Implementing a Revised Methodology for State/Local Air Grants

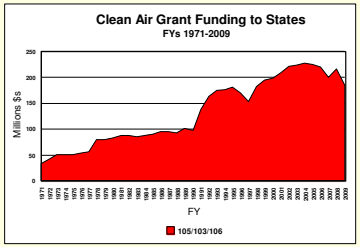
Update for NACAA

May 6, 2009

Contents

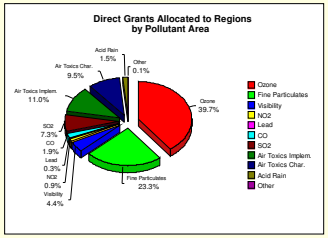
- Why a revision is necessary.
- Developments to date.
- Guiding principles and concerns for a revised allocation.
- Development of an updated methodology.
- Developing a practical implementation approach.
- Maintaining relevance and stability.

Why an Allocation Update?



- OMB's '06 NAAQS PART Review finds allocation of §105 grants needs to be updated to better align w/ strategic goals/objectives.
  - *OMB - "…doesn't appear that allocation methodology ensures the appropriate beneficiaries… allotment formula is outdated…"*
- Stakeholders question continued relevance.
  - *NACAA calls for revision of allocation – "as part of an overall grant funding increase…"*
  - *ECOS – Supports the STAPPA-ALAPCO position.*
  - *SESARM – "…EPA needs to update factors to reflect growth…phase in changes over 5 years…"*
- Last comprehensive revision of allocation was for T5 in '96 @ $169M – largely pollutant, title-specific driven

Previous Basis for Allocation



- Some funding categories are no longer appropriate.
- Underlying basis for factors and algorithms from mid-1990s is dated.
- Certain priorities have changed.

Pollutant or Program Area	**FY 1993 Air Grant Allocation: Algorithms w/ Weighted Factors *** *(Where applicable, on Regional %-of-total basis using aggregated area by area data)
Carbon Monoxide (CO)	CO Non-Attainment Area Population - 50% Total Indexed Classification Level of CO Non-attainment Areas - 50%
Fine Particulates (PM_{10})	Total Number of PM_{10} N/A Areas - 75% Total Population in PM_{10} N/A Areas - 25%
Lead (Pb)	Total Number of Lead N/A Areas - 100%
Acid Rain	# of Utility Units Required to Reduce SO2 in Phase I - 50% # of Utility Non-Gas SO2 Units Affected in Phase I and II (in States w/ >10 Affected Units) - 25% # of States in Region w/ >10 Units Affected in Phase I or II - 25%
Air Toxics	Unique TRI Facilities Reporting 1989 CAA Releases - 40% TRI 1989 CAA Releases (lbs.) - 30% Total 1990 Resident Population - 30%
Ozone	Total Population in Ozone Non-Attainment Areas - 50% Total Indexed Classification Level of Ozone Non-attainment Areas - 50%
Permitting (Removed after 1996)	Total Major Sources in AIRS Facility Subsystem - 40% Total # of States - 40% Total Resident Population - 20%

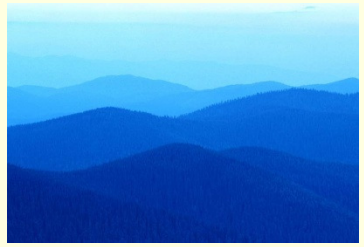
Developments to Date

- Spring ’06 PART Review of NAAQS program calls for update.
- EPA forms workgroup in 11/06 and adopts guiding principles.
- NACAA passes on participating in development of allocation methodology (1/07).
- EPA workgroup includes key Program Offices and all Regions.
- Analytical tool for rapid assessment of options developed (2/07).
- Workgroup holds 12 calls, 2 meetings, looks at over 130 factors in producing a near-consensus methodology (1/07-7/08)
- RO ADDs agree in principal to methodology pending actual #s (9/08)
- Principal DAA agrees that OAR proceed with methodology (10/08)
- OAR briefs ADDs, APMs, RGCs (10/08-11/08)
- OAR holds call w/ NACAA funding chairs (12/08)
- OAR invites NACAA to participate in development of implementation strategy (1/09)
- NACAA accepts invite (3/09)
- Implementation Group Initial Teleconference (4/09)

Original Study Methodology

- Phase I: Study plan, Formation of Methodology WG, Development of Guiding Principles, Formulate Framework.
- Phase II: Factor and Data identification, Compilation and Analysis, Options Analysis.
- Phase III: Formulate Methodology, Obtain Management Approval.
- Phase IV: Stakeholder Outreach and Consultation, Form Implementation WG, Develop Implementation Strategy, Recommendation to AA.
- Phase V: Obtain AA Approval, Conduct Stakeholder and Public Outreach, Implementation including Integration w/ Budget and National Guidance processes.
- Phase VI: Periodically Re-assess and Update.

