

Air Quality Workgroup Report: Indicators and Beyond...

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Update

- Indicators – completed documents
- Lessons learned
- Pilot process
- Next steps

Indicators

- **Ambient concentration of pollutants**
 - 3 Measures
- **Exceedances of Air Quality Indices and Standards**
 - 4 Measures
- **Hazardous Air Pollutants**
 - 2 Measures
- **Climate change**
 - 1 Measure

Documents

- **Measure Description Templates (8)**
 - Standardized templates
 - Completed Feb-March 2008
 - Measurement units, scales (time/geography), significance, rationale, limitations, data resources and limitations, related data/measures (e.g., asthma), recommendations
- **How-To Guides**
 - Step-by-step data access and report generation

Indicators

Ambient Concentrations of Pollutant

- Measures, by county:
 - PM₁₀, PM_{2.5}, (annual average of 24-hr averages)
 - O₃ (average max. daily 8-hr average for ozone season)

Indicators

Exceedances of Air Quality Indices & Standards

- Measures, by County & MSA
 - Days & Person-Days Daily 24-hr Average PM_{2.5} concentration in AQI Unhealthy Range*
 - Days & Person-Days Daily 8-hr Max Average O₃ concentration in AQI Unhealthy Range*
- Measure, by County
 - NAAQS PM_{2.5} and O₃

* Unhealthy v Unhealthy for sensitive populations

Indicators

Hazardous Air Pollutants

- **Measure**
 - **%Population in counties exceeding health benchmarks for Benzene, Acrolein**

Indicators

Climate Change

- **Measure**
 - Per capita, by Sector
 - CO₂-Equivalent Greenhouse Gas (GHG) Emissions

Lessons Learned

- Collaboration across programs and disciplines
- Clearly communicating during development and creating indicators
- Consider formatting/presentation early
- Group process requires time
- Pilot testing & tracking changes

Lessons Learned

- *How can this work and lessons be used to inform others?*
- *How can these indicators be improved?*

Lessons Learned - Piloting

Recent pilot data request – The Kansas Experience

- Issues with internet links for data sources*
- A few additional steps or clarifications*
- Some steps didn't work (e.g., paste special, copy/paste census)*
- Definitions of “unhealthy” (include sensitive populations – then different concentration value)*

Lessons Learned - Piloting

The Kansas Experience

- Changes: standard (e.g., AQI, $PM_{2.5}$, O_3), definition of MSA*
- Decision on how that affects historic data reports*
- Data completeness (counties must be comparable with completeness of data)*
- Rural & urban counties (re: census data use, emissions inventory for HAPs, copy/paste could result in mislabel)*

Lessons Learned - Piloting

The Kansas Experience

- *Why didn't other states pilot?*
 - *Too complex (too many measures, too many steps)*
 - *EPHT (SEHIC members focused on roll-out)*
 - *Centralized/federal reporting (unnecessary, not useful)*

Results

Days/Person-days of Unhealthy air for sensitive groups/all, by MSA

<i>MSA</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>
Kansas City, MO-KS	15	8	12	13	4	20	17
Lawrence, KS				2	0	1	1
Topeka, KS	0	0	0	1	0	0	0
Wichita, KS	2	3	2	2	0	1	0

Results

*Days/Person-days of Unhealthy air for sensitive groups
vs **Unhealthy** by MSA*

<i>MSA</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>
Kansas City, MO-KS	15	8	12	13	4	20	17
	0	0	0	2	1	2	1
Lawrence, KS				2	0	1	1
				0	0	0	0
Topeka, KS	0	0	0	1	0	0	0
	0	0	0	0	0	0	0
Wichita, KS	2	3	2	2	0	1	0
	0	0	0	0	0	0	0

Results

CO₂-Equivalent GHG Emissions from Fossil Fuel Combustion, by Sector					
Kansas	Million Metric Tons CO₂ (MMT CO₂)				
Sector	2000	2001	2002	2003	2004
Total	75.36	71.31	75.56	78.3	76.74
Commercial	2.56	2.48	2.44	2.5	2.4
Industrial	14.23	12.97	13.59	14.56	14.26
Residential	4.38	4.24	4.28	4.45	4.11
Transportation	18.73	17.49	17.78	19.47	19.37
Electric Power	35.47	34.14	37.48	37.32	36.61

Next Steps

- Each pilot state contribute comments/edits
- EPHT coordination
- If nationally produced, assure the measures are well-documented, descriptions clear (what they are, what they are not)
- Graphic display - mapping



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VROOOM...
THE END!

