



Connecticut Department of Energy and Environmental Protection



2013 Air Monitoring Network Plan

July 11, 2013

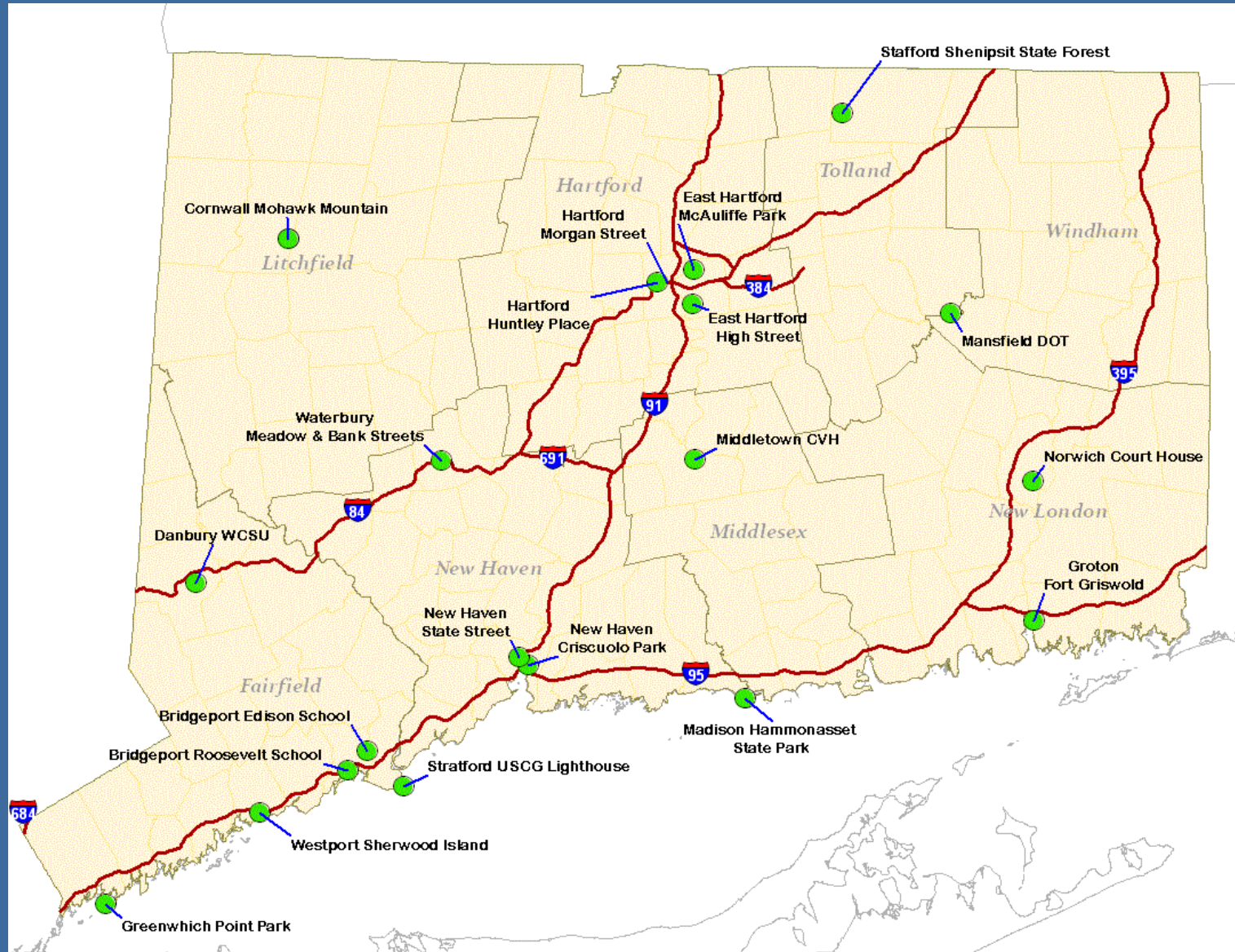
Randall Semagin

SIPRAC



Connecticut Department of Energy and Environmental Protection

DEEP Current Monitoring Network

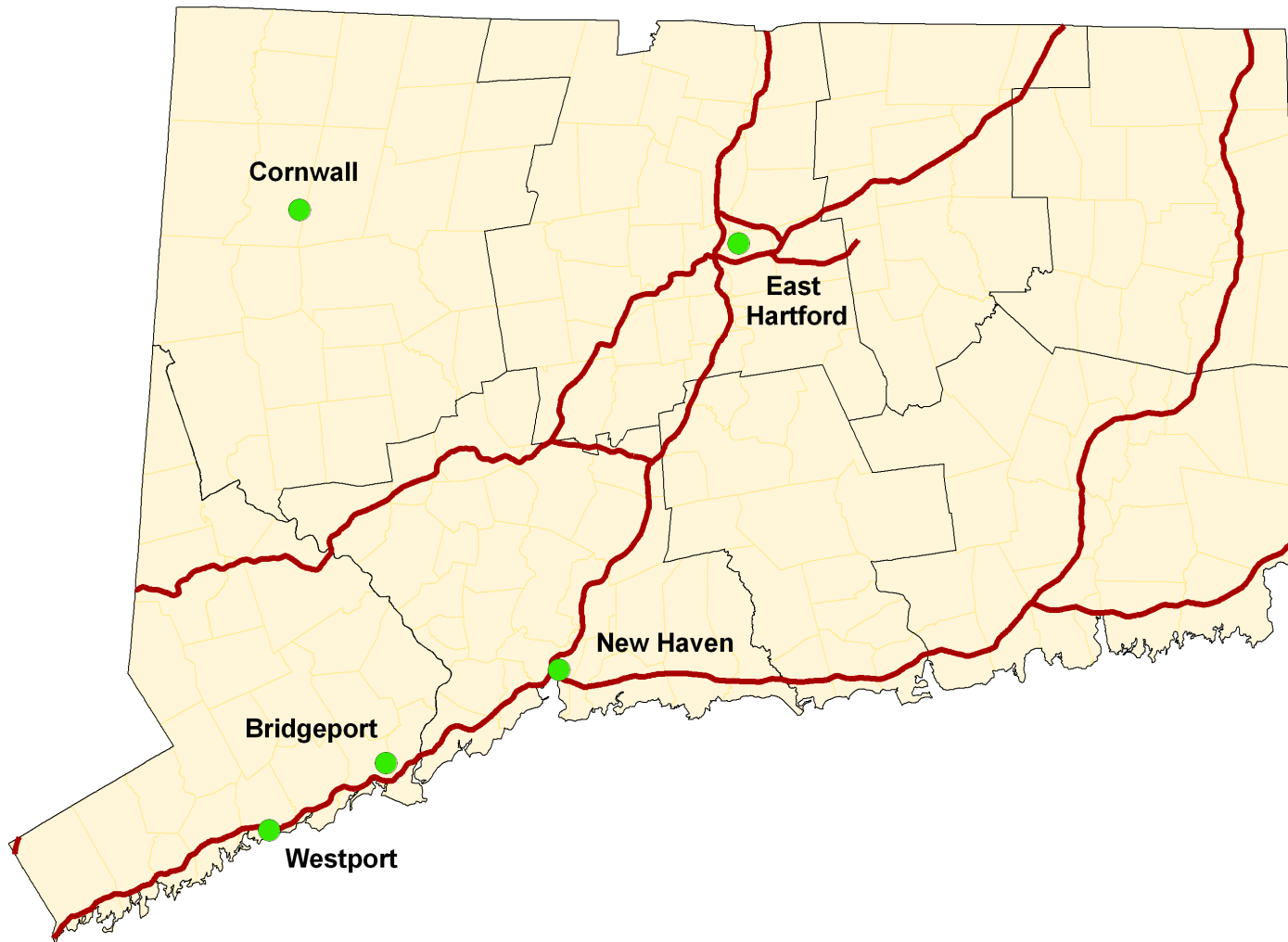


Proposed Changes to the Air Monitoring Network for 2013-2014

- Discontinuing federal reference method (FRM) PM_{2.5} sampling at the Norwich Courthouse.
- Establishing continuous PM₁₀/PM_{10-2.5} sampling at Hartford Huntley Place.
- Discontinuing SO₂ sampling at Westport Sherwood Island State Park.
- Commencing to report continuous PM_{2.5} data from the Groton Fort Griswold, Waterbury Bank Street and Bridgeport Roosevelt School monitoring sites as federal equivalent method (FEM) data eligible for comparison to the PM_{2.5} NAAQS.
- Suspending carbonyls sampling at East Hartford McAuliffe Park for 2013.

