



APPENDIX AVAILABLE ON THE HEI WEB SITE

Research Report 178

National Particle Component Toxicity (NPACT) Initiative Report on Cardiovascular Effects

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Section 1: NPACT Epidemiologic Study of Components of Fine Particulate Matter and Cardiovascular Disease in the MESA and WHI-OS Cohorts

Appendix B. CSN Monitoring Sites and Protocols

Note: Appendices that are available only on the Web have been assigned letter identifiers that differ from the lettering in the original Investigators' Report. HEI has not changed the content of these documents, only their identifiers.

Appendix B was originally Appendix A

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This document was reviewed by the HEI NPACT Review Panel but did not undergo the HEI scientific editing and production process.

Appendix Table A.1. Monitoring sites (by AIRS ([AQ5] ID) for PM2.5 components in the 6 MESA AIR city areas with data available during the interval from 2000 through 2009.

Monitor Network		LA	Chicago	St. Paul	Baltimore	NY	Winston-Salem
CSN	1	060290014	170310057	270530963	100010003	090019003	370350004
	2	060371103	170310076	270953051	110010042	090090027	370510009
	3	060658001	170314201	271095008	110010043	250130008	370570002
	4	060658005	170434002	271230871	240030019	340230006	370670022
	5	060730003	180390003	551198001	240053001	340273001	370810013
	6	060731002	180390008		240330030	340390004	371190041
	7	061112002	180890022		420010001	360050083	371590021
	8		180892004		420270100	360050110	371830014
	9		181411008		420430401	360610062	450250001
	10		260050003		420710007	360610134	515200006
	11		260770008		420990301	360810124	517700014
	12		550270007		421330008	420692006	
	13		550590019		511390004		
	14		550790026			100032004	
	15		551330027			340070003	
	16					420110011	
	17					420290100	
	18					420450002	
	19					420950025	
	20					421010004	
	21					421010055	
	22					421010136	
IMPROVE	1	060299001	170310076	271699000	110010042	090050005	370110002
	2	060379034			240059000	360050110	511639000
	3	060658001			420019000		
	4	060659000			511139000		
	5	060719002				340019000	
	6	060719010					
	7	060839000					

Collocated sites for CSN, IMPROVE, and MESA AIR fixed,

Collocated sites for CSN and fixed,

Collocated sites for CSN and IMPROVE

Core sites

Appendix Table A.2. Similarities and Differences of monitoring, sampling, and analysis protocols between Monitoring Networks

Network	Monitoring	Sampling for carbon	Nominal air volume (m ³)	Analysis for carbon
CSN old protocol	3- or 6-day	CSN Met One+	10.5	NIOSH/ Total optical transmittance (TOT)
CSN new protocol*	3- or 6-day	CSN URG	32.8	IMPROVE-A/ Total optical reflectance (TOR)
IMPROVE	3-day	IMPROVE+	32.8	IMPROVE-A/ Total optical reflectance
MESA Air	14-day avg	MESA AIR sampler+	18.1	IMPROVE-A/ Total optical reflectance

*Effective March 2007; supplemental sites phased in over time

+Comparable

Appendix Table A.3. CSN monitor sites that served as collocated fixed sites for NPACT/MESA Air PM2.5 sampling.

MESA Site ID	EPA Monitor ID	Site Name	City Location	AQS parameter	Latitude	Longitude
L-001	06-037-1103	Downtown AQMD	Los Angeles, CA	daily PM2.5; spectn	34.067	-118.227
LR-002	06-065-8005	Van Buren/Mira Loma	Riverside, CA	1:3 PM2.5	33.996	-117.493
C-004	17-031-0076	Lawndale	Chicago, IL	1:3 PM2.5; spectn	41.751	-87.713
B-003	24-005-3001	Essex	Essex, MD	daily PM2.5; spectn	39.311	-76.474
S-003	27-053-0963	Andersen/Phillips	Minneapolis, MN	1:3 PM2.5; spectn	44.954	-93.258
S-001	27-123-0868	Ramsey Co. Health Center	St. Paul, MN	1:3 PM2.5; daily PM10	44.951	-93.098
N-001	36-005-0110	IS-52	Bronx, NY	daily PM2.5; spectn	40.816	-73.902
W-001	37-067-0022	Hattie Ave.	Winston-Salem, NC	daily PM2.5; spectn	36.111	-80.227
W-002	37-067-0030	Clemmons	Winston-Salem, NC	1:3 PM2.5	36.026	-80.342

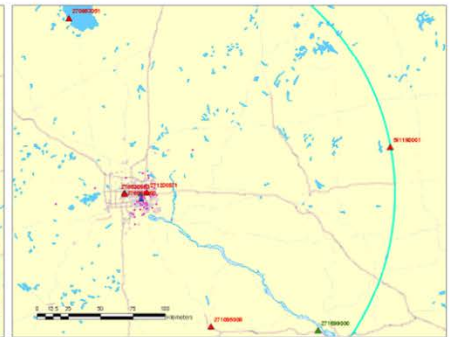
LA



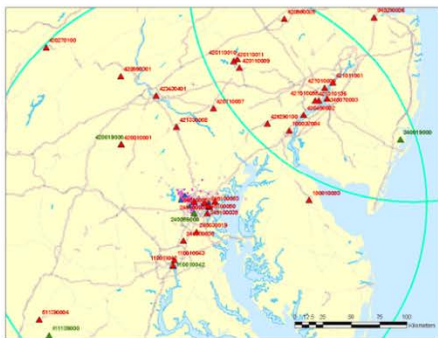
Chicago



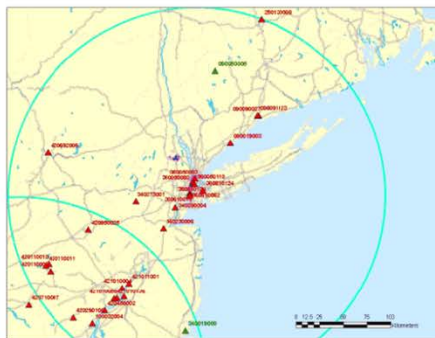
St. Paul



Baltimore



NY



Winston-Salem



▲ CSN ▲ IMPROVE ▲ MESA AIR fixed sites ● MESA AIR home-outdoor sites ● MESA AIR participants — 200km buffer from the city

Appendix Figure A.1. Locations of CSN, IMPROVE, and MESA Air monitoring sites for PM_{2.5} components within 200 km from the MESA Air city center in 6 MESA Air city areas