



# Health and Environmental Justice (HEJ)



## A. Introduction



**Environmental justice** – The fair treatment and meaningful participation of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies. (Government Code §65040.12).

The way we design and build the human environment has a profound impact on both public health and environmental justice. Planning decisions related to transportation systems, density and intensity of uses, land use practices, and street design influence: how much we walk, ride a bicycle, drive a car, or take public transportation; the level of our stress; the types of food we eat; and the quality of our air and water – all factors which affect our health. For example, the more we drive, the more our vehicles emit harmful gases and particles into the air, which can lead to respiratory problems such as asthma. A compact, mixed-use development pattern that reduces reliance on automobiles and increases public transit opportunities can improve air quality and respiratory health<sup>1</sup>.

In addition, the presence or absence of sidewalks and bike routes, heavy traffic, hills, street lights, enjoyable scenery, and observations of others exercising all impact our level of physical activity<sup>2</sup>. Regular physical activity is important to build and maintain healthy bones, muscles, and joints and to help reduce the risk of developing heart disease, diabetes, high blood pressure, colon and breast cancer, obesity, and depression and anxiety. Eliminating barriers to physical activity and increasing access to parks and open space and quality recreational facilities and programs increases the likelihood that people will exercise<sup>3</sup>.

<sup>1</sup> Jackson, Richard. (n.d.). Creating a healthy environment: The Impact of the built environment on the public health. Sprawl Watch Clearinghouse Monograph Series. Retrieved August 27, 2009 from <http://www.sprawlwatch.org/health.pdf>.

<sup>2</sup> King, AC, et. al. (2000). Personal and environmental factors associated with physical inactivity among different racial-ethnic groups of US middle-aged and older-aged women. *Health Psych*; 19(4):354-364.

<sup>3</sup> Kahn, E.B. (2002). The effectiveness of interventions to increase physical activity. *American Journal of Preventative Medicine* 22: 87-88.



Problems with environmental justice are often related to procedural or geographic inequity. Procedural inequity occurs when the planning process is not conducted in a uniform way. An example of this would be conducting public meetings at locations and/or times that make it difficult for certain individuals or groups to participate in a worthwhile fashion. Geographic inequity occurs when undesirable or unhealthy land uses are concentrated within one part of a city, creating a disproportionate burden on the residents in that area. Geographic inequity also refers to a situation in which desirable public amenities are not equitably distributed, leaving portions of a city underserved.

The purpose of this Health and Environmental Justice Element is to identify public health risks and environmental justice concerns and improve living conditions to foster the physical health and well-being of National City's residents. The hope is that the City's commitment to preventative health measures will become evident in decreases in the occurrence of diabetes, asthma, heart disease, cancer, and other physical and emotional ailments. Public health and environmental justice are themes that are tied to all of the General Plan elements, so it is important to cross-reference other sections of this document for a complete picture of National City's efforts to improve health and equality.

The Health and Environmental Justice element is not a state-mandated element. However, by including this element in the General Plan, the City hopes to give prominence to National City's health and environmental justice priorities. The authorization for this optional element is contained within Section 65303 of the California Government Code, which authorizes local jurisdictions to adopt additional elements beyond the mandatory elements when they relate to the physical development of the jurisdiction.

## **B. Existing Setting**

Most health statistics are not available at the planning area level for this General Plan. The San Diego County Community Health Statistics Unit mainly provides demographic and health data at a regional level. National City is located within the "South Region" of San Diego County, which also includes the communities of Chula Vista, Coronado, South Bay, and Sweetwater. Most of the health information within this section applies to the South Region. However, where available, statistics specific to National City's 91950 zip code are discussed.



## RESPIRATORY HEALTH AND AIR QUALITY



**Asthma** – An inflammatory disorder of the airways, which causes attacks of wheezing, shortness of breath, chest tightness, and coughing.

**Chronic Obstructive Pulmonary Disease** – A breathing disorder that gets worse over time which can cause coughing that produces large amounts of mucus, wheezing, shortness of breath, chest tightness, and other symptoms.

There are two main breathing disorders that are tied to environmental air quality that can serve as indicators for the respiratory health of National City: asthma and chronic obstructive pulmonary disease (COPD). Environmental risk factors for both of these conditions include outdoor air pollution and cigarette smoke.

According to 2005/2006 fiscal year (FY) data, overall asthma hospitalization rates for the South Region are just slightly higher than countywide rates (74 persons per 100,000 population versus 70 persons per 100,000 population).<sup>4</sup> However, children under 17 within National City's 91950 zip code suffer disproportionately from asthma symptoms than children in the rest of San Diego County. According to 2005 data, children's asthma hospitalization rates for National City are approximately 57% higher than the County average (247 children per 100,000 children versus 140 children per 100,000 children).<sup>5</sup>

According to 2005 data, the South Region has a higher rate of hospitalizations that are attributed to COPD than San Diego County (108.8 per 100,000 versus 95.7 per 100,000).<sup>6</sup> Figure HEJ-1 identifies COPD hospitalization rates by zip code to provide a better picture of how this disease specifically affects National City. In 2004, National City experienced 200.1 to 300 hospitalizations per 100,000 persons for COPD, which is higher than surrounding communities. Eastern San Diego County is the only other area in the county that shares such a high rate of hospitalizations for COPD.

Hospitalization rates may be higher in certain areas either because there is an actual higher incidence of these disorders in those areas or because there is less adequate management of these disorders, resulting in a greater rate of hospitalization.

Because of the link between respiratory illnesses and air pollution, federal and state clean air standards have been established for common outdoor air pollutants to protect public health and the environment. The federal standards, known as National Ambient Air Quality Standards (NAAQS),

<sup>4</sup> San Diego Regional Asthma Coalition (2008). San Diego County asthma report card.

<sup>5</sup> Office of Statewide Health Planning and Development. (2005). Children's asthma hospitalization rates by zip code.

<sup>6</sup> County of San Diego Health and Human Services Community Health Statistics Unit (2009). County of San Diego Community Profiles by Region and Subregional Area: South Region.



