

Measuring What Matters

Neighborhood Research for Economic and Environmental Health and Justice in Richmond, North Richmond, and San Pablo

> The West County Indicators Report by the Pacific Institute

> > with

West County Toxics Coalition, Neighborhood House of North Richmond, Contra Costa Interfaith Supporting Community Organization, Historic Triangle Neighborhood Council, Morada de Mujeres del Milenio, North Richmond Shoreline Open Space Alliance, Richmond Progressive Alliance



Measuring What Matters:

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The Pacific Institute is a nonpartisan research institute that works to advance environmental protection, economic development, and social equity in California and around the world. The Community Strategies for Sustainability and Justice Program works to build power in low-income neighborhoods and communities of color in the San Francisco Bay area to improve economic and environmental health.

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TABLE OF CONTENTS

Dedication: Ethel Dotson 6
Introduction: A Vision of Healthy Communities7
Summary of Findings 12

Healthy Homes and Lead Contamination Risk 16
Access to Shoreline Open Space
Freight Transport and Community Health
Water Contamination in Creeks and Bays 40
Flaring at the Chevron Refinery 50
Liquor Stores and Community Health
Employment of Formerly Incarcerated Residents
Richmond's Tax Revenue from Chevron74

Introduction to Participatory Research				
City Park Conditions 84				
Access to Quality Youth Programs				
Streetlights and Community Safety 100				
Methods for Accessing Demographic Data				

Oral Histories

Lilia Quiñónez1	5
Doria Robinson2	5
Robert (Bob) Ellison	8
Reverend Kenneth Keith Davis6	3
Bennie Lois Clark-Singleton8	1
Zadia Saunders9	1

Essays and Success Stories

Saving Breuner Marsh	23
Black and Brown Unity	39
Organizing Brings a Breath of Fresh Air	48
Undocumented Immigrants: Untapped Potential	72

DEDICATED TO ETHEL DOTSON

E thel Dotson knew that the toxic chemicals in her Richmond neighborhood were harming people. She knew how to unearth the facts that could bring better health and justice to her community. And she knew how to show up and speak up for the truth. With her sharp intelligence and unflagging persistence, her striking personal style of speech and dress, and her commitment to make right action happen, she showed what a strong woman who would not be silenced could do.

Ethel Dotson has been described as a "force of nature," and that is, perhaps, the most apt praise for a woman whose passion was environmental justice, from the clean-up of toxic chemical sites she was convinced were making her family and neighbors sick, to her work to gain access to the treasures of the Bay shore that were so close, yet blocked from reach for so many in her community.

Growing up in the Seaport Village area of Richmond, steps away from a complex of chemical plants, Ethel began her outspoken advocacy on behalf of her neighborhood when demolitions at the plant site blanketed the community with toxic residue. With petition and protests and impassioned pleas to the City Council and legislators, she led the charge for the State Department of Toxic Substances Control to step in and gathered signatures for the formation of a Community Advisory Group to keep watch for the health and safety of the Richmond southeast shoreline neighborhoods.

Tireless in her campaign for the rights of her fellow Richmond residents who suffer the effects of living alongside the chemical sites and refineries, she worked to bring to light the hazards to people whose situation had long been ignored and raised the demand for just action.



^bhoto: Richard Brenneman, *Berkeley Daily Plane*t

"Ethel was a continual advocate for social justice," said Whitney Dotson, her brother, who became chair of the Community Advisory Group of which she was the founding member—and who now serves on the East Bay Regional Parks board.

"She was a strong woman who fought for the rights of the everyday person and for those that couldn't fight for themselves; her determination and perseverance helped many throughout the years," said Gayle McLaughlin, mayor of the City of Richmond.

Ethel Dotson passed away in November of 2007, but her voice reverberates still, having helped raise the issues of social and environmental justice that continue to demand action. Her legacy is one of change and hope in the community she called home.

DEDICATION

A VISION OF HEALTHY COMMUNITIES

What is your vision for healthy communities in West Contra Costa County?

The West County Indicators Project was launched in 2006 to discover community answers to this question and to work with local residents and organizations to build power to achieve this vision. Their bottom line: a healthy community requires environmental and economic justice. With environmental justice, residents of Richmond, North Richmond, and San Pablo live in a healthy and safe community regardless of their race, nationality, or economic status. Economic justice ensures that each resident has access to a meaningful livelihood and that each neighborhood has the resources it needs for its residents to thrive.

Underlying the entire project is the idea that research owned and controlled by neighborhood residents can help build powerful movements for social change. The unifying power of hands-on research on neighborhood concerns builds connections and successes across issues like good jobs, air quality, youth opportunities, park conditions, street lights, and housing quality, and it holds the power to help unify diverse communities.

WEST COUNTY: A SNAPSHOT

This neighborhood indicators project focuses on the westernmost communities of Contra Costa County and the City of Richmond, including North Richmond, Parchester Village, Iron Triangle, Atchison Village, Santa Fe, Coronado, Belding Woods, Shields-Reid, and West San Pablo. These culturally and economically diverse neighborhoods are home to approximately 47,000 residents, 90% of whom are people of color, with a median household income of \$32,000 according to the 2000 Census. Their neighborhoods hold a wide range of treasures including extensive and deep-rooted community social networks, strong leaders, broad-based support for the arts, athletic legacies, a gorgeous natural environment and excellent climate, an extensive shoreline, small locally owned businesses, and a rich history reflecting the accomplishments of workers and residents from all walks of life.1

These neighborhoods also struggle with many economic, social, and environmental challenges. High unemployment and school drop-out rates have contributed to financial hardship for many families. Crime, violence, illegal dumping, and neglected public parks disrupt the otherwise strong social fabric. West County is also home to several sources of environmental pollution, which have considerable cumulative negative health impacts, including General Chemical, the Chevron Refinery, the Port of Richmond, two rail yards, an older, possibly lead-contaminated housing stock, and several abandoned brownfield sites.²

The environmental health risks created by industrial activity are concentrated in West County's communities

of color, although these neighborhoods reap relatively few of the benefits, such as good jobs. This legacy of racial inequity is an historical pattern that is common to urban communities across the United States. Since before World War II, African-American Richmondites were restricted to living in areas viewed as less desirable, often because of the area's proximity to industrial activity. Such segregation contributed to economic decline and subsequent depressed housing prices in these neighborhoods, leaving them the only affordable areas for many incoming immigrants. As a consequence, many people of color have been relegated to the areas where the greatest concentration of heavy industry and pollution sources is located.

The concentration of environmental hazards and lack of economic assets in the West County neighborhoods where black, Latino, and Asian-American residents have lived and continue to live can seem overwhelming, yet there is also a strong tradition of community organizing and advocacy that has played a crucial role in creating thriving, healthy neighborhoods. One of the rationales behind embarking on the West County Indicators Project was to produce research that breaks down neighborhood challenges into specific indicators the community can focus on changing through organizing, advocacy, and targeted service-provision.

The West County Indicators Project is comprised of three major elements: **research** on priority issues, **relationship- and capacity-building**, and (planning for and taking) **action**.

The Roots

The Indicators Project was initiated by four West County community leaders: Dr. Henry Clark of the West County Toxics Coalition, Lee Jones and Jannat Muhammad of the Neighborhood House of North Richmond, and Johnny White of the Community Health Initiative. The project was modeled on the successful West Oakland Environmental Indicators Project of the Pacific Institute, which highlighted the connections between the root causes of multiple social, environmental, and economic issues to create powerful collaborations and innovative, effective organizing strategies.

The West County Indicators Project was launched in 2006 with a series of workshops and outreach to communitybased organizations, parent groups, churches, neighborhood councils, and elected officials in Richmond, North Richmond, and San Pablo to identify priority issues to be

addressed. During this outreach we also invited organizations and individuals who were interested in being more involved in the project to join a Steering Committee to help plan and conduct both research and capacitybuilding workshops. The Steering Committee helped ensure that the Indicators project met its goals of being accountable to a wide range of neighborhoods, issues, and types of organizations (from service providers to organizing and advocacy groups). The organizations who anchored the Steering Committee were: West County Toxics Coalition, Contra Costa Interfaith Supporting Community Organization (CCISCO), Neighborhood House of North Richmond, Historic Triangle Neighborhood Council, Morada de Mujeres del Milenio, North Richmond Shoreline Open Space Alliance (NRSOSA), Pacific Institute, and the Richmond Progressive Alliance.

Selecting Issues and Indicators

What is a neighborhood indicator?

An indicator is a measurement or a piece of information that tells us something about a larger system. For example, the temperature on a thermometer is an indicator of a person's health. Similarly, neighborhood indicators tell us something about our local community. Indicators can be tracked over time to see if neighborhood conditions are improving or getting worse, or can be compared across neighborhoods to highlight inequalities. Indicators also reflect the values and hopes residents have for their communities, and provide concrete data that support actions to improve community health and help measure progress toward a shared vision.

Identifying the issues

Early meetings of the Steering Committee focused on identifying which issues would be the focus of our collective research. In selecting issues, we asked:

• Does this issue affect many people? Is it widely and deeply felt?

- Do we know people in the community working on this issue? If not, are there people who want to work on it?
- Does this issue contain equity and justice concerns? Can action on this issue build power to address those concerns?
- Can action on this issue build relationships and unite people across the project area?

With an initial list of 16, we ultimately selected the 11 issues you see in this report based on whether we could find or develop useful, accessible data for the issue. We then identified specific indicators for each issue that were:

- Measurable, consistent, and reliable
- Relevant to community concerns and to policy and advocacy
- Exciting, interesting, and compelling
- Focused on causes, not symptoms
- Illustrative of equity and justice concerns

Research and Capacity-Building

Once issues and their respective indicators were developed, we began conducting two types of research. We completed "secondary" research on indicators for which data already existed but was not accessible at a neighborhood scale. Pacific Institute researchers located, collected, and analyzed data from city, county, state, and national agencies, and presented these at the neighborhood level when possible, and at the city level otherwise.

For three of the issues for which no data existed, we completed "primary" research, during which we generated new information about neighborhood conditions through participatory research projects led by various Steering Committee member organizations. These projects included an audit of the condition of area parks by youth from Neighborhood House of North Richmond, surveys completed by Contra Costa Interfaith Supporting Community Organization (CCISCO) on the perception of streetlight improvements around the Lucas Park section of the Iron Triangle, and surveys by CCISCO on the availability of youth programs for young people in Richmond. See the introduction to the participatory research chapters on page 82 for more details. Project research was not limited to indicator data. Oral histories document the memories of community residents, providing insight into the complex ways different issues intersect and affect people. Surveys were used to document and show patterns in the lived experiences of residents of different communities. Maps created by community members document and display where resources or problems are concentrated in a community. Photographs taken by community residents produce irreplaceable visual images that anchor and complement numerical data and other types of information. In carrying out the Indicators Project research, we integrated these research tools to comprehensively document neighborhood challenges and inequities, and to provide insight into the human cost and the potential solutions.

While conducting this research, the Indicators Project also worked to build the capacity of West County organizations to effectively integrate research into their service provision, organizing, or advocacy efforts. For example, we hosted a workshop on "Tools for Community Based Research" that focused on participatory action research tools as an effective way of building community leadership.

Action Planning/Looking Forward

As the research for each issue approached completion in 2008, Steering Committee members identified and acted on near-term opportunities for using the research findings to strengthen community action on the issues of refinery flaring, streetlights, park conditions, access to shoreline open space, and tax revenue. The partners also engaged in longer-term planning for building momentum on these and other issues, including lead contamination in homes, resources for formerly incarcerated individuals, and youth programs.

We are also communicating our findings to reach multiple audiences through fact sheets for individual issues, presentations at community meetings, teach-ins, meetings with elected officials, and other actions planned by those organizing on specific issues.

The ultimate value of this research is not in this report alone, but in how the research has been and continues to be used for attaining substantial improvements in the conditions of our neighborhoods. It is also about how the process of creating and acting on this report builds significant capacity for change in West Contra Costa County. With these goals in mind, we hope you take this information into your hands and use it to advance economic and environmental health and justice.

ENDNOTES

- 1. These community "treasures" were identified by over 100 respondents in community forums and other outreach meetings in the early phases of this project, answering the question, "What are some of the things you treasure about your community?"
- 2. Brownfields are abandoned or underused industrial or commercial property where redevelopment is complicated by actual or perceived environmental contamination.
- Contra Costa Health Services. (2007). Community Health for Contra Costa County. Retrieved August 20, 2008 from http://www.cchealth.org/health_data/hospital_council_2007/ pdf/chape_executive_report_2007.pdf.

West County Indicators Project Neighborhoods



HEALTH, JUSTICE, AND ENVIRONMENT IN WEST COUNTY

According to the 2007 Contra Costa County Community Health Indicators Report,³ San Pablo and Richmond mothers have much higher proportions of low birth weight babies than the county rate overall. People living in San Pablo and Richmond are more likely to die from cancer and heart disease compared to the county overall. Diabetes disproportionately affects the people in these communities as well, with deaths from diabetes more than twice as likely here than the surrounding county. Children living in Richmond and San Pablo are also hospitalized for asthma at almost twice the rate of children in the rest of the county. Homicide is the third leading cause of death among men living in Richmond. In fact, nearly half of all Contra Costa County homicides occur among people living in Richmond, where residents are 4.5 times more likely to die from homicide than surrounding county residents.

Is this burden of health problems related to the concentration of environmental risks in West County neighborhoods? The definition of our environment developed by the Environmental Justice movement as "where we live, work, play, and learn" suggests that our health is very much a product of our complete physical, emotional, social, and political environment.

While health is often perceived as a function of genetic factors, individual biology, and lifestyles, in fact environmental factors (factors that are external to us) play a surprisingly large role in influencing our health. This influence can shape our individual behaviors indirectly: for example, our neighborhood environment determines whether we have access to a grocery store that stocks fresh fruits and vegetables or to parks that provide safe places to exercise, or whether we regularly interact with our neighbors in safe community spaces. But environmental factors also have a direct influence on our health:

- ▶ What we take into our bodies directly affects our health. To be healthy we need access to clean air, clean water, and safe, nutritious food that is free from contamination or toxics.
- The homes and buildings where we live affect our health. To be healthy we need stable, secure, affordable, and healthy housing. The air we breathe inside our homes should be free from mold, dust, lead, pests, and pesticides, and we should have access to regular heat, hot water, and ventilation.
- What gets built in our neighborhoods and how well it is maintained also affects our health. Noise and air pollution from freeways, train tracks, construction sites, and industrial facilities can lead to chronic health problems.
- Our social, political, and economic context also affects our mental, emotional, and physical health. The presence of violence and crime, job insecurity, and widespread poverty in our communities undermines our ability to care for our health and that of our loved ones. Strong family and community networks play a very important role in protecting our health and helping us cope with stressful or harmful conditions.

The West County Indicators Project began as an endeavor to develop information that would support community efforts to create and sustain vibrant neighborhoods that promote physical, economic, emotional, spiritual, and environmental health and well-being for all residents.

SUMMARY OF FINDINGS



Issue

Toxic exposure to lead in the home, through ingesting lead-based paint chips or breathing lead-contaminated dust or soil, is still one of the

largest environmental health hazards facing children throughout the nation. Children are especially vulnerable to lead's health effects, from permanent developmental damage to reductions in IQ and behavioral problems.

Findings

HEALTHY HOMES AND LEAD CONTAMINATION RISK

The potential prevalence of lead paint hazards increases with the age of a house. Families living in homes built before 1960—when lead began to be phased out of household paint—are at highest risk. In North Richmond, Richmond, and San Pablo, over 21,000, or approximately 50% of all homes were originally built before 1960, putting them at high risk for having lead paint.



ACCESS TO SHORELINE OPEN SPACE

Issue

The shoreline of West County is home to several parks, which in highly urbanized areas can provide much needed open space and refuge.

Physical barriers however, like the Richmond Parkway or the absence of usable public pathways, can prevent West County residents from accessing the majority of this vibrant shoreline.

Findings

Of the 16,379 Richmond and North Richmond residents who live within half a mile of undeveloped shoreline areas, only 4,514, or 28%, have easy physical access to publicly accessible shoreline open space. In some neighborhoods, including Parchester Village and the Richmond Annex, less than 10% of residents who *could* have easy access currently do.



FREIGHT TRANSPORT AND COMMUNITY HEALTH

Issue

Breathing in diesel exhaust contributes to cancer, asthma, heart disease, premature birth, and other health problems. Residents living closest to

the streets, freeways, rail yards and railroad tracks used by freight trucks and trains are exposed to higher levels of diesel pollution and face greater risk of suffering health impacts.

Findings

Currently, 8,469 homes, or nearly one-in-five households in West County neighborhoods, are situated within 500 and 1,000 feet of freight transport areas. Neighborhoods with an above average percentage of homes near freight transport have a median household income of \$37,501 and are 82% people of color, while neighborhoods with a below average percentage of affected homes have a median income of \$57,571, and the percent of people of color is 69%.



WATER CONTAMINATION IN CREEKS AND BAYS

Issue

Urban waterways provide recreational opportunities for nearby residents and serve as important sources of wildlife, supporting

birds, fish, greenery, and oftentimes local subsistence fishers. Toxins from both urban run-off and industrial discharges can create health risks for people, impair the growth of plants and insects along creeks, and cause declines in marine life.

Findings

Contaminated by pollutants from agricultural uses, industrial discharge, or urban run-off, all of the creeks and bays in West Contra Costa County do not meet the San Francisco Regional Water Quality Monitoring Board's water quality standards. From 2005 through 2008, industrial facilities, which generate many of these contaminants, violated water quality regulations 204 times—an average of almost 4.5 water quality violations per month, based on Regional Board data.



FLARING AT THE CHEVRON REFINERY

Issue

A flaring event occurs when a refinery burns off unwanted gases built up in the process of refining oil. The gaseous pollutants and particu-

late matter released can cause many health problems for nearby residents, including respiratory problems, asthma attacks, and eye, skin, and nose irritation.

Findings

Between 2004 and 2007, there were 142 days when the Chevron Richmond refinery flare emissions were above Air District thresholds for causing harm to nearby residents' health. There were 82 days when these flare events released at least three times the Air District safety threshold.



Issue

A high density of liquor stores in a neighborhood is linked to many community health and safety problems, including high levels of crime

and violence, higher rates of alcohol-related hospitalizations, drunk driving accidents, pedestrian injuries, higher numbers of child accidents, assaults, and child abuse injuries.

Findings

LIQUOR STORES AND COMMUNITY HEALTH

Although Richmond and San Pablo represent less than 14% of Contra Costa County's total population, together these cities hold 25% of the county's liquor stores. Almost 60% of West County schools and parks are within 1,000 feet of a liquor store, and roughly 30% of parks and schools are within 1,000 feet of two or more liquor stores.



EMPLOYMENT OF FORMERLY INCARCERATED RESIDENTS

Issue

The lack of services available and difficulties formerly incarcerated individuals face in accessing employment end up affecting the com-

munities to which they return. When they cannot get a job, they are more likely to be arrested again for a crime. Employers who ask applicants about their legal history are less likely to hire formerly incarcerated jobseekers.

Findings

Employment applications from Contra Costa County and all of Richmond's top employers, including the City of Richmond, ask applicants whether they have been convicted of a felony. The top ten employers in Richmond accounted for 15,273, or 29%, of the 52,390 jobs in Richmond.



CITY PARK CONDITIONS

Issue

Parks are the primary resource for physical activity in a community like West County, where access to clean, safe, and well-maintained park facili-

ties is critical to improving residents' health by promoting active living and quality of life. The quality of a park, even more than its size or proximity, is associated with the use of a park by children and parents. The Pacific Institute worked with the Healthy Eating Active Living Collaborative of the Neighborhood House of North Richmond to support 13 youth in a participatory research project surveying all 52 parks in Richmond, North Richmond, and San Pablo.

Findings

This survey found an average of 7.3 "bad conditions" per park, defined as the absence of a key park feature (including restrooms, ramps for the disabled, crosswalks, bike racks); the disrepair of a park feature (including benches, barbeque pits, picnic tables, water fountains, walking or bicycle paths, shelter, lights, trash cans, slides, monkey bars, sandbox, playgrounds, fields, goals, basketball, or tennis courts); or the presence of an unwanted condition (including graffiti, trash "all over the place," or broken glass).

ACCESS TO QUALITY YOUTH PROGRAMS



Issue

Youth programs offer young people the opportunity to build on their school education, increase self-confidence, acquire skills, develop rela-

tionships with caring adults, set higher goals for their future, and explore new interests. Access to these programs is particularly important for low-income and minority youth who, research indicates, have many environmental disadvantages that contribute to greater difficulties in early adulthood.

Findings

Our survey with Contra Costa Interfaith Supporting Community Organization (CCISCO) found 20 programs serving youth aged 15-to-20 years old providing 2,409 spaces, enough for 22% of all West County youth. For the 3,710 low-income youth in this area, the free or low-cost program spaces serve no more than 43%.



STREETLIGHTS AND COMMUNITY SAFETY

Issue

Street lighting is integral to the health of a community. Improved lighting can reduce crime, increase community pride and cohesiveness,

and make a community feel safer. In an effort to reduce crime, residents organized by CCISCO wanted better public lighting for streets in high-crime areas of the Iron Triangle. In response, the city, working with Pacific Gas and Electric (PG&E), agreed to increase the wattage on light fixtures, beginning with a pilot project located in a five-block area between Lucas Park and Perez Elementary School.

Findings

A door-to-door survey of 200 homes in this neighborhood was completed to assess the effectiveness of the light upgrade. The survey found that 63% of residents surveyed around Lucas Park noticed the new lights. Eighty-three percent of respondents said they felt safer with brighter lights. Almost half said they noticed a decrease in criminal activity since the streetlights were upgraded, and more than half of those surveyed had seen or felt change in their neighborhood. Almost half of the lights in the Iron Triangle are still the dimmer 70-watt bulbs and remain to be upgraded.



Issue

Many of the public services and infrastructure Richmond residents and businesses rely on require public revenue collected by the City of

Richmond—revenue largely generated from taxes and fees on local businesses, property owners, and residents. The largest business in Richmond is the Chevron refinery, whose operations occupy 13.4% of the city's land.

Findings

RICHMOND'S TAX REVENUE FROM CHEVRON

Based on publicly available information, Chevron paid \$25 million to the City of Richmond in 2007 through all significant taxes and fees, which amounted to about 10% of the city's total annual revenue. During a twoyear period when the company donated an annual average of \$1.1 million in charitable donations for service providers, Chevron also took action to reduce its annual contributions to city revenue by an estimated \$9.4 million.

LILIA QUIÑÓNEZ

The first time I heard about lead was many years ago with my youngest grandchild. At that time, he was about one and a half years old. I went to his pediatrician to see about getting a lead test. His pediatrician did not want to do it; he said he was already too old and that it had to be done when he was a newborn. He did not say anything else.

Some years later, when the boy started school, he started to have learning and behavior problems. I fought with the district for them to do a test to measure his learning capacity. I suffered a lot; I felt like no one understood me, that the child had something, and that the district was ignoring me. It has always been on my mind that his learning difficulties have been a result of lead, of the environment, and of the older houses in which we live. My grandchild is fourteen now and still has not been tested.

My neighbors talk to me about the construction of our houses, that they are very old, that they need to be fixed, renovated, actually that they must be torn down and rebuilt. However, they know very little about lead. And well, with the days come heat, it rains, the wind blows, and our homes deteriorate with the environment. All that goes into the earth and us: my children and my neighbors are exposed to it. This danger is more prominent for those of us that rent, because we have no control. This is the reality for those of us that live in homes that are not ours.



I have lived in this neighborhood, and more specifically in this house, for more than 19 years. I have seen my children and grandchildren play and grow up within the walls of this house.

I am particularly concerned about my community —the one I live in. In my community, there are many houses, many children, and many older homes. Of course, the other areas are important, but where I live now, I see that many children have problems. I have noticed in my community there are children that have learning disabilities and children with special needs, like my grandson. I can't be 100% sure, but there will always be a doubt in my mind that something in our surrounding environment has permanently affected my family."

HEALTHY HOMES AND LEAD CONTAMINATION RISK



Children like this one in Richmond are more vulnerable to lead contamination than adults.

am particularly concerned about my community, the one I live in. There are many children and many older homes. I have noticed that there are many children with learning problems and children with special needs, like my grandson. I can't be 100% sure, but there will always be a doubt in my mind that something in our surrounding environment, something in our home, has permanently affected my family."¹ Lilia Quiñonez's grandson is now a teenager with attention deficit disorder and learning disabilities, which she suspects are related to his exposure to lead in the paint of his family's home. When he was one and a half she took him to the pediatrician but was not able to confirm lead poisoning because the clinic said he was too old to receive a blood lead test.

Lead has long been recognized as a harmful environmental toxin, but has nonetheless been in widespread commercial use for centuries—in paint, pottery and ceramics, gasoline, water pipes, food, and medicinal coloring and additives.² The greatest risk of lead exposure is within the home, from ingesting lead-based paint chips or breathing lead-contaminated dust or soil.³ Since at least the 17th century, lead was added to paint manufactured and sold throughout the United States because it increased the paint's brightness and durability.⁴ In 1978, decades after lead-based paint was banned by most European nations, the U.S. government banned the use of lead in house paint.^{5,6} Today, however, lead exposure from lead-based paint is still one of the largest environmental health hazards facing children throughout the nation.⁷ Lead affects practically every part of the body. It can cause permanent damage to the brain, nervous system, heart, and reproductive organs, which in turn can result in learning disabilities, behavioral problems, and at very high levels, seizures, coma, and even death.⁸ There is no safe level of lead in the body, and lead will continue to accumulate in the body as long as a person is exposed to it.⁹ Unfortunately, because low-level lead poisoning rarely exhibits visible symptoms, it frequently goes unrecognized.¹⁰

Children under the age of six are most vulnerable to lead exposure not only because their brains and nervous systems are still developing, but because their small size and play activities put them more into contact with lead sources.¹¹ Studies show lead exposure at a young age can cause learning and reading disabilities, hearing and speech loss, and difficulty concentrating.¹² Consequently, lead-poisoned children are seven times more likely to drop out of school.¹³ Childhood exposure to lead may also be linked to criminal and violent behavior later in life.¹⁴ High levels of lead damage brain cells, affecting the part of the brain that controls impulsive behavior, aggression, judgment, and emotional regulation.¹⁵ This evidence suggests that a reduction in lead exposure in children may in fact help reduce violence at the community level.

Although rates of lead poisoning have decreased nationally, not all children in the country have equally benefited from this decrease.¹⁶ Children of minority populations and children from low-income families are more likely to have elevated blood lead levels. According to the most recent national data (1999–2002), non-Hispanic black children are 2.4 times as likely as white children to be poisoned by lead, and Mexican American children are 1.5 times more likely to be poisoned as white children.¹⁷ Data from 1991–1994 showed prominent income disparities as well: low-income children were eight times more likely to be lead poisoned than children from higher income households.¹⁸ Many minority and low-income families are tenants in privately owned, older, poorly maintained housing.¹⁹ Such housing is more likely to have uncorrected plumbing leaks, leaks in the structure of the house, holes in painted walls that are not fixed, poorly hung doors, or no regularly scheduled painting of indoor walls—all of which result in paint deterioration that produces lead hazards. According to a national study, 35% of low-income household units were found to have lead-based paint hazards, compared with 19% of middle and upper-income household units.²⁰

In Contra Costa County, similar disparities exist: almost half (46%) of all county children with elevated blood lead levels live in the cities of Richmond and San Pablo.²¹ The cities of Richmond and San Pablo have some of the highest numbers of families living in poverty (15.5% and 13.4% respectively), as well as the greatest proportion of children in Contra Costa County under the age of five (9.1% and 7.7% respectively). San Pablo and Richmond neighborhoods are also compromised mostly of people of color (84% and 79% respectively).²²

WHAT DID OUR RESEARCH FIND?

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This indicator estimates the level of lead exposure risk for homes within West Contra Costa County. This was done by looking at the year homes in the county were built, which can help determine if lead-based paint was used or prohibited during original construction. From this information, the relative risk of lead exposure can be estimated. It was originally intended for this indicator to track the number of lead remediation projects—the removal, enclosure, or sealing of lead paint in older residential units; however, Contra Costa County data on number of residential lead remediation projects is unavailable, and few programs

In Richmond, San Pablo, and North Richmond, 50% of homes were built before 1960, and so have high risk of lead contamination.

> exist that conduct lead inspection, remediation, or abatement within the county.

