



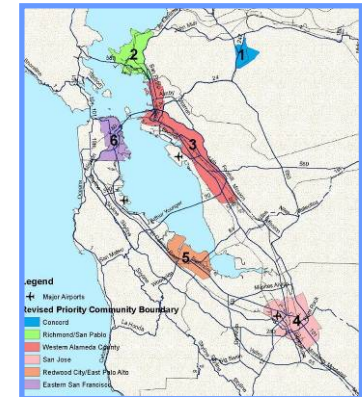
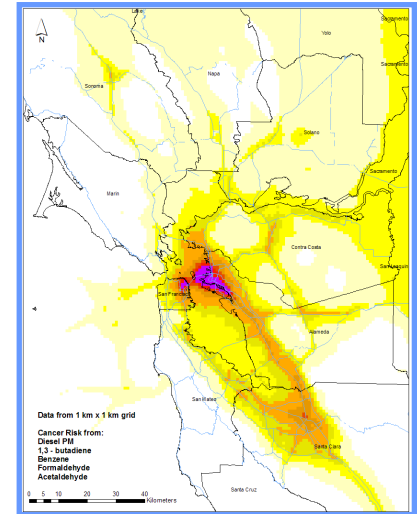
BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

COMMUNITY RISK REDUCTION PLANS

**Phil Martien, Ph.D.
CARE Task Force Meeting
Bay Area Air Quality Management District
February 11, 2010**

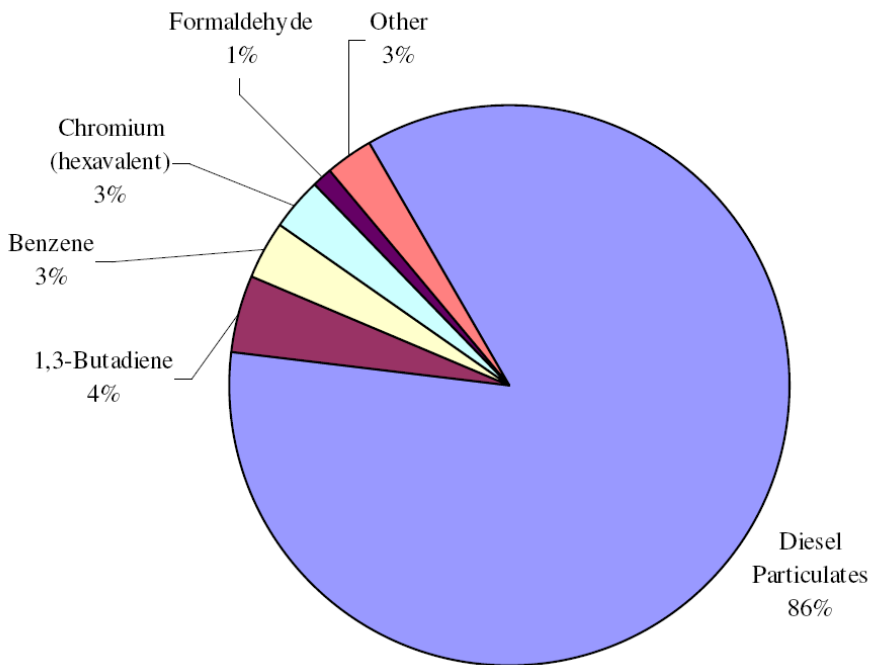
Community Air Risk Evaluation (CARE) Accomplishments

- 2006** First regional toxics emissions inventory
Began focusing grant funding
Regular CARE Task Force meetings
- 2007** Began West Oakland health risk assessment
Richmond BNSF railyard assessment
Began focused public outreach
- 2008** Update regional toxics emissions
Regional toxics modeling
Board resolution on impacted communities
- 2009** Identify impacted communities
Clean Air Communities Initiative
Began West Oakland monitoring study
Draft CEQA guidelines for PM & toxics
MOU to enforce CARB diesel regulations