**Ozone** – A gas composed of three oxygen atoms linked together. At ground level, it is formed by chemical reactions of nitrogen oxides (NOx) and volatile organic compounds (VOCs) in the presence of sunlight. NOx and VOC emissions are mostly the result of human activities such as fossil fuel combustion and solvent use. Ozone can cause coughing, throat irritation, pain, burning, or discomfort in the chest when taking a deep breath, and chest tightness, wheezing, or shortness of breath.



are established by the Environmental Protection Agency (EPA) pursuant to requirements of the federal Clean Air Act (CAA). Each area of the nation with air pollution levels violating NAAQS are designated as non-attainment areas and must submit a plan outlining the combination of local, state, and federal actions and emission control regulations necessary to bring the area into attainment. San Diego County is currently designated as a non-attainment area for ozone<sup>7</sup>.

In California, the California Air Resources Board (CARB) is responsible for meeting the State requirements of the federal CAA, administering the California CAA and establishing the California Ambient Air Quality Standards (CAAQS). The California CAA, as amended in 1992, requires all air districts in the State to endeavor to achieve and maintain the CAAQS. The CAAQS are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles

Air quality issues are locally regulated by San Diego County's Air Pollution Control District (APCD). The APCD is an extension of the CARB. The APCD has air monitoring stations in downtown San Diego and Chula Vista. There are no air monitoring stations in National City. As such, the measurement of air quality within National City is reflective of a larger region, and it does not measure specific locations (the port, freeways, gas stations, etc.) where local sources could be contributors to higher levels of pollutants.

Table HEJ-1 displays data on how often and by how much the air surrounding National City, measured in downtown San Diego and Chula Vista, violated state and federal ozone laws between 2004 and 2008. Chula Vista exceeded the federal 8-hour standard twice and the state 8-hour standard six times. Downtown San Diego did not exceed the federal standard, but did exceed the state standard once. Both Chula Vista and Downtown San Diego are far below the number of days that exceeded state and federal standards countywide. This is likely because these coastal cities, like National City, benefit from the prevailing eastern wind currents that carry some of the air pollution away from the coast to inland locations such as Alpine and El Cajon.

<sup>7</sup> San Diego County Air Pollution Control District (2007). Eight Hour Ozone Attainment Plan.





**TABLE HEJ-1**  
**Ozone**  
**Number of Days Exceeding Federal and State Standards (2004-2008)\***

	# of Days Exceeding Fed 8 hr Stnd >8.4 parts per hundred million (pphm)**					# of Days Exceeding State 8 hr Stnd >7.0 parts per hundred million (pphm)					Max 8 hr Concentration				
Station	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
Chula Vista	1	0	0	1	0	State standard adopted in 2006		0	2	4	9	8	7	9	8
Downtown SD***	0	0	0	0	0			0	0	1	8	7	9	8	9
Countywide	8	5	14	7	11			68	43	65	10	9	10	9	11

\* Data excludes measurements taken during the 2007 fires, as they emitted huge amounts of pollutants, mainly particulate matter, and led to the area being out of compliance. The event was rare enough that the data from that time was withdrawn from calculation.

\*\* Federal 8 hr standard was revised to >7.5 pphm on March 12, 2008, to become effective March 12, 2009.

\*\*\* Downtown San Diego monitoring station was moved in 2005 from 12<sup>th</sup> Avenue to Beardsley Street. 2004 and 2005 measurements are taken from the 12<sup>th</sup> Avenue monitoring station.

Source: Air Pollution Control District (2008). Five year air quality summary: 2004-2008. Retrieved August 27, 2009 from <http://www.sdapcd.org/air/reports/smog.pdf>.

**Particulate Matter**

*– A complex mixture of extremely small particles and liquid droplets made up of a number of components including acids, organic chemicals, metals, and soil or dust particles.*

Particulate matter (PM) is another pollutant of concern for San Diego County. Like ozone, PM is formed in the air by a chemical reaction and mainly comes from combustion sources like vehicles, diesel engines, and industrial facilities. Smoke from wildfires and dust also contains PM. Once inhaled, PM can affect the heart and lungs and cause serious health effects. Scientists have observed higher rates of hospitalizations, emergency room visits, and doctor's visits for respiratory illnesses or heart disease during times of high PM concentrations. During these periods of high PM levels, scientists have also observed the worsening of asthma symptoms and acute and chronic bronchitis.

There are two categories of PM: PM<sub>10</sub> particles, which are less than 10 micrometers in diameter and PM<sub>2.5</sub> particles, which are less than 2.5 micrometers in diameter.

Table HEJ-2 identifies data regarding PM measurements taken at the San Diego and Chula Vista monitoring stations from 2004 to 2008 for both PM<sub>10</sub> and PM<sub>2.5</sub>. The highlighted cells identify the incidences in which standards were exceeded. According to CARB, most areas of California exceed the current state PM standards from a few to many times each year.



**TABLE HEJ-2**  
**Particulate Matter Measurements**

Particulate Matter (PM <sub>10</sub> ) Annual Arithmetic Mean and Maximum 24 hr Sample (2004-2008)*										
Station	Annual Arithmetic Mean Fed Stnd is 50 micrograms/m <sup>3</sup> ** State Stnd is 20 micrograms/m <sup>3</sup>					Max 24 hr Sample Fed Stnd is 150 micrograms/m <sup>3</sup> State Stnd is 50 micrograms/m <sup>3</sup>				
	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
Chula Vista	26	27	26	25	26	44	52	51	51	53
Downtown SD***	33	28	24	30	29	68	76	71	55	58

Particulate Matter (PM <sub>2.5</sub> ) Annual Average and Maximum 24 hr Sample (2004-2008)*										
Station	Annual Average Fed Stnd is 15 micrograms/m <sup>3</sup> State Stnd is 12 micrograms/m <sup>3</sup>					Max 24 hr Sample Fed Stnd is 35 micrograms/m <sup>3</sup>				
	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
Chula Vista	12	12	11	11	12	33	34	30	46	33
Downtown SD***	14	11	13	12	14	43	32	63	52	42

\* The data excludes measurements taken during the 2007 fires.

\*\* EPA revoked the Federal Arithmetic Mean standard for PM<sub>10</sub> as of December 17, 2006, due to lack of available evidence linking health problems to long-term coarse particle pollution.

