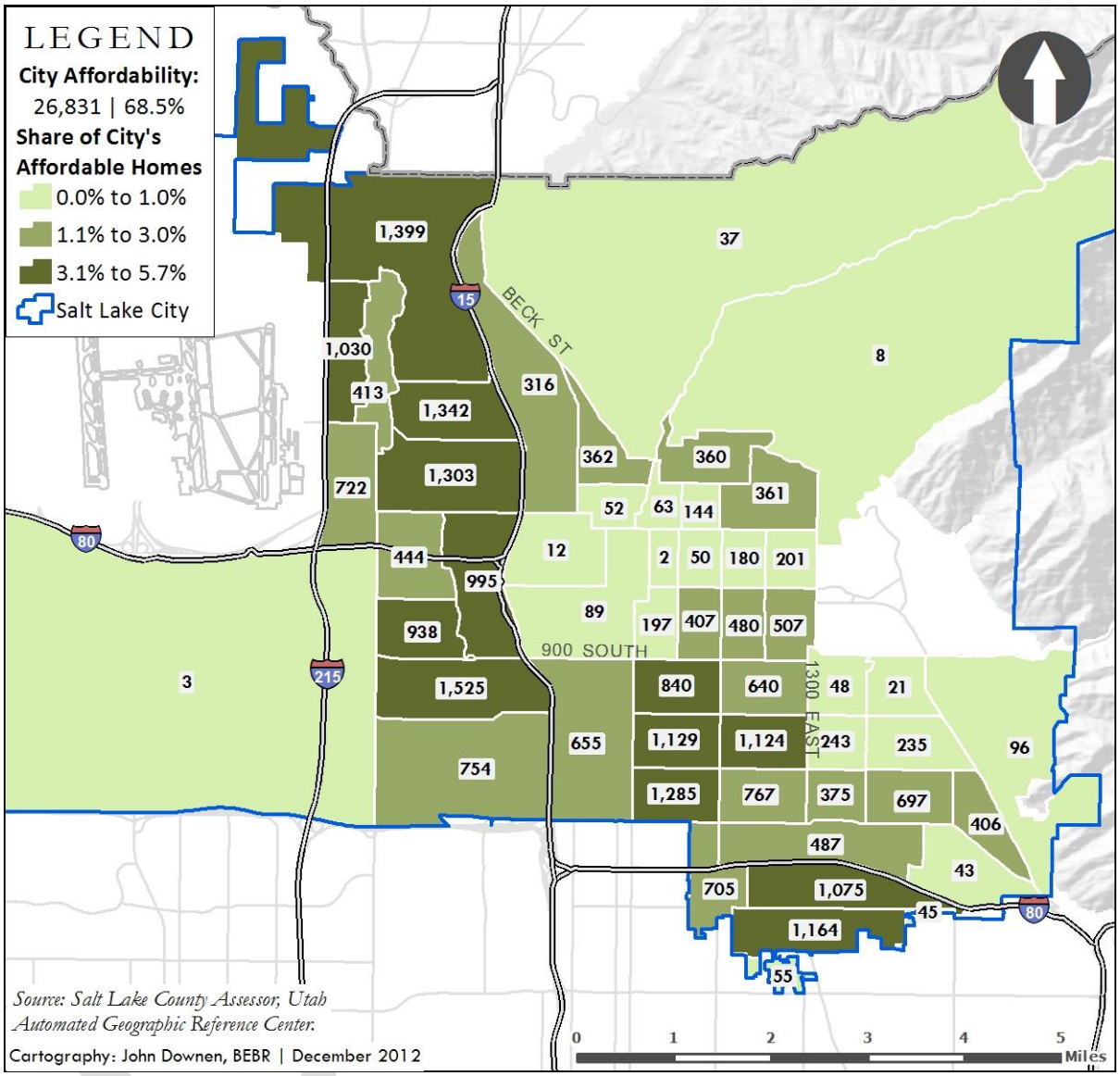

Figure 11 shows the number of single-family homes in Salt Lake City census tracts that are affordable at the 80 percent AMI level in 2011. Affordability calculations are based on 30 percent of annual income, accounting for taxes, home insurance, and mortgage insurance. The maximum affordable single-family home price at 80 percent AMI is $255,897. Nearly 69 percent of the city's single-family housing stock is affordable at 80 percent AMI. However, very few single-family homes in the easternmost part of the city are affordable at this level. A few census tracts in Central City (south of the downtown area) and the Sugar House neighborhood in the southeastern part of the city have a sizeable number of affordable homes. Nonetheless, the River District neighborhoods accounts for over 40 percent of the affordable housing in the city.

Another measure of segregation is the dissimilarity index shown in Table 11. The dissimilarity indices for Salt Lake City are the highest among all incorporated cities in Salt Lake County. Half of all minorities in Salt Lake City would have to move to another census block in order to match the non-Hispanic white geographic distribution in the city. The dissimilarity index is even higher for Hispanics/Latinos, 60 percent of whom would have to move to other census blocks to mirror the non-Hispanic white distribution. While the dissimilarity index itself does not provide any geospatial information about segregation, Figure 11 shows that the highest levels of dissimilarities between non-Hispanic whites and minorities are in the River District.

Table 11
Dissimilarity Index

Group	Salt Lake City	Salt Lake County
Minority	0.50	0.43
Hispanic/Latino	0.60	0.50
Non-Hispanic Minority	0.42	0.41

Source: BEBR computations from 2010 Census.

Dissimilarity Index Scale

Value Ranges	Interpretation
≤ 0.40	Low Segregation
0.41–0.54	Moderate Segregation
≥ 0.55	High Segregation

The dissimilarity index calculates the share of the minority group that would have to move to different census blocks in order to match the non-Hispanic white distribution in the respective geographic area. The Salt Lake County dissimilarity index was calculated using data from all incorporated cities and unincorporated areas.

The dissimilarity index is calculated as follows:

$$Dissimilarity\ (W, M)_j = \frac{1}{2}\sum_{i=1}^{N}\left|\frac{M_i}{M_j} - \frac{W_i}{W_j}\right|$$

where

$W =$ non-Hispanic white population
$M =$ minority population
$i =$ ith census block
$j =$ geographic area (city or county)
$N =$ number of census blocks in geographic area j

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Figure 12
Dissimilarity Index for Minorities in Salt Lake County, 2010

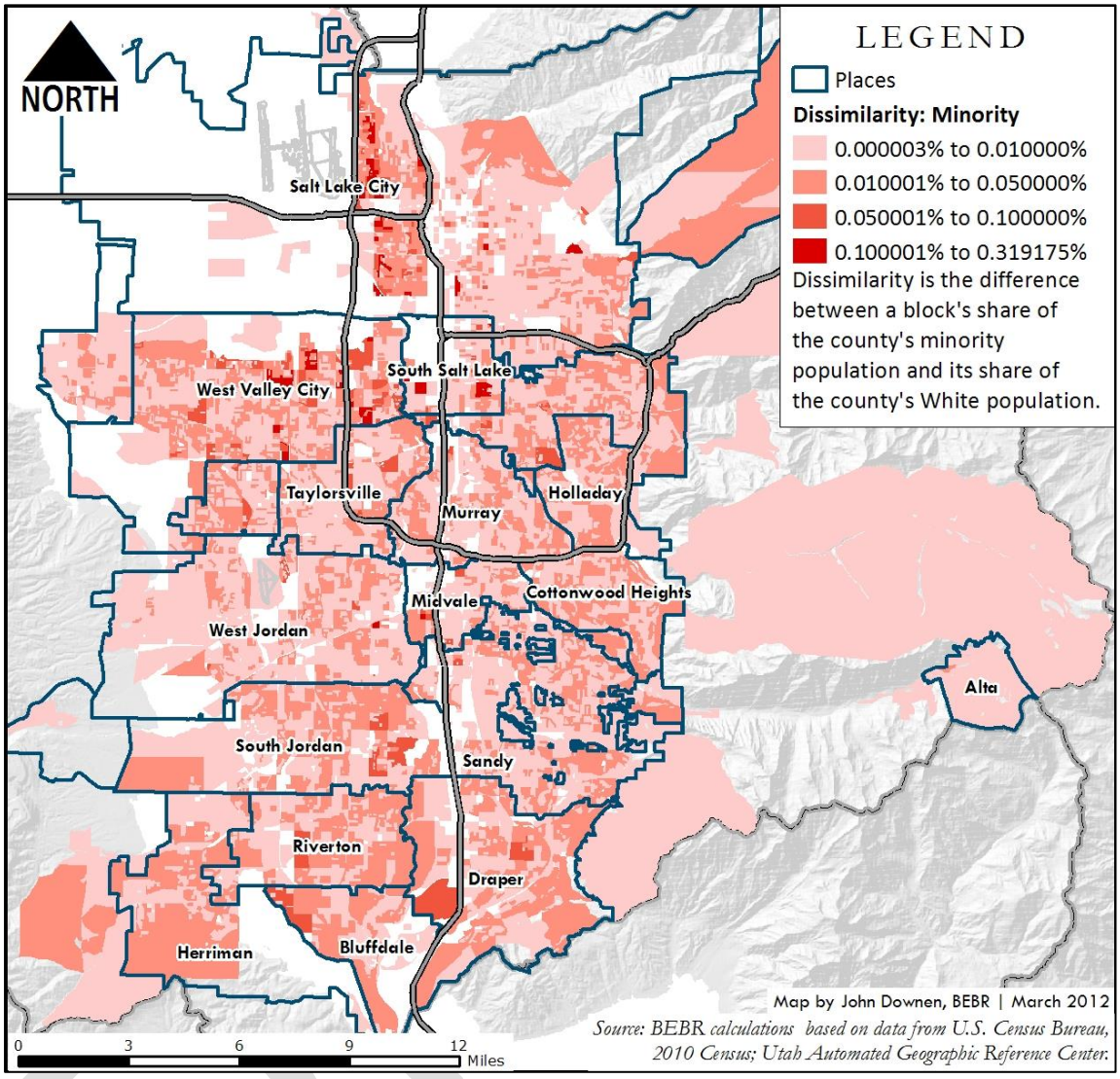

Figure 12 shows the absolute difference between each census block's county share of the minority and non-Hispanic white populations. These absolute differences are used to calculate the dissimilarity index in Table 11. Noticeably large dissimilarities between the minority and non-Hispanic white county shares at the block level are concentrated in Salt Lake City's River District. Some census blocks in the surrounding cities of West Valley City and South Salt Lake also have dissimilarities greater than 0.1 percent. A dark red block in Figure 12 is located in the eastern part of Salt Lake City near the University of Utah campus. The high dissimilarity in this block is mostly likely due to the diverse student population residing near campus. While the diverse population attending the University of Utah is not reflective of the minority population in the River District due to the disparities in opportunity in the city, the dissimilarity in this east-side block is nonetheless not a direct reflection of the city's racial segregation of the general population. The symptoms of structural segregation are in fact on the other side of the city in the River District, which has several blocks with dissimilarities greater than 0.1 percent due to the concentrations of minority-majority populations.

RCAP/ECAP

In 2010, there were 29,085 poor persons living in Salt Lake City, approximately half of whom were non-Hispanic white (Table 12). A third of the poor population of the city was Hispanic individuals, while just over a tenth of the poor were of other races and ethnicities. These 29,085 people account for 12.6 percent of the city's total population (Table 13). A Native American or Hispanic person living in the city was more than twice as likely as the general population to be poor. The share of white people who were poor is comparable to that of the total population, with 13 percent of whites in the city who are poor.

The percentage of poor people living on the east side of I-15 is only about one percent less than in the River District. Yet, on the east side, about two-thirds of the poor people on the east side are non-Hispanic white, whereas over two-thirds of the poor on the west side are minorities. There is a clear segregation of racial and ethnic minorities and non-Hispanic whites within the poor populations of Salt Lake City. A majority of the city's poor whites are living on the east side with easier access to transportation, employment centers and opportunities that the poor minorities in the River District are more removed from.

Table 12
Poor in Salt Lake City by Race and Ethnicity, 2010

	Race/ Ethnicity	Persons	Share
Salt Lake City	Black	1,311	4.5%
	Native Am.	526	1.8%
	Asian	1,444	5.0%
	Pacific Island	401	1.4%
	Hispanic	9,780	33.6%
	Total Minority	13,462	46.3%
	White	15,623	53.7%
	Total Poor	29,085	100%
East Side	Black	837	4.6%
	Native Am.	440	2.4%
	Asian	1,107	6.1%
	Pacific Island	86	0.5%
	Hispanic	3,406	18.9%
	Total Minority	5,876	32.5%
	White	12,188	67.5%
	Total Poor	18,064	100%
River District	Black	474	4.3%
	Native Am.	86	0.8%
	Asian	337	3.1%
	Pacific Island	315	2.9%
	Hispanic	6,374	57.8%
	Total Minority	7,586	68.8%
	White	3,435	31.2%
	Total Poor	11,021	100%

Source: HUD Spreadsheet for Sustainable Communities Grantees.

Table 13
Number and Share of Poor Persons by Race and Ethnicity in Salt Lake City, 2010

	Race/ Ethnicity	Poor	Total	% Poor
Salt Lake City	Black	1,311	5,522	23.7%
	Native Am.	526	1,986	26.5%
	Asian	1,444	7,575	19.1%
	Pacific Island	401	2,479	16.2%
	Hispanic	9,780	37,638	26.0%
	Total Minority	13,462	55,200	24.4%
	White	15,623	120,385	13.0%
	Total	29,085	175,585	16.6%
East Side	Black	837	2,520	33.2%
	Native Am.	440	1,188	37.0%
	Asian	1,107	5,017	22.1%
	Pacific Island	86	247	34.8%
	Hispanic	3,406	11,379	29.9%
	Total Minority	5,876	20,351	28.9%
	White	12,188	90,821	13.4%
	Total	18,064	111,172	16.2%
River District	Black	474	3,002	15.8%
	Native Am.	86	798	10.8%
	Asian	337	2,558	13.2%
	Pacific Island	315	2,232	14.1%
	Hispanic	6,374	26,259	24.3%
	Total Minority	7,586	34,849	21.8%
	White	3,435	29,564	11.6%
	Total	11,021	64,413	17.1%

Source: HUD Spreadsheet for Sustainable Communities Grantees.

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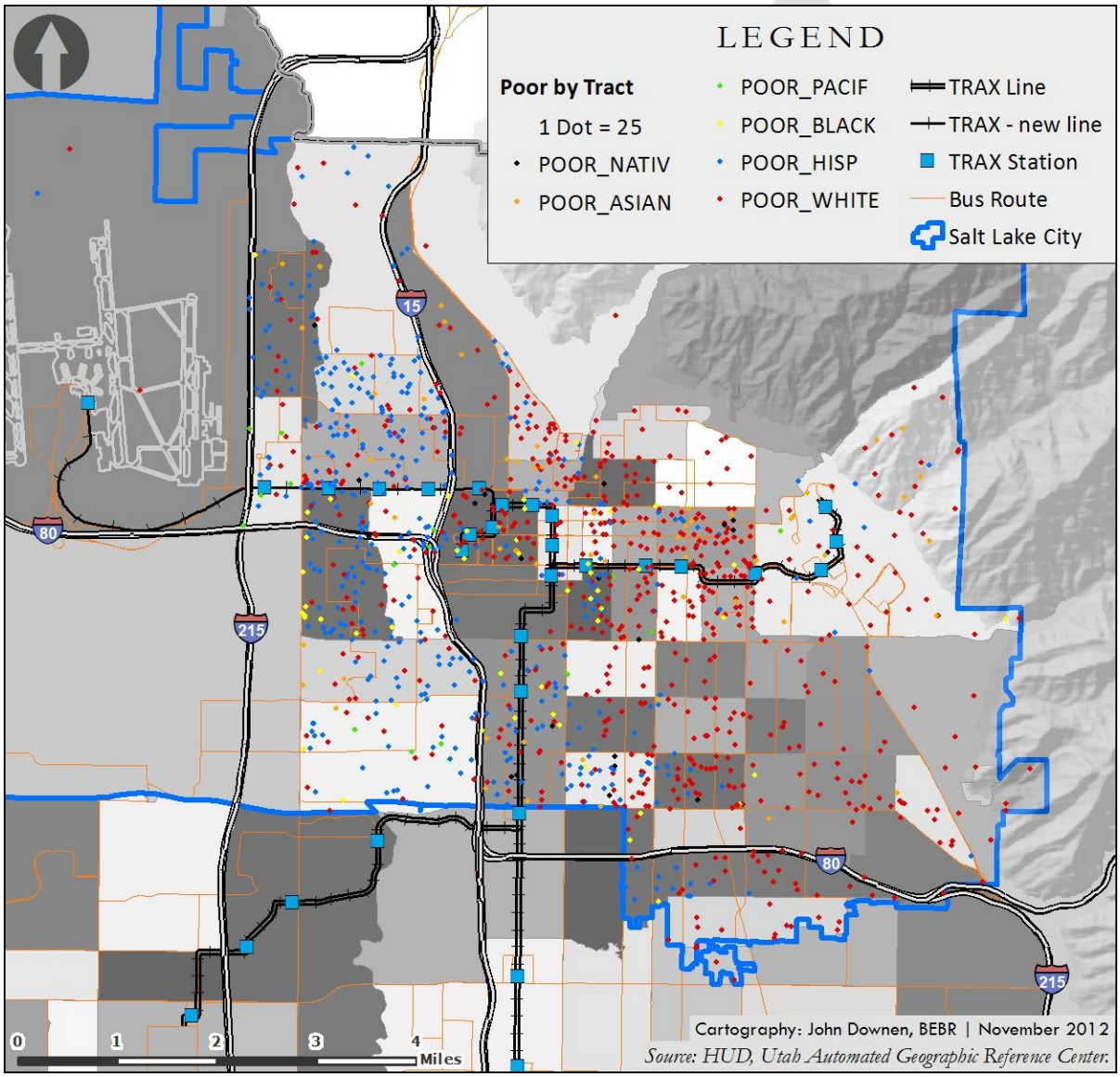
In Salt Lake City, the concentrations of poor residents are dispersed across the city as shown in Figure 13. However, poor non-Hispanic white individuals (red dots) are concentrated mostly on the east side of I-15, closer to more bus routes, TRAX stops, and employment centers. The concentration of other minorities, specifically Hispanics (blue dots) and Pacific Islanders (green dots) are in the River District neighborhoods. It can be expected that with the new TRAX line headed to the airport, this will open up more opportunities to the poor individuals, mostly minority populations, living in the River District by opening new public transit options. Though there are much fewer poor blacks and Asians in the city, they are dispersed relatively evenly throughout the city.

Figure 13
Poor by Census Tract in Salt Lake City, 2010



HUD defines a racially/ethnically concentrated area of poverty as a census tract with a family poverty rate greater than or equal to 40 percent, or a family poverty rate greater than or equal to 300 percent of the metro tract average, and a majority non-white population, measured at greater than 50 percent. In Salt Lake County, there are three RCAPs, two of which are in Salt Lake City (Figure 14). One lies in the River District along the west side of I-15 and east of the airport. This RCAP is located in a low employment tract with few bus routes traveling north to south. However, the newest TRAX line will be intersecting directly through the center of the RCAP. The other is just east of I-15 toward the southern end of the city, just above I-80. Again, this RCAP is located in a low employment tract in the county; it is also dissected down the middle by a north-south running TRAX line.