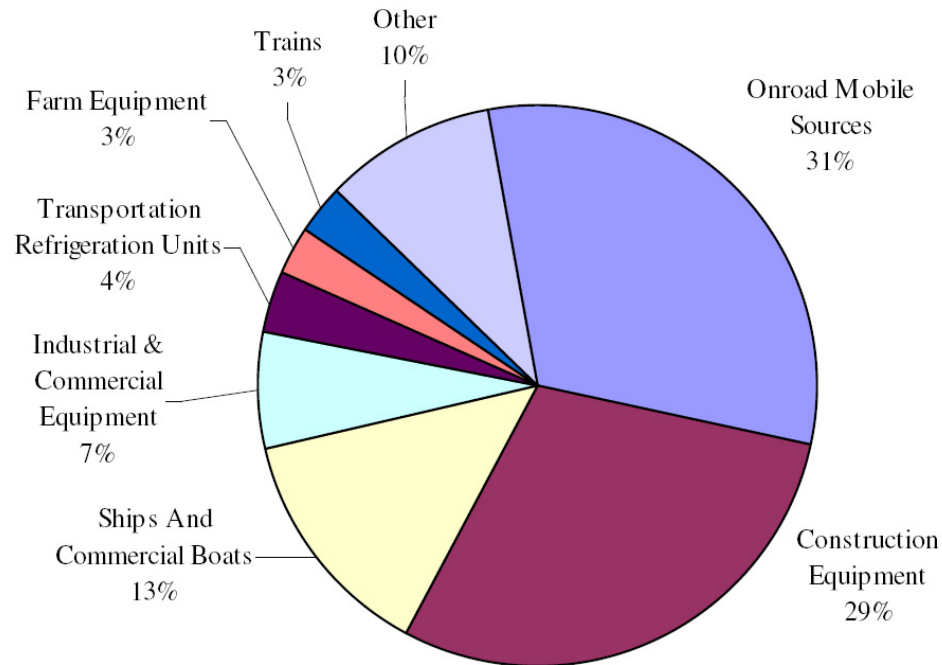


Cancer Toxicity-Weighted Emissions: Bay Area (2005)