> The potential prevalence of lead paint hazards increases with the age of a house. Figure 1 illustrates the potential relative risk of lead exposure for residents based on the year the home was constructed. Families living in homes

	High Risk, built before 1960	Medium Risk, built 1960–1977		Year Built Unknown	Total # of Homes
Richmond, Number of Homes	16,445	3,535	6,551	6,184	32,715
San Pablo, Number of Homes	5,233	2,102	1,809	1,361	10,505
North Richmond, Number of Homes	275	67	465	413	1,220
TOTAL	21,953	5,704	8,825	7,958	44,440

Figure 1. WEST COUNTY HOMES BY LEVEL OF RISK FOR LEAD CONTAMINATION

built before 1960—when lead-based paint was still widely used and in greater concentration—are at highest risk. In fact, a national study shows that homes built before 1960 have five-to-eight times the prevalence of hazards compared with units built from 1960 to 1977.²³ Between 1960 and 1977, homebuilders began to

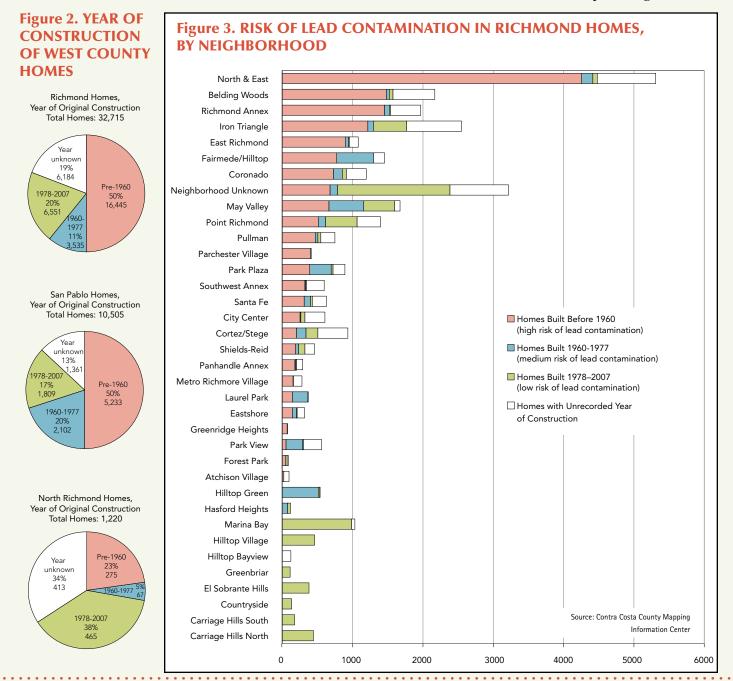
Source: Contra Costa County Mapping Information Center

avoid the use of lead-based paint in construction, which began to reduce the risk of exposure. Homes constructed 1978 or later have the lowest risk of lead hazards, due to the 1978 government ban on residential lead-based paint.

The following figures show a comparison between the level of risk of lead exposure for homes within the cities of Richmond, San Pablo, and North Richmond. In these areas as a whole, close to 22,000 of the 44,440 homes—about 50%—were built before 1960, putting families living within them at high risk of lead contamination. Figure 2 shows that specifically among the 32,715 houses in Richmond, 50% are in the high-risk category, and 11% are in the medium risk category. Within San Pablo, the distribution is similar. Of the 10,505 homes in San

Pablo, 50% are at high risk and 20% are at medium risk of lead contamination. North Richmond residents are at high risk of lead poisoning in at least 23% of their homes, however with 34% of the homes of unknown age, it is possible that the actual number of high-risk homes is even greater.

A focus on the neighborhood level in Richmond (Figure 3) shows the number and proportion of high-risk homes by neighborhood. In many Richmond neighborhoods, over half of the homes are built prior to 1960, and a large number of high-risk homes in neighborhoods such as North and East Richmond, Belding Woods, Iron Triangle, and Richmond Annex puts thousands of children and families at risk for lead poisoning.



WHAT DOES THIS MEAN FOR WEST COUNTY?

The high number of high-risk housing units within West County mirrors the disproportionate number of leadpoisoned children in the county. According to Contra Costa County Health Services, of the more than 800 children identified with elevated blood lead levels²⁴ in the last eleven years, 46% live in Richmond and San Pablo,²⁵ although these cities together represent only 14% of the total county population. State and federal agencies recommend universal or targeted screening of all children in communities where 27% or more of housing was built before 1960.²⁶ With half of the total homes built prior to 1960, Richmond and San Pablo children warrant routine screenings. Even at the neighborhood level, the majority of neighborhoods of Richmond have well over 27% of homes built prior to 1960.

It is important not only to evaluate the extent of lead-contaminated housing, but also to assess what the community is doing to reduce the risk of lead poisoning in the home. Although various public and nonprofit programs are working on the issue of preventing childhood lead poisoning in Contra Costa County, few programs fund or conduct lead remediation projects. The Contra Costa County Lead Poisoning Prevention Project offers residents important prevention education, but its limited staff, resources, and financing are inadequate to conduct lead inspections and

WHAT CAN WE DO?

Build awareness and public support.

Education plays an important role in reducing lead exposure by increasing community understanding and strengthening publicity and community support.²⁹ Expanding public outreach and education on lead hazards, prevention, and remediation should include ongoing multilingual efforts targeting high-risk communities. Successful methods carried out through public, private, and community agencies include:

- Demonstration homes to show the public and policymakers how lead paint hazards can develop and to demonstrate techniques for controlling these hazards.³⁰
- Lead safety education targeting new and expectant families.³¹
- Resources for rental property owners on lead safety, disclosure, and other responsibilities.³²

Increase access and number of lead screenings.

Successful programs and policies to increase targeted lead screening by other cities have included:

• Free mobile or in-home community lead screening clinics at target neighborhoods, with on-site lead-

remediation. Some lead remediation in West County homes has occurred through Richmond-based Project REAL (Richmond Effort to Abate Lead). This Department of Housing and Urban Development (HUD) funded lead-hazard-reduction program inspected over 800 homes and remediated lead hazards in 450 of these homes between 1999 and 2006.²⁷

Many West County homes may also receive lead remediation through individual owners and private contractors. While the best way to reduce lead poisoning is to remove lead paint altogether, its complete and permanent removal can be very costly and harmful if not completed correctly. As a result, temporary controls, which involve painting over older paint and addressing the underlying causes of paint deterioration such as leaks, friction, and chip-causing impacts, is a more widespread and accepted approach for remediation efforts.²⁸ Currently no local documentation system exists to monitor the number of homes remediated or to assure that remediation conducted by private contractors or residents is done safely. The considerable number of high risk homes in the county and the challenges of lead remediation work highlight the need for monitored and coordinated lead remediation efforts, particularly within the high risk neighborhoods in West County.

level consultation and other community resources. These programs help address barriers to screening such as transportation, time, lack of insurance, and lack of trust in the medical system.^{33, 34}

- Collaborative partnerships with churches, other faithbased organizations, schools, and community organizations to inform and promote lead screening.³⁵
- Partnerships with day care centers and other early childhood programs to ensure that documentation of lead screening is in each child's file upon enrollment.³⁶

Increase tracking of and resources for remediation.

The research presented here has demonstrated the critical need for lead remediation resources for West County neighborhoods. Significant help is needed in the area of detection, remediation, and prevention of lead problems specifically aimed at owners of pre-1978 residential property. Remediation work is happening through individual property owners and project-based work such as Project REAL, but many homes remain at high risk. As a first step, policy is needed to help document and report remediation projects at all levels throughout the county to prioritize high-risk areas and help assure safe remediation work.

COMMUNITY RESOURCES FOR INFORMATION AND CHANGE

Project REAL (Richmond Effort to Abate Lead) Chidi Egbuonu

510.412.8568, 510.412.8586

Project REAL is a free Department of Housing and Urban Development (HUD) program for low-income families with children under six years old living in housing built prior to 1978. The program focuses its work in the cities of Richmond and San Pablo. It provides in-home testing for lead paint hazards, remediation of identified lead hazards, and blood-lead testing for children under age six. Project REAL is currently in the process of re-applying for funding to continue lead hazard remediation in these cities. If received, the new grant will fund remediation of 200 units over the next three years.³⁷

Morada de Mujeres del Milenio (MMM)

Rosa Acosta, Program Director 510.231.0489

MMM is a San Pablo-based community organization that helps families on a range of family wellness issues. Due to the high risk of lead contamination in San Pablo neighborhoods, MMM is designing workshops around lead-poisoning awareness within the communities it serves.

Contra Costa Lead Poisoning Prevention Project

Contra Costa Health Services 597 Center Avenue, Suite 125 Martinez, CA 94553 925.313.6763 Community Wellness and Preservation Program 1.866.FIX.LEAD

www.cchealth.org/topics

As part of the county's Health Services, LPPP provides services for lead-poisoned children and their families; education and outreach to health care providers, agencies and residents; as well as information and referral to parents, home remodelers, and childcare providers.

Neighborhood Preservation Program— Contra Costa County Building Inspection Department

651 Pine St. 4th Floor Martinez, CA 94553 925.335.1137 http://ca-contracostacounty.civicplus.com/index. asp?NID=287

The Neighborhood Preservation Program's purpose is to provide loans to low- and moderate-income persons to improve their homes by correcting health and safety problems and improving livability. The loan program is only available for owner-occupied homes. More information on types of loans, types of work completed, and eligibility requirements is available on the website.

Alliance for Healthy Homes

www.afhh.org

The Alliance for Healthy Homes is a national, nonprofit, public interest organization working to prevent and eliminate hazards in our homes that can harm the health of children, families, and other residents. For successful and innovative programs on identifying, controlling, and preventing lead poisoning in the home, see *Building Blocks for Primary Prevention: Protecting Children from Lead-Based Paint Hazards (2005)*. The report can be accessed at www.afhh.org/buildingblocks.

RESEARCH METHODS

Data

Data on the year that West County homes were originally constructed was gathered from parcel data from the county tax assessor. This and other data from tax records kept by the county are included in Geographic Information Systems .shp files made available on the website of the Contra Costa County Mapping Information Center: http://www.ccmap.us. The official boundaries of Richmond neighborhoods were obtained from the staff at Richmond Mapping Services, online at http://www. ci.richmond.ca.us/index.asp?NID=865 and by telephone at 510.620.6542.

Methods

Software Needed: ArcGIS, Excel

- Join Year of Construction to GIS point file of parcels: Contra Costa County has two sets of parcel data available on the county's Mapping Information Center website, a point file that has few housing characteristics in the attribute table, and a boundary file that has an extensive set of housing characteristics in the attribute table. To make the following analysis easier, export the attributes of the boundary file, then join them to the parcel point file using the APN numbers.
- 2. Group residential parcels according to the neighborhoods in which they are located: conduct a spatial join that joins the neighborhoods to the parcel point file. The attribute table should now have a column listing the name of the neighborhood where each parcel is located.
- 3. Create a table of the parcels in your area and their attributes: export the attribute table of the parcels. Open the new .dbf table in Excel and save it as an .xls file. Note: If there are too many parcels for the file to be opened in Excel, you may have to use Access or another database program to do this.
- 4. Count how many parcels have homes built before 1960, how many built between 1960 and 1977, and those built after 1977. The year a home was built tells us the relative risk of lead exposure for residents within the home. Residents living in homes built prior to 1960 are at highest risk for lead poisoning; residents living in homes built between 1960 and 1977 are at medium risk; and those living in homes built after 1977 are at lowest risk.

Do Your Own Research on Your Home's Year of Construction

To find out the year of original construction of the building on a property in Contra Costa County, use the Contra Costa Mapping Information Center web page: http://ccmap.us/gis/. Click on "Accept below disclaimer" to enter the site. In the space under "Site Address Number," type the address number of the property. In the next blank space, type the name of the street. Do not include "St" or "Ave" or any other street suffix. Under "Site Street Suffix," select the appropriate ending of the property's street name. Under "Site City," select the city in which the property is located. There may be two properties that match the address, in which case on the left side of the next page two blue boxes appear, each starting with "APN." Click on the number to the right of "APN." This is the parcel number of the property, which is used by the county to keep records about the property. The next page will show you a map of the property's location, and information about the property on the left side under "Parcel Details." Move the bar next to "Parcel Details" in order to scroll to the bottom and see the information under "Building Information." Next to "Year Built" is the year that the building was originally built. If the year is not listed, you may need to go to the Contra Costa County Tax Assessor office, located at 2530 Arnold Drive, Suite #100, Martinez, CA. The phone number for the Tax Assessor is 925.313.7400.



Lead paint can be harmful to children.

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SAVING BREUNER MARSH: A COMMUNITY SUCCESS STORY

by Amy Vanderwarker

Parchester Village, Richmond's northern-most neighborhood, is surrounded by Breuner Marsh, an ecological treasure which is one of the San Francisco Bay's last remaining tidal wetlands. Parchester residents have long recognized the marsh's value as natural open space, while developers have sought to build an airport, industry, and housing there. Protecting the marsh from development has taken years of concerted community efforts, but the recent campaign leading the Parks District to take over the marsh property may be the final victory ensuring the protection of Breuner Marsh.

Named for its original property owner, Breuner Marsh is a tranquil and beautiful rest area away from busy urban life. The colorful wetlands are habitat for abundant wildlife, hosting migratory water birds and endangered species such as the California Clapper Rail. The 238 acres of marsh function as water purifiers, flood control mechanisms, and prevent erosion along the shoreline.

Parchester Village was constructed in the 1940's as a subdivision inclusive of African-American families, many of whom migrated from the South to work in Richmond's shipyards during World War II. In an era of overt housing discrimination, which relegated many African Americans to dilapidated housing, Parchester was an important victory organized by a network of churches and ministers. The ministers secured verbal promises from the housing developers that the neighboring marsh, later named Breuner, would remain open space for the enjoyment of residents.¹

Since then, Parchester residents have had to wage periodic battles to preserve the marsh and ensure their access to it, as have communities throughout the Bay area. Up to 95% of San Francisco Bay's tidal wetlands have been lost to development.² In the 1970's, residents fought off a proposal to build a small airport on the marsh. In 2000, the land was sold to a new owner who proposed to develop a complex of light industry on the marsh. By 2003, the plan had changed into a housing complex of over 1,000 units. The Parks District offered to buy the land, but the owners refused to sell.

Residents knew that development would irreversibly cut them off from the marsh and destroy the precious ecosystem. Other areas on the shoreline were being developed at a rapid rate, with subdivisions sprouting up along the Richmond Parkway.



Led by longtime residents and organizers such as Whitney Dotson, the community stepped up its organizing to stop the development. They were joined by research and advocacy groups including the Pacific Institute, Sierra Club, Save the Bay, Urban Creeks Council, Natural Heritage Institute, and the Environmental Justice Coalition for Water. Together they formed the North Richmond Shoreline Open Space Alliance (NRSOSA).

NRSOSA began gathering petition signatures to save the marsh and giving presentations on its historical, aesthetic, and environmental benefits. The group sponsored shoreline festivals in Point Pinole Park, organized walking tours, and held meetings with local decision makers to discuss alternate plans for Breuner Marsh.

Community-driven research played a key role in the campaign to save Breuner Marsh. In 2003, members of NRSOSA partnered with the Pacific Institute to design a series of trainings to build residents' research and advocacy skills. Participants in the training used a case study of a failed former development proposal for the Breuner Marsh to identify key players and political opportunities to influence local development decisions. They conducted a power analysis—a campaign planning tool that helps activists harness their knowledge of the local political landscape to develop effective strategies to achieve their goals. NRSOSA decided on a strategy for saving Breuner Marsh that centered on getting the Parks District to transform the area into a park.

To make their case for declaring the area a park, community members divided into groups to gather information on the area, such as which endangered species lived in the marsh and what the marsh meant to longtime community residents. The groups then used the information they collected to develop advocacy materials, which included a slide show presentation, a letter of introduction, and a fact sheet on the Breuner Marsh campaign.

After vigorous research and advocacy by these community leaders, the Parks District initiated eminent domain proceedings to acquire the Breuner Marsh property. Eminent domain allows a public agency to seize private land for the public good, providing market-rate compensation for the landowners. Despite the City of Richmond's opposition, the Parks District successfully concluded the legal proceedings to acquire the marsh in 2008.

Today, NRSOSA is working toward establishing a corridor of open space along the North Richmond Shoreline, preserving West Contra Costa County's incredible natural amenities and advancing sustainable, community-based development. They are also pushing for increased community access to the shoreline, recognizing that barriers such as the Richmond Parkway and the railway tracks prevent many residents from fully enjoying the open space in their backyard. Voters recognized the leadership of Whitney Dotson in November 2008, by electing him to the Board of Directors of the East Bay Regional Parks.



Amy Vanderwarker became involved in the struggle to save the North Richmond shoreline through her work as the Outreach Manager at the Environmental Justice Coalition for Water. She has worked on various social and environmental justice issues in California for the past ten years and now works as a consultant in Oakland, CA.

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DORIA ROBINSON

II was born and raised in Richmond. For the first 13 years of my life, I lived a block away from the Nevin Community Center, so Nevin Park was my park. But we hardly ever went to that park even though it was so close because there was not much to do there. It was just a bunch of grassy hills and no trees. It was nothing exciting. And there was always a bunch of adults hanging out at the picnic tables. While a big grassy field is better than nothing, it's important to actually think that you're creating space for people to inhabit, to think about safety, so kids feel comfortable in the park space. If you look at the numbers comparatively, the percentage of West County schools using the regional parks is so small. It is basically because the parks we have here—Alvarado, Eastshore, Point Pinole and Miller Knox—have no facilities. There are no facilities.

When I was a kid, I didn't even know about the North Richmond shoreline. I had never been to Point Pinole; I had never known about Breuner Marsh or any of that area. Ninety-nine percent of kids from Richmond and the flatlands have never been out there even though it is blocks away from their houses. When I bring kids out to the shoreline, they feel uncomfortable. They feel like it's not theirs.

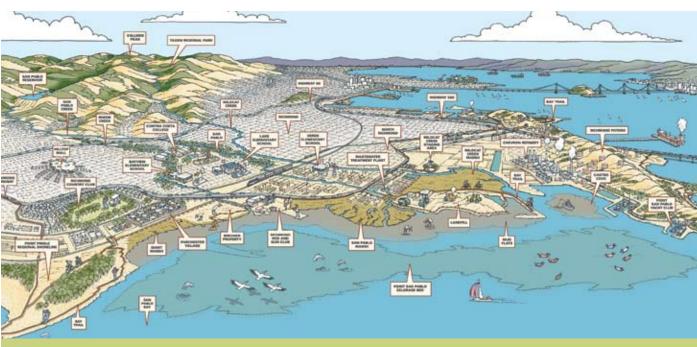
The gated communities in the area do not help. Every time I drive around down there, you need a code to get in. It just feels so screwed up. I mean, I'm the kind of person they are trying to keep out, right? People who live on South 12th Street—that is what they are afraid of and that is why they have their gates up. At least that is how I feel.



Every single person who goes into that community who is not from that community and not from Marina Bay knows that the gates are there to keep you out.

In terms of future projects and development on that shoreline, discouraging physically gated communities and discouraging residential development is a good thing. It just makes it so the shoreline isn't for everyone; it becomes a private property thing. We need to minimize residential development along the shoreline because we need more open space and greater access. We need to engender a sense of entitlement: this is your space; feel comfortable. This is your space."

ACCESS TO SHORELINE OPEN SPACE



Illustrated map of the North Richmond Shoreline

riving along the Richmond Parkway, long-time Richmond resident Whitney Dotson can point out every inlet and access point to the North Richmond shoreline, from old roads on private property to hidden parks. Whitney can show many visitors and locals alike a North Richmond they rarely see—one of tidal marshes and migratory birds. Instead, most people see the more glaring features of the coast: the Chevron refinery, the West County Landfill, the trains, and the trucks thundering along the parkway.

"Shoreline" refers to areas where the land borders an ocean or a bay. The shoreline of West County, including the North Richmond shoreline, curves along the southern San Pablo Bay. The West County shoreline is home to several parks, such as Miller-Knox and Point Pinole Park. The area, and the North Richmond shoreline specifically, has hundreds of acres of habitat, including one of the largest remaining salt marshes in the East Bay.¹ West County's wetlands support hundreds of thousands of shorebirds, waterfowl, plant life, and several endangered species.²

Unfortunately, the majority of West County's vibrant shoreline is inaccessible for West County residents. The Richmond Parkway—a major transportation corridor for trucks—divides most residential neighborhoods from the coast. Union Pacific train tracks run parallel to the parkway. In addition, industrial facilities, ranging from a commercial nursery to a regional landfill to Chevron, line the parkway. For residents, these structures have cut off the recreational, aesthetic, and educational opportunities created by open spaces and have harmed the local ecology and environment.

In highly urbanized areas such as West County, a shoreline can provide much needed open space and vistas. On a daily basis, these communities endure the diesel exhaust from truck traffic routes, the noise of trains rumbling by, and emissions from local industry. A walk along the shoreline can bring physical health and greater spiritual and psychological well-being. Studies show being located close to attractive, open spaces is a critical component to increasing or maintaining physical activity.³ Increased physical activity is strongly linked to improved health,

Figure 1. WEST COUNTY SHORELINE OPEN SPACE PUBLIC **ACCESS POINTS**

Point Pinole

such as a reduction in the risk of heart disease, diabetes, hypertension, and cancer.⁴ Further, studies show that areas with the poorest access to parks and other forms of open space for recreation have exceptionally high rates of obesity and diabetes.⁵ Natural spaces, and the physical activity they promote, have also been found to relieve depression and anxiety, and generally increase psychological health.6

A protected and conserved shoreline can also support local development. Wildlife not only provides educational and environmental opportunities, but can increase the economic value of a place. Services focused on the environment, such as environmental education centers or park amenities, can attract tourism and business.7

As communities and researchers have recognized the physical and mental benefits of living near open spaces, there has also been another, more disturbing recognition. From Los Angeles to Portland to Brooklyn, the disparities in distribution of open space have been well documented: low-income communities often have less access to open spaces and recreational opportunities than more affluent communities.⁸ In a report mapping race, income, and park access in Los Angeles, the nonprofit

organization City Project found that the communities with the worst park access were predominantly communities of color and lowincome communities in Central and South Los Angeles.9 Not only is actual park space distributed inequitably, often the programs and amenities offered in parks and open spaces vary according to socioeconomic status.¹⁰

A recent study by the Golden Gate University School of Law found that throughout San Francisco's East Bay, Image: California Spatial Information Library. Data: Pacific Institute

Shimada Park

"the majority of park acreage owned and managed by East Bay Parks is located in or near communities where the majority of residents are white and affluent."11 As researchers have confirmed what many communities see around them in their daily lives, equitable access to parks and open spaces such as shorelines has become an important environmental justice issue.

Vincent Park

Pinole Shores



WHAT DID OUR RESEARCH FIND?

"I don't think there are very many other places in this region that you are gonna be able to capture that sunset going down like that, over the Bay...It's just awesome...That's where that spiritual connection starts to come in, just being able to see that...."

-Cochise Potts, Parchester Village resident, on the benefits of being on the North Richmond shoreline¹²

To create a realistic picture of how many West County residents can easily walk or bike to the shoreline, we calculated how many residents live within one half mile of a public entrance to the shoreline, traveling by any public street that is "uninterrupted by nonresidential roads or other physical barriers."¹³ To understand who could potentially have access to the shoreline, we measured how many people live within one half mile as the crow flies from an undeveloped shoreline area. Measuring access is more complex than looking at who lives within close proximity to open space or how many acres of open space per person exist, as this does not consider the distribution of lands or barriers to accessing lands, such as a truck corridor.¹⁴ As Trust for Public Land, the prominent open space advocacy organization, notes:

It is not enough to measure access purely from a map; planners must take into account such physical barriers as uncrossable highways, streams, and railroad corridors, or heavily-trafficked roads. Also, the standard for acceptable distance shouldn't be based on an idealized healthy adult, but rather on a senior with a cane, a mother pushing a stroller, or an eight-year-old riding a bicycle.¹⁵

There are 40.3 miles of shoreline in Richmond, but much of it is inaccessible for a majority of West County residents.¹⁶ Although 14% of Richmond residents currently live within a half mile of undeveloped shoreline areas, only 4% of Richmond residents have easy physical access to shoreline open space. Access is defined by the standard measure of a half mile traveling by any public street. "Undeveloped" refers to shoreline that does not have commercial, residential, or industrial facilities on it. "Open space" refers to an area that is undeveloped and open to the public.

Although 14% of Richmond residents live within a half mile of undeveloped shoreline areas, only 4% have easy physical access to shoreline open space.

When access to the shoreline is compared across neighborhoods, a clear pattern of inequity emerges. The neighborhoods with less than 10% rate of access have an average household income of \$31,740, whereas the neighborhoods with greater than 10% rate of access have an average household income of \$55,179.



Keller Beach in the Point Richmond neighborhood

Table 1: ACCESS TO SHORELINE OPEN SPACE IN RICHMOND AND NORTH RICHMOND, BYNEIGHBORHOOD

Neighborhood	Median Household Income*	Percent Residents of Color*	Residents with potential shoreline access	Residents with actual shoreline access	Percent of residents with potential access who currently have access
Coronado	\$32,978	93%	221	-	0%
Cortez/Stege	\$26,373	98%	75	-	0%
Park View	\$30,750	95%	476	-	0%
Richmond Annex	\$47,530	51%	2,313	-	0%
Shields-Reid	\$23,313	98%	244	-	0%
Panhandle Annex	\$30,750	95%	545	3	1%
Southwest Annex	\$33,250	75%	852	11	1%
Parchester Village	\$28,974	84%	1,174	103	9%
Richmond (No Neighborhood) **	\$48,660	73%	2,023	227	11%
Point Richmond	\$73,125	16%	3,323	654	20%
Marina Bay	\$74,798	52%	3,008	2,970	99%
Richmond	\$44,210	79%	14,255	3,969	28%
North Richmond	\$24,131	95%	2,124	545	26%

** Some areas of Richmond are outside of any official neighborhood.

*Source: Census (2000)

WHAT DOES THIS MEAN FOR WEST COUNTY?

Areas such as Parchester Village are located directly next to the Bay, but most residents do not even have a park gate within walking distance. While 26% of North Richmond residents do have access to the shoreline, it is through the "West County Landfill Trail," which is not a very welcoming access point.

While projects such as the San Francisco Bay Trail, a continuous ring of trails around the Bay, and the rezoning of land uses have the potential to increase resident

WHAT CAN WE DO?

Designate undeveloped shoreline areas as open space.

The City of Richmond has the rare opportunity to increase open space designated areas of the shoreline through the city's general plan update process. The area titled Change Area 10-B is just north of North Richmond and south of Parchester Village. If the city council chooses land use "option 1" for this change area, the land north of the Parkway would be protected as open space, creating the opportunity to increase access to shoreline open space for residents of Parchester and North Richmond neighborhoods, two areas with disproportionately low rates of access. access to some of West County's natural treasures, the shoreline faces many conflicting pressures that will reconfigure shoreline access in the long term. Many of the former industrial sites are now abandoned, and there is pressure to re-develop these lots into new facilities or housing and bring revenue to the city. Our research shows there is still much work before West Contra Costa communities have adequate levels of open space access. The shoreline is a highly underutilized resource that can increase the health and quality of life for Richmond residents.

Invest in solutions that resolve barriers to local access. Through the development of the Bay Trail and the projects funded by ballot measure WW, there are significant opportunities for increasing local access to the shoreline. The lack of a functional pedestrian crossing where the Richmond Parkway crosses Wildcat Creek prevents residents from safely using the Wildcat Creek trail to access the shoreline. A pedestrian bridge at this location would resolve this barrier and provide other benefits. Similarly, establishing a trail along San Pablo Creek would greatly increase access for San Pablo neighborhoods.

COMMUNITY RESOURCES FOR INFORMATION AND CHANGE

North Richmond Shoreline Open Space Alliance (NRSOSA)

Whitney Dotson, President P.O. Box 70953, Richmond, CA 94807-0953 510.367.5379

info@northrichmondshoreline.org www.northrichmondshoreline.org

NRSOSA is a group of concerned residents who organize efforts to increase access to the shoreline in Richmond and North Richmond. Contact NRSOSA for a schedule and locations of their meetings, or to take a guided tour of the North Richmond Shoreline.

Richmond General Plan Update Process

www.cityofrichmondgeneralplan.org

Every five years the city updates its General Plan, a document that sets goals and policies that guide future development. See the website for upcoming meetings and relevant documents.

Richmond Bay Trail

http://baytrail.abag.ca.gov/

Visit the San Francisco Bay Trail Project's website to download maps and see photos of the walking and biking trail that already has 24.5 miles of trails in Richmond.

Golden Gate Audubon Society

Jennifer Robinson 510.843.2222 jrobinson@goldengateaudubon.org www.goldengateaudubon.org The Audubon Society hosts periodic events along the shoreline and is undertaking a bird census.

Save the Bay

www.savesfbay.org

One of the leading organizations working to protect the San Francisco Bay, Save the Bay hosts day-long restoration workshops and events where you can participate in shoreline restoration activities. Visit the "Get involved" link on the Save the Bay website.

North Richmond Shoreline Academy

www.shorelineacademy.org/index.php

The North Richmond Shoreline Academy was founded to promote knowledge and restoration programs along the North Richmond Shoreline specifically. Visit the website for information and upcoming events.

Trails for Richmond Action Committee (TRAC)

www.pointrichmond.com/baytrail/calendar.htm TRAC hosts a variety of events, from restoration to nature walks, along the Richmond shoreline. Visit the online calendar to learn about upcoming events.