Figure 14
Racially/Ethnically Concentrated Areas of Poverty in Salt Lake County

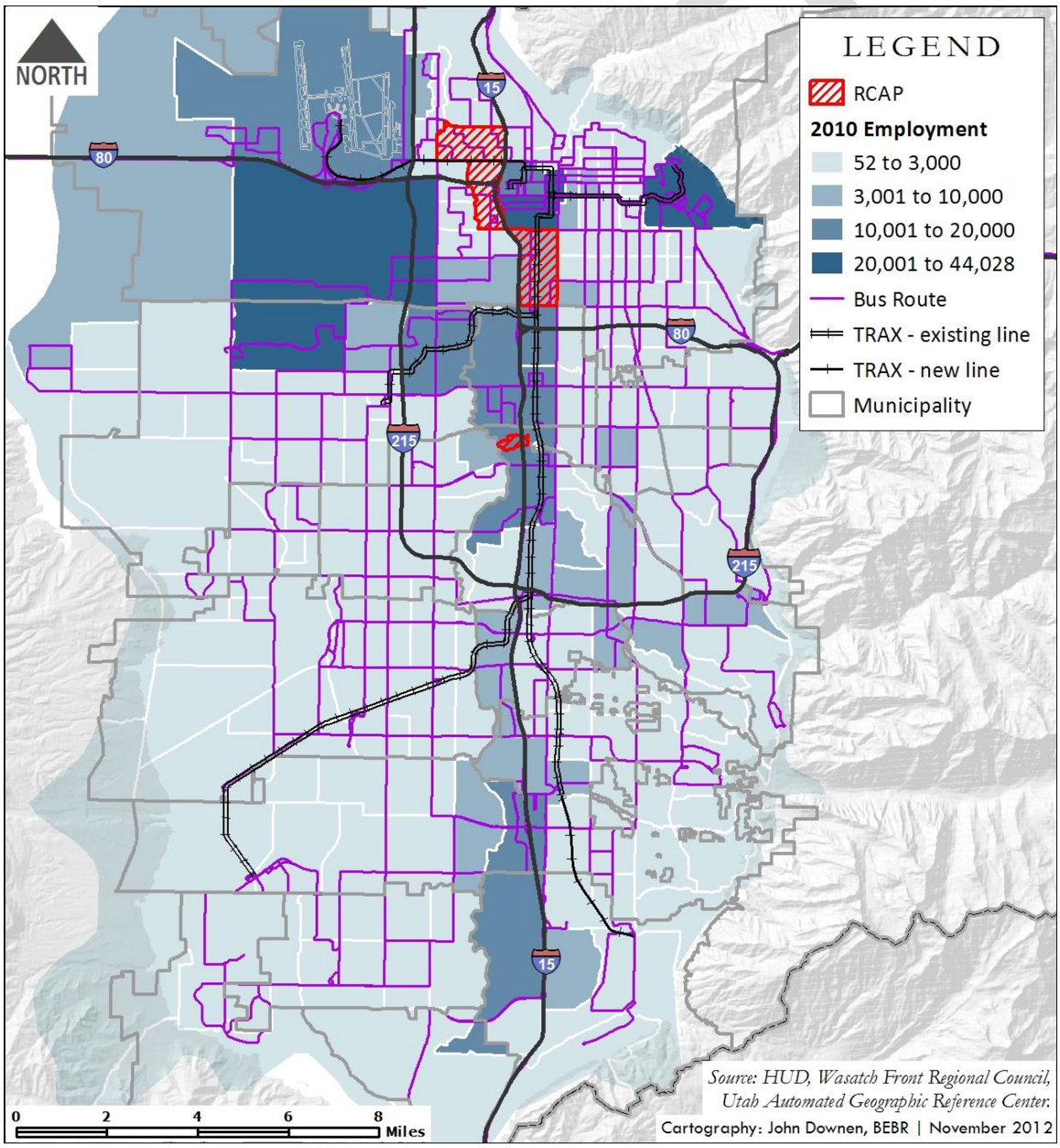
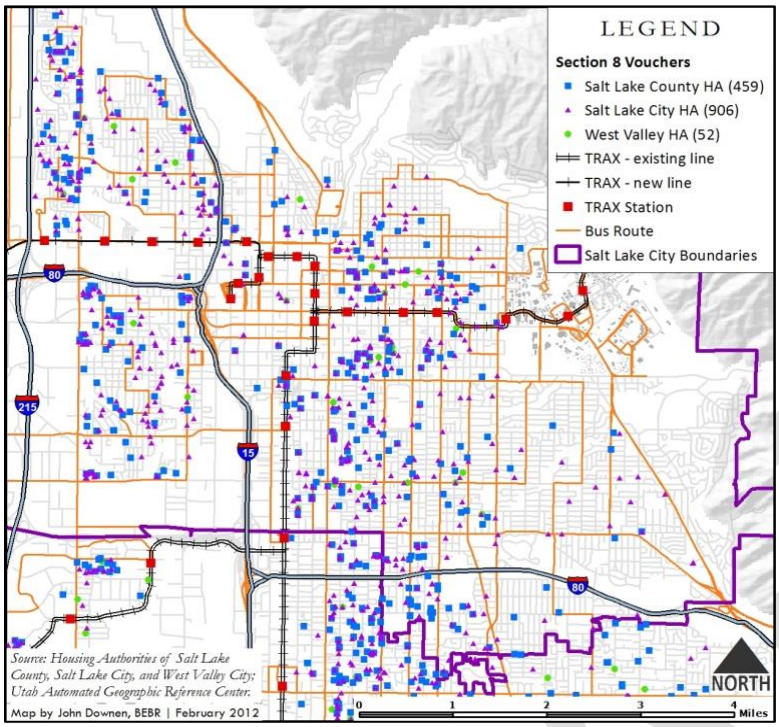
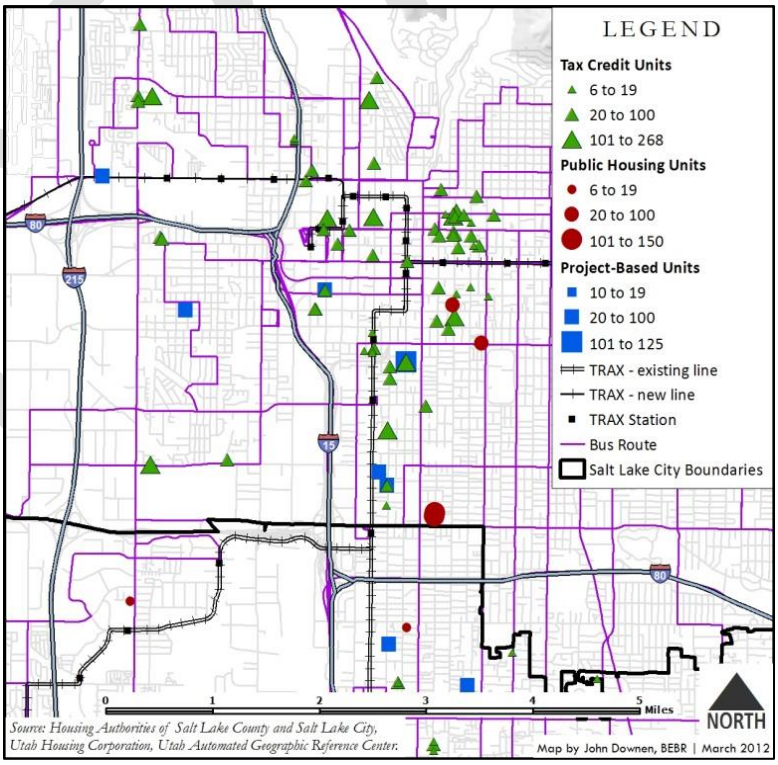


Figure 15
Section 8 Vouchers in Salt Lake City, 2011



The concentration of Section 8 vouchers in Salt Lake City is in the central and west portions of the city, as well as along the border of South Salt Lake (Figure 15). There are a few Section 8 vouchers located along the eastern side, run by the Salt Lake City Housing Authority as well as the Salt Lake County Housing Authority, but their numbers are negligible compared with the central and western regions. The concentration of subsidized apartment projects is solely concentrated to the central and western regions of the city, with a large cluster in downtown (Figure 16). Most vouchers and subsidized housing projects are located along bus routes, or within a few blocks of TRAX, as well as a concentration along the eastern border of the Salt Lake City International Airport.

Figure 16
Subsidized Apartment Projects in Salt Lake City, 2011



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The following three figures (Figure 17, Figure 18, and Figure 19) show concentrations of poverty in Salt Lake County, estimated from the 2007-2011 American Community Survey. Here, an area of poverty is considered concentrated when it has three times the countywide average share of the population living below the poverty line. The countywide average is approximately 11.6 percent, so an area is considered highly concentrated when it has 34.7 percent or more of the population living in poverty. Figure 17 overlays these areas of poverty with census tracts that have minority-majority populations, which are defined as having a minority share greater than 50 percent of the census tract population. Figure 18 overlays the concentrations of poverty with tracts that have a Hispanic population of 10 percentage points or more above the county's Hispanic share of 17.1 percent. Figure 19, on the other hand, overlays the concentrated areas of poverty with a county map showing the census tracts where the minority population is 10 percentage points above the county average of 26 percent. In all cases, the concentrated areas of poverty are north along Interstate 15 in Salt Lake City. The largest area is just north of South Salt Lake directly along I-15 and the other two are each around downtown Salt Lake City. However, none of these tracts have minority-majority populations. All of the minority-majority tracts in Salt Lake City are west of the interstate in the River District. Similarly, the only tract of concentrated poverty to have either a Hispanic or minority share of 10 percentage points higher than the county average is the southern tract just north of the South Salt Lake border. This could be an indication that the poorer minority residents do not have equal access to opportunity in downtown or the east side of Salt Lake City. Instead they are forced to the west side in the River District and the southern edges of the city, closer to other cities with higher concentrations of poor minorities and lower opportunity.

Figure 17
Concentrations of Poverty and Minority Majority by Tract in Salt Lake County, 2007-2011

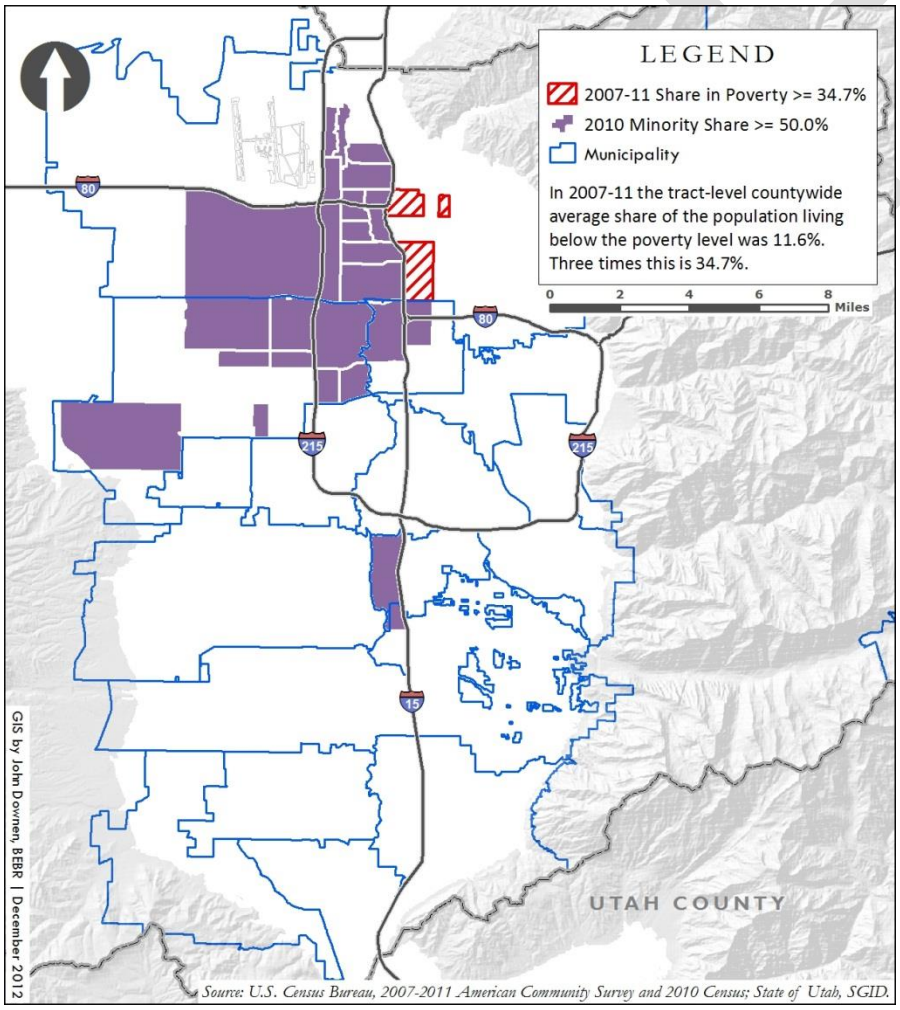

Figure 18
Concentrations of Poverty and Hispanics by Tract in Salt Lake County, 2007-2011

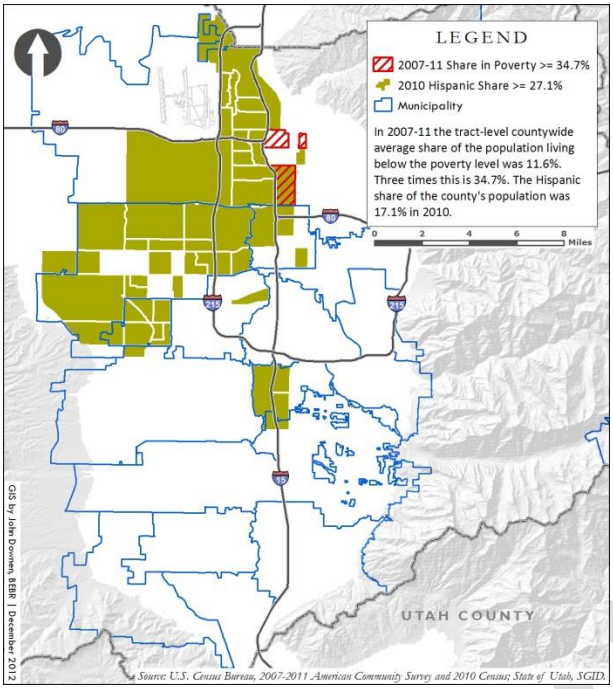

Figure 19
Concentrations of Poverty and Minorities by Tract in Salt Lake County, 2007-2011

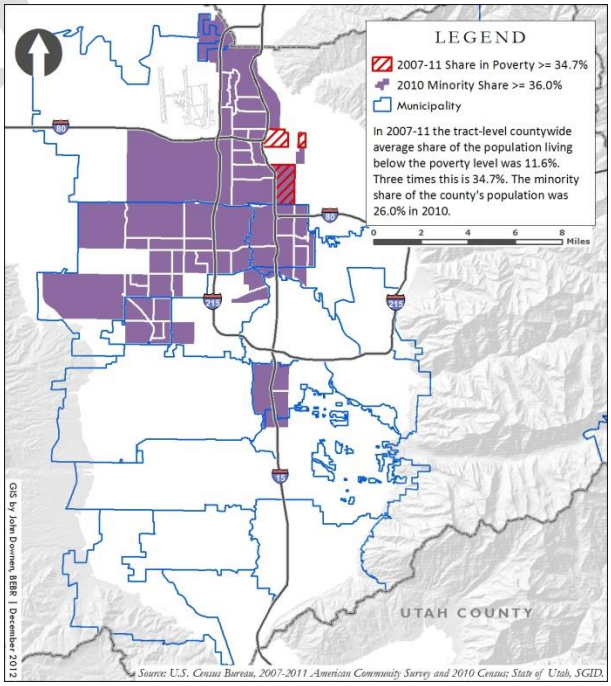

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Table 14 displays the number of individuals receiving public assistance in Salt Lake City disaggregated by zip code. Each count in 2007 and 2012 is a distinct individual living in that zip code receiving assistance from a state program such as food stamps, Temporary Assistance for Needy Families (TANF) or any other financial, medical or child care services from the Department of Workforce Services (DWS). DWS estimates its services capture at least 70 percent of all poor living in these areas; the other 30 percent may be living in poverty, but are not using any form of public assistance. As it can be seen, there is a wide range in number of people on public assistance, as well as percentage change between 2007 and 2012 in Salt Lake City. Much of the disparity is between the easternmost zip codes, with much lower number of recipients, and the downtown and westernmost zip codes, with much higher numbers. While a campus zip code, 84113, decreased in the number of recipients by almost 70 percent, it has only 25 fewer recipients. On the other hand, a 35 percent increase in zip code 84116 on the west side equated to almost 3,200 more recipients. An aggregate of all the Salt Lake City zip codes show that the entire city gained just over 9,500 more recipients in 2012, for only a 25 percent increase, more than 20 percentage points below the county aggregate. The number of individuals receiving public assistance in 2012 is mapped in Figure 20 by zip code. Each zip code with fewer than ten recipients is suppressed in the data, and each zip code without any residences or missing data are also removed. Overall, the number of recipients ranged from under 10 to over 18,000 in a single zip code in 2012. While a few zip codes declined in the number of recipients, most increased by over 50 percent in all regions of the county.

