

Updating Transportation Conformity Budgets for Ozone (NO_x and VOC)

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Inter Agency Consulting Group Meeting
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Transportation Conformity Budgets

2008 Ozone Standard

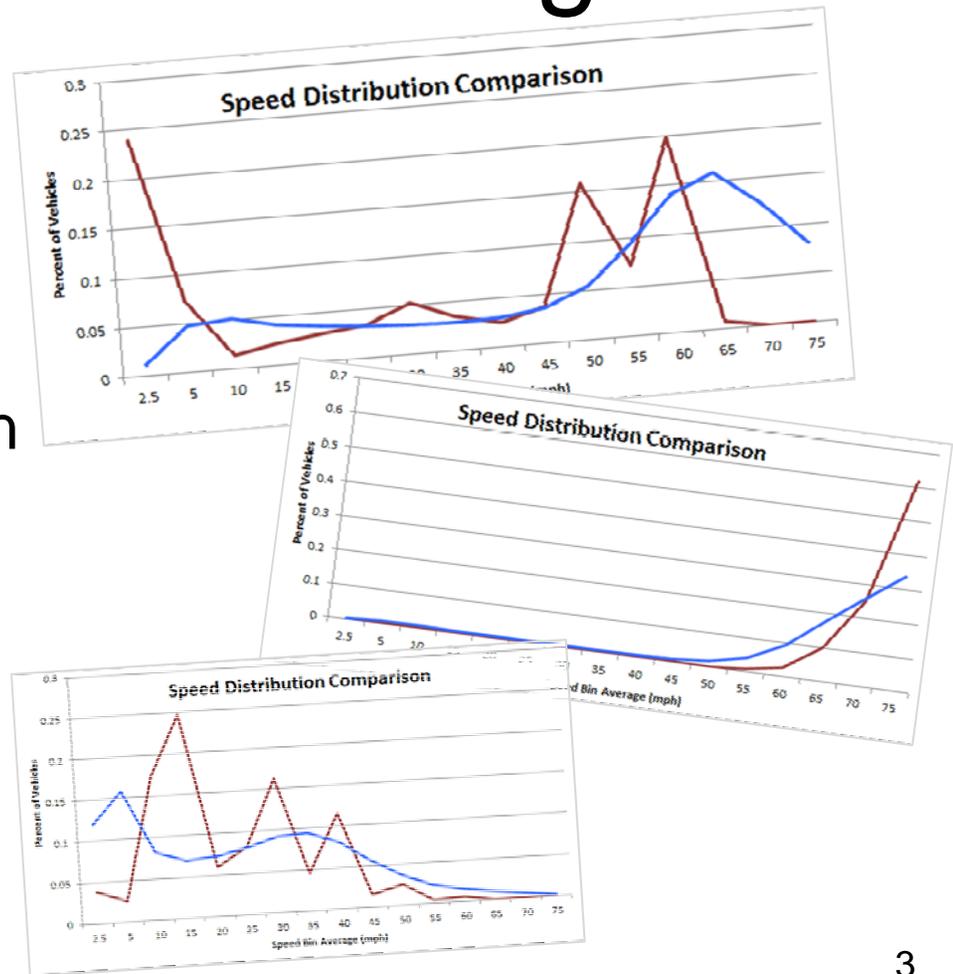
- Redesignation request and maintenance plan included budget for 2030
- Budgets adequate April 2017

1997 PM_{2.5} Standard

- Supplement/Revision to redesignation request and maintenance plan submitted to EPA March 2014
- Budgets not yet approved

2008 Ozone Standard Budgets

- EPA asked questions regarding the maintenance plan.
- Review of 2014 MOVES model inputs revealed an erroneous table that inflated 2014 onroad emissions.