For more information about the environmental health of the San Francisco Bay Estuary, visit the following websites:

San Francisco Estuary Project

www.sfep.abag.org

The Estuary Project was founded to coordinate restoration activities among local, federal, and state agencies around the entire San Francisco Bay area.

San Francisco Estuary Institute

www.sfei.org

Founded in 1986, SFEI works to foster the development of the scientific understanding needed to protect and enhance the San Francisco Estuary. SFEI's work tackles issues currently facing the ecosystem, including industrial and municipal discharge, non-point source pollution, biological invasions, and watershed and wetlands restoration.



View of North Richmond shoreline

RESEARCH METHODS

To analyze current shoreline access we used the computer mapping software ArcGIS. The ArcGIS tool Network Analyst allowed us to find every residential building from which a resident could travel a half mile along public streets to reach an entry to shoreline open space. To identify the entry points, we referred to maps produced by the East Bay Regional Parks and conducted a survey to ensure no public entry points were missed. Spatial data on the location of residences was drawn from parcel data originally from the county tax assessor and made available by the Contra Costa County Mapping Information Center. Street lines were obtained from Street Map USA.

To analyze potential shoreline access, we identified the undeveloped parcels on the shoreline, used ArcGIS to create a half-mile buffer around them, and looked at what residential parcels fell within the buffer area. Undeveloped parcels were identified using aerial photographs available from the California Spatial Information Library.

There are several limitations to our research methods that should be noted. This methodology does not take into consideration that freeways and the Richmond Parkway may not be considered "walkable" or "bikeable." This analysis allows such major streets to count as means of access to the shoreline. This analysis does not count pathways that may exist and do not go along streets. In order to identify undeveloped shoreline areas, we relied on aerial photos taken in 2004 and 2005. Construction since that time may have removed some of the undeveloped areas included in this analysis.

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FREIGHT TRANSPORT AND COMMUNITY HEALTH



n the morning, Lee Jones notices little black particles of soot on the roses in his front yard. "One day, as I started to rinse the spots off my roses, I noticed the side of my house also had all this black soot on it. After washing it off, I realized a couple of months later that it was right back there again." Mr. Jones is concerned about the effects this soot has on his family's and community's health, not to mention the well-being of his beautiful roses. "I never had this much of a problem with bronchitis 'til I moved out here," says Mr. Jones, a North Richmond resident.

This soot is one type of air pollution known as particulate matter (PM), comprised of microscopic pieces of solid or liquid pollutants in the air. Burning fuel is a major source of particulate matter in urban communities, and in particular, the burning of diesel. Sources of particulate matter from diesel include the diesel engines running the trains, cargo trucks, ships, and construction equipment at the port, rail yards, rail tracks, freeways, and city streets in West County.

Breathing in diesel exhaust contributes to cancer, asthma, heart disease, premature birth, and other health conditions.¹ Diesel exhaust poses more cancer risk than any other air contaminant in California. According to the Bay Area Air Quality Management District, 81% of all cancer risk from air pollution in the San Francisco Bay Area comes from diesel particulate matter.² Diesel exhaust not only produces particulate matter, but it also contains 450 different chemicals, 40 of which are considered toxic air contaminants by the California Environmental Protection Agency.

Residents of West County live at a crossroads of global trade where new cars, petroleum, and other products make their way on diesel-fueled ships, trucks, and trains from production sites around the world to consumers in the United States. The infrastructure in West County that supports this trade includes the Port of Richmond, the Burlington Northern Santa Fe Richmond (BSNF) rail yard, several dozen warehouses and distribution centers, 15 miles of railway, two Interstate highways, and a system of local streets and avenues frequently used by trucks. Each day, this infrastructure supports the movement of an average of seven ships that enter the Port of

PACIFIC INSTITUTE

Richmond,^{3, 4} 7,000 trucks that travel on West County highways,⁵ and 29 freight trains⁶ (not including passenger trains) that arrive, depart, or pass through the BNSF Richmond rail yard.^{7, 8} Further, a daily average of 13,000 truck trips are made on West County streets and avenues to access highways, by-pass traffic, or access food and fuel locations.⁹ ¹⁰ In addition, the Chevron refinery and other oil manufacturing operations in West Contra Costa County rely on diesel-fueled oil tankers to receive raw petroleum and on tanker trains and trucks to move finished products from the refineries. Much of this infrastructure abuts areas where West County residents live, work, and play.

As a result, a total of more than 90 tons of diesel pollution is released in West Contra Costa County every year.¹¹ This translates into six times more diesel pollution released per square mile than in the County as a whole, and 40 times more than in the state as a whole.¹²

Residents living closest to the streets, freeways, and railroad tracks used by freight trucks and trains are exposed to higher levels of air pollution and face greater risk of suffering health impacts. The California Air Resources Board (CARB) has found that living close to these freight transport areas is associated with a reduction in lung function of children and an exacerbation of asthma and other respiratory health conditions.¹³ In addition, a host of other severe public health threats are caused by the close proximity of trucks, trains, ships, and their associated land uses to residential communities, including noise, vibration, reduced visibility, and neighborhood blight—all of which are linked with real health impacts on school performance,¹⁴ pedestrian safety, ability to sleep or concentrate, and overall physical and mental health.¹⁵

The volume of goods imported and otherwise moved through West Contra Costa County is expected to increase significantly in the coming years, which means potential increases in the environmental and health impacts of this industry. For example, the Port of Oakland has proposed an expansion of the "Martinez Subdivision" rail line segment that it relies on to transport containerized cargo north from the Port to Northern California and beyond. Currently, an average of 18 trains travel through West County daily, which the Port says will increase by 20 per day with the rail expansion project.¹⁶

While all West County residents are affected in one way or another, those who live closest to freight transportation infrastructure are most vulnerable.

WHAT DID OUR RESEARCH FIND?

Our research looked at the number of households within a high-risk zone of freight transportation infrastructure in West Contra Costa County. The California Air Resources Board has recommended limits on how close sensitive sites—like homes, parks, school yards, daycare facilities—should be to a rail yard, distribution center, freeway, and high truck-traffic street (see Table 1).¹⁷

CARB concludes that if these recommendations are followed, exposure to air pollutants can be reduced by 80%. Although these recommendations only apply to future developments, CARB's conclusions suggest that people already living this close to freight transportation sites are at elevated risk.

The Indicators Project looked into who currently lives within these high-risk areas near freight transport in West Contra Costa County neighborhoods. This indicator calculates the number of homes and apartment units within 500 feet of the freeway or parkway, 1,000 feet of a rail yard, and 500 feet of a "truck generator."¹⁸ We also included a 500-foot area surrounding the rail tracks within a mile from the rail yard.¹⁹ By estimating the number of homes and apartments located in these areas,

Eighteen percent, or nearly one in five households in Richmond, North Richmond, and San Pablo, are within 500 or 1000 feet of freight transportation infrastructure in West County.

we can estimate the number of households currently living with elevated exposure to air pollution and increased risk to the health impacts of freight transport.

Table 1. RECOMMENDED DISTANCES BETWEEN FREIGHT TRANSPORT AND SENSITIVE LAND USES

	Recommended Distance from Sensitive Sites ¹⁹
Rail Yard	1,000 feet
Freeway or High-Traffic Road	500 feet
Distribution Center	500 feet

Data Source: California Air Resources Board, 2005

Table 2. HOUSEHOLDS NEAR FREIGHT TRANSPORT HAZARDS BY NEIGHBORHOOD

Neighborhood	Median Household Income	Percentage People of Color	Percentage of Population Under Age 18	Number of Households Near one or more Freight Hazards	Percentage of Households Near One or More Freight Hazards
May Valley	\$60,348	47%	24%	0	0%
Hilltop Village	\$66,500	81%	19%	0	0%
Hasford Heights	\$43,822	53%	24%	0	0%
Greenridge Heights	\$43,822	53%	24%	0	0%
Greenbriar	\$79,914	53%	23%	0	0%
El Sobrante Hills	\$79,914	53%	23%	0	0%
Countryside	\$91,938	50%	24%	0	0%
Carriage Hills South	\$91,938	50%	24%	0	0%
Carriage Hills North	\$79,914	53%	23%	0	0%
North and East	\$45,147	76%	27%	268	5%
Fairmede/Hilltop	\$50,443	87%	26%	78	5%
Laurel Park	\$60,536	96%	30%	31	8%
Belding Woods	\$36,100	91%	35%	237	11%
Hilltop Green	\$57,012	64%	25%	87	16%
North Richmond	\$24,131	95%	35%	159	17%
Forest Park	\$9,709	94%	22%	15	18%
Marina Bay	\$74,798	52%	12%	199	19%
Park Plaza	\$40,295	98%	29%	173	19%
Pullman	\$38,307	97%	35%	177	24%
Coronado	\$32,978	93%	28%	295	25%
Richmond Annex	\$47,530	51%	17%	541	27%
Undesignated Richmond Neighborhood	\$48,660	73%	20%	897	28%
East Richmond	\$57,563	52%	21%	318	29%
Point Richmond	\$73,125	16%	9%	460	33%
Park View	\$30,750	95%	35%	199	36%
Cortez/Stege	\$26,373	98%	37%	349	38%
Eastshore	\$38,438	99%	32%	119	38%
Santa Fe	\$28,768	97%	38%	239	38%
Iron Triangle	\$26,011	97%	36%	977	38%
Shields-Reid	\$23,313	98%	38%	179	39%
Metro Richmore Village	\$39,955	89%	33%	122	44%
Hilltop Bayview	\$46,766	71%	16%	62	51%
Panhandle Annex	\$30,750	95%	35%	153	51%
City Center	\$31,918	95%	37%	357	59%
Parchester Village	\$28,974	84%	20%	257	63%
Atchison Village	\$29,107	80%	32%	64	67%
Southwest Annex	\$33,250	75%	24%	552	93%
Richmond Total	\$44,210	79%	28%	7,564	19%
San Pablo Total	\$37,184	84%	32%	905	12%
Richmond, North Richmond and San Pablo total				8,469	18%

WHAT DOES THIS MEAN FOR WEST COUNTY?

A total of 8,469 households in Richmond, North Richmond, and San Pablo, housing approximately 24,308 residents, are within 500 or 1000 feet of freight transportation infrastructure in West County. This is 18%, or nearly one-in-five households in these areas.

While, overall, Richmond and San Pablo have high numbers of people near freight transport health hazards, the concentrations of trucks and trains are especially high in neighborhoods with lower income, more people of color, and more people under age 18. Neighborhoods where the percentage of homes near freight transport hazards is greater than average have a median household income of \$37,501 and are 82% people of color; for neighborhoods where this percentage of homes is less than average, the median income is \$57,571 and percent people of color is 69%.

West County residents have vocalized a number of concerns about the impacts of freight transport on their families and communities. The "Community Concerns" listed below were articulated by West County residents who participated in a series of community workshops in 2007 and 2008 as part of Project 12898 (conducted by the Neighborhood House of North Richmond, West County Toxics Coalition, Contra Costa Health Services, and the Pacific Institute).

Community Concerns with Expanded Freight Trains and Trucks:

- Noise/vibrations
- Pollution/soot
- Difficulty crossing streets due to truck and train traffic
- · Pedestrian safety issues
- Health problems
- Traffic congestion
- Train idling
- Damage to streets and sidewalks from trucks
- More problems at railroad crossings
- · Emergency response delays due to train blockages
- · Negative impact on local business
- Lowered tax revenue
- · Impacts on plants/vegetation
- Quality of life
- Less viable housing

WHAT CAN WE DO?

During these community workshops, West County residents also developed solutions for reducing the negative impacts of freight transport in their neighborhoods:

Reduce the impacts of existing freight-transportrelated land uses.

Require fencing and shrubbery and sound walls along freeways, railroad tracks, and businesses that attract trucks and trains. Create designated quiet zones to minimize train horns in residential areas. Change train schedules to avoid peak hours, and notify residents of train schedules to minimize delays at intersections. Implement better signage, traffic calming, and other measures to improve pedestrian safety.

Separate residential areas from freight transportrelated land uses through sound land use planning.

Require buffer zones between areas zoned for residential development and freight transport corridors as well as land uses that attract truck and train traffic. Work with residents to change truck routes to avoid residential areas. Build overpasses or underpasses that enable pedestrians, cars, and emergency vehicles to safely cross train tracks and alleviate long train blockages at intersections.

Encourage the development of green business and other minimally polluting, non-residential land uses next to freight-transport-intensive land uses.

Provide incentives to attract new green businesses and convert existing businesses to green businesses. Areas designated as high-risk zones should be zoned to attract green businesses that meet community needs while minimizing additional pollution in an already overburdened community. Green businesses should be required to minimize pollution and other negative impacts from their operations, as well as their end product.

Provide an accountable public process that requires developers to consult with impacted residents.

Proposals that could result in increases in truck and train traffic in West County neighborhoods should be discussed with impacted community residents before decisions that approve such developments are made. The impacts and mitigation measures identified by residents should be integrated into development proposals and environmental impact assessments as a precondition of their approval by permitting, regulatory, and planning agencies.

COMMUNITY RESOURCES FOR INFORMATION AND CHANGE

There are several community groups taking leadership in West County on advancing solutions to the problems of freight transport and working for environmental health and justice:

Contra Costa County Asthma Coalition

Cedrita Claiborne 597 Center Ave. #115 Martinez, CA 94553 925.313.6861 www.cchealth.org/topics/asthma

Neighborhood House of North Richmond

Lee Jones or Jannat Muhammad 820 23rd St. Richmond, CA 94804 510.229.5041 www.nhnr.org

West County Toxics Coalition

Dr. Henry Clark 305 Chesley Ave. North Richmond, CA 94801 510.232.3427 www.westcountytoxicscoalition.org

RESEARCH METHODS

Data

The data used for the freight transport indicator is not always easy to obtain, but it is possible and it is the right of the community to have access to information about the issues affecting our lives. The sets of data we used were:

Data	What it is	Where to get it	
Demographics	An Excel table with population numbers by census tract	See Demographics Methods on page 105.	
Rail lines	A Geographic Information System (GIS) shapefile of the rail lines in Contra Costa County	Kristine Solseng, Senior GIS Planner Community Development Department, Contra Costa County 651 Pine St, 4th Floor, North Wing Martinez, CA 94553 925.335.1271 ksols@cd.cccounty.us	
Parcels	A GIS shapefile of the parcel lines and property information	Roi Evron, GIS Administrator IT Department, City of Richmond 1401 Marina Way South Richmond, CA 94804 510. 621.1298 roi_evron@ci.richmond.ca.us	
Truck generators (distribution centers)	A list of the businesses that attract freight trucks	Truck Route/Weight Limitations Survey for West Contra Costa County, prepared for the West Contra Costa Transportation Advisory Committee (WCCTAC) by Dowling Associates, Inc., December, 2001. For a copy, contact WCCTAC 510.215.3042 or email wcctac@ci.san-pablo.ca.us.	

Methodology of Analysis

The analysis of this data utilized ArcGIS, Excel, and Access software programs. ArcGIS was used to measure particular areas surrounding all freight transport hazards and identify the residential parcels within these buffer areas. We then exported the attribute table of parcels within the buffer area, giving us a table of information for every property near the rail lines. Parcel data included the number of units at each residence, which we used as a proxy for the number of households affected. We then used the average persons per household from the 2000 Census of Richmond and San Pablo to estimate the number of people affected.

Want to Do Your Own Research on this Issue?

Find the distance from your house or school to a rail track. You can use Google Earth, a program available for free online at http://earth.google.com/products.html. Once you download the program, type in the desired address in the box where it says "Fly to" and then click "Return." Locate the rail tracks closest to the address by scrolling around. At the top of your screen, click on a little blue ruler. Click on the two points between which you want to measure the distance. In the little box labeled "Ruler," the distance between the two points will appear.

REFERENCES

- 1 U.S. EPA. (2002). Health Assessment Document for Diesel Engine Exhaust. U.S. Environmental Protection Agency, Office of Research and Development, National Center for Environmental Assessment, Washington Office, Washington, D.C. Retrieved June 30, 2008 from http://cfpub.epa.gov/ncea/cfm/ recordisplay.cfm?deid=29060.
- 2 Bay Area Air Quality Management District. (2006). Community Air Risk Evaluation Program: Phase 1 Findings and Policy Recommendations Related to Toxic Air Contaminants in the San Francisco Bay Area. San Francisco, California: Bay Area Air Quality Management District. Retrieved June 30, 2008 from http://www.baaqmd.gov/CARE/care_documents.htm.
- 3 Army Corps of Engineers. (2006). Waterborne Commerce of the United States - Calendar Year 2006, Part 4 - Waterways and Harbor of Pacific Coast, Alaska and Hawaii. Institute for Water Resources. Retrieved November, 2008 from http://www.iwr.usace.army.mil/ndc/wcsc/wcsc.htm.
- 4 The original source presents information as a yearly figure of 2,404 inbound trips. These trips include: self propelled and non-self propelled dry cargo and tanker ships. Tow or tug boats are not included. We present the information as a daily figure. It is important to note that this figure is an average, therefore depending on the season or day of the week the daily trips may be higher or lower.
- 5 Dowling and Associates, Inc. (2001). Truck Route/Weight Limitations Survey for West Contra Costa County. December 2001. Oakland, CA: Dowling Associates, Inc.
- 6 California Air Resources Board. (2007). Health Risk Assessment for the BNSF Railway Richmond Rail Yard. Sacramento, CA: California Air Resources Board.
- 7 This figure may not include Union Pacific trains originating at the Port of Oakland that use miles of West County rail infrastructure to transport cargo from Port of Oakland to destinations across the state and country. These UP trains travel through West County without stopping at the BNSF Richmond rail yard.
- 8 The original source presents information as a yearly figure of 10,752 recorded locomotives arriving, departing, or passing through the rail yard during the course of a year. We present the information as a daily figure. It is important to note that this figure is an average, therefore depending on the season or day of the week the daily trips may be higher or lower.
- 9 Dowling and Associates, Inc. (2001). Truck Route/Weight Limitations Survey for West Contra Costa County. December 2001. Oakland, CA: Dowling Associates, Inc.

- 10 The original source determined the number of trucks that travel on local streets by surveying all West County truck generator businesses and obtaining the total daily truck trips generated and the routes they used to access the facility. Figures include the number of trips on each road, not necessarily each truck, therefore one truck may be counted more than once as they travel from distribution center to the freeway. Truck generator businesses are defined as businesses where truck activity occurs, e.g. wholesale operations, manufacturing business, and petrochemical companies. Only heavy-duty trucks with five axels or more and that weight over three tons when loaded are included.
- 11 Pacific Institute. (2005). Deluged by Diesel: Healthy Solutions for West County. Oakland, CA. Retrieved November 2008 from http://www.pacinst.org/reports/west_county_diesel.
- 12 Ibid (Same as above)
- 13 California Air Resources Board. (2005). Air Quality and Land Use Handbook: A Community Health Perspective. Retrieved November 2008 from http://www.arb.ca.gov/ch/landuse.htm.
- 14 Stansfeld, S.A., B. Berglund, C. Clark, I. Lopez-Bario, P. Fischer, E. Ohrstrom, M. Haines, J. Head, S. Hygge, I. van Kamp, and B. Berry. (2005). Aircraft and road traffic noise and children's cognition and health: a crossnational study. *The Lancet*, 365:1942-1949.
- 15 Lercher, P., G. Evans, M. Meis, and W. Kofler. (2002). Ambient neighbourhood noise and children's mental health. *Occupational and Environmental Medicine*, 59, 6:380-6.
- 16 Port of Oakland. (2007). TCIF funding nomination for the Martinez Subdivision and Rail Improvements. Retrieved on October 10, 2008 from www.portofoakland.com/pdf/ tcif_02.pdf
- 17 California Air Resources Board. (2005). Air Quality and Land Use Handbook: A Community Health Perspective. Retrieved November 2008 from http://www.arb.ca.gov/ch/landuse.htm.
- 18 Here we use the definition of "truck generator" used in the 2001 Dowling and Associates report, and use the buffer zone of 500 feet recommended by CARB for distribution centers.
- 19 CARB does not make a clear recommendation for the safe distance from a rail track, but they suggest that for tracks "within one mile of a rail yard, consider possible siting limitations and mitigation approaches (CARB, 2005)." This suggests that there is significant health risk near tracks within a mile of a rail yard, which confirms the experience of many West County residents. Therefore, this study included the population living within 500 feet of rail tracks less than a mile from a rail yard. (This distance however, does not even reach to Parchester Village, where residents report locomotives idling for as much as eight hours at a time.)



ROBERT (BOB) ELLISON

Ve lived in North Richmond all my life. I'm about 74 and I was born here and raised right on the street where I live now. I'm third generation here. My grandfather was a slave, he came here in 1898 and lived out on south 23rd which is out where the police department is now. The wide streets, the open air, the breeze coming over the bay and cooling us down—these are the things about this neighborhood I want to pass on to the next generation.

When I was a boy, the federal government came out here and told me, "You have asthma." And we still have asthma out here. So you think, "I'll just move out of here." When I was younger, you'd think the same thing: "If you don't want to die, don't live and work here." But then again, we were black and couldn't work anywhere else. Boy, what a rock and a hard place.

If I get in the car to go to San Rafael and spend the day, when I get on the bridge coming back into Richmond, it hits me. This place smells bad. But while I'm here, I can't smell it. I've asked others about it, and they too are used to it. The Standard Oil (Chevron) refinery emits an odor. It's here. It's present now. And it affects our health: asthma, allergies, and the coughing. They are polluting the air, we are getting sick. Don't you think they owe something to the community?



I would feel better if we worked in concert with Standard Oil. If their needs were our needs and our needs were their needs: if we had the same need, then we could get it together and resolve it. We have the technology to do that. We have the means to do that. I want to get the motivations together. Richmond people especially see that we're all tied in together."

ORAL HISTORY

BLACK AND BROWN UNITY

by Leonard McNeil

Black people and immigrants, particularly from Mexico, cannot afford to fall victim to the polarizing and false claim that the rights of one oppressed national minority are gained only at the expense of those of another. The chronic and disproportionate unemployment and under-employment affecting Black people is not caused by undocumented immigrants. Both the outsourcing of jobs to low-wage countries and the unauthorized migration by lowwage workers to the United States are the result of economic policies and practices that have nothing to do with the actual workers who take low-wage jobs. Achieving economic justice and racial equality for all requires that solidarity be forged and sustained between Black people and Mexican immigrants.

There is a historic legacy of solidarity between Mexicans and African-Americans that we can build on today. During the early 1800's, so many former slaves escaped into Mexico where slavery was outlawed that the federal government placed troops on the U.S.-Mexico border to stop the then "illegal" border crossing in the Southern direction. In 2008, National Guard troops and border patrol agents were placed and now remain at the same border to deter immigrants from Mexico from moving North and "illegally" entering the United States for economic opportunity and family unification. In 1829, Mexican President Vicente Guerrero, an African-Mexican, signed a decree that outlawed slavery in the Mexican Republic. Land titles were given to former slaves in Mexico, which courageously maintained its opposition to fugitive slave extradition. The defeat of the French as a confederate ally at Puebla, Mexico on May 5, 1862 (Cinco de Mayo) was a blow for the expansion of slavery. In several states in Mexico (Costa Chica, Veracruz, Guerrero, and Oaxaca), there are Mexicans with cultural (dance, food, music) and racial histories dating back hundreds of years to the African slave trade.

Both Black people and immigrants from Mexico have been subjected to negative stereotyping, discrimination, scapegoating, and exploitation. For example, the unpaid labor of Black people in chattel slavery established the economic foundation necessary for the United States to become a global power. The exploited labor of undocumented workers from Mexico by U.S. agri-business has added untold wealth to the capitalist coffers. These common struggles and moments of solidarity will not by themselves turn contention into cooperation, but they do inform the larger political framework needed to develop principled unity.

Today, there are untold examples of cooperation between African-Americans and the Mexican Diaspora. For example, the Black Alliance for Just Immigration hosted a national tour of a Black delegation to the U.S.-Mexico border to investigate human rights abuses. The Mississippi Immigrant Rights Alliance and the Mississippi Workers' Center coalesced to help both Black and immigrant workers to enforce labor rights in the service and foodprocessing industries. In New Orleans, Black people put up the bail money for undocumented Mexicans who were jailed for protesting unfair treatment by employers. In the Midwest, a coalition of Black faithbased organizations initiated an organizing campaign to inform the Black community about the white nationalist origins of anti-immigrant groups. In Los Angeles, Black and Brown youth formed the African and Latino Youth Summit. The more that is learned about examples of unity and solidarity between Black people and the Mexican Diaspora, the more both constituencies will be motivated and encouraged to join together in common cause.



Leonard McNeil is Mayor of San Pablo and serves on the Steering Committee of the Black Alliance for Just Immigration. www.blackalliance.org

WATER CONTAMINATION IN CREEKS AND BAYS



Wildcat Creek in Richmond

am way more careful when I am out with a group by the water. It is hard. You do not want them to be afraid but if they don't know the reality, they could get themselves into trouble," explains Doria Robinson, who leads creek tours and restoration projects in Richmond. Before she tells people about the water contamination, they "need to establish that connection first, a personal commitment to the space before you get into the troubles, because it can bring you down so much to think, 'Why is my creek, shoreline so torn up and other people's aren't so?"

From creeks to bays, West Contra Costa County is home to many bodies of water (see Table 1 for a list of West County creeks) and is situated within the lower portion of seven watersheds. These watersheds are areas of land where all the water under them or draining into them goes into the same place, whether it is to a stream, lake, or ocean.

Urban waterways provide recreational opportunities for nearby residents. They serve as important sources of wildlife in urban areas, a break in miles of concrete, and support birds, fish, greenery,¹ and oftentimes local subsistence fishers.² Healthy creeks and bays also help to filter pollutants and reduce flooding, erosion, and organic material buildup.³ Yet most of West County's creeks are paved over; of those that are not, many have become so polluted they are no longer safe for residents to swim, fish, or even play in. Much of the water has become contaminated by industrial and municipal facilities that are often located adjacent to or on West County's creeks and bays. For example, a sewage treatment plant, Chevron's industrial holding ponds and refinery, and a landfill all border the 300-acre salt marsh at the mouth of the San Pablo and Wildcat Creek watershed.

In addition, urban run-off is a major source of contamination in the Bay.⁴ Urban run-off is the water running from our yards, streets, and buildings every day that carries pesticides, heavy metals, and other chemicals into our waterways. Toxins from both urban run-off and industrial discharges can impair the growth of plants and insects along creeks, cause declines in marine life, and create health risks for people.⁵

Table 1: WEST COUNTY CREEKS

Creek	Total length (miles)	Beginning (Headwaters)	Drains into	Passes through
Wildcat Creek	22.22	Berkeley, Wildcat Canyon (East Bay Regional Park District Land)	San Pablo Bay at Giant Marsh	San Pablo and Richmond
San Pablo Creek	108.6	Orinda, then into San Pablo Reservoir	San Pablo Bay	San Pablo, Richmond, El Sobrante
Rheem and Garrity Creeks	3.36 and 4.10	Richmond	San Pablo Bay just south of Point Pinole	Richmond, San Pablo, some unincorporated county land
Pinole Creek	46.64	Briones Regional Park	San Pablo Bay	Pinole
Refugio and Rodeo Creeks	9.17 and 31.64	East Bay Regional Park Land	San Pablo Bay	Rodeo, Crockett, Hercules

Source: Contra Costa Watershed Atlas (2003), Contra Costa Community Development Department.

Inclusion of creeks is based on the Watershed Atlas, which uses USGS data. It does not include tributaries such as Castro Creek.

WHAT DID OUR RESEARCH FIND?

The Indicators Project examined two indicators of water contamination in West County: which water bodies are considered contaminated, and how often industries in the area are contaminating waters. To determine which are contaminated, we used data from the San Francisco Regional Water Quality Monitoring Board (Regional Board), the agency in charge of protecting water quality in the San Francisco Bay and in creeks and lakes.

To get a sense of how often industries in the area are contaminating waters, we checked data for how often, if at all, facilities are breaking water quality laws that have been set by the state and federal government. This provided information on whether or not industrial facilities are complying with legal limits on water contamination set under the federal Clean Water Act to regulate point source pollution discharges.⁶

Our analysis does not attempt to create a direct link between water contamination in local water bodies and illegal industrial discharges.

According to Regional Board listings, all of the creeks and the bays in West County are impaired.

What is the evidence of water contamination in West County?

The Regional Board is required by federal law to establish water quality standards based on the ways each water body is typically used. For instance, if an area's designated use is recreational fishing, the Board must ensure that the fish in that water body are safe for people to eat.⁷ The Regional Board then assesses which water bodies do not meet their water quality standards and designates them as "impaired."

According to Regional Board listings, all of the creeks and the bays in West County are impaired (Table 2). Table 3 provides more specific information on the contaminants present in these water bodies.