\*\*\* Downtown San Diego monitoring station was moved in 2005 from 12<sup>th</sup> Avenue to Beardsley Street. 2004 and 2005 measurements are taken from the 12<sup>th</sup> Avenue monitoring station.

Source: Air Pollution Control District (2008). Five year air quality summary: 2004-2008. Retrieved August 27, 2009 from <http://www.sdapcd.org/air/reports/smog.pdf>.

Over the past two decades, air quality in San Diego County has improved significantly due to state and federal regulations controlling emissions from mobile sources of air pollution, such as vehicles, and local controls on emissions from industrial sources, such as factories and power plants, commercial sources, such as gas stations and dry cleaners, and residential sources, such as water heaters and furnaces. The APCD's 2007 Air Quality Management Plan was designed to reduce ozone concentrations to below the level of the federal standard in 2009<sup>8</sup>. The standard has not been met.

### SURROUNDING LAND USES

The majority of land within the planning area located west of I-5 is under the jurisdiction of the San Diego Unified Port District (Port) and the US Navy. Most of the existing land uses located within the Port's jurisdiction can be classified as marine industrial, which includes activities such as

<sup>8</sup> San Diego County Air Pollution Control District (2007). Eight Hour Ozone Attainment Plan.



shipping, warehousing, manufacturing, and distribution. The Port Master Plan (2010) designates most of the 250 land acres in its National City Bayfront Planning Area for marine-related industrial and marine terminal uses.

On-going and planned uses west of I-5; therefore, pose undesirable impacts on non-industrial and sensitive land uses throughout the planning area. Industrial uses are responsible for the generation of point and non-point source emissions. Distribution activities generate a substantial amount truck traffic that contribute to high levels of diesel emissions and air quality concerns in other areas of the City. Additionally, the heavy concentration of marine-related and military facilities has created substantial barriers to public coastal access across most of National City's bayfront.

## **PUBLIC HEALTH AND FITNESS**

### **Physical Activity**

Regular physical activity is critically important for the health and well-being of people of all ages. Millions of Americans suffer from health problems that can be prevented or improved through regular exercise; these problems include: heart disease, obesity, diabetes, stress, and depression<sup>9</sup>. According to the San Diego County Health and Human Services Community Health Statistics Unit, there is a low percentage of people (18 years of age and older) engaging in moderate and vigorous physical activity within both the South Region and San Diego County as a whole. Refer to Table HEJ-3.

<sup>9</sup> U.S. Department of Health and Human Services (2002). Physical activity fundamental to preventing disease. Retrieved August 28, 2009 from <http://aspe.hhs.gov/health/reports/physicalactivity/>.



**Table HEJ-3**  
**Physical Activity and Exercise (Adults 18+ yrs)\***

Region	Walked for Transport or Fun/Exercise**	No Physical Activity**	Engaged in Moderate Physical Activity**	Engaged in Vigorous Physical Activity**
<b>South Region</b>				
2005	79%	11%	15%	18%
2007	Data not avail.	13%	14%	20%
<b>San Diego County</b>				
2005	79%	10%	16%	15%
2007	Data not avail.	14%	17%	20%

\*% is proportion of people who replied with indicated response to question. Respondents were asked a series of questions related to walking and physical activity to determine whether level is none, some, moderate, or vigorous over a seven day timeframe.

\*\* Percentages are rounded to the nearest whole number.

Source: UCLA Center for Health Policy Research, California Health Interview Survey, <http://www.chis.ucla.edu/> (accessed 5/2009); SANDAG, Current Population Estimates, 8/06, 4/08.

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Public Health Services (PHS), Community Health Statistics, 6/26/2009.

To understand physical fitness levels among children, Table HEJ-4 identifies the percentage of 5<sup>th</sup>, 7<sup>th</sup>, and 9<sup>th</sup> graders in National City meeting the healthy fitness zone for six out of six physical fitness indicators: aerobic capacity, body composition, abdominal strength, trunk extensor strength, upper body strength, and flexibility. There is a lower percentage of fifth graders, attending public schools in National City, who meet fitness standards in comparison to San Diego County and California. Seventh and ninth grade scores are better than County and State scores for the reporting academic year (2008-2009).





**TABLE HEJ-4**  
**National City Students Meeting the Healthy Fitness Zone for 6 out of 6 Physical Fitness Areas (2008-2009)\***

School	5 <sup>th</sup> Grade**	7 <sup>th</sup> Grade**	9 <sup>th</sup> Grade**
Sweetwater High School	--	--	45%
National City Middle School	--	42%	--
Granger Junior High		43%	53%
Olivewood Elementary	18%	--	--
Las Palmas Elementary	12%	--	--
Kimball Elementary	28%	--	--
Palmer Elementary	18%	--	--
Harbison Elementary	16%	--	--
John Otis Elementary	25%	--	--
Central Elementary	11%	--	--
El Toyon Elementary	28%	--	--
Lincoln Acres Elementary	22%	--	--
<b>For Comparison Purposes:</b>			
San Diego County	31%	38%	42%
State of California	29%	34%	38%

Source: California Department of Education Dataquest. Retrieved April 15, 2010 from: <http://data1.cde.ca.gov/dataquest/>

\*The physical fitness test is required to be administered to students in grades 5, 7, and 9 only.

\*\*Percentages are rounded to the nearest whole number.



**Heart Disease** – A broad term that includes more specific heart conditions such as coronary heart disease which can lead to heart attacks and other serious conditions. Heart disease is the leading cause of death for both men and women in the United States.

**Overweight** – A condition in which a person's body mass index is between 25 and 29.99.

**Obesity** – A condition in which a person's body mass index is 30 or higher.

Physical inactivity is one of the main risk factors in developing heart disease, along with tobacco use, obesity, excessive alcohol use, heredity, and diets high in salt, saturated fats, and cholesterol. According to the County of San Diego Health and Human Services Community Health Statistics Unit, in 2004, National City experienced a relatively high rate of death from coronary heart disease (191 deaths per 100,000 population compared to 133 deaths per 100,000 population countywide).