OAR Guiding Principles



Principle	Objective
Relevance	- Target resources according to air quality objectives, program priorities and environmental results for up to the next 5-7 years consistent with Strategic Plan and in consideration of state/local air quality priorities.
Simplicity	- Use simple, straight-forward scheme with timely, transparent data that can easily be updated. - Per the CAA - Consider population at risk, the severity of the air quality problem, and financial need factors; account for state maximum/ minimum funding provisions. - Avoid duplication in the type of allocation data and factors used in the allocation methodology.
Feasibility	- Minimize disruptions to stakeholders. Funding shifts should be phased in, if necessary, over a reasonable period of time taking into account strategic needs. Protect the integrity of ongoing air pollution control programs and the maintenance of air quality improvements already achieved.
Collaboration	- Through timely communication, seek and promote stakeholder input and understanding Stakeholders include: EPA, State and local air pollution control agencies, and multi-jurisdictional organizations. Seek other relevant input.
Performance	- Allocation of funds should reinforce accountability and achievement of results. Do not reward continued inadequate performance.

NACAA Principles and Concerns

- Develop a transparent, understandable and clear process.
- Use principles for national and regional allocations.
- Grant should support, not drive, priorities.
- Fully distribute funds.
- Provide new funding for new work.
- Account for funds on basis of grant work plans, not by pollutant categories.
- Phase in changes to avoid disruptions.
- Provide a stable allocation over time.

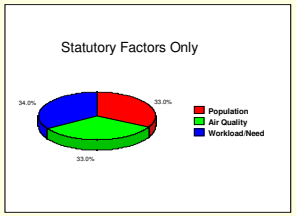
NACAA Concerns (cont.)

- EPA should address NACAA principles on methodology and implementation approach.
- Need to account for new standards and ‘near’ non-attainment areas.
- Need to protect small and local agencies.
- Avoid disruption of operations.
- Avoid redundancy in data and formula.
- How will EPA account for areas like climate change and transport?
- How can allocation analysis help define overall need?

Charge to the EPA Methodology Workgroup

- Initially EPA-only (NACAA defers).
- Follow guiding principles in developing methodology.
- Define a logical framework.
- Account for 3 CAA statutory considerations.
- Recommend a relative distribution or weighting of resources by area or category.
- Consider a 3-5 year timeframe accounting for growth.
- Develop one recommended allocation - minor variations OK.
- Communicate recommendation to OAR AA.

What Type of Allocation Framework?



- Base it solely on statute? Or pollutant-specific only? Or functional categories? Or topical areas?
- Or a combination of the approaches?
- How to treat associated program support?
- Applicable time frame (5-7 Years or about 2015)?
- Periodic updates?

Allocation Frameworks Considered

- Statutory Factors: organize limited factors by 3 statutory categories of population, air quality & financial need (workload) equally weighted.
- Essential Work: organize by major priority areas (i.e., NAAQS/SIPs, monitoring, air toxics, compliance).
- Growth: similar to above but growth factors are included. Dropped when WG agrees to use upgraded population factor data & move periodic updating of methodology to implementation strategy discussion.
- Hybrid of 'Essential work' approach is selected following numerous sensitivity analyses & determination that it is most congruent w/ principles. Haze/visibility accounted for in 'SIP' category.

Workgroup's Analytical Approach

- In crafting 'Essential Work' approach, WG considered allocation principles and CAA requirements.
- Created framework of categories that focused on essential or fundamental work areas under the CAA.
- Selected population, AQ and workload factors representative of substantive CAA grant-funded work done within each category by state and local agencies.
- Weighted categories and factors objectively based on experience with states and professional judgment.
- Recommended methodology but had differing views in a limited number of data and policy areas.

Methodological Conclusions

- Combined population and air quality considerations into population weighted design-values for N/A and 'near' N/A areas to simplify methodology.
- Looked at numerous financial factors: *agency FTE levels, non-federal/federal $ contribution ratio, average state per capita expenses, average state per capita revenue, state per capita environmental expenditures* – but all had questionable correlation relative to 'financial need.'
- WG selected factors and surrogates of workload as more relevant indicators of financial need and demand. *Financial need – more relevant consideration during the establishment of AQ programs?*
- Overall, over 135 factors and numerous algorithm variations were considered using Allocation Analytical Tool built in Microsoft Access. Not enough actual workload cost data.
- Contractor finds minimal changes in 'central tendencies' of distribution results across Regions in the various allocation algorithms.

