



# Streetlights and Community Safety

Excerpted from:

*Measuring What Matters: Neighborhood Research for Economic and Environmental Health and Justice in Richmond, North Richmond, and San Pablo*



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# STREETLIGHTS AND COMMUNITY SAFETY



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*Community residents named streetlights an important issue.*

**“**In 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 high-crime 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%.<sup>1</sup> 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.<sup>2</sup> 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.<sup>3</sup>

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	62%
	No	38%
Have you walked down your street in the last three months? (at night)	Yes	39%
	No	61%
Do you feel safer with brighter lights?	Yes	83%
	No	17%
Have you seen or felt any change in your neighborhood since the new lights were put in?	Yes	51%
	No	49%
Have you noticed a decrease in criminal activity since the lights were upgraded?	Yes	47%
	No	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%
<b>RICHMOND TOTAL</b>	<b>3,766</b>	<b>6,263</b>	<b>60%</b>

The survey found that after the streetlight upgrade, **over 60%** of residents around Lucas Park surveyed noticed the new lights. **Eighty-three 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.<sup>4</sup>

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.

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## 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.

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## 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](http://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 on-line. 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/](http://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 Health*. 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.