Obesity is a major risk factor for cardiovascular disease, certain types of cancer, and Type 2 diabetes<sup>10</sup>. Exercise and regular physical activity can help to alleviate overweight and obese conditions. Highly walkable neighborhoods have been associated with a decrease in weight and waist size for individuals who increased their levels of physical activity during a one-year period<sup>11</sup>. In 2007, the percentage of overweight and obese individuals was slightly higher in the South Region than county-wide (22% of individuals were overweight in the South Region compared to 18% countywide and 25% of individuals were obese compared in the South Region compared to 22% countywide)<sup>12</sup>.

Diabetes is a disease in which the body does not produce or properly use insulin. Insulin is a hormone that is needed to convert sugar, starches, and other food into needed energy. The more fat tissue a person has, the less sensitive his or her body is to insulin. As a result, there is a strong link between Type 2 diabetes and obesity. A healthy diet and regular physical activity is crucial to maintaining a healthy weight and reducing the risk for diabetes. In 2004, National City had the highest rate of deaths from diabetes in San Diego County (41 persons per 100,000 population compared to 18 persons per 100,000 population countywide). Refer to Figure HEJ-2.

A growing body of research shows that exercise also can help improve the symptoms of emotional ailments, such as stress and depression. Exercise can help prevent a relapse after treatment for depression. It may take at least 30 minutes of exercise a day for at least three to five days a week to significantly improve depression symptoms.

<sup>10</sup> Centers for Disease Control and Prevention (2009). Overweight and obesity. Retrieved August 31, 2009 from [http://www.cdc.gov/heartdisease/risk\\_factors.htm](http://www.cdc.gov/heartdisease/risk_factors.htm).

<sup>11</sup> Oregon Research Institute (2009). Fast-food density and neighborhood walkability linked to residents' weight and waist side. Science Daily. Retrieved August 31, 2009 from <http://www.sciencedaily.com/releases/2009/03/090303161431.htm>.

<sup>12</sup> County of San Diego Health and Human Services Community Health Statistics Unit (2009). County of San Diego Community Profiles by Region and Subregional Area: South Region.



However, smaller amounts of activity, as little as 10 to 15 minutes at a time, can improve mood in the short term<sup>13</sup>.

In addition to improving mental health, management of stress and depression is important to prevent serious physical health problems, such as heart disease. There are linkages between heart disease and the factors that often cause stress. There also are links between heart disease and depression. For instance, women who are depressed are twice as likely to develop heart disease as those who are not<sup>14</sup>.

In 2007, the percentage of adults within the South Region who sought out professional help for a mental or emotional condition was lower than in San Diego County (14% in the South Region compared to 21% countywide)<sup>15</sup>. This does not necessarily indicate that there are fewer people in the South Region experiencing emotional distress. It is possible that people in the South Region are just less likely to obtain help from a counselor due to various economic, cultural, or access constraints.

### Healthy Foods

The availability of healthy food options, including fresh produce, at stores and farmers' markets, may correlate with a higher consumption of fruits and vegetables, which in turn, can alleviate the prevalence of excess weight and obesity. A high density of neighborhood fast food outlets (formula restaurants) has been shown to be associated with weight gain and an increase in waist size among residents who frequent those establishments<sup>16</sup>. Within the City, there are approximately twice as many fast food and convenience stores as there are general grocery and fruit and vegetable markets<sup>17</sup>.

A major factor affecting access to healthy foods is an individual's or family's level of income. High calorie foods tend to be the least expensive and most resistant to inflation, which partially explains why the highest rates of

<sup>13</sup> Mayo Clinic (2007). Depression and anxiety: Exercise eases symptoms. Retrieved August 31, 2009 from <http://www.mayoclinic.com/health/depression-and-exercise/MH00043>.

<sup>14</sup> Sutter Health (2008). Stress and depression. Retrieved August 31, 2009 from [http://hearts.sutterhealth.org/women/risk/wha\\_depression.html](http://hearts.sutterhealth.org/women/risk/wha_depression.html).

<sup>15</sup> County of San Diego Health and Human Services Community Health Statistics Unit (2009). County of San Diego Community Profiles by Region and Subregional Area: South Region.

<sup>16</sup> Fuzhong Li, PhD; Peter Harmer, PhD, MPH; Bradley J. Cardinal, PhD; Mark Bosworth, MS; Deb Johnson-Shelton, PhD.(2009). Obesity and the Built Environment: Does the Density of Neighborhood Fast-Food Outlets Matter? American Journal of Health Promotion. Vol. 23, No. 3.

<sup>17</sup> California Department of Public Health (2008). California Nutrition Network Map. Retrieved August 31, 2009 from <http://cnngis.org/viewer.aspx>.



obesity continue to be observed in groups with the most limited economic means<sup>18</sup>. According to the US Census, in 2000, 22% of National City's population was living in poverty compared to 12% countywide.

The county-administered Supplemental Nutrition Assistance Program (SNAP) seeks to provide assistance relative to food costs. According to the United States Department of Agriculture (USDA), the San Diego County participation rate in the SNAP ranks the lowest in the nation among urban centers. Of those eligible to receive SNAP benefits, only 29% are doing so<sup>19</sup>. Although food stamp data are not available at the city level, based on County statistics, it is highly likely that there are far more people eligible to receive benefits in National City than who actually participate in the program. The County of San Diego has attributed its low participation rates to a lack of awareness of food stamp eligibility rules and dissatisfaction with the eligibility process.

### Access to Health Care

The availability of, and access to, health care facilities plays a large role in the preservation and maintenance of good public health and the prevention of morbidity and hospitalizations. National City contains six primary care facilities, five long term care facilities, and one hospital. All appear to be well served by vehicular routes and public transport (refer to Figure HEJ-3). Since having medical insurance influences whether or not one visits a medical professional, it is important to note the percentage of the population that is currently insured. In 2007, the percentage of currently insured adults aged 18-64 within the South Region was 83%, which mirrored that of the county<sup>15</sup>.