Plan is posted on DEEP website under: [Air/Air Monitoring/Network Design](#)

Current SO₂ Monitoring Network

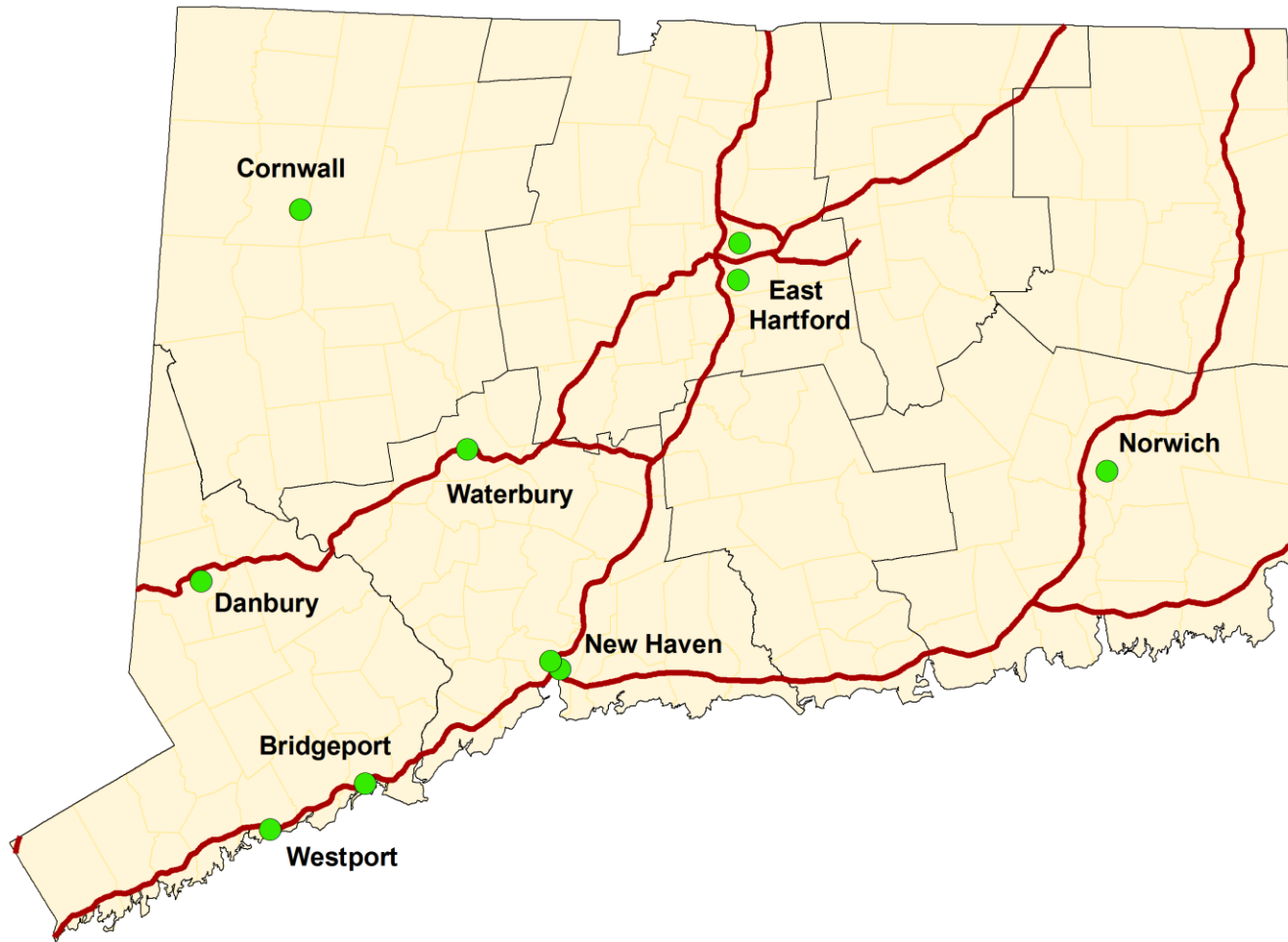


SO₂ Network Minimum Requirements

CBSA	Population	SO2 Emissions (tpy)	PWEI (M-person-t)	Highest SO2 Point Source (t)	No. Monitors	No. PWEI Required Monitors	No. NCore Required Monitors
Bridgeport-Stamford-Norwalk	901,208	9512	8573	2831	2	1	0
Hartford-West Hartford-East Hartford	1,195,998	8862	10599	1370	1	1	0
New Haven-Milford	848,006	7809	6622	1447	1	1	1
Norwich-New London	266,830	5861	1564	2755	0	0	0
Torrington	188,728	1206	228	2	1	0	1
Willimantic	117,518	1068	126	232	0	0	0

- From 2010 Network Assessment, based on 2005 NEI data
- Source monitoring not addressed, rule not yet final