By Pollutant

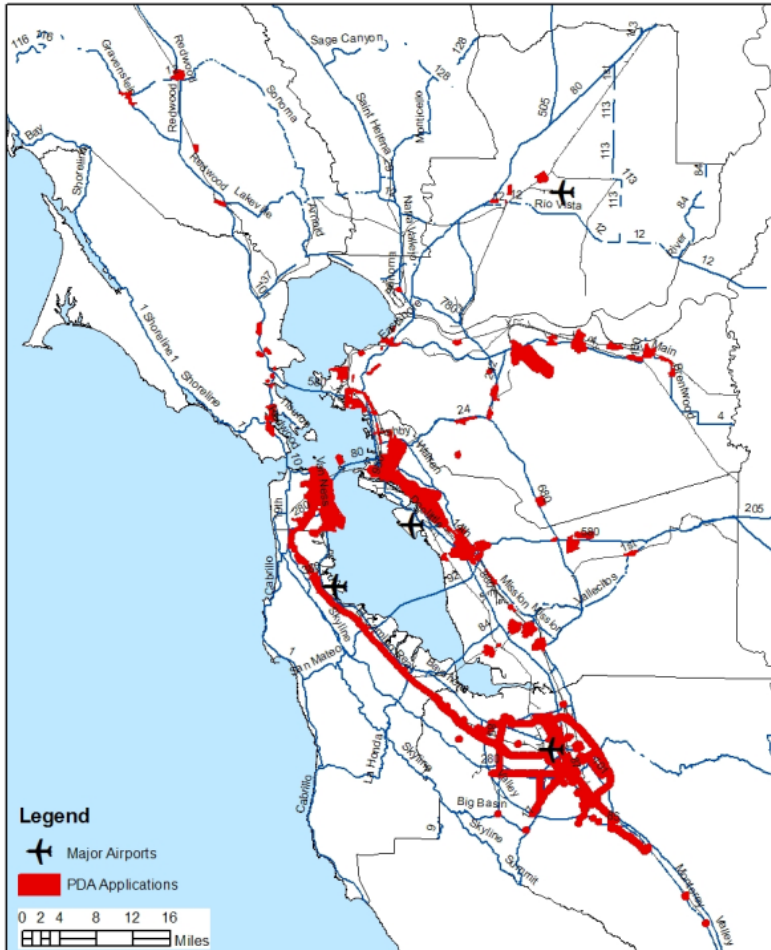


By Source Category

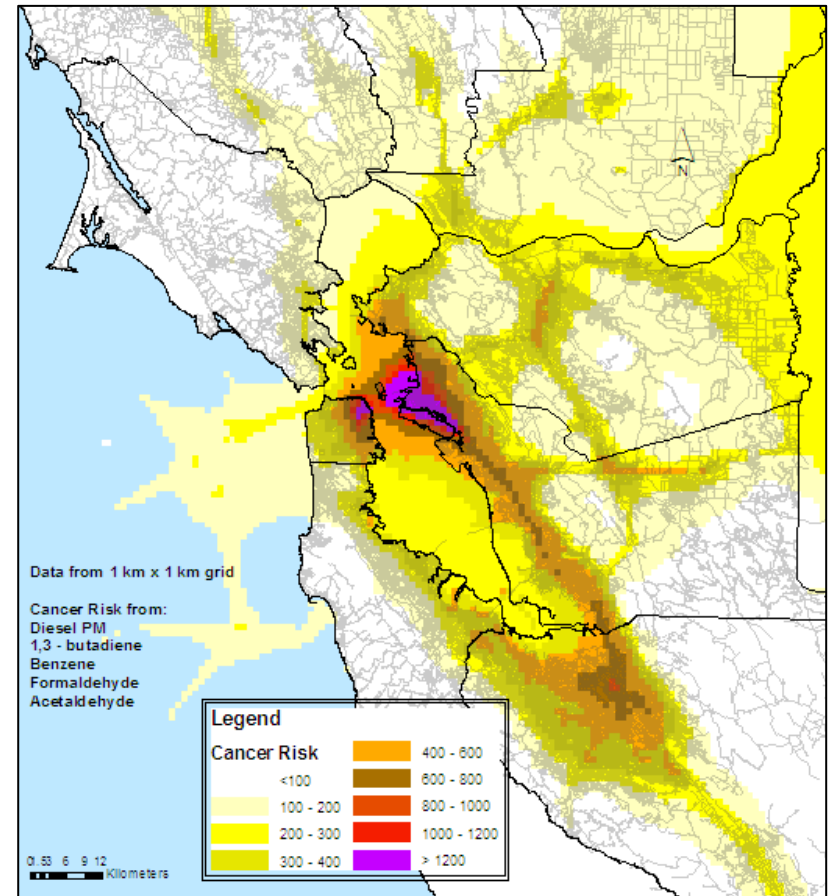


Priority Development Areas and Air Toxics

Priority Development Areas



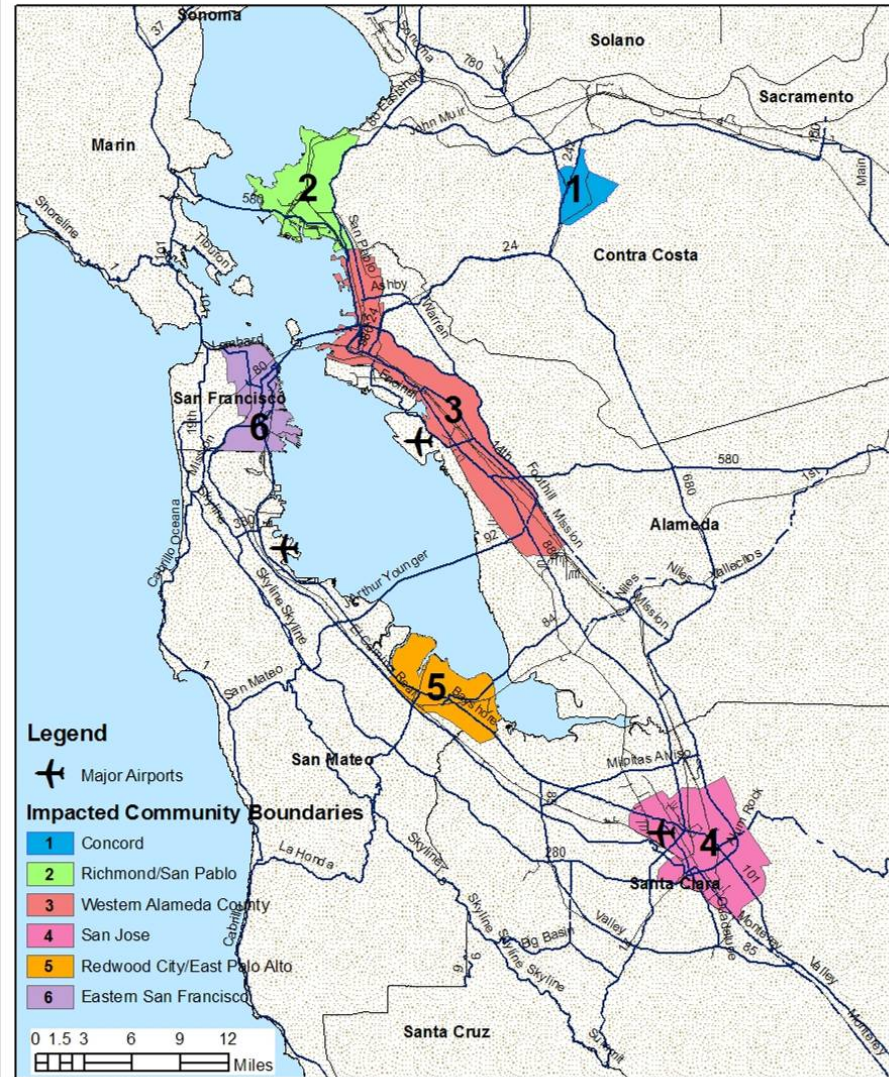
