# canal

# An Immigrant Gateway in San Rafael At Risk

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## Case Study on Gentrification and Displacement Pressures in
## The Canal Neighborhood of San Rafael, CA

## Introduction

The Canal neighborhood is a dense, Latin American ethnic enclave in San Rafael, CA where most households are low-income (a quarter of families fall below the poverty level) and 71% of residents have only a high school degree or less. The area has grown over the last 20 years, largely due to immigration: Hispanics have increased from 47% of the population in 1990 to 80% in 2013. But housing stock has not grown as quickly, owing to how built out the neighborhood is already. This, along with high rents, has resulted in significant overcrowding in this majority-renter community, where most renter households pay more than a third of their income on rent. On top of all this, it is located in the highly affluent Marin County and is in a desirable water-front location. Taken together, these aspects of the neighborhood put it at a high risk for displacement should gentrification reach into the area in future years. Gentrification may well occur here, given its close proximity to the planned site of the downtown San Rafael station for the forthcoming SMART train, which will connect Marin and Sonoma counties. However, community stakeholders interviewed did not anticipate such gentrification reaching Canal for some time.

In this neighborhood profile, we outline demographic, housing, and other data on the Canal neighborhood to show its vulnerability to future gentrification and displacement. The case study area (the census tracts 1122.01 and 1122.02) are outlined in dark blue, with an area map for perspective.

## Methodology

The case study relies on mixed methods to study changes in Canal since 1990. We partnered with Marin Grassroots, a community-based organization (CBO) that has worked in the neighborhood for over 20 years, facilitating the development of grassroots leadership in the low income communities of Marin County. The demographic and housing indicators presented are those associated with processes of resi-
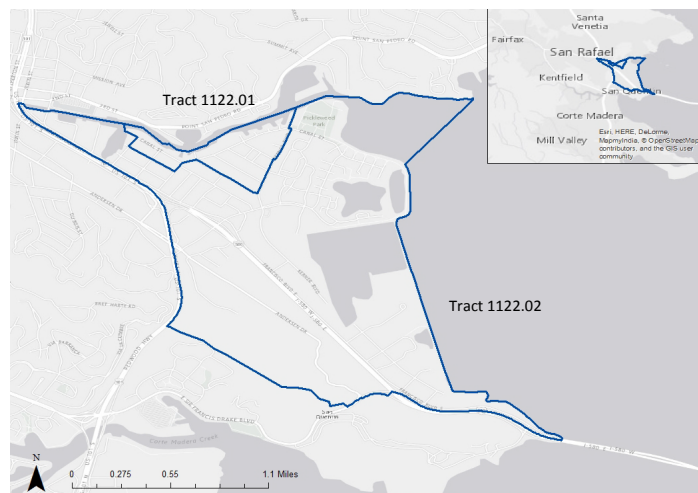


**Figure 1: Canal Area of San Rafael**

dential displacement, and/or thought to influence susceptibility to such processes (Chapple 2009). Data on these indicators are from the decennial Census for the years 1990 and 2000, and from the American Community Survey (ACS) for the period 2009-2013. Census data from 1990 and 2000 is from the Brown University Longitudinal Tract Data Base (Logan, Xu, and Stults 2012), and is normalized to the 2010 Census tract boundaries. With guidance from our partners, we identified two census tracts that best delineate the Canal neighborhood: 1122.01, 1122.02. Data on residential sales and housing permits was taken from the county assessors' office, through DataQuick. The study also uses records from the Department of Housing and Urban Development and media reports.

To verify and extend the data found in these secondary data sets, we conducted a "ground-truthing" exercise where, for a sample block in the case study area, we conducted a visual survey of conditions on the ground to ascertain levels of investment and change; this analysis is found in an appendix. The data gathered through ground-truthing was subsequently compared to Census figures and sales data from the Marin County Assessor's Office, which was obtained through Dataquick, Inc. Of the sample blocks' 16 parcels observed on the block, 12 were recorded in the assessor dataset. Of the matched parcels, 91% had similar land uses on the ground when compared to the as-

sessor data. The Census contained 27% more units than were observed on the ground (which was also lower than the Assessor unit numbers as well). These results suggest that some error may exist in either the Census or Assessor's reported count of housing units and unit type.

In order to account for possible errors, we cross-referenced the data with qualitative field observations, archival research, and interviews with key informants. Interviews with local stakeholders provided differing and valuable perspectives that informed our understanding about the current political and social climate within the community and in the city as a whole. Archival research provided context about key historical events that shaped the city's evolution. Finally, draft reports were reviewed by Marin Grassroots to guarantee accuracy.

# Historical Context and Current Resident Concerns

Originally developed in the 1950s, Canal's growth has been defined by immigration, first from Vietnam and later from Latin American countries including El Salvador, Guatemala, and Mexico (Marin Grassroots 2014). It was one of the first communities in Marin that was receptive to African-American renters in the late 1970s, primarily due to growth in the Section 8 voucher program. Today, the area stands out in white, affluent Marin County as a pocket of low-income people of color. The Canal is a place where low-income workers can afford to live close to their jobs; 51% of Canal residents work within 10 miles of their home (Marin Grassroots 2014; U.S. Census Bureau LEHD Origin-Destination Employment Statistics). Recently, new development has included the Al Boro Community Center and an expansion of Pickleweed Park. Another major development was the opening of a full-service grocery store, Mi Pueblo, a major addition to a neighborhood that previously lacked such a store. A new County Health & Wellness Campus has also opened (Marin Grassroots 2014).

The Canal area is unique in Marin County. Besides its racial and socioeconomic characteristics being quite different from the county overall, it is also unusual in maintaining a stock of market-rate affordable housing;

there are many multi-family rental buildings clustered together in the neighborhood. Responding to what one stakeholder called a "terrible slumlord situation" in Canal, the City, starting in 1998, stepped up its code enforcement and encouraged the sale of many buildings to non-profit developers. This has brought some stability to the neighborhood. While one interviewee believes private developers are "more responsible" than before, perhaps inspired by non-profit developers' good management practices, others disagree.

A recent community-directed report, "Building Safe Communities through Strong Partnerships in the Canal" asserts that public safety is the chief challenge in the neighborhood, with "one out of five residents surveyed [saying] they were a direct victim of crime including gang violence, armed assault, theft, and domestic violence" (Voces Del Canal et al. 2014). Compounding this perception are other factors, such as the

mistrust of the police, poor neighborhood conditions, and violence. Police are physically present in the community but, according to the report, not focused on residents' most concerning issues. Poor neighborhood conditions include "inadequate street lighting," "lack of signage and safe pedestrian walkways," and lack of "neighborhood cleanliness." Other concerns included poor educational resources and highly limited "family economic mobility" (Voces Del Canal et al. 2014).

