The Residential and Built Environment is considered a major determinant for the health of residents. The transportation and retail infrastructure ensures that residents have access to healthy foods and activities as well as jobs and education. Lower income neighborhoods tend to have less access to healthy retail environments and a less healthy environment correlates with an increase in rates of chronic diseases and premature deaths. Policy, planning, and infrastructure development has a positive impact on the lives of residents and their long term health outcomes.

The retail environment in Richmond demonstrates that lower income neighborhoods have a disproportionate number of retailers selling unhealthy items, such as alcohol, tobacco, and unhealthy foods. Residents of these neighborhoods are also less likely to own a car and therefore are more reliant on their local retail environment than are higher income residents. Residential mobility and gentrification is a problem for low income residents and trends have shown an increase in concentrated...
Access to Healthy Foods
The built environment has a strong impact on the ability of residents to eat healthy and have active lives. Using data collected by the Contra Costa Health Services Environmental Health Division, we examined the relationship between poverty and access to healthy foods in retail stores and farmers markets. Stores without fruits or vegetables prevail in low income census tracts (Map 1).

MAP 1 MARKETS AVAILABLE TO LOW-INCOME RICHMOND RESIDENTS

Source: American Community Survey 2008-2012; Contra Costa Health Services Environmental Health Data
Access to Healthy Foods

Respondents to the Richmond City Survey report poor access to quality food. In 2013, 64% of Richmond residents reported that access to quality food was fair or poor. This response did not differ significantly by racial/ethnic group and did not change from the results in the 2007 city survey.

Estimates indicate that most adults in Contra Costa (79.9%) and the Bay Area overall (80.5%) report that they “always” have access to fresh fruits and vegetable in their neighborhoods. Yet approximately half of adults surveyed in Contra Costa (56.4%) and the Bay Area (54.3%) report such access to affordable fresh produce.1 (Chart 1)

**CHART 1 PERCENT OF ADULTS REPORT NEIGHBORHOOD ACCESS TO AFFORDABLE FRESH PRODUCE, BAY AREA**

<table>
<thead>
<tr>
<th></th>
<th>Contra Costa</th>
<th>Bay Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>16.7%</td>
<td>17.1%</td>
</tr>
<tr>
<td>Usually</td>
<td>26.8%</td>
<td>28.6%</td>
</tr>
<tr>
<td>Sometimes/Never</td>
<td>56.4%</td>
<td>54.3%</td>
</tr>
</tbody>
</table>

Source: 2011-12 California Health Interview Survey

**Lower income adults were less likely to have consistent access to affordable fresh produce in their neighborhood in Contra Costa and the Bay Area overall.**

Only 41.9% of adults from households with income less than 200% Federal Poverty Level (FPL) reported they were ALWAYS able to get affordable fresh produce in their neighborhood compared to 61.1% of higher income adults in Contra Costa. This pattern existed for Bay Area adults overall as well. (Chart 2)

---

1 This variable is not asked of everyone. Adults who eat and have access to fresh fruits/vegetables in neighborhood were asked: "How often are they affordable?"
There were no differences in reports of consistent access to affordable fresh produce by race/ethnicity in Contra Costa. In the Bay Area, a larger percentage of Non-Hispanic whites (61.2%) reported ALWAYS having access to affordable fresh produce compared to NH African Americans (46.8%), Hispanics/Latinos (41.9%), and adults overall (54.3%). Hispanics/Latinos were less likely to report such access compared to NH whites, Asians and adults overall. (Chart 3)

**Access to Unhealthy Items**

The access to healthy foods can drive healthier eating habits, and conversely, access to unhealthy items can influence individual behaviors as well. Many Richmond residents live in close proximity to unhealthy retail, including alcohol and tobacco outlets. Residents in heavy retail areas (such as Hilltop) experience a greater density with alcohol outlets. (Map 2)
MAP 2. RESIDENTS LIVING WITHIN A QUARTER MILE OF AN ALCOHOL OUTLET

Residents Living Within 1/4 Mile of an Alcohol Outlet, by 2010 Census Block

Number of Residents Within 1/4 Mile of an Alcohol Outlet
- 0 - 45
- 46 - 149
- 150 - 340
- 341 - 738
- 739 - 1900
- Outside City of Richmond Boundary
- Open Space and Parks
- Richmond Industrially Zoned Areas