Table 14
Distinct Individuals on Public Assistance, 2007-2012

City	Zip Code	2007 Individuals	2012 Individuals	Absolute Change	Percentage Change
Salt Lake City	84101	3,658	4,630	972	26.6%
Salt Lake City	84102	3,284	3,387	103	3.1%
Salt Lake City	84103	1,998	2,340	342	17.1%
Salt Lake City	84104	7,555	9,989	2,434	32.2%
Salt Lake City	84105	2,168	2,441	273	12.6%
Salt Lake City	84110	73	68	-5	-6.8%
Salt Lake City	84111	3,443	4,173	730	21.2%
Salt Lake City	84112	146	65	-81	-55.5%
Salt Lake City	84113	36	11	-25	-69.4%
Salt Lake City	84114	39	34	-5	-12.8%
Salt Lake City	84152	14	16	2	14.3%
Salt Lake City	84116	9,055	12,199	3,144	34.7%
Salt Lake City (and Millcreek)	84106	4,975	6,491	1,516	30.5%
Salt Lake City	84147	11	Less than 10	≤-2	≤-18.2%
Salt Lake City (and Emigration Canyon)	84108	1,527	1,789	262	17.2%
Salt Lake City Total		37,982	47,638†	9,656	25.4%
Salt Lake County		146,699	215,426	68,727	46.8%

† 2012 count for ZCTA 84147 is estimated to be 5 individuals.
Source: BEBR Calculations from Utah DWS Data

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Figure 20
Individuals Receiving Public Assistance by Zip Code, 2012

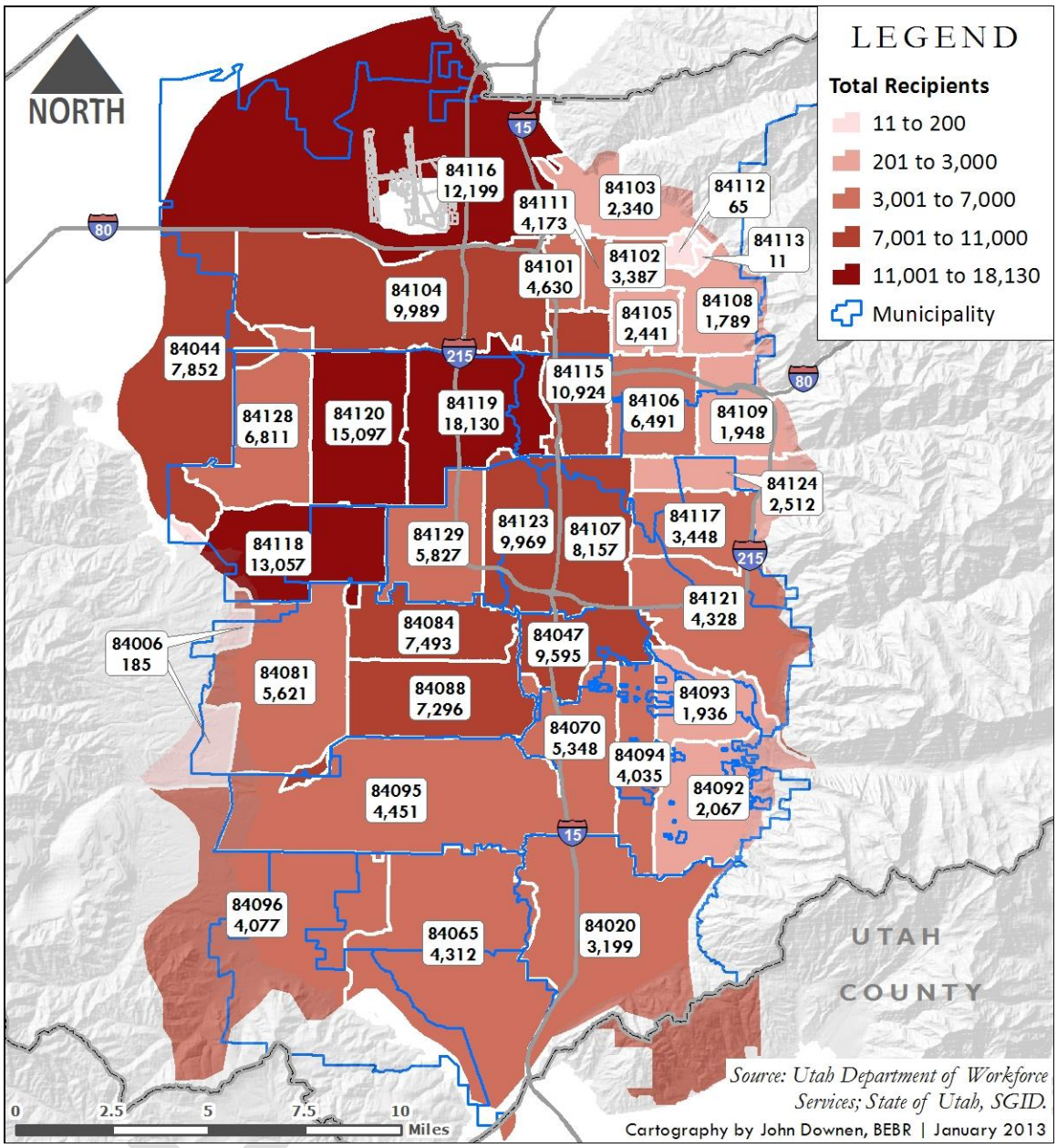

Table 15 uses the same DWS data on public assistance to calculate the number of large family households on public assistance in 2007 and 2012. A large family size is classified as a household of five or more individuals living together. Though some zip codes in Salt Lake City saw a decrease in number of large families living on public assistance, the city overall saw a 25 percent increase in the number of families receiving assistance from 2007 to 2012. Some of the reasons for the zip codes with decreasing recipients, especially the ones decreasing by 100 percent, could just as well be due to families moving to a different zip code rather than these large families getting off public assistance and remaining in those zip codes. Countywide, the number of large families receiving public assistance increased by about 61 percent over the five-year period. Figure 21 displays the concentrations of these large families by zip code in Salt Lake County. Not surprisingly, the northwest quadrant of the county, including parts of Salt Lake City, has much higher numbers of large families receiving public assistance than other areas. These cities are heavily concentrated with poor residents (Figure 13) and minorities (Figure 19), and tend to have low access to opportunity, especially for children in school (Table 19).

Table 15
Large Family Households on Public Assistance, 2007-2012

City	Zip Code	2007 Family Size ≥5	2012 Family Size ≥5	Absolute Change	Percentage Change
Salt Lake City	84101	299	309	10	3.3%
Salt Lake City	84102	284	229	-55	-19.4%
Salt Lake City	84103	197	228	31	15.7%
Salt Lake City	84104	1,968	2,555	587	29.8%
Salt Lake City	84105	291	306	15	5.2%
Salt Lake City	84110	16	5	-11	-68.8%
Salt Lake City	84111	471	439	-32	-6.8%
Salt Lake City	84112	47	34	-13	-27.7%
Salt Lake City	84113	5	0	-5	-100.0%
Salt Lake City	84114	6	0	-6	-100.0%
Salt Lake City	84152	0	0	0	0.0%
Salt Lake City	84116	2,159	3,082	923	42.8%
Salt Lake City (and Millcreek)	84106	1,023	1,320	297	29.0%
Salt Lake City	84147	0	—	—	—
Salt Lake City (and Emigration Canyon)	84108	384	406	22	5.7%
Salt Lake City Totals		7,150	8,913	1,763	24.7%
Salt Lake County		30,473	49,019	18,546	60.9%

Source: BEBR Calculations from Utah DWS Data

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Figure 21
Number of Large Families by Zip Code Receiving Public Assistance, 2012

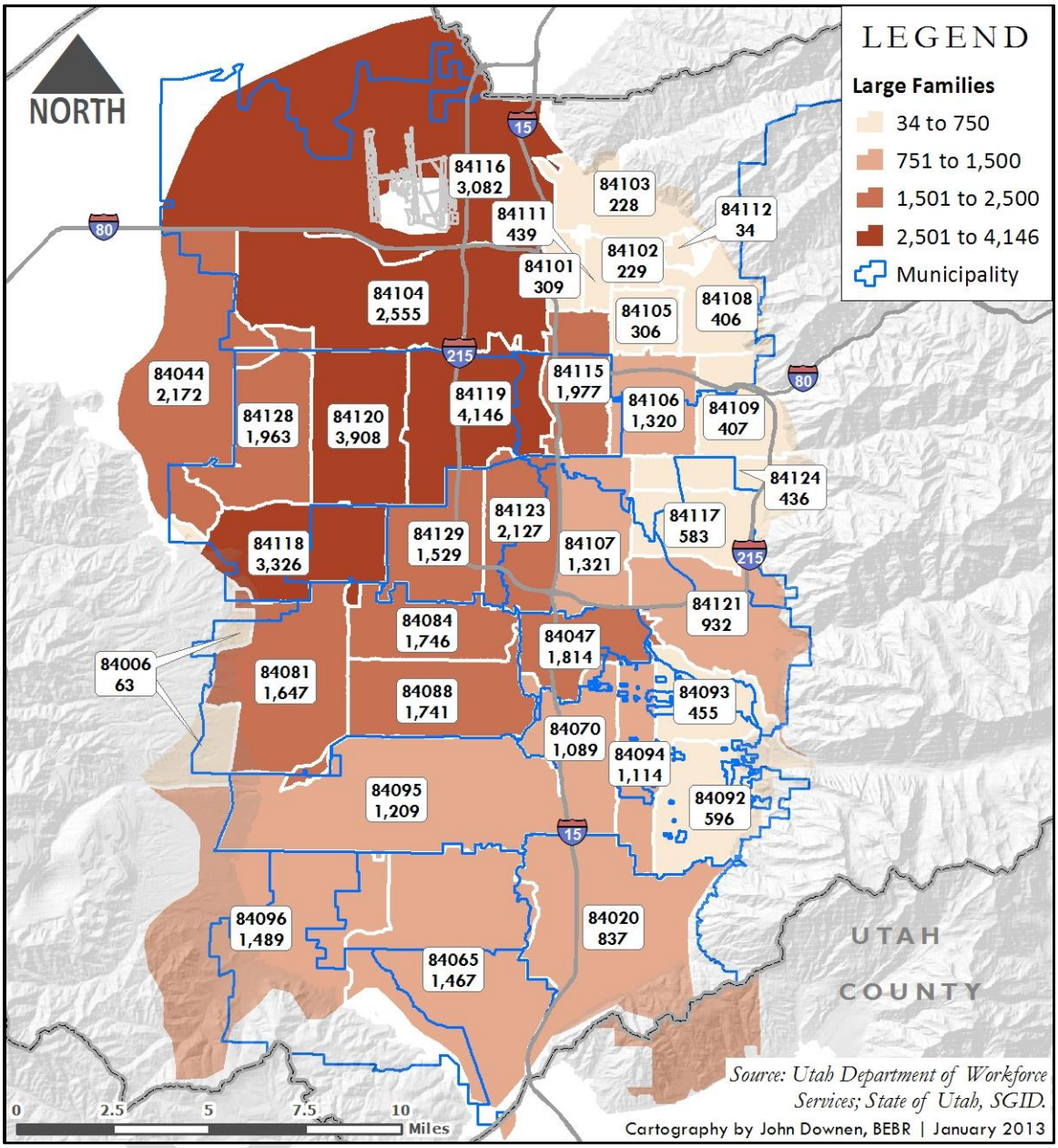

Table 16 shows the number of disabled individuals receiving public assistance in 2007 and 2012. To be considered disabled and on public assistance by DWS standards, each individual must be receiving financial assistance and have a verified condition by the Medical Review Board. Not surprisingly, the number of disabled individuals on public assistance increased between 2007 and 2012 by about 21 percent in the county, but only by 9 percent in Salt Lake City. Again, the highest increase was in the downtown and western zip codes of the city, while the eastern and northern zip code often saw declines. This could be related to disabled residents moving out of these zip codes into areas with cheaper, more affordable housing options. Figure 22 maps the number of disabled individuals on public assistance in 2012 by zip code in Salt Lake County. Though the number of disabled residents on public assistance in the western half of Salt Lake City is higher than much of the county, the highest concentration appears to be more centrally located in West Valley City and South Salt Lake.

Table 16
Disabled Individuals on Public Assistance, 2007-2012

City	Zip Code	2007 Disabled	2012 Disabled	Absolute Change	Percentage Change
Salt Lake City	84101	591	859	268	45.3%
Salt Lake City	84102	880	777	-103	-11.7%
Salt Lake City	84103	446	417	-29	-6.5%
Salt Lake City	84104	926	1,068	142	15.3%
Salt Lake City	84105	507	488	-19	-3.7%
Salt Lake City	84110	14	13	-1	-7.1%
Salt Lake City	84111	991	1,018	27	2.7%
Salt Lake City	84112	6	4	-2	-33.3%
Salt Lake City	84113	6	6	0	0.0%
Salt Lake City	84114	10	4	-6	-60.0%
Salt Lake City	84152	1	1	0	0.0%
Salt Lake City	84116	1,060	1,242	182	17.2%
Salt Lake City (and Millcreek)	84106	901	1,016	115	12.8%
Salt Lake City	84147	5	—	—	—
Salt Lake City (and Emigration Canyon)	84108	129	131	2	1.6%
Salt Lake City Totals		6,473	7.044	576	8.9%
Salt Lake County		21,460	25,942	4,482	20.9%

Source: BEBR Calculations from Utah DWS Data

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Figure 22
Disabled Recipients Receiving Public Assistance by Zip Code, 2012

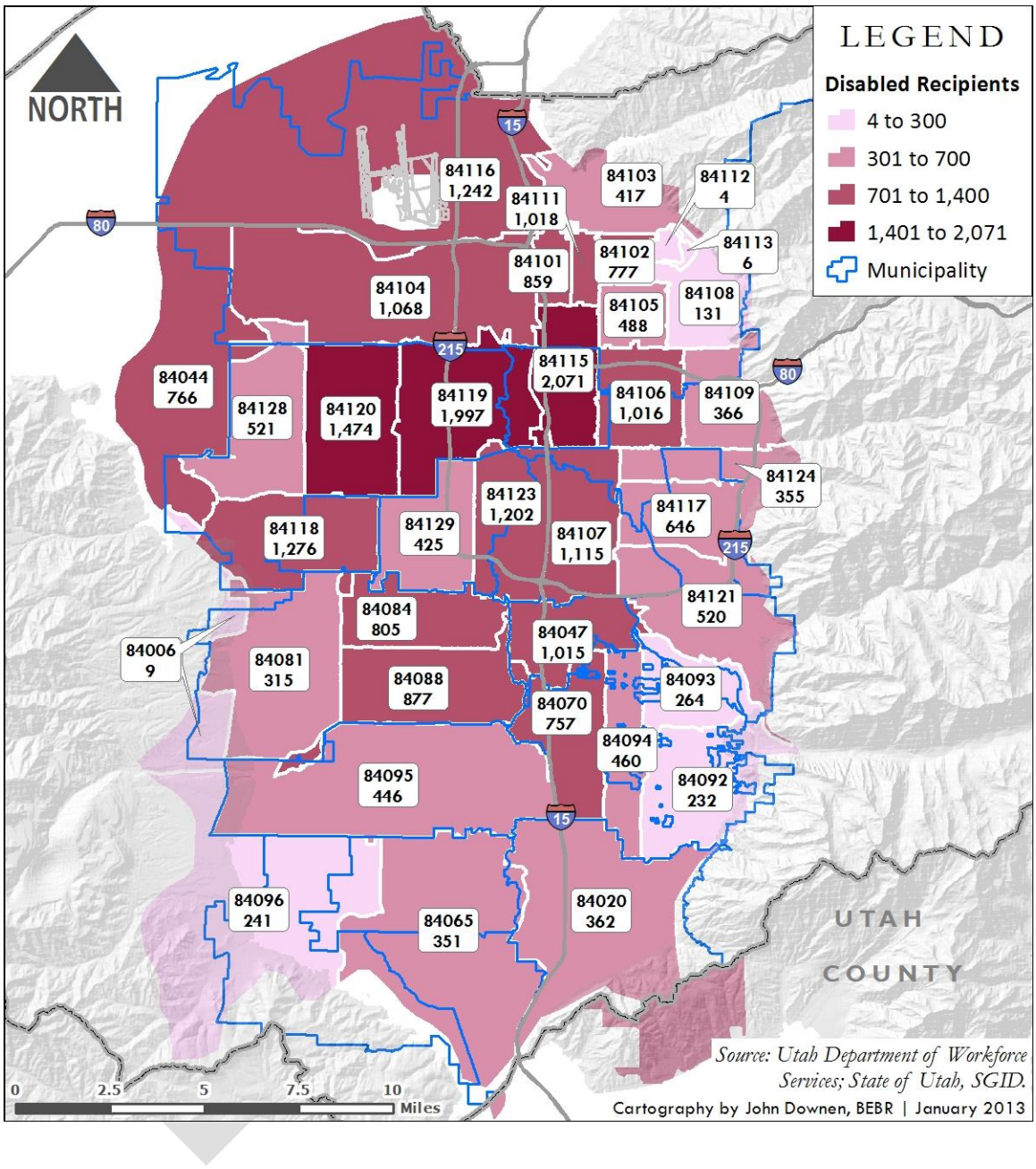

Table 17 uses the DWS data for the number of Hispanic individuals who received public assistance from the state in 2007 and 2012. Overall, the city saw an increase of only about 7 percent citywide, but the western and southern zip codes increased, while many eastern zip codes decreased. Figure 23 maps the number of Hispanic recipients in 2012 by zip code in Salt Lake County. The highest number of individuals is in the northern and western cities including Salt Lake City. However, some of the largest percentage increases were in the southern and eastern zip codes

Table 17
Hispanic Individuals on Public Assistance, 2007-2012

City	Zip Code	2007 Hispanic	2012 Hispanic	Absolute Change	Percentage Change
Salt Lake City	84101	560	551	-9	-1.6%
Salt Lake City	84102	468	372	-96	-20.5%
Salt Lake City	84103	347	250	-97	-28.0%
Salt Lake City	84104	3,444	3,954	510	14.8%
Salt Lake City	84105	280	250	-30	-10.7%
Salt Lake City	84110	27	11	-16	-59.3%
Salt Lake City	84111	731	642	-89	-12.2%
Salt Lake City	84112	4	4	0	0.0%
Salt Lake City	84113	4	1	-3	-75.0%
Salt Lake City	84114	11	9	-2	-18.2%
Salt Lake City	84152	0	1	1	—
Salt Lake City	84116	4,202	4,743	541	12.9%
Salt Lake City (and Millcreek)	84106	708	705	-3	-0.4%
Salt Lake City	84147	2	—	—	—
Salt Lake City (and Emigration Canyon)	84108	64	87	23	35.9%
		10,852	11,580	730	6.7%
Salt Lake County		37,911	46,019	8,108	21.4%

Source: BEBR Calculations from Utah DWS Data

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Figure 23
Hispanic Recipients of Public Assistance by Zip Code, 2012