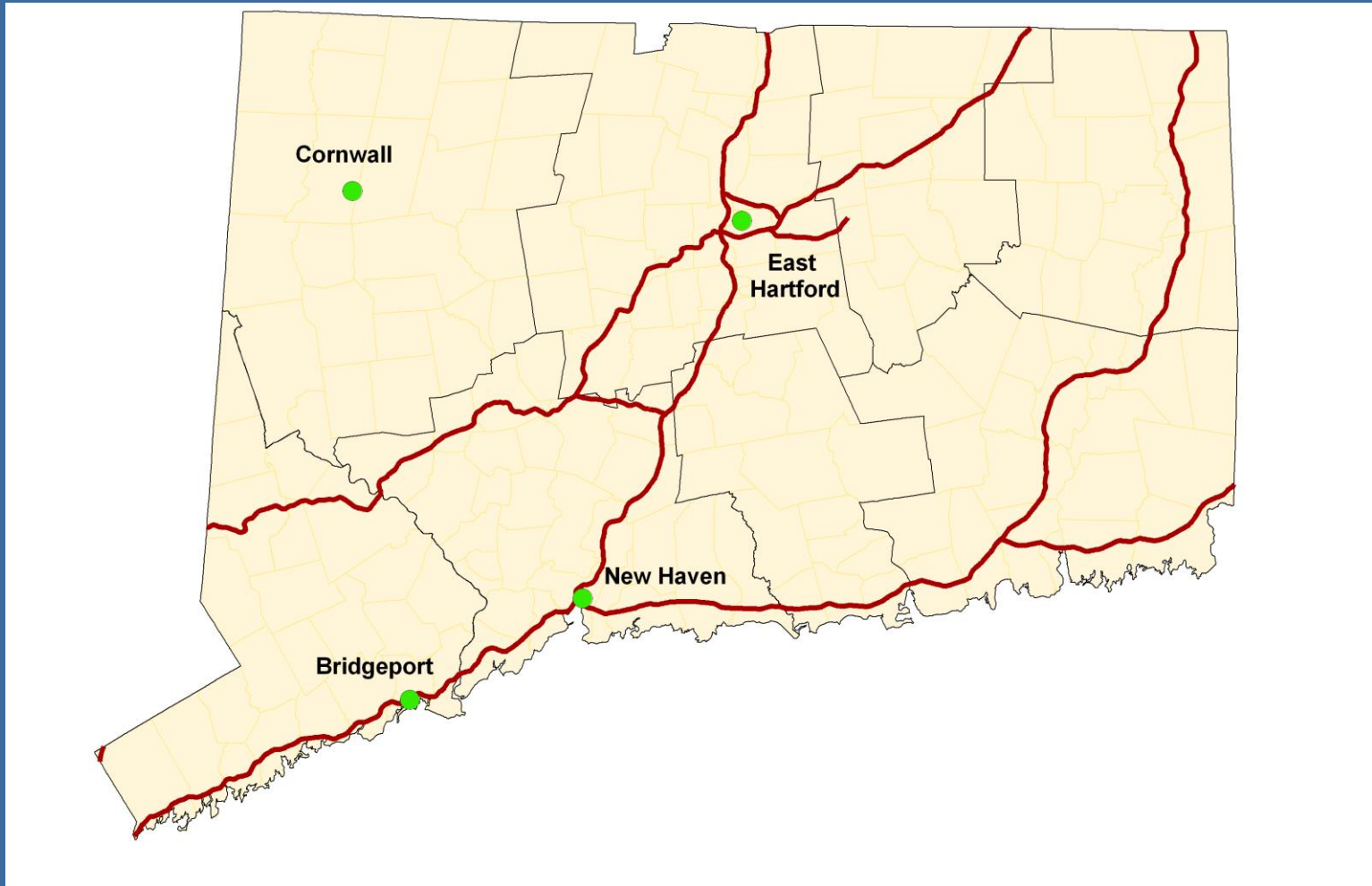
Current PM_{2.5} FRM Monitoring Network



PM_{2.5} Network Requirements

Core-Based Statistical Area	Estimated 2009 Population	Design Values > 85% PM2.5 NAAQS?	No. Monitors	Minimum No. Monitors Required
Bridgeport-Stamford-Norwalk	901,208	N	3	1
Hartford-West Hartford-East Hartford	1,195,998	N	2	2
New Haven-Milford	848,006	N	3	1
Norwich-New London	266,830	N	1	0
Torrington	188,728	N	1	1
Willimantic	117,518	(N)	0	0