Modeled Air Toxics Risk



Identify Impacted Areas

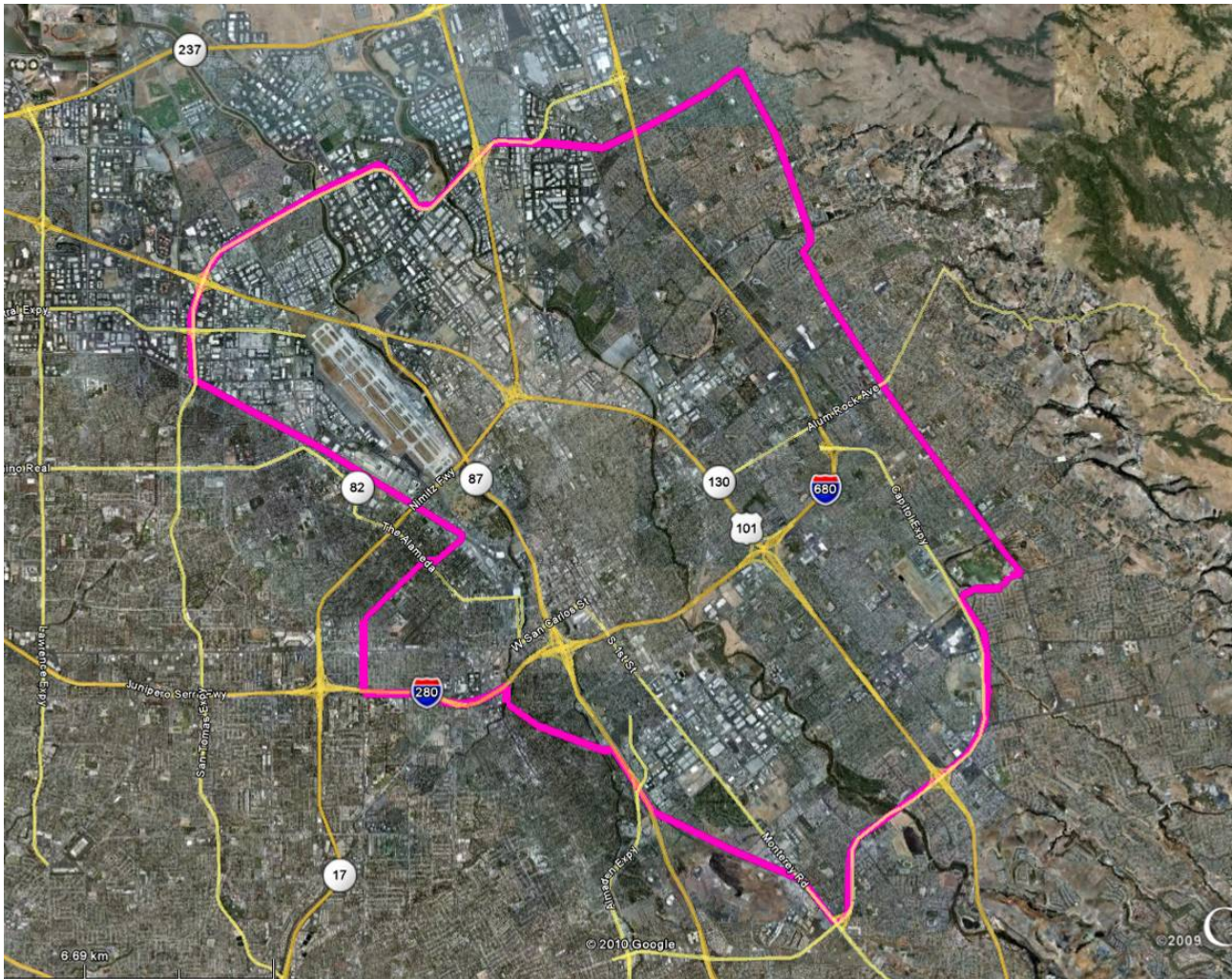
Based on

- Elevated Cancer Risk
- High Emissions of Toxic Air Contaminants
- Sensitive Populations
 - Youth
 - Seniors
 - Low-Income Families