Table 2: IMPAIRED WATER BODIES IN WEST COUNTY

Water body	Chemical contaminants	Source of contaminants
San Pablo Bay	Chlordane, DDT, dieldrin, dioxin compounds, exotic species, furan compounds, mercury, nickel, PCBs (polychlorinated biphenyls), selenium	Urban run-off and drainage, direct discharges from industry, dumping from boats, atmospheric deposition, municipal discharges, agriculture and natural sources, resource extraction
San Pablo Creek	Diazinon	Urban run-off and storm sewers
Wildcat Creek	Diazinon	Urban run-off and storm sewers
Castro Cove	Dieldrin (sediment); mercury (sediment); PAHs (polycyclic aromatic hydrocarbons) (sediment); selenium (sediment)	Direct discharges from Chevron refinery, urban run-off
Central Basin (part of central SF Bay)	Chlordane; mercury; PAHs (polycyclic aromatic hydrocarbons); PCBs (polychlorinated biphenyls); selenium	Urban run-off and drainage, direct discharges from industry, dumping from boats, atmospheric deposition, municipal discharges, agriculture and natural sources
Pinole Creek	Diazinon	Urban run-off and storm sewers
Rodeo Creek	Diazinon	Urban run-off and storm sewers
Central SF Bay	Chlordane; DDT; dieldrin; dioxin compounds; exotic species; furan compounds; PCBs (polychlorinated biphenyls); mercury; selenium	Urban run-off and drainage, direct discharges from industry, dumping from boats, atmospheric deposition, municipal discharges, agriculture and natural sources, resource extraction

Source: Proposed 2006 CWA Section 303(d) List of Water Quality Limited Segments. Retrieved 10/15/08 from http://www.swrcb.ca.gov/rwqcb2/tmdlmain.htm.

Table 3: WHAT ARE THE CONTAMINANTS IN WEST COUNTY WATERS?

Contaminant	What is it?	
Chlordane	Pesticide that has been banned, but persists in the environment.	
DDT	Pesticide that has been banned, but persists in the environment.	
Dieldrin	Insecticide that has been banned, but persists in the environment.	
Dioxin/furan compounds	Chemical compounds released as emissions from waste incineration and other combustion; also discharged from chemical factories.	
Exotic Species	Animals and plants not native to an ecosystem.	
Mercury	Heavy metal used in thermometers, dental fillings, and batteries, discharged from refineries and factories, but also present in the environment as a result of former use in mining.	
Nickel	Naturally occurring metal.	
Polychlorinated biphenyls (PCBs)	Chemicals used as coolants and lubricants in transformers, capacitors, and other electrical equipment. Due to health impacts, production has been stopped but they persist in the environment and leach from landfills and chemical waste.	
Selenium	Naturally occurring mineral element in rocks and soil. Used in the electronics industry, as a nutritional feed additive for poultry and livestock, and in petroleum refineries.	
Diazinon	Pesticide used to control pests in soil, ornamental plants, and crops.	
Polycyclic Aromatic Hydrocarbons (PAHs)	Chemical compounds formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances. PAHs are found in coal tar, crude oil, creosote, and roofing tar, but a few are used in medicines or to make dyes, plastics, and pesticides.	

Source: U.S. EPA Drinking Water Contaminants, available at http://www.epa.gov/OGWDW/contaminants/ and Department of Health and Human Services Agency for Toxic Substances and Disease Registry ToxFAQs, available at: http://www.atsdr.cdc.gov/toxfaq.html.

How often are industrial facilities illegally discharging contaminated water?

The Indicators Project also looked at how many times industrial facilities in West County violated their regulatory permits by releasing more contaminants than legally allowed. Every industrial facility must obtain a permit from the Regional Board, called a National Pollution Discharge and Elimination Permit (NPDES), which outlines how much wastewater a facility is allowed to discharge.

According to data from the California Integrated Water Quality Information System for January 2005 through October 2008, there were a total of 19 facilities in violation of their permits, 17 of them with repeat violations (Table 4). All of the violations listed are for illegal contaminant discharges.

The Regional Board also issues violations for monitoring and reporting failures. For example, if a facility did not monitor a certain chemical on a daily basis as required by law, it would receive a violation notice. From 2005 through October of 2008, there were 51 reporting and monitoring violations, and one instance where a facility was cited for failure to pay fines for a total of 52 administrative violations spread among eight facilities.⁸

Other studies and sources of data indicate that industrial facilities in West County are contributing to water contamination. In a national study on permit violations from industrial facilities, Contra Costa was one of the top 25 counties in the U.S. with the most industrial facilities exceeding their NPDES permits.9 It should also be noted that these are just illegal discharges; facilities are allowed to discharge a certain amount on a regular basis. In 2005, for example, Shell Oil released 542,497 pounds of contaminants into surface waters; Chevron released 430,777 pounds of contaminants.¹⁰ While these releases are each individually legal, they add up to a considerable cumulative load of pollutants entering West County waters on a daily basis. Further, industrial facilities contribute regularly to urban run-off-the largest source of water contamination in the Bay Area.

Table 4: ILLEGAL WATER DISCHARGES FOR CONTRA COSTA INDUSTRIAL FACILITIES, 2005–2008

Facility	Violations
Rhodia, Inc.	1
Tesoro Refinery — Golden Eagle Waste Water Treatment Plant	1
Chevron Richmond Refinery	2
Crockett Cogeneration	2
Dow Chemical Company	2
GWF — Site I Power Plant	2
US Navy Groundwater Treatment Plant, Pt. Molate	3
West County Waste Water District	4
Mt. View Sanitary District	5
City of Pinole Wastewater Treatment Plant	6
GWF Power Systems, Site IV	10
USS POSCO Industries	11
General Chemical Waste Water Treatment Plant	13
Richmond Water Pollution Control Plant	16
PG& E Shell Pond	20
Rodeo Sanitary District Wastewater Treatment Plant	21
Shell Martinez Refinery	25
Discovery Bay Treatment Plant	30
ConocoPhillips Refinery, Rodeo	32
TOTAL VIOLATIONS	206

Source: California Integrated Water Quality Information System

WHAT DOES THIS MEAN FOR WEST COUNTY?

Contaminated water bodies

The data from the Regional Board indicates there is significant water contamination in West County, but the sources vary greatly. The creeks of West County are mostly contaminated with diazinon, a pesticide commonly used on lawns.¹¹ The bays of West County have a wider array of contaminants, the majority of which are persistent organic pollutants-including chlordane; DDT; dieldrin; PCBs (polychlorinated biphenyls); and PAHs (polycyclic aromatic hydrocarbons)-from agricultural uses, industrial discharges, and urban run-off.¹² Some contaminants originate with industrial discharges, such as the mercury and PAHs in Castro Cove that are from former Chevron refinery operations.¹³ In fact, much of the industry-related contaminants may have come from "legacy" pollution-pollution that occurred many years ago-or from a mix of both historical and contemporary sources. For instance, the level of PCBs in the San Francisco Bay primarily comes from their use in electrical equipment during the 1970s, although several companies in the Bay still use them.¹⁴ Most of the mercury in the Bay is from mining operations during the Gold Rush era.15 The second largest source is from urban run-off. It also continues to enter the Bay through both air and wastewater discharges from local industries.¹⁶

Mercury and PCBs are of particular concern because they accumulate in the flesh of fish people eat and have many health impacts, from causing cancer to neurological disorders.¹⁷ A walk down Point Pinole pier reveals how many people regularly fish there and elsewhere in West County. Many people eat the fish they catch, for both cultural and economic reasons. One survey found 87% of Bay Area anglers eat the fish they catch.¹⁸ California's Office of Environmental Health and Hazard Assessment has issued fish advisories limiting the amount of fish people should consume from the Bay because of the potential health consequences.¹⁹ PCB concentrations in Bay sport fish are still more than ten times higher than levels considered safe for human consumption.²⁰ In fish tissue testing throughout the Bay, the highest levels of mercury were found in the Central San Francisco Bay region, just off West County's shoreline, in rates well above a safe consumption level.²¹

Illegal industrial discharges

All of the violations in Table 4 are based on instances when a facility discharged wastewater that contained levels of contaminants above levels deemed healthy for local ecosystems and public health. Since 2005, there has been an average of almost 4.5 water quality violations per month, based on Regional Board data alone.

While these violations cannot be traced specifically to the data on water contamination in West County presented in this chapter, they convey a pattern of industrial pollution. Together, the two Indicators, which provide data on water contamination and data on industrial permit violations, illuminate part the complex issue of addressing water quality concerns of West County.

WHAT CAN WE DO?

From working for more protective water quality standards to educating people on how to restore local creeks, many organizations in West County and the Bay Area offer different types of solutions to our water quality problem. Residents can implement solutions on several levels, including limiting one's own contribution to water contamination, participating in water restoration and clean-up activities, and supporting ongoing advocacy campaigns.

Limit your own contribution to water contamination.

West County residents themselves can help reduce water contamination.²² Keep litter, pet waste, and debris out of street gutters and storm drains: they drain directly to streams, rivers, and wetlands. Minimize the use of pesticides and fertilizers. Dispose of used oil and antifreeze, pharmaceuticals, batteries, paints, and other household hazardous materials at local hazardous material centers (see Resources section). Use nontoxic household cleaners, as most commercial all-purpose cleaners contain dangerous chemicals.

Help restore your local water bodies.

Participate in local creek clean-up and restoration projects (see Resources section).

Support ongoing policy efforts to limit water pollution. Many organizations work to implement policies at both the regional and state level to protect our health and environment. One of the best ways to directly impact local policy is by attending San Francisco Regional Water Quality Control Board meetings. Organizations such as Baykeeper and Clean Water Action have worked at the local level to create comprehensive contaminant limits for the San Francisco Bay, to improve the regulation of industries, and more. (See next section for contact information.)

COMMUNITY RESOURCES FOR INFORMATION AND CHANGE

City of Richmond Household Wastewater Web Page

www.ci.richmond.ca.us/index.asp?NID=170 Information and local resources on ways to reduce household water pollution.

Clean Water Action

111 New Montgomery St., Suite 600 San Francisco, CA 94105 415.369.9160 www.cleanwateraction.org

Helps citizens make their case for clean water to local, state, and national decisionmakers and to advocate for strong environmental policies.

North Richmond Shoreline Academy

100 Pine St, #1550 San Francisco, CA 94111 415.693.3000 www.shorelineacademy.org A project of the Natural Heritage Institute working to restore and protect the North Richmond Shoreline for the benefit of local communities.

San Francisco Baykeeper

785 Market Street, Suite 850 San Francisco, CA 94103 415.856.0444

www.baykeeper.org

Works to reverse the environmental degradation of the past and promote new strategies and policies to protect the water quality of the San Francisco Bay.

SPAWNERS (San Pablo Watershed Neighbors Education and Restoration Society)

1327 South 46th Street, Bldg. 155 Richmond, CA 94804 510.665.3538 www.spawners.net Works to protect and restore San Pablo Creek.

The Watershed Project

1327 South 46th Street
155 Richmond Field Station
Richmond, CA 94804
510.665.3546; info@thewatershedproject.org
www.thewatershedproject.org
Provides support for watershed restoration projects and
runs environmental education programs in Richmond.

Urban Creeks Council

1250 Addison Street, Suite 107 Berkeley, CA 94702 510.540.6669 www.urbancreeks.org Supports efforts to restore urban creeks throughout Richmond and Berkeley.

West Contra Costa County Integrated Waste Management Services 1.888.412.9277

www.recyclemore.com

Provides recycling and garbage services for West Contra Costa County, runs a Household Hazardous Waste Collection facility, and has information on how to reduce household pollution.



Wildcat Creek in Richmond

RESEARCH METHODS

Contaminated water bodies

Our list of impaired water bodies in West Contra Costa County is drawn from the San Francisco Regional Water Quality Control Board's 303(d) list for the San Francisco region, which provides an overview of water quality information in an area based on comprehensive testing of water bodies. The 303(d) list is required under the federal Clean Water Act and lists water bodies that "do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology."²³

We used the Contra Costa Watershed Forum's Watershed Atlas to identify water bodies that correspond to the geographic boundaries of our research area: north of Interstate 580 and west of 23rd Avenue.

Industrial discharges

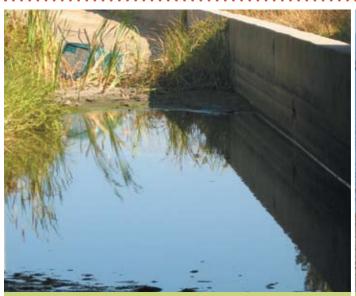
Our data does not set out to provide the complete picture of how many contaminants are getting into West County's water bodies. We do not address the largest source of contamination in the Bay—urban run-off—or each facility's contribution to urban run-off, or the large amount of contaminants that industrial facilities are legally allowed to discharge. Accessing information on industrial discharges is challenging as there is a lack of precise data.

Because it measures direct discharges from facilities, we used the State Water Resource Control Board's California Integrated Water Quality System (CIWQS) to generate reports on National Pollutant Elimination Discharge System (NPDES) permit violations for all local, state, federal, and private facilities in Contra Costa County, 2005 through 2008. In order to comply with the federal Clean Water Act, the Regional Water Quality Control Boards are required to issue NPDES permits to all facilities discharging wastewater. Analyzing permit violations indicates how many facilities are in violation of existing federal and state clean water laws.

Our report focuses exclusively on permit violations, which provides only a partial picture of the extent of industrial contamination, as violations exclude legal discharges. The permits themselves can allow discharge levels that may be undesirable, as limits are based not only on environmental and health effects, but on the costs of implementation to businesses. The list of contaminants regulated may not cover all the contaminants that are a byproduct of industrial processing. Finally, all the data within the CIWQS is based on reports of compliance or violations submitted by the facilities themselves, which raises questions about the objectivity of the data.

A focus on wastewater discharges also overlooks the many other ways industrial facilities can contaminate water bodies. Wastewater discharges are "point source" pollution, which comes directly from one source, such as pipes. However, "nonpoint source pollution," which comes from many, diffuse sources, is a large problem that lacks clear regulation.

Another limitation in our data is the state database itself, as CIWQS has been the subject of significant criticism. In May 2007, an independent panel reviewed the system and found the CIWQS to be "a dysfunctional program on the verge of collapse. There were serious and unresolved concerns about the technical soundness of the underlying database design and its implementation."²⁴



Wildcat Creek at the Richmond Parkway



Keller Beach and the Chevron Pier

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ORGANIZING BRINGS A BREATH OF FRESH AIR

A COMMUNITY SUCCESS STORY

by Carla M. Pérez

Contra Costa County is home to a diverse set of cities, some with stretches of open space and regional park land. Contra Costa is also the second most industrialized county in California, with five oil refineries dotting the west coast of the county, including the largest refinery on the west coast of North America. Refineries are inherently toxic operations: turning crude petroleum into highly refined and lucrative products such as gasoline, jet fuel, diesel, and industrial oils requires highly intensive processing to remove and dispose of tons of toxic contaminants. This toxic waste inevitably ends up in the Bay waters, in the air surrounding refining facilities, and in the lungs of nearby residents.

While refineries contribute to local pollution in myriad ways, one of the largest sources is refinery flaring. West County residents near refineries consistently experience breathing problems, eye irritation, nausea, and asthma attacks after flare events occur at nearby refineries. As a result, in the mid 1980s, Communities for a Better Environment (CBE) began scientific and legal investigations of these flare emissions.

The CBE work investigating flare-related emissions was considerably strengthened in the 1990's when it was coupled with a then-emerging grassroots organizing strategy. Working with local leaders such as Ethel Dotson, Dr. Henry Clark, Barbara Parker, and Mary "Peace" Head, CBE organizers knocked on doors in the neighborhoods closest to the Chevron refinery to ask neighbors about their experiences with health problems and their concerns about flaring events at the refinery. Resident leaders hosted house meetings where neighbors discussed their common experiences and concerns, and CBE staff shared information about the chemicals that were released during flaring episodes, their potential health effects, and the ways that these chemicals, and flaring as a whole, were regulated (or not regulated). Over meals in the homes of their neighbors, concerned residents recognized that one way to reduce the possible health risks from refinery flaring was to demand that the Bay Area Air Quality Management District (Air District) require refineries to do more to prevent flares.

The first breakthrough for this emerging community campaign came in 2001 when the Air District agreed to a community demand to complete a rigorous study of flares and their local impacts. This study found that flare emissions were 200 times higher than the Air District had previously thought. The campaign made another breakthrough the same year, when CBE successfully filed a lawsuit against the Air District forcing the agency to improve their regulation of the refineries. Although this marked a victory for the campaign, CBE members had a new, larger goal: to get the Air District to pass a strong flare control rule.

CBE staff and resident leaders began increasing their organizing efforts and expanded their reach to Rodeo and Crockett, also low-income communities of color in Contra Costa County hosting major

"While this is an incredible victory, equally important was the victory of organizing itself."

refineries. Community leaders attending house meetings each committed to bringing one of their neighbors to the next meeting. The belief that their neighborhoods deserved to be healthy and to be protected from needless risks resonated strongly among families in Richmond neighborhoods like Parchester Village and Liberty Village. CBE, with the help of the Pacific Institute, also held a series of workshops to help residents understand the flare emissions data and the range of potential solutions, such as pollution control equipment and adjustments in refinery operations. In addition, the organization and its members forged a strong and crucial alliance with the International Brotherhood of Electrical Workers, Steamfitters, and Pipefitters Local 302, whose members are contracted to work at refineries and are often on the front lines of risk caused by accidents and routine air pollution emissions at refineries.

It was an exciting time for people who had been looking for a way to address refinery flaring for so long. Members were buzzing with feelings of empowerment and hope. And in the midst of this momentum, the community was reminded why this campaign was so important. In July 2002, a huge flare event took place at the Conoco-Philips refinery in Rodeo, which shares a chain-link fence with a low-income housing project. The incident released nearly 250 tons of pollution in a huge cloud of smoke and fire. Local CBE members immediately reported shortness of breath, skin rashes, nausea, and migraine headaches.

Organized and vocal community members increased pressure on the Air District, paying

visits to Air District board members and giving compelling testimony at Air District board meetings. Finally, in 2003, the first victory for the flare rule was announced when the Air District required refineries to monitor and report on the volume and content of flare gases. Soon after the adoption of this regulation, one refinery cut its flaring by 80-90 percent. After two more years of organizing, on July 20, 2005, the Air District approved a Flare Control Rule that prohibits routine dumping of refinery gases through flaring a first regulation of its kind in the country.

By combining grassroots organizing and leadership development with legal advocacy and scientific research, organized community residents were able to force a 50% reduction in flaring at Bay Area refineries. While this is an incredible victory, equally important was the victory of organizing itself. In the process of building the campaign, organizing their neighbors, building alliances with labor, and taking collective action, community members were empowered with knowledge to build a community network and strengthen their voice and their power as a people.



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FLARING AT THE CHEVRON REFINERY



Chevron Richmond Refinery

nstead of the sun going down, you saw flames going up," recalls Dorothy Lightner when describing the view from her North Richmond home near the Chevron refinery. For years, people like Dorothy Lightner have suffered from air toxins released by local refineries, predominantly in the form of periodic "flares" from smokestacks. "They look like black clouds floating around," she explains. Ms. Lightner lived in Los Angeles for ten years and only developed asthma when she moved back to North Richmond in the mid 1990s. At that time, the number of flaring episodes at the refinery and the amount of pollution being released were not monitored.

In 2003, after intensive community organizing and advocacy, the agency in charge of regulating local air quality, the Bay Area Air Quality Management District (Air District), passed the groundbreaking flare monitoring rule and then later passed a flare reduction rule which requires refineries with significant flaring to develop and follow a plan for reducing flares.¹ For Richmond and North Richmond residents, the flare rules are an important step toward ending ongoing problems with flaring at the Chevron refinery because they create a way to find out the frequency and intensity of refinery flaring.

A flaring event occurs when the refinery does not have a way to store or use unwanted gases built up in the process of refining oil. The gases are released through smokestacks with flares, devices for burning gases as they are released into the air. When gases are lit on fire as they are released, most of the chemicals are combusted into less harmful components (mostly carbon dioxide and water). Although this burning reduces the amount of toxic chemicals in the gas, it never eliminates all of them. These toxic gases can flow into the air along with the black smoke emitted.²

The release of these gaseous pollutants and the particulate matter present in the flare smoke have both immediate, short-term (or acute) impacts on the health of residents, and long-term health impacts as well. The acute health impacts occur when people are exposed to very high levels of these pollutants over a short period of time (a few minutes to a few hours), and include respiratory problems, asthma attacks, and eye, skin, and nose irritation. These physical effects are compounded by the stress that can be experienced by residents during a severe flaring event, which may require emergency "shelter in place" procedures. The long-term impacts, which occur when people are exposed to certain levels of these pollutants over a long period of time (several years) include increased cancer risk, permanent respiratory conditions such as asthma, and, in the case of particulate matter pollution, premature death.³ Health surveys have linked refinery flaring with elevated levels of cancer, lung disease, asthma, and reduced attendance in local elementary schools.⁴

Community organizing around flaring in Richmond has been born from the experience of residents who live next door to Chevron and have suffered eye, skin, and respiratory irritations for years.⁵ An analysis of data from air quality monitors in neighborhoods near the refinery found that measurements of known air quality toxins, particularly sulfur gases, reached record levels on days of flaring at the refinery.⁶

In a 2003 study, hospitalization rates for children with asthma under 15 years old in Richmond and San Pablo zip codes were found to be double the state's rate, and nearly double other areas in Contra Costa County such as Pittsburg/Bay Point, Concord, and Walnut Creek.⁷ The Air District has identified Richmond as a "priority community"



A refinery smokestack flaring

for air quality mitigation measures because of the area's high rates of toxic air contaminants and asthma and other medical conditions, compounded by high rates of poverty.⁸

WHAT DID OUR RESEARCH FIND?

We reviewed flaring event data from the Air District to report the number of days per year when significant flaring occurred at the Chevron refinery from 2004 to 2007. Our research builds on the work that groups such as Communities for a Better Environment, West County Toxics Coalition, and the Laotian Organizing Project of the Asian Pacific Environmental Network have done over the past decade. Largely due to their efforts, the flare monitoring rule was created and data on the daily flaring at refineries can be easily accessed through the Internet. The Indicators Project analyzed data from one of the Bay Area's five refineries, the Richmond Chevron refinery, which operates six of the Bay Area's 23 active flares.⁹

Recognizing that gaseous pollutants emitted above certain levels during flaring events harm human health in nearby communities,¹⁰ the Air District passed a flare reduction rule in 2005, establishing thresholds based on how much total gas is released and how much sulfur

Seventy percent of the flare days between '04 and '07 had flares that released more than double one of the Air District thresholds.

dioxide is released in a 24-hour period. Flaring that emits gases above these threshold levels is considered "significant" and must be reported to the Air District.¹¹ In addition, each refinery must create a plan to reduce flaring after any significant flaring event. The Indicators Project looked at reported instances when the flaring emissions were above the Air District threshold to find out how many days per year the Chevron refinery had significant flaring.

The indicator focuses on the number of days in which significant flaring episodes occurred, rather than looking at monthly or annual averages of the pollutants released during flaring events. Research has indicated that averages

Photo: Joe Gough/Dreamstime.com

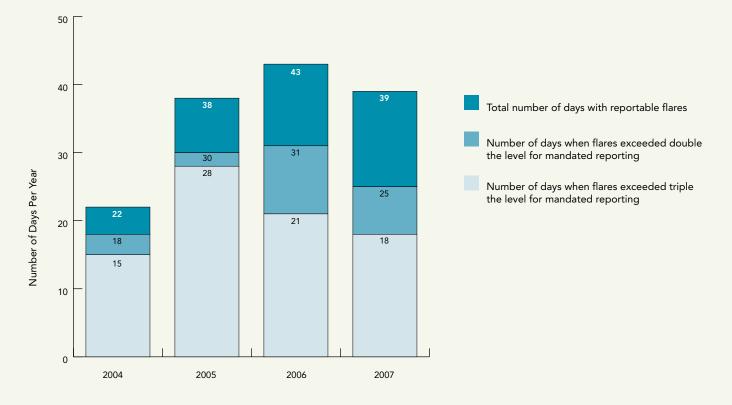
Table 1: NUMBER OF DAYS WITH SIGNIFICANT FLARING, 2004–2007

Flare days are defined as days when total vent flow is above 500,000 standard cubic feet of gases per day, and/or emits more than 500 pounds of sulfur dioxide per day.

Year	Total number of days when flares exceeded air quality thresholds	Number of days when flares more than doubled the thresholds	Number of days when flares more than tripled the thresholds
2004	22	18	15
2005	38	30	28
2006	43	31	21
2007	39	25	18
4 year total	142	104	82

Source: Bay Area Air Quality Management District Flare Data, various dates, available online at http://www.baaqmd.gov/enf/flares/.

Figure 1: NUMBER OF DAYS WITH SIGNIFICANT FLARING, JANUARY 1, 2004 TO DECEMBER 31, 2007



Source: Bay Area Air Quality Management District Flare Data, available online at http://www.baaqmd.gov/enf/flares/.

for flare emissions do not accurately show the impacts on air quality; the most severe problems occur when there is a large flare event.¹² Our indicator focuses on significant flare days as short time periods during which massive quantities of gases are emitted, leading to short-term exposure to contaminants at very high levels.¹³ These "acute" exposures are of particular concern in communities near the Richmond refinery. Our analysis shows an average of three significant flare episodes per month at the Chevron refinery since 2004. Figure 1 and Table 1 show the number of days when episodic flaring exceeded the Air District's established flare thresholds. Further analysis shows that over 70% of the flare days between 2004 and 2007 had flares that released more than double one of the thresholds, and over half had flares with more than triple these levels.

WHAT DOES THIS MEAN FOR WEST COUNTY?

Despite increased regulation, Chevron has not demonstrated an ability to proactively address its flaring occurrences. Flaring continues on a regular basis—and Chevron's flares frequently emit very large amounts of gases at levels the Air District has identified as a threat to public health. This causes recurrent acute exposures that threaten people's health in nearby neighborhoods, disproportionately affecting low-income communities and communities of color.

Theoretically, flares are only supposed to be used in emergency situations or when there are no other feasible options, but the U.S. Office of Inspector General has found that in many refineries, flaring is used routinely.¹⁴ Other research has indicated that most flares are unnecessary and preventable, many of them resulting from outdated technologies and equipment or operational failures.¹⁵ In 2007, Communities for a Better Environment found Chevron could reduce flaring by 65% by implementing measures already being used at another Bay Area refinery.¹⁶

The Chevron refinery is one piece of a national and international system of oil and gas production, and in many ways, the residents of Richmond are subsidizing this system with their health and quality of life. As Chevron prepares to modify its production processes to include dirtier crude to meet a continually growing market for oil use in the U.S., the direct burdens Richmond residents must bear may grow.

WHAT CAN WE DO?

Get to know and use the public information on flares.

Data on refinery flares is at the fingertips of anyone who can access the Internet. Checking the Air District flare rule website (http://www.baaqmd.gov/enf/flares/index. htm) and downloading the data for the refineries affecting your community is an important step in affecting change. Look at the Research Methods section of this chapter for step-by-step directions on how to find and analyze flare data.

There are several operational and policy changes that can be made to better protect the health of Richmond residents from flaring events. The following proposals are drawn from the work of Communities for a Better Environment:

Utilize the full authority of the Air District to compel refineries to adopt measures to prevent flaring.

The Air District flare reduction rule states that all refineries should use "all feasible measures" to prevent and minimize flaring. The Air District should ensure full implementation of this provision, and Chevron should eliminate flaring caused by non-emergency situations. One of the most feasible measures to do this is by installing back-up compressor capacities that are dedicated to recovering flare gases. The Shell Martinez refinery operates such a system, and it is effective.¹⁷

Cap the quality of oil processed at the refinery.

A new policy should establish an enforceable cap on the quality of oil processed by Chevron. Such a cap would reduce the increased rates of flaring documented when Chevron refines lower quality crude oil.¹⁸

Accurately measure the acute impacts of flaring on local communities.

Policymakers often base decisions on flare analyses that are averaged over a long period of time, such as an annual average of flaring. In a July 2008 hearing regarding Chevron's proposed refinery expansion plan, the Richmond City Council accepted such an annual average analysis presented by the refinery. This type of analysis does not consider the acute air quality impacts caused directly by a flare event, and thus does not present the full impacts on community health. Decisions that relied on annual average of flaring should be revisited.



COMMUNITY RESOURCES FOR INFORMATION AND CHANGE

Asian Pacific Environmental Network (APEN)

310 8th Street, Suite 309 Oakland, CA 94607 510.834.8920

www.apen4ej.org

APEN provides support for environmental justice campaigns in Contra Costa County, particularly in the Asian and Asian-American communities, and has been active in the campaign to hold Chevron accountable for its pollution.

Communities for a Better Environment (CBE)

1440 Broadway, Suite 701 Oakland, CA 94612 510.302.0430 www.cbecal.org

CBE works on environmental justice issues in Contra Costa County, providing organizing, legal, and scientific support for community campaigns, and has been active in the campaign to hold Chevron accountable for its pollution.