Correspondence with EPA

- On July 27, 2017, the air program responded to EPA's emissions question with corrected 2014 emissions.
- 2030 emissions are unchanged, but the budgets need revision

2011		
Onroad	NO _x	VOC
Franklin	7.83	2.4
Jefferson	12.45	4.24
St. Charles	21.04	6.73
St. Louis Co	66.34	20.17
St. Louis City	16.55	4.46
Total	124.21	38

2014	
NO _x	VOC
8	2.57
12.87	4.65
19.68	7.75
118.61	73.21
10.92	4.23
170.08	92.41

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NO _x	VOC
8	2.57
12.87	4.65
19.68	7.75
60.29	19.01
10.92	4.23
111.76	38.21

Budget Revision

- Start with new emissions difference from 2014 to 2030

Source Category	2014		2030		Difference	
	VOC	NOx	VOC	NOx	VOC	NOx
Point Sources	13.86	81.7	14.31	93.08	0.45	11.38
Area Sources	69.81	6.47	68.80	13.03	-1.01	6.56
Onroad Mobile Sources	38.21	111.76	18.42	25.57	-19.79	-86.19
Nonroad Sources	33.42	38.44	30.01	29.90	-3.41	-8.54
Total	155.30	238.37	131.54	161.58	-23.76	-76.79

- Reduce by banked emissions

Area Total 2030 Banked Emissions	2.85	0.01
Reduced Revised Safety Margin	20.91	76.78

- Determine the budgets for 2030 onroad sources

Today's Budget Discussion

Budget Revision Analysis

- The budgets for 2030 will decrease as a result of the correction to 2014 emissions error.
- The goal is to reach consensus on the final budgets.

Budget Revision Analysis

- Latest conformity analysis:

Analysis Year	Volatile Organic Compounds		Oxides of Nitrogen	
	Emissions	2015 Budget	Emissions	2015 Budget
2020	15.41	32.70	28.85	76.70
2025	11.53	32.70	18.08	76.70
Analysis Year	Emissions	2030 Budget	Emissions	2030 Budget
2030	9.68	78.49	13.04	133.65
2035	7.41	78.49	10.62	133.65
2045	6.44	78.49	9.63	133.65

All tests have been passed for all years.

