

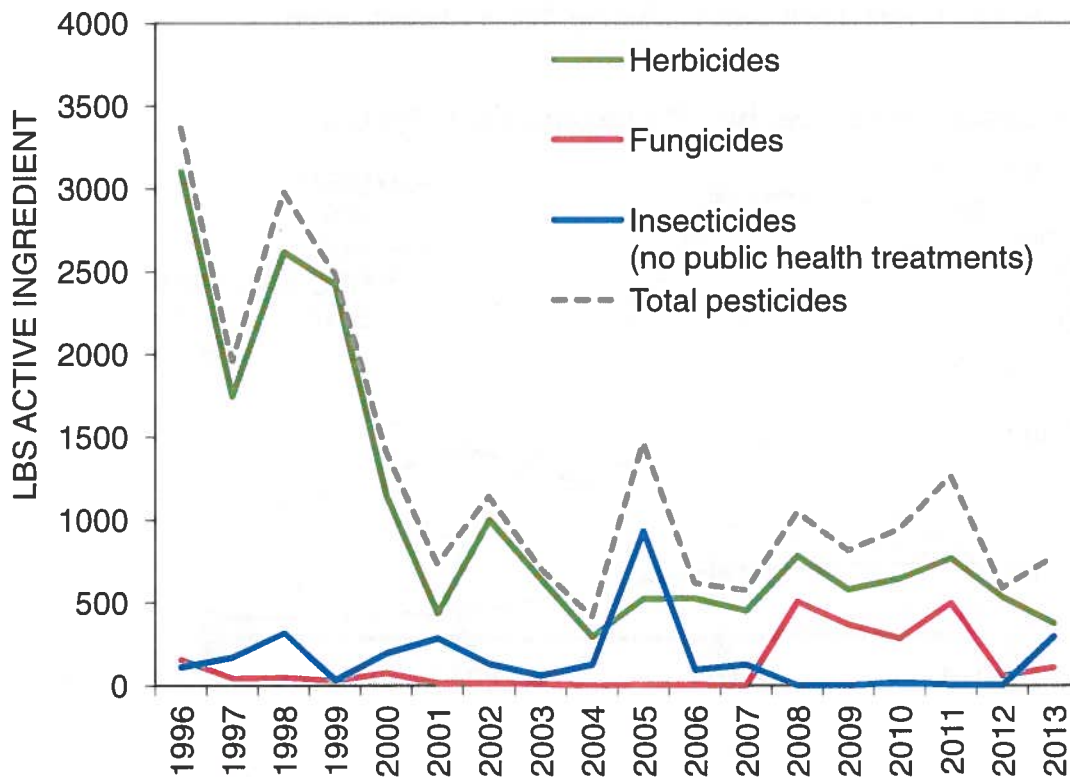
Pesticide Use Trends for City & County of San Francisco Properties

