



Evaluation of SCAQMD Socioeconomic Assessments

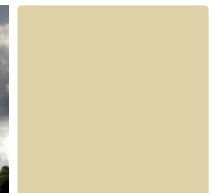
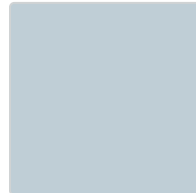
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Outline



Introduction

Who conducted the evaluation? What's the objective?

Evaluation Method

How did we conduct the evaluation? What did we do?

Evaluation Results

What did we find from stakeholder interviews and our detailed review?

Recommendation

What are our suggestions to the SCAQMD?

Quick Facts about Abt Associates



Abt is a mission-driven, global leader in research and technical implementation in health, social and environmental policy, and international development.

FY 2011 Revenue

\$380 million

Employees

1,900+ full-time

600+ part-time

800 overseas

US Offices

Atlanta, GA

Cambridge, MA

Durham, NC

Bethesda, MD

New York, NY (Abt SRBI)

Telecommuters

International Offices

Nearly 40 countries across Asia, Africa, Eurasia, Latin America and Europe

Recognized As

2010 Global top 25 market research firm

2010 U.S. top 50 market research firm

2011 Top 40 Development Innovator by Devex

Evaluators



- Experts specialized in
 - Health and welfare benefits analysis
 - Compliance cost analysis
 - Macroeconomic modeling
 - Regulatory impact analysis
 - Environmental justice
 - Survey / questionnaire design

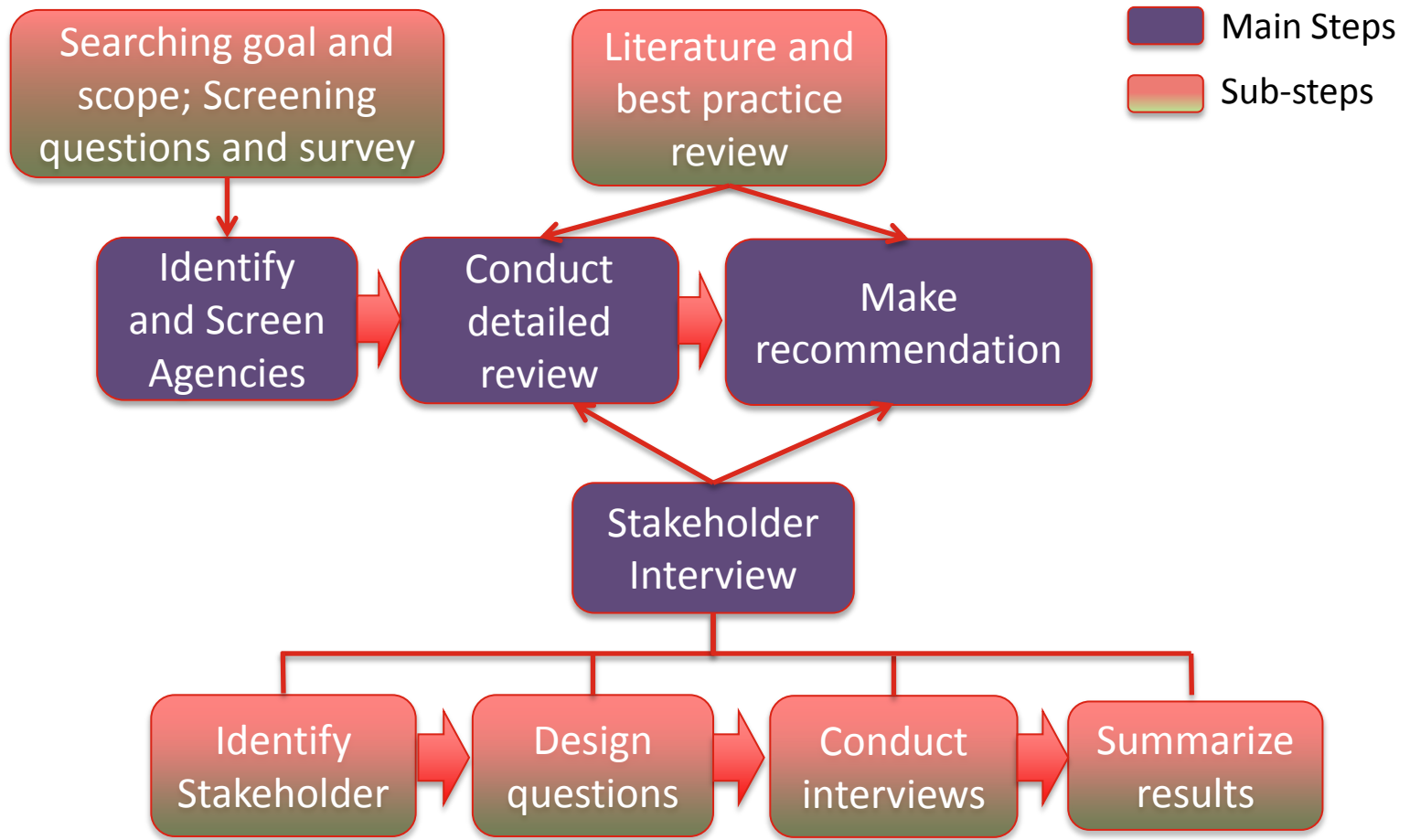
- Not involved in any previous SCAQMD Socioeconomic Analysis