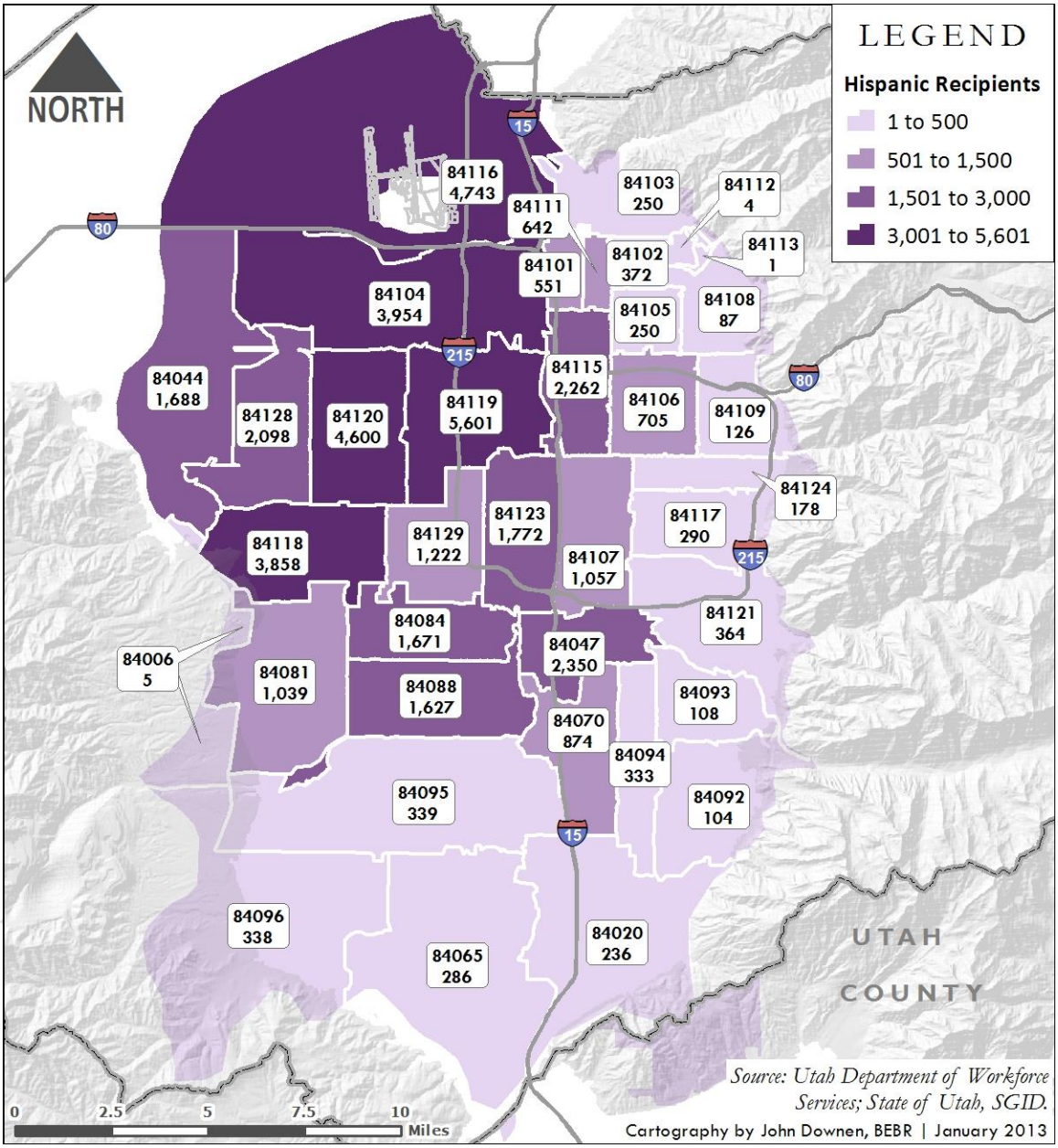
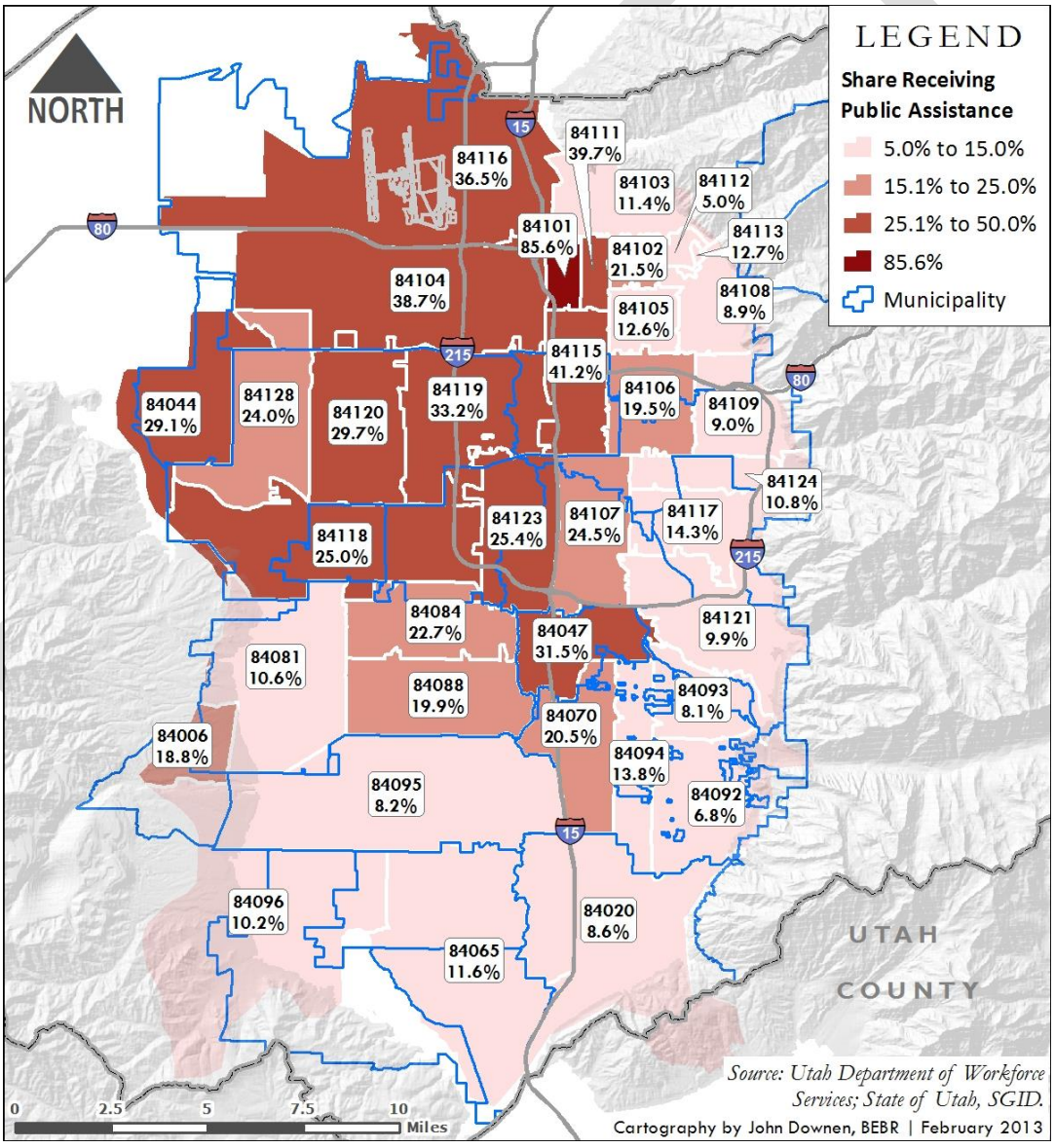


Figure 24 maps the percentage of individuals receiving public assistance in each zip code in Salt Lake County. It should be noted that the zip codes used in the map are based on the U.S. Census Bureau's "zip code tabulation areas" (ZTCAs), which do not exactly correspond to the zip code boundaries used by DWS. Regardless, the general trends of public assistance recipients as a share of a regions population can be seen. Again, there is a clear difference between the east and west sides of Interstate 15, and even more so the northwestern and southeastern regions of the county. Much higher proportions of the populations in the northwest and west are recipients of some form of public assistance from the state. This stark difference between concentrations of individuals receiving public assistance and those populations with very few recipients is even felt within Salt Lake City itself. West and south of 84101, the share of recipients is very high, while it is relatively low along the eastern border of the city.

Figure 24
Percent of Individuals Residing in a Zip Code Receiving Public Assistance, 2010



DISPARITIES IN OPPORTUNITY

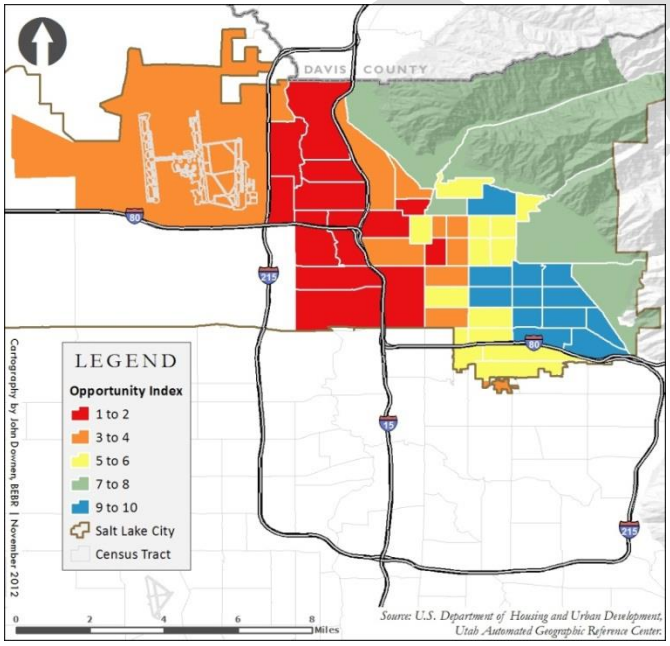
HUD provided an opportunity index with which to quantify the number of important "stressors" and "assets" that influence the ability of an individual, or family, to access and capitalize on opportunity. These five measures of opportunity were used to calculate an opportunity index for each census tract. Using the population of each tract within the city boundaries of Salt Lake City, it received an index score of 4.9 out of 10, the same score as the county (Table 18). However, because of the segregation within the city, the opportunity available also varies within the city boundaries. Using Interstate 15 as a general boundary of segregation, we see the opportunity increase on the east side to 6.3, and a decrease in opportunity on the west side to 2.5. All measures of opportunity are contributing factors except for the job access index which remained constant.

Table 18
Weighted, Standardized Opportunity Index

	School Proficiency	Job Access	Labor Market Engagement	Poverty	Housing Stability	Opportunity
Salt Lake City	4.5	6.5	5.4	3.7	4.7	4.9
East Side	5.8	6.5	6.7	4.2	6.2	6.3
West Side	2.3	6.5	3.0	2.9	2.3	2.5
Salt Lake County	4.3	5.4	5.0	4.9	5.3	4.9

Source: HUD Spreadsheet for Sustainable Communities Grantees.

Figure 25
Opportunity Index by Census Tract in Salt Lake City



As shown in Figure 25 there is a clear division between census tracts of opportunity between the east and west side. The further east the tract is located, the better chance it has of having a high opportunity score. Likewise, the further west the tract is in Salt Lake City, the more likely it is to have a low opportunity index score. The westernmost tract, however, is slightly higher than that of the rest of the district due to its low population and high employment at the Salt Lake City International Airport. The concentration of the highest opportunity scores is on the southeastern corner of the city in the eastern Sugarhouse and Foothills area. The one exception is the tract in the northeastern quadrant where the university is located, which has one of the highest opportunity scores.

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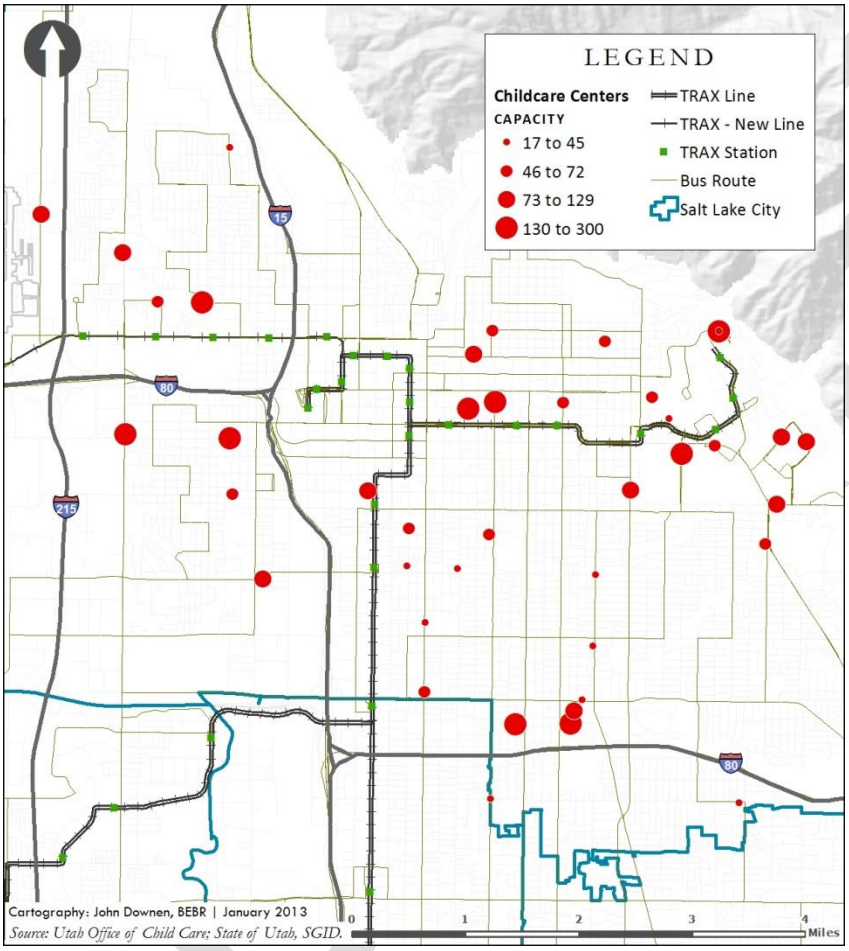
Figure 26 maps the active childcare centers in Salt Lake City by capacity, with licensed families and residential certificate facilities excluded. The larger the dot is on the map, the higher the maximum capacity of the center. Access to daycare can be considered an advantage in terms of fair and equitable housing as well as access to opportunity for many reasons. For one, if a household relies on low-wage jobs for stability, it is valuable to have affordable childcare so that adults are able to earn income for their families. Similarly, without access to childcare, more parents will be forced to stay at home with their children, thereby forgoing potential earned wages. This is especially important for Hispanic families, who on average have larger family sizes, even as other races and ethnicities have an average decreasing family size (Table 4). As a result, a lack of adequate childcare can restrict a family's mobility, and time they can invest in opportunities outside the home, presenting an impediment to housing choice for minorities, larger families, and low-income households. As it can be seen in Figure 26, there are quite a few childcare center options, many within close proximity to the bus routes and TRAX running through the city. This can cause major impediments to housing choice as low-income and minority residents disproportionately rely on public transit and are therefore less mobile than other populations. Similarly, minorities, especially Hispanics, often have larger family sizes (Table 4) and would arguably need these services at a disproportionately higher rate than other populations. Figure 26 does not show licensed families or residential certificates that also provide childcare. However, with a maximum capacity of eight children per provider, these types of childcare will unlikely offset the need. Overall, the sparseness and general lack of adequate daycare services in the city can provide a major impediment to fair and equitable housing choice.

Figure 26
Childcare Centers in Salt Lake City, 2010



Each dot represents childcare centers only, and does not include any licensed family or residential certificate providers. Those providers are protected under GRAMA and their location is not public information. However, each licensed provider in a private residence may have up to 8 children in their care.

As a further assessment of opportunity in Salt Lake City, an index is created as a representation of opportunity within K-12 public schools in Salt Lake County. This is done by summing two normalized, positive indicators: percent proficiency in language arts and science for elementary, middle and

high schools. Subtracted from this indicator is the summation of four negative proxies for home environment and educational quality: free and reduced lunch percentage, percentage of minority students, percentage of students with limited English proficiency parents and average classroom size. Each school containing data on all of these indicators is ranked based on their normalized index score by the county. From there, the ranking is split into decile ranks across the county, with a score of 10 representing the highest opportunity score (Table 19). Overall there are 204 schools with complete data on all the indicators and enrollment numbers, 34 of which are in Salt Lake City. Not surprisingly, a majority of the schools on the west side have a lower opportunity score than those on the east side. Only five schools on the east side received a score of 4 or below, whereas only two west-side schools scored a 4 or above.

Table 19
Salt Lake City School Opportunity

East/West Side	School	County Ranking	Opportunity Index
West	Meadowlark School	204	1
West	Backman School	203	1
West	Rose Park School	202	1
West	Franklin School	201	1
West	Edison School	200	1
East	Lincoln School (SLC)	199	1
West	Parkview School	198	1
West	Glendale Middle	192	1
West	Riley School	188	1
West	Jackson School	186	1
West	Mountain View School	183	2
West	Northwest Middle	178	2
East	M Lynn Bennion School	172	2
West	Escalante School	170	2
East	Bryant Middle	167	2
East	East High	163	3
West	North Star School	160	3
West	Newman School	158	3
West	Nibley Park School	135	4
East	Washington School	133	4
East	Highland High	122	5
East	Whittier School (SLC)	114	5
West	West High	113	5
East	Hillside Middle	92	6
East	Clayton Middle	90	6
East	Emerson Middle	88	6
East	Hawthorne School	75	7
East	Beacon Heights School	53	8
East	Ensign School	41	9
East	Indian Hills School	27	9
East	Highland Park School	16	10
East	Bonneville School	13	10
East	Uintah School	8	10
East	Dilworth School	6	10
East	Horizonte Instr & Trn Ctr	—	—
East	Children Behavior Therapy Unit	—	—
East	Hospital	—	—

Source: BEBR computations from Utah State Office of Education data.
Though located east of I-15, West High School primarily enrolls students who live in the River District.

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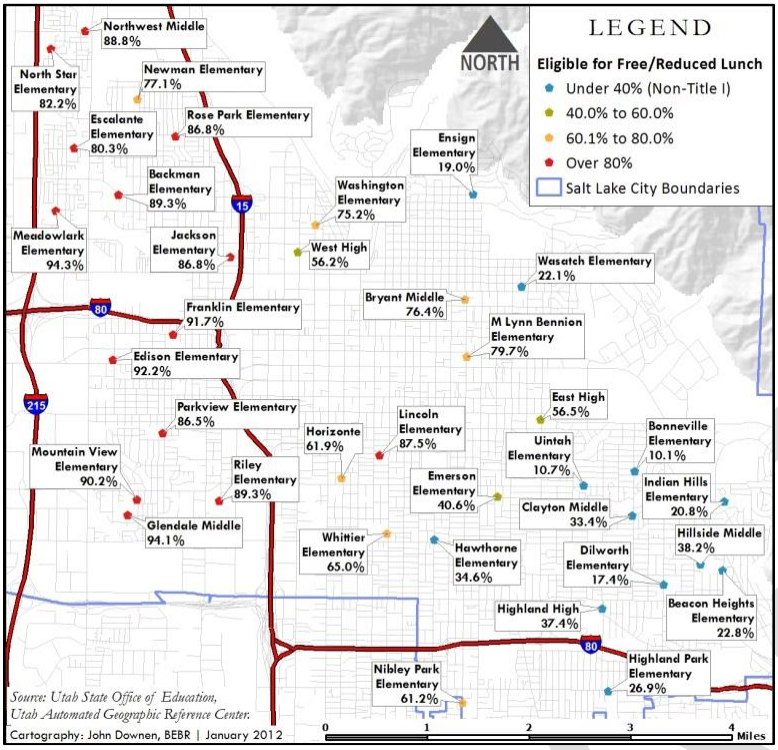
Figure 27
Free/Reduced Lunch Eligibility in Salt Lake City, 2011



The following six maps (Figure 27–Figure 32) each depict most of the elements of the school opportunity index, the exceptions being the addition of free/reduced lunch eligibility change from 2005–2011 (Figure 28) and the exclusion of class size due to the small changes between schools. These maps show a clear division between the east and west sides of Salt Lake with a concentration of the schools performing well located on the east side, and a concentration of schools with high reports of the negative attributing factors on the west side.