# Overcrowding: A Major Concern in Canal

The population in Canal increased by 50% between 1990 and 2013 (Table 1). This growth was accompanied by a less dramatic increase in the number of households, meaning the average household size increased. The proportion of households that are families, and that are families with children, has also increased since 1990.

This population increase has not been accompanied by a commensurate increase in the stock of housing. In fact, there appears to have been very little development of new units in the past 10 years, according to Census data (which shows an increase in only 90 units between 2000 and 2013) and stakeholders (Table 2). Vacancies are minimal.

**Table 1: Change in Population and Households in Canal**

| Year | Total Population | Total Households | Average Number of People per Household | Percent of Households Families | Percent of Households Families with Children |
|------|------|------|------|------|------|
| 1990 | 7,972 | 2,700 | 2.95 | 60% | 36% |
| 2000 | 11,679 | 2,978 | 3.92 | 71% | 52% |
| 2013 | 11,884 | 2,993 | 3.97 | 74% | 55% |

*Source: US Census, 1990, 2000; American Community Survey 2009-2013*

**Table 2: Housing Supply and Vacancies in Canal, 1990-2013**

| Year | Housing Units | | Vacancies | |
|------|------|------|------|------|
| | Units | % Change | Units | % Change |
| 1990 | 2,782 | - | 102 | - |
| 2000 | 3,053 | 10% | 56 | -45% |
| 2013 | 3,132 | 2% | 139 | 109% |

*Source: US Census 1990, 2000; American Community Survey 2009-2013*

**Table 3: Overcrowding in Canal, 1990-2013**

| Year | Rented Units | Owner-Occupied Units |
|------|------|------|
| 1990 | 32% | 5% |
| 2000 | 62 % | 12% |
| 2013 | 51% | 14% |

*Source: US Census 1990, 2000; American Community Survey 2009-2013.*

New immigrants, who may lack social capital and sufficient income to live elsewhere, turn to this enclave, where they may find friends or relatives from their home countries, according to one stakeholder. Presumably, landlords are aware of the highly limited housing stock and the limited resources of residents, and so charge rent accordingly; to afford these rents, many residents pack into units, resulting in significant overcrowding.

An overcrowded unit is defined as one with more than 1 person per room (which includes bedrooms and living rooms, but not kitchens or bathrooms). Overcrowding is a significant issue for the Canal Area, particularly in rental units, with 51% of rented units and 14% of owner-occupied units experiencing overcrowding (Table 3).

Based on interviews with local stakeholders, overcrowding in this area exacerbates several other community and quality of life issues. It is not uncommon for three or four families to live in one unit, each family living in one bedroom, with as many as "eight or more persons" in a two-bedroom apartment (Marin Grassroots 2014). In addition to health risks, this introduces a safety risk for children as there may be unfamiliar people invited into their home. In addition, students in overcrowded homes have little space to do homework. Overcrowding also leads to a parking capacity problem, since many residents need a car to get to work (as detailed below). It has also led to community conflicts between Canal residents and nearby higher-income residents who complain when Canal residents park on their streets, according to a stakeholder. Indeed, in the morning, there is major traffic getting out of the neighborhood, which is partially related to limited street access.

Finally, "many of these apartments have environmental health issues but, because of many barriers, tenants often don't report these problems" (Marin Grassroots 2014). In the earlier-discussed community-directed report, residents recommended "safer and adequate housing, via better code enforcement and public housing services," indicating poorly-maintained housing as an ongoing concern (Voces Del Canal et al. 2014).

# Resident Profile

Over the last 20 years, Canal's Hispanic population has grown dramatically, from nearly 3,800 people in 1990 to about 9,400 in 2013; meanwhile, whites, blacks, and Asians have decreased their proportion (Figure 2).
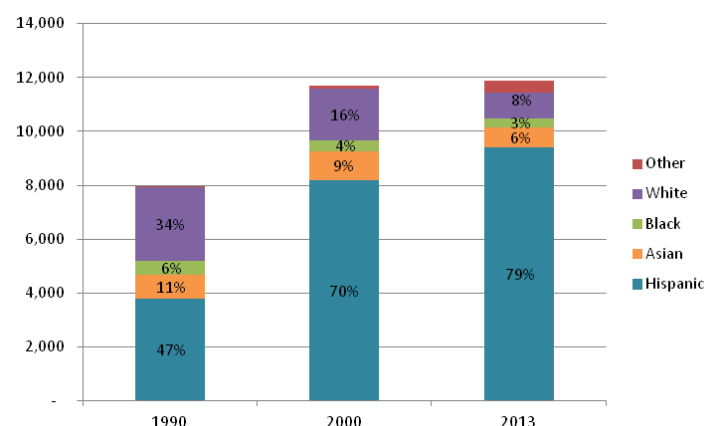


**Figure 2: Population in Canal by Race/Ethnicity (1990-2013)**
*Source: US Census 1990, 2000; American Community Survey 2009-2013.*

Of the Hispanic residents, most are Guatemalan, Mexican, and, to a smaller extent, Salvadoran (Table 4).

The Canal Area has consistently been an immigrant-receiving neighborhood, largely due to economic or civil strife in their home countries, according to one stakeholder. The proportions of foreign-born residents and residents who speak a language other than English at home have increased between 1990 and 2013 (Table 5). The number of recent immigrants remain high indicating that the neighborhood is still functioning as a gateway.

According to stakeholder interviews, the Asian and Pacific Islander population in the 1980s was largely made up of Vietnamese immigrants with refugee status after the Vietnam War. Over time however, the grown children from these families have largely moved away from the area. The current Vietnamese population is small and tends to be elderly.

Consistent with this influx of immigration, over the past three decades the area has experienced a general downward trend in the educational attainment of its residents (Figure 3). According to the 2009-2013 American Community Survey, 64% of US-born residents age 25 and older had only a high school degree or less, compared with 78% of foreign-born; therefore, the immigration patterns may be at least partially responsible for this downward trend in educational attainment.

With lowering educational attainment has come a decrease in median household income, which dropped sharply in 2009-2013 (Table 6).

