

# **Independent, Sector-Specific Source Apportionment Modeling of the 2017 Cross State Air Pollution Rule Modeling Platform**

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Similar to EPA's methodology documented in the air quality TSD<sup>1</sup> for the Cross State Air Pollution Rule (CSAPR), Alpine performed nationwide, state, source category-level ozone source apportionment modeling using the CAMx OSAT technique to quantify the contribution of 2017 base case NOx and VOC emissions from major source categories in each region to projected 2017 ozone concentrations at ozone monitoring sites.

Two key and important differences in our modeling compared to EPA's CSAPR modeling are the selection using the Ozone Source Apportionment Technology (OSAT) technique instead of OSAT/Anthropogenic Precursor Culpability Assessment (APCA) technique and the use of the released version of CAMx, rather than the EPA modified version with the altered HMAX parameter.

Our selection of OSAT over OSAT/APCA is a result of the purpose and intended use of the model results. According to the model's documentation, the OSAT technique provides a more robust picture of what emissions sources are contributing to ozone formation since it specifically apportions ozone to all source categories, including the "uncontrollable" (e.g., biogenics in EPA's modeling). This allows for a separation of attribution for anthropogenic from biogenic contribution to a downwind monitor's modeled concentration. Under some chemical regimes the APCA technique apportions biogenic emissions to anthropogenic sources when biogenic emissions react with anthropogenic sources and therefore is typically recommended in the development of control strategies. The primary purpose for our simulation was to develop a region and source category specific contribution to each monitor and therefore OSAT was selected as the preferred approach.

Additionally, CAMx includes a feature called "Super Stepping". Super stepping is a technique to relax certain numeric limits in the horizontal advection scheme to maximize model computation speed at the expense of a certain degree of numeric accuracy and can reduce the accuracy of the vertical transport solution, especially in high wind conditions over complex terrain. As distributed, the CAMx model sets a default super stepping parameter (HMAX) to 2000 m. This defines the altitude below which peak winds are used in the calculation of the timestep.

Lowering HMAX results in using winds at lower altitudes to define the timestep, and since these winds are usually much slower than winds aloft, timestep increases and computation time decreases. When super stepping is not invoked, the peak winds over the entire domain depth are used to calculate timestep. EPA had modified the code to set HMAX to 20 m, potentially reducing the accuracy of the vertical transport solution over the entire modeling domain. The CAMx model developers put in the 2000 m parameter as an appropriate balance between numeric accuracy and computational efficiency. Our modeling maintained HMAX at the default value of 2000 m which resulted in increased model run times, but provided a more numerically accurate solution.

In the source apportionment model run, we tracked the ozone formed from each of the following contribution categories (i.e., "tags"):

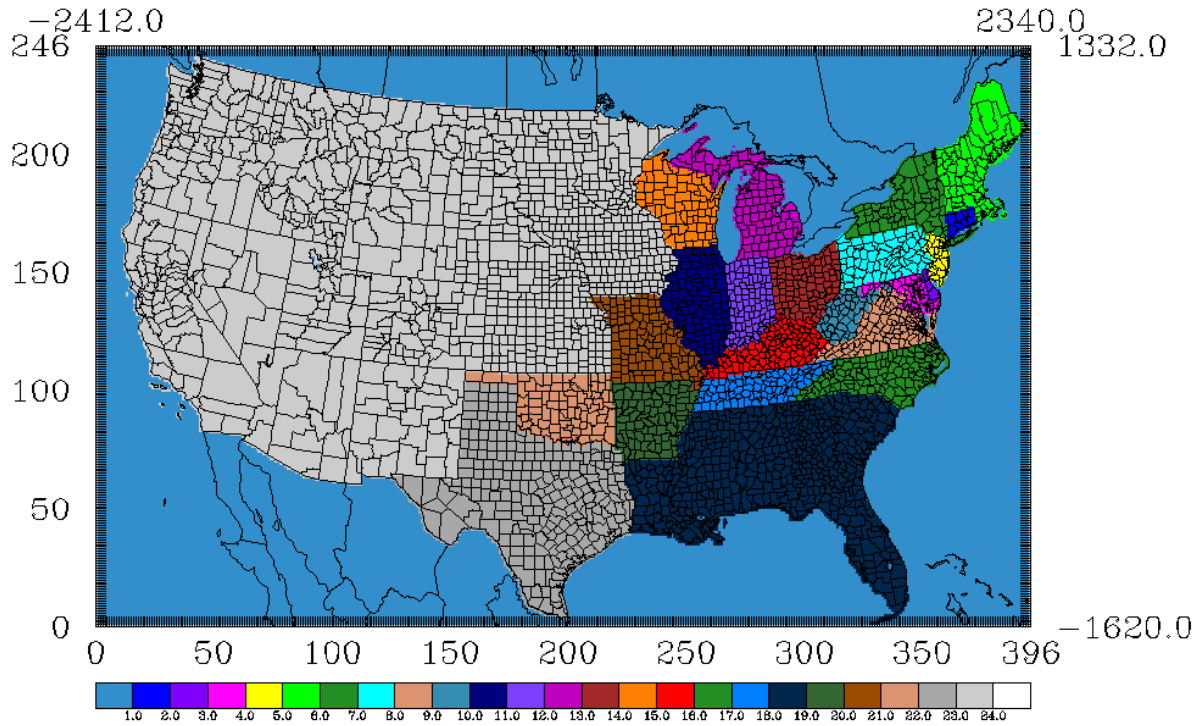
- Regions –NOx and VOC emissions from each state or state group tracked individually using the additional source category "tags" listed below;
  - Biogenic/Fires;
  - On-Road Mobile;
  - Non-Road Mobile/Stationary Area;

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<sup>1</sup> <http://www3.epa.gov/crossstaterule/pdfs/AQModeling.pdf>

- EGU Point; and
- Non-EGU Point;
- Boundary and Initial Concentrations – concentrations transported into the modeling domain (e.g., international transport, stratospheric intrusion, domain initialization conditions);
- Canada, Mexico, and over water domains – anthropogenic emissions from sources in the portions of Canada and Mexico included in the modeling domain and from sources in the Pacific and Atlantic Oceans or from the Gulf of Mexico or Great Lakes.

The CAMx modeling domain was subdivided into 24 source groups as presented in Figure 1 and Table 1.



**Figure 1.** OSAT source region definition

**Table 1.** OSAT source regions definition

Region Number	Region Name
1	Canada/Mexico/Water
2	CT
3	DE
4	MD
5	NJ
6	Northeast
7	NY
8	PA
9	VA/DC
10	WV
11	IL
12	IN

Region Number	Region Name
14	OH
15	WI
16	KY
17	NC
18	TN
19	South
20	AR
21	MO
22	OK
23	TX
24	West

The contribution modeling provided contributions to ozone from NOx and VOC emissions in each region and source category as noted above. This differed from EPA's modeling in that our analysis provides finer category-specific contribution resolution for components in many eastern states compared to the "all-state" contribution method applied in CSAPR. For example, we have determined the relative contribution of Ohio's onroad mobile source sector emissions on ozone concentrations at downwind monitors instead of just Ohio's total anthropogenic contribution to that same monitor. In this regard, we can see what the relative magnitude of category-based emissions is compared to individual monitor concentrations in contrast to just regional or state total contributions.

The CAMx OSAT model run was performed for the period March 22 through September 30 using the projected 2017 base case emissions and 2011 meteorology for this time period. Because of the limited time available in the comment period, and the significant computational burden in running the large grid with multiple source groups and source regions, the model simulation was broken into segments. Each segment was run individually with the model being initialized from a non-OSAT run restart file a minimum of 2 weeks prior to when the model OSAT results were analyzed. The 2 week spin-up allowed sufficient time for the initial conditions to be washed out of the modeling domain. Each of the segments was run in parallel on multiple processor nodes. This reduced the overall elapsed time of the simulation sufficiently to fit within the very aggressive comment period timeframe.

Our opinion is that the segmented simulations had a very minor, if any, influence on the results. Traditionally long photochemical modeling simulations have been broken into segments with the model reinitialized quarterly and the model run for approximately two weeks pre-episode to "spin-up" the model. In this situation the model was started with a previous model simulation so no spin-up was necessary and the model was run for more than two pre-episode weeks to remove the influence of the initial conditions.

The hourly contributions from each tag were processed to calculate an 8-hour average contribution metric. The model results for each 8-hour period where the total model concentrations were over a threshold (e.g., 60 or 75 ppb) at the grid cell that contains the ozone monitor were averaged over the modeled episode. This averaged the model results over a different time period than the EPA analysis. To better compare with the EPA results, these concentrations were scaled based on the future design values published in the TSD.

Table 2 and Figures 2 and 3 provide OSAT output for an example monitor using a 75 ppb reporting threshold. In this table and figures, we provide both the tabular results (scaled to CSAPR average 2017 design values), as well as tag-specific contributions based on the relative contribution analysis.

In Table 2, each grid cell represents the ozone concentration contribution of NOx and VOC emissions for each of the regions (rows) and source categories (columns) in the table. A regional total contribution is found near the end of each row and a category total contribution is found at the bottom of each column. Additionally, in the last column of each row, we have calculated a regional percent contribution total relative to the CSAPR design value. In other words, it provides the relative percent ozone contribution from each region to the monitor's total concentration.

Figure 2 is a stacked bar chart that presents the tabular data in a graphical format. Each bar represents an individual source region (rows in the top table) while each colored segment of the bar is representative of the source categories as defined by the columns in the top table. The purpose of this figure is to provide an easy visual for relative contribution by region and source category.

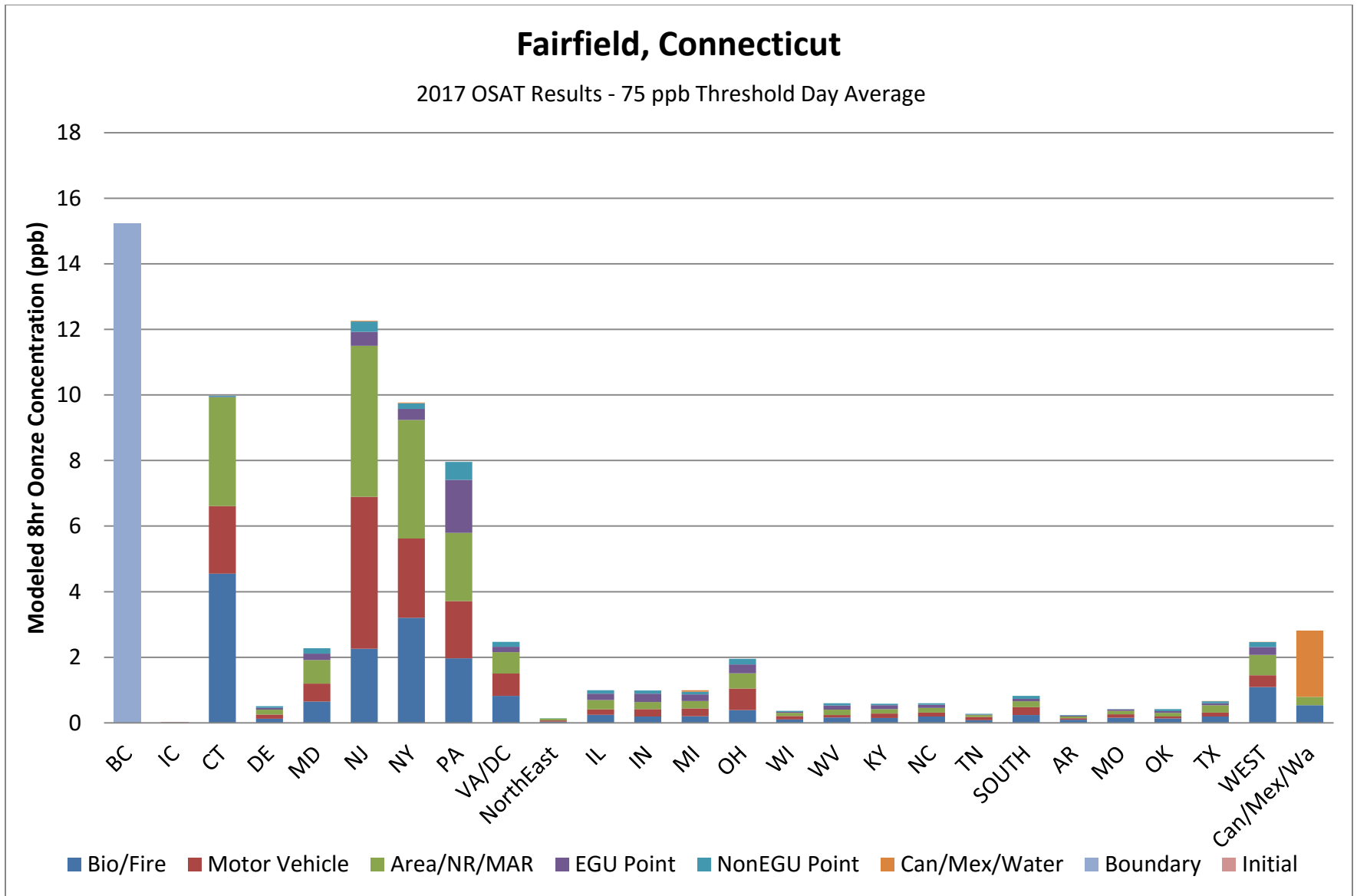
Finally, Figure 3 is a pie chart that represents the source category total (in percent) across all regions modeled. This provides an easy visual of how each source category, in sum, contributes to the modeled concentrations at each monitor.

Contribution results for the CSAPR nonattainment and maintenance monitors in the eastern U.S. modeling domain are provided at the end of this document.

**Table 2.** Example monitor and CSAPR dv-scaled source apportionment output.

Monitor            090010017            Fairfield, Connecticut

2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold										
Region	Bio/Fire	Motor Vehicle	Area/NR /MAR	EGU Point	NonEGU Point	Can/Mex /Water	Boundary	Initial	Total	% of Total
BC	0.00	0.00	0.00	0.00	0.00	0.00	15.24	0.00	15.24	20%
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0%
CT	4.55	2.06	3.31	0.02	0.03	0.00	0.00	0.00	9.97	13%
DE	0.12	0.13	0.15	0.05	0.05	0.00	0.00	0.00	0.51	1%
MD	0.65	0.54	0.72	0.19	0.17	0.00	0.00	0.00	2.27	3%
NJ	2.26	4.64	4.60	0.43	0.32	0.02	0.00	0.00	12.26	16%
NY	3.21	2.42	3.62	0.33	0.18	0.02	0.00	0.00	9.77	13%
PA	1.97	1.75	2.08	1.62	0.54	0.00	0.00	0.00	7.96	10%
VA/DC	0.83	0.68	0.65	0.17	0.15	0.00	0.00	0.00	2.47	3%
NorthEast	0.04	0.04	0.06	0.00	0.01	0.00	0.00	0.00	0.14	0%
IL	0.25	0.17	0.28	0.19	0.11	0.00	0.00	0.00	0.99	1%
IN	0.19	0.23	0.21	0.25	0.10	0.00	0.00	0.00	0.98	1%
MI	0.20	0.24	0.23	0.20	0.08	0.04	0.00	0.00	0.99	1%
OH	0.39	0.66	0.47	0.27	0.17	0.00	0.00	0.00	1.95	3%
WI	0.11	0.11	0.10	0.03	0.04	0.00	0.00	0.00	0.37	0%
WV	0.17	0.07	0.17	0.12	0.07	0.00	0.00	0.00	0.60	1%
KY	0.15	0.13	0.14	0.11	0.04	0.00	0.00	0.00	0.58	1%
NC	0.19	0.12	0.14	0.10	0.04	0.00	0.00	0.00	0.60	1%
TN	0.08	0.10	0.06	0.02	0.02	0.00	0.00	0.00	0.27	0%
SOUTH	0.24	0.24	0.18	0.07	0.10	0.00	0.00	0.00	0.83	1%
AR	0.10	0.04	0.05	0.03	0.02	0.00	0.00	0.00	0.24	0%
MO	0.16	0.11	0.11	0.04	0.01	0.00	0.00	0.00	0.42	1%
OK	0.13	0.06	0.11	0.05	0.06	0.00	0.00	0.00	0.42	1%
TX	0.19	0.12	0.22	0.06	0.06	0.01	0.00	0.00	0.67	1%
WEST	1.09	0.36	0.62	0.24	0.15	0.01	0.00	0.00	2.47	3%
Can/Mex/Water	0.54	0.00	0.25	0.00	0.00	2.02	0.00	0.00	2.81	4%
<b>Grand Total</b>	<b>17.78</b>	<b>15.00</b>	<b>18.54</b>	<b>4.60</b>	<b>2.49</b>	<b>2.12</b>	<b>15.24</b>	<b>0.03</b>	<b>75.80</b>	<b>100%</b>



**Figure 2.** Region and category contribution concentrations for example monitor and CSAPR dv-scaled source apportionment output

090010017

### Fairfield, Connecticut

2017 OSAT Results - 75 ppb Threshold Day Average

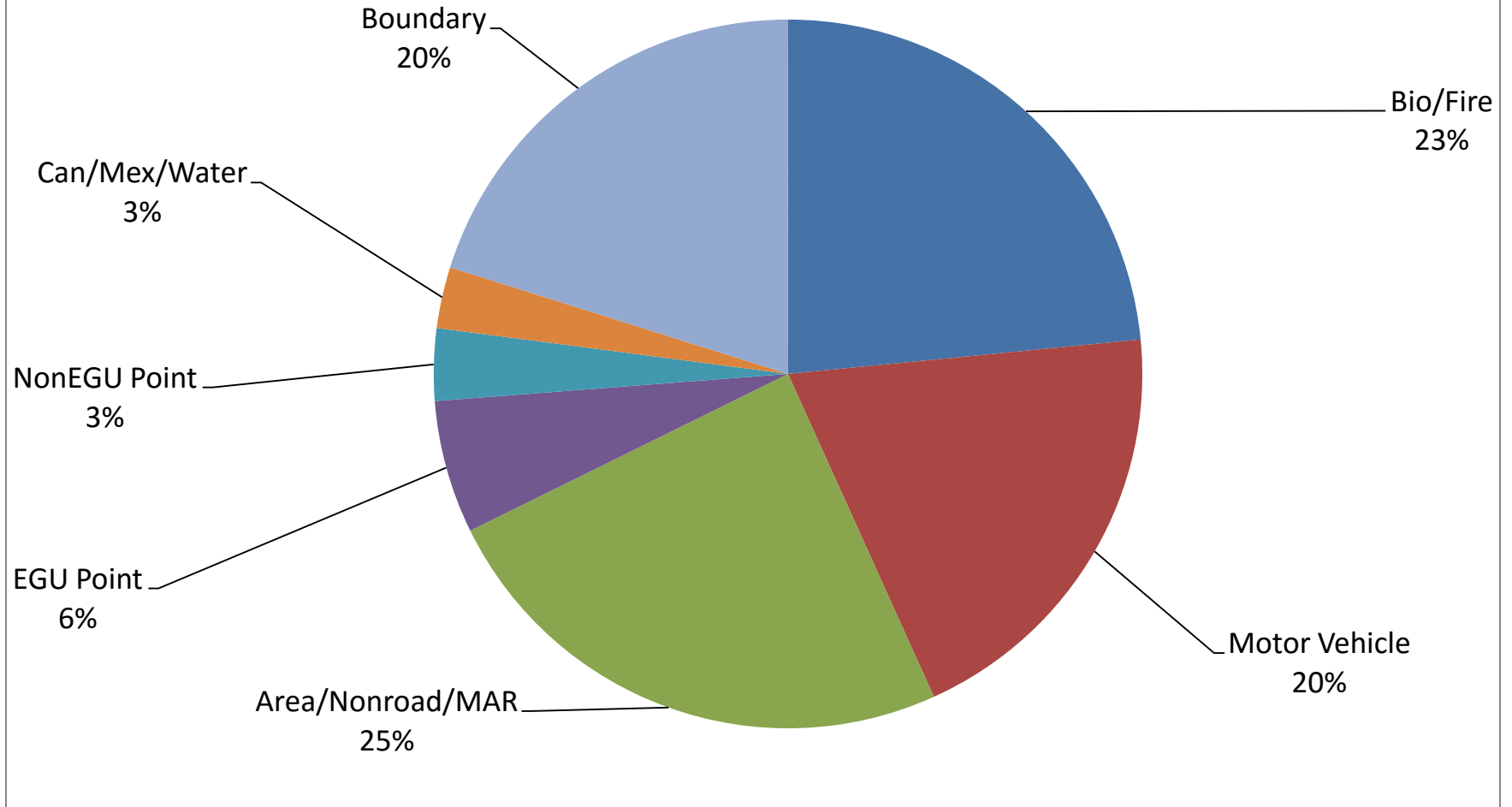
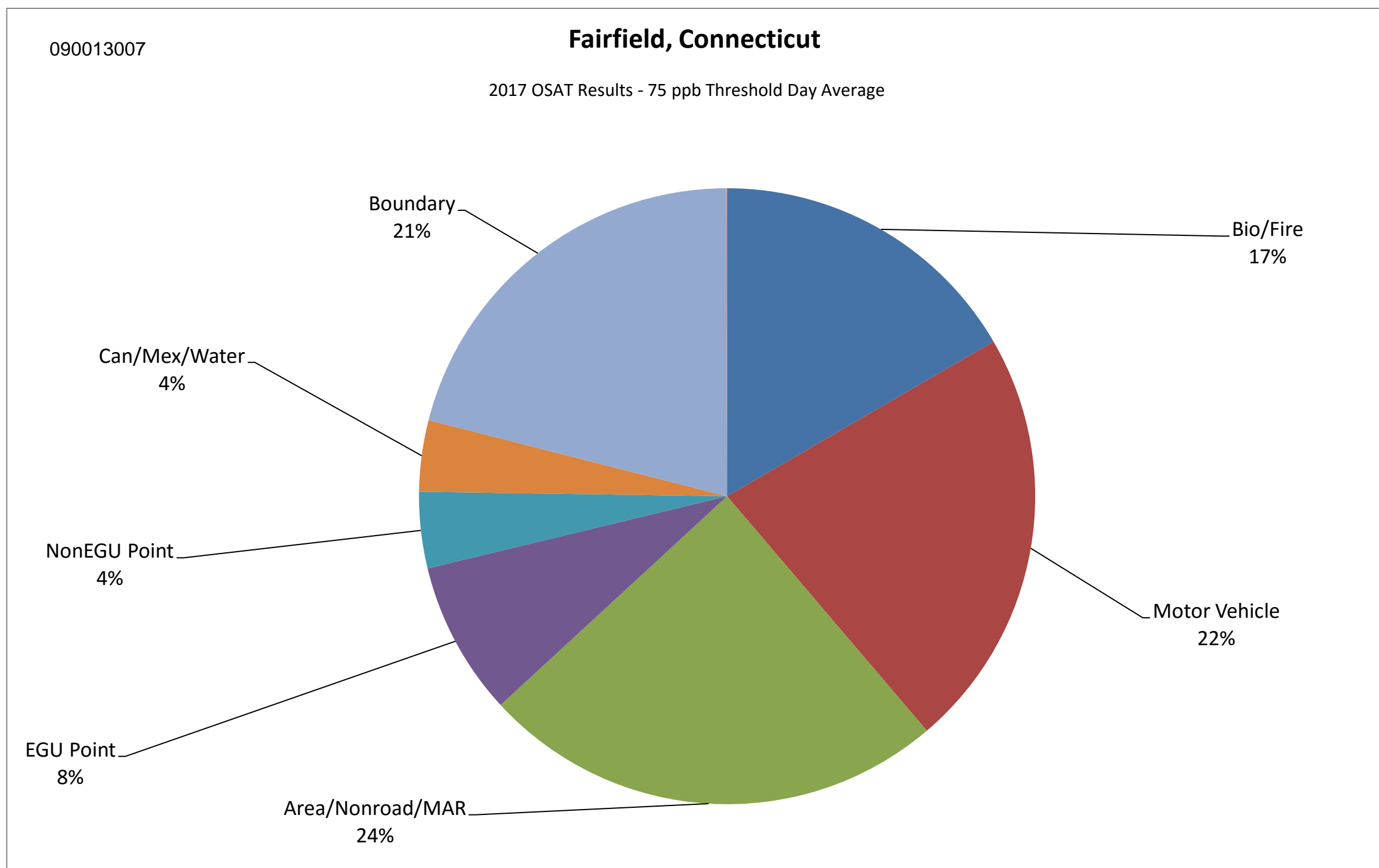
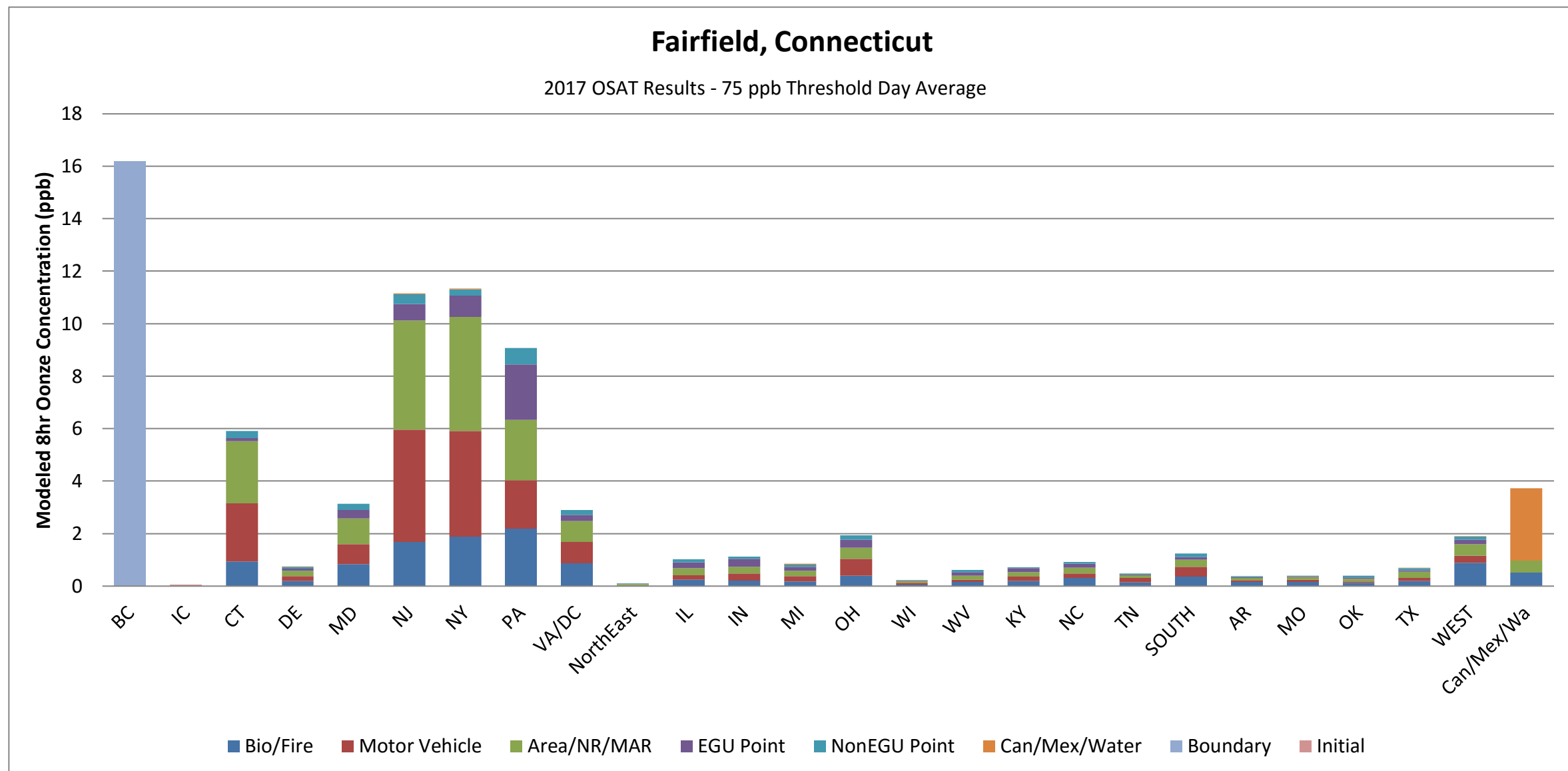


Figure 3. Source category contribution percentages for example monitor and CSAPR dv-scaled source apportionment output

