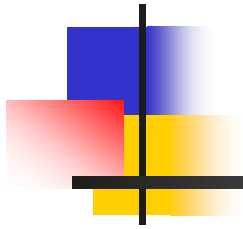


VISTAS 2018 Regional Haze and ASIP 2009 PM_{2.5} Best and Final Projections



MANE-VU TSC Call
March 18, 2008



Best and Final Inventory Changes for 2009 and 2018

- Point EGU and non-EGU only
- Updates to EGU for consent decrees, changes to control assumptions from IPM v2.1.9
- BART controls for non-EGU known by Oct 2007
- Source specific corrections or controls
- For 2009 only, incorporate MRPO Base M point source inventory
 - Important for nonattainment areas bordering OH, IN

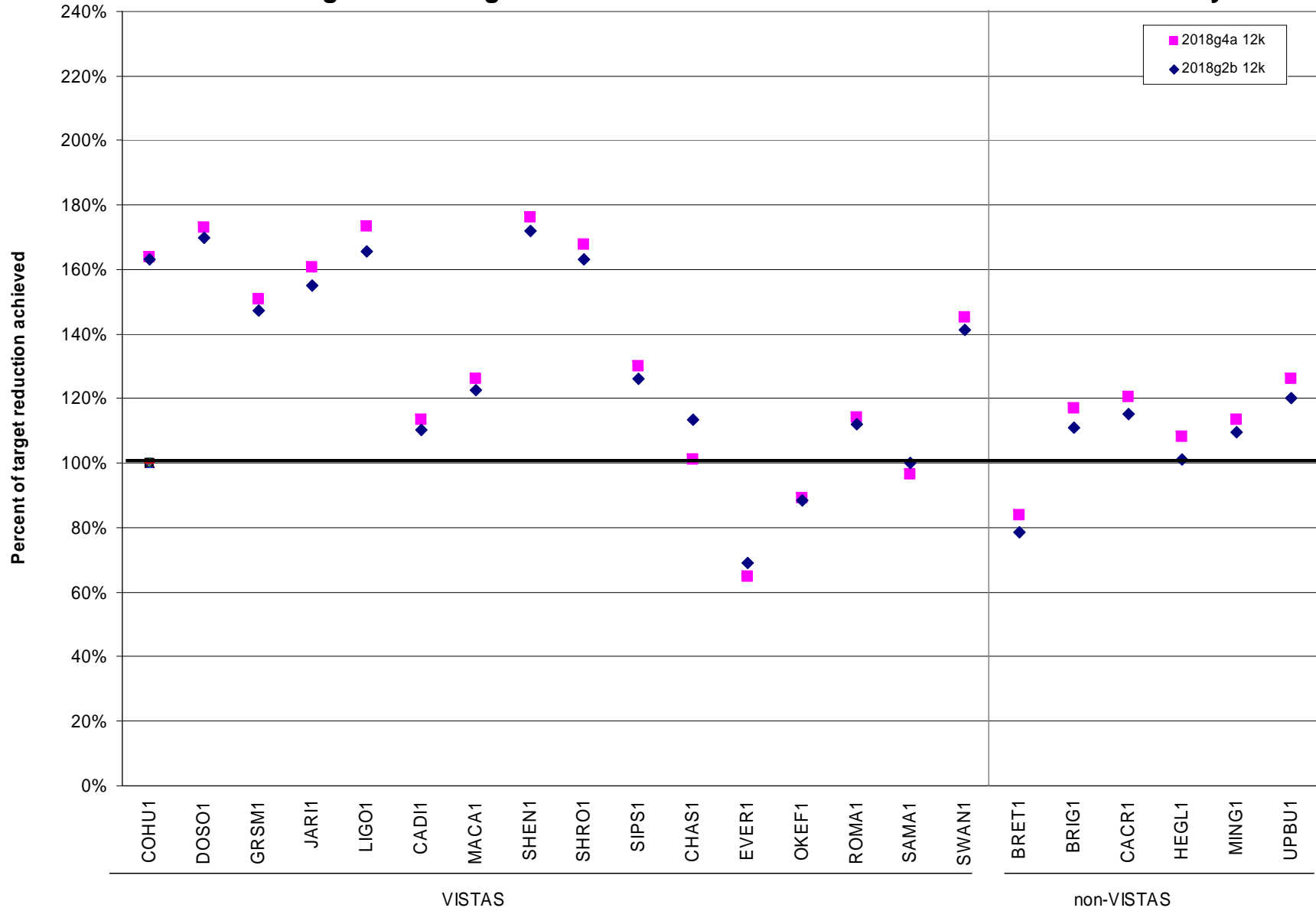


VISTAS Point Source Emissions 2018 Annual SO₂

State	2018 Point Source SO ₂ (Tons)		
	BaseG2	B&F (G4)	Delta
Alabama	249,075	239,154	-9,921
Florida	213,387	265,838	+52,451
Georgia	138,778	127,680	-10,914
Kentucky	266,744	262,784	-3,960
Mississippi	41,824	40,888	-936
North Carolina	161,085	166,480	+5,395
South Carolina	146,851	147,787	+935
Tennessee	189,919	169,354	-20,565
Virginia	183,164	156,778	-26,386
West Virginia	168,128	167,901	-227
VISTAS Total	1,758,956	1,744,827	-14,129

Jan 31, 2008

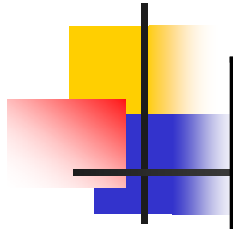
CMAQ 2018g4a vs 2018g2b Method1 Prediction at VISTAS+ sites on W20% Days



2018 Best and Final vs Base G2 Visibility Projections

Class I area	2000-04 Baseline	Uniform Progress	Base G2	Difference G2-Uniform	Best and Final	Difference BaF-G2
CHAS	25.75	22.31	21.85	-0.46	22.27	0.42