The distribution of family income in Canal does not seem to follow any pattern, as seen in Figure 4. Over half of families earn less than $35,000, reinforcing the fact that the neighborhood is a low-income one. However, 17% of families earn more than $75,000, indicating a contingent of wealthier households, too. These households appear to be clustered in a large single-family development on the far west side of the area, which contains mostly single-family homes right along the canal.
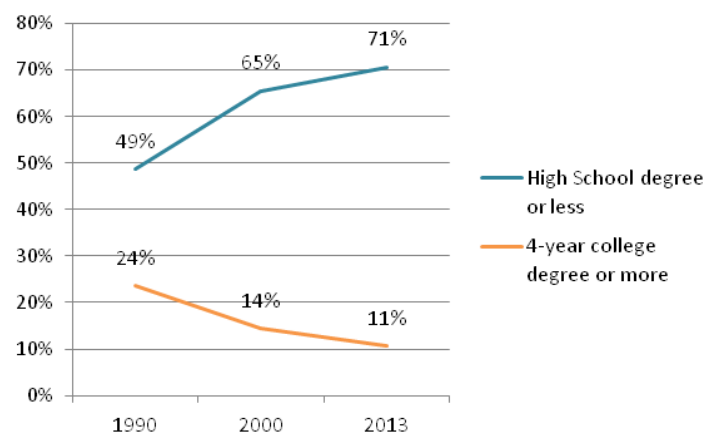


**Figure 3: Educational Attainment of Population over 25, Canal, 1990-2013**
*Source: US Census 1990, 2000; American Community Survey 2013*

### Table 4: Hispanic: Countries of Origin in Canal, 2013

| Country of Origin | Number of People | Percent of Hispanic Residents |
|---|---|---|
| Guatemalan | 3,442 | 37% |
| Mexican | 4,172 | 44% |
| Salvadoran | 897 | 10% |
| All Other Hispanic | 894 | 10% |

*Source: American Community Survey 2009-2013.*

### Table 6: Median Household Income, Canal, 1990-2012, 2013 (2013 constant $)

| Year | Median Household Income |
|---|---|
| 1990 | $ 57,469.08 |
| 2000 | $ 54,924.75 |
| 2013 | $ 43,448.50 |

*Source: US Census 1990, 2000; American Community Survey 2009-2013.*

### Table 5: Canal Hosts a Large Immigrant Presence

| Year | Foriegn Born Count | Percent Foreign Born | Number Immigrated in last 10 years | Percent Immigrated in last 10 years | Percent Language other than English spoken at home | Percent Limited English Proficiency |
|---|---|---|---|---|---|---|
| 1990 | 4188 | 53% | 3319 | 42% | 51% | 29% |
| 2000 | 7452 | 64% | 5169 | 44% | 70% | 39% |
| 2013 | 7160 | 60% | 4333 | 36% | 74% | 54% |

*Source: US Census 1990, 2000; American Community Survey 2009-2013*

**Figure 4: Income Distribution of Families, Canal, 2013, in 2013 $**
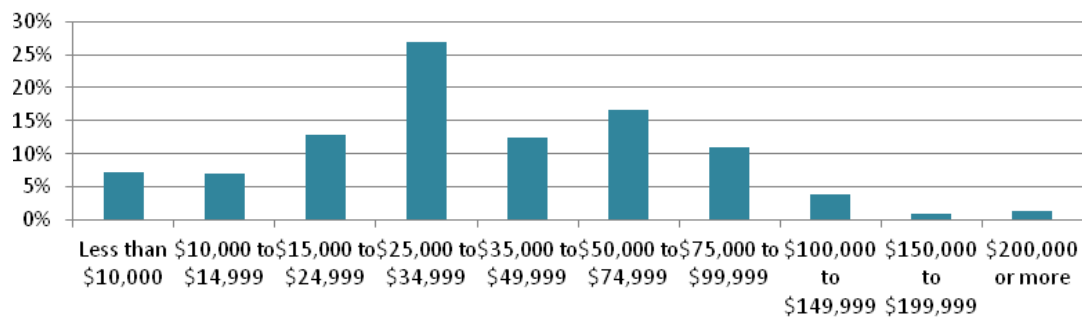
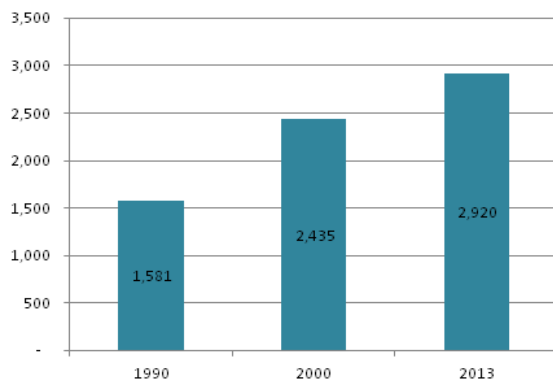*Source: 2009-2013 American Community Survey*



**Figure 5: Number of Families in Poverty, 1990-2013**

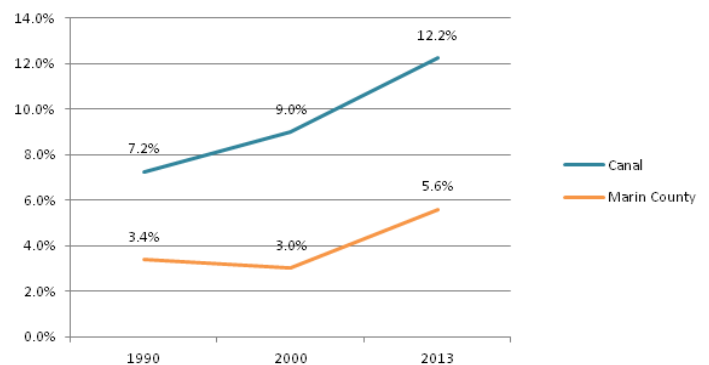*Source: US Census 1990, 2000; American Community Survey 2009-2013.*



**Figure 6: Unemployment, Canal vs. Marin County, 1990-2013**

*Source: US Census 1990, 2000; American Community Survey 2009-2013.*

With such low and declining incomes, it is no surprise that many families live in poverty. The percentage of families below the poverty level grew: from 20% in 1990 to 25% in 2013. Figure 5 shows the number of families in poverty over the same time frame.

Finally, unemployment has increased in Canal and, as of 2009-2013, was 12.2%--much higher than in Marin County overall (Figure 6). According to a stakeholder, because many of the residents in the Canal Area are undocumented immigrants, economic mobility has been a challenge as they try to "stay under the radar." Community members believe that the major driver of any change in the local economy or the local housing market will be immigration reform.