Sources: U.S. Census Bureau, 2010 Census; California Department of Alcoholic Beverage Control.
TOBACCO ENVIRONMENT

Access to Tobacco

Richmond accounts for 10% percent of all stores and 15% of those near schools in the county that sell tobacco. Almost half (49%) of the 82 stores that sell tobacco in Richmond are located within 1,000 feet of a school – potentially exposing young people to unhealthy products and marketing. (Chart 4)

Chart 4. Percent of Stores Selling Tobacco Near Schools by Jurisdiction, 2014

Most stores selling tobacco near schools in Richmond are within the central part of the city – on or near Macdonald Ave, 23rd Street, and Cutting Blvd. (Map 3)

Source: Store data from California Board of Equalization, January 2014; School data from California Department of Education, August 2014. NOTE: Distances between stores and schools calculated by Contra Costa Health Services, Epidemiology, Planning and Evaluation Unit. (See separate methods document for more information about distance calculations.)
As part of a 2013 state-wide study to assess access to healthy and unhealthy products and advertising in the retail environment observational surveys were conducted with stores selling tobacco in a sample of Contra Costa zip codes, including Richmond zip code 94801. Almost all stores (85%) selling tobacco in this zip code were surveyed. **Approximately two-thirds (63.6%) of these stores that sell tobacco were small markets, produce markets and/or delis -- where residents buy food and beverages for their households and families.** (Chart 5)

**Chart 5 Percent of Stores Surveyed Selling Tobacco in Richmond Zip Code 94801 by Store Type (n=22), 2013**

Most stores surveyed in Richmond zip code 94801 sold youth-friendly tobacco products including flavored non-cigarette tobacco products, such as cigarillos and little cigars, single packs of these products, and/or e-cigarettes and/or e-hookah. (Chart 6)

**Chart 6 Percent of Stores Selling Tobacco with Youth-Friendly Tobacco Products, 2013**

Source: 2013 Healthy Stores for a Healthy Community Survey, California Department of Public Health.
Approximately half (55%) of stores surveyed in Richmond zip code 94801 that sell tobacco also sell alcohol and 44% of them have more storefront advertising and other signage than is allowed by the State. This signage exposes community members, including children, to product advertising, most of which is focused on unhealthy products. (Chart 7) [The Lee Law, enacted in 1994, requires off-sale alcohol retailers such as liquor stores and grocery stores to abide by a set of public health and safety standards to protect surrounding neighborhoods and communities from problems associated with alcohol sales. One provision of the law is that no more than 33% of window space can be covered with advertising or signs.]²

Only 9% of stores surveyed in Richmond (zip code 94801) that sell tobacco have exterior advertising for healthy products (e.g., fruits, vegetables, and non-fat/low-fat milk) compared to 68% of stores with exterior ads for unhealthy products (e.g., tobacco, alcohol and sugary drinks.) (Chart 7)

**Chart 7 Percent of Stores That Sell Tobacco by Type of Exterior Ads, 2013**

<table>
<thead>
<tr>
<th>Type of Exterior Advertising</th>
<th>94801</th>
<th>Contra Costa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy</td>
<td>12%</td>
<td>9%</td>
</tr>
<tr>
<td>Unhealthy</td>
<td>67%</td>
<td>68%</td>
</tr>
</tbody>
</table>

Source: 2013 Healthy Stores for a Healthy Community Survey, California Department of Public Health.

*NOTE: Exterior advertising includes advertising on windows and glass doors only. Unhealthy ads include tobacco, alcoholic beverages and/or sugary drinks. Health ads include fruit, vegetables, and/or healthy beverages (e.g., water, 100% juice, low or non-fat milk).

² Using the Lee Law to Reduce Youth Exposure to Alcohol Retail Outlet Advertising, July 2013.
Secondhand Smoke Exposure

One indicator of secondhand smoke exposure (SHS) is the presence of smoking inside the home. The estimated percent of residents (all ages) who reported this kind of SHS exposure was similar in Contra Costa (6.2%) and the Bay Area (5.4%) in 2011-12.