Updated 2/15/15

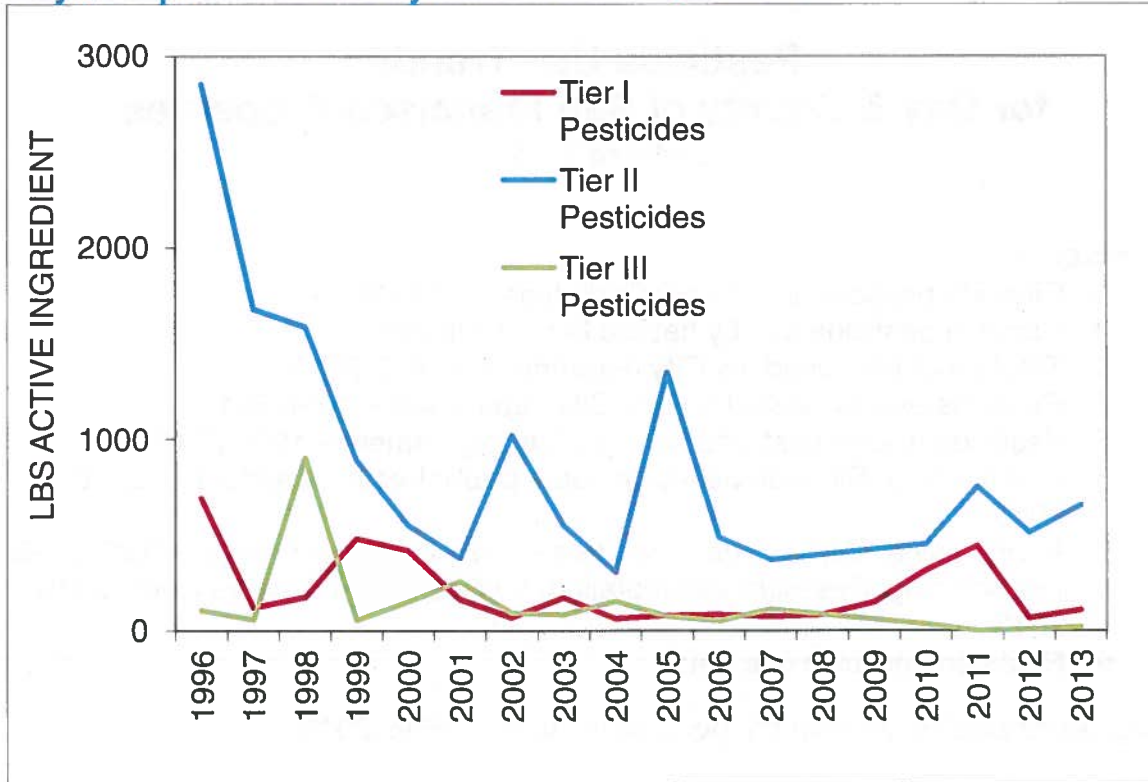
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Citywide pesticide use by pesticide type – 1996-2013