San Jose Community

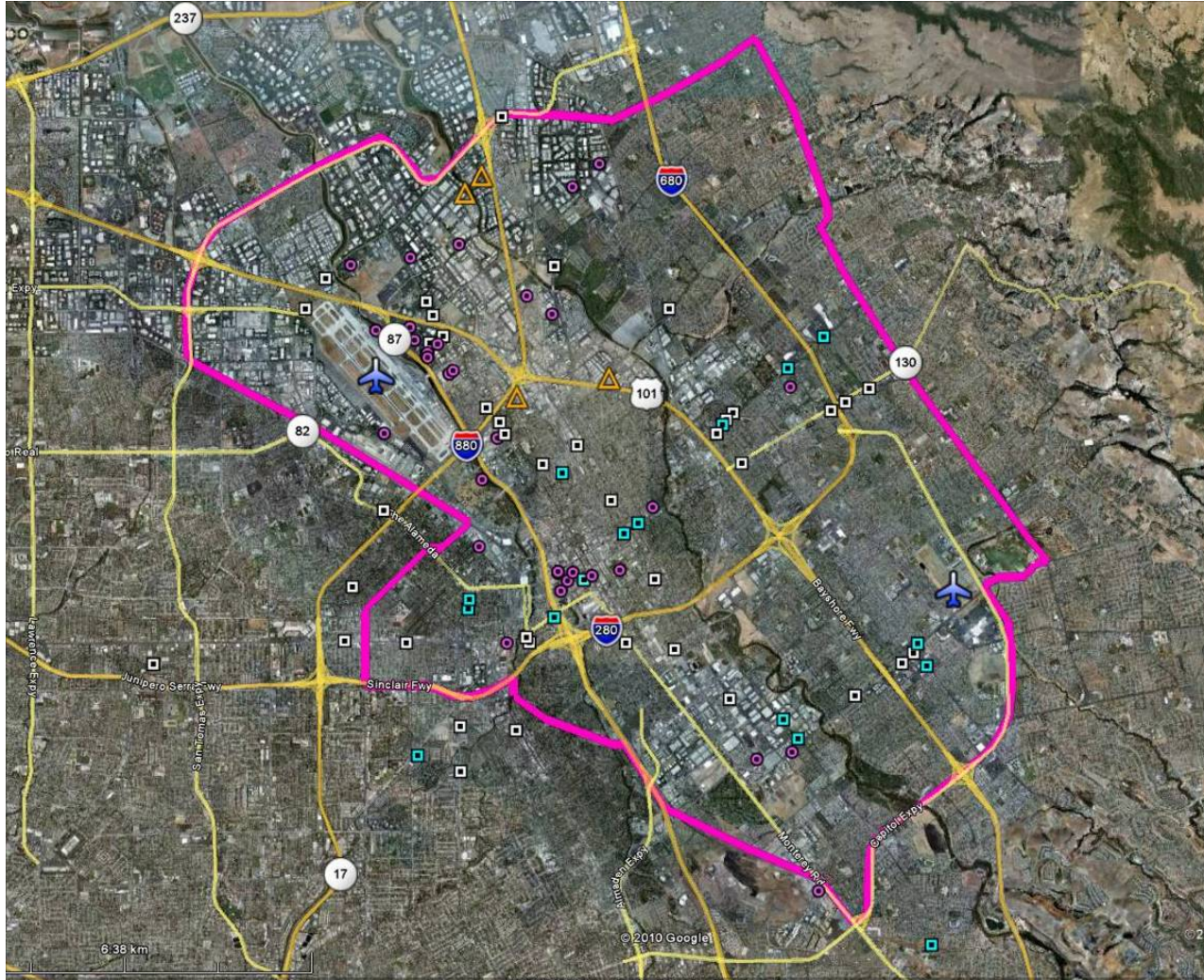


LEGEND







 CARE Impacted Boundary



San Jose Stationary Sources

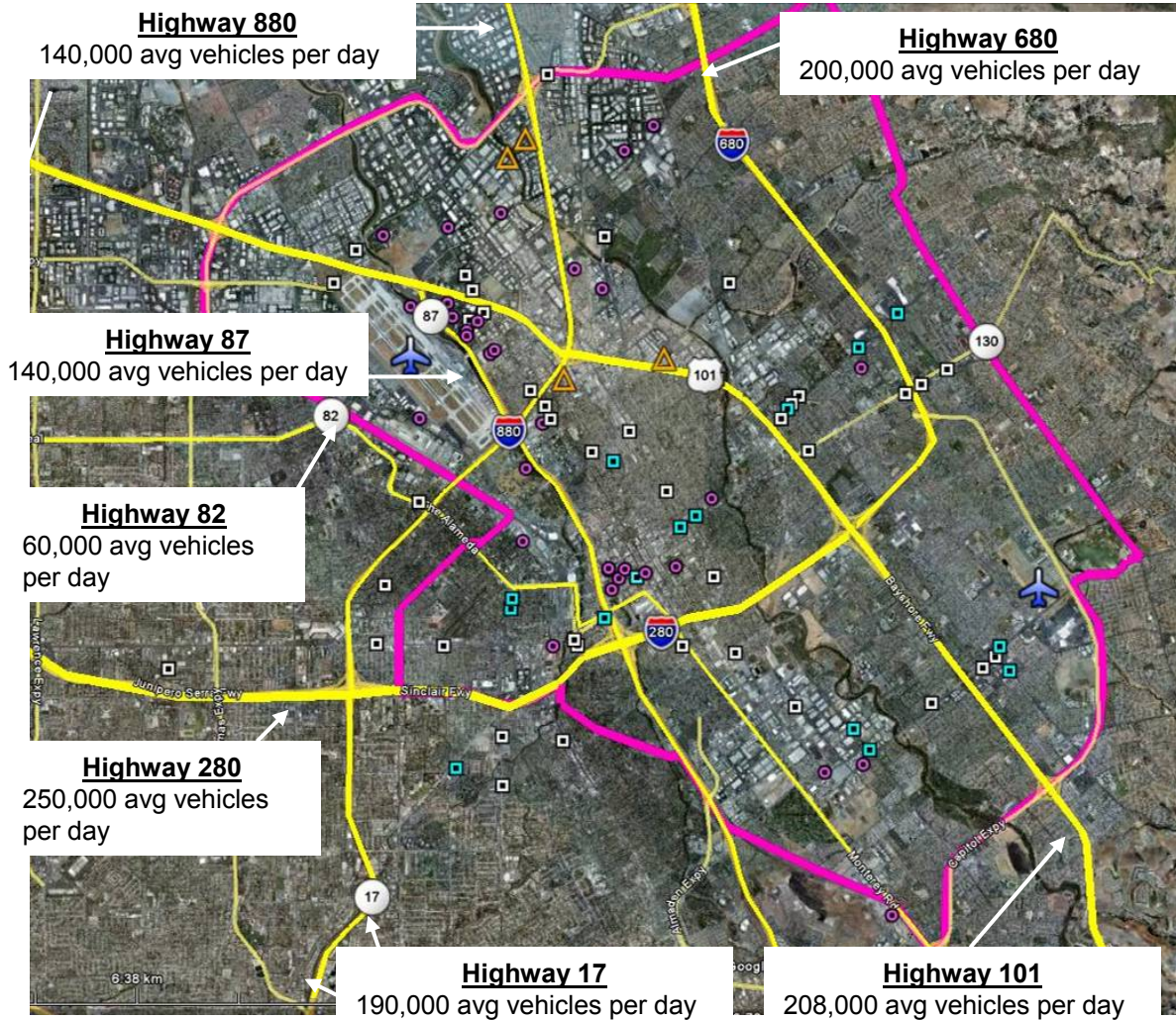


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









-  CARE Impacted Boundary
-  Backup Generators
-  Dry Cleaners
-  Gas Stations
-  Other Significant Stationary Sources
-  Airports



San Jose Major Freeways