### Lead Based Paint

Structures constructed prior to 1978 have the propensity to contain paint that has high levels of lead. Approximately 85 percent of the residential dwelling units in the City were constructed prior to 1980<sup>20</sup>. Lead-based paint is not a hazard when it is in good condition, but exposure to lead often occurs when paint is aging, peeling, or being removed. Lead exposure can cause nervous system and kidney damage (among a host of other physical problems) in

<sup>18</sup> Reuters Health (2008). Healthy food getting more expensive. Retrieved August 31, 2009 from <http://www.reuters.com/article/healthNews/idUSPAR27349420080102>.

<sup>19</sup> Food research and action center (2008). Food stamp access in urban America: A city by city snapshot. Retrieved September 3, 2009 from <http://frac.org/pdf/urbanfoodstamps08.pdf>.

<sup>20</sup> U.S. Census Bureau, American FactFinder. (2000.) Census 2000, Summary File 3. Retrieved May 3, 2010 from: <http://factfinder.census.gov/home/en/datanotes/expsf3.htm>.



children. Exposure to high levels of lead can lead to serious health problems such as seizures. Lead exposure also can be dangerous for adults, with impacts ranging from increased chances of illness during pregnancy to nerve disorders.

Approximately 13,348 housing units were constructed prior to 1980 in National City. Approximately 589 of these units are at high risk for containing lead based paint hazards. Through grants and public/private participation a total of 115 units have been mitigated from a lead based paint perspective as of 2008<sup>21</sup>. As of the writing of this document, the City does not have a program to address residential lead paint issues. It is anticipated that a Housing Rehabilitation Program, slated to begin in 2010, will include a component to address residential lead based paint issues.

## C. Citywide Goals and Policies

### RESPIRATORY HEALTH AND AIR QUALITY

**Goal HEJ-1: The reduction of health risks related to air pollution.**



**Sensitive Land Uses** – Land uses where segments of the population most susceptible to poor air quality (i.e., children, the elderly, and those with pre-existing serious health problems affected by air quality) are most likely to spend time, including schools and schoolyards, parks and playgrounds, day care centers, nursing homes, hospitals, and residential communities. (California Air Resources Board)

**Policy HEJ-1.1:** Locate new stationary sources of emissions so as to minimize impacts on sensitive land uses, where feasible.

**Policy HEJ-1.2:** Encourage existing stationary sources of emissions to use feasible measures to minimize emissions that could have potential impacts on air quality.

**Policy HEJ-1.3:** Require new development located within 500 feet of a freeway to include feasible measures such as separation/setbacks, landscaping, barriers, ventilation systems, air filters/cleaners, and/or other effective measures to minimize potential impacts from air pollution.

**Policy HEJ-1.4:** Require new sensitive land uses to include feasible measures such as separation/setbacks, landscaping, barriers, ventilation systems, air filters/cleaners, and/or other effective measures to minimize potential impacts from air pollution.

**Policy HEJ-1.5:** Encourage existing sensitive land uses to include feasible measures such as separation/setbacks, landscaping, barriers, ventilation systems, air

<sup>21</sup> City of National City (2008). Closeout of Lead Hazard Control (LHC) Grant - CALHB0238-03 Final Report.





filters/cleaners, and/or other effective measures to minimize potential impacts from air pollution.

**Policy HEJ-1.6:** Consider air quality impacts, including cumulative impacts, from existing and new development when making land use decisions.

**Policy HEJ-1.7:** Designate truck routes that avoid sensitive land uses, where feasible.

**Policy HEJ-1.8:** Encourage smoke-free workplaces, multi-family housing, parks, and other outdoor gathering places to reduce exposure to second-hand smoke.

**Policy HEJ-1.9:** Request lead and responsible agency consultation on land use and transportation planning, design, and implementation projects to insure that feasible measures are included to minimize potential impacts on the city from air pollution.

**Policy HEJ-1-10:** Distribute information about best practices to reduce and/or eliminate sources of indoor air pollution.

### Why is this Important?

National City suffers disproportionately from respiratory disorders associated with air quality issues compared to other parts of San Diego County. The above goal and policies are intended to reduce exposure to poor air quality by separating sensitive receptors from significant sources of air pollution; reducing emissions; incorporating design features that minimize air quality impacts into new development; considering cumulative air quality impacts when making land use decisions; and advising other jurisdictions on land use decisions that could affect National City residents.

### PHYSICAL ACTIVITY

**Goal HEJ-2: Safe and accessible physical activities to meet the needs of all segments of the community.**

**Policy HEJ-2.1:** Encourage walking and bicycling as daily physical activities by providing conveniently located daily goods and services and recreational facilities and programs within a comfortable walking or biking distance from homes.



*Refer to the Conservation and Sustainability Element for additional policies related to reducing emissions and improving air quality.*



*Refer to the Circulation Element for additional policies related to transportation planning.*



*Refer to the Open Space and Agriculture Element for additional policies related to recreation.*

*Refer to the Circulation Element for policies related to pedestrian and bicycle circulation.*



**Universal Design** –  
*A user-friendly approach to design in the living environment where people of any culture, age, size, weight, race, gender and ability can experience an environment that promotes their health, safety and welfare today and in the future. (Universal Design Alliance)*

**Policy HEJ-2.2:** Identify and eliminate, where feasible, barriers to outdoor physical activity, such as damaged or incomplete sidewalks and bike paths, insufficient lighting, poor walkability, and lack of landscaping and shade trees along streets.

**Policy HEJ-2.3:** Improve access to bicycles, helmets, and related equipment for lower income families.

**Policy HEJ-2.4:** Apply universal design principles in the design and review of development and redevelopment projects, where feasible.

**Policy HEJ-2.5:** Raise awareness about the importance of healthy behaviors and physical fitness to overall well-being.

### Why is this important?

The more convenient and comfortable a place is to walk or bike, the more likely an individual is to achieve the recommended amount of daily exercise. Access to parks, trails, and recreation facilities can significantly increase levels of physical activity. Any reduction in vehicle miles traveled also creates corresponding reductions in air pollution, traffic volumes, noise, and safety impacts.

