

ARB's Perspective on Next Generation Air Monitoring Technology

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My Air Quality: Using Sensors to Know What's In Your Air
November 19, 2014 - Oakland, CA
November 21, 2014 – Diamond Bar, CA

California Environmental Protection Agency

Air Resources Board



ARB's Air Monitoring Program

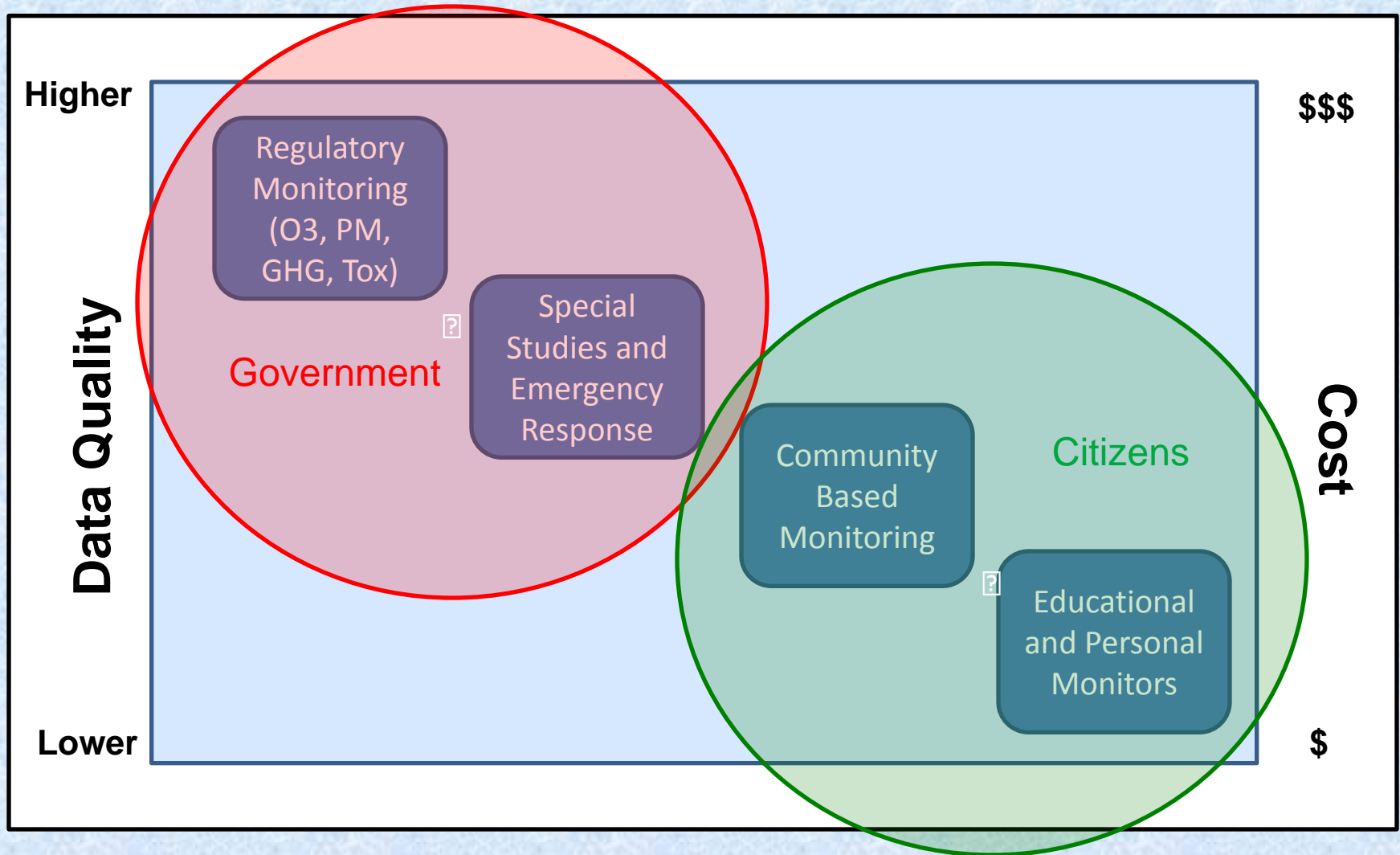
- Statewide ozone and PM network
- Statewide toxics network
- Statewide greenhouse gas network
- Special studies (communities, fenceline, pesticides)
- Emergency response (wildfire, facility release)
- Research (mobile platforms, personal monitors, low-cost sensors)

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Different Tools for Different Needs



Reconciling Government and Citizen Efforts

- Paradigm shift in air monitoring
- Public expectation for rigorous monitoring for regulatory and enforcement purposes
- But also public desire for more grassroots community monitoring and access to information
- Need clear understanding of strengths and limitations of different monitoring tools

ARB's Support for Low-Cost Monitoring Tools

- Since early 2000's, provided ~\$2 million to develop and deploy low cost-monitors
- Focus on environmental justice communities
- Recognize potential benefits of big data
 - Vehicle OBD, Vapor Recovery ISD
- Potential future role defining needs and priorities for sensor manufacturers



Future ARB Priorities

- Ongoing collaboration with other agencies and community groups related to:
 - Evaluation programs for low-cost sensors
 - Development of quality assurance and quality control
 - Outreach to community groups and users
 - Guidance documents on deployment and appropriate usage