Reported SHS exposure inside the home varies by race/ethnicity in the Bay Area. Estimates indicate a higher percent of Non-Hispanic (NH) African Americans (14.4%) reported this type exposure than residents overall (5.4%) and NH Asians (5.7%), NH whites (5.2%), Hispanics/Latinos (2.9%), and Bay Area residents in 2011-12. Estimates suggest that Hispanics/Latinos were also less likely to report this exposure than NH whites and Bay Area residents overall. (Chart 8)

CHART 8 PERCENT REPORTED SECONDHAND SMOKE (SHS) EXPOSURE AT HOME, BAY AREA

![Chart 8]

Source: 2011-12 California Health Interview Survey

Reported SHS exposure inside the home was more commonly among lower income populations in the Bay Area. The estimated percent of people in households with income less than 200% FPL who reported this exposure (8.1%) was higher than among those with household incomes of at least 200% FPL (4.8%) in the Bay Area in 2009 and 2011-12 combined (Chart 9). Although it was not possible to detect a difference in response for Bay Area respondents, 2011-12 CA data indicates that households with income less than 200% FPL (7.9%) report higher SHS exposure than those from those from households with income of 200% FPL (6.2%) or above.

CHART 9 PERCENT REPORTED SHS EXPOSURE AT HOME BY FEDERAL POVERTY LEVEL (FPL) - BAY AREA

![Chart 9]

Source: 2009 & 2011-12 California Health Interview Survey; pooled data

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3 Adult respondents to the 2011-12 California Health Interview Survey were asked about the presence of smoking inside their home. This household data is extrapolated to children and teen respondents.

4 Note: Where stable data was not available at the Contra Costa level, Bay Area or California data was used.

5 Note: Where stable data was not available at the Contra Costa level, Bay Area or California data was used.
Access to Physical Activity

Access to physical activity is driven by many factors, but can be influenced by proximity to areas for recreation, including parks and open spaces. By comparing the density of populations in census blocks to the location of parks and open spaces, we estimate that more than 60% of Richmond residents live near parks (these residents live within census blocks that are within a quarter miles of a park). (Map 4)
MAP 4 Proximity of parks to Richmond residents
An estimated 80.4% of Contra Costa young people (1-17 years old) reported visiting a park, playground or open space in the past month in 2011-12; similar to Bay Area youth (86.3%).

There were no differences in reported access to these outdoor areas by poverty level in the Bay Area or California.

Differences in reported access varied by race/ethnicity among young people in California. A higher percentage of NH white children and youth (85.8%) reported visiting a park, playground or open space in the past month compared to Hispanics/Latinos (80.5%), NH Asians (75.8%) and young people overall (81.3%) in California in 2011-12. (Chart 10)

CHART 10  PERCENT OF YOUTH (1-17 YRS) REPORT VISITING PARK, PLAYGROUND OR OPEN SPACE IN PAST MONTH - CA

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH white</td>
<td>85.8%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>80.5%</td>
</tr>
<tr>
<td>NH Black/African American</td>
<td>78.3%</td>
</tr>
<tr>
<td>NH Asian</td>
<td>75.8%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>81.3%</td>
</tr>
</tbody>
</table>

Source: California Health Interview Survey, 2011-12.

An estimated 19.6% of young people (ages 1 to 17 years old) in Contra Costa reported they did not visit a park, playground or open space in the past 30 days in 2011-12; similar to Bay Area (13.7%) and California (18.7%) youth.

There were no differences in reported access to these outdoor areas by poverty level in the Bay Area or California.

Differences in reported access varied by race/ethnicity among young people in California. Estimates indicate that a higher percentage of Non-Hispanic (NH) white (14.2%) children and youth (ages 1-17 years) reported they did not visit a park, playground or open space in the past 30 days than Hispanic/Latino (19.5%) and NH Asian (24.2%) young people and young people overall (18.7%). (Chart 11).

