

# San Francisco Community Risk Reduction Plan: Air Quality Health Risk Improvement Plan

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San Francisco Community Risk Reduction Plan / May 20, 2017 / Cal AEP 2017



**San Francisco**  
**Planning**



# Why Prepare a Community Risk Reduction Plan?

## GHG / Sustainable Communities Strategy



### GREENHOUSE GAS / SUSTAINABLE COMMUNITIES LEGISLATION

AB 32 and SB 375 have led to a new era of regional planning focused on policy-driven outcomes rather than forecasts and funding allocations based on past trends.



### REGIONAL EXPECTED GROWTH

**+ 2.1 MILLION PEOPLE**

**+660,000 HOUSING UNITS**

**+1.1 MILLION JOBS**



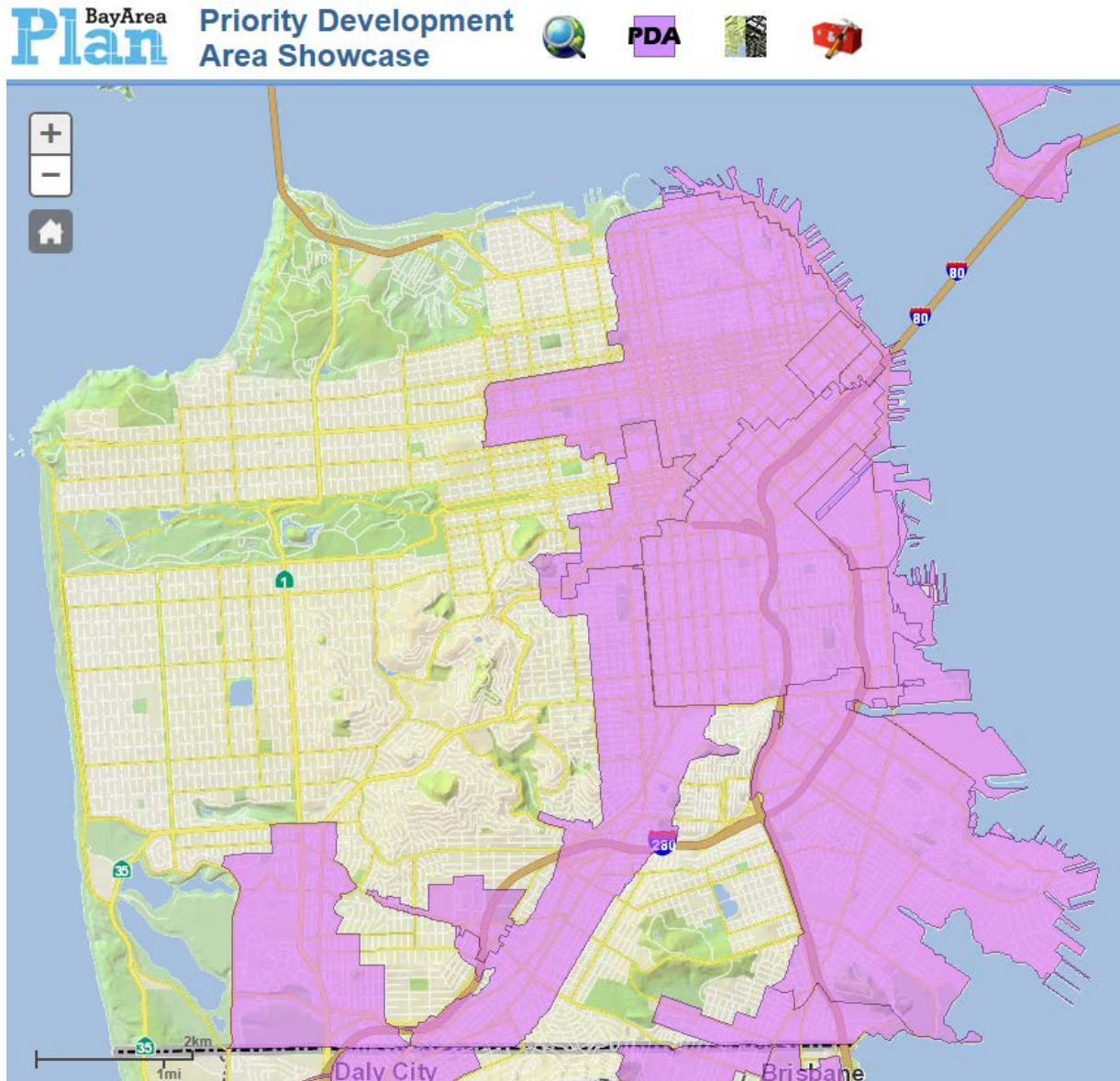
### SAN FRANCISCO'S SHARE

**MAINTAIN 15%**  
*share of regional growth*

**+92,000 HOUSING UNITS**  
*(3,000/year)*

**+190,000 JOBS**  
*(6,000/year)*

# Where will this growth occur?



Source: ABAG, <http://gis.abag.ca.gov/website/PDAShowcase/>



# Areas of Air Pollution Concern (2008-2012)

## Existing Article 38 - Potential Roadway Exposure Zone



SAN FRANCISCO  
PLANNING DEPARTMENT



Health Code  
Article 38 (2008)