Figure 28
Free/Reduced Lunch Eligibility Change in Salt Lake City, 2005–2011

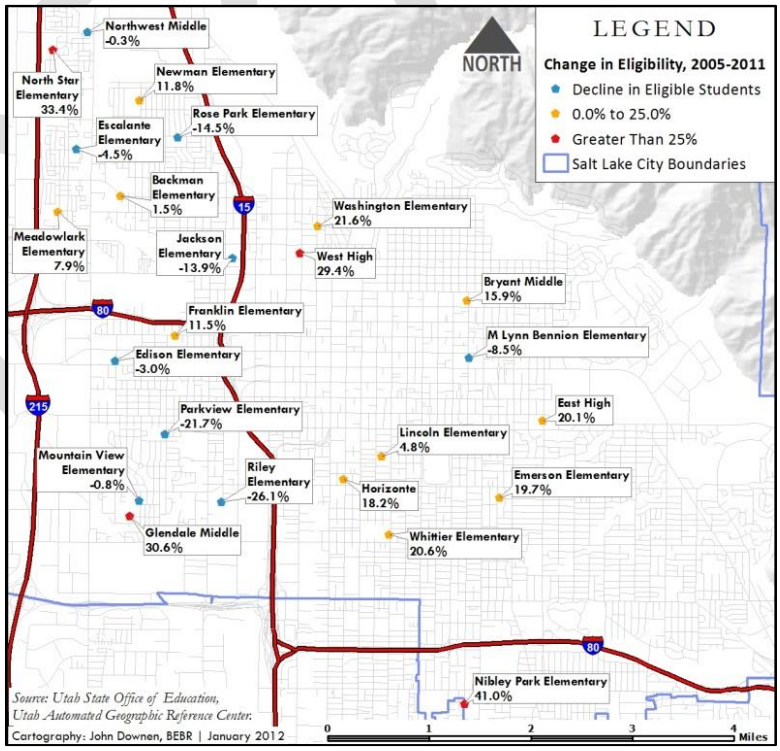


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Figure 29
Share of Students Proficient in Language Arts in Salt Lake City Public Schools, 2011

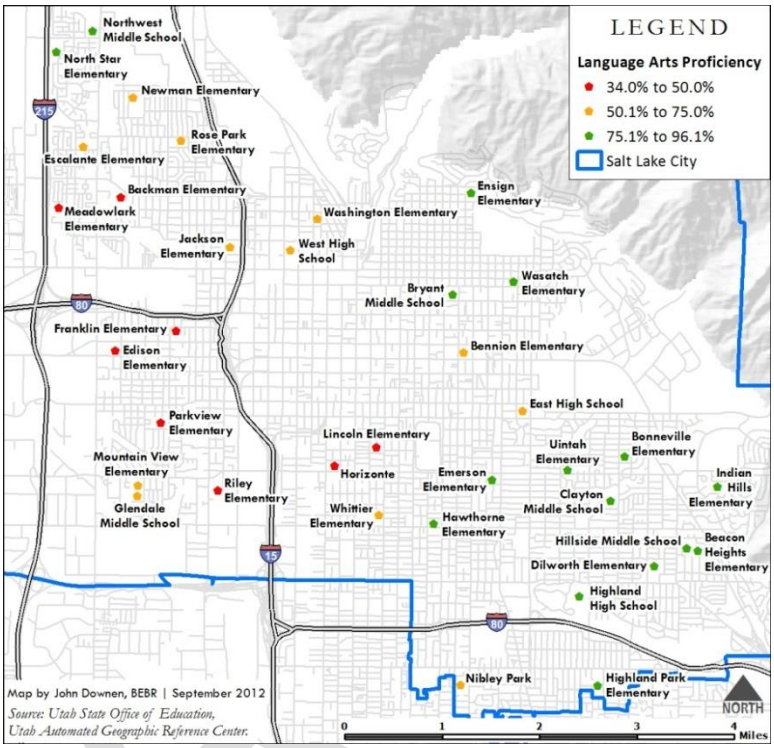


Figure 30
Share of Students Proficient in Science in Salt Lake City Public Schools, 2011

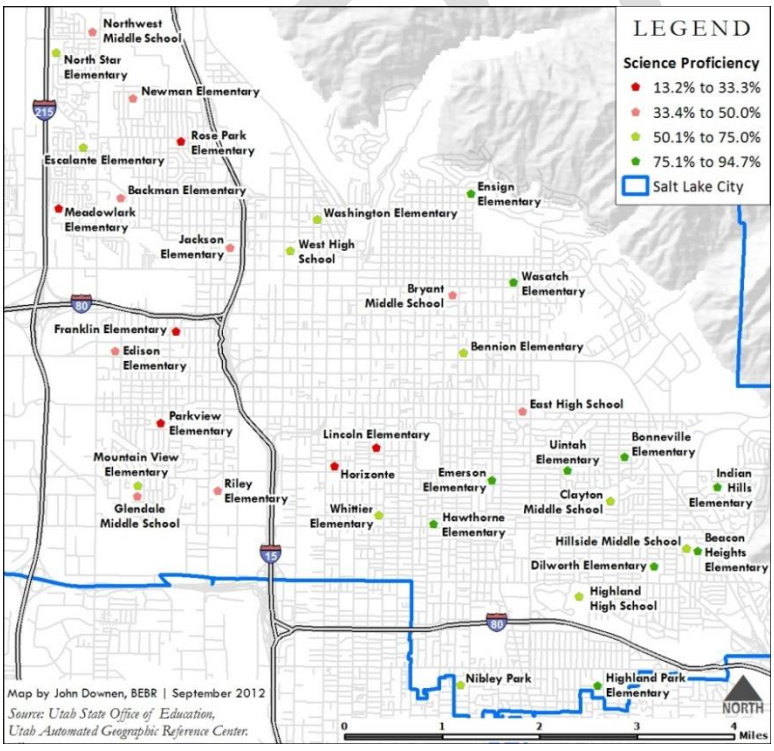


Figure 31
Minority Share of Enrollment in Public Schools in Salt Lake County, 2011

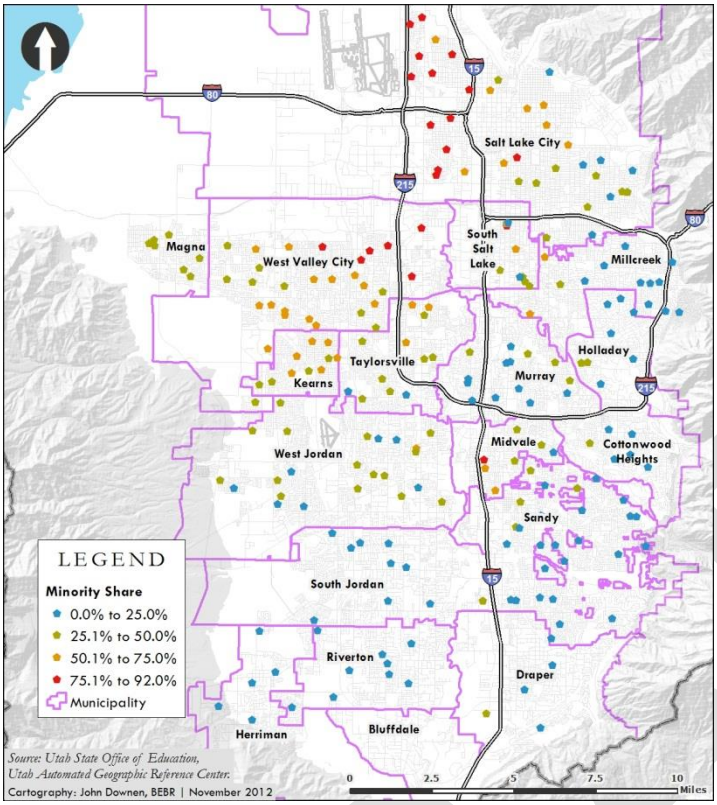
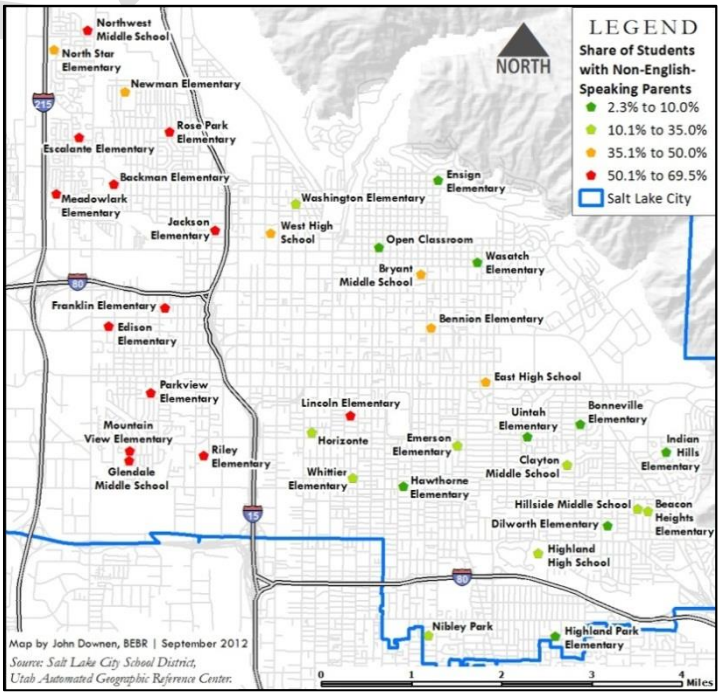


Figure 32
Share of Students with Parents of Limited English Proficiency in Salt Lake City



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One way to measure the racial and ethnic diversity of an area is to use readily available public school enrollment data. Every year, the Utah System of Education collects data on the fall enrollments of each public school in the state. Included in this data collection is data on race and ethnicity of each student enrolled in a public school in grades K through 12. In one particular survey, it allows each student to choose only a single race/ethnicity category or select a multi-race category, creating distinct count per student. Allowing each student to only be classified by one race/ethnic category eliminates the issue of double counting individual students who identify as more than one distinct race. This allows for a unique analysis of racial and ethnic makeup of public schools in Utah. Similarly, the number of minority students enrolled in public schools can be used as a proxy for estimating the diversity of families residing in each city. Table 20 shows the total number of students enrolled at each school in the three cities by race/ethnicity, as well as the city's total and average.

Using enrollment data from the Utah State Office of Education from the years 2006-2007 and 2010-2011 provides information on ethnicity enrollments in Salt Lake County public schools. The data comes from the Superintendent's Annual Report for each respective year and are matched based on school name, district and location. From there, the data is separated by city, and in some cases, by township. If a school is not located inside an incorporated city, or one of the two townships, Kearns or Magna, then they are included in the analysis for the closest city to their physical location. While the datasets from each year are not organized or collected in the exact same manner, they are still comparable. For example, in 2007 there is a category for "unknown" ethnic/racial identity, whereas in 2011 there is no "unknown" category but there is a "multi-race" category. These two classifications cannot be assumed to be the same, as someone who claims to be "unknown" is not necessarily a multi-race individual. However, both of these categories were used in the calculation for total enrollments and total minority enrollments in each respective year.

Due to Salt Lake City's large size, metro center, and diverse population between the downtown areas and the different socioeconomic areas, the segregation between both sides of the city is apparent. One physical boundary between the more affluent half of Salt Lake City and the less affluent areas is Interstate 15, which effectively splits the city in half, creating an east and west side. Figure 33 and Figure 34 show the enrollment changes from 2007 to 2011 by the respective halves of the city. The only exception to the physical boundary is West High School, which is geographically located east of the interstate; however, the majority of its student body resides on the west side. The two charts illustrate a clear difference in the enrollment changes between the two halves of Salt Lake City with a majority of east-side schools increasing their minority enrollments in almost all categories except American Indian and black students. On the other hand, the west side shows a general trend of declining enrollments, with the exception of American Indian students, who increased at by almost 30 percent.

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Table 20
Enrollment Percentage by Race in Public Schools, 2011

I-15 Boundary	School	Minority	African Am or Black	American Indian/ Alaskan Native	Asian	Hispanic/ Latino	Multi-Race	Pacific Islander
east side	Eastwood School	5.9%	1.0%	0.2%	2.1%	2.1%	0.2%	0.2%
east side	Dilworth School	12.2%	1.2%	0.3%	1.2%	5.7%	2.8%	1.0%
east side	Uintah School	12.4%	1.3%	0.2%	3.6%	6.3%	0.4%	0.7%
east side	Children Behavior Therapy Unit	12.5%	8.3%	0.0%	0.0%	4.2%	0.0%	0.0%
east side	Rosecrest School	13.3%	2.3%	0.7%	2.6%	5.1%	0.5%	2.1%
east side	Bonneville School	13.7%	0.0%	0.2%	4.4%	3.2%	5.2%	0.8%
east side	Highland Park School	15.1%	1.4%	0.9%	1.7%	5.9%	3.9%	1.2%
east side	Ensign School	20.0%	1.4%	1.7%	2.2%	9.2%	2.5%	3.1%
east side	Indian Hills School	20.9%	1.7%	0.6%	9.1%	3.7%	4.3%	1.5%
east side	Wasatch School	27.2%	3.2%	1.6%	4.4%	13.1%	3.8%	1.0%
east side	Hawthorne School	28.2%	1.9%	0.8%	4.7%	12.3%	6.4%	2.1%
east side	Clayton Middle	29.1%	2.2%	1.7%	3.0%	17.0%	2.0%	3.1%
east side	Beacon Heights School	29.4%	2.0%	0.4%	15.5%	6.4%	4.0%	1.0%
east side	Hillside Middle	31.7%	3.5%	0.6%	5.6%	18.7%	1.7%	1.5%
east side	Highland High	34.1%	3.8%	1.7%	4.0%	19.2%	0.8%	4.6%
east side	Washington School	36.4%	9.0%	2.2%	1.6%	20.3%	0.5%	2.7%
east side	Emerson School	39.2%	1.1%	0.9%	1.8%	27.3%	7.2%	0.9%
east side	Whittier School	39.8%	7.3%	1.1%	5.8%	20.1%	3.0%	2.6%
east side	Nibley Park school	47.8%	4.8%	2.7%	3.9%	31.7%	3.4%	1.3%
east side	East High	53.4%	5.0%	1.5%	5.1%	35.7%	0.9%	5.2%
east side	Bryant Middle	62.1%	6.1%	1.1%	3.9%	46.2%	0.7%	4.1%
east side	Horizonite Instr & Trn Center	64.5%	3.5%	4.0%	1.3%	50.0%	0.5%	5.3%
east side	M Lynn Bennion School	70.8%	6.8%	2.5%	2.1%	55.2%	3.6%	0.7%
east side	Hospital	75.0%	25.0%	0.0%	25.0%	25.0%	0.0%	0.0%
east side	Lincoln School	85.9%	4.6%	6.1%	8.0%	62.5%	2.1%	2.7%
east side	Northwest Middle	86.1%	7.3%	0.8%	3.3%	67.7%	0.5%	6.5%
west side	West High	52.2%	5.3%	2.1%	8.4%	30.9%	1.0%	4.5%
west side	Newman School	64.9%	1.8%	0.4%	1.8%	54.9%	2.7%	3.3%
west side	Riley School	71.8%	2.7%	0.7%	5.1%	52.0%	1.0%	10.3%
west side	Jackson School	77.7%	2.8%	0.8%	1.2%	67.6%	1.4%	4.0%
west side	North Star School	80.2%	6.4%	2.5%	4.4%	54.7%	4.1%	8.2%
west side	Rose Park School	80.9%	1.7%	7.9%	4.7%	61.7%	3.4%	1.5%
west side	Franklin School	82.9%	2.2%	0.2%	3.1%	70.4%	0.2%	6.9%
west side	Glendale Middle	83.3%	7.8%	1.4%	2.8%	61.5%	0.0%	9.9%
west side	Parkview School	83.8%	4.4%	0.5%	1.5%	70.6%	1.7%	5.1%
west side	Escalante School	84.2%	8.3%	0.3%	4.7%	63.1%	1.2%	6.4%
west side	Backman School	85.0%	4.5%	0.7%	1.4%	73.9%	1.0%	3.5%
west side	Edison School	86.2%	4.2%	6.1%	1.2%	63.2%	0.5%	10.9%
west side	Mountain View School	88.3%	8.8%	3.4%	2.6%	56.6%	0.9%	15.9%
west side	Meadowlark School	92.0%	9.5%	1.3%	3.6%	69.3%	0.7%	7.5%
	SLC Totals	52.6%	4.3%	1.7%	4.3%	36.1%	1.9%	4.4%
	SLC Averages	52.0%	4.7%	1.6%	4.3%	35.6%	2.0%	3.8%
	East Side Totals	40.5%	3.9%	1.5%	4.9%	25.1%	2.0%	3.1%
	East Side Averages	37.8%	4.5%	1.4%	5.0%	22.5%	2.3%	2.3%
	West Side Totals	82.1%	5.3%	2.0%	2.9%	62.9%	1.4%	7.5%
	West Side Averages	81.7%	5.0%	2.0%	2.9%	63.0%	1.5%	7.2%

Source: BEBR Computations from Utah State Office of Education Data

Though West High School is physically located east of Interstate 15, the majority of the students attending school there live on and come from west-side schools.

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Figure 33
Total Minority Enrollment Changes, 2007 - 2011

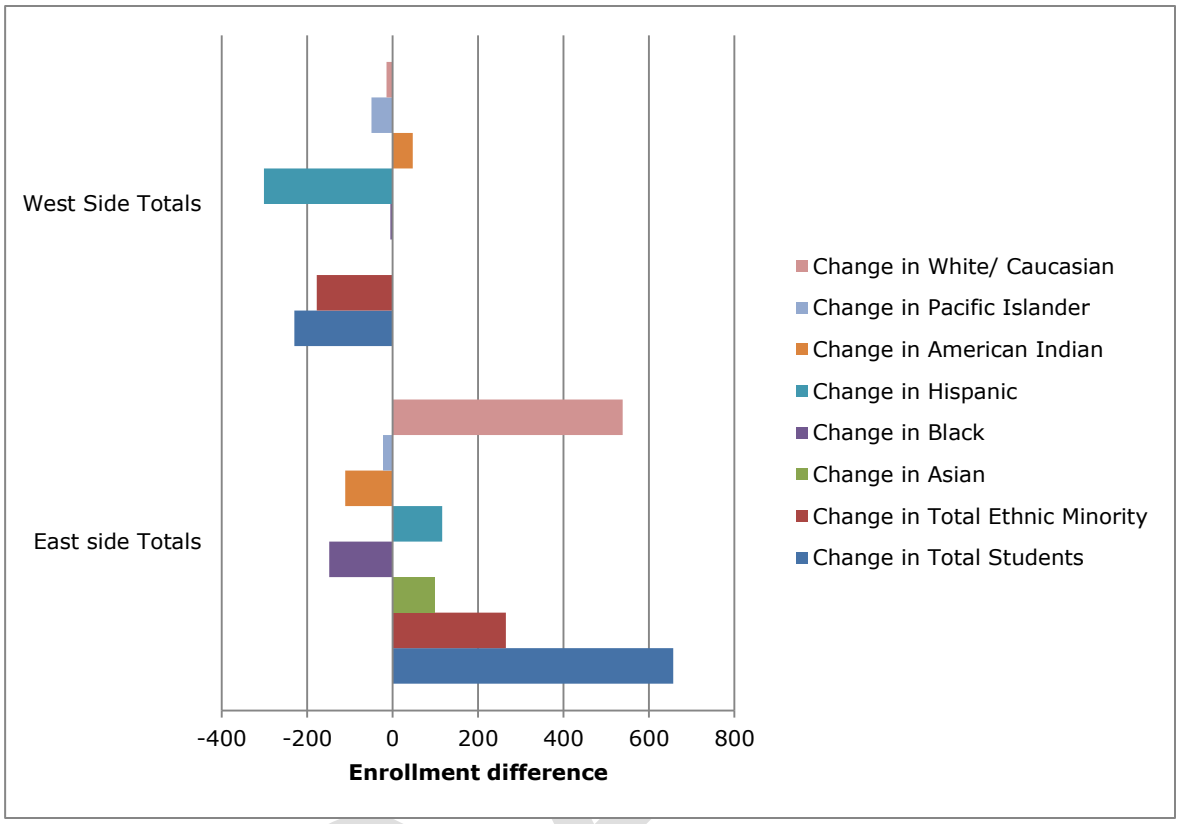
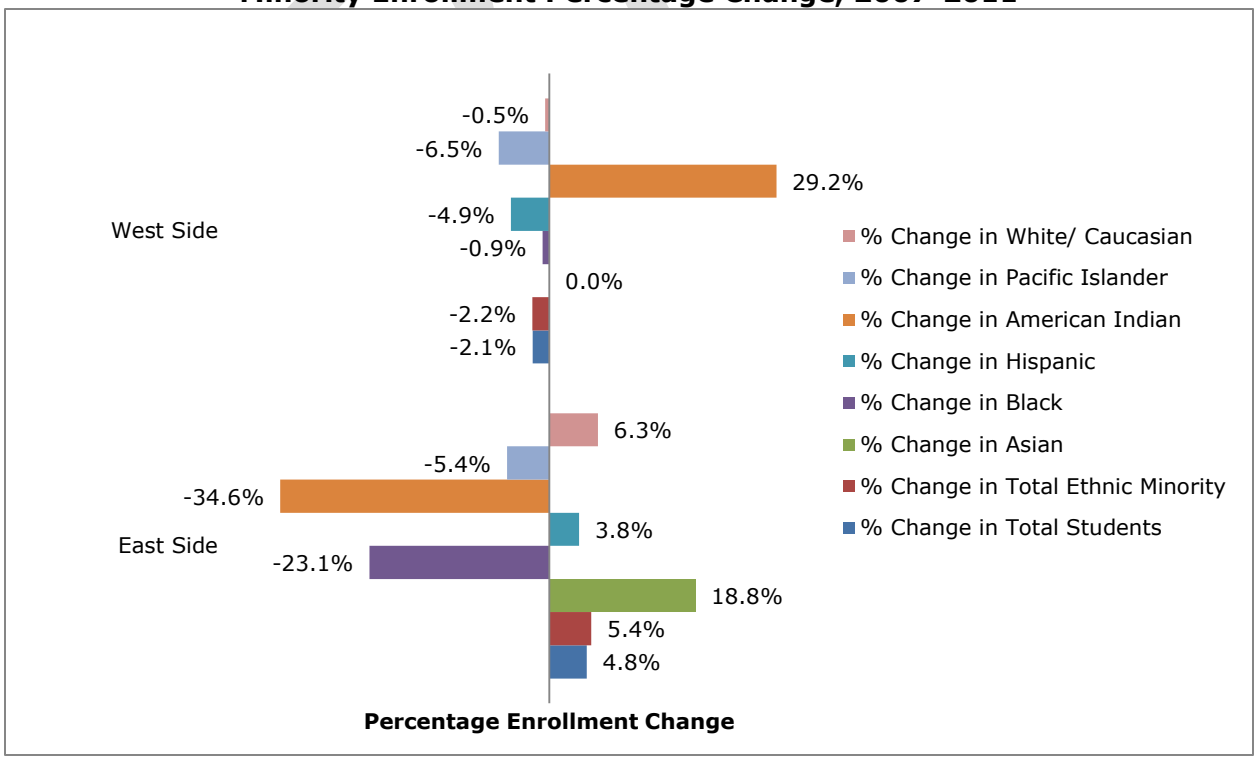