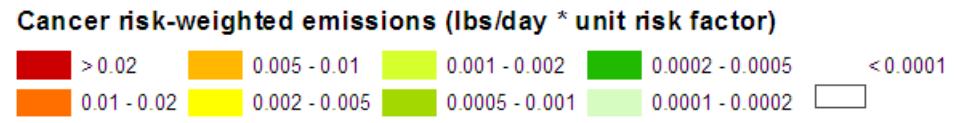
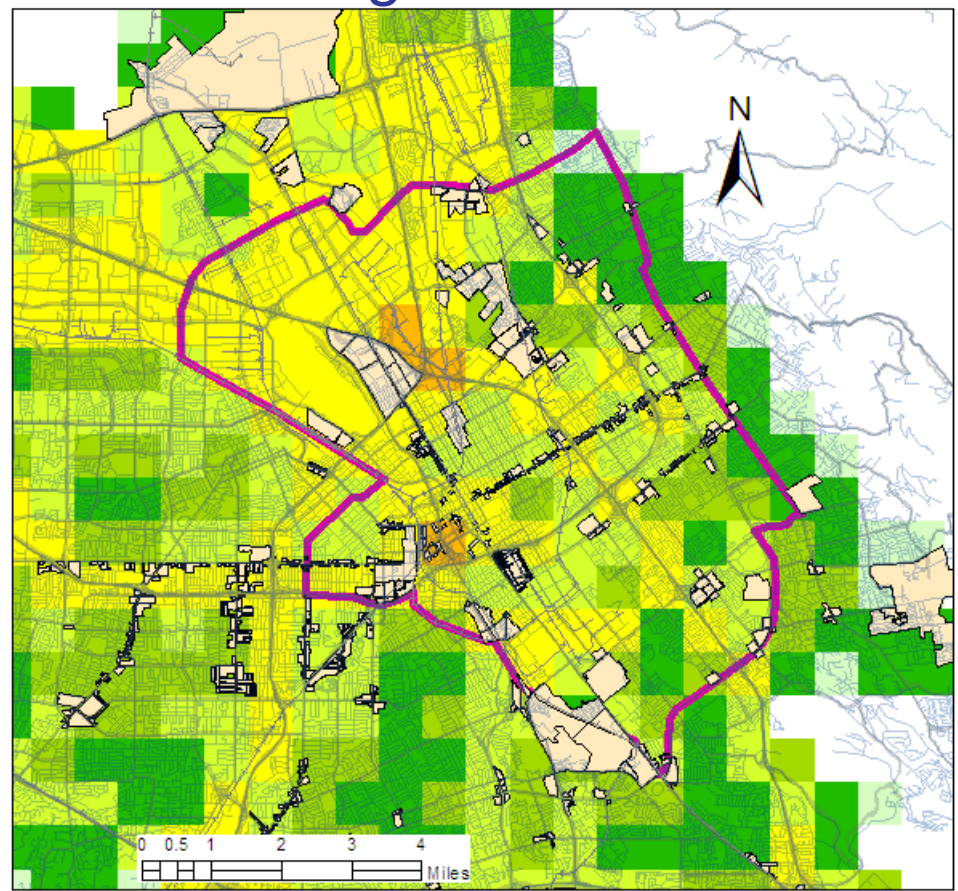
LEGEND

-  CARE Impacted Boundary
-  Backup Generators
-  Dry Cleaners
-  Gas Stations
-  Other Significant Stationary Sources
-  Airports
-  Freeways with >200,000 vehicles/day
-  Freeways with <200,000 and >150,000 vehicles/day
-  Freeways with <150,000 and >100,000 vehicles/day
-  Freeways with <100,000 vehicles/day