# Housing Patterns

The housing stock in the Canal is in "bad shape" and owned by "a lot of landlords who are not that scrupulous…part of the reason why it's affordable is that it's really awful housing stock," according to a stakeholder we interviewed. The area is essentially built out and is one of the most densely developed areas in Marin County. This makes building more affordable housing

a challenge. Additionally, another stakeholder commented that the area has been down-zoned: developers would not be able to build at the same density as existing buildings, which limits the appeal of the neighborhood to developers seeking profit. Plus, within San Rafael, there are always concerns about traffic impact. Together, these features limit developers' ability to tear down buildings and build more densely, making it far easier to renovate existing structures.

Marin County is notorious for having exclusionary policies and practices, including "strict zoning ordinances; restrictions on high-density, multi-family housing; insufficient outreach to non-English speakers; predatory lending practices; and negative stereotypes about low-income residents with Section 8 vouchers" (Green n.d.). In 2011, these came to a head when the county entered into a Voluntary Compliance Agreement with the U.S. Department of Housing and Urban Development (HUD) after it became clear the county was not in accordance with fair housing laws, civil rights laws, and had not updated its main fair housing document in seven years, two more than is allowed (Rachel Dornhelm 2011). The county's people of color are largely concentrated in the Canal area and Marin City, which was also cited in the HUD agreement.

**Table 7: Tenure in Canal, 1990-2013**

| Year | Total Occupied Units | Rented Units | | Owner-Occupied Units | |
|------|---------------------|--------------|--------------|---------------------|--------------|
| | Number | Number | Percent | Number | Percent |
| 1990 | 2,680 | 2,128 | 79% | 552 | 21% |
| 2000 | 2,997 | 2,206 | 74% | 791 | 26% |
| 2013 | 2,993 | 2,348 | 78% | 645 | 22% |

*Source: US Census 1990, 2000; American Community Survey 2009-2013.*

**Table 8: Median Rent, Canal, 1990-2013, in 2013 $**

| Year | Median Rent |
|------|-------------|
| 1990 | $ 1,215.74 |
| 2000 | $ 1,243.35 |
| 2013 | $ 1,342.00 |

*Source: US Census 1990, 2000; American Community Survey 2009-2013.*

**Table 9: Percent of Renters that are Housing Cost Burdened, Canal**

| Year | % Cost Burdened Renter | % Cost Burdened Owner-Occupier |
|------|------------------------|-------------------------------|
| 1990 | 58% | 54% |
| 2000 | 53% | 61% |
| 2013 | 71% | 44% |

*Cost Burdened defined as paying more than 30% of income on housing costs. Source: US Census 1990, 2000; American Community Survey 2009-2013*

Most housing units in Canal are rented—over 75%—meaning residents would be particularly vulnerable to displacement if market pressures begin to mount (Table 7).

Median rent has increased slightly over the past 20 years, from about $1,200 to nearly $1,350 (Table 8). However, over this same period, the proportion of renters who are cost-burdened has risen, reaching 71% in 2009-2013 (Table 9). Residents are considered rent or mortgage burdened if their monthly housing costs exceed 30% of their gross monthly income. One stakeholder believes that an influx of residents to Marin County paired with a stagnant housing stock is driving up rent; since incomes have actually decreased, residents' housing cost burdens have increased.

Canal experiences higher turnover than the county overall, though turnover has decreased over time: In 2013, 22% of Canal residents had moved in within the last three years. In 1990, 79% of Canal residents had moved within the last five years, compared with 52% in Marin County.

# Public and Affordable Housing

The Canal neighborhood does not have any public housing, but it is host to two senior projects (combined 35 units) and four additional affordable buildings with 116 units total, plus 200 housing choice voucher holders who live in the area (California Housing Partnership Corporation 2015; BRIDGE Housing, n.d.; Department of Housing and Urban Development 2014). Several homeless shelters are located in the Canal area that serve people from all over the county, according to a stakeholder.

In the early 2000s, responding to the problems with rental housing stock in Canal, the city initiated a redevelopment process that, for one developer, resulted in two rehabilitations, for a total of 66 units. The apartments feature wall-to-wall carpeting at both, gas stoves in one building, decks or patios on some units, and a swimming pool, courtyard, and community room at one site (BRIDGE Housing, n.d.; BRIDGE Housing, n.d.). There were only enough funds available at the time to renovate these two sites.

Another stakeholder believes that the lack of affordable housing units is the biggest issue facing Marin County today. However, there is much opposition to affordable housing in the county from both the political right and left; many people believe that the presence of low-income residents will drive down their own property values.

# Home Ownership

Canal has seen more variability in the number of property sales each year than Marin County as a whole, with spikes in 2004 and 2009 (Figure 7). Overall, though, very few homes are sold each year in Canal.

Home sale price-per-square-foot in Canal followed the trends of the Marin County and the whole Bay Area and was lower than both, showing once again its status as a relatively affordable neighborhood in Marin County (Figure 8 and Figure 9).

# Condo Conversions

In the 1990s, there were a small number of changes from rental units to condominiums along the water in the Canal Area. A stakeholder made clear that these were not condominium conversions; instead, the buildings, when developed in the 1970s, had been built as condominiums, but were difficult to sell, so they were rented until the 1990s when they began selling them as condominiums. Another stakeholder believed the buildings that experienced this trend were primarily 1-2 story walk-up buildings, as opposed to larger apartment buildings. This was small in scale, and one stakeholder believes it did not result in much displacement. A representative of the city believed that no true condominium conversion had occurred in San Rafael in the last 20 years.