### HEALTHY FOODS



**Healthy Food Supply** – Provides (1) a minimum of 5,000 square feet of retail space for a general line of food and non-food products intended for home preparation, consumption, and utilization (2) at least 50% of a general consumption line of food products intended for home preparation, consumption, and utilization (3) at least 30% of retail space for perishable goods that include dairy, fresh produce, fresh meats, poultry, fish, and frozen foods (4) at least 500 square feet of retail space for fresh produce. (San Diego County Health and Human Services)

**Goal HEJ-3:** Convenient access to fresh and healthy foods, water, fruits, and vegetables for all segments of the community.

**Policy HEJ-3.1:** Prioritize healthy food supplies in economic development efforts.

**Policy HEJ-3.2:** Prioritize and facilitate the development of healthy food establishments in areas with a high concentration of fast food establishments, convenience stores, and liquor stores.

**Policy HEJ-3.3:** Encourage and facilitate public or private shuttle systems to transport customers to grocery stores and other sources of healthy foods.

**Policy HEJ-3.4:** Encourage the development of convenient and accessible neighborhood gardens and other sources of healthy foods in appropriate zones and within each neighborhood, where feasible.



*Refer to the Open Space and Agriculture Element for additional policies related to urban agriculture and community gardens.*



**Mobile Health Food Market** – A truck that delivers groceries to residences and/or sells healthy foods/meals curbside in residential and/or employment areas.

**Policy HEJ-3.5:** Encourage new development and redevelopment to include a healthy food supply or edible garden, or be located within a half mile of a healthy food supply, where feasible and appropriate.

**Policy HEJ-3.6:** Encourage and facilitate the establishment of a farmer's market(s), mobile health food markets, and corner stores that sell healthy foods.

**Policy HEJ-3.8:** Require new development to provide and maintain fresh drinking water fountains, where feasible and appropriate.

**Policy HEJ-3.9:** Inform low income families and people experiencing homelessness about food assistance programs.

**Goal HEJ-4: Improved eating habits among all segments of the community.**

**Policy HEJ-4.1:** Promote messages regarding healthy eating habits and food choices.

**Policy HEJ-4.2:** Encourage food-service establishments to post nutritional information, comply with dietary guidelines, eliminate the use of trans fats, and serve locally-grown foods.

**Policy HEJ-4.3:** When served at City-sponsored events, provide food consistent with health-oriented dietary guidelines, including water and fresh fruit and/or vegetables.

#### **Why is this important?**

Eating healthy foods reduces the risk of health problems such as diabetes, heart disease, excess weight, and obesity. In addition, a healthy diet is associated with better academic performance<sup>22</sup>. Despite these known benefits, as of 2003, only a quarter of the nation's population followed the government recommended diet that calls for eating five servings of fruits and vegetables a day<sup>23</sup>. There are many factors that impede healthy eating such as a lack of grocery stores in the neighborhood, lack of transportation to get to a place that sells affordable, healthy foods, the expense of

<sup>22</sup> Florence, M., Asbridge, M, and Veugelers, P. (2008). Diet quality and academic performance. *Journal of School Health*. Vol. 78(4): 209-215.

<sup>23</sup> Centers for Disease Control and Prevention (2006). Physical activity and good nutrition: Essential elements to prevent chronic diseases and obesity. Retrieved January 22, 2010 from <http://www.cdc.gov/nccdphp/publications/aag/pdf/dnpa.pdf>.



healthy foods compared to unhealthy foods, and limited time or knowledge to prepare healthy foods. The preceding goals and policies are aimed at encouraging healthy eating habits and eliminating the barriers that make it difficult for people to eat healthily.

## ACCESS TO HEALTH CARE

### Goal HEJ-5: Convenient and accessible health services that meet the needs of the community



*Refer to the Safety Element for policies related to emergency medical services.*

**Policy HEJ-5.1:** Encourage a range of health services in locations that are convenient and accessible (walkable) to the community.

**Policy HEJ-5.2:** Encourage local transit providers to establish and maintain routes and services that provide the community with convenient access to health service facilities, where feasible.

**Policy HEJ-5.3:** Encourage businesses to provide and maintain a free shuttle service to health care facilities for residents, where feasible.

### Why is this important?

When residents have easy and safe access to a variety of health care services, they have the opportunity to learn about good health care practices, prevent illness, and lessen the severity of illness.

## LEAD BASED PAINT

### Goal 6: The elimination of health risks associated with lead-based paint.



*Refer to the Housing Element for additional information regarding the City's efforts to remove lead based paint hazards.*

**Policy 6.1:** Inform the public about the risks associated with lead based paint and encourage and facilitate remediation.

**Policy 6.2:** Develop a process by which to identify residences with lead based paint hazards and notify residents of the potential hazard.

**Policy 6.3:** Program the remediation of lead based paint in city structures, prioritizing efforts in buildings where children may be present.



### Why is this important?

As indicated in the Existing Setting section, approximately 13,348 housing units were constructed prior to 1980 in National City and almost 600 of these units are at high risk for containing lead based paint hazards. Although the City has succeeded in mitigating 115 of these units as of 2008 through its Lead Hazard Control Program, there is still a long way to go to rid National City of its lead based paint hazards. Young children are at the highest risk of developing health problems as a result of lead exposure, and low income families often cannot afford to remove lead based paint hazards from their homes. Therefore, directing resources towards low-income residences where young children reside is a priority. Educating residents about the steps they can take to reduce the risk of lead exposure also is an important step toward eliminating hazards.

## COMMUNITY INVOLVEMENT



*Refer to the Education and Public Participation Element for additional policies related to community outreach and involvement.*

**Goal HEJ-7: Involvement of all segments of the public in the process of creating a healthy environment and improving the health of the community.**

**Policy HEJ-7.1:** Facilitate the involvement of community residents, businesses, and organizations in the active support of community health and consider their concerns in the decision-making process.

**Policy HEJ-7.2:** Address health issues in National City with the public during the annual review of the General Plan.

### Why is this important?

The more opportunities that are provided for community involvement helps to assure that community issues are identified and addressed. Through community involvement, opportunities that contribute to improved public health can be identified and prioritized.