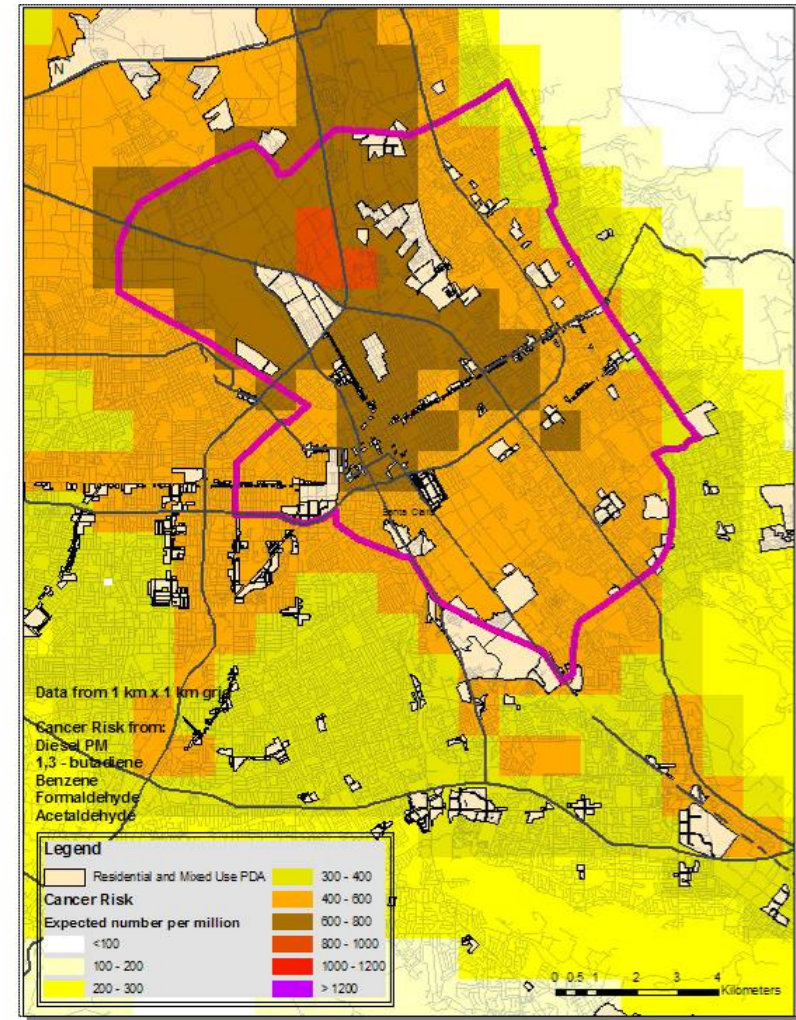


Risk-Weighted Emissions & Risk

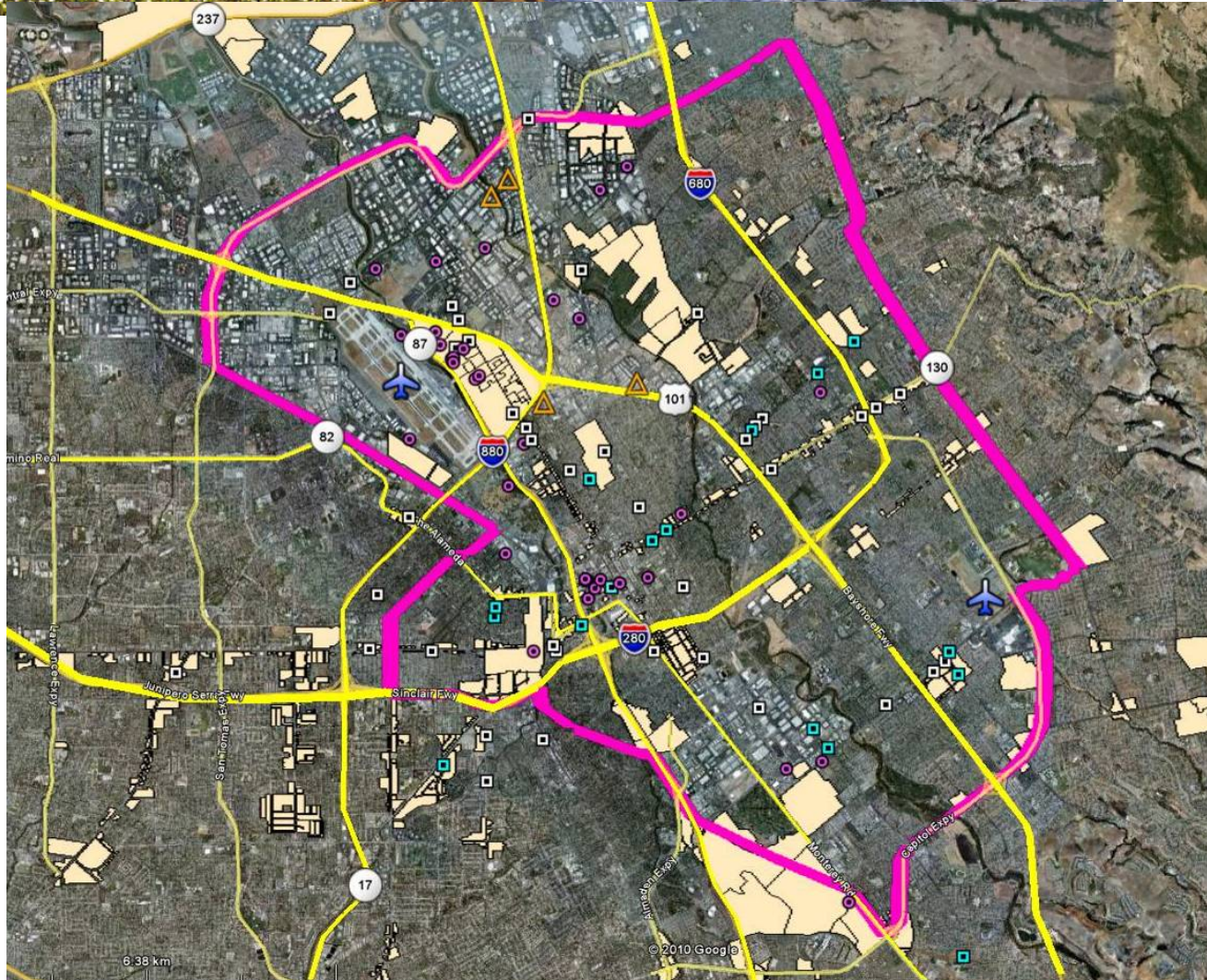
Risk-weighted Emissions














Modeled Air Toxics Risk



Proposed Residential and Mixed Use Development Areas



LEGEND

-  CARE Impacted Boundary
-  Backup Generators
-  Dry Cleaners
-  Gas Stations
-  Other Significant Stationary Sources
-  Airports
-  Freeways with >200,000 vehicles/day
-  Freeways with <200,000 and >150,00 vehicles/day
-  Freeways with <150,000 and >100,00 vehicles/day
-  Freeways with <100,000 vehicles/day
-  Proposed Residential/Mixed Land Use in General Plan



Community Risk Reduction Plans

- Supports community wide planning approach to reduce cumulative impacts
- Collaborative effort between local governments and Air District
- CRRP Elements:
 1. Defined CRRP Planning Area
 2. Goal or Reduction Target, e.g.,
 - a) No Net Increase/Net Reduction
 - b) Percent Reduction from Baseline Conditions
 - c) Equivalent to Regional Average Risk
 3. Emission Inventories
 4. Risk Modeling
 5. Emission Reduction Measures
 6. Monitoring and Updating Mechanism
 7. Public Involvement Process



Developing CRRPs

- District staff to work closely with local government staff
 - District to provide technical elements
 - Emissions inventory
 - Modeling
 - Identify sources & areas of concern
 - Assist with mitigation
 - Local government
 - Planning/policy framework
 - Public outreach
 - Assist with mitigation
- District developing CRRP criteria
- District retaining consultant to develop more detailed criteria
- RFP for consultants to develop emission inventories
- Initiate pilot projects
 - San Jose underway
 - San Francisco underway