Figure 34
Minority Enrollment Percentage Change, 2007-2011



In accordance with Title VI of the Civil Rights Act of 1964, HUD recognizes persons who, as a result of national origin, do not speak English as their primary language and have a limited ability to read, write, or understand the language. As the major metropolitan center of the state, Salt Lake County must account for the percentage of Limited English Proficiency, or LEP, persons living in the county. According to data from the county's public schools, there are concentrated areas of both high and low levels of LEP families throughout the county. Salt Lake City is the northernmost city in Salt Lake County, bordering West Valley City, South Salt Lake, and unincorporated Millcreek to the south. It is home to the most schools of any city in the county with a total of 38 public schools, including 29 elementary, five middle, and four high schools. Not surprisingly, it has the wide range of percentage of students with LEP parents than any other city. It ranges from 5.0 percent at Unitah Elementary School to 70.4 percent at the Mountain View School. Half of all public schools in Salt Lake City have a reported rate of students with LEP parents/guardians over 35 percent, well above the county average rate of 21.5 percent. Due to Salt Lake City's large size and wide range of student's LEP status, it makes sense to divide the city by the I-15, separating the east and west sides The only exception to the physical boundary of I-15 in this analysis is West High School. Even though the school is physically located east of I-15 the students who attend West High overwhelmingly live west of the interstate. While the east side of Salt Lake City has less than a quarter of its students with LEP parents/guardians, the west side has over half. In fact, even the west-side school with the lowest prevalence of students with LEP parents, West High School, with 36.9 percent, is higher than that of the east-side average of 19.7 percent. The full breakdown for each school in the east side is displayed in Figure 35.

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Figure 35
Percent of Students with LEP Parents, 2010

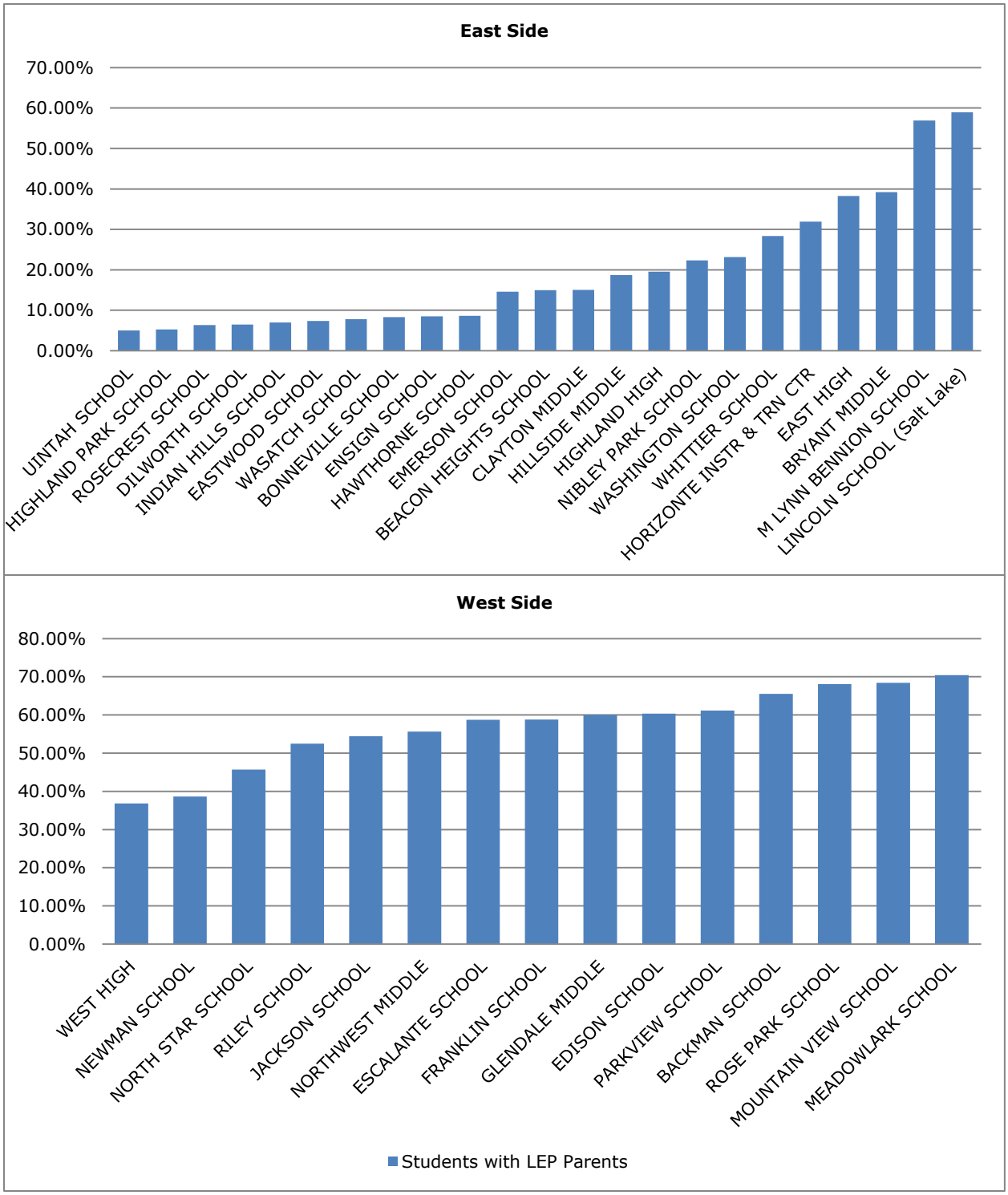


Figure 36 and Figure 37 show the 2011 assessed value of homes and the median home value by tract in Salt Lake City, respectively. The overall range of assessed home values in the city ranges quite a bit, from under $150,000 to well over $400,000. Both maps show home values increase in the city from west to east. This is especially true along the eastern areas surrounding the University, including the Federal Heights and Foothill areas. There are also large gaps of no home values in Figure 36, since these areas are heavily urban, with lots of business, apartments and other higher capacity buildings as opposed to detached single-family homes.

Figure 36
Assessed Value of Detached Single Family Homes in Salt Lake City, 2011

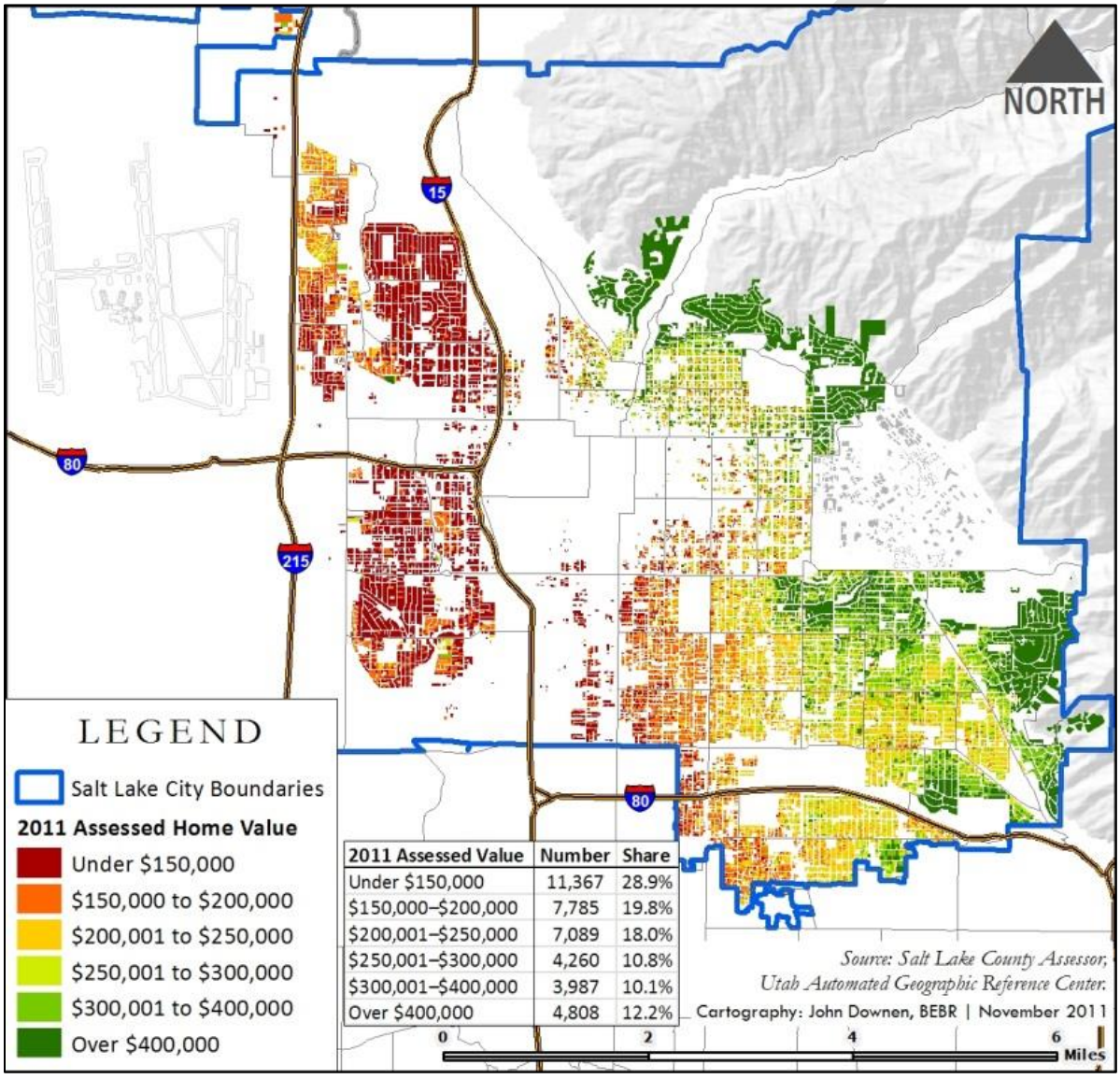
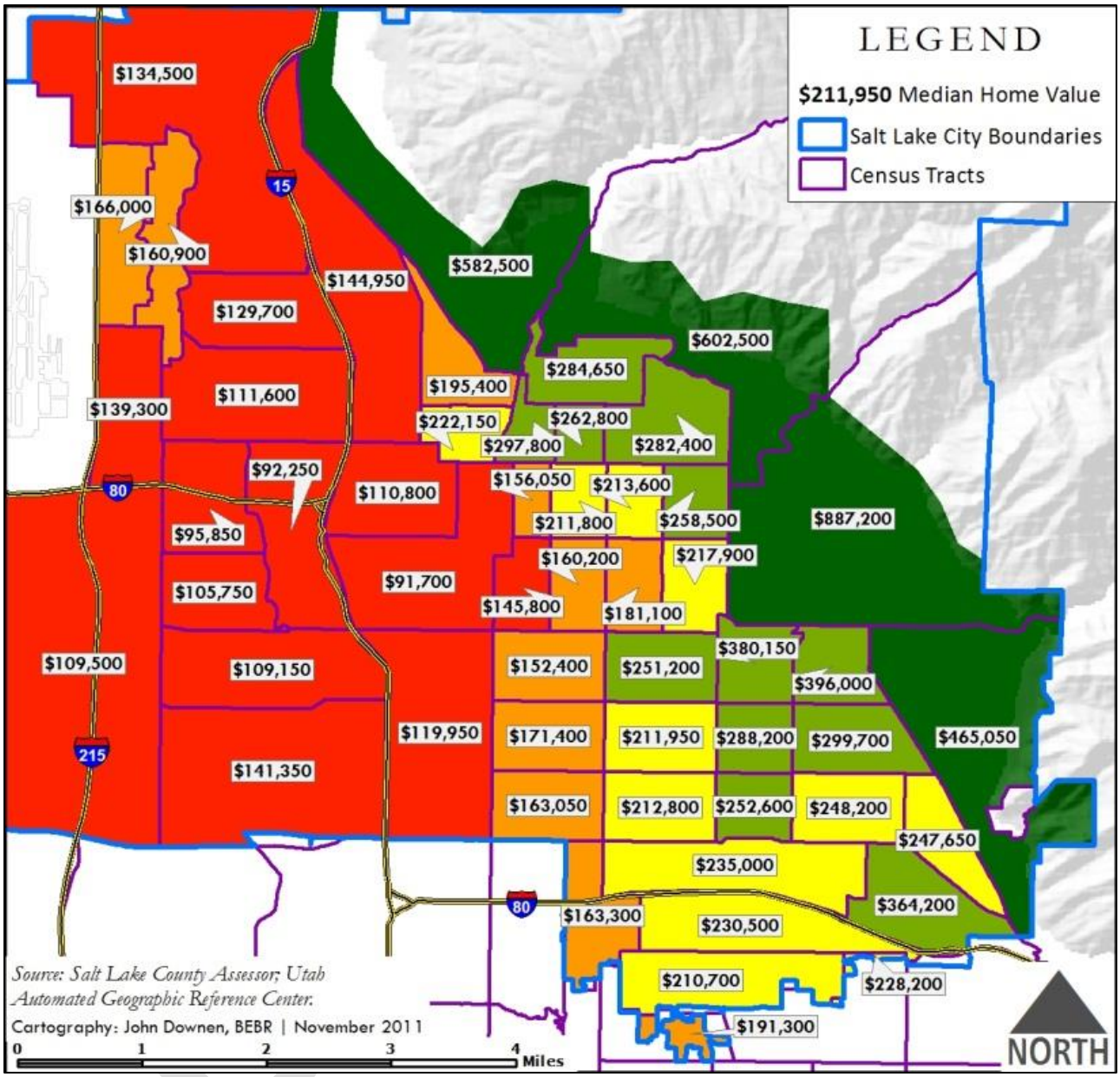


Figure 37
Median Home Value by Tract in Salt Lake City, 2011
(Red and Orange Tracts Median Value Less Than City Median)



Foreclosed homes have not only a negative effect on residents who lost their homes, but can also negatively affect neighboring housing and real estate values in the area. Table 21 estimates the percentage of the owned housing stock that was foreclosed on in the last few years for Salt Lake County. The calculations use total foreclosures between 2008 and 2012 from the Wasatch Regional Front Multiple Listing Service, and the total owned homes form the 2010 U.S. Census as the best approximation of the total housing stock in a zip code. Overall, for all the zip codes in Salt Lake City, about 1.7 percent of the city's housing stock was in foreclosure between 2008 and 2012. However, this total includes both the west and east sides. Considering the demographic and economic dispari-

ties on either side of Interstate 15, it is clear there are higher foreclosure rates on the west than east side. This is made more evident in Figure 38.

Table 21
Foreclosed Homes in Salt Lake County, 2008-2012

City	Zip Code Tabulation Area	Total Owned Units	Total Foreclosures for 2010 ZCTA (2008-2012)	Share of Foreclosed Homes
Bluffdale/Riverton	84065	8,534	296	3.47%
Cottonwood Heights (and Big Cottonwood)	84121	11,692	168	1.44%
Draper	84020	8,852	374	4.23%
Herriman	84096	7,597	288	3.79%
Holladay	84117	6,588	64	0.97%
Magna Township	84044	6,194	254	4.10%
Midvale	84047	5,739	126	2.20%
Millcreek/Parley's Canyon	84109	6,773	57	0.84%
Murray	84107	6,925	137	1.98%
Salt Lake City Total		39,134	670	1.71%
Salt Lake City	84101	657	20	3.04%
Salt Lake City	84102	2,401	39	1.62%
Salt Lake City	84103	4,968	62	1.25%
Salt Lake City	84104	3,926	137	3.49%
Salt Lake City	84105	5,761	71	1.23%
Salt Lake City	84111	1,302	28	2.15%
Salt Lake City	84112	1	0	0.00%
Salt Lake City	84113	—	0	—
Salt Lake City	84116	5,944	163	2.74%
Salt Lake City (and Emigration)	84108	5,648	32	0.57%
Salt Lake City (and Millcreek)	84106	8,526	118	1.38%
Sandy Total		28,234	436	1.54%
Sandy	84070	5,922	122	2.06%
Sandy (and Little Cottonwood)	84092	8,318	138	1.66%
Sandy	84093	6,738	74	1.10%
Sandy	84094	7,256	102	1.41%
South Jordan	84095	12,490	299	2.39%
South Salt Lake	84115	4,173	114	2.73%
Taylorsville Total		24,345	597	2.45%
Taylorsville	84123	8,509	97	1.14%
Taylorsville (and Kearns)	84118	15,836	500	3.16%
Unincorporated (Brigham Canyon)	84006	228	2	0.88%
Unincorporated (Millcreek/Mt. Olympus)	84124	6,034	64	1.06%
West Jordan Total		26,114	691	2.65%
West Jordan	84081	9,353	81	0.87%
West Jordan	84084	8,868	347	3.91%
West Jordan	84088	7,893	263	3.33%
West Valley City Total		26,302	791	3.01%
West Valley City	84119	9,704	265	2.73%
West Valley City	84120	10,246	281	2.74%
West Valley City	84128	6,352	245	3.86%
Salt Lake County		235,948	5,428	2.30%

Zip Code 84129 had a total of 25 foreclosed homes since its incorporation in 2011. However, this table uses the 2010 Zip Code Tabulation Areas (ZCTAs) from the 2010 Census, and therefore does not include 84129. However, this zip code was formed from parts of zip codes 84118, 84119 and 84084. There are 10,324 single-family parcels in 84129. Of these, 2,090 are in ZCTA 84084, 7,147 are in 84118, and 1,087 are in 84119. Assuming the 25 foreclosures in 84129 since July 2011 were evenly distributed across the area, these numbers are used to weight these foreclosures to the other/older zip codes. Thus the County totals should still equal the accurate total number of foreclosures, and ZCTA's 84118, 84119 and 84084 have 17, 3 and 5 additional foreclosures, respectively, added that are currently in the 84129 zip code.