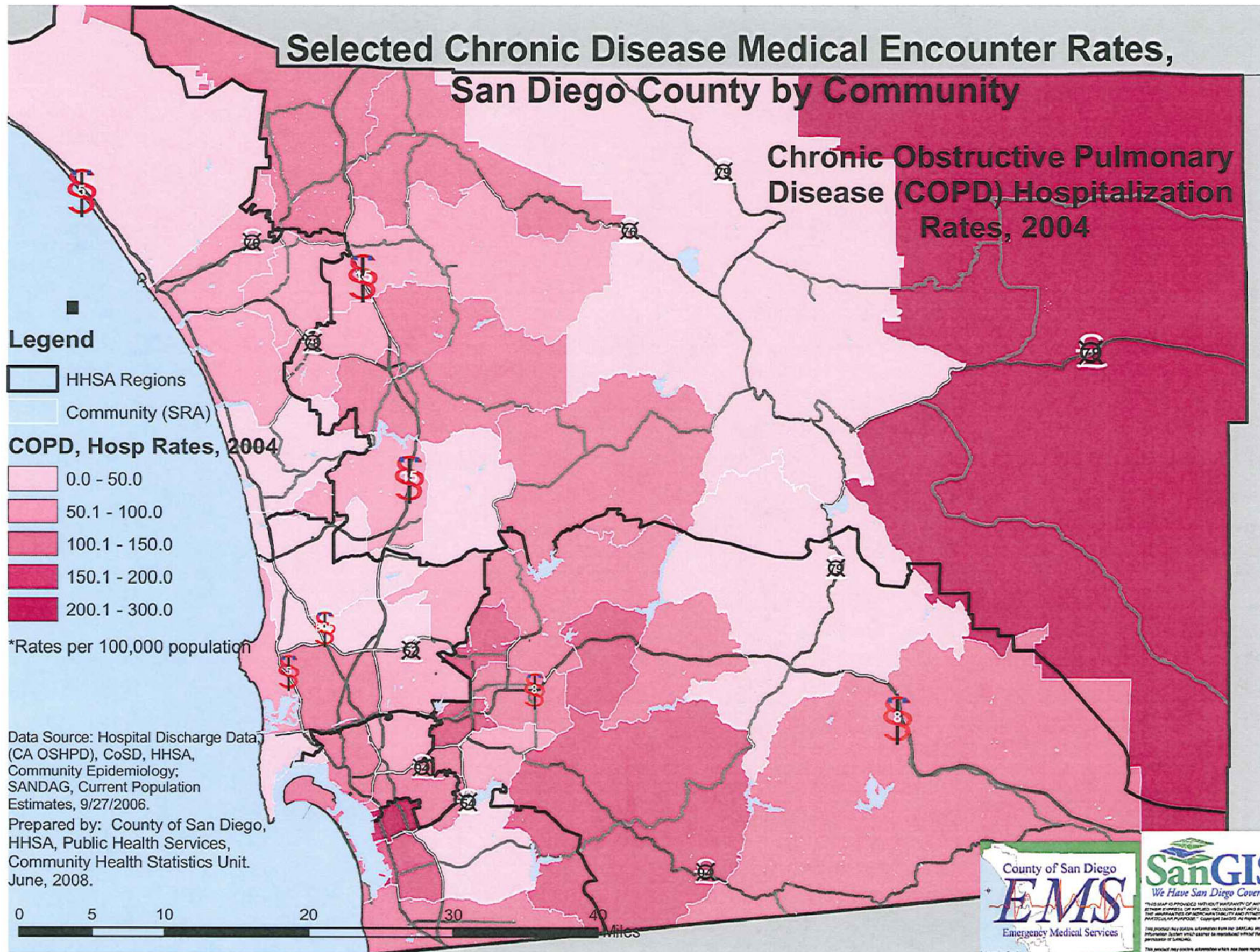


Figure HEJ-1  
Chronic Obstructive  
Pulmonary Disease (COPD)  
Hospitalization Rates, 2004