Current PM₁₀ Monitoring Network



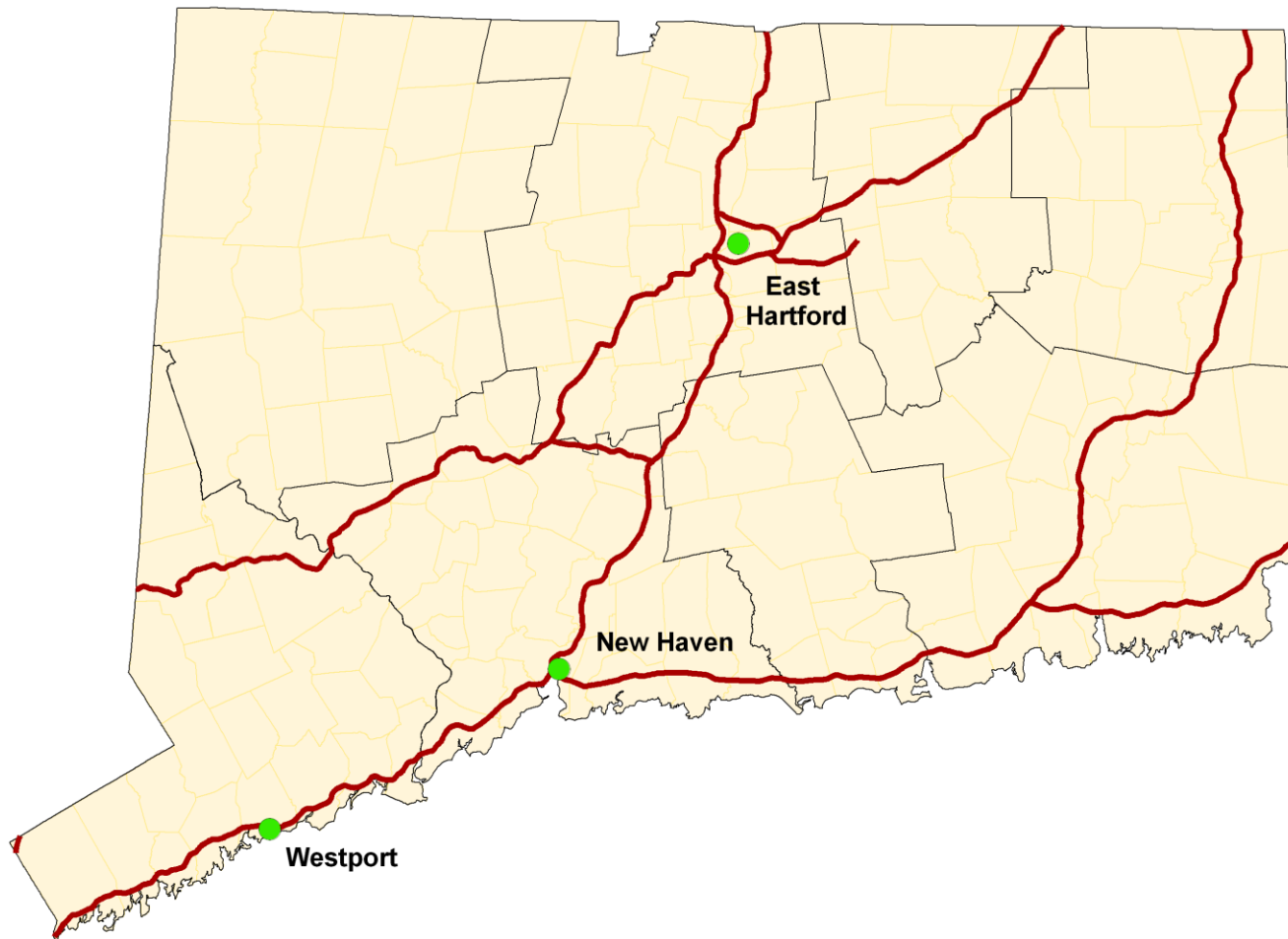
PM₁₀ Monitoring Network Requirements

Core-Based Statistical Area	Estimated 2009 Population	Design Values < 80% PM10 NAAQS?	No. Monitors	Minimum No. Monitors Required
Bridgeport-Stamford-Norwalk	901,208	Y	1	1-2
Hartford-West Hartford-East Hartford	1,195,998	Y	1	2-4
New Haven-Milford	848,006	Y	1	1-2
Norwich-New London	266,830	(Y)	0	0-1
Torrington	188,728	Y	1	1*
Willimantic	117,518	(Y)	0	0