Refinery Reform Campaign

739 Cortland Ave. San Francisco, CA 94110 415.643.1870 www.refineryreform.org

The Refinery Reform Campaign provides information and resources on campaigns to clean up refineries around the U.S. and background information on refineries.

West County Toxics Coalition

Dr. Henry Clark, Director 510.232.3427 www.westcountytoxicscoalition.org Henryc11@prodigy.net

The West County Toxics Coalition is a community-based organization fighting Chevron pollution and flaring for the past twenty years.

RESEARCH METHODS

The Indicators Project used data from the Bay Area Air Quality Management District (Air District) to analyze flare emissions from the Chevron refinery. The Air District is required to post monthly reports from refineries on the results of flare monitoring. We collected and analyzed data from 2004 to 2007 from the Chevron refinery.

We used the definition of a significant flare that the Air District uses: any 24-hour period when flaring emits over 500,000 total pounds of gases or more than 500 pounds of sulfur dioxide. We also looked at how many of these incidences exceeded two and three times these thresholds: 1,000,000 total pounds and/or 1,000 pounds of sulfur dioxide, and 1,500,000 total pounds and/or 1,500 pounds of sulfur dioxide, respectively.

Flare Data Limitations

The largest limitation in flare data is that gas emissions are not directly measured. An equation, called a combustion efficiency (CE), is used to predict how much of the recorded total vent flow will be destroyed in the flare. However, the CE is not always accurate because it is dependent on a wide variety of factors, such as the size of the vent, the technologies used, wind speeds, etc.¹⁹

Accessing Bay Area Flare Data

1. Go to the website where the Bay Area Air Quality Management District posts the data on refinery flares: http://www.baaqmd.gov/enf/flares/index.htm. (Note that data does not download well when you use Firefox as your Internet browser; Explorer works better.)

2. Decide what refinery and what month and year you want data for. Refineries have different numbers of smokestacks, also called flares, and flare data is available for each smokestack at each refinery. Under the name of the refinery are the names of the smokestacks or "Flare name." Next to each flare name are the months for which flare data is available. The Chevron Richmond refinery has six smokestacks or flares for which data is collected. Their names are listed as: Alky-Poly, Fluidized Catcracker, Low Sulfur Fuel Oil, North Isomax, Richmond Lube Oil Project, and South Isomax.

3. To view the data on a particular flare, click on one of the months to the right of the flare name. The next screen will show a table with rows for each date during that month, the volume of gas released (Vent Gas Flow), and the estimated pounds released of Methane, Nonmethane Hydrocarbon (NMHC), and Sulfur Dioxide. For example:

Date (mo/day/yr)	Vent Gas Flow (volume in scf)	Methane (lbs)	NMHC (lbs)	Sulfur Dioxide (lbs)
2/1/2008	0	0	0	0
2/2/2008	0	0	0	0
2/3/2008	10,278	1.75	13.52	14.16

The screen will also show three graphs, each showing a line representing the volume of gas released by that flare during each day during the month, and a point symbol (a small x, a small square, or a small diamond) that shows the estimated level of each of the three chemicals: Methane, Non-methane Hydrocarbon, and Sulfur Dioxide.

4. To download the flare information for the month you have selected, click on the words "Download this report as a CSV file" near the top of the screen. The file may

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appear in an Explorer window that looks like the window you see when browsing the Internet. To keep the file, you need to click "Save as," give it a name, and choose a folder where you want to save it.

5. To compare flare data from multiple months or multiple smokestacks, you may want to copy the data from a specific month and paste it in an Excel (.xls) file where you are pasting multiple months and multiple smokestacks.

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LIQUOR STORES AND COMMUNITY HEALTH



A liquor store across the street from Nystrom Elementary School in Richmond

n eighth grade Helms Middle School student sets out on his ten-block walk to school. He has an assignment to track what he sees on his walk. A block from his home, he stops at the first store to buy something to drink it is a liquor store. He leaves with a soda. He has barely begun drinking it before he reaches the next liquor store. He decides to buy a soda at every liquor store he passes as an indicator of how prevalent these stores are in his neighborhood. He continues his walk to school. He does not go into a few of the liquor stores because he is nervous about the activity happening in front of them. By the time he gets to school, he has collected six soda cans over just ten blocks.¹

High exposure to liquor stores and the easy availability of alcohol in the community affects this San Pablo eighth grader and the public health, safety, and quality of life of his community. On his walk to school, he may be exposed to public drunkenness, harassment of passers-by, and criminal activities—like gambling, prostitution, and drug dealing—that contribute to an environment of social disorder around many liquor stores. At the community level, these stores can act as magnets for crime and violence and expose residents to potential harm.

A high density of liquor stores can contribute to a variety of health and safety problems. Studies show that neighborhoods with higher concentrations of liquor stores also have higher rates of alcohol-related hospitalizations, drunk driving accidents, and pedestrian injuries.^{2, 3} A recent study across all California zip codes found that neighborhoods with a higher density of liquor stores had higher numbers of childhood accidents, assaults, and child abuse injuries.⁴ Liquor stores become places where social controls are weaker, increasing the likelihood of criminal and nuisance activities.⁵ A high density of liquor stores is linked to higher levels of crime and violence.^{6,7,8} A study conducted in Los Angeles found that each new liquor store in a neighborhood resulted in 3.4 more assaults per year.⁹ In New Jersey, researchers found that the number of liquor stores was the single most important environmental predictor of why some neighborhoods have higher crime rates than others—a stronger predictor than unemployment rate or median household income.¹⁰ Since merchants often use storefronts to advertise alcohol products, the concentration of liquor stores also influences the amount of alcohol advertising in a community. This advertising can have a powerful impact over time, especially when the advertisements are located in areas where youth often congregate or pass by. Exposure to alcohol advertising on television has been related to youth having positive attitudes about the social uses of alcohol.^{11, 12} The influence of this advertisement is especially troubling for youth whose immediate physical and social environments are dominated by liquor stores and alcohol advertisements.

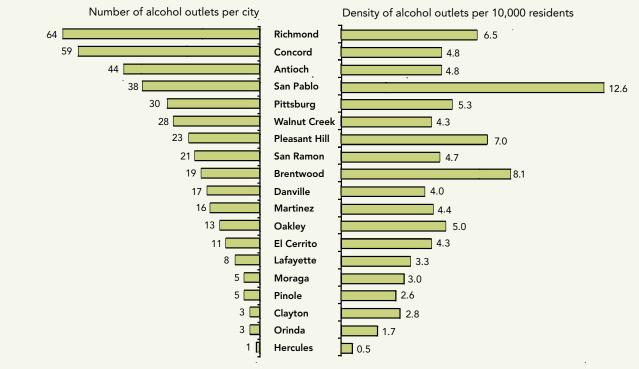
This high concentration of liquor stores and outdoor alcohol advertising disproportionately affects low-income communities of color. Research shows that black people face higher exposure to liquor stores in their neighborhoods than do white people, and similarly nonwhite youth live in neighborhoods with higher concentrations of liquor stores than white youth.^{13, 14} For example, a study found that West Oakland—home to predominantly people of color—contains one liquor store for every 298 residents, while the largely white neighborhood of Piedmont has one liquor store for every 3,000 residents.¹⁵ As a result, communities like West Oakland tend to have far more access to liquor stores and alcohol than to grocery stores and fresh produce.

A high density of liquor stores also contributes to economic and social disintegration.¹⁶ Similar to power plants and refineries, alcohol outlets represent a form of locally unwanted land use that conflicts with desirable land uses such as schools, parks, and residences. The over-concentration of liquor stores increases the perceived lack of safety and limits walkability in the community. Moreover, concentrations of liquor stores in a neighborhood can constrain economic opportunities for current and new businesses and therefore are both a symptom and accelerator of economic decline.

WHAT DID OUR RESEARCH FIND?

We looked at two indicators of youth and resident exposure to liquor stores: 1) liquor store density and 2) proximity of liquor stores to schools or parks. We looked only at alcohol outlets that are not grocery stores and that sell liquor for consumption off the premises. Similar to most of the studies cited above, we did not look at fullservice grocery stores that sell alcohol, as these stores do not present the same types of risks (easy access to liquor, storefront advertising) as liquor stores.

Figure 1. NUMBER AND DENSITY OF ALCOHOL OUTLETS PER CITY, CONTRA COSTA COUNTY, 2006^{17,18}



Total off-site outlets in cities in Contra Costa County: 408

Liquor Store Density

This indicator examines the number of liquor stores in an area in relation to the size of the population that lives there. It allows us to compare the density of liquor stores across Contra Costa communities of varying populations and determine the communities that have the highest concentrations.

Richmond and San Pablo have 25% of Contra Costa County's liquor stores, but less than 14% of its population.

Figure 1 shows the number and density of alcohol outlets within each Contra Costa County city. The cities of Richmond, Concord, Antioch, and San Pablo have the most liquor stores. San Pablo and Richmond neighborhoods—compromised mostly of people of color (84% and 79% respectively)—have 12.6 and 6.5 liquor stores for every 10,000 residents. In contrast, neighboring Orinda and Lafayette—both 16% people of color—have 1.7 and 3.3 liquor stores for every 10,000 residents, respectively. In fact, Richmond and San Pablo are home to a quarter (25%) of Contra Costa County's liquor stores, but represent less than 14% of the county population.

Proximity of Liquor Stores to Schools and Parks

Land-use compatibility is an important component of the well-being and health of communities. Liquor stores in close proximity to schools and parks expose youth to the negative effects of alcohol outlets and advertising. This indicator measures the number of liquor stores within 1,000 feet of a school or park.¹⁹

Figure 2 shows the proximity of liquor stores to schools and parks in West County neighborhoods. Each school and park is encircled by a 1,000-foot radius (or buffer) to determine whether liquor stores are located within short walking distance. Almost 60% of West County schools and parks are within 1,000 feet of a liquor store. In fact, roughly 30% of parks and schools in West County are within 1,000 feet of two or more liquor stores.

Table 1 shows, for each city in Contra Costa County (excluding the cities with zero liquor stores), the number of liquor stores located within 1,000 feet of any park or school, along with the median household income and the percentage of residents of color.

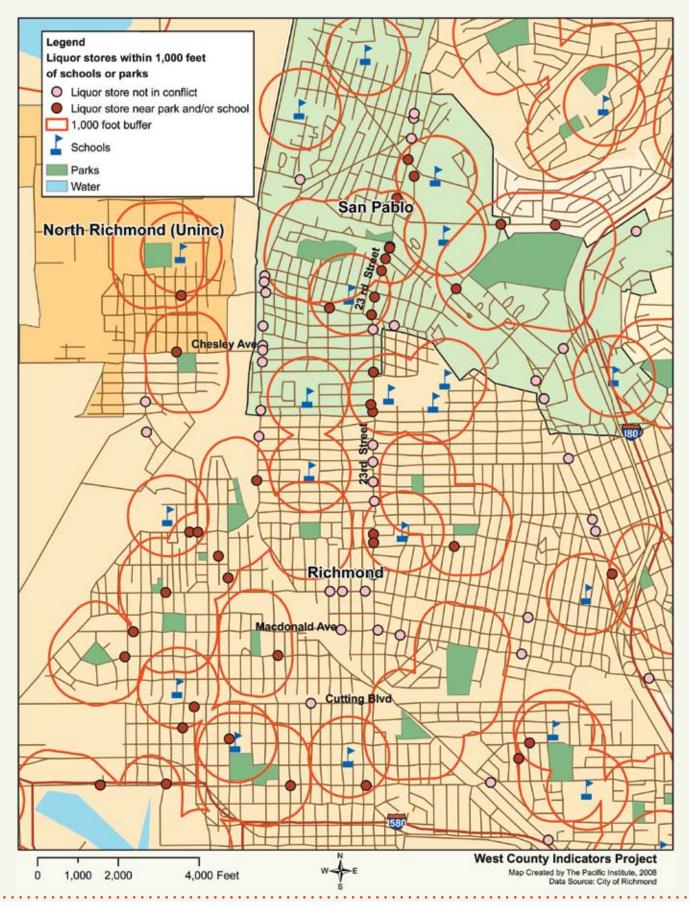
Table 1. CITIES WITH ONE OR MORE LIQUOR STORE WITHIN 1,000 FEET OF ANY PARK OR SCHOOL, CONTRA COSTA COUNTY, 2006

City	Liquor stores within 1,000 ft of a park or school	Total liquor stores in city	Median Household Income (Census 2000)	Percent People of Color (Census 2000)
Moraga	1	5	\$ 98,080	22%
Pinole	2	5	\$ 62,256	52%
San Ramon	2	21	\$ 95,856	28%
Danville	3	17	\$ 114,064	17%
El Cerrito	2	11	\$ 57,253	46%
Lafayette	3	8	\$ 102,107	16%
Pleasant Hill	4	23	\$ 67,489	23%
Brentwood	5	19	\$ 69,198	37%
Walnut Creek	5	28	\$ 63,238	19%
Pittsburg	6	30	\$ 50,557	69%
Antioch	7	44	\$ 60,359	44%
Martinez	8	16	\$ 63,010	24%
San Pablo	14	38	\$ 37,184	84%
Concord	20	59	\$ 55,597	39%
Richmond	25	64	\$ 44,210	79%
Contra Costa County	113	388	\$ 63,675	37%

Note: Cities not listed were found to have zero liquor stores near schools or parks.

Figure 2. PROXIMITY OF LIQUOR STORES TO SCHOOLS OR PARKS IN WEST COUNTY NEIGHBORHOODS, 2006

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WHAT DOES THIS MEAN FOR WEST COUNTY?

When we step back and compare the cities of Richmond and San Pablo to the surrounding county, we find that an unusually high number of schools and parks in these cities are within a short walking distance of a liquor store. The five cities with the highest numbers of liquor stores near parks and schools all have median household income below the county median of \$63,675. It is evident that West County youth have far more liquor stores within their immediate environment compared to the rest of the county. In fact, 39 of the 113 (35%) liquor stores within 1,000 feet of a school or park in Contra Costa County are located within the cities of Richmond and San Pablo—the two cities in Contra Costa County with the highest percentage of nonwhite residents.

WHAT CAN WE DO?

In California, like many others states, the rules on issuing and revoking licenses to sell alcohol are set by the State; however, local governments have authority to regulate land use to protect the health, welfare, and safety of citizens. Many municipalities, including the cities of San Pablo²⁰ and Richmond,²¹ have zoning ordinances in place that restrict the development of new liquor stores by enforcing minimum distance requirements either between outlets or between liquor stores and schools or parks. While these ordinances are successful at preventing the



Students walk home from Peres Elementary School in Richmond.

establishment of new liquor stores, they do not address the health and safety problems associated with existing ones. Below are successful approaches carried out by other cities across the state designed to address existing liquor stores in their communities:

Enforce property maintenance and environmental design guidelines of liquor stores, particularly those in close proximity of schools and parks.

Environmental Prevention in Communities (EPIC) carried out a youth-driven survey of liquor stores in the city of Oakland. The survey assessed the number of outlets that were not in compliance with environmental design guidelines of the city. Results provided evidence for enforcement of design standards, including restrictions on storefront liquor advertising.²²

Assist with conversion of liquor stores to other retail that meets community needs, such as access to healthy food. Because many liquor stores are also independently owned corner stores, they can transition to other forms of retail that are greater assets to the neighborhood. To facilitate this transition, cities and counties could provide redevelopment dollars, credit for repair and loans, and business plan development assistance.²³

Enforce ordinances to restrict nuisance activities around liquor stores.

Both the City of Oakland and the City of San Francisco passed legislation that strengthens local control and holds liquor store owners accountable for addressing nuisance and crime issues connected to their stores, such as litter, loitering and graffiti, assault, and prostitution.²⁴ Liquor store permits are revoked if proof of serious issues is obtained and violations persist.

COMMUNITY RESOURCES FOR INFORMATION AND CHANGE

California Department of Alcohol Beverage Control

www.abc.ca.gov

The Department of Alcohol Beverage Control (ABC) is the state agency responsible for "the protection of the safety, welfare, health, peace, and morals of the people of the State, to eliminate the evils of unlicensed and unlawful manufacture, selling, and disposing of alcoholic beverages, and to promote temperance in the use and consumption of alcoholic beverages... (for) the economic, social, and moral well-being and the safety of the State and of all its people."

City of Richmond City Council Meetings

www.ci.richmond.ca.us/index.asp?NID=29

Meetings are held on the first and third Tuesday of every month at City Hall, 1401 Marina Way South, Richmond CA 94804.

City of Richmond Neighborhood Council Meetings

Richmond Neighborhood Council meetings are typically held monthly in a community center in each

neighborhood. For a particular neighborhood council meeting time and location, visit: www.ci.richmond.ca.us/DocumentView.asp?DID=306.

San Pablo City Council Meetings

www.ci.san-pablo.ca.us/main/citycouncil.htm Meetings are held on the first and third Mondays of each month at 7:00 p.m. in the City Hall Council Chambers located at 13831 San Pablo Avenue.

The Marin Institute

24 Belvedere Street San Rafael, CA 94901 415.456.5692 info@marininstitute.org www.marininstitute.org

The Marin Institute works to protect the public from the impact of the alcohol industry's negative practices. The Institute serves as a resource for solutions to community alcohol problems by helping develop environmental prevention strategies, alcohol policy, and media advocacy. Access to fact sheets, community success stories, and other tools for success are also available through their website.

RESEARCH METHODS

Accessing Liquor Store Data

Information on the locations of businesses with licenses to sell alcohol comes from the California Department of Alcohol Beverage Control (ABC). To access a list of the current alcohol licenses in your city, go to the ABC website: www.abc.ca.gov/datport/SubscrMenu.asp. At this website, you may choose the type of information you would like to view by selecting from a list of reports available. For a list of the alcohol licenses in your city, select the "Query by City and License Type information" ad-hoc report near the bottom of the page. On the next page, you can select your city and the type of alcohol license you are interested in. For our research, we focused on "Active Off-Sale Retail Licenses," or businesses that sell alcohol to be consumed off the business property. If you select Active Off-Sale Retail Licenses, the next page will provide a full list of the businesses in your city with this type of license, including the addresses and owner name. By clicking on the license number of a specific store, you may also view detailed information about that business, including past violations of relevant laws. The laws and penalties related to

alcohol businesses are available on the ABC webpage: www.abc.ca.gov/LawsRulesReg.html.

The information on the density of liquor stores per 10,000 city residents was produced using the alcohol license data from ABC along with Census data on the number of residents per city. To obtain Census data on the total population per city and town in your county, follow the steps described in the Demographics Research Methods section on page 105. To calculate the number of liquor stores per 10,000 residents, use the following formula: number of liquor stores in the city, divided by the city's total population, multiplied by 10,000.

For our research on the number of liquor stores near parks and schools per city, we used the computer mapping software ArcGIS. The ArcGIS buffer analysis tool was used to identify the parks and schools within 1,000 feet of liquor stores. For detailed methods for our analysis with ArcGIS, please contact the Pacific Institute: info@pacinst.org; 510.251.1600.

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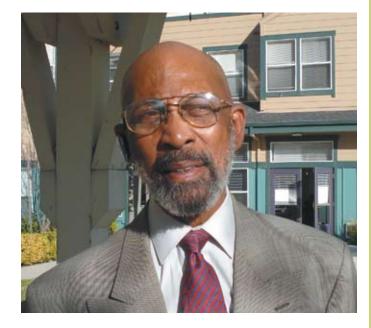
- 1 Story is adapted from a conversation on June 19, 2008, with Antonio Medrano, a retired community college and high school teacher. The original mapping exercise, designed by Medrano, was actually carried out with teachers at Helms Middle School to understand the surrounding environments their students were exposed to on their daily walk to and from school. Helms Middle School is located in the city of San Pablo.
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- 17 Alcohol outlets include liquor stores and other retail outlets that sell liquor for consumption off the premises. This figure excludes full-service grocery stores that sell alcohol.
- 18 Figure 1 only includes Contra Costa County cities; it does not include unincorporated areas or census designated places (CDP) of the county.
- 19 On average, a person will walk 1,000 feet in less than five minutes. This distance was chosen as an estimate of the short distance that students at a school, users of a park, and customers of liquor stores would easily travel.
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REVEREND KENNETH KEITH DAVIS

II ve been here in and out of Richmond and North Richmond for guite a few years since coming originally in the sixties. I've noticed quite a change since coming back into this area. I think we have the most wonderful climate in the world, but I don't think we have the most beautiful air in the world. I wake up in the morning now and the first thing I'm doing is trying to get warm water on my face to wash my face, trying to clear my nasal passages; my eyes are burning. I notice my throat, and I notice the frequency with which I am going back and forth to the medical facilities trying to get something because of how I feel. And there is nothing they can tell me other than it is allergies. Well, there is something wrong.

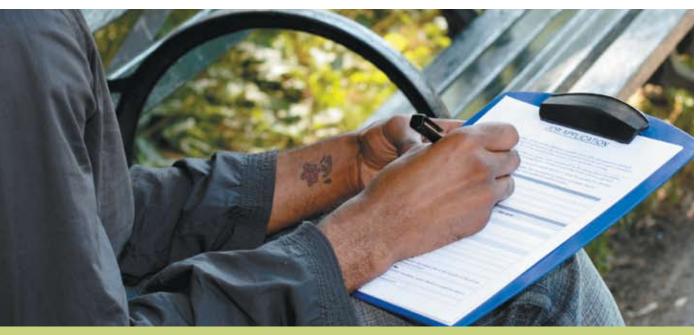
Pollution is a major problem in this area. Pollution is something we're dealing with on a daily basis. And with all the pollution we are subjected to, how can you expect to put more pollution in here? There is no solution with more pollution. If we want to try to arrest some of the situations that are plaguing our community, then we should try to start off with having better air quality for ourselves and not worsening what we already have. When I look out my apartment window, I'm looking at Chevron on a daily basis. Every time I look out the window, I see what looks like smoke, different colored smoke, coming up from those chimneys. I know there is stuff being released in the air. They said there wasn't any harm to us with the stuff blowing right in our faces and our bedrooms and everywhere else, but I know it didn't look good. Now I'm wondering what else is



out there: we've got Chevron, we've got General Chemical, and I don't have any idea what this industry is bringing to us. Every type of industry comes in here. They heap all of these plants on us. They invite industry, they give tax breaks and other types of considerations. Why should my people here in North Richmond suffer?

We have enough difficulty with people that are coughing, gagging, and having all kinds of medical problems. With all the things we're dealing with, now you're talking about routing more trucks, more heavy diesel, trucks and engines, and bringing more pollution. How much more can our children, how much can any of us take? We know that we are in bad shape already. This is a small community we live in. We've taken everything they've thrown on us and look how sick we are. Don't make me suffer. I want to live and my health is not for sale."

EMPLOYMENT OF FORMERLY INCARCERATED RESIDENTS



Finding a job is a challenge for the formerly incarcerated.

hen Richmond resident Ronald Burnham fills out an employment application and sees the question asking if he was previously convicted of a crime, he senses the odds are against him. "When you see that question, you have to say yes; you can't lie. But people don't want to see that," he says. "I just hope that they will give me a chance." Since his release from prison four months ago, he has applied unsuccessfully for jobs in janitorial services, hotels, factories, construction, landscaping, and warehouses. Every application he has filled out has asked about prior convictions. Previously convicted of drug possession for sale, he is now living with his child and girlfriend and is looking for work.

Research confirms Mr. Burnham's suspicion that checking the criminal history box on an application reduces his chances of being hired. A 2003 study found white applicants with a past felony drug conviction were half as likely to be called back for an interview as white applicants with the same work experience and no criminal record. Black applicants with a felony drug conviction were one-third as likely as black applicants with no record.¹ A survey of over 3,000 employers doing entry-level hiring in Atlanta, Detroit, Los Angeles, and Boston found that more than 60% of employers would absolutely or probably not hire someone with a criminal record.²

Finding employment is made more difficult as prisoners are inadequately prepared to successfully rebuild their lives.³ Harsh conditions within California's prison system, including overcrowding, a lack of substance abuse programs, and inadequate health services do little to prepare prisoners to re-enter their communities.⁴ After release, resources remain insufficient.

Whereas most workers unable to find employment can turn to public programs that provide a safety net during economic hardship, many of these programs are off limits to people with a past drug conviction or other criminal records. People with certain past convictions are prohibited from Public Housing and Section 8 programs;⁵ those with drug convictions are not allowed access to food stamps, federal education funding, or Temporary Aid to Needy Families.^{6,7} A 2008 assessment of the needs of parolees and probationers released in San Francisco found that 75% needed substance abuse treatment services, 70% needed education and employment services, 47% needed housing services, and 28% needed mental health services.⁸

The difficulties facing formerly incarcerated individuals end up affecting the communities to which these individuals return. While Californians have attempted to reduce crime by passing propositions that increase policing, punishable offenses, and sentences, they have also created a greater number of people returning to their communities from jail and prison.9 Ninety-five percent of all California prisoners will eventually be released, and 95% of those released are required by the parole system to return to live in the counties where their crime was committed.¹⁰ When they cannot get a job, they are more likely to be arrested again for a crime. Studies have shown a strong relationship between employment and decreases in crime and recidivism.11 Local communities are affected financially as well: California is one of just two states where counties pay for the vast majority of parole programs, rather than receiving state funding.¹² As a result, communities that suffer from high crime rates and thus have higher concentrations of formerly incarcerated residents not only disproportionately bear the burden of addressing the needs of these formerly incarcerated individuals, but if the community is unable to adequately address them, it remains stuck in a cycle of crime.

The effects of this situation are of particular concern in Contra Costa County, where the rate of prison admissions grew 486% between 1970 and 2000.¹³ Since peaking in 2000, the rate has decreased slightly (see Figure 1).

When the issue of formerly incarcerated residents was brought up at West County Indicators Project community meetings, residents expressed three major concerns. They were concerned that 1) formerly incarcerated people are highly concentrated in certain neighborhoods, creating a disproportionate need to address the problem in these areas;¹⁴ 2) services available for formerly incarcerated residents (such as assistance finding housing, obtaining an ID, and applying for employment) were not adequate; and 3) the City of Richmond, Contra Costa County, and the major employers in the area were asking applicants about their court convictions in their hiring process. To address these concerns, our research analyzed public information on these three questions:

- What is the distribution of parolees among the different cities and neighborhoods in Contra Costa County?
- What evidence is there regarding the adequacy of services for formerly incarcerated residents in Richmond?
- Do the City of Richmond, County of Contra Costa, and the top ten employers in Richmond ask applicants on their job application forms whether they have been convicted of a crime?

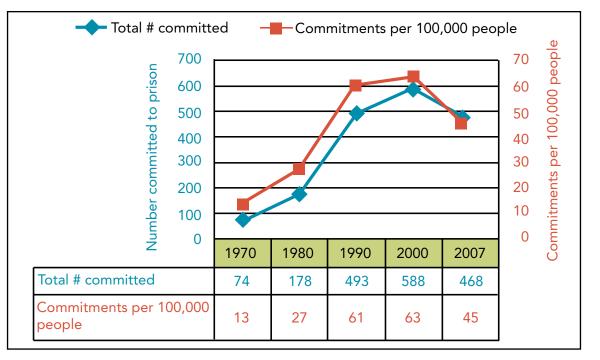


Figure 1. PRISON ADMISSIONS, CONTRA COSTA COUNTY

Source: California Prisoners and Parolees, California Department of Corrections (1980; 1990; 2001; 2007)

WHAT DID OUR RESEARCH FIND?

How are the parolees returning to Contra Costa County distributed among the different cities and neighborhoods?

Figure 2 shows the numbers of parolees per census tract for Contra Costa County. This data is a snapshot of the residents under California Department of Corrections and Rehabilitation supervision on June 1, 2005; it is not a cumulative total for the year. This map does not include people on probation or formerly incarcerated people no longer on parole. This map reveals a high concentration of parolees in West County neighborhoods.

What evidence is there regarding the adequacy of services for formerly incarcerated residents in Richmond?