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6 Respondents to the 2011-12 California Health Interview Survey were asked: "In the past 30 days, did you go to a park, playground or open space?"; Only asked of respondents ages 1-17 years old.
7 NOTE: Where stable data was not available at the Contra Costa level, Bay Area or California data were used.
8 NOTE: Where stable data was not available at the Contra Costa level, Bay Area or California data were used.
9 NOTE: Where stable data was not available at the Contra Costa level, Bay Area or California data were used.
Access to transportation

Access to public transit is a known indicator of physical activity, as individuals who use transit are more likely to be active than those who do not. The Richmond City Survey asks respondents about their access to public transit. 58% of respondents in 2013 stated that ease of bus travel was fair or poor in Richmond and 56% or respondents reported that ease of subway or rail travel was fair or poor.

When considering active transit, Richmond residents reported a lack of ease of walking and biking. In 2013, 70% or Richmond residents reported that ease of biking was fair or poor and 68% or residents reported that ease of walking was fair or poor. The reported ease of walking improved from the 2007 survey (80% reported fair or poor). Differences were detected comparing racial and ethnic groups combining results from the 2007 survey with Hispanics and Non Hispanic Other reporting the least ease biking (78% fair or poor) and least ease walking (Hispanic, 69% fair or poor; Non-Hispanic Other 74% fair or poor).

Access to both transit and vehicles is important for transportation needs. We examine here census tracts with high percentages of households without a vehicle (Map 5). Households in low income neighborhoods are less likely to have vehicles. We also look at the average daily transit pickups (Map 6). Some low income communities have both low vehicle access and fewer transit pickups.
MAP 5 Transportation Landscape, households without vehicles and transit routes.

Percent of Occupied Housing Units with No Vehicle Available

- **12.9% - 22%**
- **5.2% - 12.8%**
- **0.3% - 5.1%**
- Outside City of Richmond Boundary
- Open Space and Parks
- Richmond Industrially Zoned Areas

Source: U.S. Census Bureau, 2009-2013 American Community Survey
Average Daily Transit (Bus, Rail, Ferry) Pickups by Census Tract, 2009

Average Daily Transit Passenger Pickups

- 91 - 157
- 67 - 90
- 42 - 66
- 23 - 41
- 3 - 22
- Outside City of Richmond Boundary
- Open Space and Parks
- Richmond Industrially Zoned Areas

Source: MTC 2009
Residential Mobility and Displacement
Residential mobility is described by residents who report that they did not live at that same residence in the prior year. Residents of Lower income neighborhoods in Richmond are more likely to experience high residential mobility than residents of higher income neighborhoods. (Map 7)

Map 7 Residential Mobility in Richmond, Proportion of the population not living at the same residence in the prior year.

Residential mobility can be caused by high housing cost burden and economic instability. In addition, gentrification and displacement in the Bay Area due to housing cost increases may affect low-income Richmond residents. Models of gentrification predict that Richmond neighborhoods are currently in the stages of gentrification, with some neighborhoods already experiencing displacement and others at risk for displacement in the future. (Map 8).
Residential Segregation and Isolation

Racial isolation is measured by the likelihood that an individual will live in a neighborhood with a predominance of individuals of their same race. The greater the proportion of a particular demographic in the population, the more likely that group will be racially isolated. We compared racial isolation by race/ethnic group over time and between Richmond and Contra Costa County. Racial isolation has increased among Hispanics in Richmond and in Contra Costa, however the racial isolation among Richmond Hispanics is much higher than for Hispanics overall in Contra Costa. (Chart 12).
CHART 12 RACIAL ISOLATION INDEX FOR RICHMOND AND CONTRA COSTA COUNTY

Source: 2000 and 2010 Dicennial Census

As poverty has increased, so has concentration of poverty for many residents. Concentration of poverty is defined by the percent of a particular group who lives in a low income census tract (a census tract in which 40% or more of residents live below the federal poverty level). All groups in Richmond demonstrate a greater likelihood of living in a low income census tract than in 2000, except for African Americans. Hispanics experience the greatest likelihood of living in a low income census tract. In addition, those aged under 18 experience a high likelihood of living in a low income census tract. (Chart 13)

CHART 13 CONCENTRATION OF POVERTY FOR RICHMOND RESIDENTS BY RACE/ETHNICITY AND FOR YOUTH
**Neighborhood Acceptance**

The Richmond City Survey asks residents whether they feel that their community has openness and acceptance towards people of diverse outcomes. There was not a detectable difference in responses to this question between 2007 and 2013. In 2013, 47% of respondents reported that the community acceptance was either “excellent or good”. Responses to this question differed by race/ethnic group. Whites reported a higher rate of “excellent or good” acceptance (55%) and Hispanics reported a lower rate of “excellent or good” acceptance (36%).