Source: BEBR Calculations From Wasatch Front Regional Multiple listing Service and U.S. Census Bureau, 2010 Census

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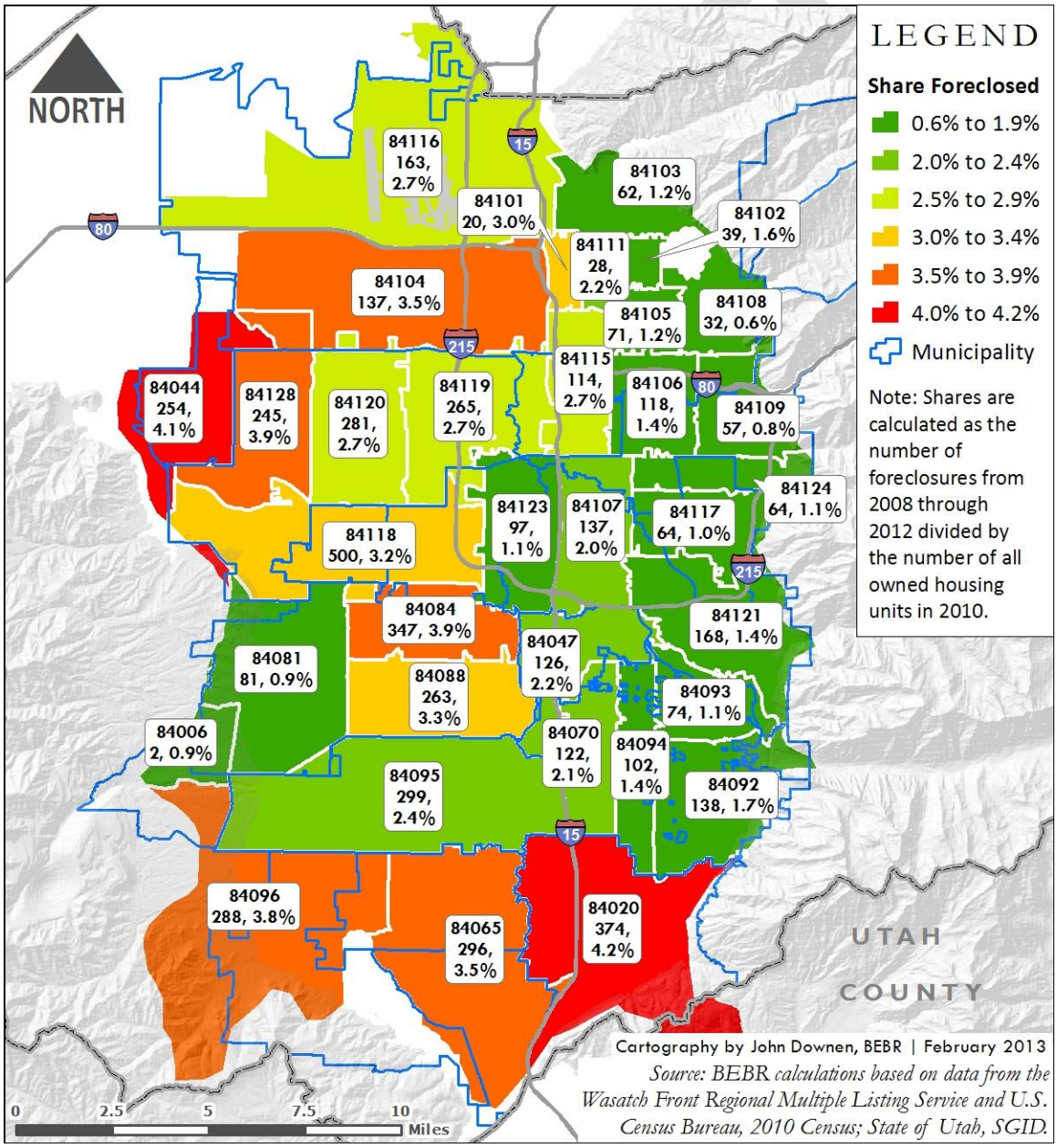
Figure 38 maps the share of the foreclosed homes in each zip code in Salt Lake County, based on the 2010 owned housing stock and Zip Code Tabulation Areas (ZCTAs) from the 2010 Census. Though the aggregated zip codes in Salt Lake City have a lower foreclosure rate than the county average, this is not true for each individual ZCTA. The trend on the west side and downtown are higher than the county average, maxing out in 84104 at 3.5 percent, while the eastern zip codes enjoy a much lower foreclosure rate. This has an effect not only on the housing stock in the area, but indirectly affects members of many protected classes, racial and ethnic minorities (especially Hispanics) and poor residents who predominately reside on in the higher foreclosure areas (Figure 18 and Figure 19). This effect further exacerbates poverty, considering the location of the RCAPs in Salt Lake City, both of which are located in high foreclosure areas of the city (Figure 13).

Figure 38
Share of Foreclosed Owned Housing Units, 2008-2012



Lending Practices

Approval/ Denial Rates (Figure 39)

- The approval rate for white applicants steadily increased from 67 percent in 2006 to 75 percent in 2011.
- Hispanic applicants saw a decrease in approval rates from 48 percent in 2006 to 36 percent in 2008. Conventional loan approval rates for Hispanic applicants dropped even more precipitously to 31 percent in 2008.
- The overall approval gap between the two groups nearly closed in 2010 when the Hispanic/Latino approval rate reached a new high of 69 percent but has since widened with the recent approval rate decrease in 2011.

High-Interest Loans (Figure 40)

- About 11.6 percent of approved loans for non-Hispanic whites were deemed to be high interest (vs. 36.3 percent of approved loans for Hispanic/Latino applicants). The gap persists through all income deciles between the two groups, in fact widening dramatically at the higher income levels.

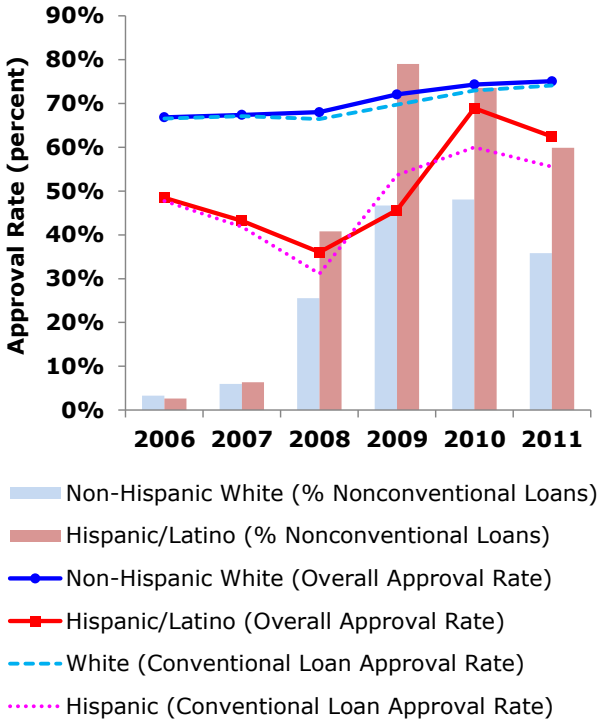
Neighborhood Selection (Figure 41)

- The proportion of prospective SLC white homebuyers selecting the more affluent east-side neighborhoods have persisted at levels of 80 percent.
- With volatility, the proportion for Hispanic/Latino applicants has increased from 20 percent in 2006 to 32 percent in 2011.

Applicant Income & Loan Amount (Figure 42)

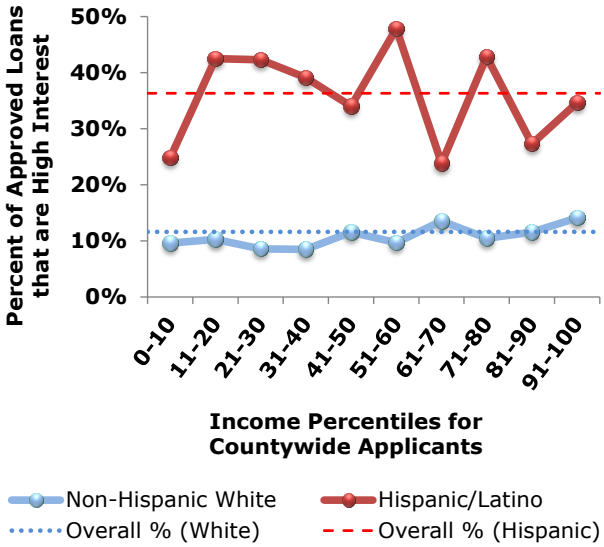
- The white applicant median income peaked in 2007 at $77K and then plummeted to $62K in 2009 with a slight rebound in the following years. Hispanic/Latino applicant median incomes gradually decreased from $46K in 2006 to $36K in 2011.
- The applicant loan amount gap between the two groups has widened from $33K in 2009 to $69K in 2011 mostly due to the rapid decrease in the Hispanic/Latino loan amount.

Figure 39
Approval Rates by Race/Ethnicity with Loan Type Composition
Salt Lake City, 2006–2011



Source: HMDA LAR Raw Data by MSA (2006-2011)

Figure 40
Percent of High-Interest Loans by Income
in Salt Lake City, 2006–2011



Source: HMDA LAR Raw Data by MSA (2006-2011)

High-interest loans are defined as any loan with a reported rate spread that exceeds 3 percentage points for first liens and 5 percentage points for subordinate liens. The rate spread is the difference between the loan APR and the yield of comparable Treasury securities.

Please refer to Figure 44 on page 57 for the corresponding income levels in nominal amounts.

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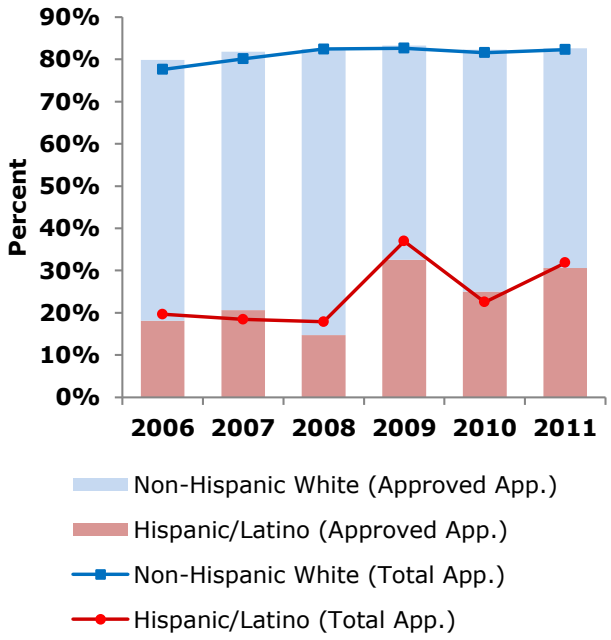
Figure 41
Percent of Total/Approved Applications in East SLC by Race/Ethnicity in Salt Lake City, 2006–2011



Source: HMDA LAR Raw Data by MSA (2006-2011)

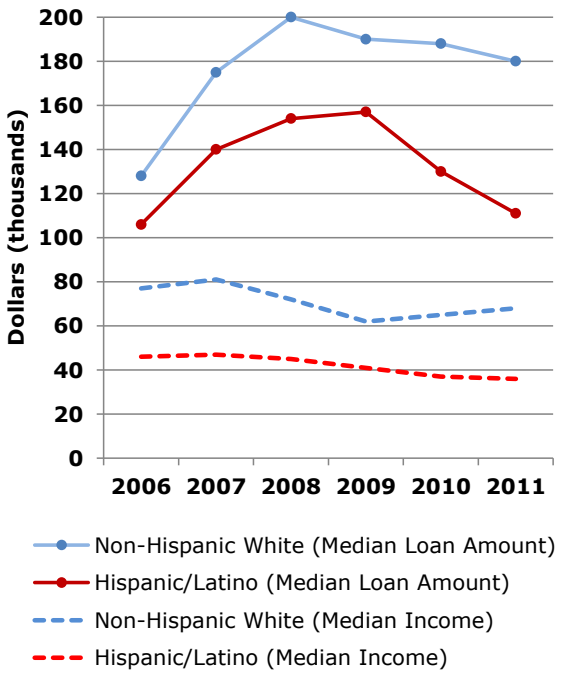
east SLC for Hispanic/Latino applicants was in fact lower than the corresponding proportion for total applications. This means that the mortgage approval process further widened the large disparity in the existing neighborhood self-selection effect. Thus, while the approval gap might appear to be closing, the persistent self-selection effect does not mitigate the existing racial and ethnic segregation in SLC.

This dramatic increase in approval rates for Hispanic/Latino applicants could also be driven by the corresponding increase in nonconventional loans after 2008. Figure 39 shows that while only 2.7 percent of the 2006 SLC applications for Hispanic/Latino applicants were nonconventional, this rate rose to a staggeringly 79 percent in 2009. Given that nonconventional loans have less stringent lending standards, part of the dramatic increase in Hispanic/Latino mortgage approval rates could be attributed to the increased weight of nonconventional loans in the applicant pool. When accounting for only conventional loan applications, the Hispanic/Latino overall 69 percent approval rate in

The closing of the approval rate gap between white and Hispanic/Latino applicants from 2008 to 2010 does not necessarily imply lessened barriers to opportunity in housing. Two major factors confound this misleading conclusion—the neighborhood self-selection effect and trends in loan type composition.

Figure 41 shows the percent of SLC applications by race/ethnicity concentrated in the east-side neighborhoods. Prospective SLC non-Hispanic white applicants persistently chose east-side neighborhoods at levels of 80 percent from 2006 to 2011, whereas Hispanic/Latino applicants overwhelmingly selected River District properties. In addition to the line graphs in Figure 41 that show the 6-year self-selection trends, the bar graphs show the proportion of SLC approved loans concentrated on the east side. The self-selection trend remains homogenous with the approved loans for white applicants. In 2008 and 2009, the proportion of approved loans concentrated in

Figure 42
Median Loan Amount and Income of Total Applicants by Race/Ethnicity in Salt Lake City, 2006–2011



Source: HMDA LAR Raw Data by MSA (2006-2011)

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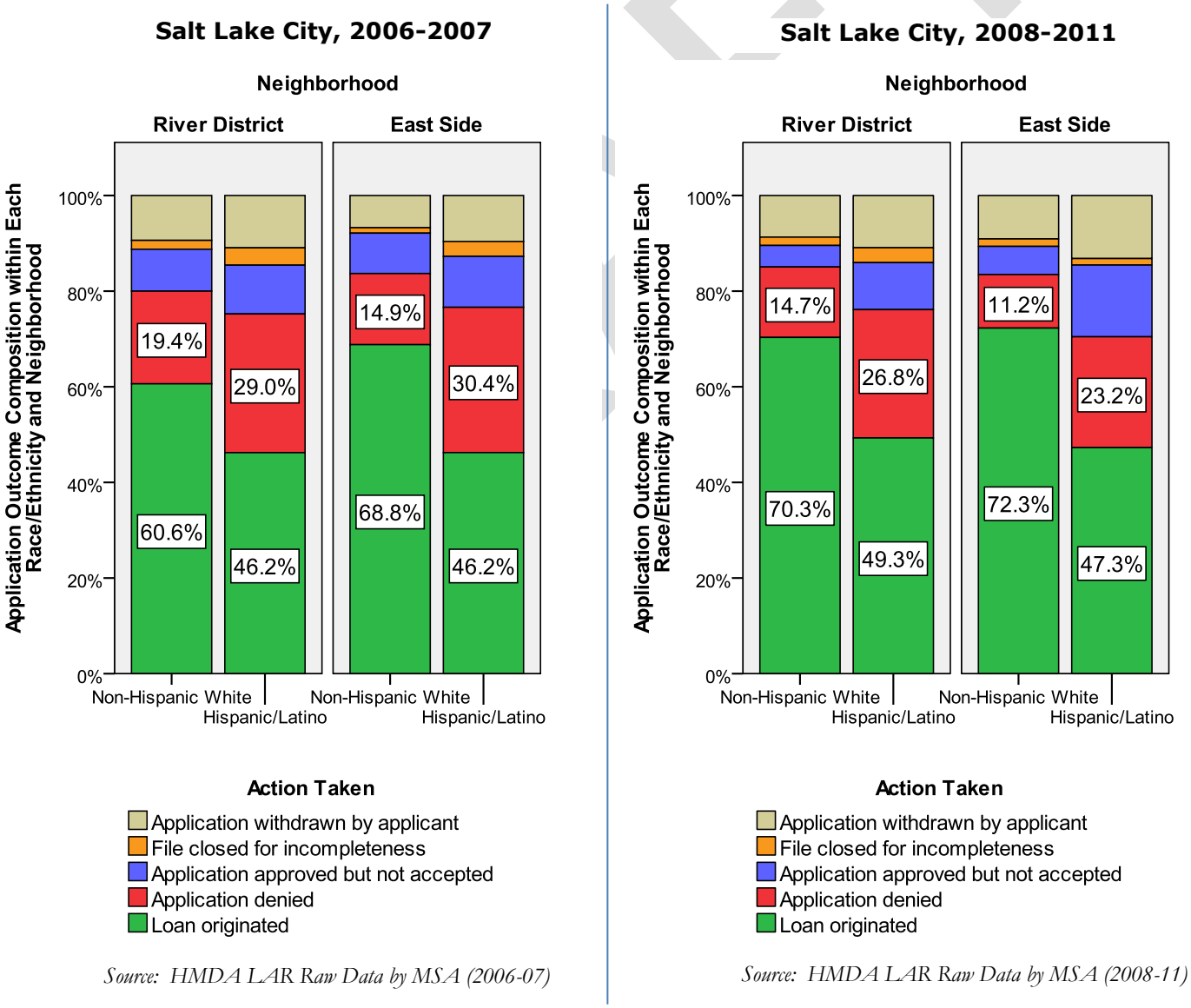
2010 dropped to 60 percent. Interestingly, this volatility between overall approval rates and conventional loan approval rates does not exist for non-Hispanic white applicants. Figure 39 shows that even accounting for only conventional loans, the non-Hispanic white approval rates from 2006 to 2011 did not drop by more than a few percentage points from the corresponding overall approval rates.