The Indicators Project was only able to conduct preliminary research into the services available to formerly incarcerated residents in West County. Many service providers do not collect information about the legal Employment applications from Contra Costa County and all of Richmond's top employers, including the City of Richmond, ask applicants whether they have been convicted of a felony.

history of their clients, preventing a calculation of how many formerly incarcerated people are currently being served. A full review of services available to and needed by formerly incarcerated residents would need buy-in from service providers and could follow the lead of the report *Assessing Need for Reentry Services Among Probationers and Parolees in San Francisco.*¹⁵

Anecdotal evidence obtained from visits to the monthly meeting that brings together local service providers and recently released parolees suggested the situation is

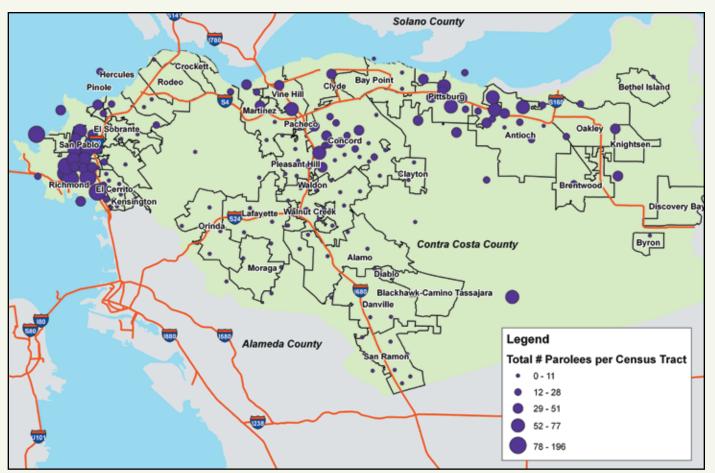


Figure 2. DISTRIBUTION OF PAROLEES IN CONTRA COSTA COUNTY, JUNE, 2005

Data source: CDCR, 2005; Data aggregated by Urban Strategies Council, 2008; Map created by Pacific Institute.

grave.¹⁶ The Parole and Community Team (PACT) is the Department of Corrections' primary means through which parolees are connected to local services. When the Indicators Project visited the PACT meeting for parolees, fewer than half of the planned service providers were present.¹⁷ The Office of Neighborhood Safety (ONS) also reported that when it began attending PACT meetings, the "Community Resource Handbook" for parolees had outdated, incorrect information. The ONS requested revisions of the handbook, which has since been corrected and updated. Do the City of Richmond, County of Contra Costa, and the top ten employers in Richmond ask applicants on their job application forms whether they have been convicted of a crime?

Our research shows that Contra Costa County and all of Richmond's top employers, including the City of Richmond, ask applicants whether they have been convicted of a felony.¹⁸ The top ten employers in Richmond in fiscal year 2006/07 accounted for 15,273, or 29% of the 52,390 jobs in Richmond. Table 1 summarizes our findings.

Employer	Number of employees	Screens for past felony conviction?
City of Richmond	10,152	Yes
Chevron U.S.A., Inc.	2,461	Yes
Permanente Medical Group	786	Yes
WalMart Store #3455	350	Yes
Costco Wholesale #482	278	Yes
California Autism Foundation	250	Yes
Macy's Hilltop	242	Yes
Home Depot #643	209	Yes
Veriflo Division	185	Yes
Sealy Mattress	184	Yes
TPMG Regional Laboratory	176	Yes
Total	15,273	

Table 1: CITY OF RICHMOND EMPLOYERS ROUTINELY SCREENING FOR PAST FELONIES

Sources: Comprehensive Annual Financial Report 2006/07, City of Richmond; Personal communications with employers, June 2008

WHAT DOES THIS MEAN FOR WEST COUNTY?

This research indicates formerly incarcerated people returning to West County communities are encountering not only a lack of coordinated, effective services, but employers who are collecting information on applicants' conviction history. Screening applicants for past felony convictions, even when prior conviction does not interfere with job requirements, often leads directly to applicant rejection. This rejection comes even as some employers have experienced unique benefits to employing formerly incarcerated workers. An employer interviewed in a study of four major cities told an applicant that he "like[d] hiring people who ha[d] just come out of prison because they tend to be more motivated, and are more likely to be hard workers."¹⁹ The California Fair Employment and Housing Act protects employees against discrimination based on race, color, national origin, and ancestry, but no law prevents asking about an applicant's court convictions. Divulging this information offers the employer an opportunity to discriminate against formerly incarcerated persons. In addition to facing discrimination through employment screening, in California, formerly incarcerated individuals with certain convictions can also be legally prevented from obtaining a job in law, real estate, private security, nursing, physical therapy, and education.²⁰

WHAT CAN WE DO?

Further Research

The Indicators Project has conducted initial research that serves as a foundation for more in-depth communitybased research. We offer the following questions or areas of work to consider:

- What are West County employers' experiences and attitudes regarding hiring formerly incarcerated applicants and applicants with past misdemeanors or arrests?
- Which of the companies that are City of Richmond vendors include questions regarding the legal history on their employment applications? How many jobs do these vendor companies account for? This information could help assess the potential impact of the city passing an ordinance requiring vendors to remove such questions from their application (see second item in Policy Solutions section below).
- What are the neighborhood- and block-level incarceration rates in West County? How much public revenue is being spent to imprison residents of highincarceration areas?²¹ This information could help quantify public investment in incarceration and raise the question of whether the money could be better invested in other services.
- What obstacles to employment have formerly incarcerated people in West County experienced and what support do they want? This might entail conducting primary research using tools such as surveys and focus groups to gain a more detailed picture of the community and its needs.²²

The issue of employment for formerly incarcerated people resonated with community groups in West County, and there is ample research that could be done to provide a platform from which to develop a coordinated advocacy effort. By working with community groups to determine the most pressing questions to be answered and the most effective mechanisms to do so, a participatory research process could serve as a way to engage groups on the issue while providing much-needed data to support a community-based campaign.

Policy Solutions

Eliminate the question regarding past conviction history from city and county job applications.

In an attempt to reduce crime and recidivism, cities and counties across the nation, including Boston, Chicago, Minneapolis, San Francisco, Baltimore, and the Counties of Alameda and Multnomah—have all removed the criminal history question on their employment applications.²³ Governments



Employment opportunities can transform lives.

adopting this change typically inquire into an applicant's court convictions later in the hiring process and conduct an analysis of whether the conviction has any relation to the job responsibilities. Similarly, Richmond and Contra Costa can require their personnel departments to shift questions regarding past convictions to a later phase in the hiring process, or eliminate them altogether from jobs with duties that are unaffected by past convictions.

Require city and county vendors to eliminate the question regarding past convictions from their job applications.

Cities like Boston now require the companies that sell products and services to the city to eliminate legal history questions from their employment applications. These efforts highlight a practical step that public institutions and private companies can take to level the employment playing field for all job seekers.

Increase funding to provide missing services for formerly incarcerated residents.

A full study of the services currently provided to formerly incarcerated residents, levels of participation, and the gap between supply and demand would guide the city toward effectively addressing community needs. Funding the needed services identified in the study would set the city on track toward allowing this part of the community to secure healthy lifestyles and fully contribute to the community.

COMMUNITY RESOURCES FOR INFORMATION AND CHANGE

All of Us or None

c/o Legal Services for Prisoners with Children 1540 Market St. Ste. 490 San Francisco, CA 94102 415.255.7036 ext. 337

www.allofusornone.org

A national organizing initiative of prisoners, former prisoners, and felons to combat the many forms of discrimination faced as the result of felony convictions.

California Department of Corrections and Rehabilitation

www.cdcr.ca.gov/Reports_Research/Offender_ Information_Services_Branch/Offender_Information_ Reports.html

Extensive statistics and summaries on California's prison population, including county-level information on a variety of issues.

Justice Policy Institute

1003 K Street, NW Suite 500 Washington, D.C. 20001 202.558.7974

www.justicepolicy.org

A nonprofit organization dedicated to providing research and background information on issues related to prisons, jails, and incarceration.

National Employment Law Project

405 14th Street, Suite 1400 Oakland, CA 94612 510.663.5707 www.nelp.org

A nonprofit organization with an office in Oakland, CA that specializes in the employment rights of people with criminal histories.

Richmond Office of Neighborhood Safety (ONS)

207 37th Street Richmond, CA 94805 510.412.8540

www.ci.richmond.ca.us/index.asp?NID=271

Helps "foster greater community and neighborhood safety for our children, youth, and their families." The office works with service providers and organizations to grow their ability to provide necessary and effective service opportunities for youth, young adults, and families who are high-risk for being involved in gun violence.

Richmond Parole and Community Team (PACT) Meetings

PACT meetings are every first and third Thursday, 10:00-11:30 a.m. at the Veterans Hall on 23rd Street. Members of the public are allowed to sit in during the meetings when Richmonders who were recently released meet to make contact with service providers and community members.

The Sentencing Project

514 Tenth Street, NW, Suite 1000 Washington, D.C. 20004 202.628.0871

www.sentencingproject.org

A national organization that advocates for changes in sentencing policy and provides research and background information on incarceration issues.

U.S. Department of Justice, Office of Justice Programs – Reentry

www.reentry.gov/publications/es.html

Website contains many resources and information on reentry issues and employment specifically.

RESEARCH METHODS

Mapping the Distribution of Parolees

The numbers of parolees per county are reported each year by the California Department of Corrections and Rehabilitation (CDCR) in their annual report, "California Prisoners and Parolees."²⁴ Obtaining information on the census tracts where the parolees within a county live is more difficult because a specific request must be filed with the CDCR. We obtained this data from the Urban Strategies Council, a nonprofit research organization in Oakland, California, that had already requested the data from CDCR.²⁵ It should also be noted that this data does not include any information on county jails, whose populations throughout California have expanded greatly over the past ten years as they are increasingly being used to house the expanding prison population.²⁶ Looking at this data was beyond the scope of the project.

The data table of the number of parolees per census tract was copied to an Excel spreadsheet. The spreadsheet was saved as a .dbf file so that it could be opened as a table in ArcGIS. With ArcGIS, the .dbf file was opened and joined to a boundary file of the census tracts in Contra Costa County. The map presented in this chapter was created using the proportional symbol function.

Employment Application Screening for Court Convictions

We looked at the top ten employers in Richmond, assuming that as the largest employers they would be places where many people apply for jobs. To find the list of the top ten employers, we looked at the City of Richmond's City Annual Financial Report (CAFR). The CAFR is an annual report prepared by the city's Finance Department that contains information on city revenue, spending, top property tax payers, top employers, and other local business and government information. The CAFR is released in July of each year and can be obtained for free at the Finance Department office (1401 S. Marina Way South) or online at http://www.ci.richmond.ca.us/index. asp?NID=1000.

Using the list of top employers, we looked online at each company's website for the standard job application. If the application was not provided online, we called each company to inquire if they ask new applicants whether they have a past felony conviction.

Data Limitations

Our analysis did not look at how many of the employees working for the current top ten employers are actually from Richmond. Many of the companies may not be hiring Richmond residents at all. There is no data available on the most common forms of employment for formerly incarcerated people in Richmond, so we are unable to say whether formerly incarcerated individuals commonly apply to these ten employers. Additionally, our data on who screens for criminal records is based on 2008 data collection, while the figure for overall jobs in Richmond is a number from 2005.



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- 7 Community Legal Services, Inc. (2002). *Every door closed; barriers facing parents with criminal records*. Washington, D.C.: Center for Law and Social Policy, 29, 87.
- 8 Allen, Joan E. (2008). Assessing need for reentry services among probationers and parolees in San Francisco. San Francisco, CA: Safe Communities Reentry Council and San Francisco Reentry Council, 1.
- 9 Some of the less serious crimes that now carry a felony charge are: possession of any amount of a drug besides Marijuana, possession of one or more Vicodin pills without a prescription, petty theft with a prior conviction, graffiti or vandalism causing more than \$400 in damage.
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- 11 See Emsellem and Mukamal, "The New Challenge of Employment in the Era of Criminal Background Checks," in Barnhardt, Annette, Heather Boushey, and Chris Tilly (eds)(2008). *The Gloves Off Economy Workplace Standards at the Bottom of America's Labor Market*, et al., eds. Ithaca, NY: Cornell University Press, 191.
- 12 California Department of Corrections and Rehabilitation. (1980; 2007). California Prisoners and Parolees. Sacramento, CA: State of California, 189; 11.
- 13 California Department of Finance. (2007). Contra Costa County Total Population. Accessed on October 29, 2008 from http:// www.dof.ca.gov/HTML/FS_DATA/profiles/pf_home.php.

- 14 These areas identified by meeting participants included the central and southern neighborhoods of Richmond, as well as North Richmond.
- 15 Allen, Joan E. (2008). Assessing Need for Reentry Services Among Probationers and Parolees in San Francisco. San Francisco, CA: Safe Communities Reentry Council and San Francisco Reentry Council.
- 16 Personal communication, Devone Boggan, Director of the Office of Neighborhood Safety, City of Richmond, May 5, 2008.
- 17 Devone Boggan, Director of the Office of Neighborhood Safety, confirmed that this level of participation by service providers has been typical during his time at the office.
- 18 Our survey question asked employers if they required information on past felonies. We did not find out whether the employers ask about less severe past events like misdemeanors or arrests or infractions, which some employers do.
- 19 Pager, Devah. (2003). The mark of a criminal record. *American Journal of Sociology*, Volume 108 Number 5 (March 2003): 956–57.
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- 22 See for an example the report "Employing Offenders in San Francisco" by the National Economic Development and Law Center. Accessed on October 30, 2008 at http://www.insightcced.org/uploads/publications/wd/Ex-offenders%20Full%20 Report.pdf.
- 23 National Employment Law Project. (2008). Second Chance Labor Project. Accessed on October 24, 2008 from http://www.nelp.org/page/-/SCLP/citypolicies.cfm.htm
- 24 An archive of these reports is available online at http://www.cdcr.ca.gov/Reports_Research/Offender_ Information_Services_Branch/Annual/CalPrisArchive.html.
- 25 Urban Strategies Council is located at 672 13th St., Oakland, CA 94612, online at http://www.urbanstrategies.org, and can be reached by telephone at (510) 893-2404.
- 26 Petteruti, A., and N. Walsh. (2008). Jailing Communities: The Impact of Jail Expansion and Effective Public Safety Strategies. Washington, D.C.: Justice Policy Institute.

UNDOCUMENTED IMMIGRANTS: UNTAPPED POTENTIAL

by Cristina Hernández

Undocumented immigrants, who are we, really? The political debate around immigration reform often insists on turning us into figures that must be reduced to zero at any cost. Nevertheless, we are in stores helping with groceries; we are in shops changing oil; we are in schools organizing fundraisers and parent meetings; and we are campaigning for changes in policy that will benefit everyone in areas such as safety, housing, and healthcare. Oftentimes, we are entrusted with the care of the most vulnerable: the children and the elderly. Undocumented immigrants are hard to tell apart within the immigrant population for we are the links that hold our immigrant familia and our communities together, as stitches of a colorful quilt. Many families have mixed immigration status within their family, such as children who are citizens with undocumented parents.

Studies estimate that one-in-four Californians are immigrants, and that almost 10% of workers in California are undocumented.¹ In Contra Costa County, the U.S. Census Bureau estimates that around 12% of the population of over one million people living in Contra Costa County is foreign born *and* not a U.S. citizen and that 32% of the population speaks a language other than English.² Undocumented immigrants, also known as illegal aliens, are commonly chastised as a heavy burden in our communities. Still many of them hold higher education degrees and possess an entrepreneurial spirit, and all of them have survived the intricate labyrinth of relocation and adaptation by relying on their greatest asset: their resourcefulness.

Challenges of being an undocumented immigrant

In West Contra Costa County, the foreign-born community has increased consistently in recent years. Héctor Jauregui, resident of Richmond for over 20 years and a community leader, has witnessed the transformation. "There have been two major waves of immigrants to the area, first in the mid 90's and more recently in 2000 when many immigrants, especially Latinos, found good housing deals here." According to the U.S. Census Bureau, people of Latin American descent comprised 35.4% of the population in Richmond in 2006.³

"In this area, our immigrant communities are very diverse. Still, we all suffer from the same illness: we ignore our rights or lack the initiative or are afraid to learn them, and we feel powerless as a result. Documented or not, our main obstacle is lack of access to information," states Héctor.

For Carolina García, youth leader in Richmond and a college student, the challenges of the undocumented youth involve not only lack of access to resources, but also lack of faith in a better future. "For those who have migrated, language is the number one barrier. Once you learn the language, the next question is: what is the motivation to stay in school and get a college degree when it would be very difficult to get a job?" For many others, even the idea of having a career is not part of the conversation. Many immigrant families earn very low incomes and have neither assets nor vehicles for asset creation.

In addition to these economic challenges, the immigrant community in Richmond and other parts of West Contra Costa County has faced police actions that can tear families apart. In January 2007, the Immigration and Customs Enforcement Department (ICE) conducted raids in Contra Costa County targeting mainly Latinos in Richmond, sweeping up 119 people, 80% of whom were "encountered in the process," meaning they had no deportation orders.⁴ As a response to the raids and due to intense organizing by the faith community, the Richmond City Council unanimously approved a resolution protesting the raids,⁵ yet within months of the resolution, the city began the controversial practice of setting up police checkpoints.

"We are the links that hold our immigrant familia and our communities together."

At the checkpoints, police stop drivers without cause and check their identification, ostensibly as part of an effort to fight crime in the city. However, these checkpoints create a constant level of anxiety and fear among the immigrant community. According to community members, those who don't carry a license get their vehicle impounded for as many as 30 days and receive a fine between \$1000 and \$2500. Police checkpoints are still common practice in various neighborhoods in the city.

Why shall we all care?

Immigrants are agents of change.

Immigrants—documented and undocumented—can be catalysts of positive change in their communities if considered as equal partners and no longer as outsiders. A fair and functional federal immigration policy is needed, but local strategies are equally important in addressing many of the issues immigrants face.

Strategies like funding and promoting entrepreneurship and wealth building and promoting community membership and civic participation can match the industrious spirit of many immigrants and help them become stronger links in the communities they already support. A recent study released by the Women's Initiative for Self-Employment reports that Latina clients participating in a microenterprise program saw their business equity grow over 3000%.⁶

To address the problems of checkpoints disproportionately affecting immigrant and low-income drivers, some cities have stopped impounding cars driven without a license. Recently, courts ruled that impounding cars on the sole charge of driving without a license is unconstitutional, giving local governments reason to change these practices.⁷ Research into whether checkpoints actually reduce crime rates and where the money from fines levied against undocumented drivers goes would help measure the fairness and effectiveness of the practice.

For the immigrant community, the reality of comprehensive reform may be too distant, but improving their quality of life and developing a stronger voice could be well within reach. West County neighborhoods already benefit and stand to gain even more when we truly embrace the many contributions immigrants make to our communities.



Cristina Hernández is an immigrant and a citizen and is the Cooperative Network Manager for Women's Action for Economic Security (WAGES).

Endnotes

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- 3 U.S. Census Bureau, American Community Survey, 2006.
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RICHMOND'S TAX REVENUE FROM CHEVRON



Playgrounds like this one are maintained with funds from local tax revenue.

treet pavement conditions in Richmond were ranked the worst of all urban areas in the Bay Area by the
 Metropolitan Transportation Commission in 2006.¹ Richmond residents reached the same conclusion: in a
 2007 survey, 72% of the respondents rated the city's street repair services as "poor." ²

Street maintenance, public safety services, sewers, housing and redevelopment, parks, streetlights, and community centers all rely on public revenue collected by the city of Richmond—revenue that is largely generated from taxes and fees on local businesses, property owners,

and residents. With Richmond's public streets in worse

condition than any other urban area in the nine-county

and other considerable needs for improved services and

infrastructure, the city is clearly in need of increased

Bay Area, parks across the city in dilapidated conditions,³

While Chevron benefits from its strategic location, the people, and the infrastructure provided by the City of Richmond, how much it gives back in terms of local revenue has not always been clear. The largest business in Richmond, and an important source of the revenue that funds essential city services and infrastructure, is the Chevron refinery. The Chevron refinery and associated operations are situated on

126.3 million square feet of property, occupying 13.4% of the city's land.⁵ Chevron is the third largest corporation in the country (in terms of revenue),⁶ with revenue of \$210 billion and a profit of \$18.7 billion in 2007.⁷ While Chevron benefits from its strategic location, the people, and the infrastructure provided by the City of Richmond, how much it gives back in terms of local revenue has not always been clear.

public revenue.4

WHAT DID OUR RESEARCH FIND?

The portion of the City of Richmond budget that comes from Chevron's taxes and fees is debated: it has been published that it comprises as much as 33% of the budget, while some residents doubt it is so high.⁸ The purpose of this indicator was to investigate this discrepancy in perception and gather all relevant, publicly available data to determine how much Chevron actually contributes to the City of Richmond.

Based on publicly available information, Chevron paid \$25,066,925 to the City of Richmond in 2007 through all significant taxes and fees, which amounted to about 10% the city's total annual revenue (\$246,872,000 in 2007).⁹ Like many large corporations, Chevron also contributes to the community through charitable donations; however, our research shows Chevron's charitable donations are minimal when compared with their tax payments, and ultimately public revenue. Chevron initiated a court case in 2007 challenging the property taxes that benefit the City of Richmond and Contra Costa County. If Chevron is successful, Richmond is expected to lose \$4.7 million, among other fiscal effects. (See sidebar on Chevron charitable contributions.)

Chevron paid \$25 million in taxes and fees to the city of Richmond in 2007, about 10% of the city's total revenue.

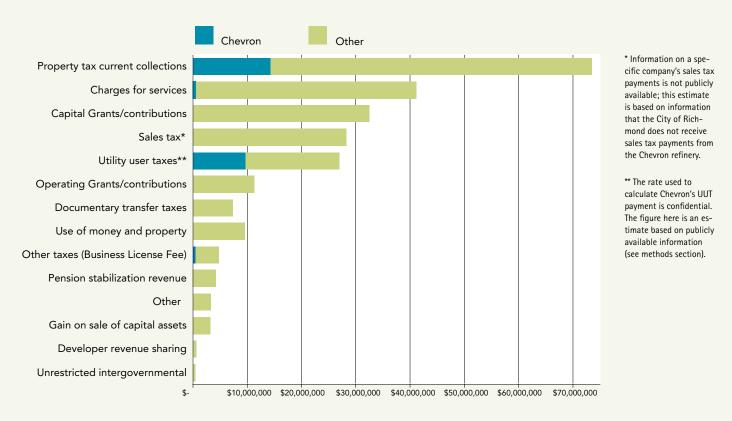
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Below is a summary of the taxes and fees that make up Chevron's contributions to local public revenue. For a more detailed description of the taxes, including who has to pay which ones and where the revenue goes, read the full report online at http://www.pacinst.org/reports/ tax_revenue_chevron.

Property Tax

The total the City of Richmond received in property tax revenue in fiscal year 2006/07 was \$73.5 million.¹⁰ Chevron contributed \$14.3 million, about 20% of the total property tax revenue received by the city that year.¹¹ The total value of Chevron's property is assessed at \$3,391 million, which amounts to 34% of the net value of all property in Richmond.¹²





Sewer and Storm Drain Fee (Charges for Services)

The storm and sewer drain fee, while part of a category of city revenue known as "Charges for Services" that includes other sources of revenue, is the only fee from this category that applies to Chevron. Last year, city revenue from "Charges for Services" was \$41.1 million. Chevron contributed \$587,967—about 1.45% of the revenue from Charges for Services.¹³

Sales Tax

All businesses with sales in Richmond must pay 8.75% of the gross receipts of their qualifying sales transactions.¹⁴ Sales tax does not apply to transactions involving a buyer who is going to resell the purchased item.¹⁵ As a result, Chevron is only required to pay sales tax on the sales it makes at retail outlets (gas stations) in Richmond—not on the sales of what is produced at the refinery.¹⁶ The total sales tax revenue received by the City of Richmond last fiscal year was \$28.2 million. The amount Chevron contributed is not publicly available. Even if it were available, it does not speak to our research interest, which is tax revenue associated with refinery operations.

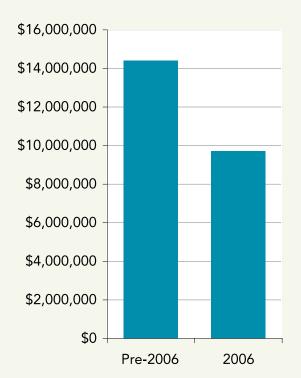
Utility Users Tax (UUT)

This tax on every utility (water, electricity, gas, telephone) user is imposed at the rate of 8% of the costs of utilities.¹⁷ Chevron however, has historically negotiated its own UUT rate; for 20 years (from 1986 to 2006), the city allowed Chevron to pay a flat rate of \$1.2 million monthly, amounting to \$14.4 million annually.

In 2006, Chevron decided to start using the 8% tax rate all other utility users have to use; however, the company has stated that it cannot publicly release information about its utility usage; therefore the public, and even city officials, have had to rely on Chevron itself to calculate how much 8% of utility costs amounts to.¹⁸

According to a September 2006 article in the *Contra Costa Times*, the change in Chevron's method of calculating their UUT reduced the first month's payment from \$1.2 million to \$810,000—a reduction of \$390,000.¹⁹

Figure 2. ESTIMATED ANNUAL CHEVRON UTILITY USERS TAX PAYMENTS



If one uses this information, the yearly total revenue from Chevron's UUT payments would be \$9.72 million, \$4.68 million less than it has paid each year for two decades.

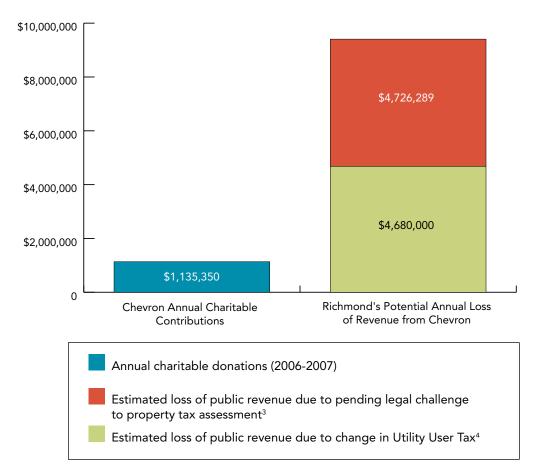
Other Taxes

Every person engaged in the manufacturing, wholesaling, or retailing business, or providing any service to the public, has to pay an annual business license fee. Total Richmond revenue categorized as "Other Taxes," which includes the business license fee, was \$4.7 million last fiscal year. Chevron's 2006/07 payment in the Other Taxes category amounted to \$420,000—about 9.71% of all the Other Taxes revenue.²⁰ About a quarter of Chevron's contributions to Other Taxes comes from the business license fee, which, based on public records stating the number of employees as 2,461,²¹ would have been \$99,088.

CHARITABLE DONATIONS AND LOSSES IN RICHMOND'S REVENUE

Chevron reported giving \$1.25 million to service providers in Richmond and Contra Costa County during 2006¹ and \$1.02 million in 2007.² Contrasting the company's local charitable donations with the money it has already removed and is attempting to remove from public revenue presents a contradiction, however, in Chevron's stated goals of being "committed to contributing to the social and economic development of the Richmond community."

CHEVRON'S ANNUAL CHARITABLE DONATIONS VS. ESTIMATED ANNUAL LOSS IN PUBLIC REVENUE FROM CHEVRON TAX/FEE PAYMENT REDUCTIONS



During a two-year period when the company donated an annual average of \$1.1 million in charitable donations for service providers, Chevron also took action in court to reduce property tax payments to Richmond and changed its UUT payment formula, potentially reducing its annual contributions to city revenue by an estimated \$9.4 million. It is also important to note that Chevron does not have a nonprofit foundation through which it makes donations in Richmond. Therefore, it is not required to publicly release complete information regarding how much and to whom money is donated.

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4 Geulardi, John. (2006, September 8). Utility Tax Recalculation Costs City. Contra Costa Times. Accessed on April 21, 2008 from http://www.gaylemclaughlin.net/press-2006.htm.

WHAT DOES THIS MEAN FOR RICHMOND RESIDENTS?

A lack of public revenue can prevent the adequate maintenance and expansion of public infrastructure and services. Addressing many of the health and environmental justice issues documented in this report will require healthy public revenue. Further, without the means to pay for alternatives to many of these services, low-income residents are particularly impacted when public revenue falls short and services and infrastructure fall into disrepair. Forty-four percent of Richmond residents are considered low, very low, or extremely low income.

Industries like the Chevron refinery offer both a benefit and a cost to the cities in which they are located. The benefits can include the generation of local and regional jobs, charitable contributions, and local and county tax revenue. The costs can include environmental and community impacts on local residents and other businesses, including:

• Lost work time, reduced quality of life, and experiences of stress and fear for local residents when accidental releases of air pollution trigger an emergency warning system, requiring residents and workers to stay indoors, and at times to seal windows and doors;

- Long-term, chronic exposure to pollutants that are routinely emitted from refineries;
- Diesel pollution, traffic congestion, and increased risk of hazardous accidents from the ships, trains, and trucks that bring liquid petroleum to the refinery and move finished oil products from the refinery.

Because many of these risks are physically specific to the refinery operation itself, while the benefits, such as jobs and tax revenue, may be dispersed throughout a wider geographic area, industrial operations can concentrate risks in a local area, without offering a proportional set of benefits in that area. For a city or community to evaluate these benefits and risks, local residents must have an accurate assessment of what those local benefits are.²²

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WHAT CAN WE DO?

Increase transparency and reporting.

The costs and benefits of industries cannot be fully assessed without public access to accurate and timely information. When communities have to rely on information that is self-reported by a company, suspicion and mistrust are inevitable. Regular and reliable access for City of Richmond staff to record Chevron's utility use, along with the public reporting of this information by the city, would help give the community a transparent look at Chevron's contributions to public revenue.

Adopt resident-driven ballot initiatives.

Concerned Richmond citizens gathered 5,300 signatures in support of a November 2008 ballot initiative, Measure T or "A Fair Share for Richmond." The measure designed to change the city's business license fee structure requiring large manufacturers to pay a rate based on the volume of raw materials they process—was passed in the November election. It is expected to increase revenue from the business license fee on large manufacturers by \$26 million annually.²³ For more information, contact the Richmond Progressive Alliance, listed below.