**PROJECTED NONATTAINMENT SITES  
IN THE EASTERN U.S.**

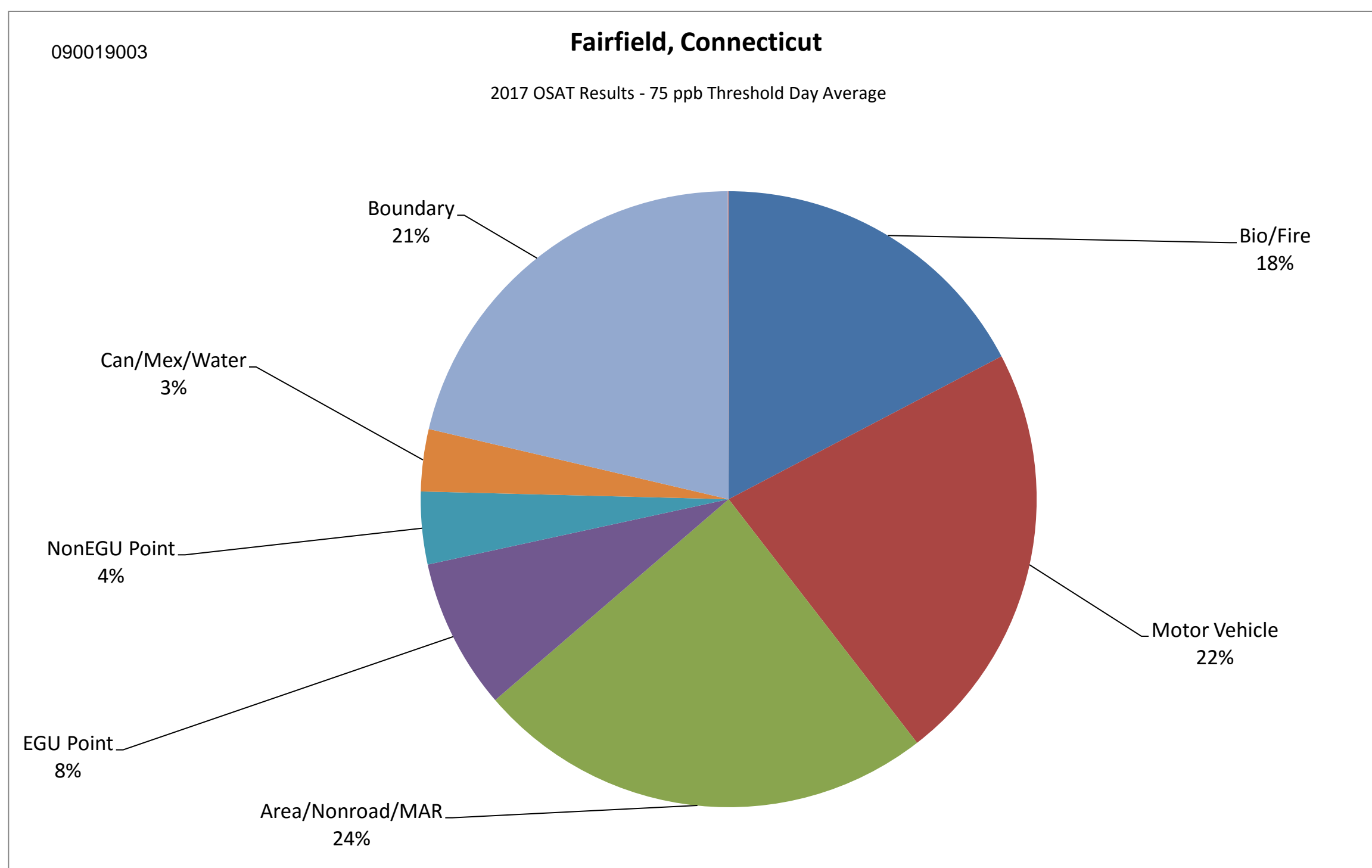
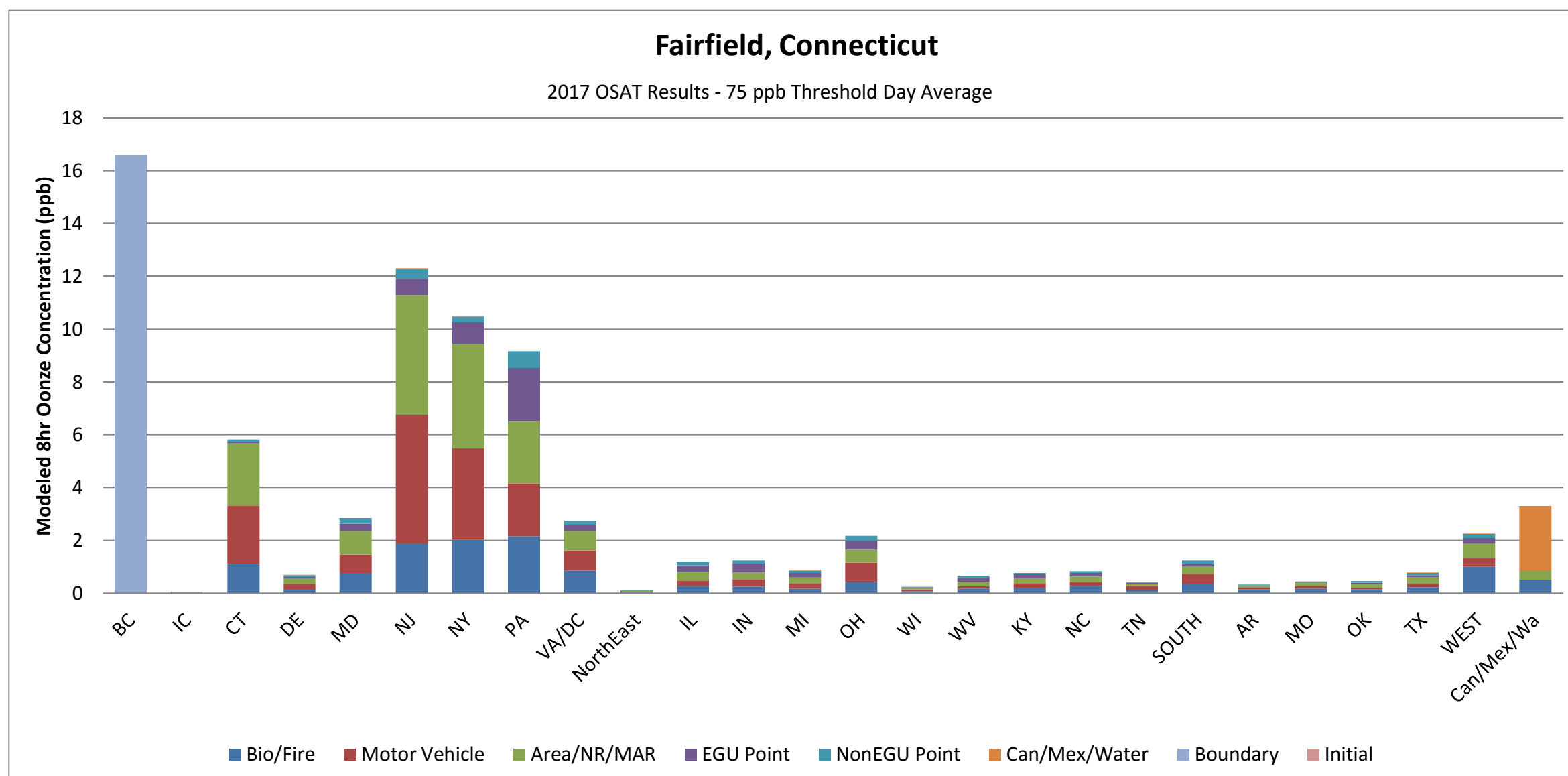
Monitor 090013007 Fairfield, Connecticut

2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold										
Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total
BC	0.00	0.00	0.00	0.00	0.00	0.00	16.17	0.00	16.17	21%
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0%
CT	0.93	2.22	2.37	0.12	0.27	0.00	0.00	0.00	5.91	8%
DE	0.19	0.19	0.21	0.07	0.07	0.01	0.00	0.00	0.74	1%
MD	0.83	0.77	0.99	0.32	0.23	0.00	0.00	0.00	3.13	4%
NJ	1.67	4.28	4.16	0.63	0.36	0.04	0.00	0.00	11.15	14%
NY	1.89	4.02	4.34	0.83	0.23	0.03	0.00	0.00	11.33	15%
PA	2.19	1.85	2.29	2.12	0.62	0.00	0.00	0.00	9.07	12%
VA/DC	0.86	0.81	0.81	0.23	0.19	0.00	0.00	0.00	2.90	4%
NorthEast	0.03	0.02	0.04	0.00	0.01	0.00	0.00	0.00	0.10	0%
IL	0.24	0.17	0.28	0.22	0.11	0.00	0.00	0.00	1.01	1%
IN	0.20	0.28	0.25	0.30	0.10	0.00	0.00	0.00	1.13	1%
MI	0.17	0.20	0.20	0.16	0.07	0.04	0.00	0.00	0.85	1%
OH	0.39	0.64	0.44	0.30	0.16	0.00	0.00	0.00	1.93	3%
WI	0.06	0.06	0.06	0.02	0.02	0.00	0.00	0.00	0.22	0%
WV	0.16	0.08	0.16	0.13	0.08	0.00	0.00	0.00	0.61	1%
KY	0.19	0.17	0.18	0.14	0.04	0.00	0.00	0.00	0.72	1%
NC	0.30	0.18	0.22	0.15	0.06	0.00	0.00	0.00	0.92	1%
TN	0.13	0.17	0.11	0.04	0.03	0.00	0.00	0.00	0.47	1%
SOUTH	0.36	0.36	0.27	0.11	0.14	0.00	0.00	0.00	1.25	2%
AR	0.15	0.07	0.08	0.04	0.04	0.00	0.00	0.00	0.37	0%
MO	0.15	0.09	0.10	0.04	0.01	0.00	0.00	0.00	0.38	0%
OK	0.12	0.05	0.11	0.04	0.06	0.00	0.00	0.00	0.39	1%
TX	0.20	0.12	0.23	0.06	0.07	0.01	0.00	0.00	0.69	1%
WEST	0.88	0.28	0.44	0.17	0.12	0.01	0.00	0.00	1.90	2%
Can/Mex/Wa	0.52	0.00	0.45	0.00	0.00	2.76	0.00	0.00	3.73	5%
<b>Grand Total</b>	<b>12.82</b>	<b>17.07</b>	<b>18.79</b>	<b>6.24</b>	<b>3.09</b>	<b>2.88</b>	<b>16.17</b>	<b>0.04</b>	<b>77.10</b>	<b>100%</b>



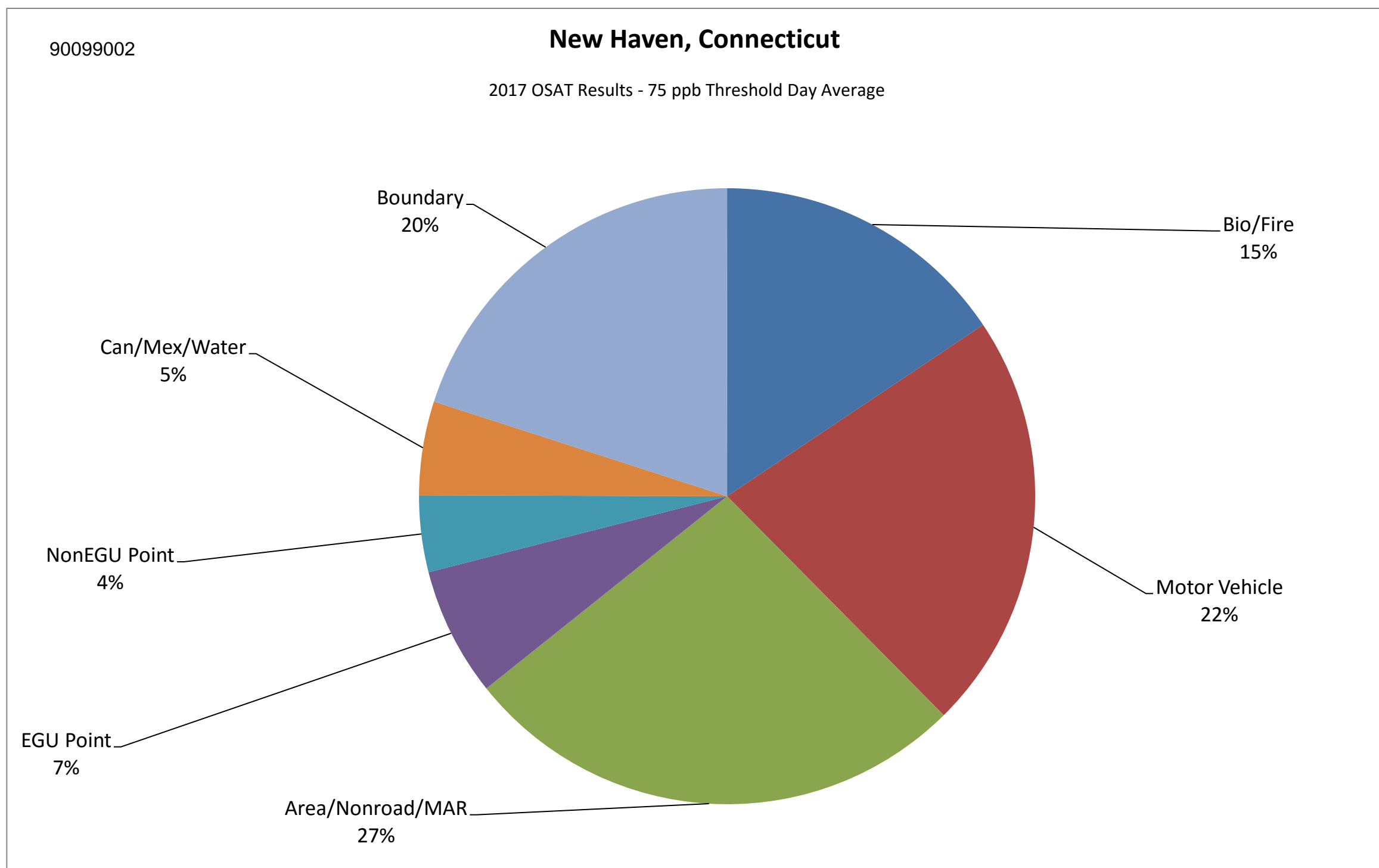
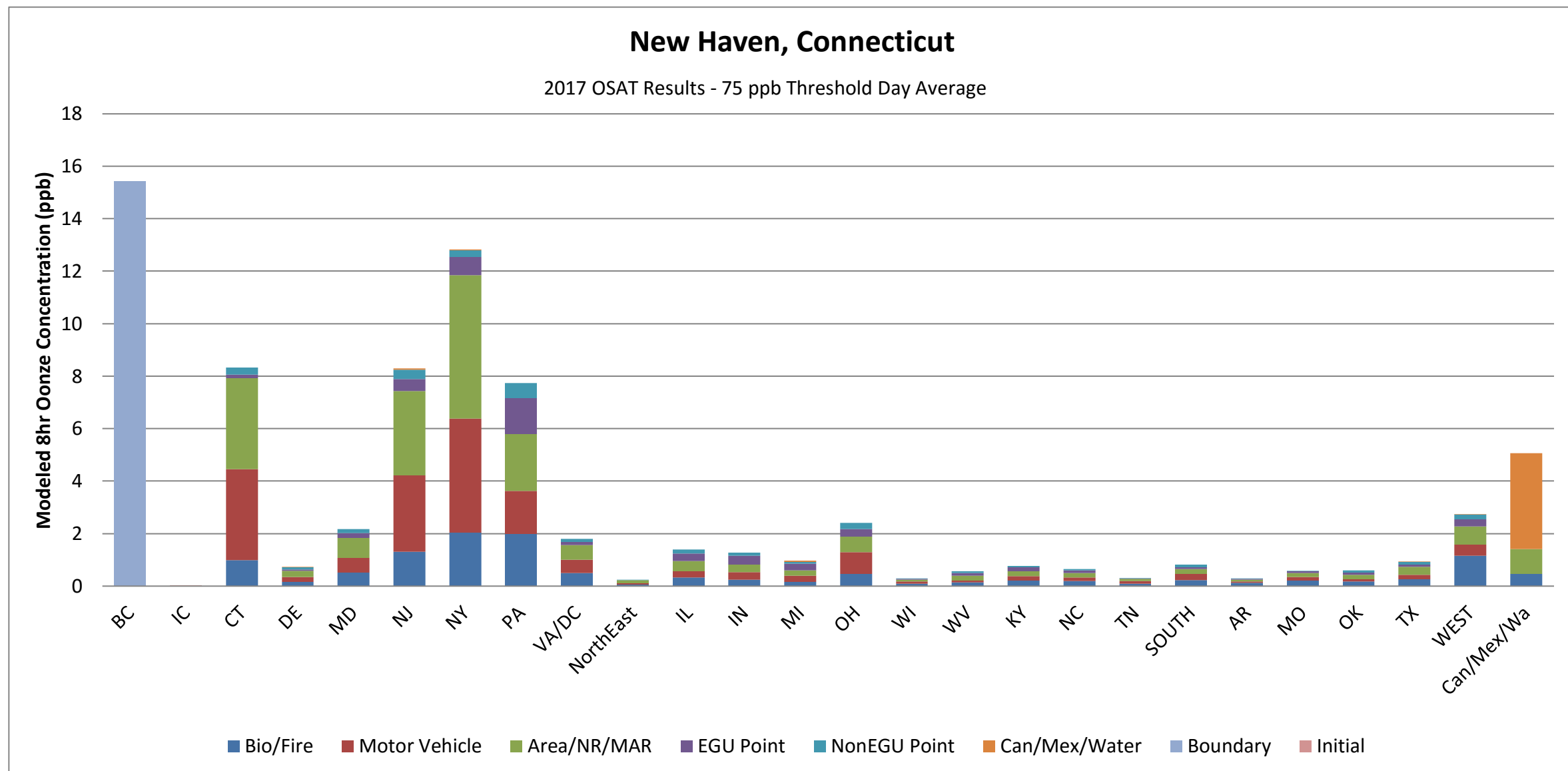
Monitor 090019003 Fairfield, Connecticut

2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold											
Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total	
BC	0.00	0.00	0.00	0.00	0.00	0.00	16.61	0.00	16.61	21%	
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0%	
CT	1.11	2.21	2.35	0.08	0.07	0.00	0.00	0.00	5.82	7%	
DE	0.16	0.18	0.20	0.07	0.06	0.01	0.00	0.00	0.69	1%	
MD	0.76	0.70	0.89	0.28	0.22	0.00	0.00	0.00	2.85	4%	
NJ	1.89	4.86	4.54	0.62	0.37	0.03	0.00	0.00	12.30	16%	
NY	2.02	3.46	3.97	0.81	0.22	0.02	0.00	0.00	10.50	13%	
PA	2.16	1.99	2.36	2.02	0.64	0.00	0.00	0.00	9.16	12%	
VA/DC	0.85	0.76	0.74	0.21	0.17	0.00	0.00	0.00	2.74	4%	
NorthEast	0.03	0.03	0.05	0.00	0.01	0.00	0.00	0.00	0.11	0%	
IL	0.28	0.20	0.34	0.25	0.13	0.00	0.00	0.00	1.19	2%	
IN	0.24	0.29	0.26	0.34	0.11	0.00	0.00	0.00	1.23	2%	
MI	0.17	0.21	0.21	0.18	0.07	0.04	0.00	0.00	0.88	1%	
OH	0.43	0.73	0.50	0.33	0.19	0.00	0.00	0.00	2.17	3%	
WI	0.07	0.07	0.06	0.02	0.02	0.00	0.00	0.00	0.25	0%	
WV	0.17	0.08	0.18	0.15	0.08	0.00	0.00	0.00	0.66	1%	
KY	0.20	0.18	0.18	0.15	0.05	0.00	0.00	0.00	0.76	1%	
NC	0.27	0.16	0.20	0.14	0.05	0.00	0.00	0.00	0.83	1%	
TN	0.12	0.15	0.09	0.03	0.03	0.00	0.00	0.00	0.42	1%	
SOUTH	0.36	0.36	0.27	0.10	0.15	0.00	0.00	0.00	1.24	2%	
AR	0.14	0.06	0.07	0.03	0.03	0.00	0.00	0.00	0.33	0%	
MO	0.17	0.10	0.12	0.05	0.01	0.00	0.00	0.00	0.44	1%	
OK	0.15	0.06	0.13	0.05	0.07	0.00	0.00	0.00	0.46	1%	
TX	0.23	0.14	0.25	0.07	0.07	0.01	0.00	0.00	0.77	1%	
WEST	1.01	0.33	0.54	0.22	0.15	0.01	0.00	0.00	2.24	3%	
Can/Mex/Wa	0.52	0.00	0.35	0.00	0.00	2.43	0.00	0.00	3.30	4%	
<b>Grand Total</b>	<b>13.51</b>	<b>17.32</b>	<b>18.85</b>	<b>6.17</b>	<b>2.97</b>	<b>2.54</b>	<b>16.61</b>	<b>0.04</b>	<b>78.00</b>	<b>100%</b>	



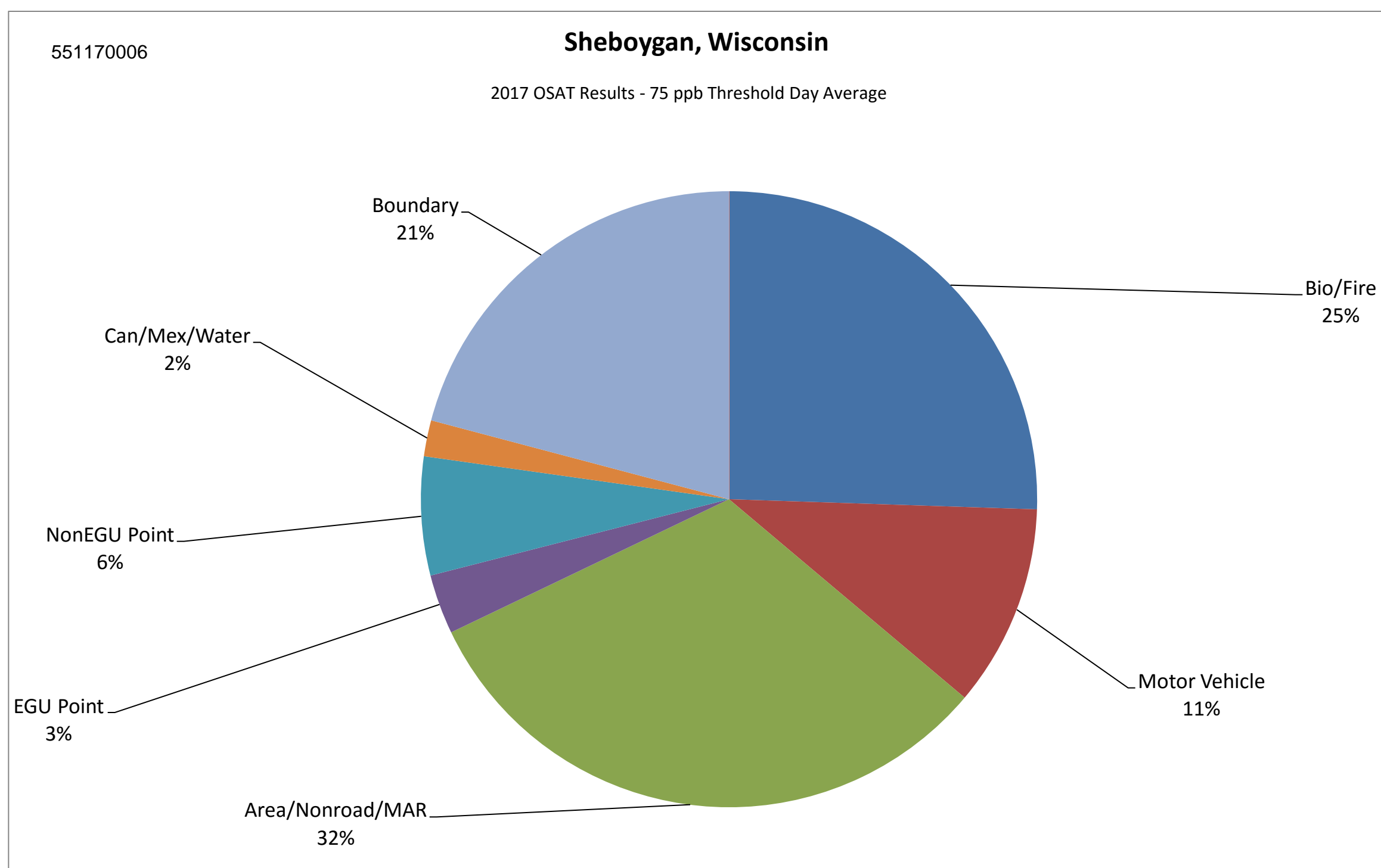
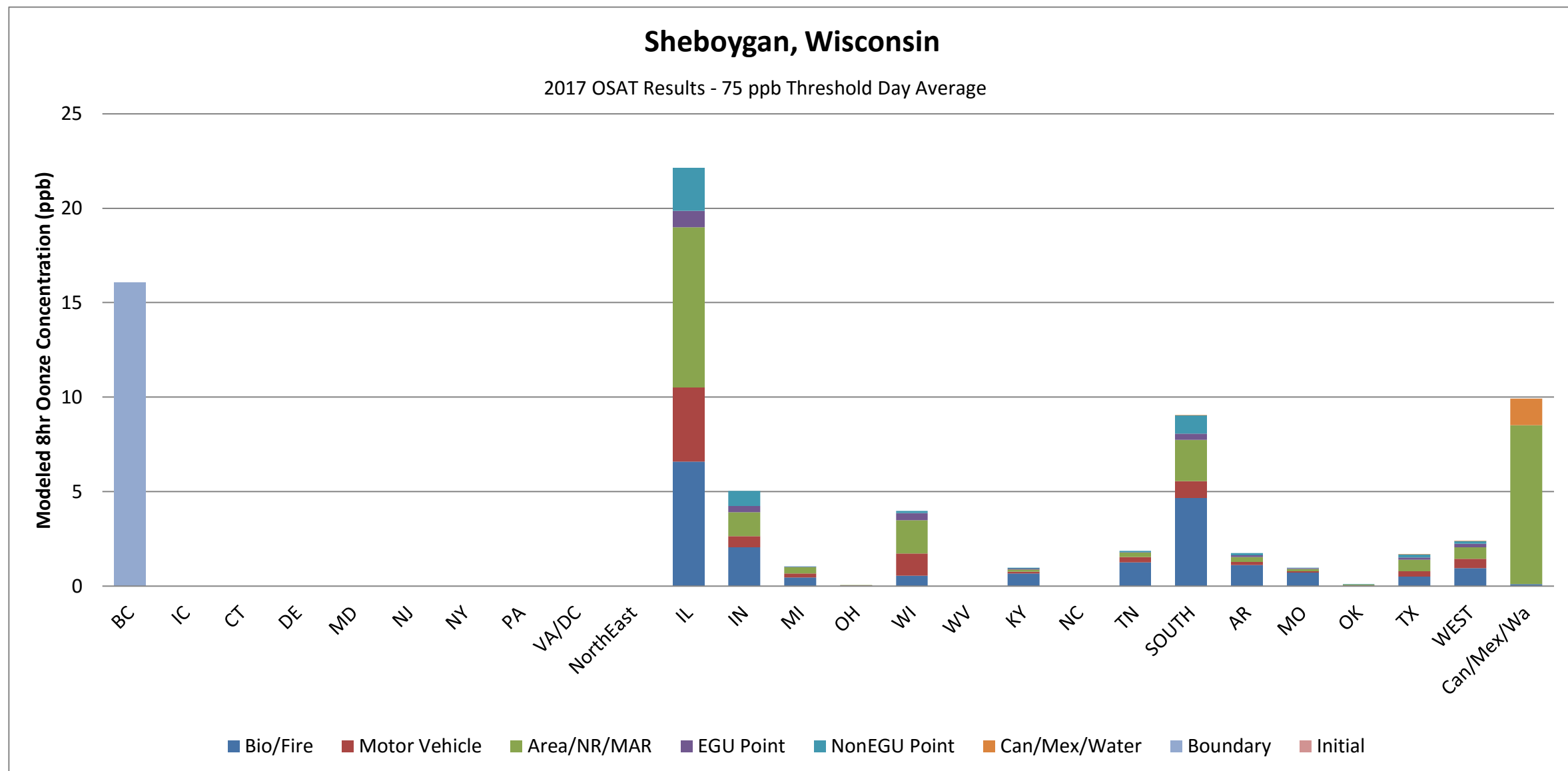
Monitor 90099002 New Haven, Connecticut