Evaluation Objectives



- Independent evaluation in an objective manner
- Whether SCAQMD practices represent state-of-the-art methods for socioeconomic assessments
- Whether the scope of the analysis undertaken is adequate
- Whether the documentation assures a transparent and balanced presentation to the public.

Evaluation Approach



Evaluation Process



- Started November 2013 and completed August 2014
- Selected 16 public agencies (from 171 nationwide)
 - SCAQMD, U.S. EPA, and other state and local agencies
- Reviewed 63 relevant analyses
 - For SCAQMD: 2007 and 2012 AQMPs, and six rules
- Identified 33 candidates and interviewed 23 stakeholders (face-to-face and phone interviews)
- Interviewers maintained a neutral stance on all questions and responses.

Stakeholder Interview Summary



Table: Common Themes Collected from Stakeholder Interviews:

Strengths	Weaknesses
Methods and tools	Accuracy of data inputs and assumptions; uncertainty analysis
Scope of analysis	Issues with REMI
Presentation	Inclusion of SCAG's TCMs
	Credibility of the assessments
	Outreach effort

Evaluation Results – Overview



- All agencies included in our review conducted cost analysis; only 6 of them conducted benefits analysis; half conducted economic impact analysis.
- Overall, the SCAQMD performs stronger socioeconomic assessments than the majority of other agencies.
- Many agencies have shared weaknesses, e.g., clarity and transparency, documentation of methods.

Evaluation Results - Comparative Strengths and Weaknesses



Comparative Strengths of SCAQMD's Assessments	Comparative Weaknesses of SCAQMD's Assessments
<p>Comprehensive (breadth and depth):</p> <ul style="list-style-type: none">• Benefits analysis (health and welfare)• Environmental justice analysis• Administrative and other costs• Equipment life• Competitiveness	<p>Uncertainty analysis</p>
<p>Sound methodology in general</p> <ul style="list-style-type: none">• BenMAP• Major costs included• Cost effectiveness• REMI	<p>Different cost-effectiveness calculation makes it difficult to compare with other agencies</p>

Key Recommendations



- Redouble effort to better define baseline and policy scenarios for regulations.
 - If TCMs are considered in the baseline
 - If SIP-committed TCMs are incorporated as part of AQMP
 - Use baseline definition consistently across the assessment
- Strengthen REMI and consider alternative models
 - Properly normalize magnitude of adjustment to coefficients in the migration equation to link air quality change with relative attractiveness of one area compared to others
 - Partial equilibrium models for small businesses analysis
 - Retrospective analysis
 - Evaluation of REMI regarding applying benefits in the model

Key Recommendations - continued



- Redesign the reporting/documentation system; Enhance analysis transparency
 - Methodology guidebook; Technical report; Summary report
 - Details about data sources, data input choices, methods
- Institute a systematic process of literature review (e.g., epidemiological studies, valuation studies, job impact assessment, EJ analysis, visibility studies)
- Incorporate uncertainty analysis
 - Health benefits estimates from BenMAP
 - Sensitivity analysis for control costs
 - Qualitative discussion – uncertainty sources, magnitude, impact

Key Recommendations - continued



- Expand environmental justice analysis
 - EJ screening analysis to identify “hotspots”
 - Further analysis to assess policy impact
- Present cost effectiveness based on DCF and LCF to allow comparison across agencies
- Increase the transparency of the socioeconomic assessment process
 - New reporting system
 - Science Advisory Group
 - Outreach to strengthen public participation
 - External peer review