Pursue other solutions.

Other solutions may include impact mitigation fees paid by developers and conducting fiscal impact studies of new policies and projects. Information on how these tools have been used by Bay Area communities is available in the report, "Building a Better Bay Area: Community Benefit Tools and Case Studies to Achieve Responsible Development" by the East Bay Alliance for a Sustainable Economy (www.workingeastbay.org).²⁴ Additional ideas may arise from community leaders working to improve the wide range of issues that depend on solid city revenue.

COMMUNITY RESOURCES FOR INFORMATION AND CHANGE

Richmond Progressive Alliance

The Richmond Progressive Alliance is an alliance of progressive Democrats, Greens, and Independents coming together in progressive unity for a better Richmond. Meetings are public and held monthly. For more information, visit www.richmondprogressivealliance.net or contact info@richmondprogressivealliance.net, or call 510.595.4661.

Get to Know Your City's Financial Records

One of the main sources for information on your city's financial situation is the City Annual Financial Report (CAFR). The CAFR reports how much revenue is coming from each different type of tax and how much revenue is

being spent by all the different departments. The CAFR can be found on the City of Richmond website: www.ci.richmond.ca.us.

Attend City Council Meetings

The Richmond City Council meets the first and third Tuesday of every month at 7:00 p.m. at City Hall, 1401 Marina Way South. The meetings are open to the public and often include a time for public comment. The budget is negotiated every year in May-June, with a mid-year budget review in February. You can also watch video recordings of City Council and other city government meetings by going to the website: http://richmond. granicus.com/ViewPublisher.php?view_id=10.

RESEARCH METHODS

This research began by identifying what taxes and fees apply to businesses located in Richmond and generate revenue for the city. The Comprehensive Annual Financial Report (CAFR) for the City of Richmond produced and released after June 30th each year by the City's Finance Department—includes information on the income to the general fund and overall city budget, the spending of each city department, and the top employers in the city, the number of city employees by department, and other useful information.

The second phase of the research was to identify all types of taxes and fees that Chevron is required to pay that



A Richmond park maintained with public revenue

generate revenue at the city level. Much of this public data was obtained by meeting with the Richmond Finance Department. While the department can legally share some information, it is not permitted to release information about sales tax payments by individual businesses, nor Utility Users Tax (UUT) fees paid by Chevron. The Finance Department did confirm that the sales tax that applies to Chevron is limited to their retail gasoline sales.

Chevron's UUT payment was estimated using a publicly available figure released by the company to the *Contra Costa Times*. The figure reported the lost revenue in the month following the change in how Chevron's UUT charges would be calculated. The Indicators Project estimated a figure for annual loss (in "Chevron's Charitable Donations" box), limited by the assumption that the first month was a predictor of average monthly loss.

The analysis of Chevron's business license fee used the formula the municipal code before Measure T required all Richmond businesses to use to calculate their license fee. The business license fee is \$234.10 plus \$46.80 per employee for the first 25 employees and \$40.10 per employee in excess of 25 employees.²⁵ The number of Chevron employees was taken from the 2007 CAFR "Principal Employers" appendix on page 160. Information on Chevron's payments in the Other Taxes category comes from the Richmond Finance Department.

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- 3 See "City Park Conditions" chapter on page 84.
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Upkeep of Richmond streets like this one rely on local tax revenue funds.

BENNIE LOIS CLARK-SINGLETON

When I grew up in Richmond we could walk down the streets without fear. There was nothing to be afraid of except your parents getting you if you did something wrong. In the early days there was lots of undeveloped land. Many of the new arrivals were from the south, so Richmond was really a country town.

The first week my family arrived in Richmond, we all slept in the same room. There was no place to live because there were so many new people. Somehow my father acquired a trailer in North Richmond and we lived there until we moved to the Harbor Gate housing project. Harbor Gate was built during the war where Marina Bay is now. Once the war was over, the Housing Authority tore the projects down and people had to find places to live again. Some moved to surrounding areas, some moved back to the south, but many remained in Richmond.

After I married my husband, I wanted to purchase a house in Richmond but ran into problems. White-only covenants restricted us to certain areas. Where were black people to live? We could live in South Richmond or North Richmond, and then they built Parchester Village for us. Primarily we could live in the areas where we lived when we were in the projects, and the white people had everything else.

I said, 'Let me get out of this prejudiced town,' and my husband, my children, and I moved to Los Angeles. I found Los Angeles to be worse than Richmond in its segregation, but we stayed there almost 10 years. Then we moved back to Richmond.

When we came back, things had really changed. I noticed people not working, kids not in school and standing on corners. There were lots of one-



parent families. The morals had changed and I don't know why. Even the churches changed, with fewer people attending them.

The Richmond that we have today is so different from when I was a girl. Today people appear to be afraid of each other and don't speak to each other as they pass on the streets. People are afraid to walk down the streets and sometimes afraid to drive down certain streets. It is as though the family has just disappeared. In the old family, if I was seen doing something wrong, anyone knowing me could tell my parents. I would suffer the consequences of my actions. Now people just don't want to get involved.

Things are starting to change. I remember during the sixties when the youth took over this country and President Kennedy was elected. It seems that as we become adults we forget how we are supposed to treat each other. Then the youth come along and say, 'Hey, that is not right.' I like that; I really like that. Now the youth are at it again. I felt this movement with President Kennedy and I now feel it with Obama today."

PARTICIPATORY RESEARCH

The West County Indicators Project is rooted in principles of participatory research, in which impacted residents—rather than being the subjects of research—define and complete their own research projects to support community action. When impacted residents take charge of planning research, gathering and analyzing evidence, and sharing their findings, they are empowered to bring about considerable change in their everyday lives and collective circumstance.

A participatory research process can support many aspects of community organizing and advocacy campaigns, including:

- Identifying a common challenge (or building a shared vision)
- Investigating the root causes of that challenge
- Developing solutions to the challenge
- Building relationships with similarly affected individuals and allied organizations
- Delivering powerful, effective, and persuasive messages to convince others that a particular solution should be implemented

• Measuring whether the solution is in fact being implemented and whether it is effective

The benefits of participatory research are not limited to community organizing or advocacy campaigns. Service providers, educators, those who work with youth or in job training programs, counselors, and others who seek to improve community conditions by working with one individual at a time may find both the process and outcomes of a community-based research project useful. For example, such a project can help:

- Establish the need for particular services in a given community
- Identify strategies that are the most effective in bringing about changes in knowledge, attitudes, or action in individuals
- Build confidence and agency in those individuals participating in the research project

The following three chapters on city park conditions, streetlights, and youth programs are the result of participatory research by community-based organizations in the West County Indicators Project.



Members of the park survey team document Richmond's city park conditions.

Examples of Useful **Examples of West County** Phases in Organizing Participatory Research Tools **Indicators Project Research** Door-to-door survey to discover Park Conditions Survey Identify a common problem problems residents have in NHNR youth documented common conditions of city park facilities. In-depth interviews to find out Describe the problem what people care about most Survey of neighborhood conditions to document what is Recognize patterns in or is not working experiences with a problem Survey the quality and/or Youth Programs Survey Develop solutions quantity of programs that CCISCO contacted every youth address the problem program provider and gathered Investigate what policies or info on how many youth they **Develop strategies** actions have been successful in serve and how they involve youth other communities in designing programs. **Build support** Present research findings to members, residents, decision makers, and media Document or evaluate the Take action, implement actions as they are happening strategies Celebrate victory Gather information on how **Street Lights Survey** funding for the solution is being CCISCO members went door used to door in the neighborhood Evaluate outcomes and revise Conduct "after" survey to where PG&E had upgraded strategies document how issue has streetlights to document changed resident perceptions of the impact on safety. Monitor implementation of solutions

Diagram 1. COMMUNITY ORGANIZING AND PARTICIPATORY RESEARCH

CITY PARK CONDITIONS



A broken bench found during the Richmond Park Survey

arcus Jenkins,¹ now 16 years old, remembers going to Lucas Park across the street from his house when park staff would open the recreation center and hand out balls and sports equipment and lead him, his cousin, and other neighborhood children in activities like tennis tournaments. "We used to go there all the time," he recalls. "The pavement was smooth, and now it's all cracked and broken. You can't do anything on it anymore." The recreation center now sits abandoned, play structures have been taken out, the bathrooms are never open and the water fountains do not work, and Marcus has not used the park in years.

The condition and accessibility of parks impact whether and how often people use them. Although Richmond is home to more than 50 parks throughout the city, the actual acreage of the parks is about half what the National Parks and Recreation Association (NPRA) recommends for a city of Richmond's size. Richmond has 2.6 acres of neighborhood and community parks per 1,000 residents, while the NPRA recommends five acres of parkland per 1,000 residents.² According to the 2006 City of Richmond Citizen Survey, three-fourths (76%) of residents had visited a park in Richmond in the last year.³ Nearly twothirds (65%) of residents said improving park conditions was essential or very important.⁴

Parks become the primary resource for physical activity in a community like West County. Residents of low-income

neighborhoods often rely on parks and other public recreation amenities as places to exercise because they cannot afford gym memberships and lack safe streets and large backyards where they can be active.⁵ Recreational opportunities for low-income residents should be close to home, since they often have less time for physical activity due to multiple jobs or caretaking responsibilities.⁶ In the face of pressing survival concerns as well as serious time and resource constraints, physical activity often becomes a lower priority—especially if places to exercise are not easy to access. Overall, parks have a critical role in fostering physical activity in low-income communities of color.^{7,8}

Residents most in need of public recreational opportunities often have the least access to parks. Research suggests that low-income neighborhoods have fewer and lower quality

84

parks than more affluent areas.⁹ The quality of parks and the perceived safety of the surrounding neighborhood both shape how physically active residents are.¹⁰ A 2006 study found that neighborhoods with concentrated health problems tend to have parks that lack facilities for physical exercise, contain visible litter or graffiti, and are located next to vacant lots, boarded-up buildings, industrial sites, or multi-lane roads.¹¹ Park quality, even more than the size or proximity of a park, is associated with park use by children and parents.¹² Parents in another study identified amenities such as the presence of shade, cleanliness of park grounds and restroom facilities, and availability of play structures as key factors shaping their choices about where they take their children to play.¹³

Access to clean, safe, and well-maintained park facilities is critical to improving residents' health and quality of life by promoting physical activity.¹⁴ Active living during childhood and adolescence can lower the risk of developing chronic health conditions like diabetes and high blood pressure as an adult.¹⁵ Residents in communities like West County are at higher risk for chronic illnesses like obesity and diabetes in part because they have less access to opportunities for physical activity.¹⁶ Over one-



A sign in a Richmond park

third of Contra Costa County children of low-income families, ages 2-5 years, are either at risk of being or already are overweight. In addition, African-American and Latino children in the county, ages 5-19, are more likely to be overweight or obese than white and Asian children.¹⁷

RESEARCH DESIGN

During Indicators Project community forums, West County residents raised the need for improving city park conditions, stating, "Kids don't have a place to play. We need cleaner and safer parks, meaning more security, trash bins, and clean bathrooms." Other problems, such as parks being near train tracks, the presence of alcohol and drug use, and broken glass were also identified. Positive visions, such as parks with community gardens "where we can grow our own food" were brought forward. When the Indicators Project began to examine these issues, we found that information on the state of parks was not being collected, so we set out to collect primary data to assess park conditions.

The Neighborhood House of North Richmond (NHNR) volunteered to lead a community survey to produce data on the conditions of city parks. NHNR had already formed the West County HEAL (Healthy Eating, Active Living) Collaborative–a project focused on changing policy to encourage healthy and active lifestyles in local communities. The HEAL Collaborative wanted to survey the physical conditions of the 52 parks in Richmond, North Richmond, and San Pablo to collect information they could use to advocate for improvements, and to create new community leadership by engaging local youth in designing and conducting the survey.

In summer 2008, the Pacific Institute partnered with the HEAL Collaborative to design the parks survey and train local youth to conduct it. Through the 2008 Richmond YouthWORKS summer youth employment program, 13 youth were recruited to design and conduct the survey in July and August. At workshops co-facilitated by HEAL and Pacific Institute staff, the youth used their own visions and reasons for healthy parks to prioritize the information the survey would collect, deciding on specific park qualities to measure, adapting questions from university-led park studies, and developing new survey questions.

The survey was observational: survey teams visited parks and filled out information based on what they saw there. A survey was completed for each of the 52 parks in Richmond, North Richmond, and San Pablo by teams of two youth and one adult visiting each park during daytime hours over the course of one week in July. Each team also carried a disposable camera, and each youth surveyor took one photo of something in the park he or she liked and another photo of something he or she would like to change. The results from the survey were compiled by Pacific Institute and HEAL staff, and the youth team analyzed the results and photos in data analysis meetings.

WHAT DID OUR RESEARCH FIND?

The park survey included 97 multiple-choice questions that asked surveyors to measure the availability and quality of park facilities, aesthetics, accessibility, and safety. Due to limited space, we report here on a selection of the findings, highlighting the results that were most striking or demonstrated problems identified in community meetings. [For a copy of the survey tool, contact the Pacific Institute at 510.251.1600 or info@ pacinst.org.]

The majority of parks surveyed (36 out of 52) had grassy fields, but 21 had dead grass, 15 had lots of weeds, 13 were not mowed, and seven had patches of dirt. Out of 15 basketball courts found, two were in "well-maintained or decent shape." Only three parks had soccer goals set up, none of which were in parks west of 23rd street. Of 23 water fountains at 18 parks, only two were in "wellmaintained or decent shape."

Of the parks that cover one acre or more in area, there were 22 with more than 20 trees, ten with 6-10 trees, two with 1-5 trees, and two with no trees. Of the 42 parks with benches, 16 had well-maintained benches.

Park feature	Number of parks (out of total 52) containing the feature
Grass fields	36
Basketball courts	15
Soccer goals	3
Established soccer fields	0
Park benches	42
Public restroom	12
Water fountains	18
Crosswalks marked on adjacent streets	22
Bike racks	11
Murals	2
Parking for the disabled	8
Ramps at park entrances	27
Signs in language other than English	5
Litter or visible garbage	31
Visible graffiti	29

Table 1. NUMBERS OF KEY FEATURES PER PARK

By race, the disparity is even more pronounced: the neighborhoods with the worse park conditions are 86% people of color, while those with better parks are only 69% people of color.

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Of the 12 restrooms found, four were well maintained. Thirty-one parks had litter or visible garbage: mostly paper, broken glass, cigarette butts, and food wrappers. A few parks had clothes, drug paraphernalia, and condoms. Some of this litter was also present in the children's play and sandbox areas.

The final question of our survey asked the two surveyors observing each park their perception of the park's safety. Fourteen parks were considered safe, meeting the criteria that the youth surveyors "would come here alone, even at night." Twenty-six parks were mostly safe, meaning the surveyors "would come here most of the time in most situations." Ten parks were somewhat safe, as the surveyors "would think about how to stay safe if you decided to come here." Two parks, the North Richmond Baseball Field and Point Richmond Civic Park, were considered "not safe at all."

Table 2 lists the Richmond, North Richmond, and San Pablo neighborhoods that have one or more parks. For each neighborhood, we report the number of park features our survey found to be missing or in need of repair, as well as the median household income, percent people of color, and percent people under age 18. When neighborhoods are compared based on frequency of bad park conditions, patterns of income and race emerge that confirm residents' perception of inequitable park conditions. The median household income of areas with worse-than-average park conditions (more than 7.3 bad park conditions per park) is \$40,912, while the average income of the areas with better-than-average park conditions (fewer than 7.3 bad park conditions per park) was \$48,533. By race, the disparity is even more pronounced: the neighborhoods with the worse park conditions are 86% people of color, while those with better parks are only 69% people of color. Neighborhoods with worse park conditions also had a higher percentage of people under age 18 (30%) than neighborhoods with better park conditions (24%).

Table 2. NEIGHBORHOOD PARK CONDITIONS COMPARISON

Neighborhood*	Median Household Income	Percent People of Color	Percent People Under Age 18	Number of Parks	Bad Conditions per Park**
Country Club Vista	\$ 48,660	73%	20%	2	3
Parchester Village	\$ 28,974	84%	20%	1	4
Shields-Reid	\$ 23,313	98%	38%	1	4
Marina Bay	\$ 74,798	52%	12%	6	4.3
Richmond Annex	\$ 47,530	51%	17%	2	4.5
El Sobrante Hills	\$ 79,914	53%	23%	1	5
North Richmond	\$ 24,131	95%	35%	1	5
Park View	\$ 30,750	95%	35%	2	5
Point Richmond	\$ 73,125	16%	9%	3	5
Metro Richmore Village	\$ 39,955	89%	33%	1	6
Southwest Annex	\$ 33,250	75%	24%	1	6
Atchison Village	\$ 29,107	80%	32%	1	7
Greenbriar	\$ 79,914	53%	23%	1	7
Hilltop Green	\$ 57,012	64%	25%	1	7
East Richmond	\$ 57,563	52%	21%	4	7
May Valley	\$ 60,348	47%	24%	2	8
Belding Woods	\$ 36,100	91%	35%	1	9
Coronado	\$ 32,978	93%	28%	1	9
Hilltop Bayview	\$ 46,766	71%	16%	1	9
Santa Fe	\$ 28,768	97%	38%	1	9
San Pablo	\$ 37,184	84%	32%	2	9
Fairmede/Hilltop	\$ 50,443	87%	26%	2	9.5
North & East	\$ 45,147	76%	27%	5	10
Park Plaza	\$ 40,295	98%	29%	1	11
Cortez/Stege	\$ 26,373	98%	37%	2	11
Laurel Park	\$ 60,536	96%	30%	2	11
Iron Triangle	\$ 26,011	97%	36%	4	12
				TOTAL: 52	AVERAGE: 7.3

Note: This analysis applies the same expectations to all parks while some standards set different criteria for different types of parks.

Demographic data source: Census 2000.

* Neighborhoods without parks are excluded from this list, including Carriage Hills North, Carriage Hills South, City Center, Countryside, Eastshore, Forest Park, Greenridge Heights, Hasford Heights, Hilltop Village, Panhandle Annex, Point San Pablo, and Pullman.

**A "bad condition" includes the absence of a key park feature (including restrooms, ramps for the disabled, crosswalks, bike racks); the disrepair of a park feature (including benches, barbeque pits, picnic tables, water fountains, walking or bicycle paths, shelter, lights, trash cans, slides, monkey bars, sandbox, playgrounds, fields, goals, basketball, or tennis courts); or the presence of a unwanted condition (including graffiti, trash "all over the place," or broken glass).

WHAT DOES THIS MEAN FOR WEST COUNTY?

The youth survey team, along with Neighborhood House and Pacific Institute staff, analyzed the survey findings and discussed their significance for neighborhood park users, active living and healthy lifestyles, and the city's park upkeep. Our comparison of the number of bad park conditions per neighborhood confirmed what survey teams noted anecdotally. Survey team member Leroy Merced commented, "What bothered me most was that the well-maintained parks were found more in the upper class areas." Surveyor Zadia Saunders similarly noted, "You could see what type of people must live there by looking at the parks." While survey data found an inequitable distribution of park problems, it also revealed problems in every park, suggesting a city-wide problem with park conditions.

Some park problems stood out more than others. Surveyor Chris Sivoraj felt that the "littering and trash show a lack of respect for the community." Zadia added, "It is not inviting if a park has no bathrooms or water fountains. And a lot of people in Richmond have disabilities, but we don't provide access to the parks for them." Lanisha Darlene Taylor expressed shock at finding condoms and drug paraphernalia, but reflected that "you can't be that shocked about the bottles and needles because that is what people expect of Richmond."

While our survey yielded compelling information on many park problems, its assessment of park safety was limited. Perceptions of safety may have been influenced by the survey being conducted during the day, by teams of youth and adults, and by the assignment of surveyors to parks in areas where they did not have personal safety concerns about rivaling neighborhoods. Though park safety is difficult to measure, studies have confirmed conditions such as maintenance problems, graffiti, litter, and poor lighting have a negative influence on perceptions of safety.¹⁸

This research also uncovered the role park design may play in racial tensions among Latino and African-American communities in West County. Fred Jackson of the Neighborhood House staff recalled:

Not only did our survey work reveal inequities relative to our community parks, but our endeavors also uncovered undercurrents of potential violence involving accommodation of soccer versus baseball or football in some parks. Because soccer is primarily a Latino game, and football and baseball usually involve more African Americans, park design has caused some strain in the so-called Black/Brown relations. Several of our youth workers reported that on a number of occasions this issue in fact set the stage for a potential confrontation.

The park survey findings demonstrate a wide range of problems with park conditions in Richmond, North Richmond, and San Pablo. Poor park conditions and a lack of usable recreational facilities discourage local residents, and youth in particular, from using their closest parks for physical and healthy recreational activity, which may be contributing to the higher rates of obesity, diabetes, and other health conditions in these neighborhoods.



Trash cans in Richmond parks

WHAT CAN WE DO?

The summer park survey project concluded with a workshop on identifying solutions and developing an advocacy strategy for taking action on the survey research findings. The youth analyzed the agencies and funding structure related to city park investment and maintenance and identified several possible solutions to improve park conditions. Four have stayed on as youth advocates with the HEAL Collaborative to work to encourage collaboration between city agencies and neighborhood groups on a park improvement strategy that secures the resources required to boost investment in park facilities and maintenance. Over the course of the



A slide in a Richmond park

2008-2009 school year, these youth presented their survey findings, identified and reached out to possible allies, and researched and advocated for the following solutions:

Increase funding for park improvements by raising the park fees developers pay the city or by supporting a Parks Bond Measure.

The one-time park fee developers pay the city for each new housing unit they build—called an "in lieu fee" offsets the public cost of providing park amenities for new residential developments. The City of Richmond currently charges \$5,151 per development of a single family house, lower than that of any city in the county, which range from \$6,118 to \$12,274.¹⁹ A Parks Bond Measure can also increase funding. Four local parks that benefited from state funding were found to be in better condition than many of the other parks surveyed.

Involve residents from diverse backgrounds in designing culturally and age-appropriate recreation programs.

Engaging residents in the development of recreational services benefits community health by promoting social interaction among residents of different ages and ethnic backgrounds. It also ensures that recreational programs are tailored and subsequently utilized. The Recreation Department should work with a cross-section of youth, immigrants, families, and seniors to identify and implement sports and recreational activities that can enhance health and social ties in the community.²⁰

Address and prevent vandalism and graffiti by providing staffing for park clean ups and jobs for residents, especially youth.

Youth programs that create opportunities for legalized public art space and nurture artistic expression can deter vandalism. Such programs include supporting murals designed and painted by youth; sending youth caught tagging to "graffiti school" where they can paint legally and reflect on the causes and effects of tagging; and commissioning local youth artists to design graffiti murals with anti-tagging or anti-vandalism messages.²¹

Establish a program where community and youth artists plan and implement a community education campaign to improve and increase residents' use of and care for city parks.

Community education campaigns that appeal to a community conscience can reduce littering, traffic violations, and other quality-of-life issues at and around parks.²² Such campaigns are particularly effective when they use the visual and performing arts as a means of spreading their message of moral responsibility, building a sense of civic pride, and encouraging self-compliance with quality-of-life regulations.²³ Community education campaigns can include organizing neighborhood games, interactive street theater, and other community-building events in the parks to encourage park use and raise awareness about ways that residents can better care for neighborhood parks.²⁴

COMMUNITY RESOURCES FOR INFORMATION AND CHANGE

City of Richmond Parks Division

Anthony Norris, Richmond Parks Superintendent 3201 Leona Avenue, Richmond, CA 94804 510.231.3073 anthony_norris@ci.richmond.ca.us

North Richmond Shoreline Alliance

Barbara Bream, Whitney Dotson c/o West Contra Costa Group, Sierra Club 2530 San Pablo Ave., Suite I, Berkeley, CA 94702 510.367.5379 northrichmondshoreline@sfbaysc.org www.northrichmondshoreline.org

Richmond Recreation and Parks Commission

1401 Marina Way South, Richmond, CA 94804 www.ci.richmond.ca.us/index.asp?NID=1098 Meets 1st Wednesday of every month at 7:30 p.m. in the Richmond City Council Chambers.

West County HEAL Collaborative

Neighborhood House of North Richmond 820 23rd Street, Richmond, CA 94804 510.229.5055 www.nhnr.org/wcheal

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ZADIA SAUNDERS

used to go to the park all the time when I was younger, in elementary school. I really enjoyed playing baseball, just being out there having fun and doing what I liked to do. Just being healthy. When I was out there with my team in the zone, doing a specific activity, I did not think about what was around me. But once the game was over, I would see that there was no water, no place to use the bathroom, it smelled, there were holes in the ground and trash that kids could trip on.

On the field I didn't really think about what surrounded me; I just thought that was how parks were supposed to look like and smell like. But as I got older and saw other neighborhoods I was like, "Oh my gosh; this is what other parks are like; this is where other kids play ball." Then you realize, well I don't want to go to my park anymore.

I always remember our school field trips. When we would go to Marina Bay Park we always had so much fun, but when the field trips were to parks in our neighborhoods, everyone was always depressed; everyone would ask, "Can't we just go back to Marina Bay." But then, of course, in our parks the swing sets are broken and rusted, the basketball courts are a mess of cracked concrete, there are no soccer fields—just an area of dead grass with a lot of holes. Nothing looks safe. Graffiti is all over the play-sets and on all the walls. The sandbox is full of trash and feces is scattered all across.

Today, I don't spend time at parks anymore. There are so many parks across Richmond, more than fifty, but all I see is abandoned and wasted space.



There is so much that could be done with these spaces and so many people that need it. We want to do something about our parks, but who is going to listen to us? To talk about solutions we have to feel that people in charge care. And I don't feel like they think it is important.

Parks are good for our community. They can offer youth a safe space to be physically active, to play ball, hang out with friends. In parks, little kids can use the slides and swings—oh, and swings are so much fun! And if the grass is freshly cut, you breathe in the outside air, you feel healthy. All that brings in a good feeling of "I am here!" It is sad to think that some people have that opportunity and some don't. All I want is a place where I can have a good time, enjoy myself, be healthy and play with friends and family, outside, in my own neighborhood."

ACCESS TO QUALITY YOUTH PROGRAMS



West Contra Costa youth cut the ribbon at the October 2008 opening ceremony of the RYSE Center, a comprehensive new youth center in Richmond.

hen Carolina Garcia set out with fellow youth leaders from Contra Costa Interfaith Supporting Community Organization (CCISCO) to interview her peers, she found of the 400 Richmond youth they talked to, 96% personally knew a victim of homicide. To develop a deeper understanding of the pressures and needs young people feel growing up in Richmond, CCISCO carried out surveys of 137 local youth in 2000. Two-thirds felt there were not enough things to do or safe places to go to enjoy themselves, and only 22% said they had ever been to a community center.¹ The research also showed a significant lack of program opportunities for youth aged 15-20.

Migdalia Villegas, an 18-year-old Richmond resident, feels that "having youth community centers is important because young people can spend their time in something productive instead of being out on the streets–and can gain skills that could be helpful in their future." Research supports Migdalia's perspective: youth is a time when young people need constructive opportunities to develop the attitudes, competencies, values, and social skills that can carry them forward to healthy adulthood.²

Support can be particularly important for low-income and youth of color who face many environmental disadvantages that contribute to greater difficulties in early adulthood.³ Only a quarter of youth hours are spent in school.⁴ In low-income urban settings, violence, high rates of unemployment, low-performing schools, discrimination, and unsafe park conditions can increase the need for programs during non-school hours.^{5,6}

Young people are more likely to become victims of crime during non-school hours.^{7,8} Most juvenile crime is committed between 2:00 and 8:00 p.m., with a spike occurring immediately after school.⁹ An evaluation of youth programs across the country found that participants were less likely to have committed a violent crime and less likely to have used or sold drugs in the past

month than their peers.¹⁰ The participants also valued the sense of safety and belonging, having a "place to keep off the streets" while acquiring positive values and role models.^{11, 12, 13}

Programs can also reduce the educational gap between social groups. Students in low-income inner-city neighborhoods are particularly vulnerable to lose a substantial portion of their school-year academic gains over the summer months.¹⁴ Youth programs can offer the opportunity to build on what they have learned in school, explore new interests, increase self-confidence, develop skills, and set higher goals for their future.^{15, 16} Program participation has also been shown to increase cardiovascular fitness and decrease obesity.^{17, 18} While employment has unique value for youth, the benefits of recreational, art, and social programs cannot come from employment alone.



WHAT DID OUR RESEARCH FIND?

CCISCO and the Pacific Institute conducted a survey to document the availability of youth programs serving youth from the West County communities of Richmond, San Pablo, and North Richmond. Since anecdotal information suggested programs for 15-20-year-olds were particularly lacking, and this group is also susceptible to higher rates of crime, we focused our research on programs for them. For this indicator, we defined youth programs as voluntary, structured programs delivered after school, on weekends, or over the summer months and serving West County youth. The survey encompassed recreational, artistic, or educational programs, and did not include youth employment, which offers a different set of benefits. The goal was to document the existence of all programs of this type, with a particular focus on the number of program spaces available, accessibility for low-income youth, and the extent of youth involvement in program design.