Budget Revision Recommendation

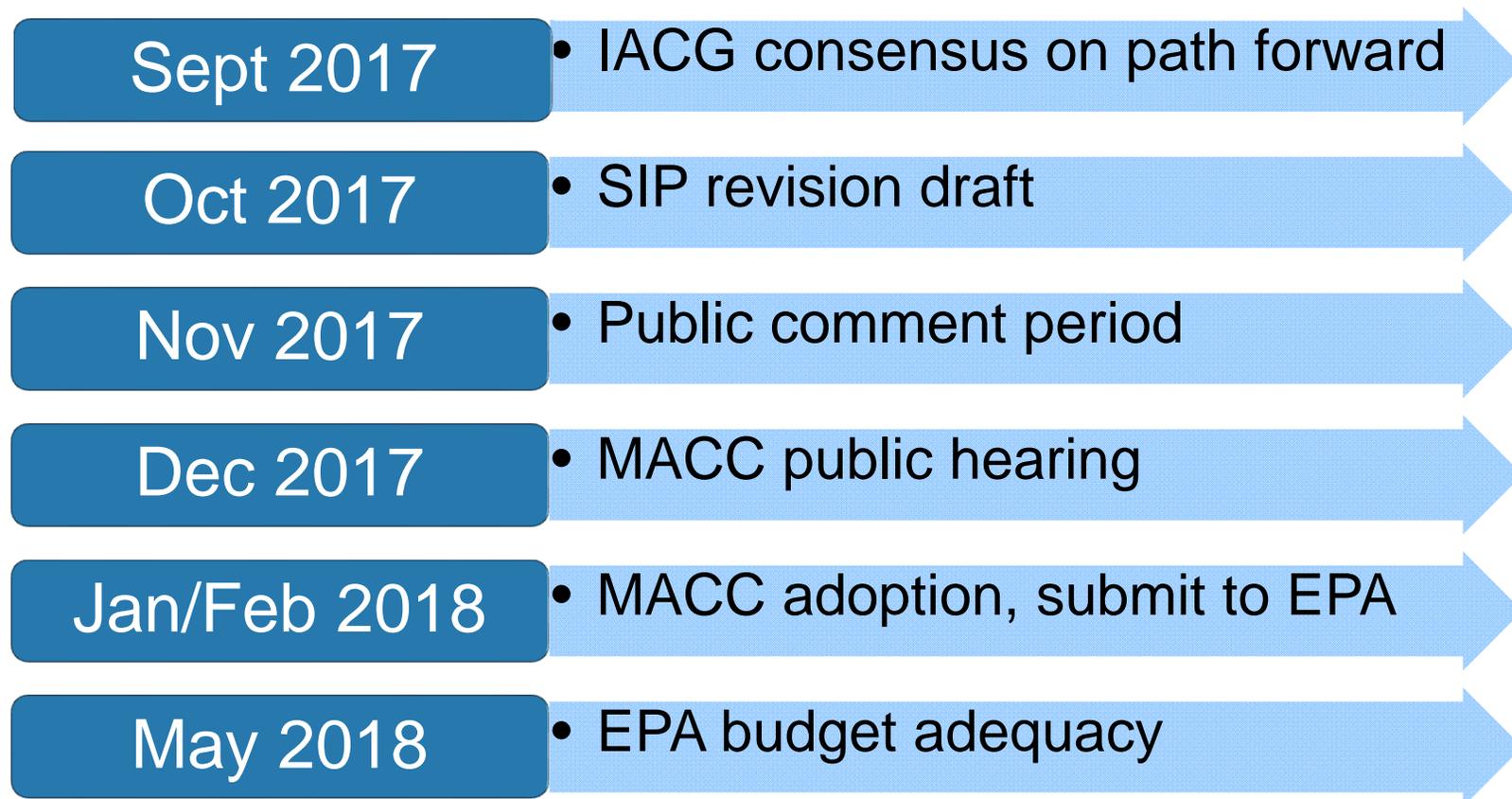
Table 3
Regional Emissions Analysis: Conformity Tests - MISSOURI
Based on Conformity Requirements for 2008 Eight-Hour Ozone Standard
(US tons per day)

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All tests have been passed for all years.

- Proposing budgets: 18.42 tons VOC and 25.57 tons NO_x per ozone season day in 2030