*NCore requirement

PAMS Network

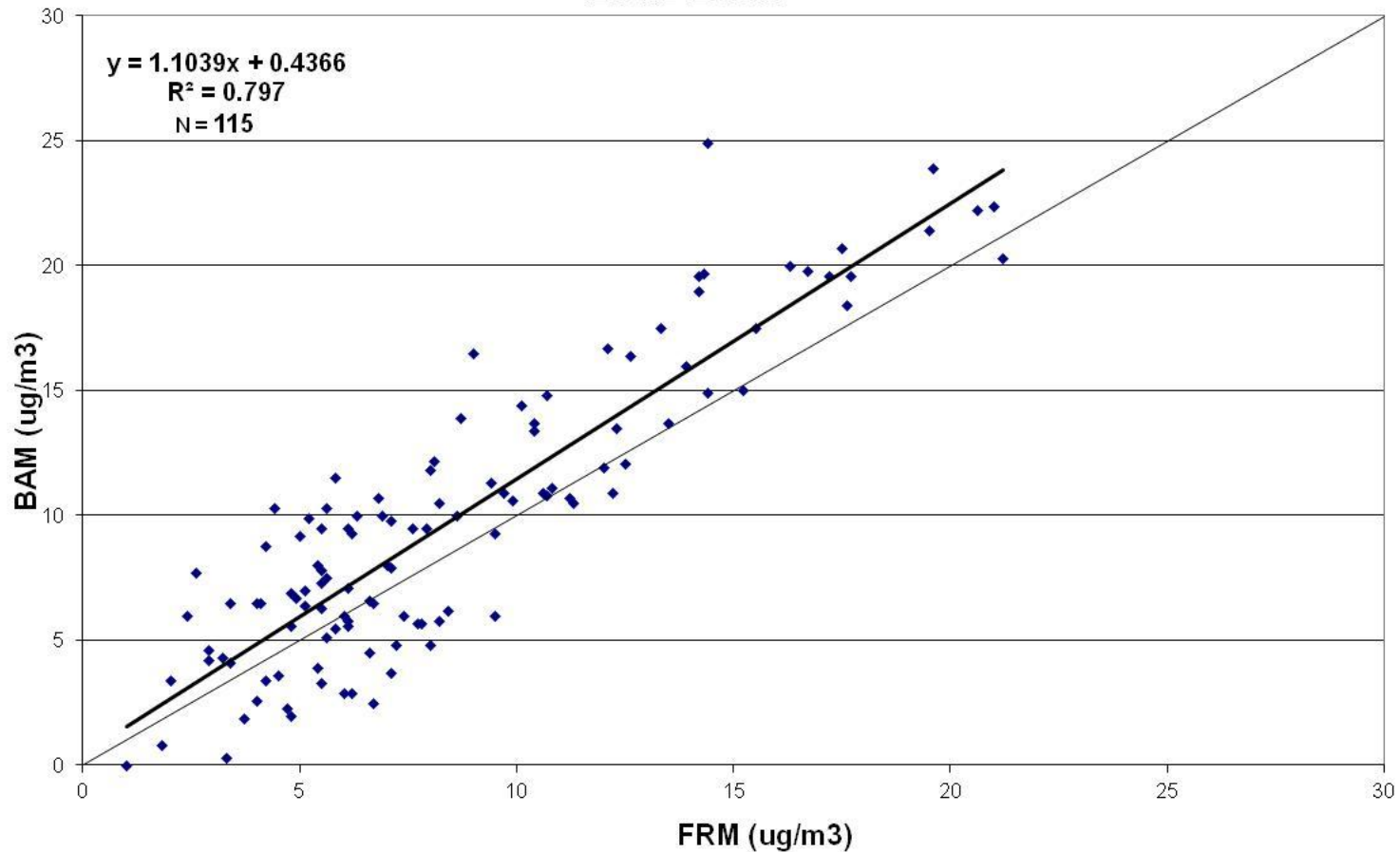
(VOC GC at 3 sites, carbonyls at 1 site)