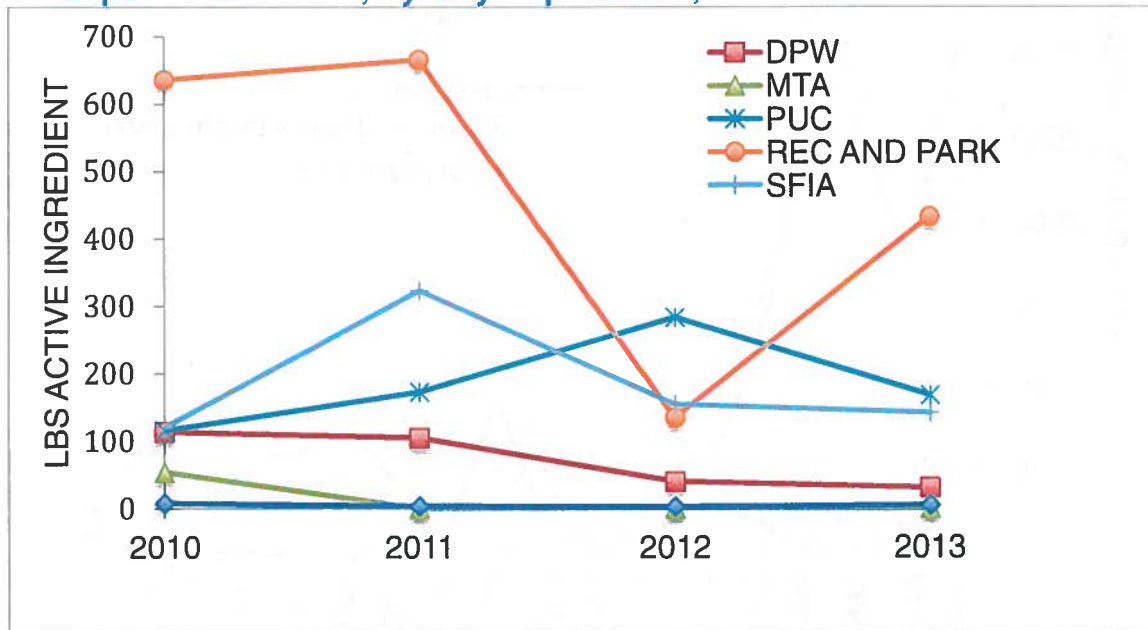


Citywide pesticide use by hazard tier – 1996-2013



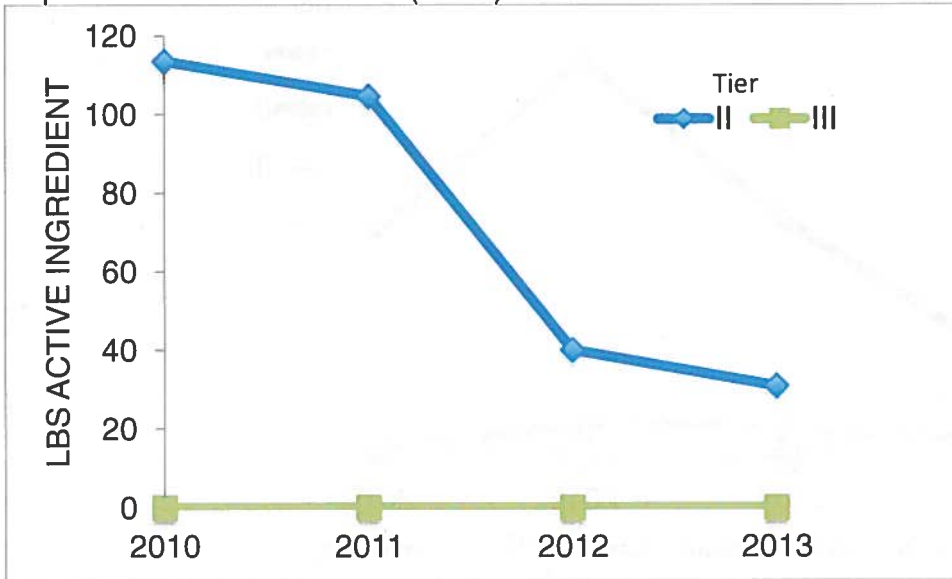
Tier I = highest hazard, Tier II = medium hazard, Tier III = lowest hazard

Total pesticides used, by City department, 2010-2013



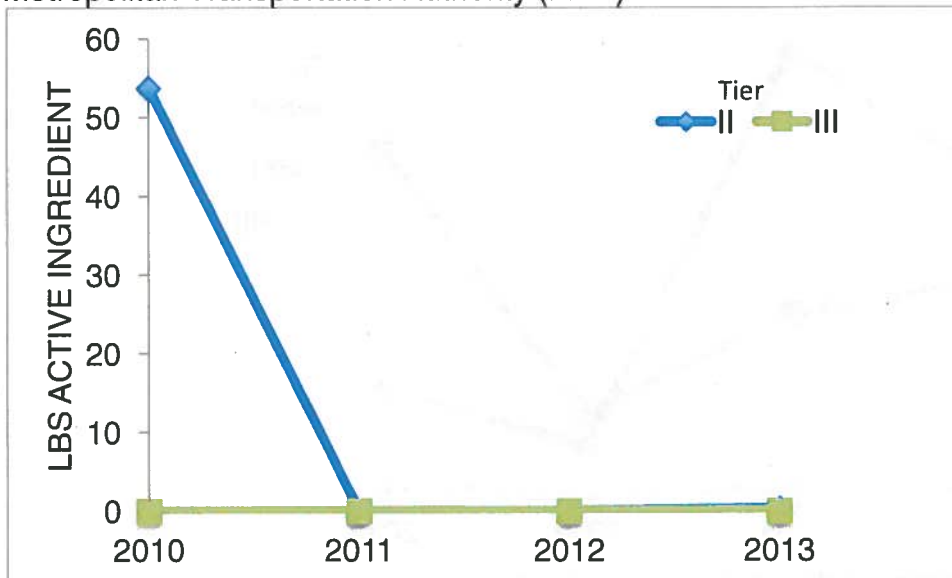
Pesticide use by hazard tier, by City department – 1996-2013

Department of Public Works (DPW)