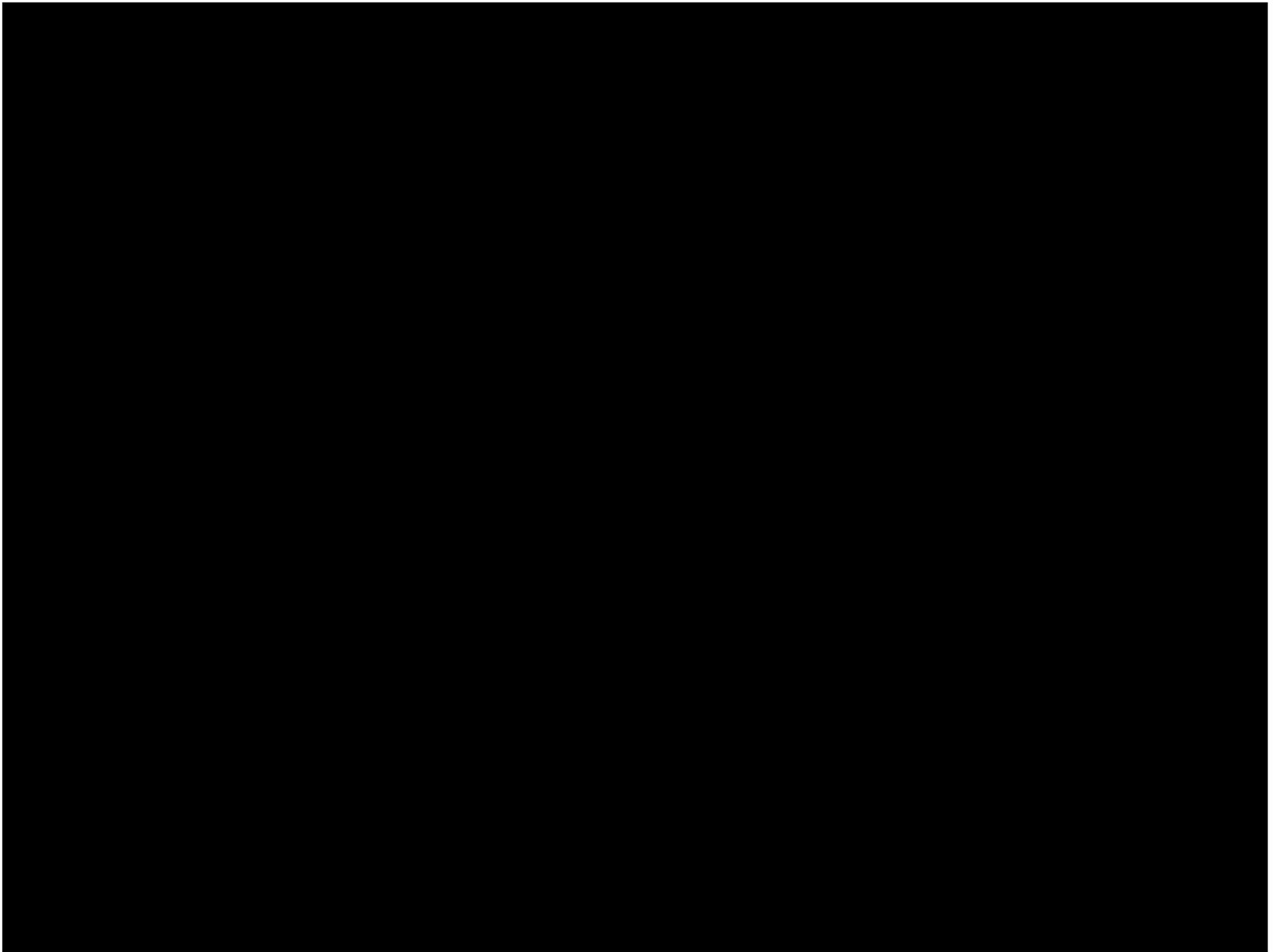
Budget Revision Timeline



In conclusion...

- The air program welcomes comments ...preferably before Oct. 13, 2017.
- The comment period on the full SIP document will be in October and November
- Questions: stacy.allen@dnr.mo.gov





40 CFR 93.124

(a) In interpreting an applicable implementation plan (or implementation plan submission) with respect to its motor vehicle emissions budget(s), the MPO and DOT may not infer additions to the budget(s) that are not explicitly intended by the implementation plan (or submission). Unless the implementation plan explicitly quantifies the amount by which motor vehicle emissions could be higher while still allowing a demonstration of compliance with the milestone, attainment, or maintenance requirement and explicitly states an intent that some or all of this additional amount should be available to the MPO and DOT in the emissions budget for conformity purposes, the MPO may not interpret the budget to be higher than the implementation plan's estimate of future emissions.



	VOC Budget	Remaining Safety Margin VOC	NOx Budget	Remaining Safety Margin NOx
0%	18.42	20.91	25.57	76.78
10%	20.51	18.82	33.25	69.11
20%	22.60	16.73	40.93	61.43
30%	24.69	14.64	48.61	53.75
40%	26.78	12.55	56.28	46.07
50%	28.88	10.46	63.96	38.39
60%	30.97	8.36	71.64	30.71
70%	33.06	6.27	79.32	23.04
80%	35.15	4.18	87.00	15.36
90%	37.24	2.09	94.68	7.68
100%	39.33	0.00	102.35	0.00