Forty-three programs were identified by gathering information from the School District, the Cities of Richmond and San Pablo, program outreach materials, and by asking program staff to identify other existing programs (see Research Methods for list). We contacted the 43 program providers by making at least five phone calls and mailing a questionnaire to each. Of the 32 programs that responded, 20 served 15-20-year-olds through youth programs, five served youth through employment or paid job training programs, and seven did not serve youth in this

Surveyed programs have 2,409 spaces, enough for 22% of West County youth.

age group. Our analysis only looks at the 20 programs serving this age group.

The results of the survey serve as a snapshot of youth programs available to West County youth. This indicator is not intended to demonstrate supply of youth programs in relation to demand, but instead to illustrate the potential availability of quality youth programs. We recognize that not all youth can participate in programs because they are occupied with employment, family obligations, team sports, or religious or other activities. Due to limited record-keeping by program providers, the information on participant age, attendance, and residence may be estimates made by program staff. We are not aware of any programs we did not contact, but without a centralized public listing of all program providers, we cannot be certain we reached all programs in the area.

Many factors determine participation in youth programs. Results presented in Table 1 consider number of program spaces available and program cost for lowincome youth. For many youth, program cost can be a significant barrier to participation. Youth that live in households with less than \$30,000 annual household

Table 1: AVAILABILITY OF YOUTH PROGRAMS FOR WEST COUNTY YOUTH (RICHMOND,SAN PABLO, AND NORTH RICHMOND)

Number of youth aged 15-20 living in West County	10,994
Number of spaces available for West County youth aged 15-20 in surveyed programs	2,409
Percentage of West County youth potentially served by surveyed programs	22%
Number of low-income youth aged 15-20 living in West County ¹⁹	3,710
Number of spaces available for low-income West County youth aged 15-20 in surveyed programs	1,613
Percentage of low-income West County youth potentially served by surveyed programs	43%

Demographic data source: U.S. Census, 2000

income (150% of the federal poverty threshold) qualify as low-income in this study.

West County is home to approximately 10,994 youth aged 15-20; of these 3,710 are low-income. Our survey of programs tallied 2,409 spaces, enough for less than one-quarter of all West County youth, by combining the number of youth participants and the number of unfilled spaces reported by the surveyed programs. For lowincome West County youth, free or low-cost spaces could potentially serve 1,613 youth, benefiting less than half of this group. Spaces for low-income youth were determined by tallying the number of full or partial scholarships available for West County youth. If scholarships were not applicable because programs were free of cost, all available program spaces were included. The positive contributions of youth programs also greatly depend on the quality, not just availability, of programs. Results presented in Table 2 report the percent of programs that involved youth in program design, facilitated youth setting their own goals, and employed a multilingual staff.

Three-out-of-four programs do not have a formal process for involving youth in program design. Less than half (45%) offer a structured way for youth to set goals for themselves. Nearly 75% of the programs have staff that speak Spanish, while one-fourth have staff that speak languages other than English or Spanish (including Cambodian, Chinese, "an Indian language," and sign language), and one-fifth have staff that only speak English.

Table 2: KEY ASPECTS OF YOUTH PROGRAM QUALITY

In planning your program, do you have a formal process for getting youth input on what the program should include?	Yes 25%	No 75%
During the program, is there a specific time when youth are asked to set goals for themselves?	Yes 45%	No 55%
Besides English, what other languages does your staff speak?	Other	n – 75% – 25% – 20%

WHAT DOES THIS MEAN FOR WEST COUNTY?

The findings demonstrate a gap between the supply and potential need for youth programs in West County: about 57% of youth in low-income families and some 78% of all West County youth may be left without access to the positive community resources, activities, and environments youth programs can provide. Moreover, although spaces may be available, research has demonstrated that youth involvement in program design is a strong predictor of participation.²⁰ In the 2006 CCISCO survey, 79% of Richmond youth indicated that they would attend recreation centers if their input was solicited in program development.²¹ But in this research, 75% of the programs surveyed do not involve youth in program design, and half do not have youth individualize the program by setting goals for themselves.

Many program providers spoke of the challenges of attendance for 15-20-year-olds, one of which is the difficulty

WHAT CAN WE DO?

Provide adequate funding to ensure that all youth programs have program staff and evaluation resources. With less than one quarter of West County youth aged 15-20 being served by the programs surveyed, there is a clear need for increased funding to expand current programs and establish new ones.

Work with youth leaders to engage their peers and ensure that all new programming is designed with the active input of youth.

The City of Oakland created the *Oakland Youth Advisory Commission*, a group of 25 volunteers aged 13-21 appointed by the mayor and City Council to advise the city on youth issues.²³ The communities of Richmond, San Pablo, and North Richmond could investigate employing such a model. in promoting the program to this age group. Richmond youth confirm this comment: the 2006 CCISCO survey reports that 57% of youth said they did not know about the programs available when asked why they did not attend youth recreation centers. The difficulty the Indicators Project survey had in finding existing programs and contacting program staff also illustrates this challenge.

Although our survey did not include youth employment programs, it is noteworthy that the City of Richmond has taken steps to increase such opportunities for its youth. In summer 2008, the city-run YouthWORKS program hired 515 Richmond youth aged 15-21, providing programming for an estimated 5% of area youth in this age group.²² Employment programs could be expanded and supplemented by additional sports, computer, art, and dance offerings, which 79% of youth surveyed by CCISCO said they would participate in at community centers.

Create a central directory of youth programs available for this age group of older teens.

While the City of Richmond and San Pablo and West Contra Costa County School District each have produced materials listing youth programs, the listings are not comprehensive and are particularly lacking opportunities for 15-20-year-olds. The Community Engagement Office of the district has recently initiated discussion on development of a centralized directory,²⁴ which could help address promotion/outreach issues, particularly if it is available both in print and online. A central web address could also serve as a means of surveying and involving youth in program design and needs.²⁵



COMMUNITY RESOURCES FOR INFORMATION AND CHANGE

Contra Costa Interfaith Supporting Community Organization (CCISCO)

724 Ferry Street, Martinez, CA 94553 925.313.0206

www.ccisco.org

CCISCO is a multi-ethnic, multi-generational, interfaith federation of 25 congregations and youth organizations representing over 35,000 families across the county, most of whom are low and moderate income. CCISCO is committed to building civic engagement and increasing public participation by those most affected by injustice and inequity.

Richmond City Council Meetings

www.ci.richmond.ca.us/index.asp?NID=29

Meetings are held the 1st and 3rd Tuesday of every month at City Hall, 1401 Marina Way South.

San Pablo City Council Meetings

www.ci.san-pablo.ca.us/main/citycouncil.htm Meetings are held the 1st and 3rd Mondays of each month at City Hall Council Chambers,13831 San Pablo Avenue.

West Contra Costa Unified School District

Marin Trujillo, Community Engagement Coordinator 1108 Bissell Avenues, Richmond, CA 94801 510.307.4526

mtrujillo@wccusd.net

The Community Engagement Office produces a yearly Summer Resource Guide for all activities and programs offered for West County youth. Look for it online at: www.wccusd.k12.ca.us/community_engagement/ WCCUSD_Summer_Resource_Guide-2008.pdf

Richmond YouthWORKS, City of Richmond

330 25th Street, Richmond, CA 94804 510.307.8019

www.ci.richmond.ca.us/index.asp?NID=662

YouthWORKS focuses on youth development, employment, and training for high-school-aged youth and young adults.

RESEARCH METHODS

Data	What it is	Where to get it
Number of spaces available for West County youth aged 15-20 in the programs surveyed	Number of youth program spaces, both filled and unfilled, as reported by surveyed programs	Survey results are available from Pacific Institute; however, program names will be kept confidential.
Number of spaces potentially available for low-income West County youth aged 15-20 in the programs surveyed	Number of scholarships available for low- income youth as reported by surveyed programs	Survey results are available from Pacific Institute; however, program names will be kept confidential.
Number of youth aged 15-20 and 15-24 living in West County	U.S. Census data with total population broken down by gender and age	Census 2000 Summary File 3 (SF3) Sample Data – Table P8 http://factfinder.census.gov
Number of West County youth living at or below poverty level	U.S. Census data with poverty status in 1999 by gender and age. For this age group, data is only available for youth ages 15-24	Census 2000 Summary File 3 (SF3) Sample Data – Table PCT49 http://factfinder.census.gov
Number of West County families with children 18 or older living in or below poverty	U.S. Census data with poverty status in 1999 of families with children 18 or older	Census 2000 Summary File 3 (SF3) Sample Data – Table P90 http://factfinder.census.gov
Number of West County families with children 18 or older living in or below 150% poverty	U.S. Census data with family income status in 1999 of families with children18 or older	Census 2000 Summary File 3 (SF3) Sample Data – Table PCT38 http://factfinder.census.gov

Calculate number of spaces available for West County youth:

With data collected from phone and mail questionnaires, total the number of youth participants and the number of unfilled program spaces.

Calculate number of spaces available for low-income youth 15-20 living in West County:

With data collected from phone and mail questionnaires, total the number of full or partial scholarships potentially available for West County youth. If scholarships were not applicable because programs were free of cost, all available slots were included. Calculate number of low-income youth 15-20 living in West County:

The Census does not provide data on income level for this 15-20 age group, but does provide data on poverty status of youth as well as income level and poverty status for families; therefore, available data was used to estimate the *total number of low-income youth aged 15-*20. To calculate this figure a ratio of *number of families in poverty* over *number of low-income families* was applied to *number of youth in poverty*. The above calculation however yields *number of low-income youth aged* 15-24 (the Census breaks down youth poverty status in this age group), therefore we applied to this number the ratio of *total youth aged 15-20* and 15-24 to determine *low-income youth aged 15-20*.

For a more detailed breakdown of research methods or a copy of the questionnaire, contact the Pacific Institute: 510.251.1600 or info@pacinst.org.

Programs Identified and Contacted for the Youth Program Survey

Programs Surveyed (The following programs were reached through phone or mail.)

Programs serving youth aged 15-20 years

Program	Address	Telephone	Type of Organization
After School – Bright Futures Program	724 Kearney Street, (Room 15), El Cerrito	510.528.5319	School District
Bay Area Peacekeepers	Address not available	510.672.3477	Private
Bay Area Rescue Mission's King's Club	P.O. Box 1112, Richmond	510.215.4552	Private
Disabled People's Recreation Center	1900 Barret Ave., Richmond	510.620-6814	City of Richmond
East Bay Center for the Performing Arts	339 11th St., Richmond	510.234.5624 x15	Private
Education Unlimited	1700 Shatuck Ave., #305, Berkeley	510.548.6612 / 510.547.6612	Private
EOPS Program – Contra Costa College	2600 Mission Bell Dr., San Pablo	510.235.7800 x4515	Community College – University
Wrap Around Program – West Contra Costa Youth Service Bureau	84 Broadway, Richmond	510.215.4671	County
Hilltop Family YMCA	4300 Lakeside Dr., Richmond	510.222.9622	Private
Martin Luther King Community Center	360 Harbor Way South, Richmond	510.620.6821	City of Richmond
Metas Program	2600 Mission Bell Dr., H-31, San Pablo	510.235.7800 x4608	Private
Parchester Community Center	900 Williams Dr., Richmond	510.620.6823	City of Richmond
Richmond Arts Commission	3230 McDonald Ave., Richmond	510.620.6952	City of Richmond
Richmond Library	325 Civic Center Plaza, Richmond	510.620.6524	City of Richmond
Richmond Recreation Complex	3230 McDonald Ave., Richmond	510.620.6795	City of Richmond
Richmond Youth Media Project	1250 23rd Street, Richmond	510.295.3993	Private

Program	Address	Telephone	Type of Organization
School to Career Program – Service Learning Program	1108 Bissell Ave., Richmond	510.620.6793 / 510.307.4565	School District
Teen Scene Program – City of San Pablo Recreation	13831 San Pablo Ave., Building 5, San Pablo	510.215.3207	Clty of San Pablo
W.C.C. Salesian Boys and Girl's Club	2801 Moran Ave., Richmond	510.215.4648	Private
Y.E.S. (Youth Enrichment Strategies) Summer Camps	2811 Macdonald Ave., Richmond	510.232.3032	Private

Programs not serving youth aged 15-20

Richmond Swim Center	South 45th and Fall Aves., Richmond	510.620.6654	City of Richmond
College for Kids	2600 Mission Bell Dr., San Pablo	510.235.7800 x4564 / x4407	Community College
National Institute of Arts and Disabilities	551 23rd St., Richmond	510-620-0290	Private
Rubicon	2500 Bissell Ave., Richmond	510.412.1725	Private
Shields Reid Community Center	1410 Kelsey Ave., Richmond	510.620.6822	City of Richmond
West Contra Costa YMCA	263 South 20th St., Richmond	510.222.9622	Private
May Valley Community Center	3530 Morningside Dr., Richmond	510.620.6890	City of Richmond

Programs serving youth through employment or paid job training

City of El Cerrito Summer Recreation Program	7007 Moeser Lane, El Cerrito	510.559.7006	City of El Cerrito
North Richmond Family Service Center	1535 Third St. Suite D, Richmond	510.374.7049/ 510.231.8320	County
Opportunity West	3700 Barrett Ave., Richmond	510.236.5812	Private
Richmond Art Center	2540 Barrett Ave., Richmond	510.620.6772	Private
Youth Entrepreneur Program – Richmond Main Street Initiative	1000 Macdonald Ave. Suite C, Richmond	510.236.4049	Private

Programs Not Reached (The following programs could not be reached by phone or mail.)

Booker T. Anderson Community Center	960 South 47th St., Richmond	510.620.6720	City of Richmond
City of Richmond	3230 McDonald Ave., Richmond	510.620.6798	City of Richmond
El Sobrante Boys and Girls Club	4660 Appian Way, El Sobrante	510.223.5253	Private
Hilltop Family YMCA	4300 Lakeside Dr., Richmond	510.222.9622	Private
Nevin Community Center	598 Nevin Ave., Richmond	510.620.6813	City of Richmond
Puente	2600 Mission Bell Dr., San Pablo	not available	Community College/Univ.
Pt. Richmond Community Center	139 Washington Ave., Richmond	510.233.6881	City of Richmond
Richmond Ravens	P.O. Box 1864, El Cerrito	not available	Private
RYSE Center (new program opened after research completed)	205 41st St., Richmond	510.374.3401	Private
San Pablo One Stop Career Center	2300 El Portal Dr., Suite B, San Pablo	510.412.6743 / 510.374.3203 /	East Bay Works
San Pablo United Youth Soccer Club	1818 Sanford Ave., San Pablo	510.685.9491	Private
West County ROP	77 Santa Barbara Rd., Pleasant Hill	925.942.3408	County

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STREETLIGHTS AND COMMUNITY SAFETY



Community residents named streetlights an important issue.

n front of my house, the streetlight was out and never working. We had a lot of people there, hanging in front of my house, stealing things from the neighbors," Carolina Garcia recalls. Her family's problem with the streetlight was resolved after she reported it and the bulb was replaced. Other residents' concerns with streetlights are more difficult to resolve: many report lights that are too weak or too far apart, a problem that especially affects people leaving for work or school before dawn or coming home after dusk.

With great desire to improve their neighborhood, hundreds of residents from one of Richmond's most violence-plagued districts—the Iron Triangle neighborhood—gathered in March 2006 at St. Mark's Catholic Church to launch a campaign to "Save the Iron Triangle!" After holding dozens of neighborhood meetings and gathering information from their neighbors, public officials, and policy experts, resident leaders from the Contra Costa Interfaith Supporting Community Organization (CCISCO) created a proposal outlining four areas where tangible, immediate improvements to the problems that plague their community could be achieved. One of the areas identified was public lighting for streets in highcrime areas of the Iron Triangle. Street lighting is integral to the health of a community. While research on the effects of improved street lighting on crime rates is not entirely definitive, an analysis of eight different studies found that improved street lighting—either through more lights or brighter lights reduced crime by an average of 7%.¹ With improved visibility, potential offenders are more exposed and less likely to commit crimes. Enhanced lighting can signal more community investment, pride, and cohesiveness, which also can discourage crime.

Streetlights do more than prevent crime. Improved street lighting can make a community feel safer. They allow safer operation of vehicles at night, reduce accidents, and assist traffic flow.² Better light can also promote the nighttime operation of businesses and increase pedestrian street use after dark, all of which leads to a more active, enhanced neighborhood.³

In the year and a half after CCISCO developed their four-point plan, residents and organizers continued to apply pressure to the city, including holding a June 2007 public meeting during which officials were asked to commit to the four-point strategy for the Iron Triangle. In response, the city, working with Pacific Gas and Electric (PG&E), agreed to increase the wattage on light fixtures in the neighborhood, beginning with a pilot project site. Located near the northern peak of the Iron Triangle, a five-block area between Lucas Park and Peres Elementary School was chosen to receive the first of the upgrades with the replacement of 30 lights. All the 70-watt streetlights in the area were upgraded to 150- and 250-watt lights.



Streetlights impact neighborhood safety.

WHAT DID OUR RESEARCH FIND?

Community-based participatory research can play a role in many stages of a campaign, from identifying an issue to redirecting the campaign focus. Research was used in this campaign to evaluate the success of a campaign result: the streetlight upgrade around Lucas Park. After the lights were replaced in the five-block area in the Iron Triangle, CCISCO, with research assistance from the Pacific Institute, conducted a survey to evaluate the success of the Lucas Park light upgrade. The door-to-door household survey of area residents consisted of five yes-or-no questions that aimed to discover if the light upgrade was perceived to have changed the neighborhood and its level of criminal activity. A week prior to the survey, a letter was sent to each of the 200 homes in the area announcing the survey. Teams containing at least one Spanish and one English speaker knocked on the doors of each of the 200 homes in the area and received 48 responses in total, representing about 25%.

For each question, the total number of respondents who answered "yes" and the number who answered "no" were totaled. These totals were then converted to a percentage of the total responses for each question (see Table 1). This information provided the relative number of community members who perceived a change in their neighborhood due to improved public lighting.

After streetlights near Lucas Park were upgraded, a significant number of residents noticed a change and felt safer in their communities.

Table 1. STREETLIGHTS SURVEY RESPONSES

Have you noticed the new lights?	Yes No	62% 38%
Have you walked down your street in the last three months? (at night)	Yes No	39% 61%
Do you feel safer with brighter lights?	Yes No	83% 17%
Have you seen or felt any change in your neighborhood since the new lights were put in?	Yes No	51% 49%
Have you noticed a decrease in criminal activity since the lights were upgraded?	Yes No	47% 53%

Table 2. STREETLIGHTS BY NEIGHBORHOOD

Neighborhood	Number of 70 W lights	Total number of streetlights	Percentage 70 W lights
North and East	645	920	70%
Fairmede/Hilltop	303	329	92%
Iron Triangle	299	606	49%
May Valley	285	336	85%
Belding Woods	244	389	63%
(Undesignated)	193	707	27%
Richmond Annex	183	198	92%
Coronado	167	294	57%
East Richmond	133	191	70%
Point Richmond	132	192	69%
Cortez/Stege	80	194	41%
Carriage Hills North	79	84	94%
El Sobrante Hills	77	77	100%
Hilltop Green	75	101	74%
Santa Fe	75	164	46%
Hilltop Village	74	101	73%
Pullman	63	119	53%
Laurel Park	62	81	77%
City Center	61	86	71%
Carriage Hills South	55	60	92%
Park Plaza	54	149	36%
Southwest Annex	53	116	46%
Parchester Village	46	53	87%
Shields-Reid	42	55	76%
Atchison Village	38	52	73%
Metro Richmore Village	36	145	25%
Greenbriar	35	35	100%
Marina Bay	33	100	33%
Hasford Heights	27	27	100%
Countryside	25	25	100%
Eastshore	24	40	60%
Panhandle Annex	22	28	79%
Greenridge Heights	15	15	100%
Forest Park	13	30	43%
Hilltop Bayview	9	38	24%
Park View	9	126	7%
RICHMOND TOTAL	3,766	6,263	60%

The survey found that after the streetlight upgrade, **over 60%** of residents around Lucas Park surveyed noticed the new lights. **Eightythree percent** of respondents said they felt safer with brighter lights. **More than half** of those surveyed had seen or felt change in their neighborhood since the lights were upgraded. And **almost half** said they noticed a decrease in criminal activity since the lights were upgraded.

The survey provides a snapshot of the community's reaction to the light upgrade, but it alone is not enough to gauge change in safety and crime due to the lighting improvement. Further study with a pre- and post-installation survey asking residents to rank their perceptions of crime level and how often they go outside after dark could show if improved lighting changed their behavior as well as their perceptions of crime and safety. Conducting several surveys after the new bulbs are installed could show how crime and resident fear levels change the longer the new lights are in place.

In addition to this primary research on the response of Lucas Park residents to the lighting upgrade, the West County Indicators Project completed secondary research in the fall of 2007, so residents involved in the campaign would have a better understanding of the public lighting situation in Richmond. Data was obtained from the City of Richmond on the type, number, and location of streetlights in the city.⁴

Using this information, the percentage of the dimmer 70-watt light bulbs in each Richmond neighborhood was determined (see Table 2). The research found that many 70-watt lights still remain not only within the Iron Triangle, but in neighborhoods throughout Richmond. Whether 70-watt lights are appropriate depends on each light's location and context. Although many residents have complained that the 70-watt lights are too dim, some of these lights may be in areas that are not residential or do not need stronger lights.

Currently, 299 streetlights—almost half of the streetlights in the Iron Triangle—are the dimmer 70-watt lights and remain to be upgraded. Sixty percent of all the public streetlights in the entire city of Richmond, a total of 3,766 lights, contain the 70-watt bulbs.

WHAT DOES THIS MEAN FOR WEST COUNTY?

The survey results indicate that after streetlights near Lucas Park were upgraded, a significant number of residents noticed a change and felt safer in their communities. Other studies confirm that lighting improvements can deter crime and improve safety. Additional Indicators Project research found that the Iron Triangle is not the only neighborhood in Richmond that has the low-watt street-lighting residents had problems with.

We also discovered that the City of Richmond had no municipal ordinance setting rules for what type of lights must be used and how they must be maintained in the city. While a City of Richmond ordinance sets streetlight criteria for new development, it does not have standards for already established streetlights and their maintenance. An exploration of other cities' streetlight regulations discovered that while it is not common for cities to formally address streetlight maintenance, the nearby City of Oakland has design standards for appropriate lighting levels, including nighttime illumination criteria. This information guided CCISCO to expand their campaign by asking the City of Richmond to agree to develop a municipal code that sets standards for installing and maintaining city streetlights.

WHAT CAN WE DO?

In June 2008, CCISCO held a public event at St. Mark's Catholic Church, where they presented community research on the four areas the CCISCO proposal had targeted and asked city officials to re-commit to the proposal presented to them one year ago. With the mayor, the city manager, and other officials in attendance, the city promised to create a municipal code to set basic lighting-level standards that can be applied to existing and future lights. This will be the first such code for the city. This is an important victory for all Richmond residents concerned with functional public lighting. Below we outline three recommendations for making sure the city's new lighting policy is the best possible.

Give community input into Richmond's draft lighting ordinance.

Richmond residents can provide important information about how different types of lighting may affect community safety, convenience, and quality of life. The city manager or city engineer can be contacted for a draft of the lights ordinance (see Community Resources below).

Learn from other cities that have developed lighting ordinances.

Oakland and other cities have developed lighting ordinances, and city staff and community leaders from these cities can provide insight into how the ordinances have worked. Although not legally enforceable, the City of Oakland's design standards provide guidelines for public street-lighting levels that, while consistent with national standards, also recognize the city's distinct needs.

Consider environmental and health impacts of new lighting design and technology.

Upgrading city lights may have important effects on energy use and chemical exposure. Some residents have raised concern that some new light bulbs have mercury, a chemical with potentially harmful health effects. Research into the energy efficiency and methods for minimizing or eliminating potential toxic chemical exposure should be conducted before the city endorses bulb and fixture types in the new standards.

COMMUNITY RESOURCES FOR INFORMATION AND CHANGE

Rich Davidson, City Engineer

Rich Davidson Rich_Davidson@ci.richmond.ca.us 510.307.8105 The city engineer is responsible for handling light upgrades in Richmond.

Contra Costa Interfaith Supporting Community Organization (CCISCO)

724 Ferry Street Martinez, CA 94553 925.313.0206 www.ccisco.org To find out the time and location of the next CCISCO meeting in Richmond, write or call the number above.

To report a broken light

To make a request to improve the street lighting in your area, you can call, write a letter, or submit a request online. To report a broken or burnt-out streetlight, contact Public Works at 510.231.3010 (for lights on metal poles) or PG&E at 800.743.5000 (for lights on wooden poles). To send a letter, mail your request to:

Engineering Division, Public Works Department 1401 Marina Way South Richmond, CA 94804

To make an online request, visit COR Connect, the city's online submission site. To access the site, go to the City of Richmond website: www.ci.richmond.ca.us/. On the left navigation, click COR Connect. You can also visit the request page directly: https://clients.comcate.com/ newrequest.php?id=18

REFERENCES

- 1 Farrington, D.P., and B. Welsh. (2002). Effects of improved street lighting on crime: a systematic review. London, United Kingdom: Home Office Research, 39.
- 2 Crilly, M., (1998). Contributory factors to traffic accident deaths identified at coroner's inquest. *European Journal of Public Heath*. 20: 139-143.
- 3 City of Oakland. (1999). City of Oakland Street Lighting Warrants. Oakland, California. Available at http://www.oaklandpw.com/Asset550.aspx.
- 4 This information was difficult to obtain since PG&E and the City of Richmond each claimed only the other had the right to share the data. In the end, PG&E convinced the City of Richmond that the city had the right to make the data available to the public.



At a June 2008 accountability session organized by CCISCO, Richmond city officials agreed to adopt a city ordinance for current and future streetlights.

METHODS FOR ACCESSING DEMOGRAPHIC DATA

The information in this report on people's income, race, household size, and age all comes from the U.S. Census which is available to the public online. By following the methods we used, you can compare the demographics of neighborhoods within a city, cities and towns within a county, and even counties or states in the U.S.

Identify the area of focus and the scale.

- To identify the area you want to focus on, go to the Census Fact Finder online (www.factfinder.census. gov). On the left side of the screen, put your cursor over the heading Maps, and click on the link to Reference Maps.
- 2. In Reference Maps, click the circle next to "2000 Census Tracts and Blocks," type in your zip code, and press "Go."
- To re-position the map to see the block groups and census tracts surrounding a particular address, click "A Street Address or Zip Code" on the left of the screen. Type in the address.
- 4. Now you see a map that is zoomed-in on the address you chose. On the left side of the screen, the Legend shows what each colored line means. Each one represents a type of Census boundary. You can get demographic information for each different type of boundary (but limited information for the smallest type, which are called "Blocks").

The order of Census boundaries, from smallest to largest, is:

- i. Block (about the size of a city block)
- ii. Block Group (this is the size of a small neighborhood)
- iii. Tract (this is the size of a bigger neighborhood)
- iv. Place (this is the category for towns or cities)
- v. County Subdivision
- vi. County
- vii. State
- viii. Region
- ix. United States
- 5. Next, choose what areas you want to compare to your area. Looking at the Reference Map of your area, see whether there are Block Groups or Census Tracts that line up with the boundaries of your neighborhood. Do you want to compare all the block groups in a city with each other, all the census tracts, or all

the cities in a county? Once you have decided, go on to downloading the data.

Download census data.

To obtain Census data on the total population per city and town in your county:

- Go to Census Factfinder online at http://factfinder. census.gov. In the middle of the page, under the heading "Getting Detailed Data," look for "Decennial Census." Just below it click on "Get Data."
- 2. In the middle of the next page, click the circle next to "Census 2000 Summary File 3 (SF 3) Sample Data." To the right, click on "Detailed Tables."
- 3. Now click on the gray tab "geo within geo."
- For this example, we will download data to compare cities within a county. Under "Show me all," select "Places." Under "Within," select "County." Select your state. Select your county.
- 5. Click "All Places," and then click "Add." Click "Next."
- 6. The web page now knows what places for which you need information. Next, select the type of information you want. In this example we will look at race. Note: the Census does not consider Latino a race, so it reports whether people are Latino separate from reporting which race they are.
- Click on "P.7 Hispanic or Latino by Race." Click on "Add." Click on "Show Result."
- 8. Now you will see a table with the race breakdown for every town and city in the county.
- 9. To download the information, click on the blue tab near the top of the page, "Print / Download," and click "Download."
- 10. To download the table and open it in Excel, just go to the bottom of the page that pops up and click "OK." The table should open in Excel and you can now save it to your computer.

VOLTEA EL INFORME PARA LEERLO EN ESPAÑOL PLEASE TURN OVER FOR SPANISH