Local stakeholders do not envision displacement due to condo conversions to be a significant issue any time in the near future. This is in part because of the city's strict condominium regulations—conversions are not allowed unless the citywide vacancy rate is higher than 5%, and even then, the city "doesn't make it easy" to convert, according to a stakeholder. A second reason this stakeholder does not believe condominium conversions, or gentrification more generally, will come to Canal anytime soon is the strong reputation of the area as overcrowded, for immigrants, and "a place to start, but not a place to aspire to."
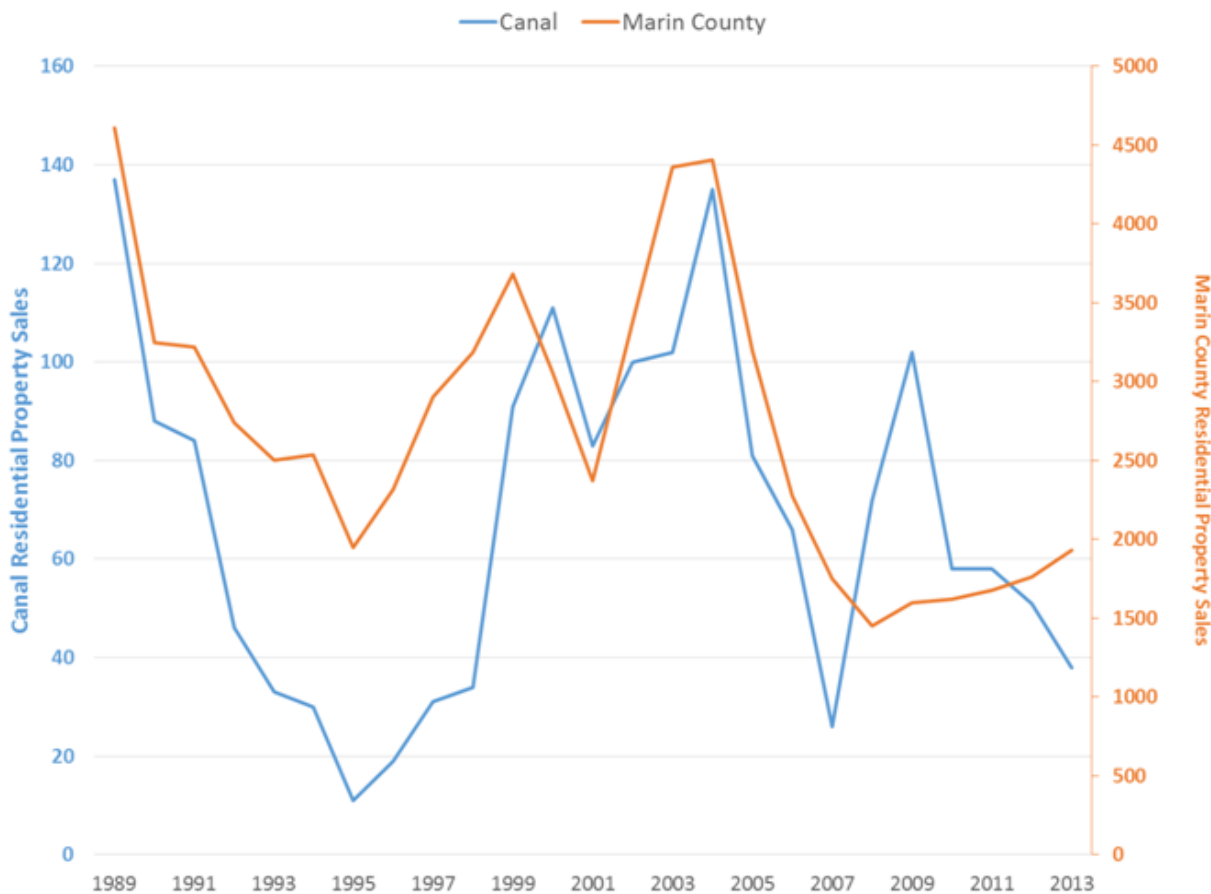