Grew out of  
Eastern  
Neighborhoods  
Land Use Plans

- > 10 units near high volume roadways
- Enhanced Ventilation



# Benefits of a Community Risk Reduction Plan

**Comprehensively address air quality health risks at a community level rather than project-by-project through CEQA**

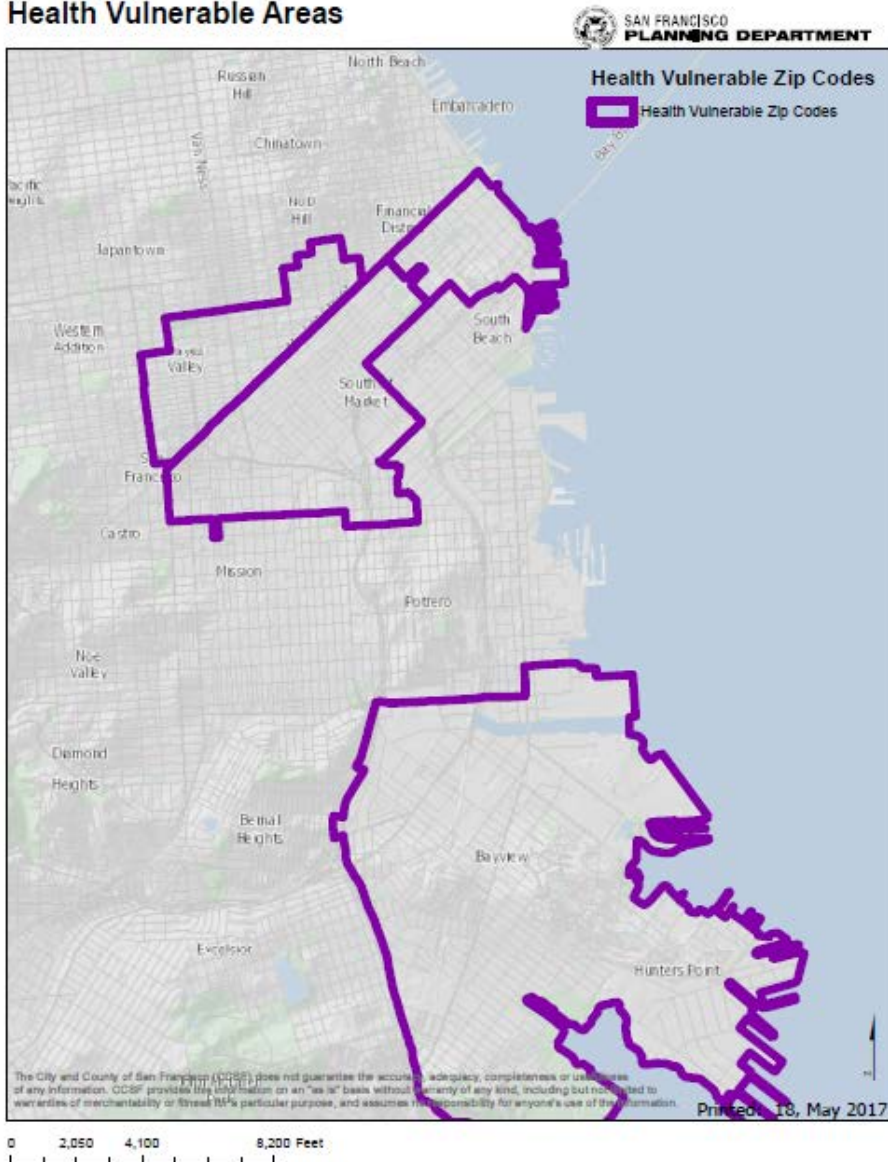
**Address health effects to existing populations**

**Address health effects of bringing new populations to areas with higher air pollutant levels**

**Reduce the need for project-specific mitigation through adoption of Community Risk Reduction Plan policies that become requirements of new development**



### Health Vulnerable Areas



Partnered with Air District & DPH to  
model most known air pollutant sources

Initial standards for areas where:

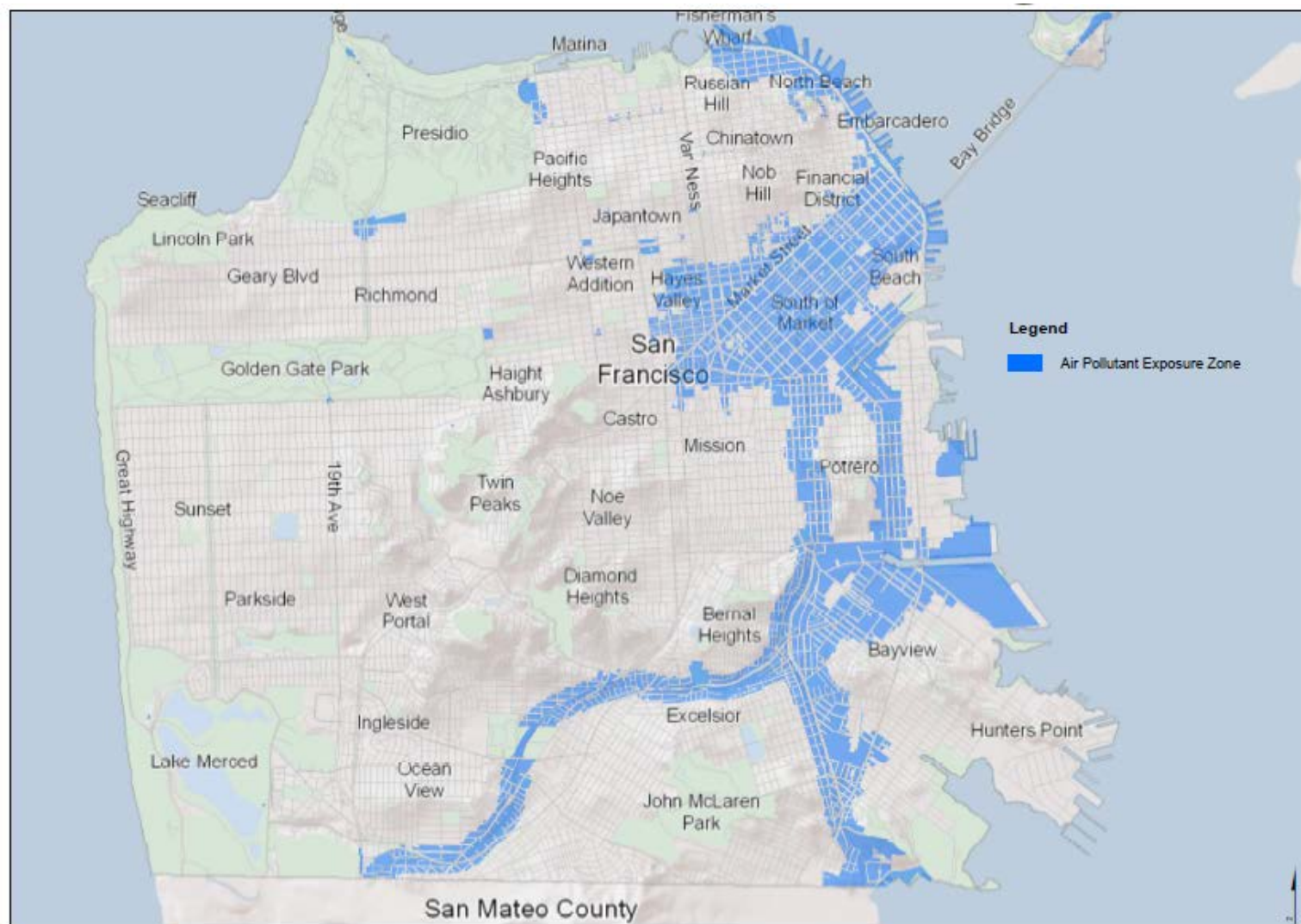
- Cancer risk at or above 100/million
- PM2.5 levels at or above 10 ug/m3

## Standards based on public feedback

- Incorporated a health vulnerability layer where:
  - Cancer risk standard reduced to 90/million
  - PM2.5 standard reduced to 9.0 ug/m3
- Ensure that all parcels within 500 feet of major freeways were included.