2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold											
Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total	
BC	0.00	0.00	0.00	0.00	0.00	0.00	15.43	0.00	15.43	20%	
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0%	
CT	0.99	3.46	3.47	0.14	0.28	0.00	0.00	0.00	8.33	11%	
DE	0.16	0.19	0.23	0.06	0.07	0.01	0.00	0.00	0.72	1%	
MD	0.52	0.55	0.77	0.19	0.15	0.00	0.00	0.00	2.17	3%	
NJ	1.31	2.92	3.20	0.47	0.35	0.05	0.00	0.00	8.29	11%	
NY	2.04	4.35	5.47	0.69	0.26	0.03	0.00	0.00	12.83	17%	
PA	1.99	1.64	2.15	1.38	0.57	0.00	0.00	0.00	7.74	10%	
VA/DC	0.50	0.50	0.56	0.12	0.12	0.00	0.00	0.00	1.80	2%	
NorthEast	0.06	0.06	0.11	0.00	0.01	0.00	0.00	0.00	0.23	0%	
IL	0.32	0.23	0.40	0.29	0.15	0.00	0.00	0.00	1.39	2%	
IN	0.25	0.29	0.28	0.33	0.12	0.00	0.00	0.00	1.27	2%	
MI	0.16	0.24	0.20	0.24	0.08	0.05	0.00	0.00	0.97	1%	
OH	0.45	0.84	0.58	0.30	0.22	0.00	0.00	0.00	2.40	3%	
WI	0.08	0.09	0.06	0.03	0.03	0.00	0.00	0.00	0.30	0%	
WV	0.15	0.06	0.18	0.10	0.06	0.00	0.00	0.00	0.56	1%	
KY	0.20	0.18	0.19	0.15	0.06	0.00	0.00	0.00	0.77	1%	
NC	0.19	0.15	0.17	0.10	0.05	0.00	0.00	0.00	0.65	1%	
TN	0.08	0.11	0.07	0.02	0.02	0.00	0.00	0.00	0.31	0%	
SOUTH	0.22	0.23	0.19	0.07	0.09	0.00	0.00	0.00	0.82	1%	
AR	0.12	0.06	0.06	0.03	0.03	0.00	0.00	0.00	0.30	0%	
MO	0.20	0.15	0.15	0.06	0.01	0.00	0.00	0.00	0.57	1%	
OK	0.18	0.08	0.17	0.08	0.09	0.00	0.00	0.00	0.60	1%	
TX	0.26	0.18	0.30	0.09	0.09	0.01	0.00	0.00	0.93	1%	
WEST	1.16	0.43	0.69	0.28	0.19	0.01	0.00	0.00	2.74	4%	
Can/Mex/Wa	0.45	0.00	0.96	0.00	0.00	3.65	0.00	0.00	5.07	7%	
<b>Grand Total</b>	<b>12.05</b>	<b>16.97</b>	<b>20.60</b>	<b>5.22</b>	<b>3.10</b>	<b>3.80</b>	<b>15.43</b>	<b>0.03</b>	<b>77.20</b>	<b>100%</b>	



Monitor 551170006 Sheboygan, Wisconsin

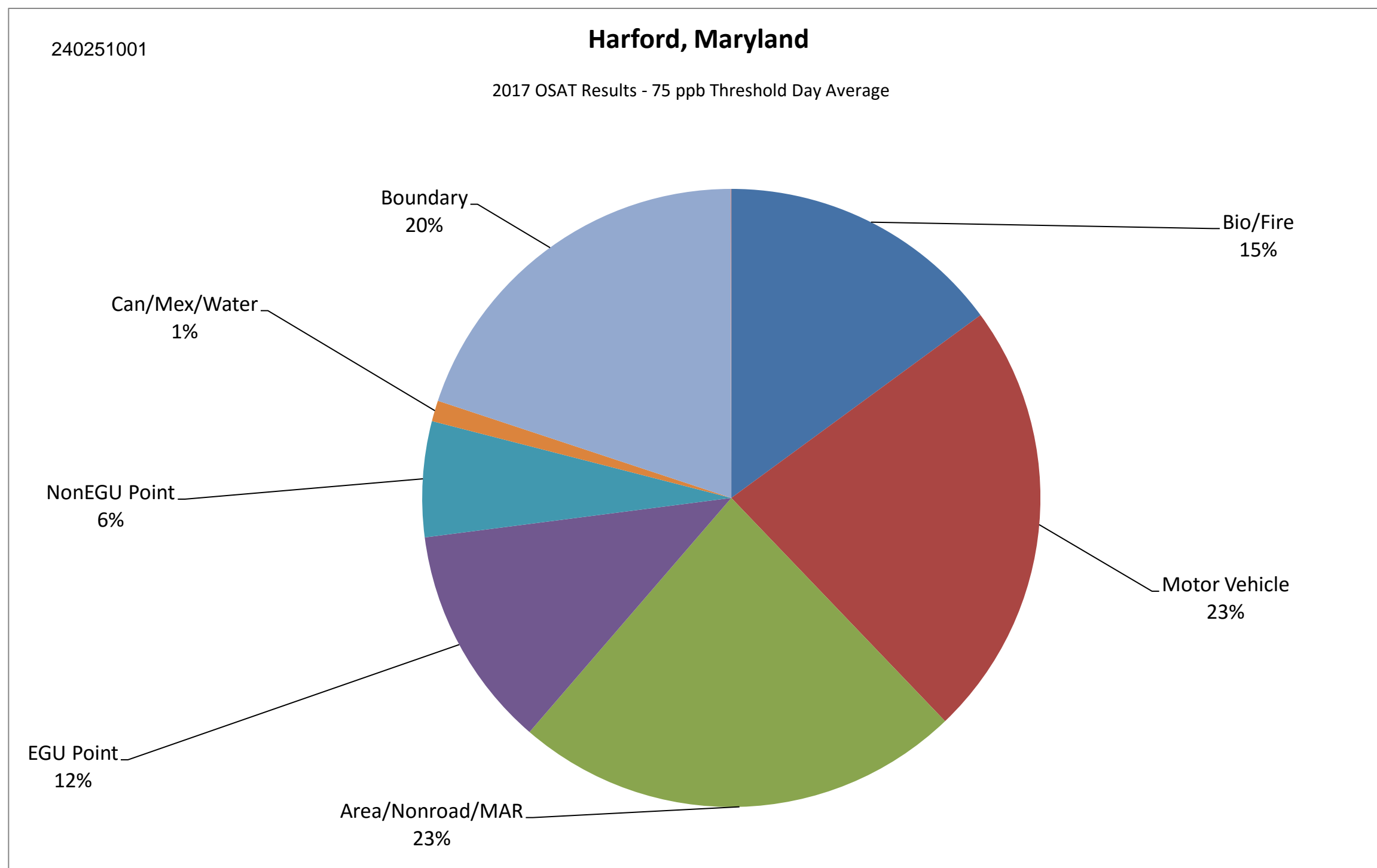
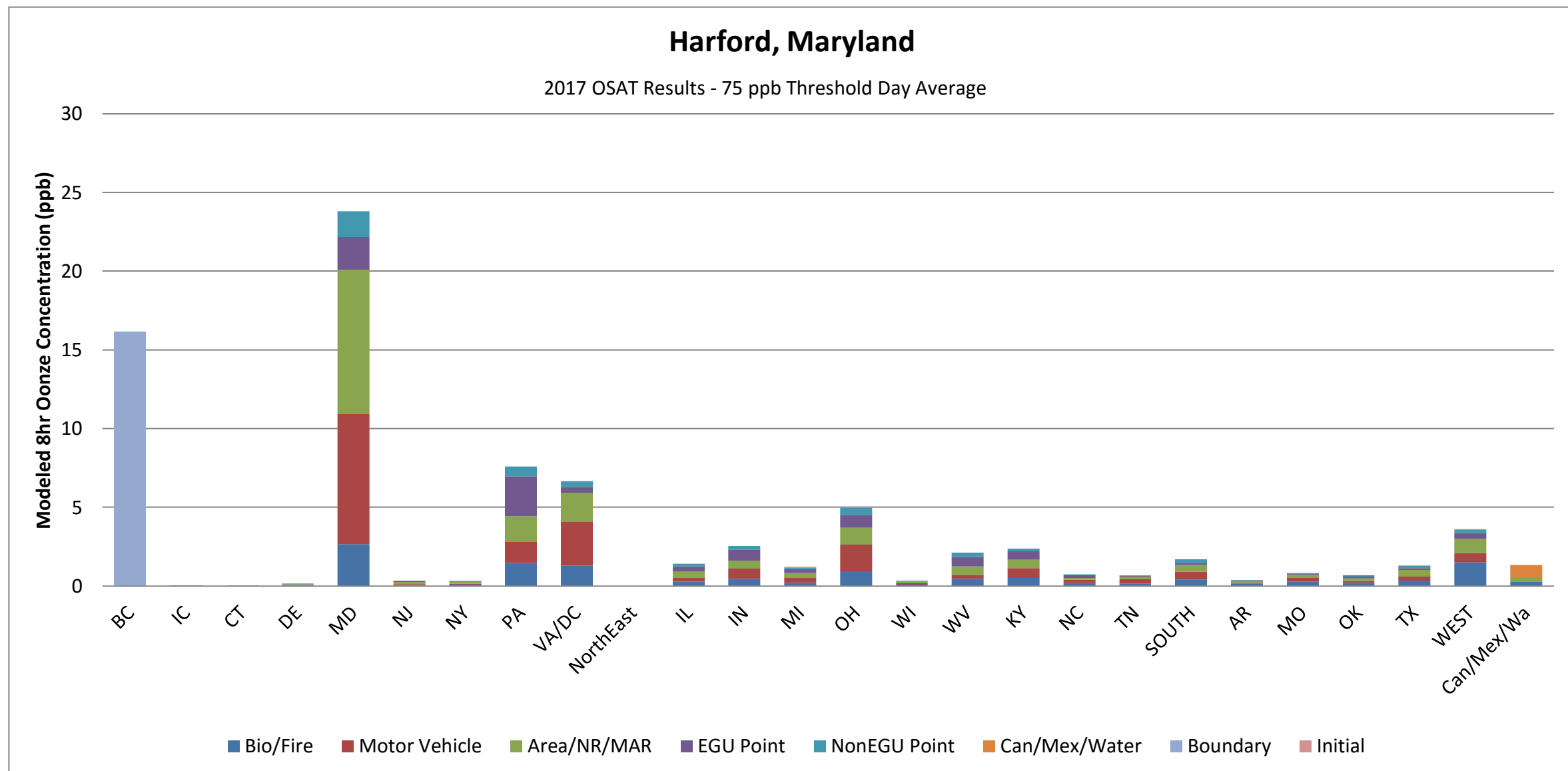
2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold											
Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total	
BC	0.00	0.00	0.00	0.00	0.00	0.00	16.08	0.00	16.08	21%	
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	
CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	
DE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	
MD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	
NJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	
NY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	
PA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	
VA/DC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	
NorthEast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	
IL	6.59	3.92	8.48	0.87	2.26	0.00	0.00	0.00	22.13	29%	
IN	2.06	0.57	1.28	0.32	0.79	0.00	0.00	0.00	5.02	7%	
MI	0.45	0.23	0.32	0.02	0.04	0.00	0.00	0.00	1.05	1%	
OH	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.03	0%	
WI	0.56	1.17	1.75	0.38	0.13	0.00	0.00	0.00	3.98	5%	
WV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	
KY	0.67	0.08	0.13	0.05	0.04	0.00	0.00	0.00	0.97	1%	
NC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	
TN	1.26	0.27	0.25	0.02	0.06	0.00	0.00	0.00	1.85	2%	
SOUTH	4.66	0.90	2.18	0.32	0.98	0.01	0.00	0.00	9.05	12%	
AR	1.11	0.16	0.28	0.09	0.12	0.00	0.00	0.00	1.75	2%	
MO	0.71	0.07	0.11	0.06	0.01	0.00	0.00	0.00	0.96	1%	
OK	0.03	0.01	0.03	0.00	0.02	0.00	0.00	0.00	0.09	0%	
TX	0.51	0.29	0.60	0.11	0.18	0.02	0.00	0.00	1.70	2%	
WEST	0.94	0.50	0.61	0.18	0.16	0.01	0.00	0.00	2.40	3%	
Can/Mex/Wa	0.10	0.00	8.40	0.00	0.00	1.42	0.00	0.00	9.92	13%	
<b>Grand Total</b>	<b>19.65</b>	<b>8.18</b>	<b>24.44</b>	<b>2.41</b>	<b>4.79</b>	<b>1.46</b>	<b>16.08</b>	<b>0.00</b>	<b>77.00</b>	<b>100%</b>	



**SITES IN THE EASTERN U.S. THAT ARE PROJECTED  
NONATTAINMENT BUT CURRENTLY MEASURING  
CLEAN DATA**

Monitor 240251001 Harford, Maryland

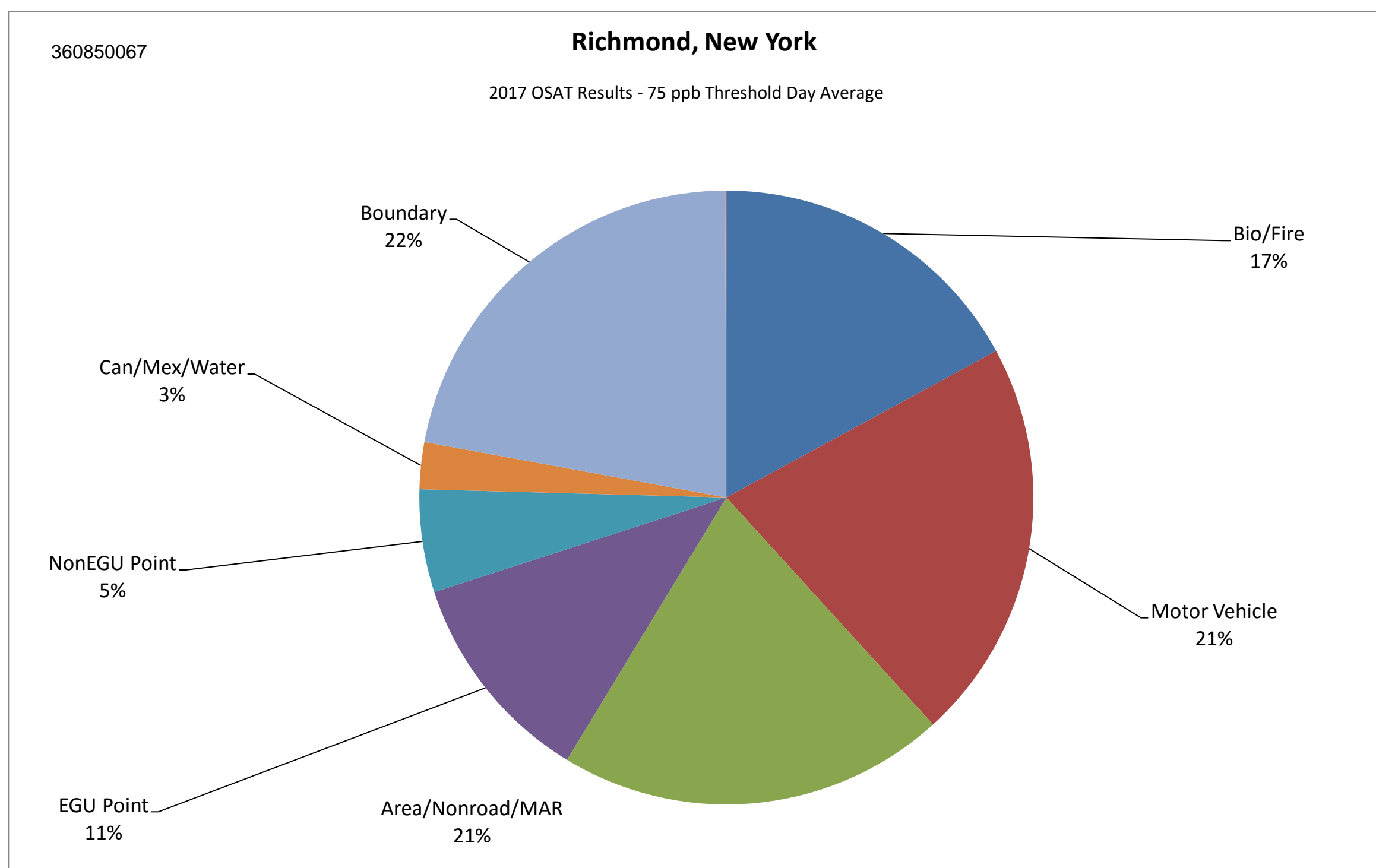
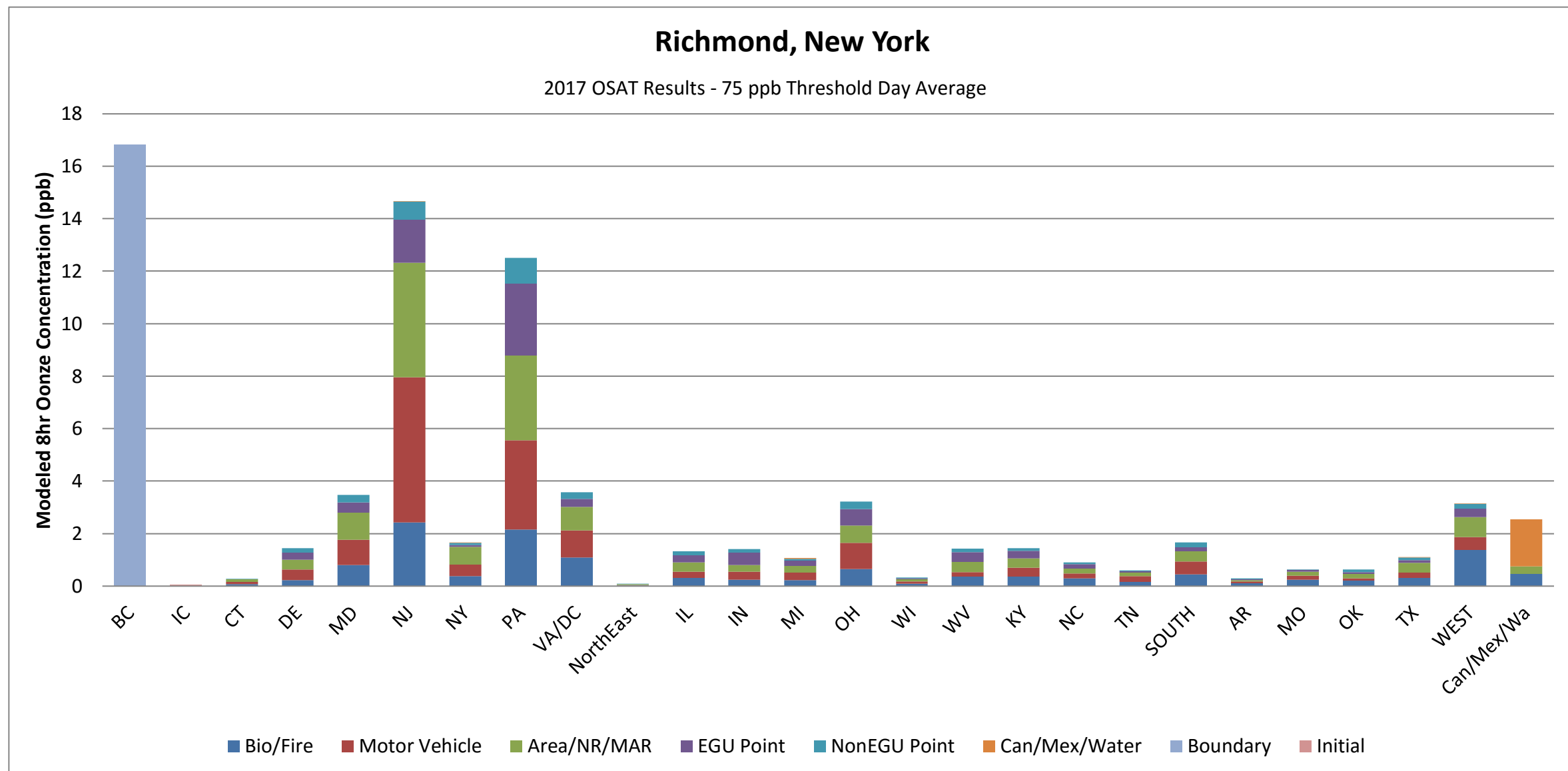
2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold										
Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total
BC	0.00	0.00	0.00	0.00	0.00	0.00	16.16	0.00	16.16	20%
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0%
CT	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0%
DE	0.03	0.04	0.04	0.02	0.02	0.00	0.00	0.00	0.15	0%
MD	2.66	8.25	9.16	2.10	1.64	0.00	0.00	0.00	23.82	29%
NJ	0.05	0.08	0.14	0.04	0.03	0.00	0.00	0.00	0.34	0%
NY	0.10	0.06	0.12	0.01	0.02	0.00	0.00	0.00	0.31	0%
PA	1.46	1.32	1.65	2.53	0.63	0.00	0.00	0.00	7.60	9%
VA/DC	1.30	2.78	1.84	0.38	0.36	0.00	0.00	0.00	6.66	8%
NorthEast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
IL	0.30	0.26	0.35	0.35	0.16	0.00	0.00	0.00	1.41	2%
IN	0.45	0.65	0.51	0.71	0.24	0.00	0.00	0.00	2.55	3%
MI	0.22	0.33	0.29	0.25	0.09	0.04	0.00	0.00	1.22	1%
OH	0.94	1.69	1.07	0.84	0.44	0.00	0.00	0.00	4.97	6%
WI	0.09	0.10	0.10	0.03	0.02	0.00	0.00	0.00	0.34	0%
WV	0.45	0.26	0.55	0.60	0.27	0.00	0.00	0.00	2.12	3%
KY	0.52	0.63	0.54	0.53	0.17	0.00	0.00	0.00	2.38	3%
NC	0.20	0.20	0.13	0.15	0.06	0.00	0.00	0.00	0.74	1%
TN	0.16	0.27	0.16	0.06	0.04	0.00	0.00	0.00	0.69	1%
SOUTH	0.41	0.51	0.41	0.16	0.22	0.00	0.00	0.00	1.70	2%
AR	0.14	0.08	0.08	0.04	0.04	0.00	0.00	0.00	0.38	0%
MO	0.29	0.23	0.20	0.08	0.01	0.00	0.00	0.00	0.81	1%
OK	0.21	0.10	0.19	0.09	0.11	0.00	0.00	0.00	0.70	1%
TX	0.36	0.24	0.42	0.13	0.13	0.01	0.00	0.00	1.28	2%
WEST	1.51	0.57	0.91	0.38	0.22	0.01	0.00	0.00	3.60	4%
Can/Mex/Wa	0.29	0.00	0.23	0.00	0.00	0.83	0.00	0.00	1.34	2%
<b>Grand Total</b>	<b>12.13</b>	<b>18.64</b>	<b>19.08</b>	<b>9.46</b>	<b>4.91</b>	<b>0.89</b>	<b>16.16</b>	<b>0.03</b>	<b>81.30</b>	<b>100%</b>



Monitor 360850067 Richmond, New York

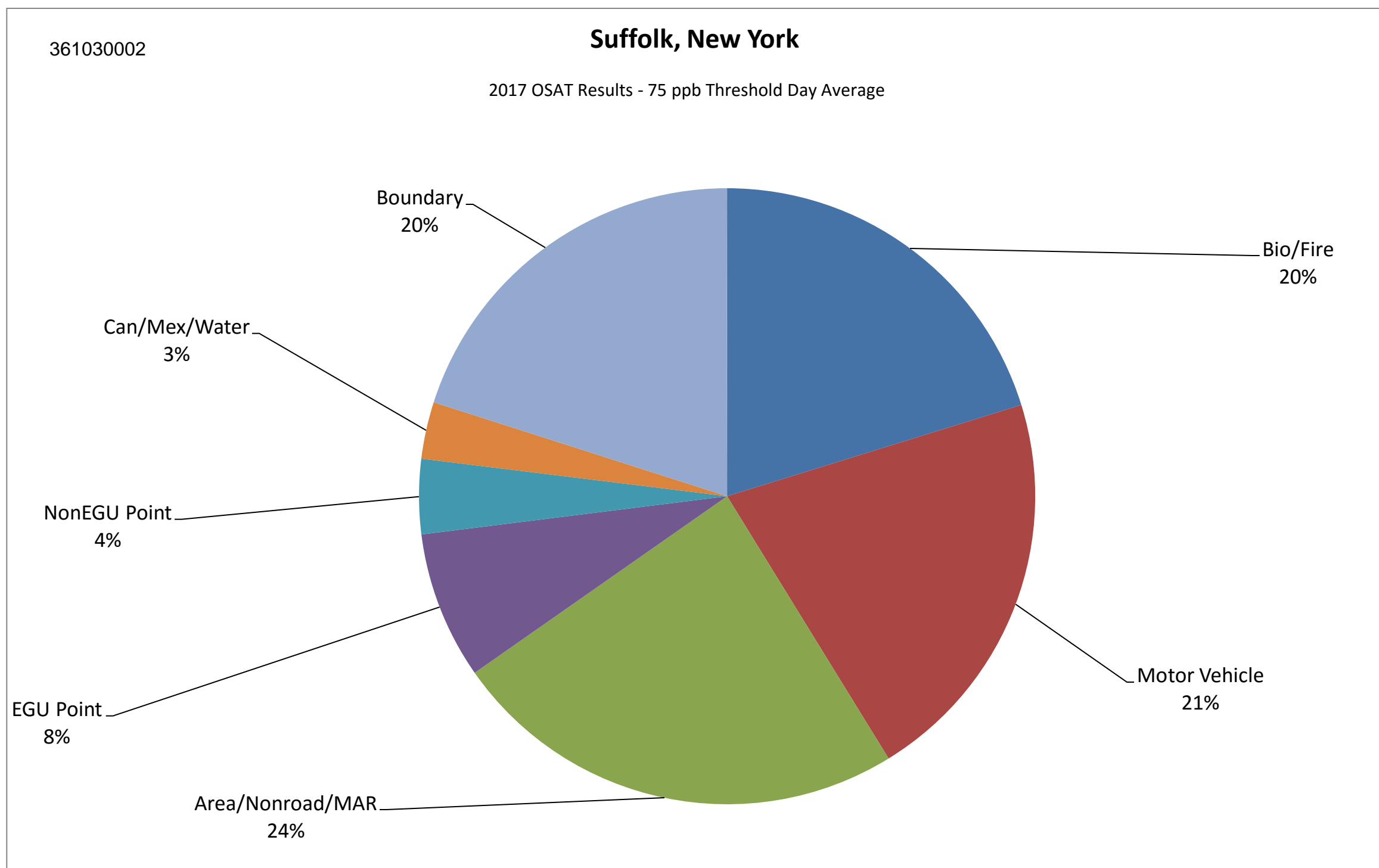
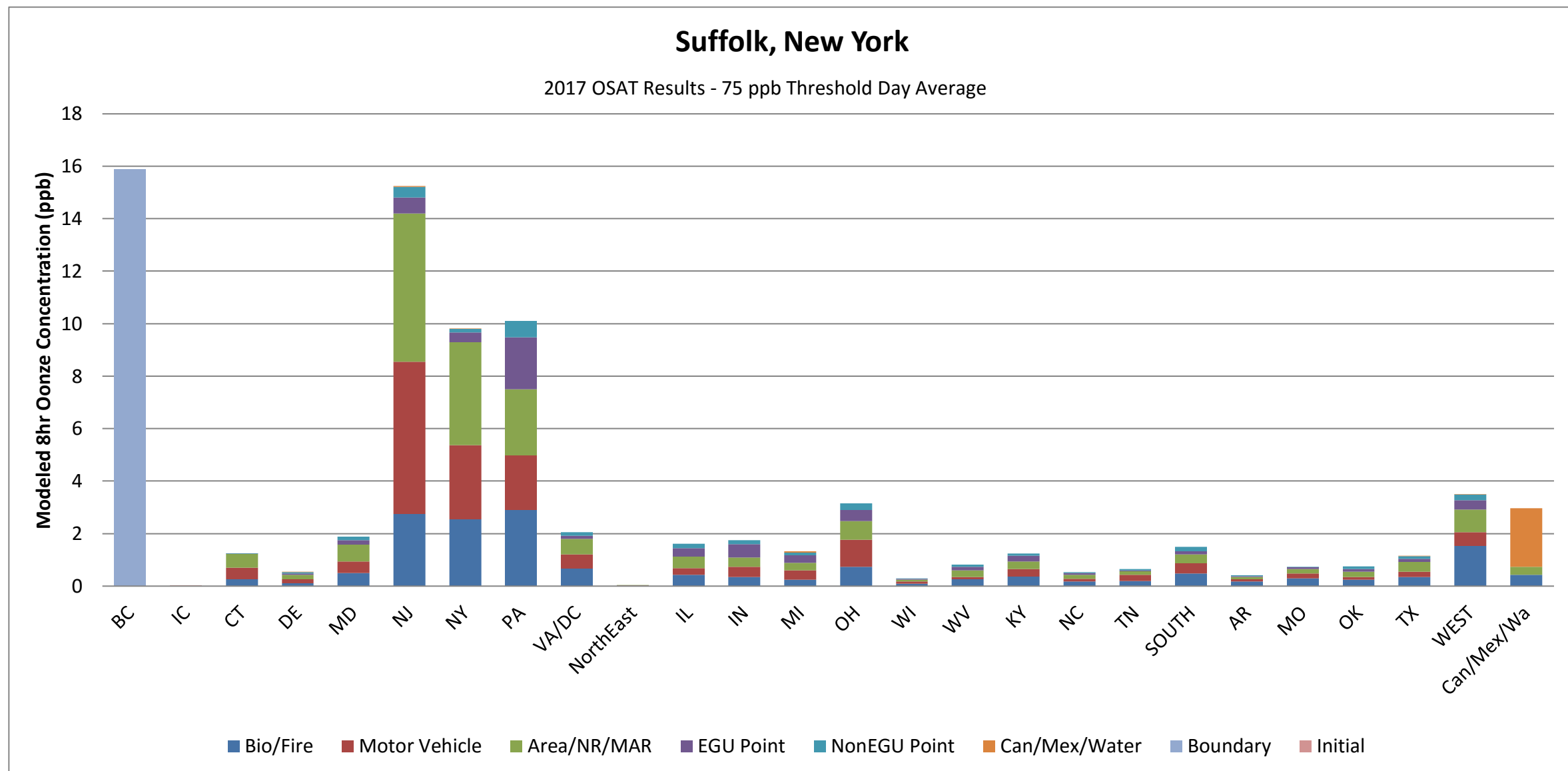
2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold

Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total
BC	0.00	0.00	0.00	0.00	0.00	0.00	16.82	0.00	16.82	22%
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0%
CT	0.08	0.09	0.11	0.00	0.01	0.00	0.00	0.00	0.28	0%
DE	0.22	0.41	0.38	0.27	0.17	0.00	0.00	0.00	1.45	2%
MD	0.80	0.96	1.03	0.38	0.30	0.00	0.00	0.00	3.47	5%
NJ	2.42	5.54	4.36	1.63	0.71	0.01	0.00	0.00	14.67	19%
NY	0.38	0.43	0.68	0.08	0.08	0.02	0.00	0.00	1.66	2%
PA	2.16	3.40	3.23	2.75	0.97	0.00	0.00	0.00	12.51	16%
VA/DC	1.09	1.03	0.90	0.31	0.25	0.00	0.00	0.00	3.57	5%
NorthEast	0.02	0.02	0.04	0.00	0.01	0.00	0.00	0.00	0.09	0%
IL	0.32	0.23	0.36	0.27	0.14	0.00	0.00	0.00	1.32	2%
IN	0.25	0.30	0.26	0.48	0.13	0.00	0.00	0.00	1.41	2%
MI	0.23	0.29	0.25	0.20	0.08	0.04	0.00	0.00	1.08	1%
OH	0.65	0.99	0.66	0.64	0.28	0.00	0.00	0.00	3.22	4%
WI	0.10	0.09	0.09	0.03	0.03	0.00	0.00	0.00	0.32	0%
WV	0.36	0.16	0.39	0.37	0.14	0.00	0.00	0.00	1.43	2%
KY	0.35	0.35	0.35	0.28	0.11	0.00	0.00	0.00	1.44	2%
NC	0.29	0.19	0.19	0.16	0.07	0.00	0.00	0.00	0.90	1%
TN	0.15	0.22	0.13	0.06	0.04	0.00	0.00	0.00	0.60	1%
SOUTH	0.45	0.49	0.38	0.15	0.20	0.00	0.00	0.00	1.67	2%
AR	0.11	0.06	0.06	0.03	0.03	0.00	0.00	0.00	0.29	0%
MO	0.24	0.15	0.16	0.07	0.01	0.00	0.00	0.00	0.63	1%
OK	0.20	0.09	0.17	0.08	0.10	0.00	0.00	0.00	0.63	1%
TX	0.32	0.19	0.37	0.11	0.11	0.01	0.00	0.00	1.10	1%
WEST	1.38	0.49	0.76	0.32	0.19	0.01	0.00	0.00	3.15	4%
Can/Mex/Wa	0.47	0.00	0.29	0.00	0.00	1.79	0.00	0.00	2.55	3%
<b>Grand Total</b>	<b>13.03</b>	<b>16.15</b>	<b>15.60</b>	<b>8.64</b>	<b>4.13</b>	<b>1.88</b>	<b>16.82</b>	<b>0.05</b>	<b>76.30</b>	<b>100%</b>



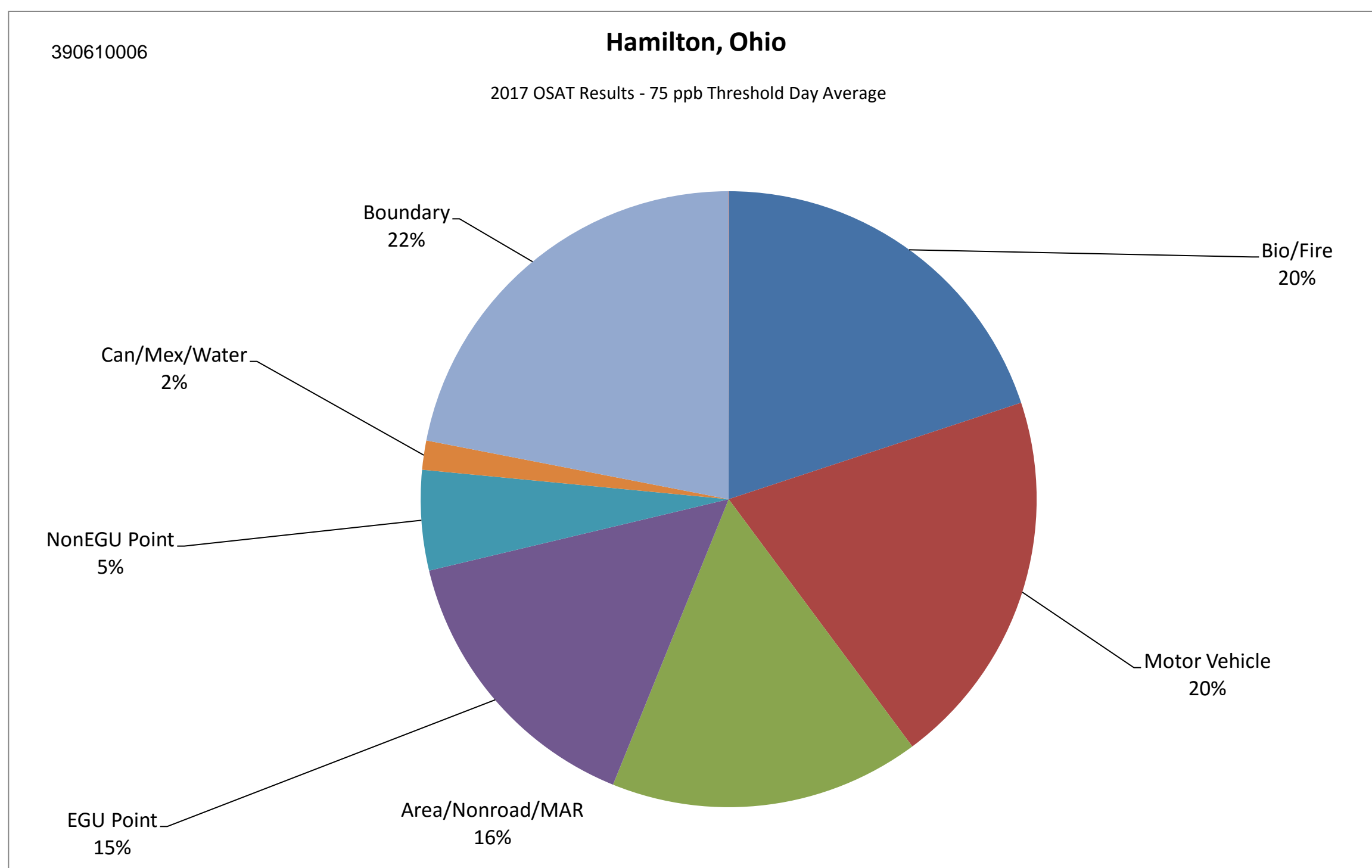
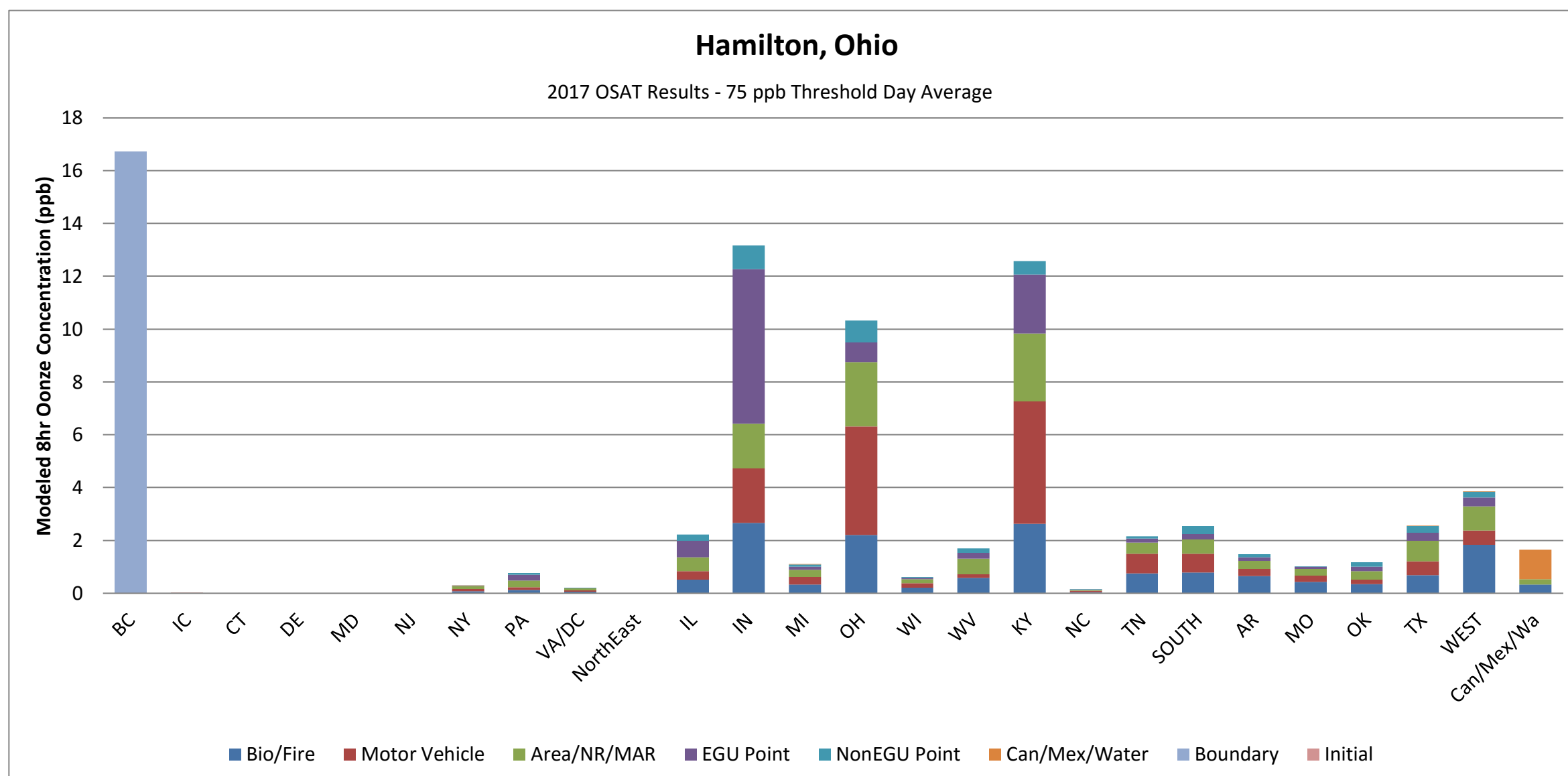
Monitor 361030002 Suffolk, New York

2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold											
Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total	
BC	0.00	0.00	0.00	0.00	0.00	0.00	15.86	0.00	15.86	20%	
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0%	
CT	0.25	0.45	0.51	0.01	0.02	0.00	0.00	0.00	1.24	2%	
DE	0.11	0.15	0.17	0.05	0.06	0.01	0.00	0.00	0.55	1%	
MD	0.49	0.44	0.65	0.16	0.13	0.00	0.00	0.00	1.88	2%	
NJ	2.75	5.79	5.66	0.60	0.41	0.04	0.00	0.00	15.25	19%	
NY	2.54	2.84	3.91	0.39	0.13	0.02	0.00	0.00	9.82	12%	
PA	2.89	2.08	2.52	1.98	0.63	0.00	0.00	0.00	10.11	13%	
VA/DC	0.67	0.54	0.59	0.12	0.13	0.00	0.00	0.00	2.05	3%	
NorthEast	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.03	0%	
IL	0.42	0.25	0.44	0.32	0.17	0.00	0.00	0.00	1.61	2%	
IN	0.35	0.39	0.36	0.51	0.15	0.00	0.00	0.00	1.75	2%	
MI	0.25	0.35	0.29	0.29	0.09	0.06	0.00	0.00	1.33	2%	
OH	0.73	1.04	0.71	0.42	0.26	0.00	0.00	0.00	3.16	4%	
WI	0.08	0.09	0.07	0.03	0.03	0.00	0.00	0.00	0.30	0%	
WV	0.25	0.08	0.25	0.13	0.08	0.00	0.00	0.00	0.81	1%	
KY	0.36	0.29	0.29	0.22	0.08	0.00	0.00	0.00	1.24	2%	
NC	0.17	0.11	0.15	0.07	0.04	0.00	0.00	0.00	0.54	1%	
TN	0.20	0.23	0.13	0.05	0.04	0.00	0.00	0.00	0.64	1%	
SOUTH	0.47	0.41	0.33	0.12	0.16	0.00	0.00	0.00	1.49	2%	
AR	0.18	0.08	0.08	0.04	0.04	0.00	0.00	0.00	0.41	1%	
MO	0.29	0.18	0.18	0.07	0.01	0.00	0.00	0.00	0.73	1%	
OK	0.24	0.10	0.21	0.09	0.11	0.00	0.00	0.00	0.75	1%	
TX	0.34	0.21	0.38	0.11	0.10	0.01	0.00	0.00	1.15	1%	
WEST	1.53	0.53	0.87	0.35	0.22	0.01	0.00	0.00	3.50	4%	
Can/Mex/Wa	0.43	0.00	0.30	0.00	0.00	2.22	0.00	0.00	2.96	4%	
<b>Grand Total</b>	<b>16.01</b>	<b>16.64</b>	<b>19.06</b>	<b>6.13</b>	<b>3.11</b>	<b>2.37</b>	<b>15.86</b>	<b>0.03</b>	<b>79.20</b>	<b>100%</b>	



Monitor 390610006 Hamilton, Ohio

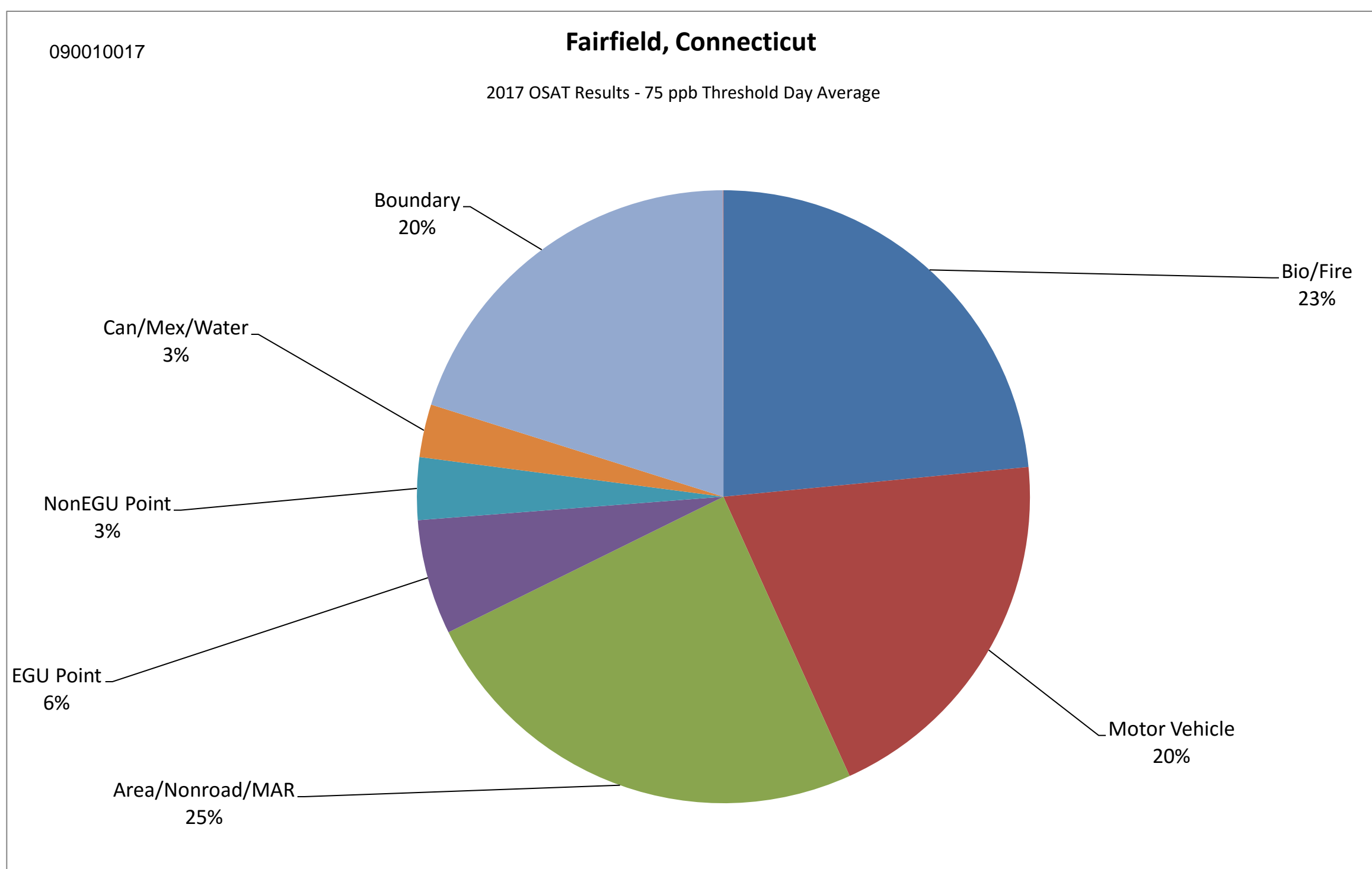
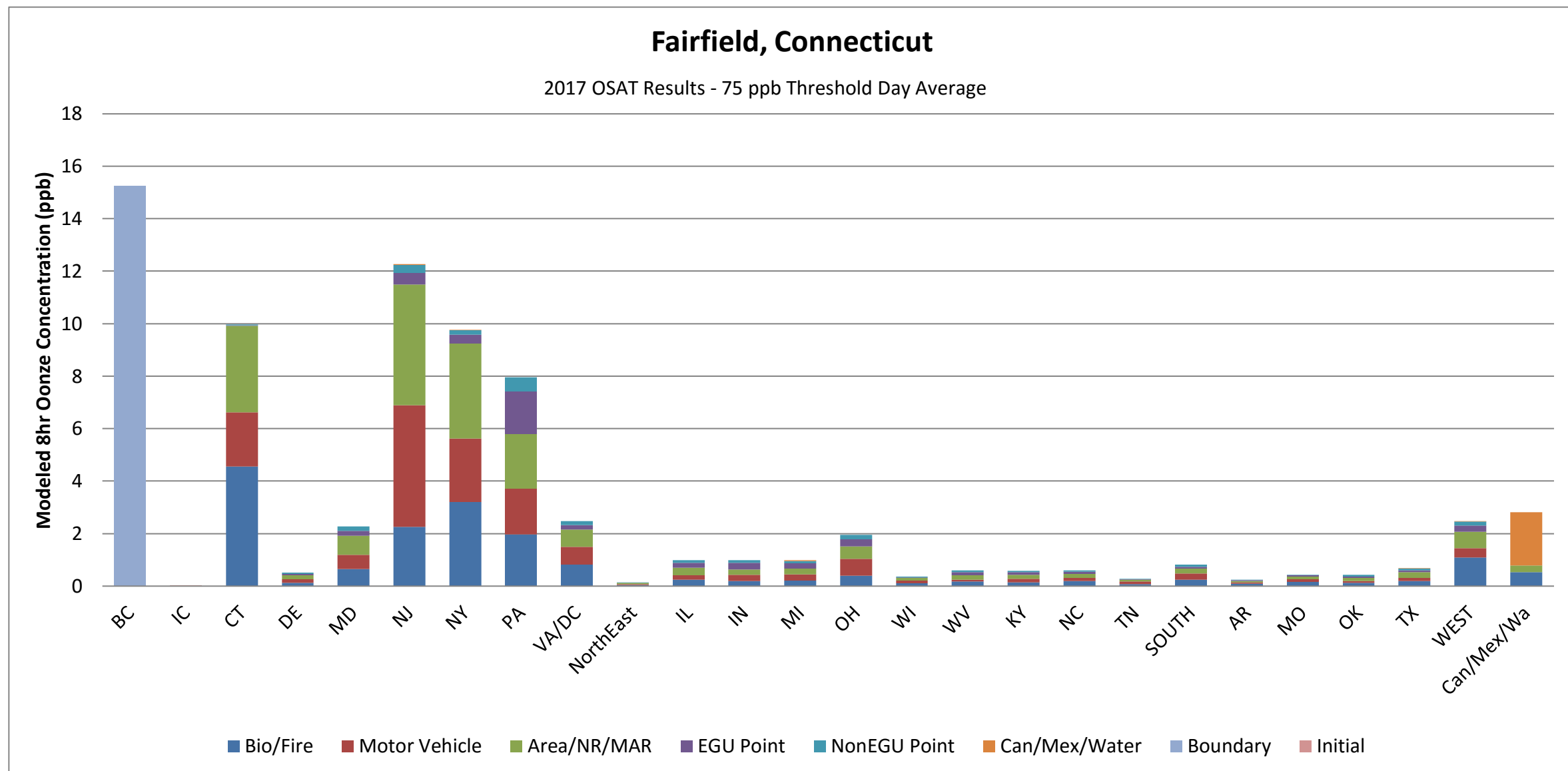
2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold										
Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total
BC	0.00	0.00	0.00	0.00	0.00	0.00	16.72	0.00	16.72	22%
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0%
CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
DE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
MD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
NJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
NY	0.07	0.09	0.10	0.02	0.01	0.01	0.00	0.00	0.29	0%
PA	0.13	0.11	0.24	0.22	0.06	0.00	0.00	0.00	0.76	1%
VA/DC	0.06	0.05	0.08	0.01	0.02	0.00	0.00	0.00	0.21	0%
NorthEast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
IL	0.52	0.32	0.52	0.63	0.24	0.00	0.00	0.00	2.23	3%
IN	2.66	2.07	1.68	5.87	0.90	0.00	0.00	0.00	13.17	17%
MI	0.32	0.29	0.27	0.13	0.08	0.02	0.00	0.00	1.11	1%
OH	2.21	4.11	2.43	0.75	0.83	0.00	0.00	0.00	10.32	14%
WI	0.21	0.16	0.17	0.04	0.05	0.00	0.00	0.00	0.62	1%
WV	0.57	0.15	0.59	0.21	0.17	0.00	0.00	0.00	1.69	2%
KY	2.63	4.63	2.57	2.25	0.50	0.00	0.00	0.00	12.57	16%
NC	0.04	0.05	0.03	0.02	0.01	0.00	0.00	0.00	0.15	0%
TN	0.75	0.74	0.43	0.16	0.09	0.00	0.00	0.00	2.16	3%
SOUTH	0.78	0.71	0.55	0.19	0.30	0.00	0.00	0.00	2.54	3%
AR	0.65	0.26	0.30	0.14	0.13	0.00	0.00	0.00	1.48	2%
MO	0.43	0.23	0.25	0.09	0.01	0.00	0.00	0.00	1.01	1%
OK	0.35	0.17	0.31	0.18	0.17	0.00	0.00	0.00	1.18	2%
TX	0.69	0.52	0.78	0.31	0.24	0.01	0.00	0.00	2.55	3%
WEST	1.83	0.54	0.91	0.34	0.22	0.01	0.00	0.00	3.86	5%
Can/Mex/Wa	0.32	0.00	0.21	0.00	0.00	1.12	0.00	0.00	1.65	2%
<b>Grand Total</b>	<b>15.21</b>	<b>15.19</b>	<b>12.43</b>	<b>11.56</b>	<b>4.01</b>	<b>1.17</b>	<b>16.72</b>	<b>0.02</b>	<b>76.30</b>	<b>100%</b>