**Figure 7: Number of Homes Sold: Canal**
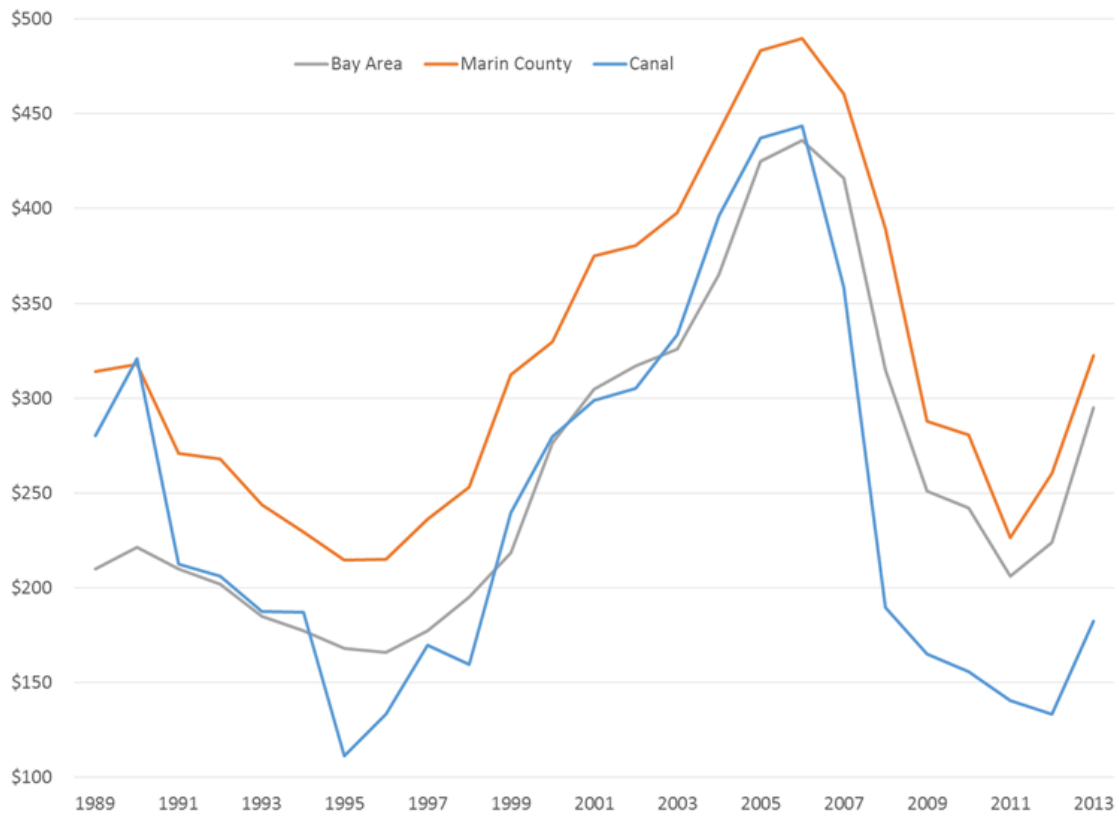*Source: Dataquick (2014)*

**Figure 8 Median Sales Price (per square foot) for Multi-Family Residential Properties**
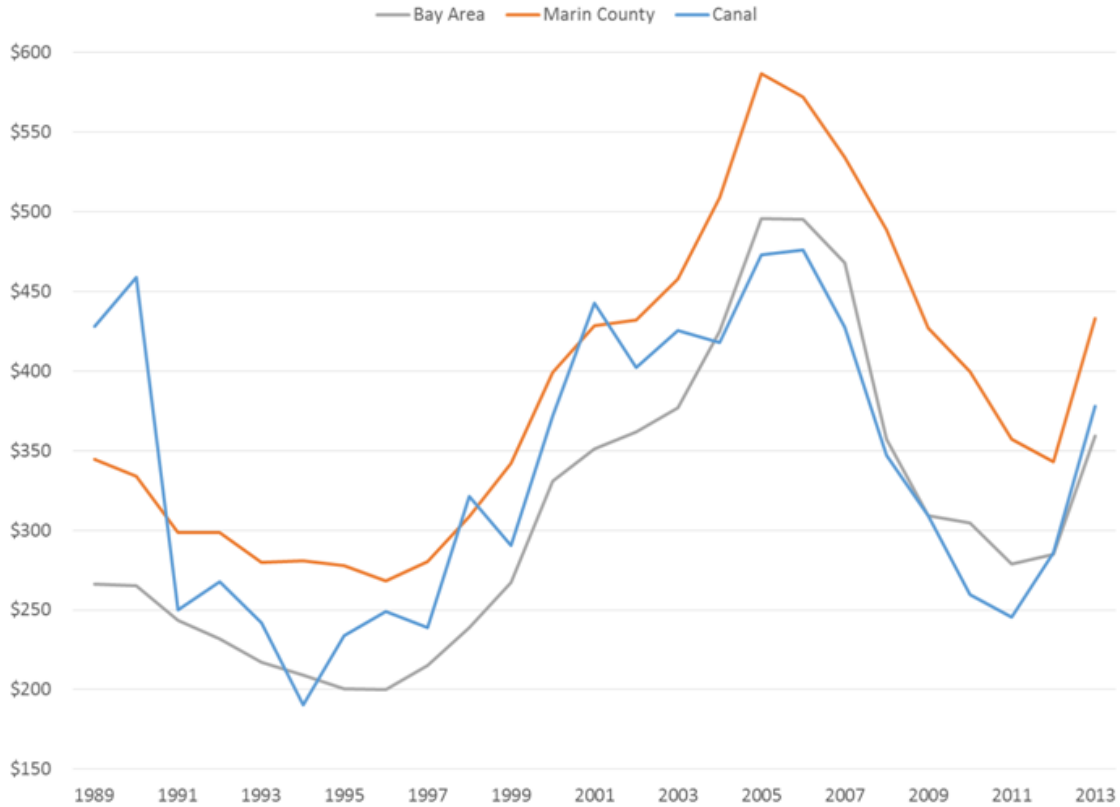*Source: Dataquick (2014)*



**Figure 9 Median Sales Price (per square foot) for Single-Family Residential Properties**
*Source: Dataquick (2014)*

# Employment and Transportation Patterns

Most employed residents of the Canal neighborhood work in Marin County, with nearly 24% working in San Rafael (Table 10). A majority of residents work within 10 miles of their home (Table 11). Together, these data indicate that residents are unlikely to benefit much from the SMART train, since it would be unlikely to service their place of employment. Additionally, residents may still need to take buses or go for a long walk to get to the train station.

A higher portion of Canal residents take transportation, bike, or walk to work compared to in San Rafael and Marin County (Table 12). However, while transit within the area—for example, to downtown San Rafael—may be adequate, 76% of residents work outside of San Rafael, which requires either multiple bus rides or a car.

### Table 10: Places of Employment for Workers Who Live in Canal, 2011

| Place of Employment | Percent of Workers |
|---|---|
| San Rafael | 24.0% |
| Elsewhere in Marin County | 27.7% |
| San Francisco | 19.9% |
| Alameda County | 8.0% |
| Contra Costa County | 5.4% |
| San Mateo County | 5.0% |
| Sonoma County | 4.0% |
| Santa Clara County | 2.9% |
| Napa County | 0.8% |
| Solano County | 0.8% |
| All Other Locations | 0.8% |

*Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2011).*

### Table 11: Distance to Place of Employment for Workers Who Live in Canal, 2011

| Distance from Home Block to Work Block | Percent of Workers |
|---|---|
| Less than 10 miles | 50.8% |
| 10 to 24 miles | 33.9% |
| 25 to 50 miles | 13.2% |
| Greater than 50 miles | 2.1% |

*Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2011).*

### Table 12: Mode of Commute to Work, 1990-2013

| Area: Year | Percent Private Auto | Percent Public Transportation | Percent Bike or Walk |
|---|---|---|---|
| Canal: 1990 | 74% | 18% | 6% |
| Canal: 2000 | 65% | 23% | 9% |
| Canal: 2013 | 68% | 17% | 11% |
| San Rafael: 2013 | 84% | 10% | 5% |
| Marin County: 2013 | 79% | 12% | 7% |

*Source: US Census 1990, 2000; American Community Survey 2009-2013. Percent are of workers 16 and older who do not work at home; some respondents chose other options, so the figures will not add to 100%.*

In terms of getting around more generally, it is hard to get around on foot in the Canal neighborhood, given its position with water on one side and a highway on the other. However, many residents still choose to walk instead of taking the bus, given its price of $2.25. The city has tried to widen sidewalks and build a bridge over the canal in a strategic location to better accommodate these walkers, but funding has been difficult to secure.

# Conclusion

When the SMART train station opens in San Rafael, the Canal area will be at risk of gentrification. One stakeholder believed that the area could become a preferred housing location for employees of Silicon Valley, resulting in gentrification and displacement. Several others, however, thought change would be slow to come to Canal. Even so, Canal's limited area to develop new housing, high renter rate, high levels of poverty, low incomes, and lack of affordable housing put it potentially at risk for displacement.

The high density of Latino residents is a potential strength of the community; organizing is easier than in other areas where members of these communities are farther spread out, such as Novato. Plus, many are from the same countries—and often towns in those countries. A report on the Canal that involved community members, "surfaced untapped agency and expertise among hundreds of Canal residents who have vocalized their desire to be genuinely and actively engaged in changing the conditions of their community" (Voces Del Canal et al. 2014). This expertise could be leveraged, in partnership with local agencies as the report suggests, to respond to displacement pressures in the future.

# Works Cited

BRIDGE Housing. n.d. "Casa Vista." http://www.bridgehousing.com/properties/family/marin/san-rafael/casa-vista;

——— n.d. "Belvedere Place." http://www.bridgehousing.com/properties/family/marin/san-rafael/belvdere-place.

California Housing Partnership Corporation. 2015. "CHPC Mapping Tool." Accessed February 26. http://www.chpc.net/preservation/MappingWidget.html.

Chapple, Karen. 2009. Mapping Susceptibility to Gentrification: The Early Warning Toolkit. Berkeley, CA: Center for Community Innovation.