OAR 'Refines' WG Methodology

- Additional analysis was necessary to assure factors chosen could be properly formatted for data analysis.
- OAR assembled new data set relationships for certain factors.
- OAR assessed various scenarios adjusting for cap, monitoring assumptions, minor variations in category weights, updated data sets.
- Uncertainty of funding authority for $PM_{2.5}$ monitoring complicates monitoring portion of algorithm.
- Workgroup methodology does result in redistribution of resources from existing allocation.
- Methodology does not yet account for 10% statutory cap per any 1 state - must address before going to OMB. One half of 1% OK.

Proposed Methodology

Category	Category Weight	Factors	Factor Weight	Corresponding Functions
SIP Planning and Implementa -tion	38	Population-weighted design value in N/A areas measuring unhealthy air	60	- Covers all aspects of NAAQS and SIP work including development and implementation of the SIP with focus on non-attainment areas. - Addresses States with areas that are nonattainment but not designated and States with areas that are attainment but for which their base program activity is not adequately accounted. - Balances for specific baseline work including conformity, maintenance, regional haze (ongoing NEPA, minor source permitting), and §110 SIPs, mercury work, continuing emission inventory work.
		Number of non-attainment areas	10	
		Population-weighted design-value in areas within 90% of the NAAQS	10	
		Number of states	20	
Monitoring	33	Adequate monitoring network	100	- Covers all pollutants (NAAQS including PM2.5, NATTS) but not competitive air toxics). - Focuses on what OAR considers to be minimally-adequate based on national air monitoring strategy.

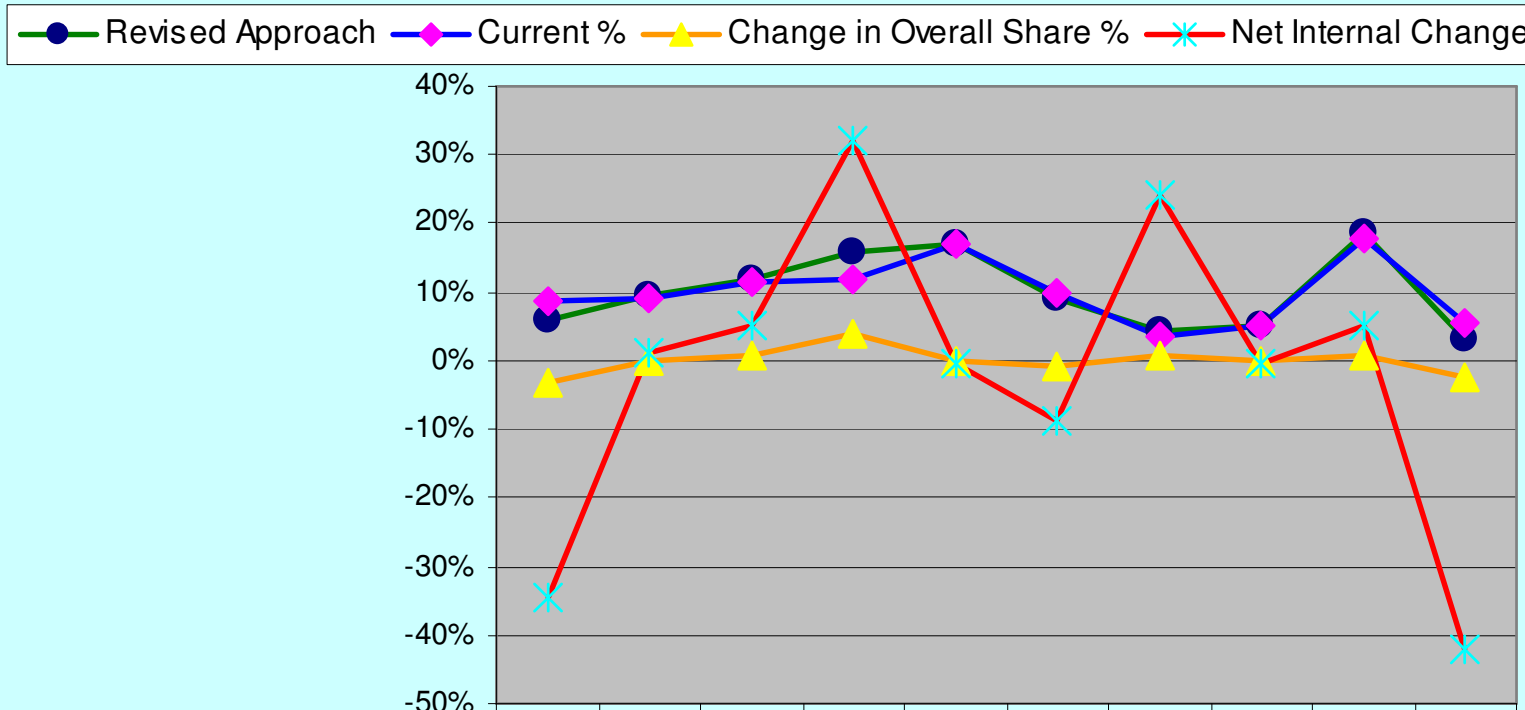
Allocation Methodology (cont.)