**PROJECTED MAINTENANCE SITES IN THE EASTERN  
U.S. BASED ON THE CSAPR METHODOLOGY**

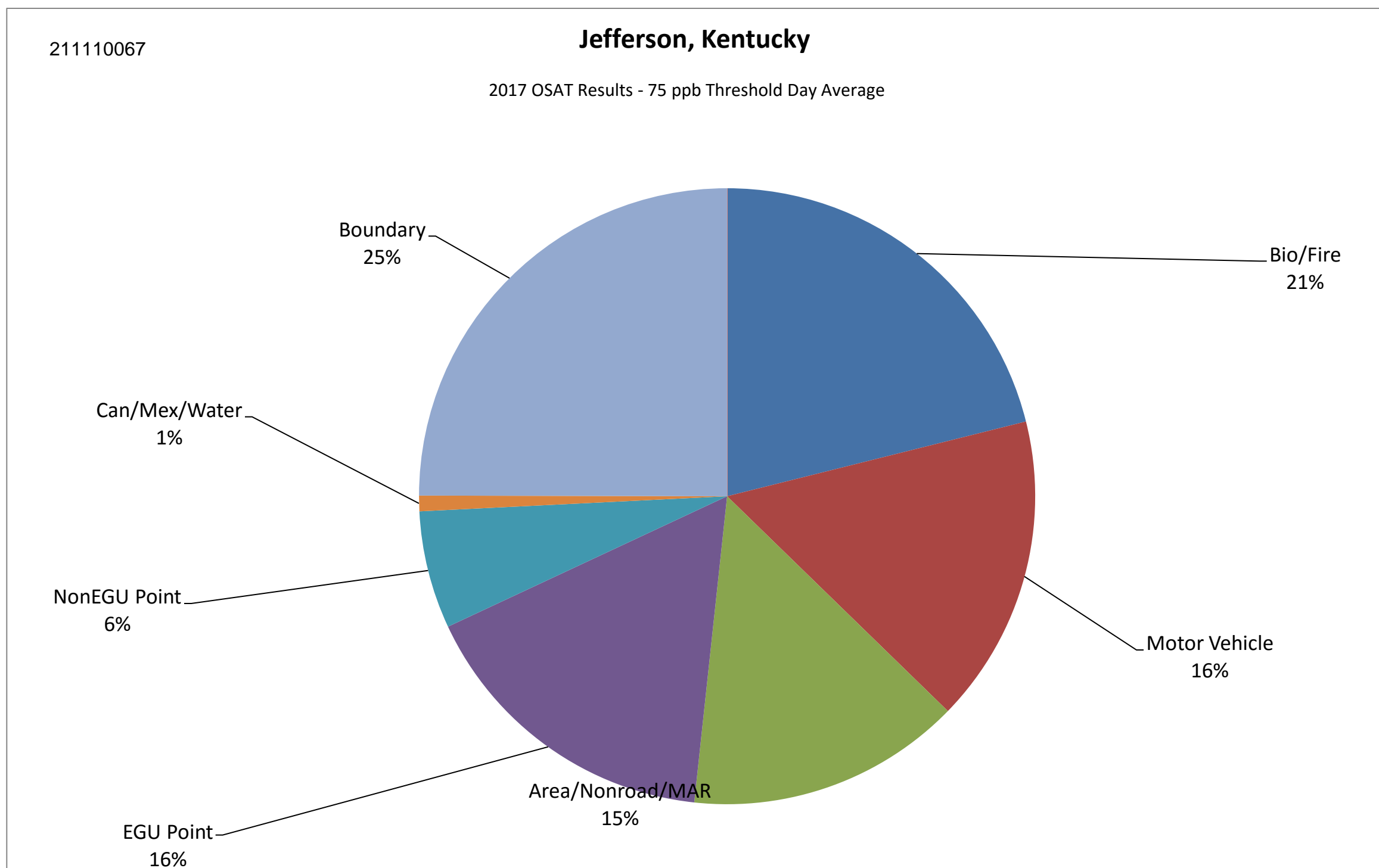
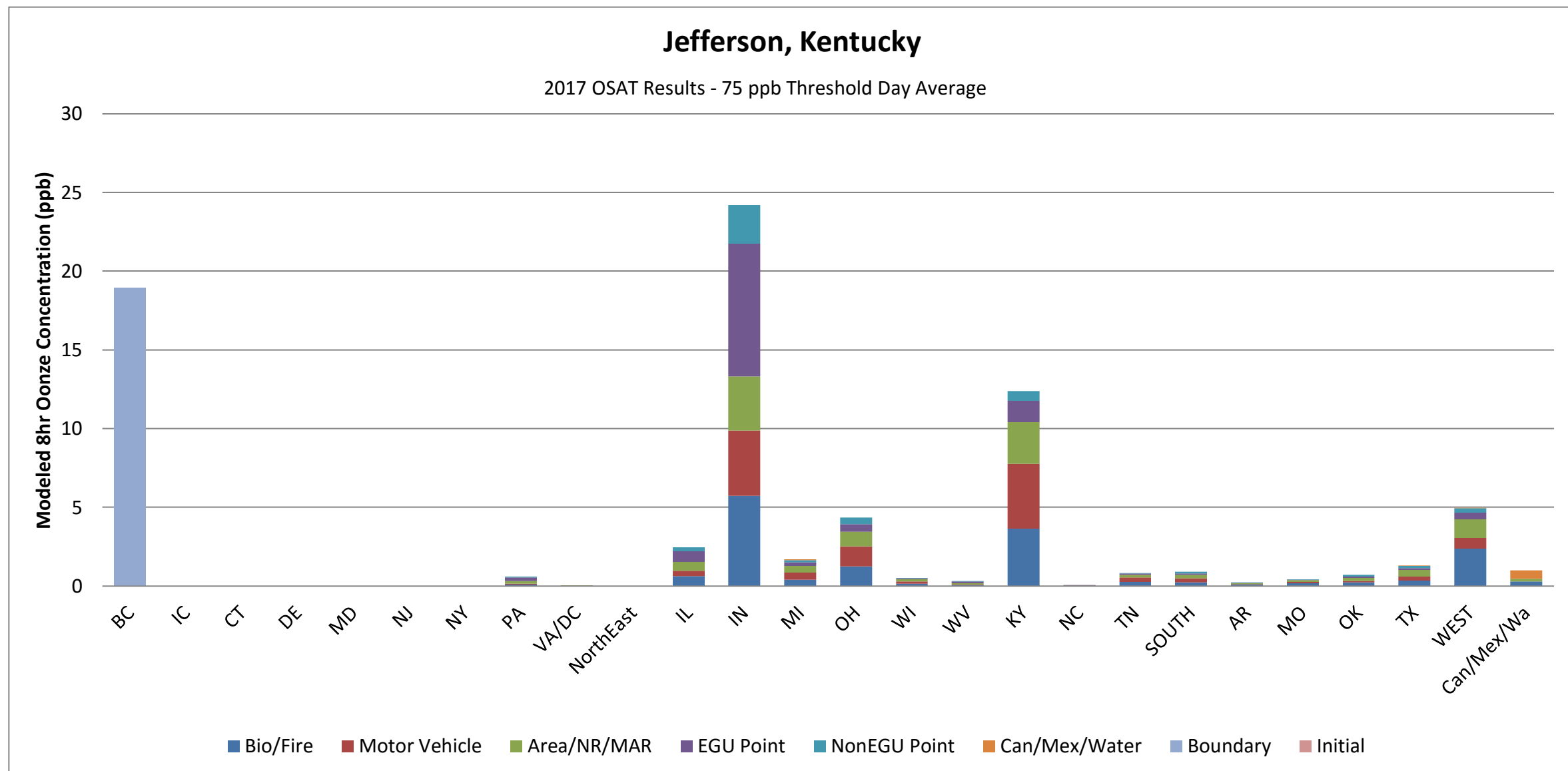
Monitor 090010017 Fairfield, Connecticut

2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold										
Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total
BC	0.00	0.00	0.00	0.00	0.00	0.00	15.24	0.00	15.24	20%
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0%
CT	4.55	2.06	3.31	0.02	0.03	0.00	0.00	0.00	9.97	13%
DE	0.12	0.13	0.15	0.05	0.05	0.00	0.00	0.00	0.51	1%
MD	0.65	0.54	0.72	0.19	0.17	0.00	0.00	0.00	2.27	3%
NJ	2.26	4.64	4.60	0.43	0.32	0.02	0.00	0.00	12.26	16%
NY	3.21	2.42	3.62	0.33	0.18	0.02	0.00	0.00	9.77	13%
PA	1.97	1.75	2.08	1.62	0.54	0.00	0.00	0.00	7.96	10%
VA/DC	0.83	0.68	0.65	0.17	0.15	0.00	0.00	0.00	2.47	3%
NorthEast	0.04	0.04	0.06	0.00	0.01	0.00	0.00	0.00	0.14	0%
IL	0.25	0.17	0.28	0.19	0.11	0.00	0.00	0.00	0.99	1%
IN	0.19	0.23	0.21	0.25	0.10	0.00	0.00	0.00	0.98	1%
MI	0.20	0.24	0.23	0.20	0.08	0.04	0.00	0.00	0.99	1%
OH	0.39	0.66	0.47	0.27	0.17	0.00	0.00	0.00	1.95	3%
WI	0.11	0.11	0.10	0.03	0.04	0.00	0.00	0.00	0.37	0%
WV	0.17	0.07	0.17	0.12	0.07	0.00	0.00	0.00	0.60	1%
KY	0.15	0.13	0.14	0.11	0.04	0.00	0.00	0.00	0.58	1%
NC	0.19	0.12	0.14	0.10	0.04	0.00	0.00	0.00	0.60	1%
TN	0.08	0.10	0.06	0.02	0.02	0.00	0.00	0.00	0.27	0%
SOUTH	0.24	0.24	0.18	0.07	0.10	0.00	0.00	0.00	0.83	1%
AR	0.10	0.04	0.05	0.03	0.02	0.00	0.00	0.00	0.24	0%
MO	0.16	0.11	0.11	0.04	0.01	0.00	0.00	0.00	0.42	1%
OK	0.13	0.06	0.11	0.05	0.06	0.00	0.00	0.00	0.42	1%
TX	0.19	0.12	0.22	0.06	0.06	0.01	0.00	0.00	0.67	1%
WEST	1.09	0.36	0.62	0.24	0.15	0.01	0.00	0.00	2.47	3%
Can/Mex/Wa	0.54	0.00	0.25	0.00	0.00	2.02	0.00	0.00	2.81	4%
<b>Grand Total</b>	<b>17.78</b>	<b>15.00</b>	<b>18.54</b>	<b>4.60</b>	<b>2.49</b>	<b>2.12</b>	<b>15.24</b>	<b>0.03</b>	<b>75.80</b>	<b>100%</b>



Monitor 211110067 Jefferson, Kentucky

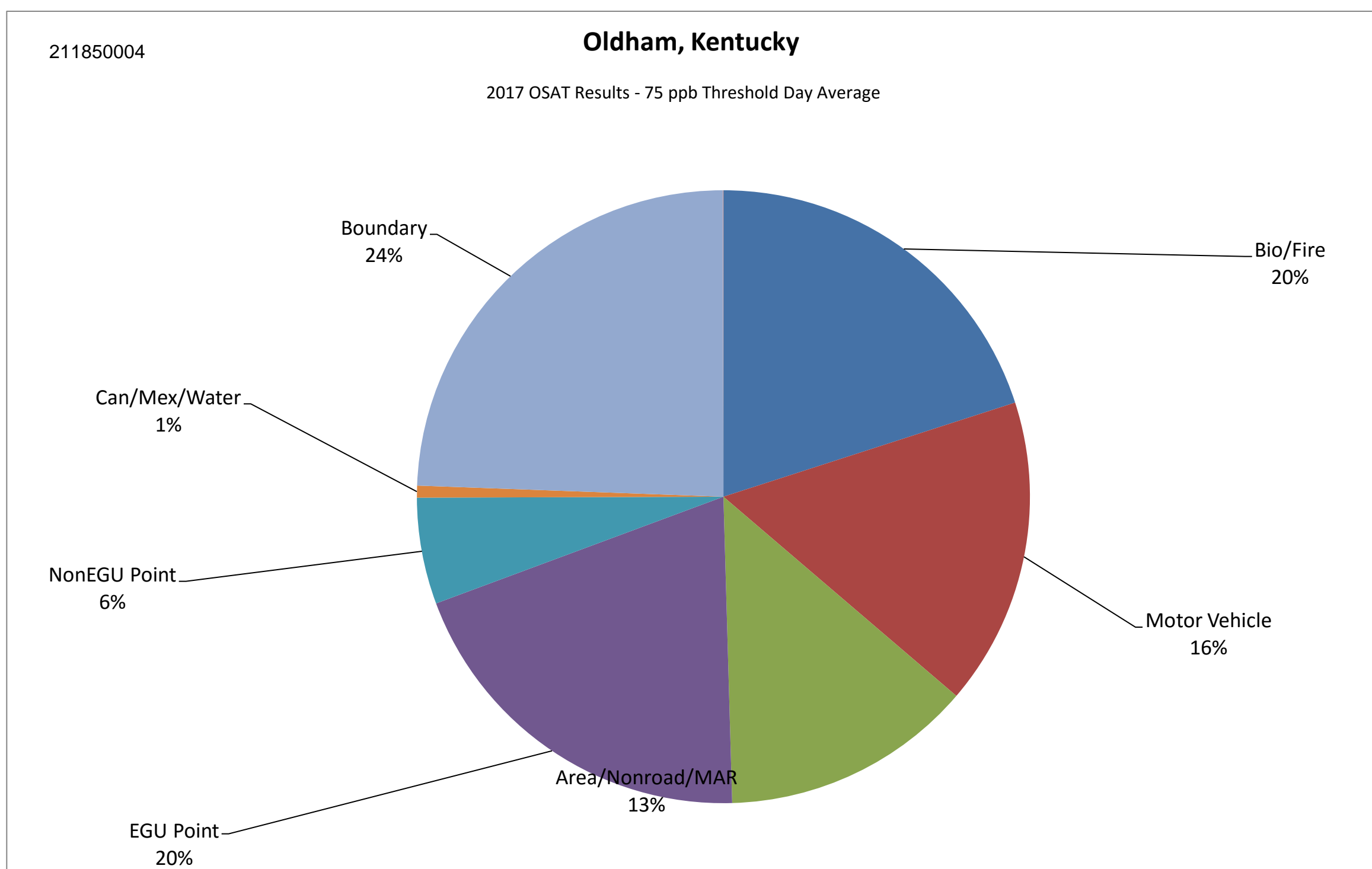
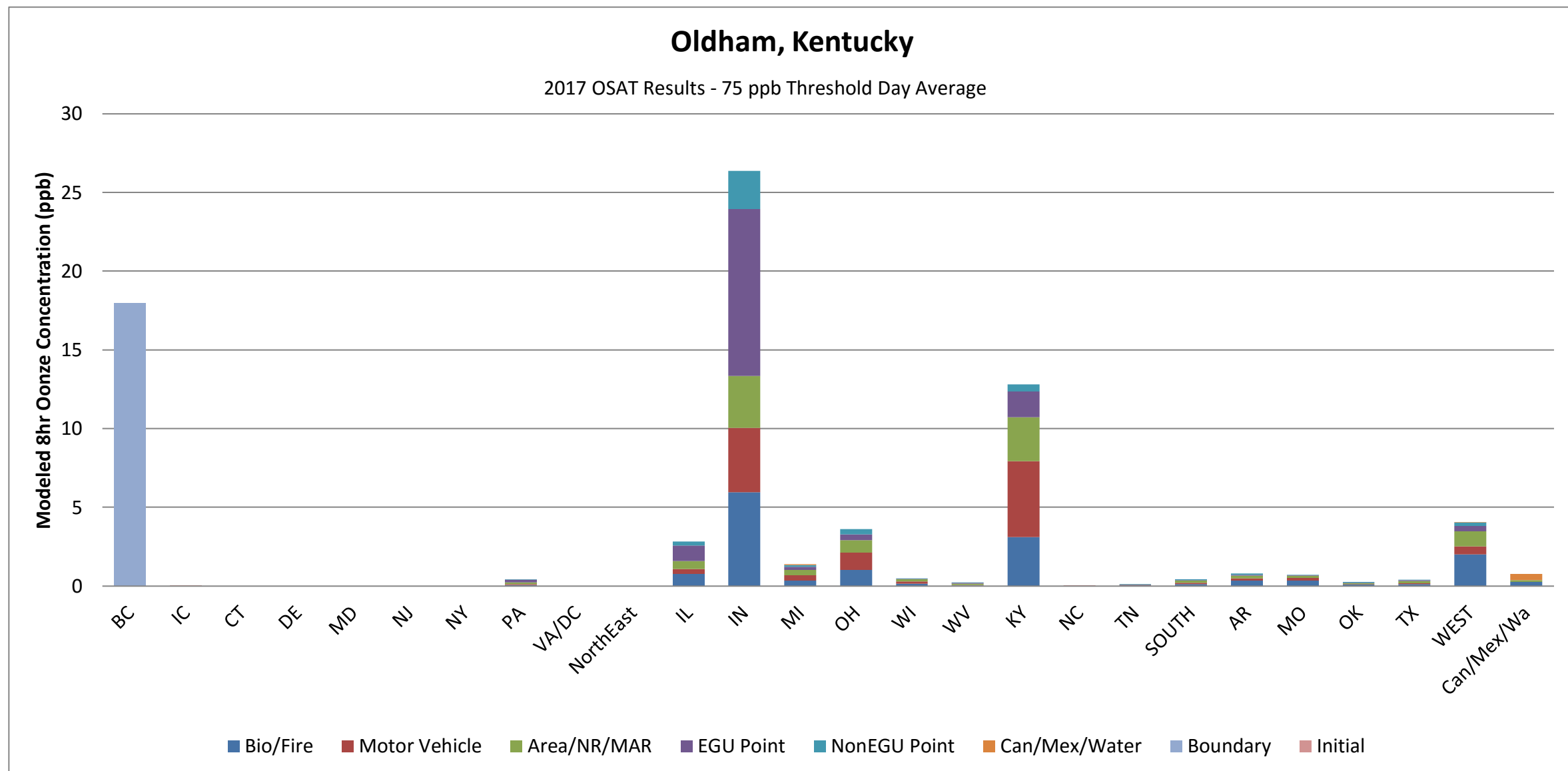
2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold											
Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total	
BC	0.00	0.00	0.00	0.00	0.00	0.00	18.92	0.00	18.92	25%	
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	
CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	
DE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	
MD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	
NJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	
NY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	
PA	0.09	0.06	0.19	0.20	0.06	0.00	0.00	0.00	0.59	1%	
VA/DC	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0%	
NorthEast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	
IL	0.64	0.33	0.55	0.68	0.26	0.00	0.00	0.00	2.46	3%	
IN	5.72	4.16	3.44	8.44	2.43	0.00	0.00	0.00	24.19	32%	
MI	0.39	0.46	0.42	0.24	0.15	0.05	0.00	0.00	1.70	2%	
OH	1.25	1.29	0.90	0.49	0.43	0.00	0.00	0.00	4.36	6%	
WI	0.15	0.14	0.14	0.04	0.05	0.00	0.00	0.00	0.52	1%	
WV	0.07	0.02	0.10	0.10	0.02	0.00	0.00	0.00	0.31	0%	
KY	3.66	4.10	2.65	1.36	0.61	0.00	0.00	0.00	12.37	16%	
NC	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.04	0%	
TN	0.26	0.29	0.18	0.09	0.03	0.00	0.00	0.00	0.84	1%	
SOUTH	0.25	0.25	0.22	0.08	0.12	0.00	0.00	0.00	0.91	1%	
AR	0.09	0.05	0.05	0.02	0.02	0.00	0.00	0.00	0.22	0%	
MO	0.17	0.10	0.10	0.04	0.01	0.00	0.00	0.00	0.42	1%	
OK	0.23	0.10	0.19	0.08	0.10	0.00	0.00	0.00	0.70	1%	
TX	0.36	0.25	0.42	0.11	0.12	0.01	0.00	0.00	1.28	2%	
WEST	2.39	0.67	1.19	0.41	0.28	0.01	0.00	0.00	4.94	7%	
Can/Mex/Wa	0.29	0.00	0.16	0.00	0.00	0.55	0.00	0.00	1.00	1%	
<b>Grand Total</b>	<b>15.99</b>	<b>12.27</b>	<b>10.93</b>	<b>12.38</b>	<b>4.68</b>	<b>0.62</b>	<b>18.92</b>	<b>0.00</b>	<b>75.80</b>	<b>100%</b>	



Monitor 211850004 Oldham, Kentucky

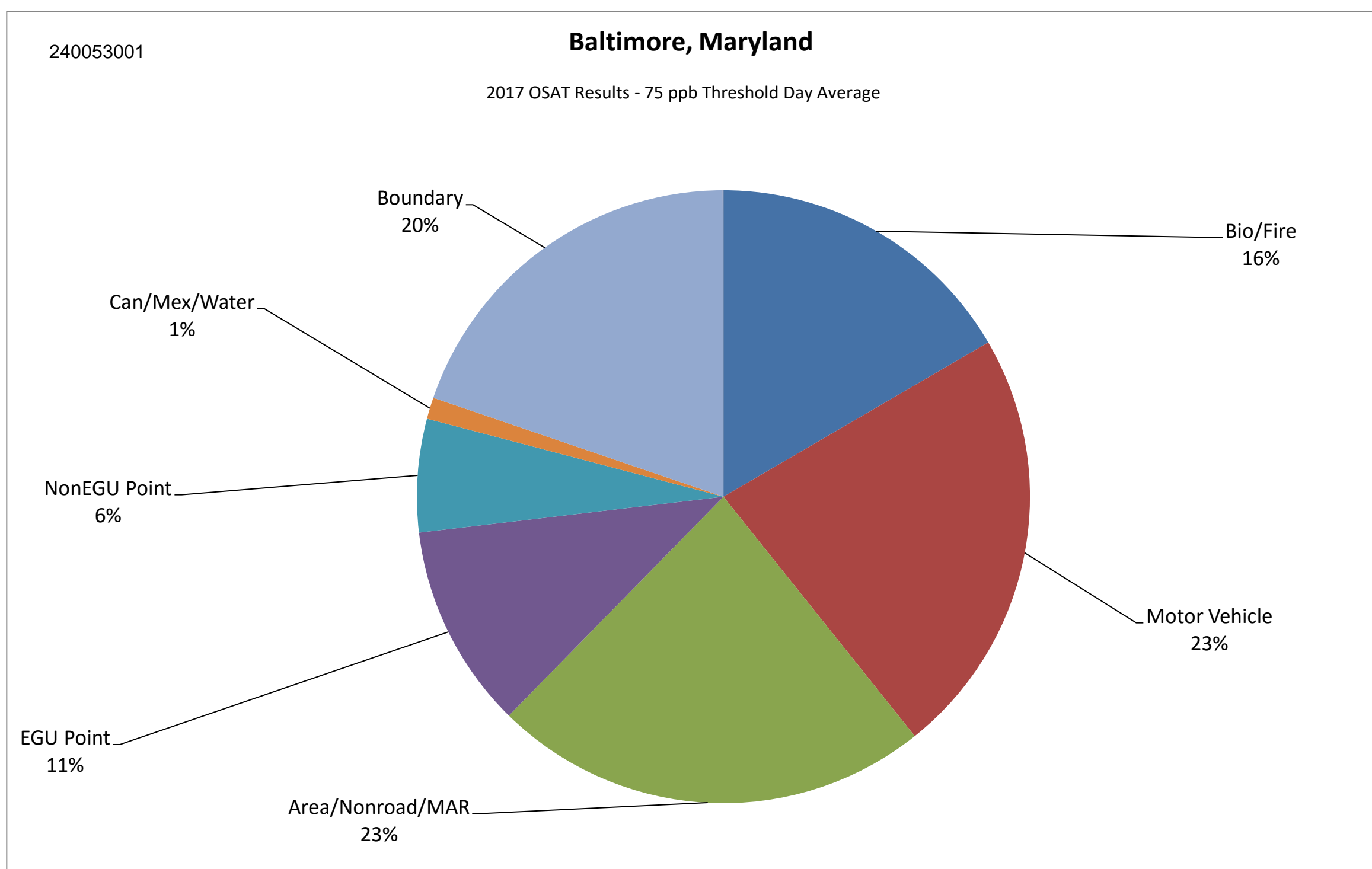
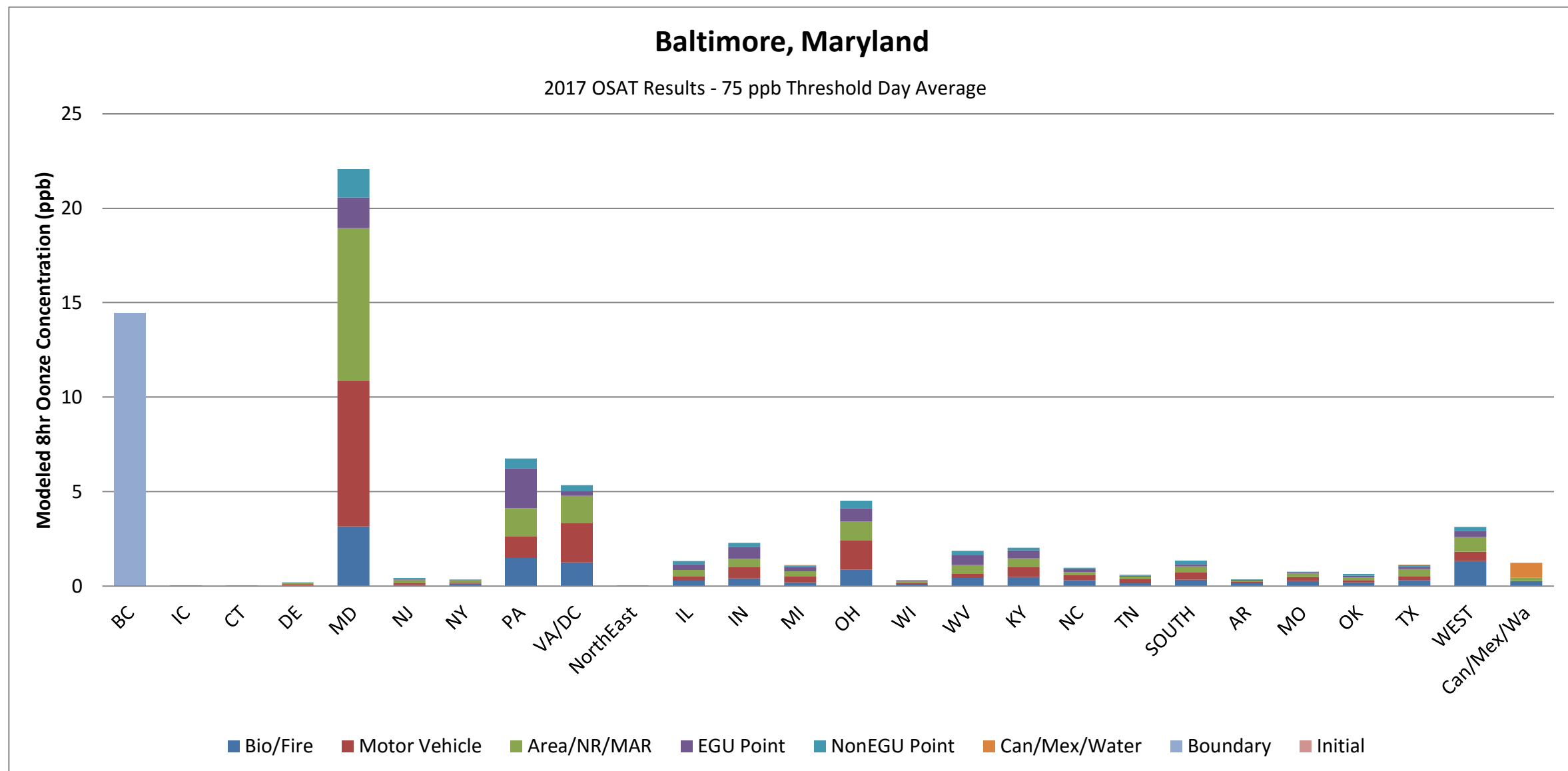
2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold

Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total
BC	0.00	0.00	0.00	0.00	0.00	0.00	17.98	0.00	17.98	24%
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0%
CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
DE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
MD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
NJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
NY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
PA	0.06	0.05	0.14	0.15	0.04	0.00	0.00	0.00	0.43	1%
VA/DC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
NorthEast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
IL	0.77	0.31	0.52	0.97	0.26	0.00	0.00	0.00	2.84	4%
IN	5.95	4.10	3.29	10.61	2.41	0.00	0.00	0.00	26.36	36%
MI	0.34	0.36	0.34	0.19	0.12	0.04	0.00	0.00	1.38	2%
OH	1.04	1.09	0.77	0.38	0.35	0.00	0.00	0.00	3.63	5%
WI	0.15	0.14	0.15	0.03	0.04	0.00	0.00	0.00	0.50	1%
WV	0.05	0.02	0.07	0.07	0.02	0.00	0.00	0.00	0.23	0%
KY	3.10	4.84	2.79	1.63	0.45	0.00	0.00	0.00	12.81	17%
NC	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0%
TN	0.03	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.09	0%
SOUTH	0.12	0.09	0.14	0.04	0.06	0.00	0.00	0.00	0.45	1%
AR	0.35	0.15	0.15	0.07	0.07	0.00	0.00	0.00	0.79	1%
MO	0.35	0.16	0.14	0.05	0.01	0.00	0.00	0.00	0.70	1%
OK	0.08	0.04	0.07	0.03	0.05	0.00	0.00	0.00	0.26	0%
TX	0.12	0.06	0.15	0.04	0.04	0.00	0.00	0.00	0.40	1%
WEST	2.00	0.52	0.96	0.34	0.23	0.01	0.00	0.00	4.05	6%
Can/Mex/Wa	0.26	0.00	0.10	0.00	0.00	0.42	0.00	0.00	0.78	1%
<b>Grand Total</b>	<b>14.76</b>	<b>11.96</b>	<b>9.79</b>	<b>14.59</b>	<b>4.14</b>	<b>0.46</b>	<b>17.98</b>	<b>0.02</b>	<b>73.70</b>	<b>100%</b>