City of San Rafael. n.d. San Rafael, CA Municipal Code. Conversion of Residential Rental Units to Condominiums. Vol. 15.12.080. https://www.municode.com/library/ca/san_rafael/codes/code_of_ordinances?nodeId=TIT15SU_CH15.12CO_15.12.080COREREUNCO.

Department of Housing and Urban Development. 2014. "Picture of Subsidized Units." Accessed November 15. http://www.huduser.org/portal/datasets/picture/yearlydata.html.

Green, Matthew. n.d. "A Primer on Fair and Affordable Housing - Equal Opportunity: Housing in Marin | KQED." KQED Public   Media. http://www.kqed.org/news/bayarea/affordablehousing/explained.jsp.

Hwang, Jackelyn, and Robert J. Sampson. 2014. "Divergent Pathways of Gentrification Racial Inequality and theSocial Order of Renewal in Chicago Neighborhoods." American Sociological Review, June, 0003122414535774.doi:10.1177/0003122414535774.

Logan, John R., Zengwang Xu, and Brian Stults. 2012. "Interpolating US Decennial Census Tract Data from as Early as 1970 to 2010: A Longitudinal Tract Database." Professional Geographer forthcoming.

Marin Grassroots. 2014. Canal Neighborhood Narrative.

Rachel Dornhelm. 2011. "Marin Struggles to Meet Fair Housing Laws | KQED." KQED Public Media. November 30. http://www.kqed.org/a/kqednews/RN201111300630/a.

Voces Del Canal, Julia Van Der Ryn, Jennifer Lucko, Tom Wilson, Omar Carrera, Miho Kim, Reem Assil, et al. 2014. "Voces Del Canal: Building Safe Communities Through Strong Partnerships in the Canal." Collected Faculty Scholarship, January. http://scholar.dominican.edu/all-faculty/39.

# Appendix A: Ground-Truthing Analysis

To tell the story of gentrification and displacement in Canal, we relied on data from the assessor's office, Census data on demographic and other change, other secondary data sources, and qualitative policy reviews and interviews with key stakeholders. However, secondary data sources are incomplete, at best, and outright wrong, at worst. Therefore, we employ a "ground-truthing" methodology to verify the validity of these datasets. The ground-truthing, which is described in more detail below, essentially consists of walking from structure to structure on sample blocks and taking detailed notes on several variables, like number of units, state of maintenance, and more. With this data in hand, we can compare the story of gentrification the secondary data sources are telling with data obtained "on the ground," while also increasing the richness of our narrative overall from the visual observations we make on the blocks.

In this section, we discuss one sample block in the case study area. We first present the secondary data sources—assessor and Census. We analyze this data to ascertain the nature and extent of recent neighborhood change on those blocks. Next, we describe the ground-truthing data and offer a similar analysis in terms of neighborhood change, but this time based solely on the ground-truthing. Finally, we reconcile the two data-sets: are they telling the same story? Where are the discrepancies? What do those discrepancies reveal?

**Methodology**
For this analysis, we selected a block from the case study area that seemed to have experienced recent change, based on secondary data (Figure A1). We consulted with a community-based organization familiar with the area to choose a block.

To prepare this section, we consulted the following data sources:

**Assessor Data**: Using a dataset purchased from Dataquick, Inc., we accessed assessor and sales data from the County of Marin, which is current as of August 7, 2013.

**US Census Bureau**: We also consulted block-level decennial Census data from 2000 and 2010.

**Ground-truthing data**: This information comes from a visual observation of each structure on the block by walking around and noting the building's type (multi-family, single-family, business, etc), the number of units it appears to hold, and a long list of signs of recent investment, like permanent blinds and updated paint, as well as signs of perceptions of safety, like security cameras. The parcel numbers used to organize this data come from the Boundary Solutions data set, which is current as of May 1, 2013.

The ground-truthing methodology is based on one used by Hwang and Sampson (Hwang and Sampson 2014), who used Google Street View images to analyze neighborhood change in Chicago. We created an observation tool based on their work and, with that in hand, conducted a pilot ground-truthing of several blocks in one of the case study areas (the Macarthur BART station area of Oakland, California). The research team revised the methodology based on this pilot; the final observation tool appears in the appendix.

On November 11, 2014, a researcher with the Center of Community Innovation performed the ground-truthing in Canal. The researcher walked the block there with a representative from a local community organization with knowledge of the area.
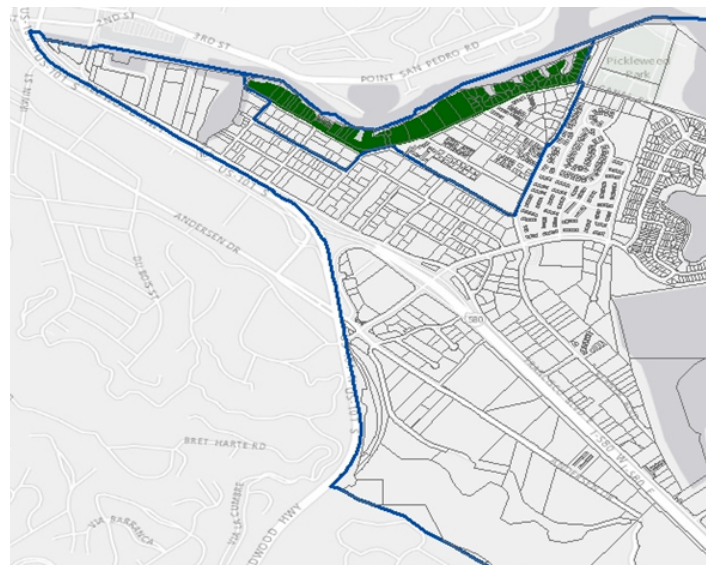


**Figure A1: Map of Canal with Ground-truthed Block 1001 (Census Tract 1122.01) in green**

## Unmatched Parcels

The ground-truthing exercise is meant to provide an additional set of data to verify conclusions reached through analyzing assessor and Census data. Complicating this effort is that the data sets do not have the same set of parcels. All data reported from the assessor data (Dataquick) includes all parcels in that set; likewise, all data reported from the ground-truthing data collection includes all parcels in that set (which is based on parcels from Boundary Solutions). Of 16 parcels ground-truthed, 12 had matches in the assessor data.

## Comparative Analysis

For two variables—land use and number of units—comparisons are made on a parcel-by-parcel basis; only parcels that appear in both data sets are used for this comparison (Table A2). Census data is not provided on a parcel level, and so includes all households surveyed by the Census. The data sets align well in terms of total number of units (except for the high Census figure) and land uses, but not for the number of units listed for each parcel.