Examples of Mitigation Strategies

- Local scale analysis
 - Emission sources
 - Growth areas
 - Potential exposures
- Land use planning and zoning
- Buffer zones and set backs
- Site planning
 - Locate residences away from sources
 - Locate sources away from residences
- Develop truck routes
- Grants and incentives
 - Target high emitting sources
 - Focus on certain subareas
- Enforcement
 - Motor vehicle emission standards
 - Idling limits
- Project phasing
- HVAC
 - High efficiency filters
 - Locate intake away from sources
- Local monitoring



CRRPs Support and Coordinate With Local Planning Activities

- Integration with Local Planning
 - Support FOCUS, PDAs, infill
 - Help implement CEQA Guidelines
 - Link with local planning activities
 - Goal: coordinate CRRPs with general plan updates, specific plans, PDA station area plans, etc.
- Support and Assist Local Planning
 - District budget funds for local government assistance
 - CRRP planning/development
 - Mitigation measures/risk reduction
 - District provide technical resources
 - District retain consultants to assist with CRRP development



Next Steps

Develop draft CRRP Guidelines	Jan-May 2010
Issue RFP for Assistance Developing Community Scale Emissions	Feb
Initiate CRRP Pilot Projects (San Jose, SF)	Jan/Feb
Workshops in Nine Counties	Apr or May
Seek Board Approval for CEQA Guidelines	June
Work with Cities to Develop CRRPs	On going



Questions

- What are appropriate targets for CRRPs?
- How do we reduce risks for existing as well as future residents?
- How do CRRPs relate to City or County General Plans?
- What are types of mitigations to consider in CRRPs?
- How can the Air District assist in CRRPs? Cities? Community Members?