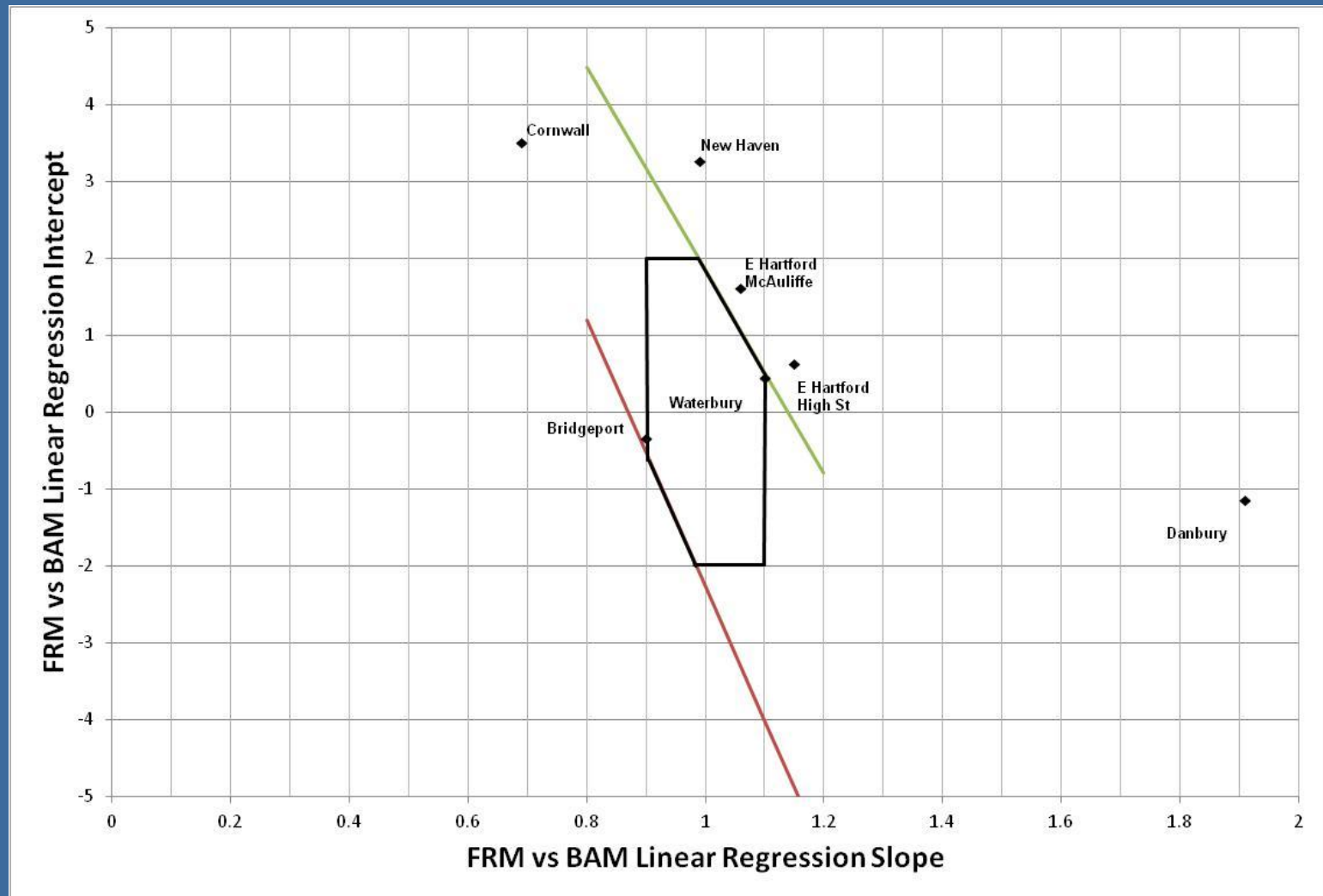
Continuous PM_{2.5} Sampler Performance (MetOne BAM 1020)