Source: 2000 Dicennial Census; American Community Survey, 2008-2012
Note: Low income communities defined by 40% or more of the population living below 200% FPL
**Housing Quality**

Housing quality is often absent from community based surveys and the census. The quality of housing is linked to many health indicators including asthma and chronic diseases. An indicator of housing quality is the age of housing stock. Older homes (which have not been upgraded) are more likely to lack weatherization and may contain lead paint. A concentration of older homes in low-income areas may be an indicator for poor quality housing stock in that neighborhood. Richmond has an older housing stock than Contra Costa, with the majority of homes built before 1980 (71%) and almost 30% of homes built before 1949. (Chart 14)

**Chart 14 Age of Housing Stock**

![Chart showing the age distribution of housing stock in Richmond and Contra Costa]

Richmond

- 1949 or earlier: 29.8%
- 1950-1979: 40.6%
- 1980-1999: 19.6%
- 2000+: 9.9%

Contra Costa

- 1949 or earlier: 12.0%
- 1950-1979: 46.7%
- 1980-1999: 28.0%
- 2000+: 13.4%

Source: American Community Survey, 2010-2012

A consequence of older and poor housing stock is lead exposure in children. High lead levels are reported to the California Department of Public Health and are intervened upon locally to ensure the health of the child. The number of children under the age of 6 with a blood lead level 9.5 mcg/dl or greater between 2009 to 2011 was disproportionately higher in Richmond, with 13 cases reported in Richmond zipcodes and 53 cases in the county overall. (Chart 15)
Smoke-free Multi-Unit Housing

Residents living in multi-unit housing in Richmond have strong legal protections against exposure to secondhand smoke (SHS) at home. More than one-third (37%) of housing units in Richmond are in multi-unit housing (i.e. buildings with at least 2 units) compared to 24% county-wide. All residents living in MUH in Richmond are protected from SHS exposure at home by a smoke-free housing law in Richmond, which prohibits smoking inside Richmond’s multi-unit residences, including the private areas of those residences (including balconies, patios, and decks) and in the common areas of multi-unit housing.

Smoke-free housing laws with 100% smoke-free MUH exist in two other Contra Costa jurisdictions - El Cerrito and Walnut Creek. These laws in these 3 cities protect all MUH units (and MUH residents at home), covering a total of 34% of all MUH units in the county. (Note: This assumes these laws are being fully implemented in the 3 jurisdictions.) (CHART 16)

CHART 15 LEAD EXPOSURE IN CHILDREN UNDER 6 YEARS OLD

<table>
<thead>
<tr>
<th>Lead Levels</th>
<th>Contra Costa</th>
<th>Richmond</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of high childhood lead levels %</td>
<td>6.5</td>
<td>7.7</td>
</tr>
</tbody>
</table>

Source: California Department of Public Health; Note high lead is considered a blood lead above 9.5 mcg/dl for children under 6, 2009-2011 3 year rate.

CHART 16 SECONDHAND SMOKE PROTECTIONS IN MULTI-UNIT HOUSING

<table>
<thead>
<tr>
<th>MUH units Total</th>
<th>Richmond</th>
<th>Contra Costa</th>
</tr>
</thead>
<tbody>
<tr>
<td>% with 100% Smoke-Free MUH laws</td>
<td>34%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Housing Affordability

HOME OWNERSHIP
Richmond residents were less likely to be homeowners than county residents overall. Home ownership was lower in Richmond than county-wide in 2010-12 (49.2% versus 65.1%, respectively) and in 2000 (53.3% versus 69.3%, respectively). The percent of owned homes decreased between 2000 and 2010-12 in Richmond (from 53.3% to 49.3%) and countywide (from 69.3% to 65.1%). (Chart 17, Chart 18)

African Americans and Hispanics were less likely and non-Hispanic whites and Asians were more likely to own homes than Richmond residents overall. Home ownership was lower among African Americans (37.5%) and Hispanics (41.1%) and higher among non-Hispanic whites (66.6%) and Asians (61.3%) compared to residents overall in Richmond in 2010-12. These patterns also existed in Richmond in 2000 and county-wide in both time periods as well.