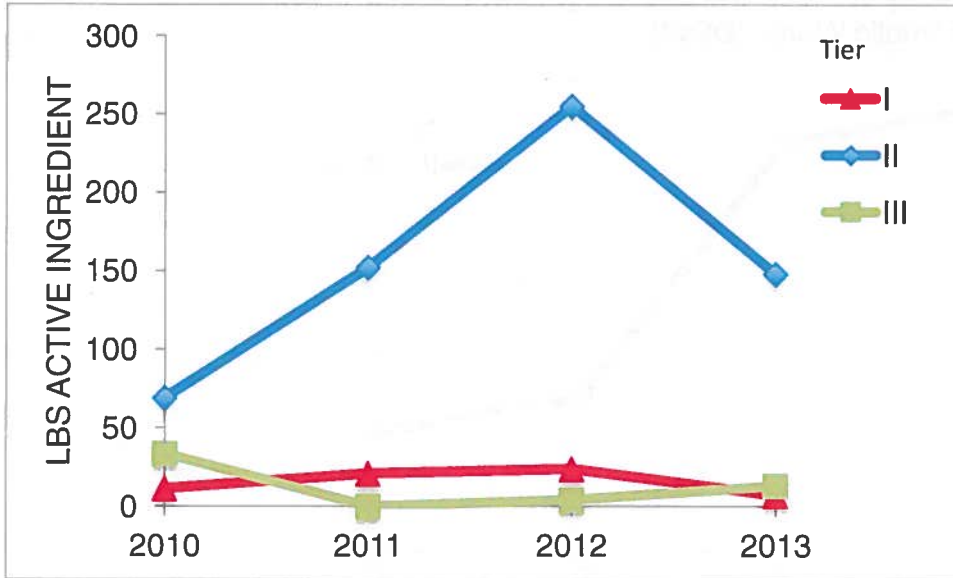
Tier I = highest hazard, Tier II = medium hazard, Tier III = lowest hazard

Metropolitan Transportation Authority (MTA)



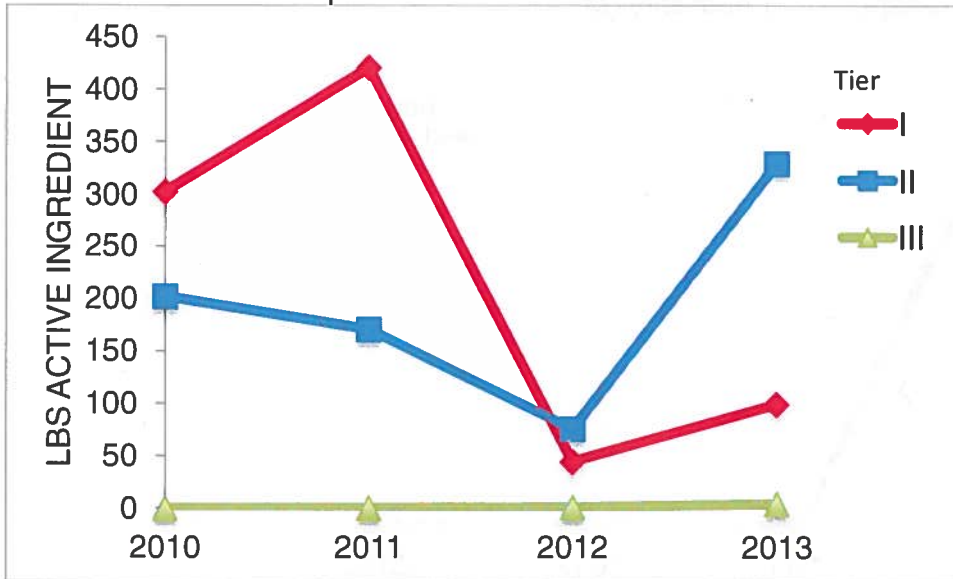
Tier I = highest hazard, Tier II = medium hazard, Tier III = lowest hazard