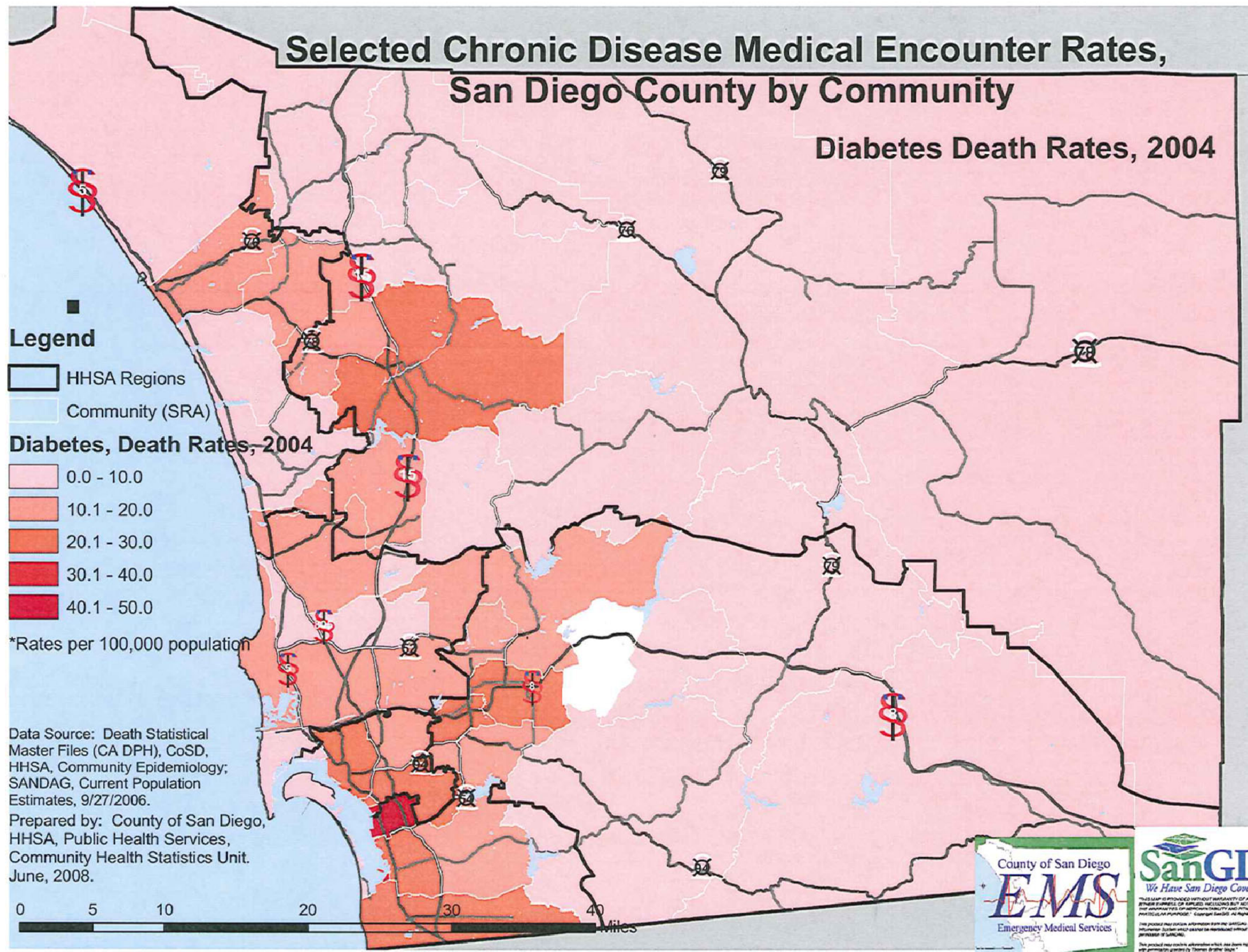
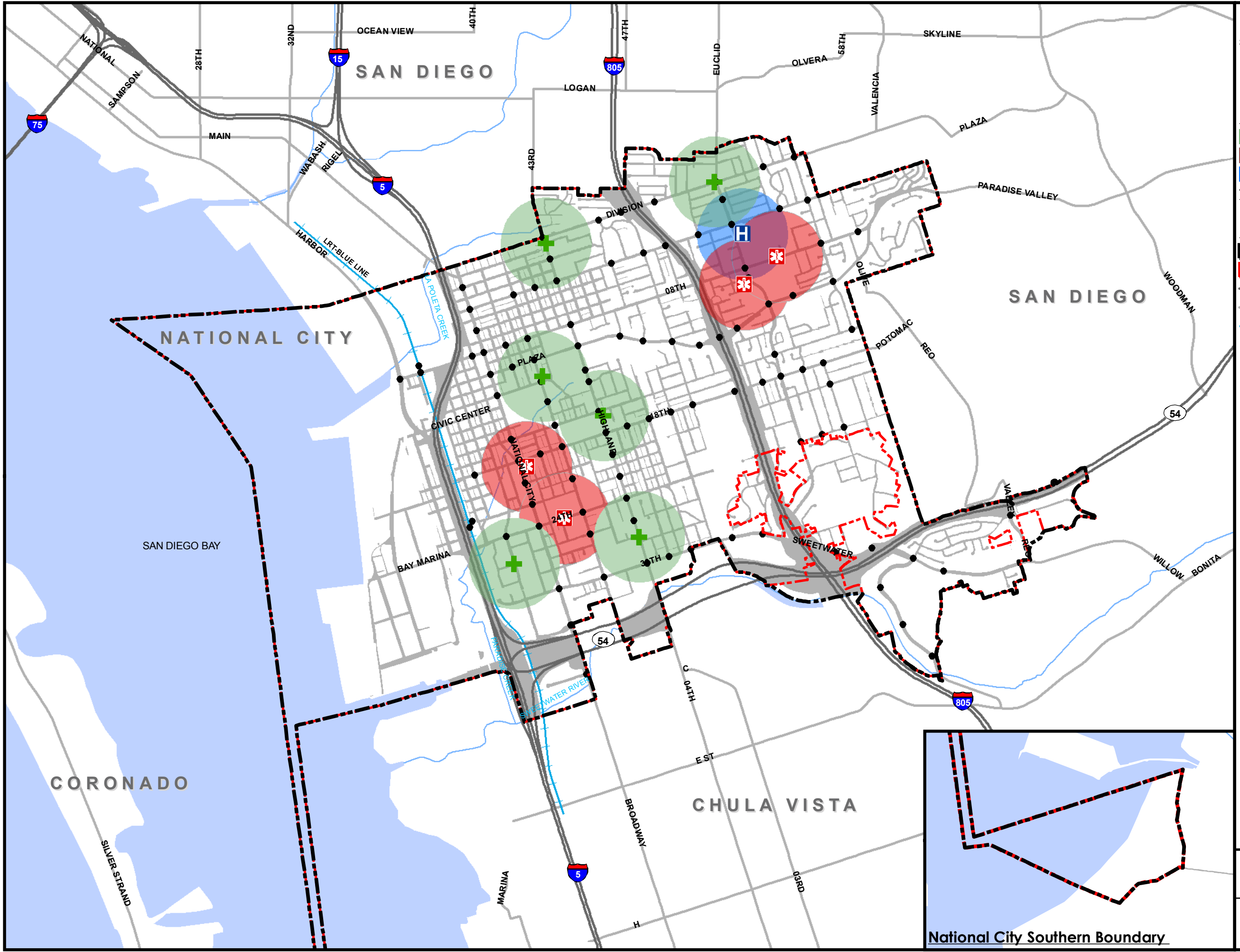


Figure HEJ-2  
Diabetes Deaths  
San Diego County





### Legend

**3778 HealthFacilities**

- Primary Care Facility or Clinic
- Long Term Care Facili
- Hospital

**Health Care Facility 1/4 Mile Radius**

- Primary Care Facility 1/4 Mile Radius
- Long Term Care Facility or Clinic 1/4 Mile Radius
- Hospital 1/4 Mile Radius

**Transit**

- Transit Stops

**Base Layers**

- National City Planning Area Boundary
- National City Boundary
- Freeways
- Major Roads
- Railroad

**Figure HEJ-3**  
**Proximity of Health Care**  
**Facilities to Transit Stops**

N

0 0.25 0.5 1

Miles

CALIFORNIA

NATIONAL CITY

1837

INCORPORATED

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