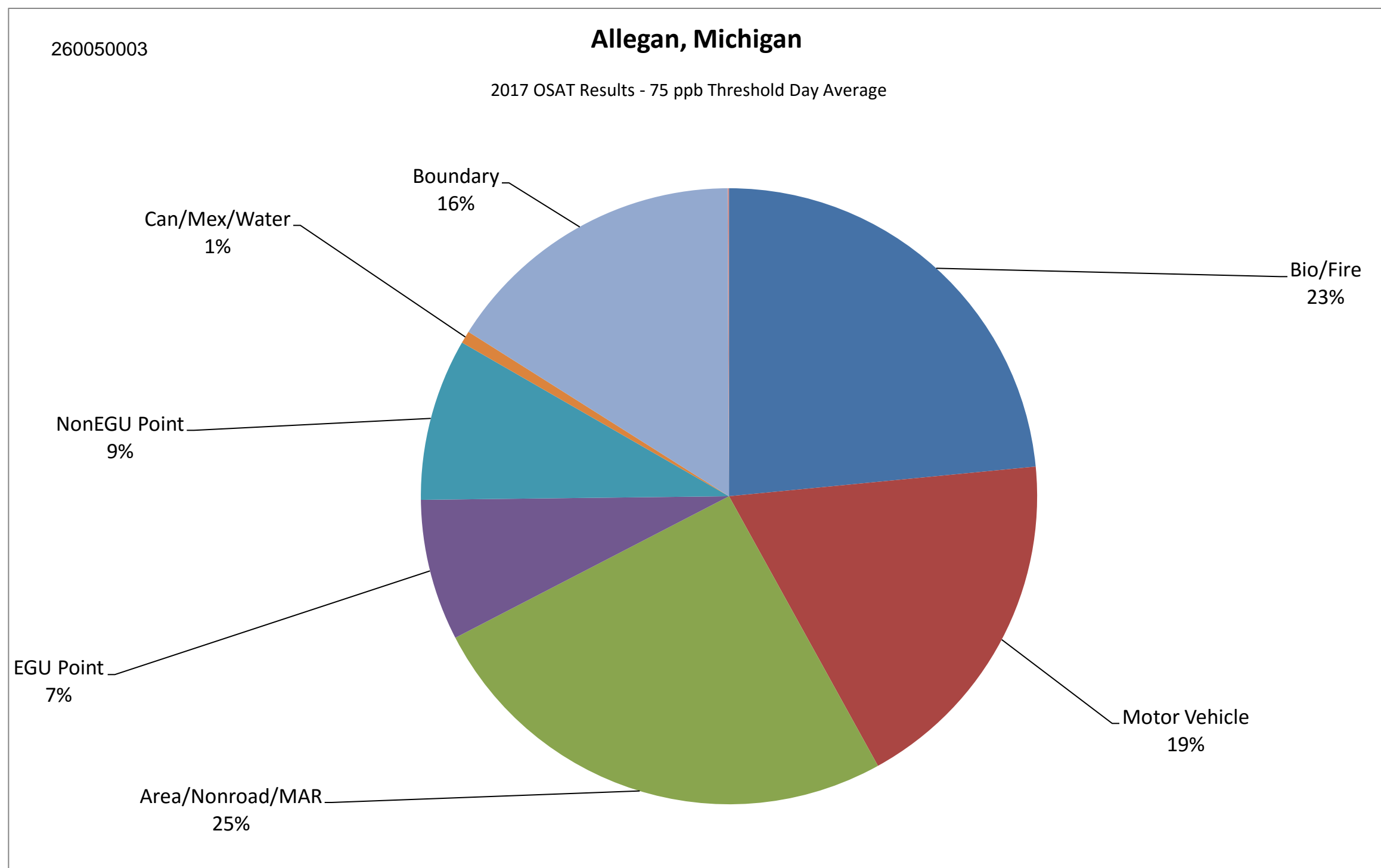
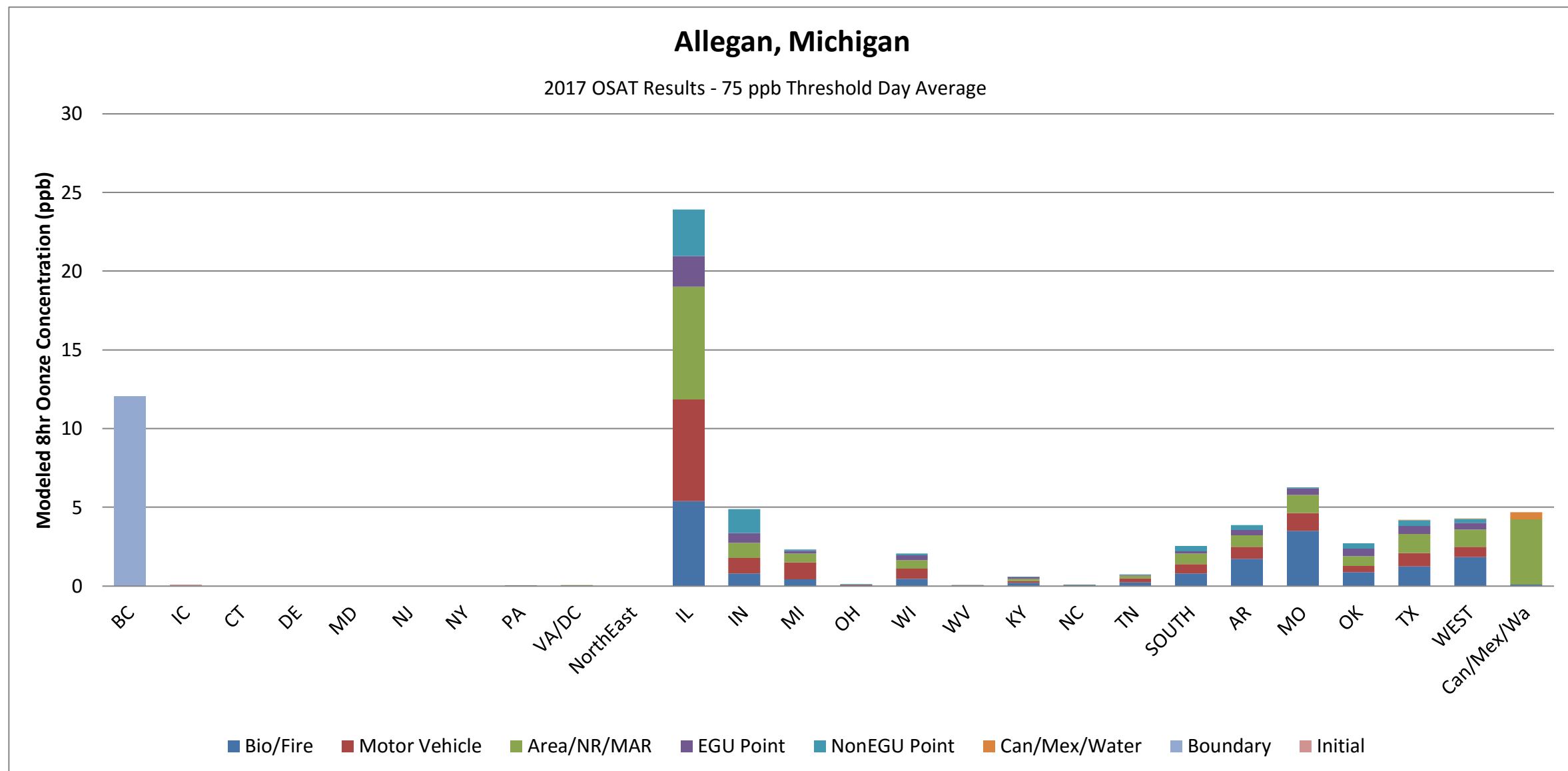
Monitor 240053001 Baltimore, Maryland

2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold										
Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total
BC	0.00	0.00	0.00	0.00	0.00	0.00	14.44	0.00	14.44	20%
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0%
CT	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0%
DE	0.04	0.05	0.05	0.04	0.03	0.00	0.00	0.00	0.21	0%
MD	3.15	7.70	8.10	1.60	1.52	0.00	0.00	0.00	22.08	30%
NJ	0.06	0.11	0.17	0.05	0.04	0.00	0.00	0.00	0.44	1%
NY	0.12	0.07	0.12	0.01	0.02	0.00	0.00	0.00	0.34	0%
PA	1.49	1.13	1.51	2.10	0.53	0.00	0.00	0.00	6.76	9%
VA/DC	1.25	2.10	1.44	0.26	0.29	0.00	0.00	0.00	5.33	7%
NorthEast	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0%
IL	0.29	0.24	0.33	0.31	0.15	0.00	0.00	0.00	1.32	2%
IN	0.41	0.58	0.45	0.63	0.21	0.00	0.00	0.00	2.29	3%
MI	0.21	0.30	0.27	0.23	0.08	0.04	0.00	0.00	1.12	2%
OH	0.87	1.55	0.98	0.71	0.39	0.00	0.00	0.00	4.51	6%
WI	0.08	0.09	0.09	0.03	0.02	0.00	0.00	0.00	0.30	0%
WV	0.42	0.22	0.47	0.51	0.23	0.00	0.00	0.00	1.85	3%
KY	0.48	0.51	0.46	0.45	0.13	0.00	0.00	0.00	2.03	3%
NC	0.30	0.26	0.18	0.16	0.07	0.00	0.00	0.00	0.97	1%
TN	0.14	0.22	0.13	0.05	0.04	0.00	0.00	0.00	0.59	1%
SOUTH	0.33	0.37	0.33	0.12	0.18	0.00	0.00	0.00	1.34	2%
AR	0.14	0.07	0.08	0.04	0.04	0.00	0.00	0.00	0.37	0%
MO	0.28	0.21	0.18	0.07	0.01	0.00	0.00	0.00	0.74	1%
OK	0.20	0.09	0.18	0.08	0.10	0.00	0.00	0.00	0.64	1%
TX	0.31	0.21	0.37	0.12	0.12	0.01	0.00	0.00	1.13	2%
WEST	1.33	0.49	0.78	0.32	0.19	0.01	0.00	0.00	3.11	4%
Can/Mex/Wa	0.27	0.00	0.20	0.00	0.00	0.78	0.00	0.00	1.24	2%
<b>Grand Total</b>	<b>12.15</b>	<b>16.59</b>	<b>16.89</b>	<b>7.90</b>	<b>4.37</b>	<b>0.83</b>	<b>14.44</b>	<b>0.03</b>	<b>73.20</b>	<b>100%</b>



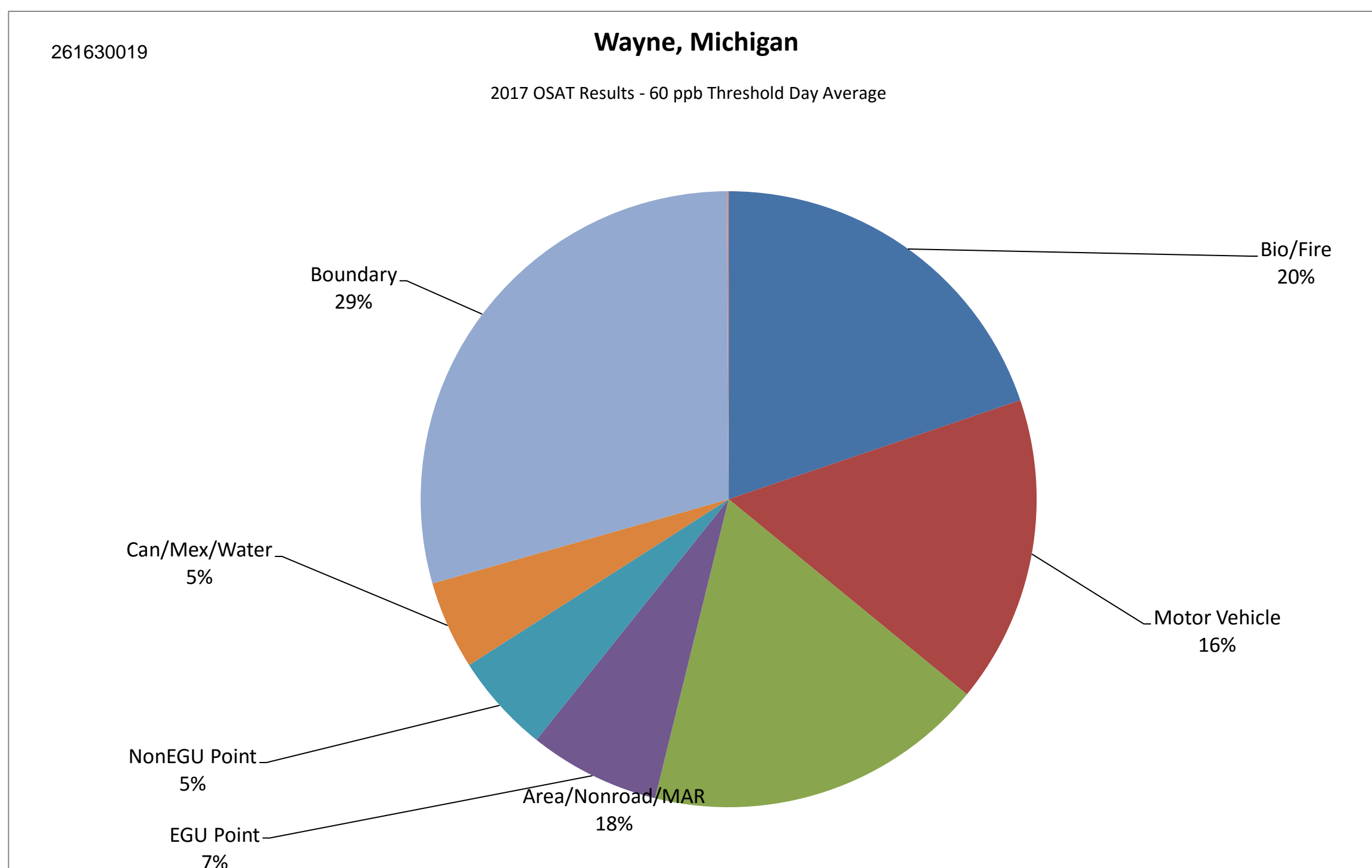
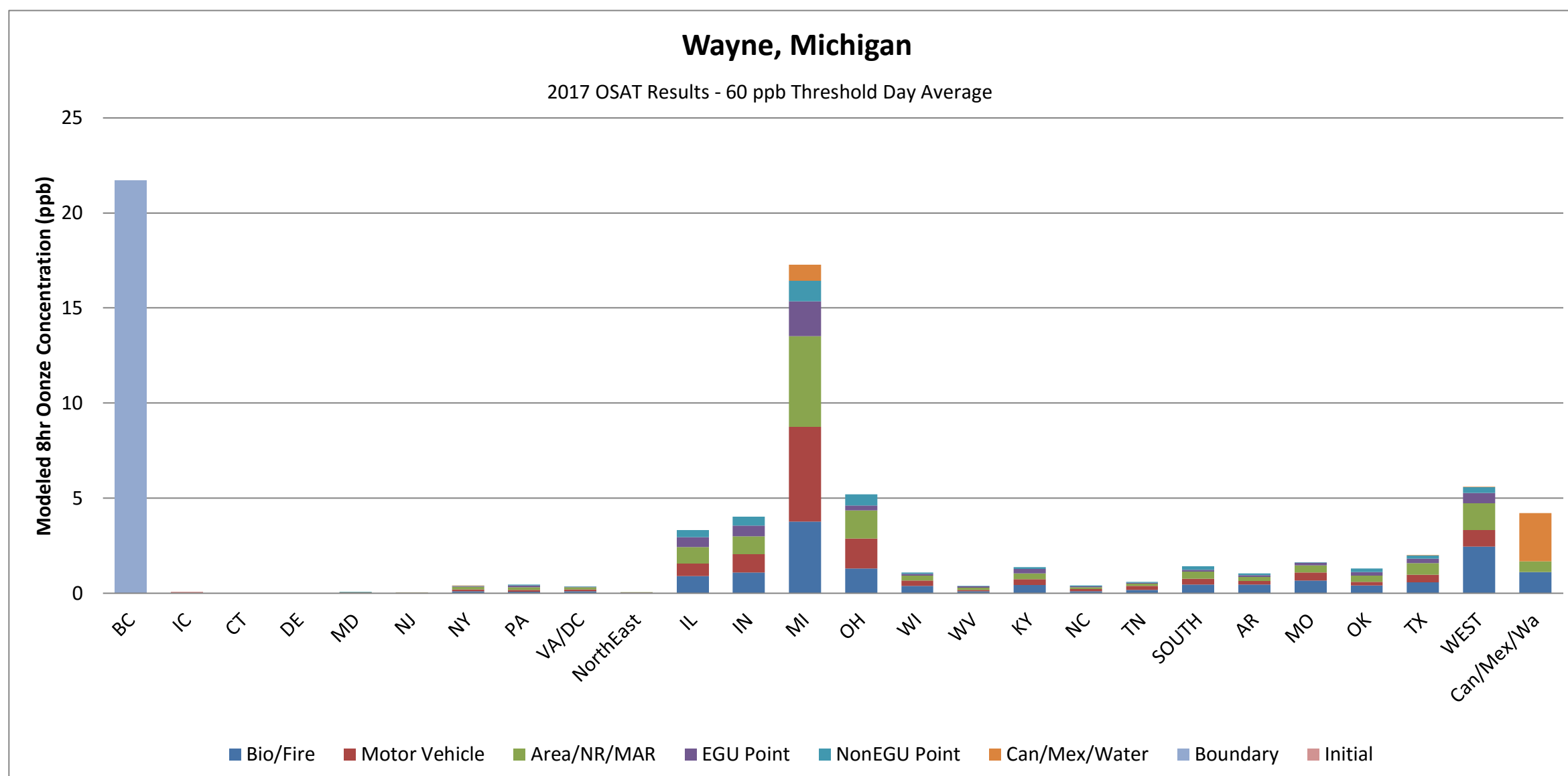
Monitor 260050003 Allegan, Michigan

2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold											
Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total	
BC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.05	0.00	12.05	16%
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.06	0%
CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
DE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
MD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
NJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
NY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
PA	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.03	0.03	0%
VA/DC	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0%
NorthEast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
IL	5.40	6.44	7.17	1.96	2.95	0.00	0.00	0.00	23.92	32%	
IN	0.79	1.01	0.95	0.62	1.51	0.00	0.00	0.00	4.88	6%	
MI	0.43	1.08	0.55	0.17	0.10	0.00	0.00	0.00	2.33	3%	
OH	0.02	0.04	0.02	0.01	0.01	0.00	0.00	0.00	0.09	0%	
WI	0.46	0.65	0.52	0.33	0.11	0.00	0.00	0.00	2.07	3%	
WV	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.04	0%	
KY	0.21	0.12	0.13	0.12	0.03	0.00	0.00	0.00	0.61	1%	
NC	0.02	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.08	0%	
TN	0.24	0.26	0.17	0.04	0.04	0.00	0.00	0.00	0.74	1%	
SOUTH	0.81	0.57	0.67	0.17	0.32	0.00	0.00	0.00	2.55	3%	
AR	1.73	0.75	0.74	0.33	0.32	0.00	0.00	0.00	3.87	5%	
MO	3.50	1.12	1.16	0.42	0.06	0.00	0.00	0.00	6.27	8%	
OK	0.88	0.40	0.63	0.48	0.32	0.00	0.00	0.00	2.70	4%	
TX	1.24	0.84	1.22	0.51	0.37	0.02	0.00	0.00	4.20	6%	
WEST	1.85	0.65	1.09	0.42	0.26	0.01	0.00	0.00	4.28	6%	
Can/Mex/Wa	0.09	0.00	4.14	0.00	0.00	0.46	0.00	0.00	4.69	6%	
<b>Grand Total</b>	<b>17.72</b>	<b>13.97</b>	<b>19.20</b>	<b>5.60</b>	<b>6.42</b>	<b>0.49</b>	<b>12.05</b>	<b>0.06</b>	<b>75.50</b>	<b>100%</b>	



Monitor 261630019 Wayne, Michigan

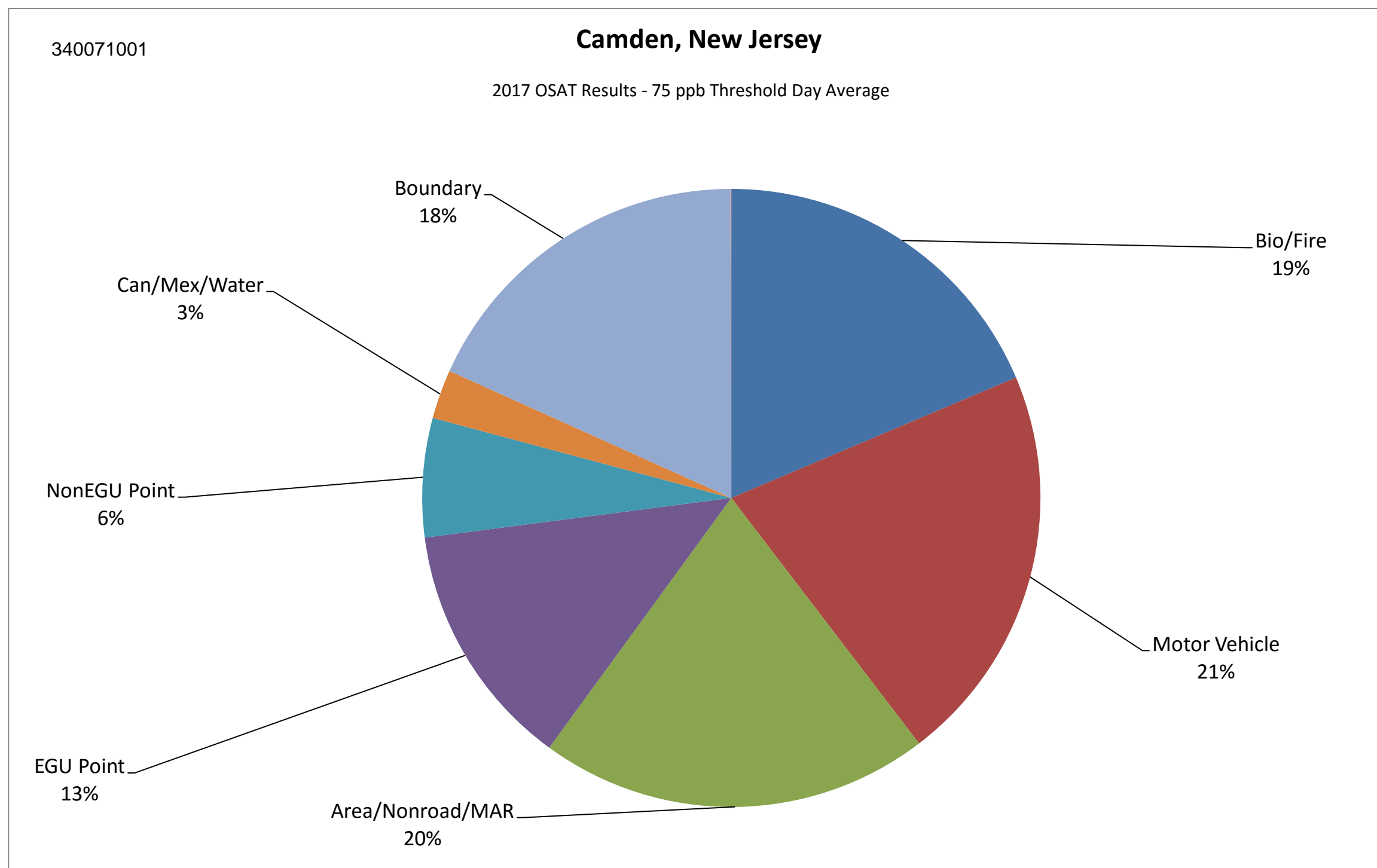
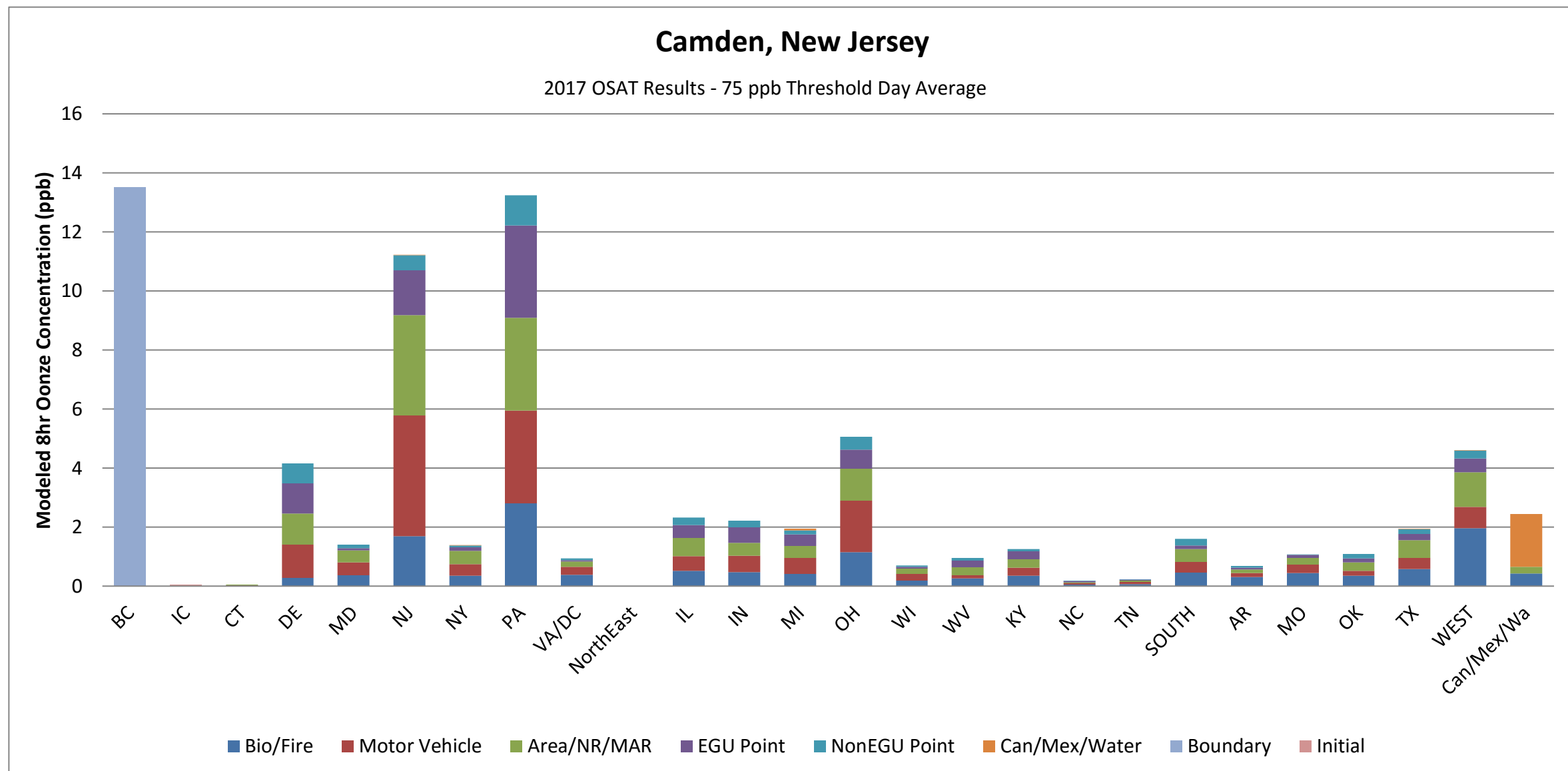
2017 OSAT Results (Modeled ppb) -- 60 ppb Threshold										
Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total
BC	0.00	0.00	0.00	0.00	0.00	0.00	21.70	0.00	21.70	29%
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.07	0%
CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
DE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
MD	0.01	0.02	0.02	0.00	0.01	0.00	0.00	0.00	0.07	0%
NJ	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0%
NY	0.10	0.10	0.13	0.03	0.02	0.02	0.00	0.00	0.41	1%
PA	0.08	0.09	0.15	0.09	0.03	0.00	0.00	0.00	0.45	1%
VA/DC	0.09	0.11	0.10	0.02	0.03	0.00	0.00	0.00	0.37	0%
NorthEast	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.03	0%
IL	0.89	0.66	0.88	0.51	0.38	0.00	0.00	0.00	3.33	4%
IN	1.10	0.95	0.95	0.56	0.46	0.00	0.00	0.00	4.02	5%
MI	3.76	4.99	4.77	1.82	1.09	0.85	0.00	0.00	17.28	23%
OH	1.29	1.59	1.46	0.26	0.58	0.00	0.00	0.00	5.19	7%
WI	0.38	0.30	0.24	0.10	0.08	0.00	0.00	0.00	1.10	1%
WV	0.10	0.07	0.13	0.06	0.03	0.00	0.00	0.00	0.39	1%
KY	0.43	0.30	0.32	0.23	0.09	0.00	0.00	0.00	1.37	2%
NC	0.10	0.13	0.08	0.06	0.03	0.00	0.00	0.00	0.40	1%
TN	0.18	0.19	0.13	0.03	0.05	0.00	0.00	0.00	0.58	1%
SOUTH	0.45	0.32	0.37	0.10	0.18	0.00	0.00	0.00	1.42	2%
AR	0.45	0.21	0.21	0.09	0.09	0.00	0.00	0.00	1.04	1%
MO	0.68	0.41	0.38	0.15	0.02	0.00	0.00	0.00	1.64	2%
OK	0.40	0.19	0.33	0.19	0.18	0.00	0.00	0.00	1.30	2%
TX	0.56	0.40	0.62	0.23	0.18	0.01	0.00	0.00	2.00	3%
WEST	2.45	0.87	1.42	0.54	0.31	0.01	0.00	0.00	5.60	8%
Can/Mex/Wa	1.12	0.00	0.56	0.00	0.00	2.54	0.00	0.00	4.22	6%
<b>Grand Total</b>	<b>14.65</b>	<b>11.93</b>	<b>13.26</b>	<b>5.09</b>	<b>3.87</b>	<b>3.43</b>	<b>21.70</b>	<b>0.07</b>	<b>74.00</b>	<b>100%</b>



