

# ACRP Report 102

## *Guidance for Estimating Airport Construction Emissions*

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*Wednesday, November 13, 2013*

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AAAE Going Green Conference, Chicago, IL

# Reasons for the Project

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# Reason for Project

ACRP

## Issue of Complexity

### Conceptually straightforward...?

Emissions = Equipment Activity x Emission Factor

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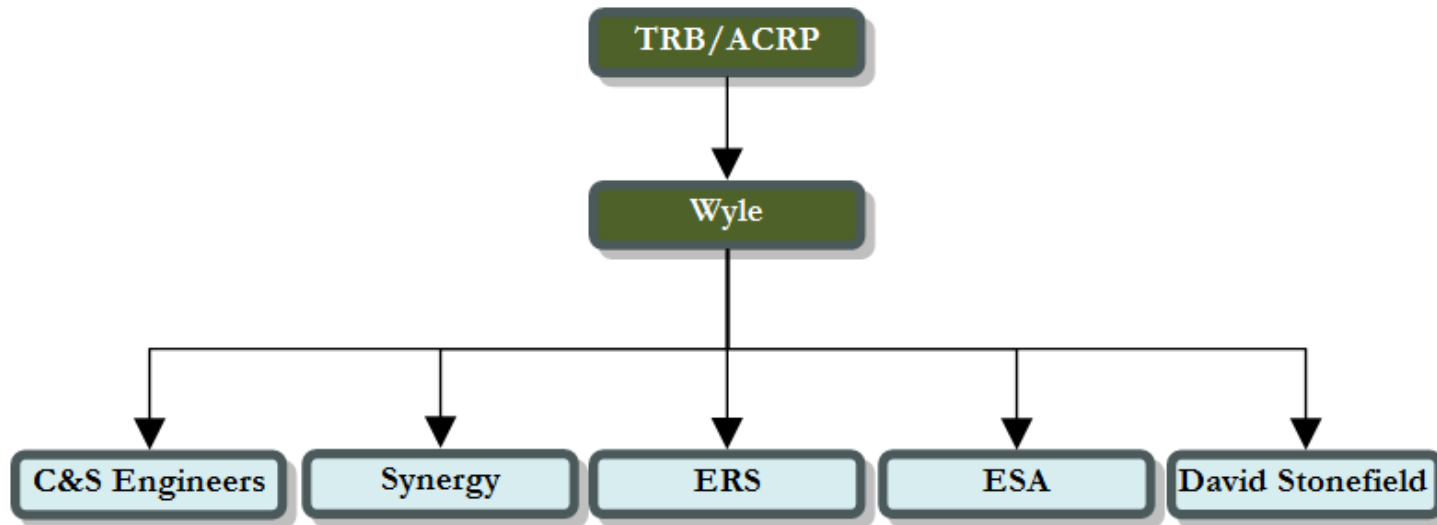
# Goal

“...develop a **guidance** document and interactive **electronic tool** to assist airports, consultants, and other stakeholders in **accurately** and **consistently** estimating **airport construction emissions**.”

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# Scope of Work



Expected Guidebook (ACRP Report 102)  
publication date:

February 2014

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# Scope of Work

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Model reviews

Development of  
default data



Data reviews

Development of  
processes and  
methods

Tool development  
and validation

Guidebook  
development

# Guidebook



## Novices

Chapter 1: Introduction

Chapter 2: Concepts and Considerations

## Experts

Chapter 3: Emissions Calculations and Inventory Development

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TRANSPORTATION RESEARCH BOARD  
OF THE NATIONAL ACADEMIES

# Guidebook



Project and scenario definition (what, where, and when)



Activities, and Equipment



Modeling emission factors



Year	Total Emissions per Year								
	Short Tons						Metric Tons		
	CO	NO <sub>x</sub>	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	VOC	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O
2015									
2016									
etc.									

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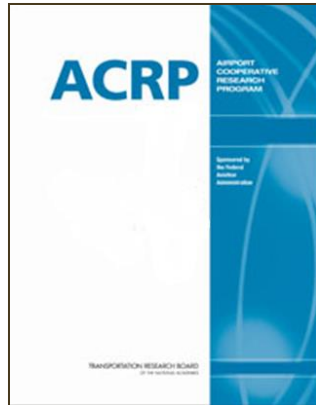
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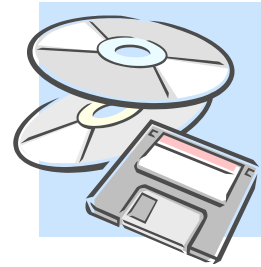
# Guidebook

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VS



## Default Data

- Project activities
- Equipment and usage
- Emission factors
- Minimum data

## Minimum Data

- Project type and size
- Project location and dates
- Season and Temperatures

## Data Levels

- Level 1: All defaults
- Level 2: Some specific activity data
- Level 3: Most or all project-specific activity data