# Air Pollutant Exposure Zone

SFDPH  
Environmental  
improving environments  
protecting health



# Near-term Actions:

## Updated & Modified Existing Regulations

### ■ Updated Health Code Article 38

- No project-specific modeling required
- Applies now to *all new sensitive uses* in the Air Pollutant Exposure Zone (APEZ)
  - Also applies to major renovations with sensitive uses
- Requires MERV-13 or equivalent ventilation

### ■ Modified Clean Construction Ordinance

- Applies only to City Projects in APEZ
- Requires most construction equipment to be Tier 2 and equipped with Level 3 diesel particulate filter (or Tier 4 equipment)
- Limits idling to 2 minutes

## San Francisco CLEAN CONSTRUCTION ORDINANCE

Implementation Guide for San Francisco Public Projects



FINAL  
AUGUST 2015



San Francisco Department of the Environment  
San Francisco Department of Public Health  
San Francisco Planning Department

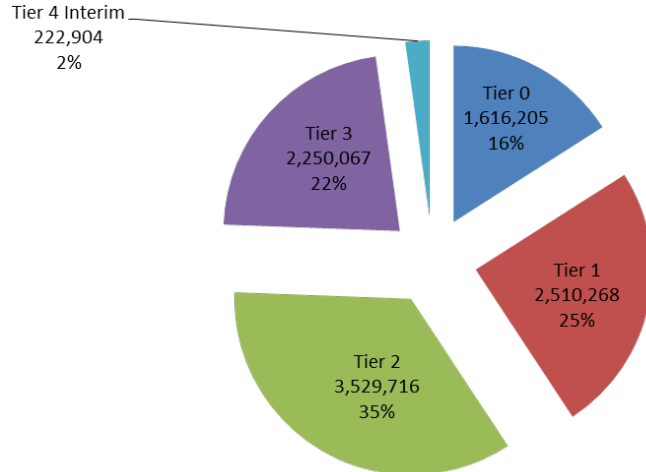


## Near-term Actions Continued:

### Identified Standard Mitigation Measures for Projects in APEZ

- Diesel backup generators required to be Tier 2 with a Level 3 diesel particulate filter or Tier 4
- Construction equipment must be Tier 2 with a Level 3 diesel particulate filter or Tier 4 & idling is limited to 2 minutes

**SFBAAB All Fleet Sizes (Activity Hours) - 2010**



Notes:  
Total Activity Hours -  
10,129,160

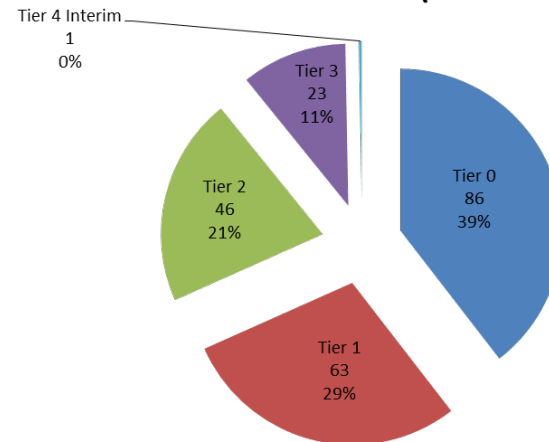
-First number shown in each  
pie is total activity hours in  
that tier.

-Second number shown in  
each pie is the percent of  
total activity hours in that tier.

Tiers are combined  
EPA/CARB PM Emission  
Standards

Source: California Air Resources Board, "In-Use Off-Road Equipment,  
2011 Inventory Model," Query accessed online, April 2, 2012.  
[http://www.arb.ca.gov/msei/categories.htm#inuse\\_or\\_category](http://www.arb.ca.gov/msei/categories.htm#inuse_or_category)

**SFBAAB All Fleet Sizes (PM10 Emissions) - 2010**



Notes:  
Total PM10 Emissions -  
219 tons

-First number shown in each  
pie is total PM10 emissions  
in that tier.

-Second number shown in  
each pie is the percent of  
total PM10 emissions in that  
tier.

Tiers are combined  
EPA/CARB PM Emission  
Standards

Source: California Air Resources Board, "In-Use Off-Road Equipment,  
2011 Inventory Model," Query accessed online, April 2, 2012.  
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# 2013 Draft Strategies

5

Goals

24

Actions  
some completed

Strategy

Implementation &  
Monitoring Strategy

## SAN FRANCISCO COMMUNITY RISK REDUCTION PLAN





## Current Efforts

# SAN FRANCISCO COMMUNITY RISK REDUCTION PLAN



- Modeling Update
  - Address new & removed stationary sources
  - Verify adequacy of mobile source data
  - Update maritime source data
  - Update caltrain data
  - Community outreach for modeling
- Evaluate the air pollutant standards based on modeling results
- Investigate development of an Air Pollution Offset Mitigation Program
- Draft Plan for Public Review
  - Plan outreach
- Plan adoption & implementation
  - How can the CRRP streamline CEQA documents?

THANKYOU



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