Monitor 340071001 Camden, New Jersey

2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold

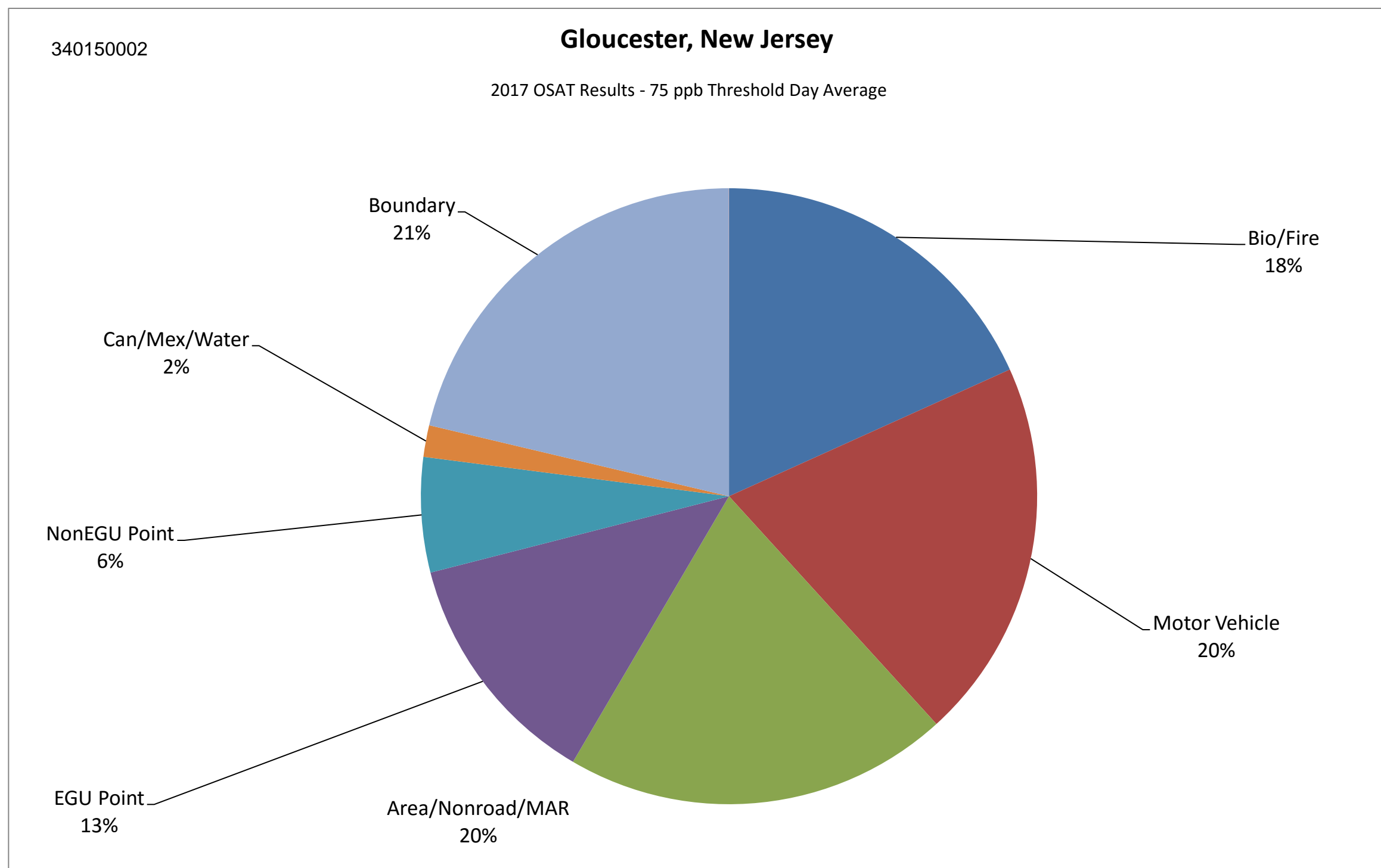
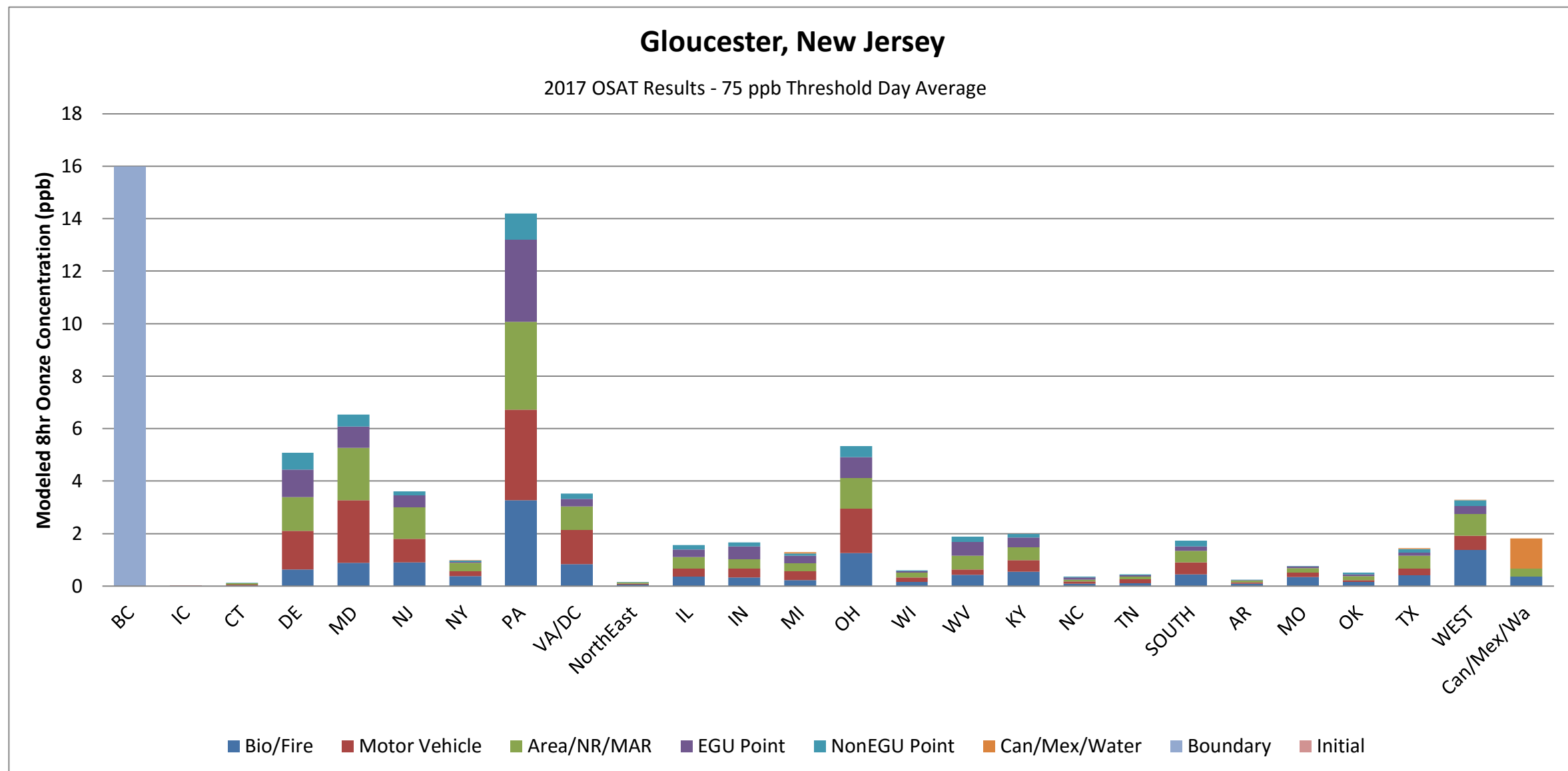
Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total
BC	0.00	0.00	0.00	0.00	0.00	0.00	13.51	0.00	13.51	18%
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0%
CT	0.01	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.05	0%
DE	0.27	1.13	1.06	1.01	0.67	0.00	0.00	0.00	4.15	6%
MD	0.36	0.44	0.40	0.08	0.12	0.00	0.00	0.00	1.40	2%
NJ	1.70	4.09	3.39	1.52	0.51	0.01	0.00	0.00	11.22	15%
NY	0.35	0.39	0.46	0.12	0.06	0.02	0.00	0.00	1.40	2%
PA	2.80	3.15	3.15	3.12	1.03	0.00	0.00	0.00	13.24	18%
VA/DC	0.38	0.26	0.19	0.05	0.05	0.00	0.00	0.00	0.94	1%
NorthEast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
IL	0.51	0.50	0.62	0.44	0.25	0.00	0.00	0.00	2.32	3%
IN	0.47	0.56	0.45	0.52	0.23	0.00	0.00	0.00	2.22	3%
MI	0.41	0.54	0.41	0.39	0.13	0.06	0.00	0.00	1.94	3%
OH	1.15	1.74	1.09	0.65	0.43	0.00	0.00	0.00	5.05	7%
WI	0.19	0.22	0.18	0.05	0.05	0.00	0.00	0.00	0.69	1%
WV	0.26	0.10	0.27	0.23	0.08	0.00	0.00	0.00	0.95	1%
KY	0.35	0.27	0.28	0.27	0.08	0.00	0.00	0.00	1.26	2%
NC	0.05	0.05	0.04	0.04	0.02	0.00	0.00	0.00	0.18	0%
TN	0.06	0.07	0.05	0.02	0.01	0.00	0.00	0.00	0.22	0%
SOUTH	0.46	0.36	0.43	0.13	0.22	0.00	0.00	0.00	1.60	2%
AR	0.30	0.14	0.13	0.05	0.06	0.00	0.00	0.00	0.68	1%
MO	0.44	0.28	0.24	0.10	0.01	0.00	0.00	0.00	1.07	1%
OK	0.36	0.16	0.28	0.14	0.16	0.00	0.00	0.00	1.09	1%
TX	0.57	0.37	0.61	0.20	0.17	0.02	0.00	0.00	1.95	3%
WEST	1.96	0.72	1.18	0.47	0.27	0.01	0.00	0.00	4.61	6%
Can/Mex/Wa	0.42	0.00	0.23	0.00	0.00	1.79	0.00	0.00	2.43	3%
<b>Grand Total</b>	<b>13.82</b>	<b>15.57</b>	<b>15.15</b>	<b>9.59</b>	<b>4.61</b>	<b>1.91</b>	<b>13.51</b>	<b>0.04</b>	<b>74.20</b>	<b>100%</b>



Monitor 340150002 Gloucester, New Jersey

2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold

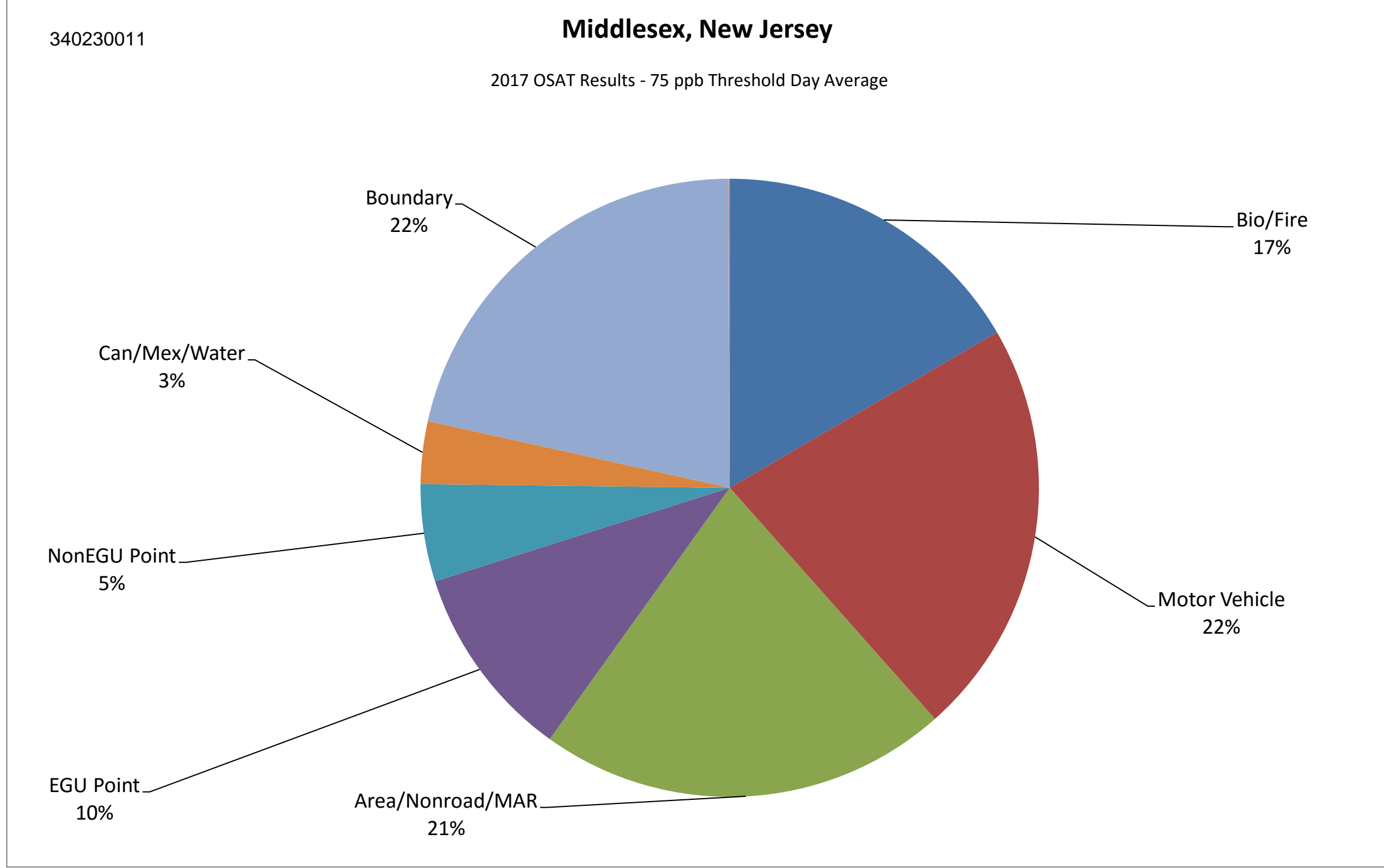
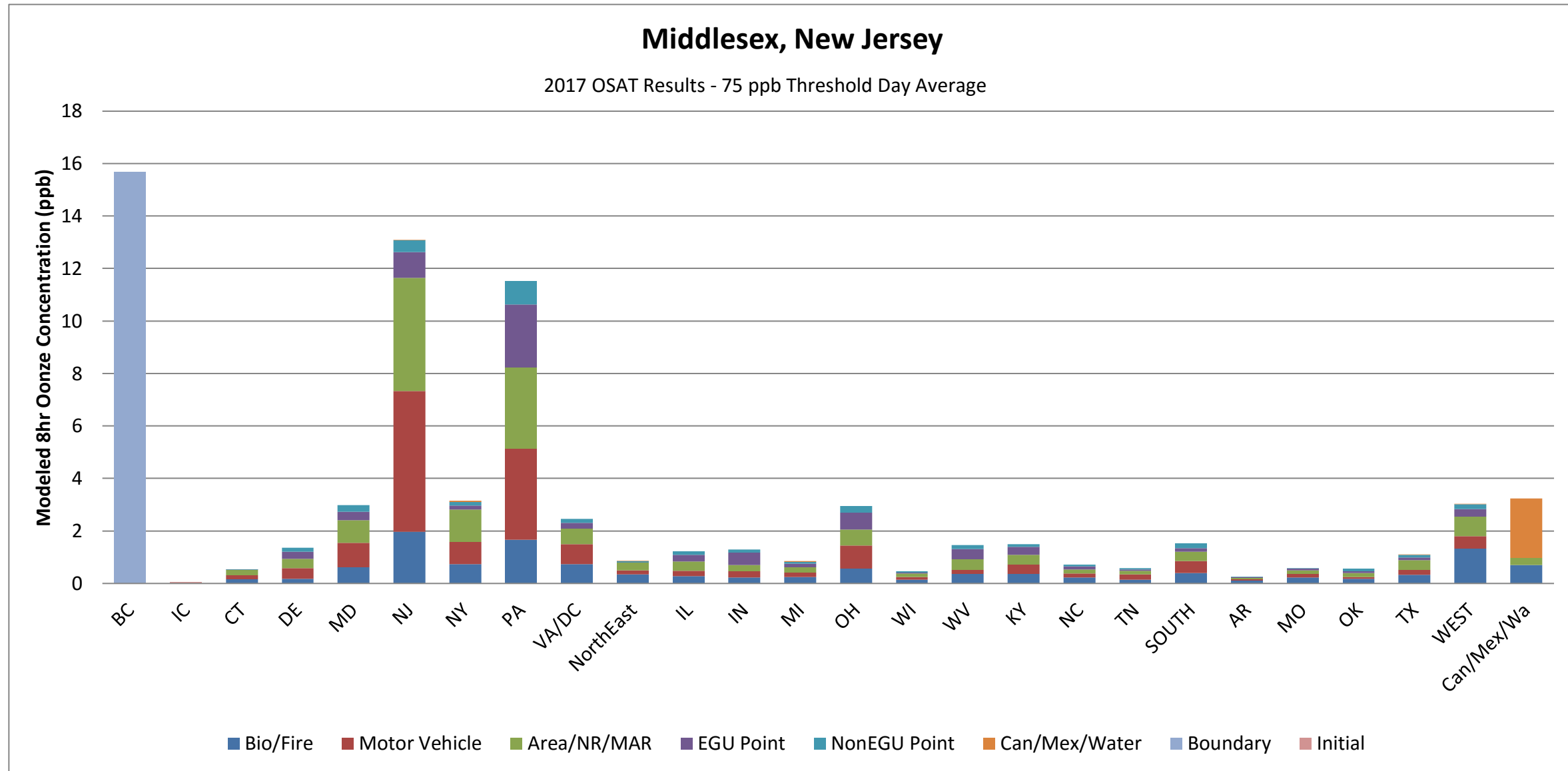
Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total
BC	0.00	0.00	0.00	0.00	0.00	0.00	15.99	0.00	15.99	21%
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0%
CT	0.03	0.03	0.05	0.00	0.01	0.00	0.00	0.00	0.11	0%
DE	0.63	1.47	1.28	1.05	0.64	0.00	0.00	0.00	5.09	7%
MD	0.88	2.38	2.00	0.80	0.47	0.00	0.00	0.00	6.54	9%
NJ	0.91	0.89	1.20	0.45	0.16	0.00	0.00	0.00	3.61	5%
NY	0.37	0.18	0.34	0.03	0.05	0.01	0.00	0.00	0.98	1%
PA	3.27	3.46	3.34	3.13	1.01	0.00	0.00	0.00	14.20	19%
VA/DC	0.84	1.30	0.88	0.29	0.21	0.00	0.00	0.00	3.52	5%
NorthEast	0.06	0.03	0.05	0.00	0.01	0.00	0.00	0.00	0.14	0%
IL	0.35	0.31	0.44	0.30	0.16	0.00	0.00	0.00	1.56	2%
IN	0.33	0.34	0.34	0.49	0.15	0.00	0.00	0.00	1.66	2%
MI	0.23	0.34	0.31	0.29	0.09	0.05	0.00	0.00	1.29	2%
OH	1.25	1.70	1.17	0.79	0.43	0.00	0.00	0.00	5.33	7%
WI	0.16	0.17	0.18	0.04	0.04	0.00	0.00	0.00	0.59	1%
WV	0.43	0.20	0.53	0.53	0.20	0.00	0.00	0.00	1.89	3%
KY	0.55	0.44	0.49	0.37	0.14	0.00	0.00	0.00	1.99	3%
NC	0.10	0.09	0.07	0.08	0.04	0.00	0.00	0.00	0.36	0%
TN	0.11	0.14	0.11	0.05	0.03	0.00	0.00	0.00	0.44	1%
SOUTH	0.45	0.46	0.43	0.16	0.22	0.00	0.00	0.00	1.72	2%
AR	0.10	0.05	0.06	0.03	0.02	0.00	0.00	0.00	0.25	0%
MO	0.34	0.17	0.16	0.07	0.01	0.00	0.00	0.00	0.76	1%
OK	0.16	0.07	0.14	0.07	0.08	0.00	0.00	0.00	0.52	1%
TX	0.41	0.26	0.48	0.12	0.14	0.02	0.00	0.00	1.44	2%
WEST	1.38	0.54	0.82	0.31	0.22	0.01	0.00	0.00	3.28	4%
Can/Mex/Wa	0.35	0.00	0.31	0.00	0.00	1.16	0.00	0.00	1.82	2%
<b>Grand Total</b>	<b>13.71</b>	<b>15.02</b>	<b>15.17</b>	<b>9.43</b>	<b>4.53</b>	<b>1.25</b>	<b>15.99</b>	<b>0.01</b>	<b>75.10</b>	<b>100%</b>



Monitor 340230011 Middlesex, New Jersey

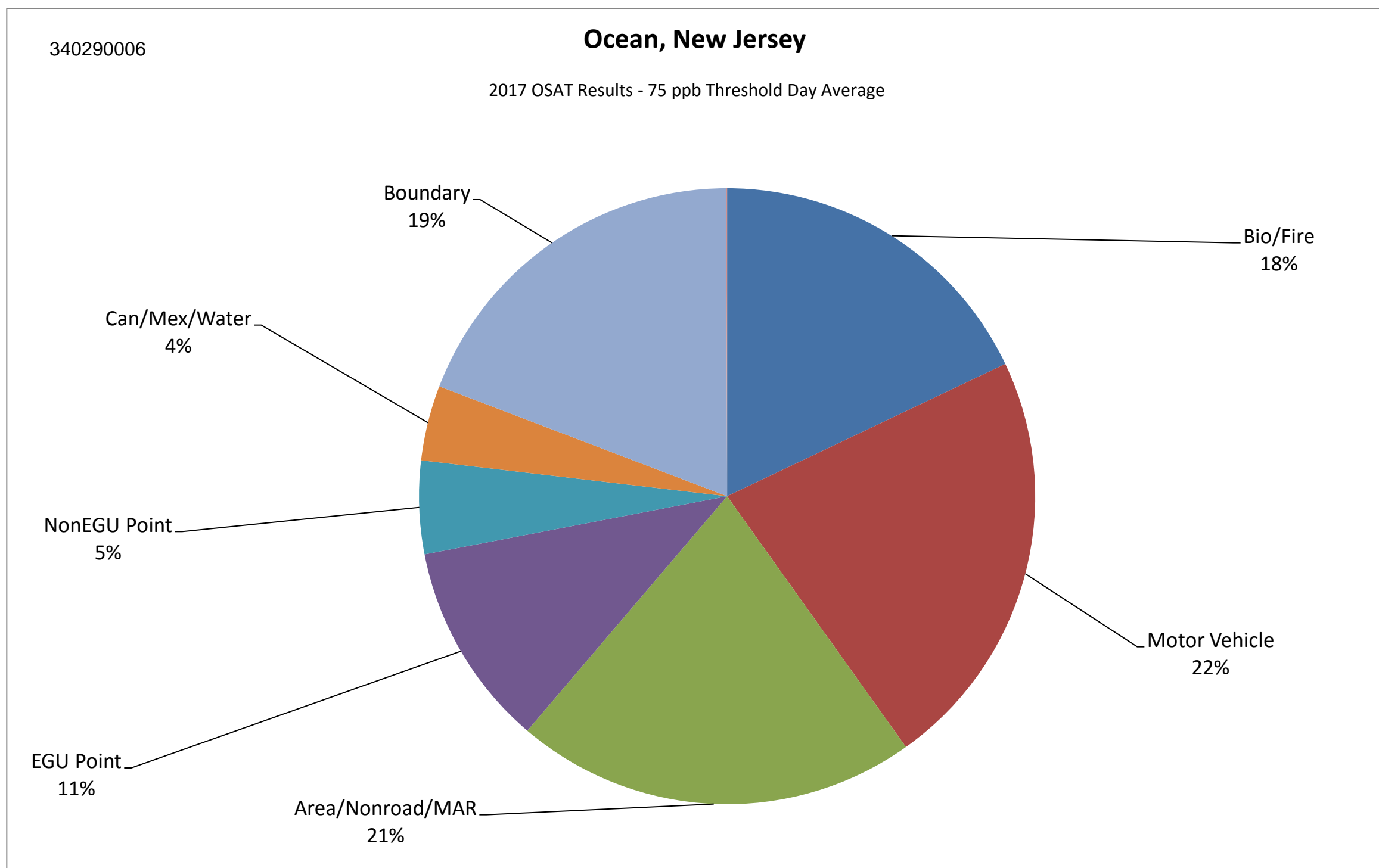
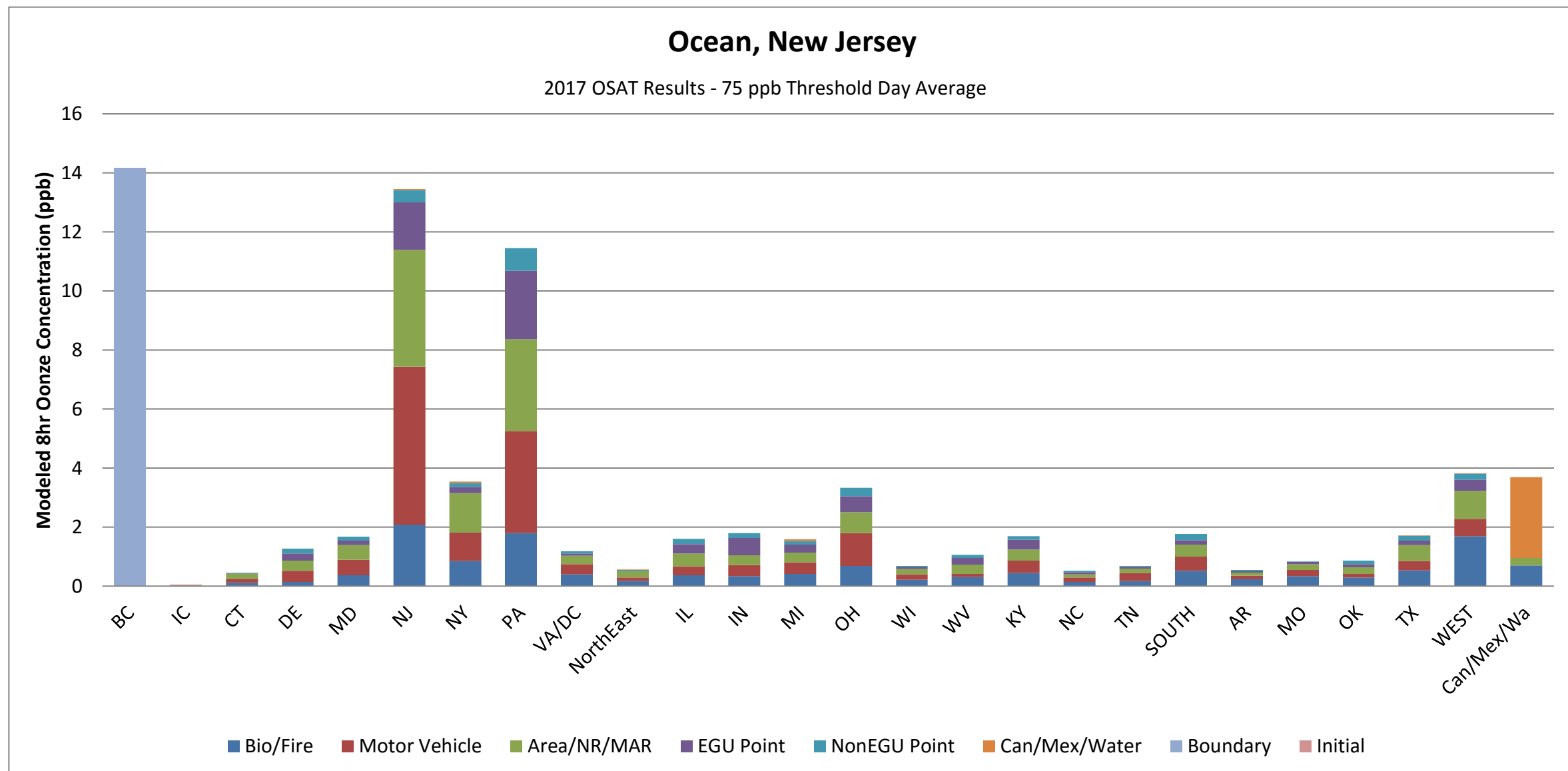
2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold

Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total
BC	0.00	0.00	0.00	0.00	0.00	0.00	15.67	0.00	15.67	21%
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0%
CT	0.16	0.16	0.20	0.01	0.02	0.00	0.00	0.00	0.54	1%
DE	0.18	0.40	0.35	0.27	0.16	0.00	0.00	0.00	1.36	2%
MD	0.61	0.93	0.87	0.33	0.26	0.00	0.00	0.00	2.99	4%
NJ	1.96	5.36	4.32	0.98	0.46	0.02	0.00	0.00	13.10	18%
NY	0.74	0.84	1.24	0.15	0.15	0.05	0.00	0.00	3.16	4%
PA	1.67	3.46	3.10	2.41	0.88	0.00	0.00	0.00	11.52	16%
VA/DC	0.74	0.75	0.59	0.22	0.16	0.00	0.00	0.00	2.46	3%
NorthEast	0.34	0.16	0.29	0.01	0.05	0.01	0.00	0.00	0.86	1%
IL	0.28	0.20	0.35	0.26	0.14	0.00	0.00	0.00	1.23	2%
IN	0.22	0.25	0.24	0.47	0.12	0.00	0.00	0.00	1.29	2%
MI	0.24	0.17	0.20	0.14	0.07	0.03	0.00	0.00	0.85	1%
OH	0.56	0.88	0.61	0.64	0.26	0.00	0.00	0.00	2.95	4%
WI	0.14	0.11	0.14	0.04	0.04	0.00	0.00	0.00	0.46	1%
WV	0.36	0.16	0.41	0.39	0.16	0.00	0.00	0.00	1.47	2%
KY	0.36	0.36	0.37	0.29	0.11	0.00	0.00	0.00	1.50	2%
NC	0.22	0.16	0.15	0.13	0.05	0.00	0.00	0.00	0.71	1%
TN	0.14	0.21	0.14	0.05	0.04	0.00	0.00	0.00	0.57	1%
SOUTH	0.40	0.45	0.36	0.14	0.18	0.00	0.00	0.00	1.52	2%
AR	0.10	0.05	0.05	0.03	0.03	0.00	0.00	0.00	0.26	0%
MO	0.22	0.14	0.15	0.05	0.01	0.00	0.00	0.00	0.57	1%
OK	0.17	0.07	0.16	0.06	0.09	0.00	0.00	0.00	0.56	1%
TX	0.32	0.19	0.37	0.10	0.11	0.02	0.00	0.00	1.11	2%
WEST	1.33	0.47	0.73	0.29	0.19	0.01	0.00	0.00	3.03	4%
Can/Mex/Wa	0.69	0.00	0.27	0.00	0.00	2.26	0.00	0.00	3.23	4%
<b>Grand Total</b>	<b>12.13</b>	<b>15.94</b>	<b>15.65</b>	<b>7.46</b>	<b>3.71</b>	<b>2.39</b>	<b>15.67</b>	<b>0.05</b>	<b>73.00</b>	<b>100%</b>



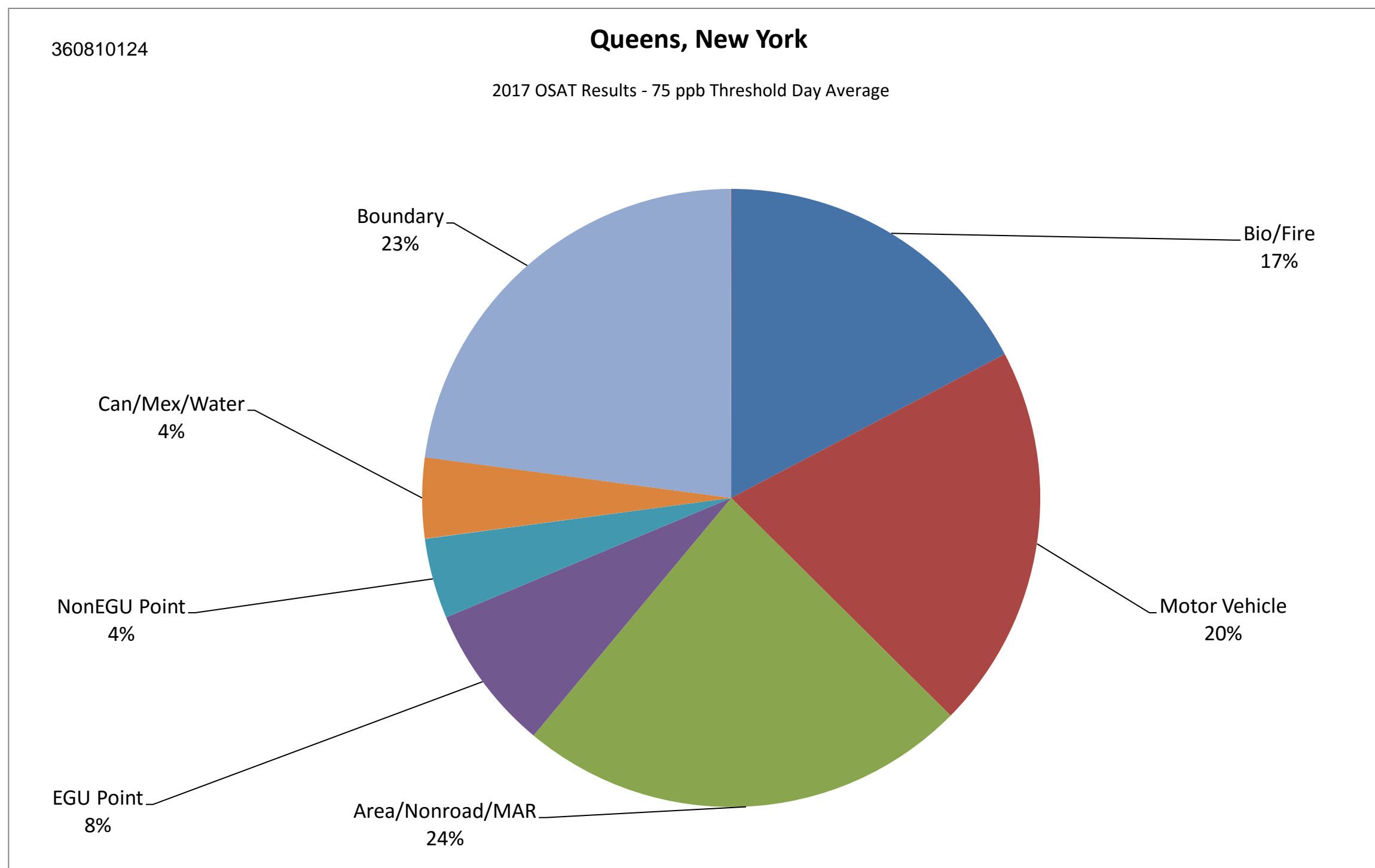
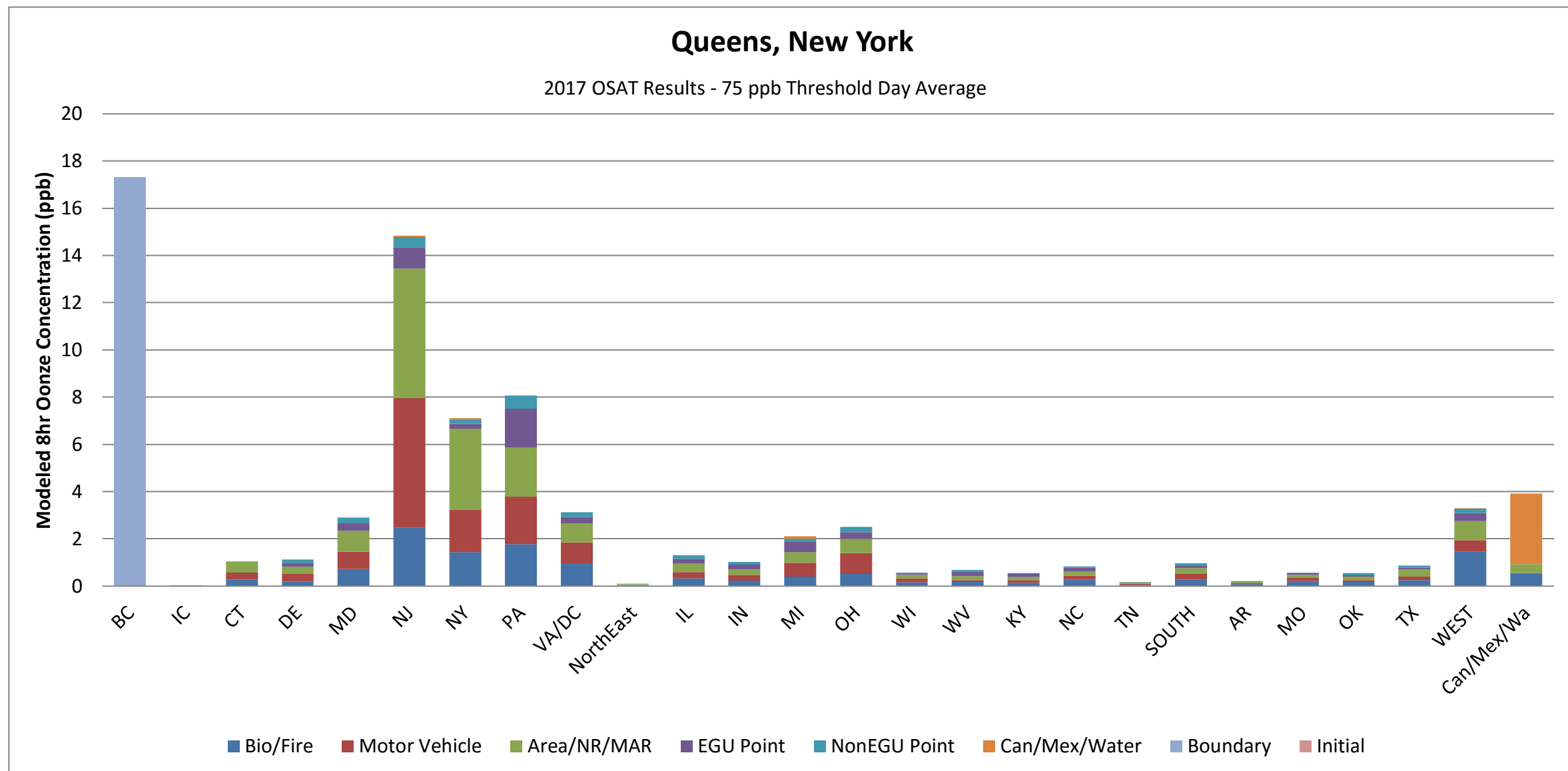
Monitor 340290006 Ocean, New Jersey

2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold											
Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total	
BC	0.00	0.00	0.00	0.00	0.00	0.00	14.15	0.00	14.15	19%	
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0%	
CT	0.11	0.14	0.17	0.01	0.02	0.00	0.00	0.00	0.45	1%	
DE	0.15	0.37	0.34	0.25	0.16	0.00	0.00	0.00	1.27	2%	
MD	0.37	0.52	0.50	0.15	0.14	0.00	0.00	0.00	1.67	2%	
NJ	2.07	5.36	3.96	1.61	0.42	0.03	0.00	0.00	13.44	18%	
NY	0.84	0.97	1.34	0.20	0.15	0.05	0.00	0.00	3.55	5%	
PA	1.79	3.46	3.12	2.31	0.77	0.00	0.00	0.00	11.45	15%	
VA/DC	0.39	0.35	0.29	0.06	0.08	0.00	0.00	0.00	1.18	2%	
NorthEast	0.17	0.12	0.21	0.01	0.04	0.01	0.00	0.00	0.56	1%	
IL	0.37	0.30	0.44	0.32	0.17	0.00	0.00	0.00	1.60	2%	
IN	0.33	0.38	0.33	0.58	0.16	0.00	0.00	0.00	1.79	2%	
MI	0.41	0.39	0.33	0.27	0.11	0.06	0.00	0.00	1.58	2%	
OH	0.69	1.11	0.71	0.54	0.28	0.00	0.00	0.00	3.33	5%	
WI	0.21	0.19	0.17	0.05	0.05	0.00	0.00	0.00	0.68	1%	
WV	0.30	0.11	0.32	0.22	0.10	0.00	0.00	0.00	1.05	1%	
KY	0.44	0.42	0.38	0.33	0.11	0.00	0.00	0.00	1.68	2%	
NC	0.15	0.14	0.11	0.07	0.05	0.00	0.00	0.00	0.51	1%	
TN	0.17	0.27	0.16	0.05	0.04	0.00	0.00	0.00	0.69	1%	
SOUTH	0.51	0.48	0.41	0.15	0.21	0.00	0.00	0.00	1.76	2%	
AR	0.24	0.11	0.11	0.05	0.05	0.00	0.00	0.00	0.55	1%	
MO	0.33	0.21	0.20	0.08	0.01	0.00	0.00	0.00	0.83	1%	
OK	0.29	0.12	0.23	0.10	0.13	0.00	0.00	0.00	0.87	1%	
TX	0.53	0.31	0.55	0.16	0.16	0.02	0.00	0.00	1.72	2%	
WEST	1.69	0.58	0.95	0.37	0.22	0.01	0.00	0.00	3.82	5%	
Can/Mex/Wa	0.70	0.00	0.25	0.00	0.00	2.74	0.00	0.00	3.69	5%	
<b>Grand Total</b>	<b>13.25</b>	<b>16.41</b>	<b>15.58</b>	<b>7.94</b>	<b>3.61</b>	<b>2.92</b>	<b>14.15</b>	<b>0.04</b>	<b>73.90</b>	<b>100%</b>	



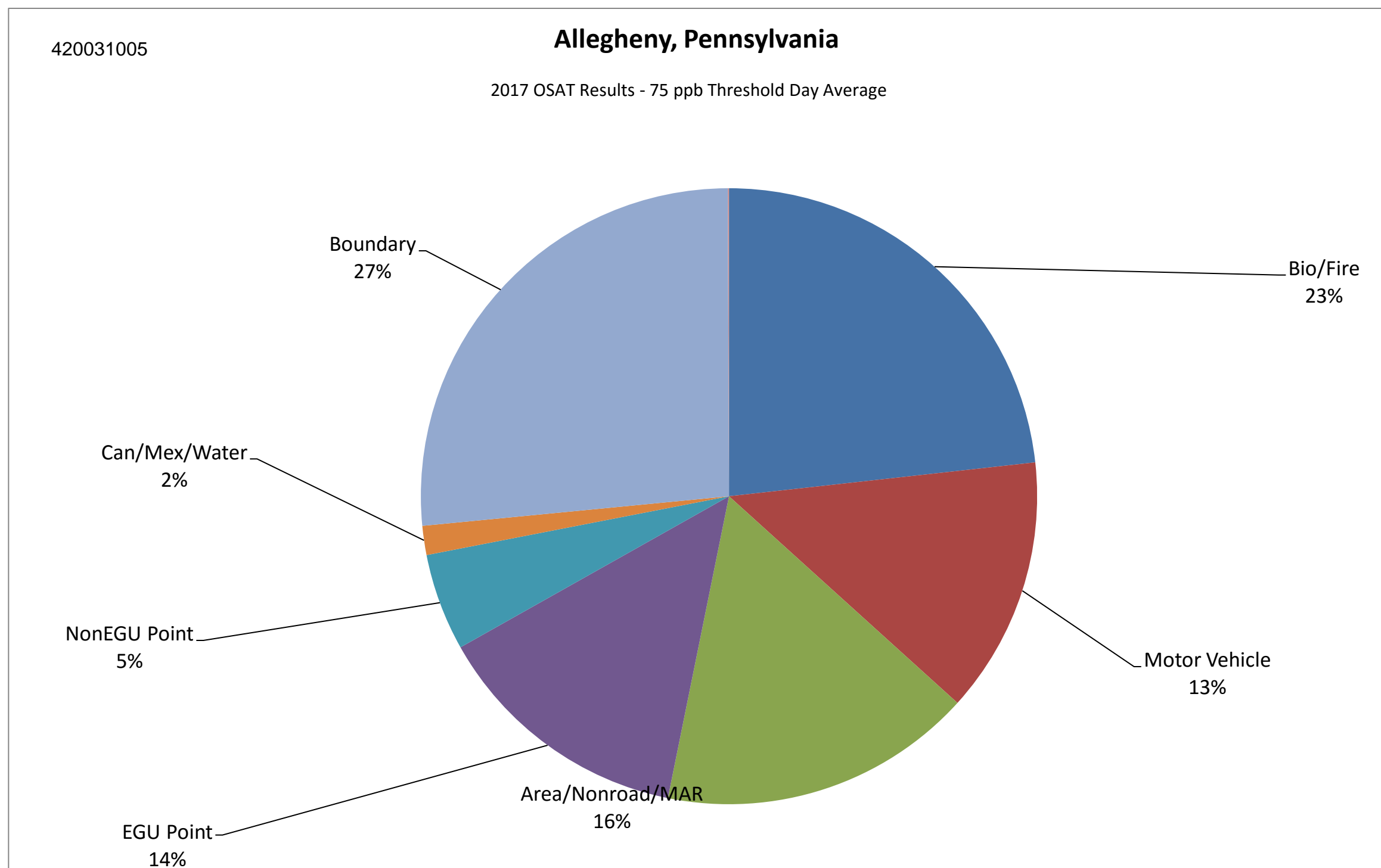
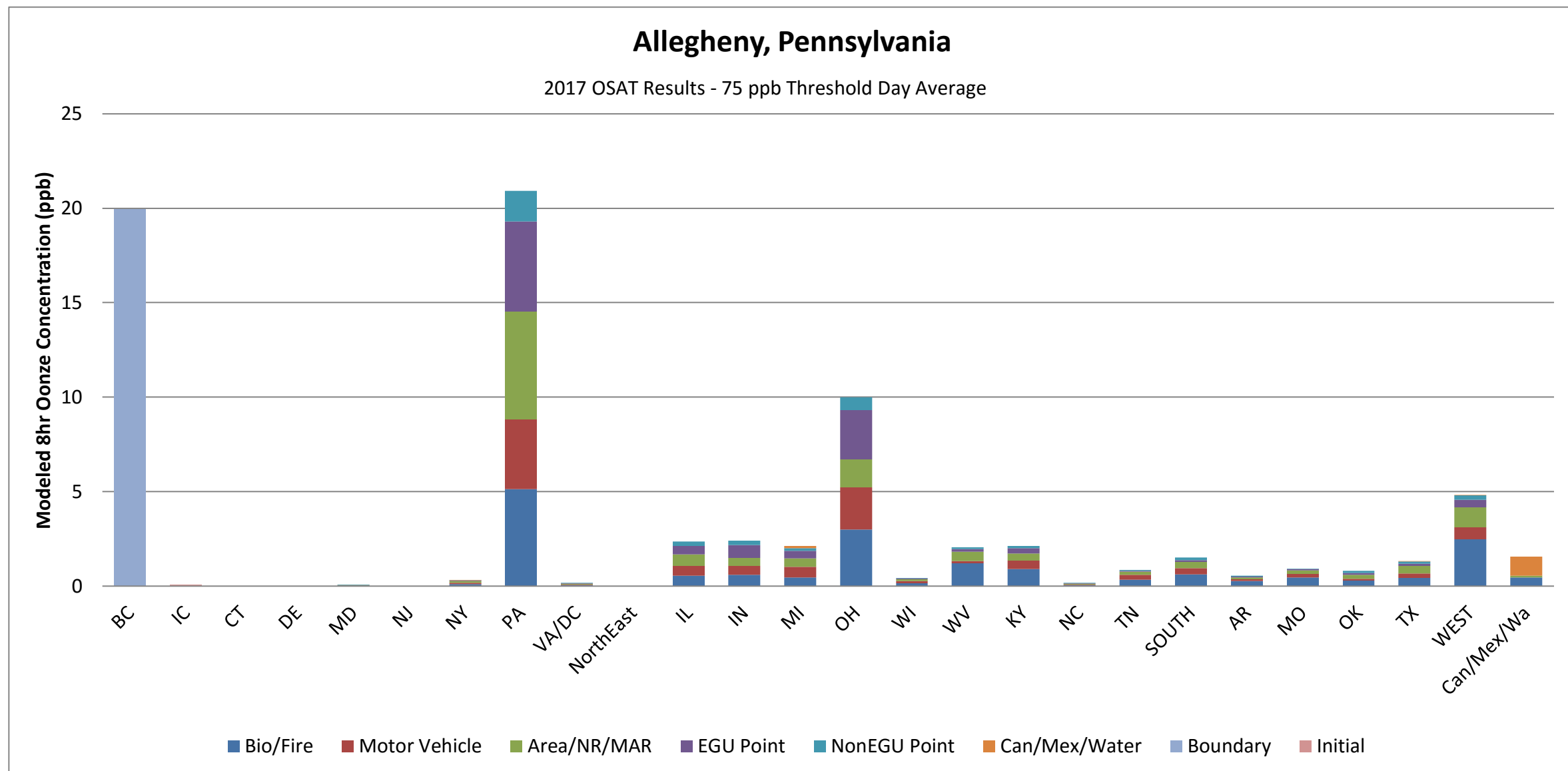
Monitor 360810124 Queens, New York

2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold										
Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total
BC	0.00	0.00	0.00	0.00	0.00	0.00	17.31	0.00	17.31	23%
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0%
CT	0.27	0.29	0.46	0.00	0.02	0.00	0.00	0.00	1.04	1%
DE	0.20	0.30	0.31	0.17	0.12	0.01	0.00	0.00	1.12	1%
MD	0.71	0.74	0.88	0.32	0.23	0.00	0.00	0.00	2.89	4%
NJ	2.46	5.50	5.47	0.90	0.45	0.06	0.00	0.00	14.85	20%
NY	1.43	1.81	3.42	0.21	0.22	0.03	0.00	0.00	7.11	9%
PA	1.77	2.01	2.09	1.63	0.57	0.00	0.00	0.00	8.07	11%
VA/DC	0.97	0.88	0.81	0.26	0.21	0.00	0.00	0.00	3.12	4%
NorthEast	0.02	0.03	0.04	0.00	0.01	0.00	0.00	0.00	0.10	0%
IL	0.32	0.26	0.36	0.21	0.14	0.00	0.00	0.00	1.29	2%
IN	0.23	0.25	0.22	0.22	0.11	0.00	0.00	0.00	1.03	1%
MI	0.41	0.57	0.46	0.43	0.14	0.10	0.00	0.00	2.10	3%
OH	0.51	0.88	0.61	0.29	0.23	0.00	0.00	0.00	2.51	3%
WI	0.16	0.16	0.15	0.05	0.05	0.00	0.00	0.00	0.57	1%
WV	0.17	0.08	0.17	0.19	0.08	0.00	0.00	0.00	0.69	1%
KY	0.13	0.12	0.13	0.11	0.04	0.00	0.00	0.00	0.54	1%
NC	0.28	0.16	0.19	0.14	0.06	0.00	0.00	0.00	0.83	1%
TN	0.04	0.06	0.04	0.02	0.01	0.00	0.00	0.00	0.16	0%
SOUTH	0.27	0.26	0.24	0.09	0.12	0.00	0.00	0.00	0.97	1%
AR	0.09	0.05	0.05	0.02	0.02	0.00	0.00	0.00	0.22	0%
MO	0.22	0.13	0.13	0.06	0.01	0.00	0.00	0.00	0.55	1%
OK	0.18	0.08	0.14	0.07	0.08	0.00	0.00	0.00	0.54	1%
TX	0.26	0.15	0.29	0.09	0.08	0.01	0.00	0.00	0.87	1%
WEST	1.46	0.49	0.82	0.32	0.19	0.01	0.00	0.00	3.28	4%
Can/Mex/Wa	0.54	0.00	0.39	0.00	0.00	2.98	0.00	0.00	3.91	5%
<b>Grand Total</b>	<b>13.09</b>	<b>15.24</b>	<b>17.87</b>	<b>5.79</b>	<b>3.18</b>	<b>3.19</b>	<b>17.31</b>	<b>0.03</b>	<b>75.70</b>	<b>100%</b>



Monitor 420031005 Allegheny, Pennsylvania

2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold											
Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total	
BC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.93	0.00	19.93	26%
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0%
CT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
DE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
MD	0.03	0.01	0.02	0.00	0.02	0.00	0.00	0.00	0.07	0.07	0%
NJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
NY	0.10	0.06	0.10	0.01	0.01	0.01	0.00	0.00	0.30	0.30	0%
PA	5.12	3.69	5.72	4.77	1.60	0.00	0.00	0.00	20.91	28%	
VA/DC	0.05	0.04	0.05	0.01	0.02	0.00	0.00	0.00	0.16	0.16	0%
NorthEast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%
IL	0.56	0.51	0.61	0.44	0.24	0.00	0.00	0.00	2.36	3%	
IN	0.59	0.48	0.41	0.70	0.21	0.00	0.00	0.00	2.39	3%	
MI	0.45	0.58	0.45	0.41	0.12	0.12	0.00	0.00	2.11	3%	
OH	3.00	2.24	1.47	2.60	0.69	0.00	0.00	0.00	9.99	13%	
WI	0.14	0.12	0.10	0.04	0.03	0.00	0.00	0.00	0.43	1%	
WV	1.22	0.10	0.49	0.14	0.09	0.00	0.00	0.00	2.04	3%	
KY	0.91	0.43	0.39	0.29	0.10	0.00	0.00	0.00	2.11	3%	
NC	0.05	0.04	0.04	0.02	0.01	0.00	0.00	0.00	0.15	0%	
TN	0.34	0.25	0.17	0.06	0.04	0.00	0.00	0.00	0.85	1%	
SOUTH	0.62	0.33	0.32	0.09	0.14	0.00	0.00	0.00	1.51	2%	
AR	0.27	0.08	0.10	0.05	0.05	0.00	0.00	0.00	0.55	1%	
MO	0.45	0.19	0.19	0.07	0.01	0.00	0.00	0.00	0.91	1%	
OK	0.28	0.11	0.20	0.10	0.11	0.00	0.00	0.00	0.81	1%	
TX	0.44	0.23	0.39	0.13	0.11	0.01	0.00	0.00	1.31	2%	
WEST	2.47	0.65	1.06	0.38	0.24	0.01	0.00	0.00	4.80	6%	
Can/Mex/Wa	0.45	0.00	0.11	0.00	0.00	1.00	0.00	0.00	1.56	2%	
<b>Grand Total</b>	<b>17.50</b>	<b>10.14</b>	<b>12.40</b>	<b>10.29</b>	<b>3.84</b>	<b>1.15</b>	<b>19.93</b>	<b>0.05</b>	<b>75.30</b>	<b>100%</b>	



Monitor 421010024 Philadelphia, Pennsylvania

2017 OSAT Results (Modeled ppb) -- 75 ppb Threshold										
Row Labels	Bio/Fire	Motor Vehicle	Area/NR/MAR	EGU Point	NonEGU Point	Can/Mex/Water	Boundary	Initial	Total	% of Total
BC	0.00	0.00	0.00	0.00	0.00	0.00	16.00	0.00	16.00	21%
IC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0%
CT	0.01	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.04	0%
DE	0.25	0.65	0.52	0.42	0.22	0.00	0.00	0.00	2.06	3%
MD	0.79	1.82	1.52	0.58	0.42	0.00	0.00	0.00	5.13	7%
NJ	0.31	1.44	1.10	0.26	0.14	0.00	0.00	0.00	3.27	4%
NY	0.04	0.04	0.07	0.01	0.01	0.00	0.00	0.00	0.16	0%
PA	2.33	6.18	5.00	3.90	1.29	0.00	0.00	0.00	18.71	25%
VA/DC	0.84	1.04	0.73	0.26	0.19	0.00	0.00	0.00	3.06	4%
NorthEast	0.01	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.04	0%
IL	0.37	0.24	0.41	0.41	0.17	0.00	0.00	0.00	1.59	2%
IN	0.45	0.54	0.46	0.93	0.23	0.00	0.00	0.00	2.62	3%
MI	0.08	0.12	0.09	0.11	0.03	0.02	0.00	0.00	0.45	1%
OH	1.04	1.60	0.99	0.98	0.40	0.00	0.00	0.00	5.01	7%
WI	0.07	0.07	0.06	0.02	0.02	0.00	0.00	0.00	0.23	0%
WV	0.57	0.25	0.63	0.59	0.23	0.00	0.00	0.00	2.26	3%
KY	0.76	0.73	0.68	0.59	0.20	0.00	0.00	0.00	2.95	4%
NC	0.19	0.17	0.13	0.12	0.06	0.00	0.00	0.00	0.67	1%
TN	0.22	0.34	0.20	0.08	0.06	0.00	0.00	0.00	0.90	1%
SOUTH	0.57	0.67	0.51	0.21	0.26	0.00	0.00	0.00	2.22	3%
AR	0.13	0.08	0.08	0.05	0.04	0.00	0.00	0.00	0.39	1%
MO	0.38	0.24	0.23	0.08	0.01	0.00	0.00	0.00	0.93	1%
OK	0.22	0.09	0.20	0.09	0.11	0.00	0.00	0.00	0.72	1%
TX	0.43	0.27	0.49	0.14	0.15	0.02	0.00	0.00	1.51	2%
WEST	1.30	0.48	0.74	0.30	0.19	0.01	0.00	0.00	3.02	4%
Can/Mex/Wa	0.16	0.00	0.18	0.00	0.00	0.81	0.00	0.00	1.15	2%
<b>Grand Total</b>	<b>11.51</b>	<b>17.09</b>	<b>15.06</b>	<b>10.15</b>	<b>4.41</b>	<b>0.86</b>	<b>16.00</b>	<b>0.03</b>	<b>75.10</b>	<b>100%</b>