### Table A1: Sales History and Assessed Value of Residential Parcels

| Area | Median Year of Construction | Median Year of Last Sale | Percent Sold 2010-2013 | Median Sale Price | Median Sale Price Per Square Foot | Assessed Value Per Square Foot (2013) |
|---|---|---|---|---|---|---|
| Block 1001 | 1964 | 2004 | 21% | $630,000 | $253 | $258 |
| Canal | 1973 | 2003 | 19% | $290,000 | $204 | $162 |
| Marin County | 1973 | 2003 | 22% | $552,000 | $307 | $258 |

*Source: Dataquick, 2014*

### Table A2: Summary of Parcel Matches and Primary Land Use

| Block | Primary Land Use, based on Groundtruthing data | Percent Land Use Matched | Total Number of Units on Block | | | Percent of Parcels whose Number of Units match between Assessor Data and Visual Observation |
|---|---|---|---|---|---|---|
| | | | Assessor Data – Dataquick | Visual Observations on Ground-truthing | Census Data: Total Housing Units – 2010 | |
| Block 1001 | Mixed multi-family and single-family | 91% | 475 | 430 | 548 | 33% |

*Note: Percent Land Use Matched and Percent Units Matched take as their denominator only those parcels for which a land use or number of units was indicated by both assessor data and ground-truth data.*

## Secondary Data

This block is slightly older than the rest of Canal and Marin County, with a median year of construction 10 years earlier than those areas. It also has a higher median sale price much higher than Canal or Marin County, but that figure is in part misleading because several multi-family buildings and expensive single-family homes are pulling up the median. Otherwise, the block is just about on par with the rest of Canal and Marin County; it appears stable and regular.

## Ground-Truthing

The structures on this block have a range of levels of maintenance, with 14% new, 29% above average, 43% average, and 14% below average. Signs of investment include: 43% of parcels have new or maintained paint. Signs of disinvestment include: 43% of parcels have litter or debris, and 29% have peeling or fading paint. Signs of perceptions of safety include: 36% of parcels have a metal security doors and 43% have security alarm signage. There seem to be many families on the block, with 43% of parcels having children or toys visible.

## Comparison

The data-sets align for this block. Both paint a picture of a block that is neither experiencing rapid change nor experiencing disinvestment. It is mixed in terms of levels of investment and appears stable.

# WORKSHEET: Visual Demonstration of Neighborhood Change

*Instructions: Physically walk predetermined neighborhood blocks and note evidence of deterioration or improvement using Section One. Parcel or building specific information should be collected in Section Two. Each block should named according to its main corridor (indicated on your map as the street with parcels on both sides). Bring a camera to take a photograph of each building.*
*\*One whole worksheet should be completed for each block section*

Block Name: _____ Observer: _____

Physical Observation date and time : ____/____/_____     Start ___:___ AM/PM    End ___:___ AM/PM

## SECTION ONE: Block Overview and initial impressions

1. The primary land use for the block face is:
   - □ Residential
   - □ Commercial
   - □ Institutional (school, hospital, churches): 
   - □ Industrial
   - □ Other: _____
   _____
   _____
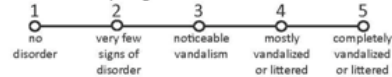   _____
   _____

2. Public investment + existing public infrastructure:
   - □ transit stops
   - □ municipal street lighting
   - □ on street residential permit parking
   - □ street furniture (including parklets)
   - □ bike racks
   - □ public trash cans
   - □ parking pay machines
   - □ newly paved streets
   - □ Other: _____
   _____
   _____
   _____
   _____
   _____
   _____

3. Describe any visible people, noting race or ethnicity, age, number, and activities they might be engaged in:_____
   _____
   _____
   _____
   _____
   _____
   _____

4. The # of signs discouraging disorder such as neighborhood watch, anti-littering/loitering/drug use/vandalism/graffiti: _____

5. Physical disorder such as garbage, litter, graffiti, or vandalism by degree of observations:

   | 1 | 2 | 3 | 4 | 5 |
   |---|---|---|---|---|
   | no disorder | very few signs of disorder | noticeable vandalism | mostly vandalized or littered | completely vandalized or littered |

6. Please describe indicators of international or immigrant presence (note ethnicity, signs in a foreign language, or locally-owned foreign/ethnic business).
   _____
   _____
   _____
   _____
   _____
   _____

7. Additional notes on block overview: _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____

### SECTION TWO: Block/Parcel Data
*\*located on the following pages*

*Using your pre-printed parcel map, carefully walk the block and record your observations for each building. Allow for ~1.5 hours of field time. Be sure to take a photograph of each building for comparison with past year data later.*

---

APN/Parcel # _____     Street Address _____

1. Does the **building** appear to be well-maintained?

   | 1 | 2 | 3 | 4 | 5 |
   |---|---|---|---|---|
   | poor | below average | average | above average | new |

2. The # of units the structure appears to have: _____
   The # mailboxes _____
   The # doorbells _____

3. The # vehicles **off-street** vehicles present _____
   - □ no off-street parking
   - □ existing driveway or parking lot
   - □ existing garage

4. Notes on visible people, building, and outdoor space; incl. *implied* information about household size and composition:
   _____
   _____
   _____

5. Building type and units:
   - □ Multi-family - apartment building
   - □ Multi-family - house
   - □ Single family - attached
   - □ Single family - detached
   - □ Mixed use
   - □ Public or subsidized project housing
   - □ Unknown or other

6. Other building/occupant characteristics:
   - □ Abandoned
   - □ For Sale sign
   - □ For Rent sign
   - □ Blinds or curtains - permanent
   - □ Blinds or curtains - temporary
   - □ Cracked windows
   - □ Bars on windows
   - □ Boarded windows
   - □ Dirty windows
   - □ Metal security door
   - □ Vegetable garden
   - □ New addition
   - □ New or maintained paint
   - □ New or updated front door
   - □ Ongoing renovation/construction
   - □ Fencing *(check all that apply)*:
     New___   Old___   For safety___   For aesthetics___
   - □ Security alarm signage
   - □ CCTV/Security cameras
   - □ Children/toys visible
   - □ Peeling/fading paint
   - □ Spraypaint/graffiti
   - □ Litter or debris
   - □ *Beware of Dog, Private, No Trespassing* signs
   - □ Signs of ethnicity

**Figure A2: Ground-truthing data collection worksheet**