Figure 43 shows the SLC application outcomes by race/ethnicity and neighborhood. The left-hand panel in Figure 43 shows the outcomes in the 2006–07 housing boom period, while the right-hand panel shows the outcomes in the housing bust thereafter from 2008 to 2011. The approval rates in all respective racial/ethnic categories by neighborhood have risen from the boom to bust period. However, the approval gap between non-Hispanic white and Hispanic/Latino applicants has continually widened during these two periods. Most significantly, the 14.4 percent approval gap in the River District between white and Hispanic/Latino applicants during the housing boom widened to 25 percent during the housing bust. The sustained approval and denial rate gaps between white and

Figure 43
Mortgage Application Outcomes by Race/Ethnicity, Neighborhood, and Housing Period

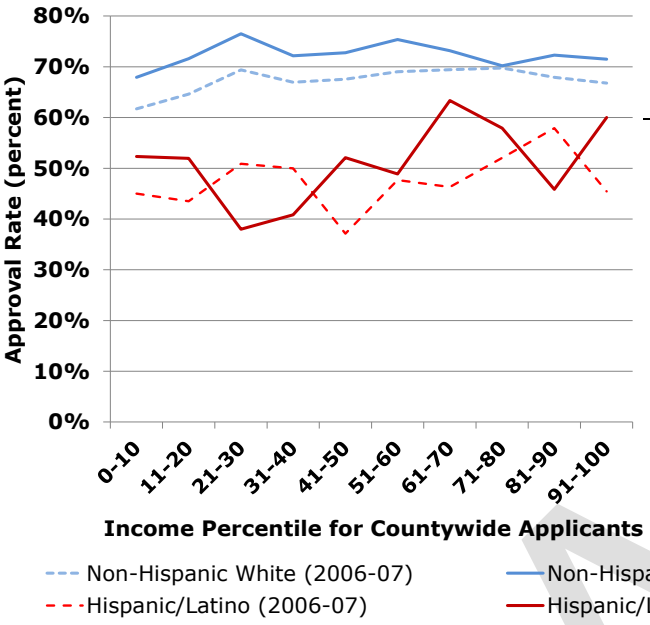


Source: HMDA LAR Raw Data by MSA (2006-07)

Source: HMDA LAR Raw Data by MSA (2008-11)

Hispanic/Latino applications shown in Figure 43 could potentially be due to the differences in income distributions by race/ethnicity.

Figure 44
Approval Rates by Income Level and Race/Ethnicity in Salt Lake City, 2006–2011



Percentile	Income (1000s)
0-10	≤35
11-20	36-42
21-30	43-50
31-40	51-57
41-50	58-66
51-60	67-77
61-70	78-93
71-80	94-118
81-90	119-173
91-100	>173

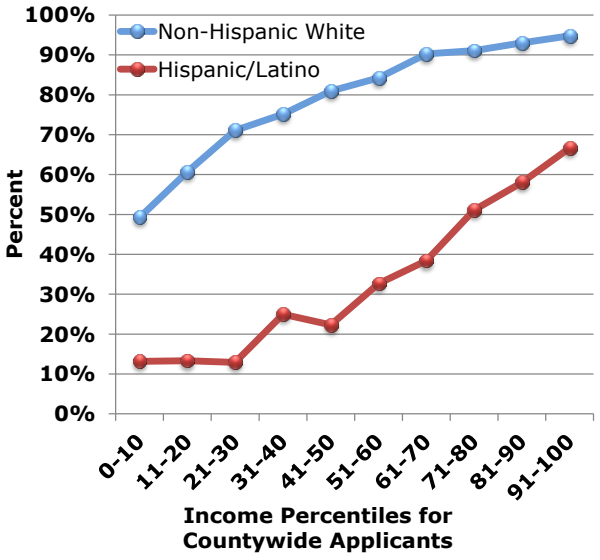
Source: HMDA LAR Raw Data by MSA (2006-2011)

Note: The percentiles are determined from the reported incomes of all applicants in the entire Salt Lake County HMDA dataset from 2006 to 2011. The table above shows the correspondence between the percentiles and the income in nominal dollars.

However, Figure 44 depicts the approval gap even when disaggregated by countywide income deciles. The income levels are categorized by deciles (10-percentile increments), using the entire Salt Lake County HMDA dataset from 2006 to 2011. The dashed lines in Figure 44 are the approval rates during the housing boom, whereas the solid lines are the approval rates during the housing bust. The approval rates for white applicants are fairly homogeneous across income deciles for both housing periods. In fact, the approval rates for white applicants have shifted upward for nearly all income deciles from the housing boom to the bust.

On the other hand, the approval rates in both housing periods were more volatile for Hispanic/Latino applications. Interestingly, the approval rate trend is generally upward as the income deciles increase, except for the lowest and highest deciles. Note that approval trends by income are also confounded by the neighborhood selection of these applications by income. Figure 45 shows the percent of SLC applications for the more affluent east-side properties by income deciles. Both white and Hispanic/Latino applicants with higher incomes applied for east-side properties at increasingly higher rates. However, white applicants applied for east-side properties at higher rates than Hispanic/Latino applicants for all income deciles. Thus, the Hispanic/Latino applicants at the very lowest income deciles might have had relatively higher than expected approval rates given

Figure 45
Percent of Applications for Properties in East Salt Lake City, 2006–2011



Source: HMDA LAR Raw Data by MSA (2006-2011)

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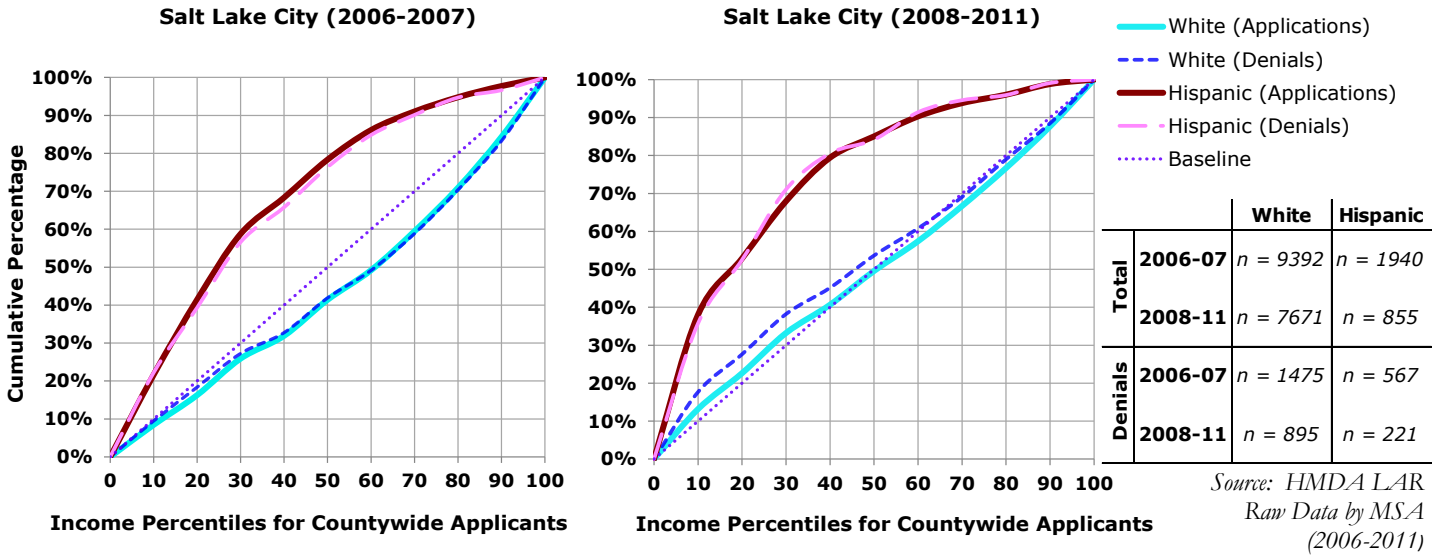
the higher tendency of selecting more affordable River District properties.

Figure 46
Cumulative Distrtibution of Applications and Denials across Income Levels by Race/Ethnicity



		White	Hispanic
Total	2006-07	n = 9392	n = 1940
	2008-11	n = 7671	n = 855
Denials	2006-07	n = 1475	n = 567
	2008-11	n = 895	n = 221

Source: HMDA LAR Raw Data by MSA (2006-2011)

The income percentiles were determined from the all applicants with reported incomes in the Salt Lake County HMDA dataset from 2006-2011. Thus, the income percentiles represent constant income levels for both groups. Please refer to Figure 43 on page 57 for the corresponding income levels in nominal dollar amounts.

Figure 46 shows the cumulative distribution of applications and denials by race/ethnicity and housing periods. The distributions are cumulative across income deciles. The purple dotted line is the baseline, meaning that curves that approach the shape of this baseline have distributions similar to the overall reported income distribution of all applications in Salt Lake County in the HMDA dataset from 2006 to 2011. Cumulative application distributions for a subpopulation above the baseline suggest that this group has more applicants in the lower income deciles compared to the entire 2006 to 2011 Salt Lake County HMDA dataset. Likewise, cumulative application distributions below the baseline mean that the group has more applicants in higher income deciles.

The two panels in Figure 46 each overlay the cumulative application distributions with the corresponding cumulative denial distributions for the two housing periods. Most notably, the non-Hispanic white application distribution changed from being convex below the baseline during the housing boom to approaching the baseline in the housing bust. The Hispanic/Latino cumulative application distribution shifted further away from the baseline after the housing boom. Despite the changes in income distribution for both groups, the income distributions of denials have been deviated significantly from the application income distribution. Surprisingly, the only major deviation occurred at the lowest income decile for white applicants as shown in the right-hand panel in Figure 46. While 13.2 percent of white applicants during the housing bust reported incomes at the lowest decile, 17.7 percent of the denials fell under this income category. Thus, Hispanic/Latino applicants were not denied mortgages solely on the basis of incomes even at the lowest income deciles. Although HMDA data do not include specific credit history information to develop a more conclusive analysis on the racial disparities in mortgage outcomes, the dataset includes denial reasons.

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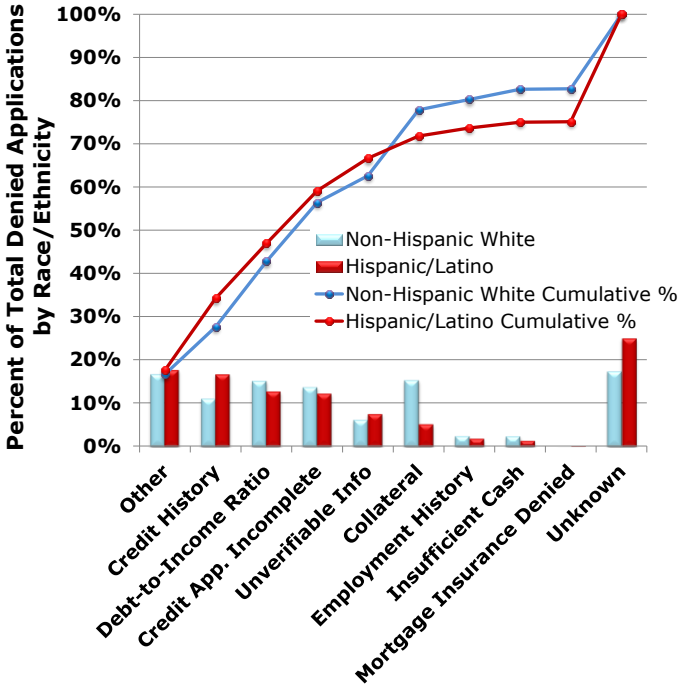
Figure 47 shows the percent of denied applications by race/ethnicity attributed to each denial reason. The line graphs in Figure 47 show the cumulative percentage aggregated in the order that the denial reasons are listed on the horizontal axis. The denial reasons are ordered from the most to least common denial reason among Hispanic/Latino applicants with the exception of categorizing all denied applications with unreported reasons at the end. Roughly 40 percent of all denied applications for both groups were attributed to poor credit history, high debt-to-income ratios, and incomplete credit applications.

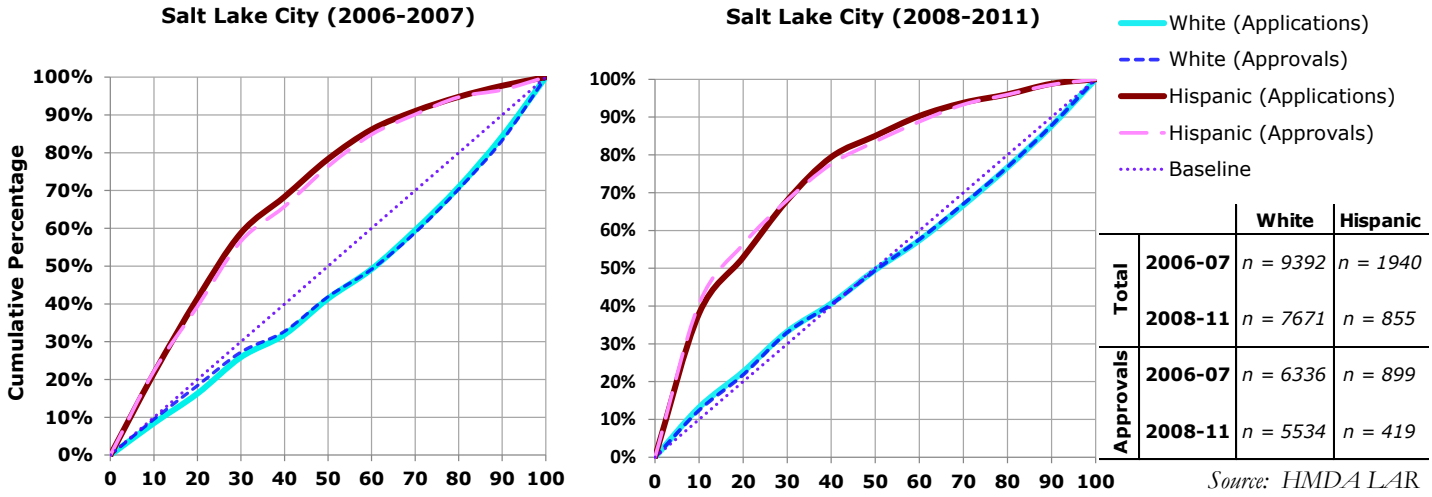
Figure 47
Primary Denial Reason by Race/Ethnicity in Salt Lake City, 2006–2011



Source: HMDA LAR Raw Data by MSA (2006-2011)

Note that the cumulative distribution of applications and approvals are fairly comparable as shown in Figure 48. While there appears to be a slight disproportionate uptick in approvals in the lowest income decile for Hispanic/Latino applicants during the housing bust, the gap between the application and approval cumulative distributions quickly close before reaching the 30th percentile, meaning that the Hispanic/Latino applicants in the 21th-40th percentiles have dispropor-

Figure 48
Cumulative Distrtibution of Applications and Approvals across Income Levels by Race/Ethnicity



		White	Hispanic
Total	2006-07	*n* = 9392	*n* = 1940
	2008-11	*n* = 7671	*n* = 855
Approvals	2006-07	*n* = 6336	*n* = 899
	2008-11	*n* = 5534	*n* = 419

Source: HMDA LAR Raw Data by MSA (2006-2011)

The income percentiles were determined from the all applicants with reported incomes in the Salt Lake County HMDA dataset from 2006-2011. Thus, the income percentiles represent constant income levels for both groups. Please refer to Figure 43 on page 57 for the corresponding income levels in nominal dollar amounts.

tionately lower approvals based on their application volumes. In fact, the index of dissimilarity (Table 22) shows a slight increase from 0.04 during the boom period to 0.06 in the housing bust for Hispanic/Latino applicants. On the other hand, despite a fairly drastic change in non-Hispanic white applicant reported income distributions in the two housing periods, the cumulative distributions of approvals for non-Hispanic white applicants have nearly mirrored the cumulative application volume distribution in both housing periods. This similarity in both distributions is also reflected in the indices of dissimilarity between total applications and the approved subset, which have been 0.01 for both the boom and bust for white applicants (Table 22).

Table 22
Indices of Dissimilarity for Denials & Approvals by Race/Ethnicity in Salt Lake City, 2006–2011

	Denials		Approvals	
	Boom	*Bust*	*Boom*	*Bust*
Non-Hispanic White	0.03	0.05	0.01	0.01
Hispanic/Latino	0.04	0.08	0.04	0.06

Source: HMDA LAR Raw Data by MSA (2006-2011)

In fact, the cumulative application volume distribution curve for non-Hispanic whites in the housing bust has an inflection point around the 50th-percentile mark, meaning that the curve is concave below the countywide median and convex above the countywide median. This means that the non-Hispanic white applicants selecting SLC properties are disproportionately higher in both the lowest and highest income deciles, suggesting a widening income gap among non-Hispanic whites after the housing boom.

The Index of Dissimilarity section on page 62 has a detailed explanation of this metric in summarizing the magnitude of the difference between the overall and approval/denial income distributions. The graphical representations in Figure 47 and Figure 48 already suggest that Hispanic/Latino applicants are not receiving disproportionately more approvals at the higher income levels and disproportionately more denials at the lower income levels, since the overall distributions nearly mirror the approval/denial distributions. The indices of dissimilarity, however, cannot provide insight into disproportional allocation of denials and approvals by income. These indices simply show the percent of applicants that must move to another income decile in order to make the overall distribution and the approval/denial distributions completely identical. In the case of Hispanic/Latino applicants in the housing bust, the index of dissimilarity between denials and overall applications is 0.08. However, in reality, most of the differences between the two distributions (shown in Figure 46) are minute differences accumulated at different income levels. Thus, the indices of dissimilarity have to be considered in conjunction with the overall graphical representation.

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FAIR HOUSING INFRASTRUCTURE

Salt Lake City has no formal housing discrimination complaint process handled by the city itself. Instead, the city recommends contacting the Utah Antidiscrimination & Labor Division (UALD) of the Utah Labor Commission, which directly handles fair housing and discrimination claims over the entire state of Utah. The Utah Antidiscrimination and Labor Division is a state agency that has contract with HUD and works directly with tenets and landlords on housing discrimination cases. Any complaints that the city does receive, the city will pass along to the UALD and recommend to the filer to follow up with them, though it is rare they ever receive calls or complaints at the city. As a result, the city does not investigate cases of possible discrimination, nor do they make any conclusions or findings on cases. Typically, the city notes that the cases are resolved between the two parties, and rarely are cases brought to court.

To promote fair housing and the process of reporting to the UALD, Salt Lake City has a two-sided pamphlet handout—one side in English and the other in Spanish—that briefly describes fair housing and how to report discrimination. Similarly, the city helps facilitate training for sub-grantees and agencies who receive HUD money to help clients, specifically of the protected classes, to find fair, affordable housing.

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APPENDIX

Index of Dissimilarity for Mortgage Denials and Approvals

The degree of difference between two distributions curves can be calculated using the index of dissimilarity. The formula[2] for the index of dissimilarity Δ shown below is tailored specifically to describe the difference between the income distribution of mortgage applications and that of denied mortgage applications:

$$\Delta = \frac{1}{2}\sum_{i=1}^{k}\left|\frac{a_i}{A} - \frac{r_i}{R}\right|$$

where

$a_i =$ the number of mortgage applications with reported incomes in the ith income decile
$A =$ the total number of mortgage applications
$r_i =$ the number of denied applications with reported incomes in the ith income decile
$R =$ the total number of denied applications

The index of dissimilarity is interpreted as the percentage of one group that must move to other income deciles in order to create a distribution equal to that of the other group. For instance, in comparing the application volume and denial distributions across the countywide deciles, an index of dissimilarity of 0.03 means that 3 percent of the denied applicants would have to move to another income decile in order to match the overall application distribution. This index in itself cannot specify if approvals and denials are occurring disproportionately at certain income levels. Cumulative distribution curves of total applications and approved/denied applications can provide this information graphically.

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[2] Shryock, Henry S., Jacob S. Siegel and Associates. *The Methods and Materials of Demography*, ed. Edward G. Stockwell. Condensed Edition. San Diego: Academic Press, 1976.