Public Utilities Commission



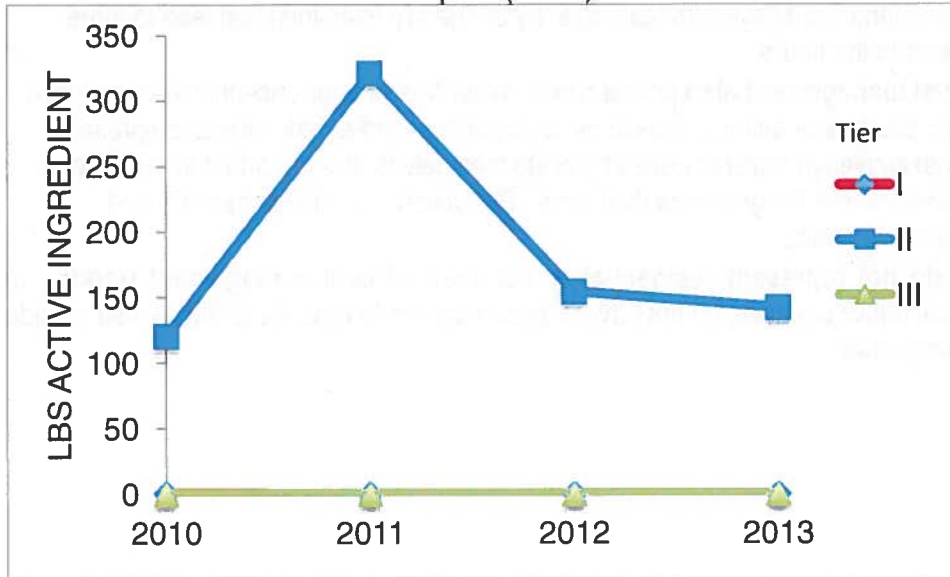
Tier I = highest hazard, Tier II = medium hazard, Tier III = lowest hazard

Recreation & Parks Department



Tier I = highest hazard, Tier II = medium hazard, Tier III = lowest hazard

San Francisco International Airport (SFIA)



Tier I = highest hazard, Tier II = medium hazard, Tier III = lowest hazard

Notes on Pesticide Use Data

Important factors to consider in analysis

The goals of San Francisco's Integrated Pest Management (IPM) program are to effectively manage pests, emphasize prevention and non-chemical controls, and reduce both the amount and toxicity of pesticides used. However, measuring the success of an IPM program is a complex task. Before drawing conclusions from pesticide use statistics, it is important to consider these factors:

- **Long-term trends are more important than short-term.** Pesticide use always varies somewhat from year to year due to weather, pest pressure, special renovation projects, staffing or other factors. A change in pesticide use from the previous year does not necessarily indicate a long-term trend.
- **Exposure potential is as important as toxicity in determining risk.** A key aim of a pest management program is the reduction of risk. Risk is primarily determined by two factors: Toxicity (for example, how much chemical is required to impair a human or other animal) and exposure (for example, how much of the chemical is likely to actually reach a human or other animal). This means that the formulation and use of the products is all-important. For example, pesticides applied as aerosol sprays have much higher exposure potential—and therefore pose a greater risk—than pesticides encased in tamperproof bait boxes.
- **Toxicity of products has reduced.** The Department has developed its own system for assessing pesticide hazards that classifies products as Tier I (highest hazard), Tier II (medium hazard) and Tier III (least hazard). Over the years we have reduced the toxicity of products on the City's Reduced Risk Pesticide list.
- **Administrative/budget impacts are important.** Increases in the number of buildings or outdoor acres maintained, decreases in landscaping staff, or underfunding can increase the

pressure for herbicide spraying, which often requires less labor than non-chemical methods. Conversely, maintenance delayed (for example, by budgetary restraints) can lead to more serious problems in the future.

- **Ineffective pest management also poses risks.** West Nile virus or encephalitis transmitted by mosquitoes, allergies or asthma caused by cockroaches, and enteric diseases spread by rats are a few examples of hazards posed by pests themselves. It is important to remember that San Francisco's IPM Program has dual aims: Reduction of pesticide hazards and effective pest management.
- **These data do not represent residential or commercial pest management trends.** In California, local public agencies do not have a legal mandate to regulate pesticide use outside of their own properties.