PM_{2.5} FRM vs. FEM Correlation Example

Waterbury Bank Street PM_{2.5} FRM vs. FEM
2012 Data

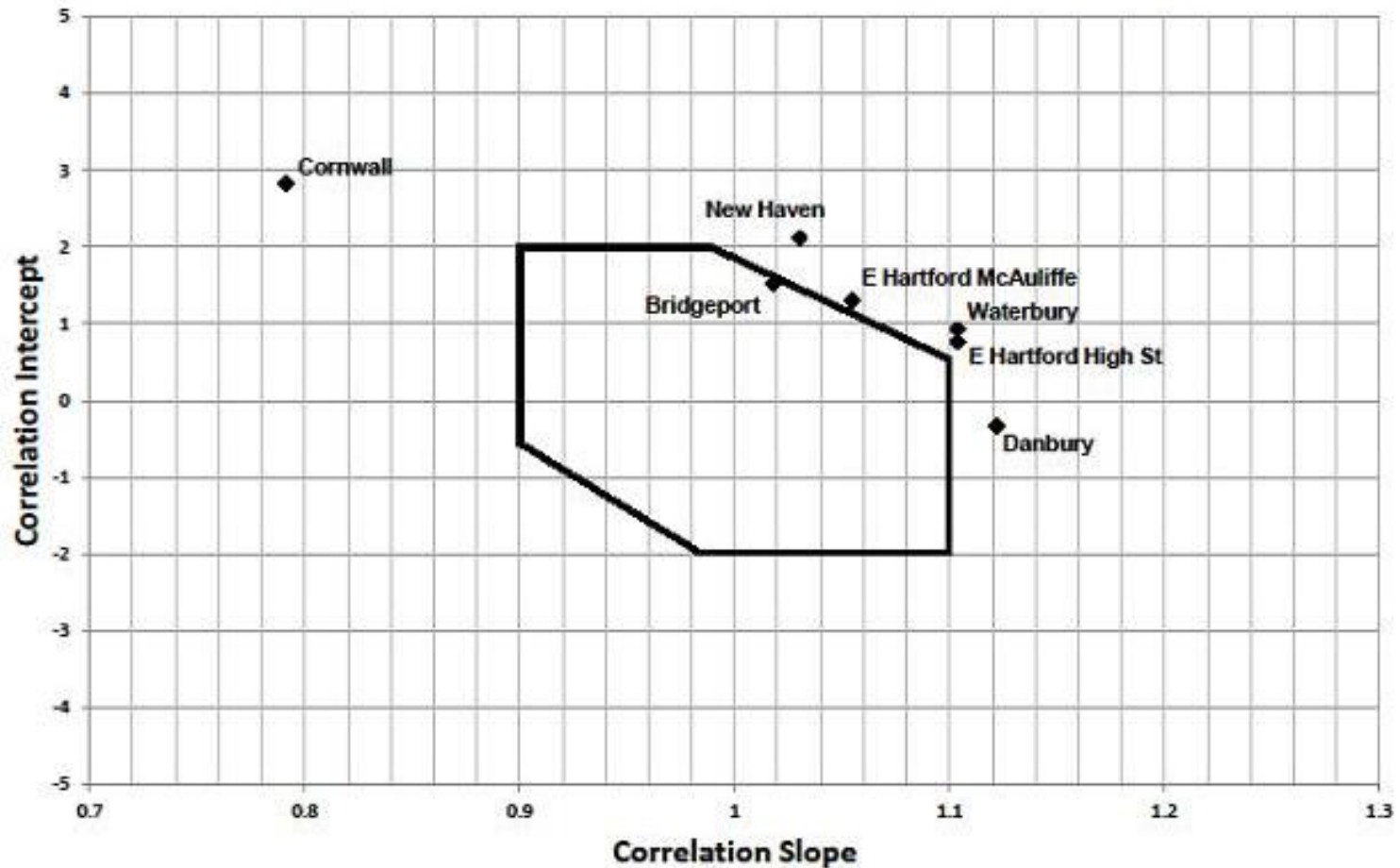


PM_{2.5} FRM vs. BAM Correlation 2012 Data



PM_{2.5} FRM vs. BAM Correlation 2010-2012 Data

MetOne BAM 1020 Comparison with EPA Performance Standards



Proposed PM_{2.5} BAM Network

Site Name	AQS ID	Parameter Name	Parameter Code	Monitor Type	Monitor Status for NAAQS	Meets FEM Performance Criteria	Eligibility for AQI Reporting
Bridgeport Roosevelt School	09-001-0010	PM2.5 LC	88101	SLAMS	Collocated	Y	Y
Danbury WCSU	09-001-1123	Acceptable PM2.5 AQI	88502	SLAMS	n/a	N	Y
Hartford Huntley Place	09-003-0025	Acceptable PM2.5 AQI	88502	SPM	n/a	n/a	Y
East Hartford McAuliffe Park	09-003-1003	Acceptable PM2.5 AQI	88502	SLAMS	n/a	N	Y
East Hartford High Street	0--003-2006	Acceptable PM2.5 AQI	88502	SLAMS	n/a	N	Y
Cornwall Mohawk Mountain	09-005-0005	Acceptable PM2.5 AQI	88502	SLAMS	n/a	N	Y
New Haven Criscuolo Park	09-009-0027	Acceptable PM2.5 AQI	88502	SLAMS	n/a	N	Y
Waterbury Bank Street	09-009-2123	PM2.5 LC	88101	SLAMS	Primary	Y	Y
Groton Fort Griswold	09-011-0124	PM2.5 LC	88101	SLAMS	Primary	n/a	Y

- Draft Network Plan is posted on DEEP website for public review
- http://www.ct.gov/deep/cwp/view.asp?a=2684&Q=321798&deepNav_GID=1744
- Submit comments by July 18, 2013, to:
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