

**Appendix I-a. NARSTO Funding and In-Kind Support: 1996-2009**

**Direct Funding**

The U.S. Department of Energy and the U.S. Environmental Protection Agency have been the primary direct funding agencies for NARSTO since its inception. DOE has principally supported the NARSTO Management Coordinator’s Office and the Quality Systems Science Center at Oak Ridge National Laboratory (includes the NARSTO Data Archive). EPA contributions have gone into the NARSTO Infrastructure Budget, which funds various NARSTO activities including the assessments. The infrastructure budget, which is managed by the Oak Ridge Institute for Science and Education (ORISE), enables pooling of financial contributions from various government and private sources. Financial contributions from DOE and EPA are summarized below. Details, including all contributions to the Infrastructure Budget are provided in Tables 1 and 2 below.

Department of Energy (1996 – 2009)

Management Coordinator’s Office \$4,280,000

QSSC \$3,835,000

Environmental Protection Agency (1997 – 2008)

Infrastructure \$990,000

**Table 1. NARSTO Infrastructure Support**

Contributor	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	By Org
Environmental Protection Agency	10,000	10,000	30,000	20,000	55,000	45,000	155,000	155,000	100,000	155,000	155,000	100,000	990,000
Canada Atmospheric Env. Service	10,000		10,000	10,000								8,000	38,000
NOAA, Boulder, CO					11,000							20,000	31,000
American Petroleum Institute			10,000					5,000				10,000	25,000
Ford Motor Company	10,000			10,000									20,000
Pennsylvania Power & Light	10,000			10,000									20,000
General Motors Corp.		10,000		5,000			5,000						20,000
Dunn-Edwards Corp.				10,000									10,000
DOE-Global Change						10,000							10,000
ENVAIR								7,588					7,588
Mid-Atlantic Regional Air Mgt. Assoc.				7,500									7,500
Edison Electric Inst.		5,763											5,763
Environment Canada							5,760						5,760
NYS Energy R&D Authority									5,000				5,000
California Air Resources Board												4,999	4,999
California Air Management Assoc.						2,000							2,000
<b>Total</b>	<b>\$40,000</b>	<b>\$25,763</b>	<b>\$50,000</b>	<b>\$72,500</b>	<b>\$66,000</b>	<b>\$57,000</b>	<b>\$165,760</b>	<b>\$167,588</b>	<b>\$105,000</b>	<b>\$155,000</b>	<b>\$155,000</b>	<b>\$142,999</b>	
<b>Grand Total</b>	<b>\$1,202,610</b>												

**Table 2. DOE Support for NARSTO Management Coordinator’s Office and QSSC**

<b>Year</b>	<b>Mgt. Coordinator</b>	<b>QSSC</b>	<b>Comments</b>
2009	\$250,000	\$295,000	The QSSC is located at ORNL and funded via the ARM Program For 2006 - 2009 MC office funded via a direct grant to CREA
2008	\$250,000	\$295,000	
2007	\$337,000	\$295,000	
2006	\$328,000	\$295,000	
2005	\$66,000	\$295,000	2005 was a transition year. \$66K via PNNL subcontract to CREA
	\$300,000		\$300K to PNNL while new MC was a PNNL employee
	\$50,000		\$50K via Argonne subcontract to Jake Hales (Envair)
2004	\$370,000	\$295,000	1996-2004 MC funded via subcontract from Argonne to Envair
	\$50,000		Support to David Street for Emissions Inventory Assessment
2003	\$370,000	\$295,000	
2002	\$370,000	\$295,000	
2001	\$370,000	\$295,000	
	\$35,000		Support to David McCellan for PM Assessment
2000	\$330,000	\$295,000	
1999	\$372,000	\$295,000	
1998	\$330,000	\$295,000	
1997	\$0	\$295,000	
1996	\$102,000		Note: PNNL and ANL subcontracts include PNNL and ANL overhead
<b>Totals</b>	<b>\$4,280,000</b>	<b>\$3,835,000</b>	
<b>Grand Total</b>	<b>\$8,115,000</b>		Note: Does not include funding to Sylvia Edgerton and George Hidy for various support activities and for various National Lab. scientists for contributions to review papers and other activities (probably at least an additional \$500,000 over the years)

**In-Kind Support**

NARSTO has received significant in-kind support over the years. Principally, this support has been for personnel who have participated in various activities ranging from NARSTO governance to EPA’s support of the position of NARSTO Associate Management Coordinator. Support for this latter position (including travel) has probably exceeded \$1,000,000 since NARSTO’s inception. Support for employee participation in other NARSTO activities is more difficult to quantify. To provide an idea of its

magnitude, government and industry contributors to only the four NARSTO assessments are listed below. The magnitude of each individual's contribution ranges from a few weeks to several weeks. Contributions from academic or private sector researchers (not included in this list) were funded through the Infrastructure Budget, the Management Coordinator's Office, or by direct support from private sector members. Numerous participants in the various meetings of the Reactivity Research Working Group and other NARSTO activities (not enumerated here) should also be added to this total. Our apologies for any inadvertent omissions.

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