Category	Category Weight	Factors	Factor Weight	Corresponding Functions
Air Toxics	15	Cancer risk	45	- Addresses MACT Implementation activity other than compliance including regulation development and notifications. - Covers state/local air toxics programs including risk assessment screening, emission inventories, community studies, diesel activity (non-DERA). - State/Local Air toxics monitoring (est. 300 sites). - Risk factors are based on NATA data which include emissions including benzene.
		Non-cancer risk	30	
		Diesel emissions	25	
Compliance	14	Number of regulated minor sources	50	- Covers minor stationary, area and mobile sources. In stationary: source inspections, stack tests, case development, non-Title V permitting, compliance assistance and outreach. - Focus on .vehicle compliance programs (i.e., anti-idling, HDV/LDV I/M, fuels programs) – R9 will assist in updating profile of these programs from ROs.
		Number of MACT area sources	30	
		Number of mobile source compliance programs	20	

About the Methodology

- Methodology is a rationale for distribution; **not** a detailed workload model or a needs analysis.
- Guided by allocation principles.
- Statutory 'considerations' ddressed.
- Focuses on essential work starting as of FY 2009 (i.e., ongoing activity projected for next 3-5 years).
- Reflects broad consensus w/ minor variance on factors/weights.
- Based on transparent, QA'd, non-redundant data as much as possible.
- Did not consider most recent developments in areas of lead (Pb) or climate change (GHG) but…
- …is configured to accommodate programmatic changes, additional allocation components, updates of data, etc.

Preliminary Region-by-Region Impacts

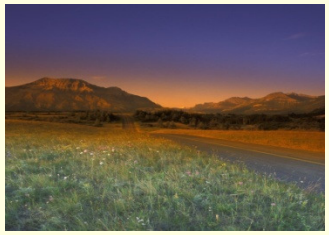


	1	2	3	4	5	6	7	8	9	10
Revised Approach	5.78%	9.37%	11.95	15.87	16.86	9.04%	4.29%	5.00%	18.74	3.09%
Current %	8.82%	9.27%	11.38	12.03	16.93	9.91%	3.45%	5.03%	17.84	5.34%
Change in Overall Share %	-3.04	0.10%	0.57%	3.84%	-0.07	-0.87	0.84%	-0.03	0.90%	-2.25
Net Internal Change	-34.42	1.06%	5.02%	31.91	-0.39	-8.79	24.30	-0.54	5.06%	-42.11

NACAA Developments

- NACAA Board and Funding Committee meets Feb.7-8, 2009 to Discuss Allocation Project.
- NACAA raises several issues/questions at Board meeting: impacts on small states, influence of population as a driver, accounting for standard operating needs,securing increased funding should take precedence.
- NACAA agrees to participate with OAR on joint workgroup with letter of confirmation forthcoming.

Implementation Subgroup Charge



- Take product of WG and develop workable implementation scheme.
- Consider additional input from NACAA, other State and Local stakeholders, Program Offices and Regions.
- Review principles and address issues of:
  - Equity, balance, practicality,
  - National vs. Regional Concerns,
  - Timing (Starting point, Phase-in),
  - Other Implementation Policy Issues.
- Make recommendation(s) to AA for OAR.

Summary of Joint WG Discussion

- Transparency is key.
- NACAA position is to focus on implementation and not methodology (e.g., timing, phase-in, RO/HQ consistency).
- But methodology questions still come up –
  - Questions on transport (fiscal implications of re: between source and receptor states)
  - Incorporation of workload considerations
  - Fixed vs. variable costs.
- NACAA participation in WG: focus only on reallocation if there are $ increases?
- Next WG meeting not likely until June ’09.

Next Steps / More to Do

- JIG - Clarify Joint Implementation Group logistics.
- EPA - Brief new AA.
- JIG - Identify and address implementation issues.
- EPA - Update allocation data.
- EPA - Address statutory provisions.
- JIG – Make recommendation on implementation approach.

Thanks for your patience!