Hispanic/Latino, Asian, and NH white residents had lower home ownership in Richmond than Contra Costa overall in 2010-12. And in 2000, these groups as well as Black/African Americans had lower home ownership locally versus county-wide. (Chart 17, Chart 18)

**Chart 17 Percent Owner Occupied Housing Units within Householder Race/Ethnic Groups**

<table>
<thead>
<tr>
<th></th>
<th>Richmond</th>
<th>CC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black/AA</td>
<td>37.5%</td>
<td>41.8%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>41.1%</td>
<td>61.3%</td>
</tr>
<tr>
<td>Asian</td>
<td>61.3%</td>
<td>70.2%</td>
</tr>
<tr>
<td>NH white</td>
<td>66.6%</td>
<td>73.1%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>49.2%</td>
<td>65.1%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2010-12 American Community Survey, 3-year estimates; B25003 b,d,h,l; **2000 Census**; H016 a,b,h,l and DP-1.

**Chart 18 Percent Owner Occupied Housing Units within Householder Race/Ethnic Groups**
**Rental Affordability**

Renters were more likely than owners to be lower-income and to be housing cost burdened.

Relatively more renter-occupied than owner-occupied households were lower income (i.e., income under $50,000 and therefore less than the Richmond median of $51,885) in Richmond in 2010-12: 63.9% of renter-occupied households; 31.6% of owner-occupied households (Charts 13). The percent of household income spent on housing is a measure of housing affordability; households that spend 30% or more of income on housing costs are considered “housing cost burdened.” 10 11 Relatively more renter-occupied households (59.9%) than owner-occupied households (41.9%) were “housing cost burdened” in Richmond in 2010-12.

Most “housing cost-burdened” renter households (90.2%) and about half of “housing cost-burdened” owner households (49.6%) in Richmond were lower income (i.e., earned less than $50,000). (Chart 19Chart 20). These same patterns existed county-wide.

**Chart 19 Renter and Owner Occupied Income Levels**

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Source: U.S. Census Bureau, 2010-2012 American Community Survey 3-Year Estimates: B25003; C25074; C25095

**CHART 20 RENTER AND OWNER OCCUPIED HOUSING COST BURDENED HOUSEHOLDS BY INCOME LEVEL**

**RENTER Occupied Housing by Income Richmond 2010-12**

- Lower income (< $50,000): 36.1%
- Higher income ($50,000 +): 63.9%

**OWNER Occupied Housing by Income Richmond 2010-12**

- Lower income (< $50,000): 31.6%
- Higher income ($50,000 +): 68.4%

**NOTES:** Gross rent is the contract rent plus the estimated average monthly cost of utilities (electricity, gas, and water and sewer) and fuels (oil, coal, kerosene, wood, etc.) if these are paid by the renter (or paid for the renter by someone else). Selected monthly owner costs are the sum of payments for mortgages, deeds of trust, contracts to purchase, or similar debts on the property (including payments for the first mortgage, second mortgages, home equity loans, and other junior mortgages); real estate taxes; fire, hazard, and flood insurance on the property; utilities (electricity, gas, and water and sewer); and fuels (oil, coal, kerosene, wood, etc.). It also includes, where appropriate, the monthly condominium fee for condominiums and mobile home costs (installment loan payments, personal property taxes, site rent, registration fees, and license fees).

**Housing Overcrowding**

High housing cost burden can force higher occupancy in the existing housing stock. We examined the percent of census tracts with more than 1.51 occupants per room. Lower income areas in Richmond tend to have greater housing occupancy.
MAP 9 OVERCROWDING-PERCENT OF HOUSING UNITS WITH >1.5 OCCUPANTS PER ROOM