COHU	30.25	25.71	22.84	-2.87	22.80	-0.03
DOSO	29.04	24.69	21.64	-3.04	21.50	-0.14
EVER	22.30	19.92	20.65	0.73	20.76	0.11
GRSM	30.28	25.79	23.66	-2.13	23.50	-0.16
JARI	29.12	24.91	22.59	-2.32	22.36	-0.24
LIGO	28.77	24.67	21.98	-2.69	21.65	-0.33
MACA	31.37	26.64	25.56	-1.07	25.40	-0.17
OKEF	27.13	23.42	23.85	0.43	23.82	-0.03
ROMA	26.48	23.12	22.72	-0.40	22.65	-0.07
SAMA	26.31	22.89	22.89	0.00	23.01	0.12
SHEN	29.31	25.12	22.11	-3.01	21.93	-0.18
SHRO	28.66	24.65	22.11	-2.54	21.92	-0.18
SIPS	29.03	24.80	23.69	-1.11	23.53	-0.16
SWAN	24.71	21.64	20.37	-1.27	20.26	-0.12

VISTAS States SIP Status



State	Draft	Proposed	Final
AL	11/16/07	3/10/08	May 2008
FL	BART TBD	Summer? 2008	
GA	April 2008	May 2008	Aug 2008
KY	12/17/07	2/28/08	May 2008
MS	12/11/07	Apr 2008	Jun 2008
NC	8/2/07	10/12/07	12/17/07
SC	9/26/07	11/09/07	12/22/07
TN	10/11/07	Nov 07; 2/21/08	Apr 2008
VA	10/1/07	Jul 2008	Sep 2008
WV	9/21/07	Nov 07; May 08	July 2008



VISTAS Questions

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ASIP 2009 Best and Final (Base G4) PM_{2.5} Design Value Projections

- 2009 Best and Final (Base G4) compared to 2002 Base G2
- PM_{2.5} Design Value (DV) Projections using relative response factors (RRFs):
 - SANDWICH Spreadsheet Approach same as used for 2009 Base G2 (G4a_Excel)
 - EPA beta MATS tool (Jan 10, 2008 version) (G4a_MATS)



ASIP Point Source Emissions

2009 Annual SO₂

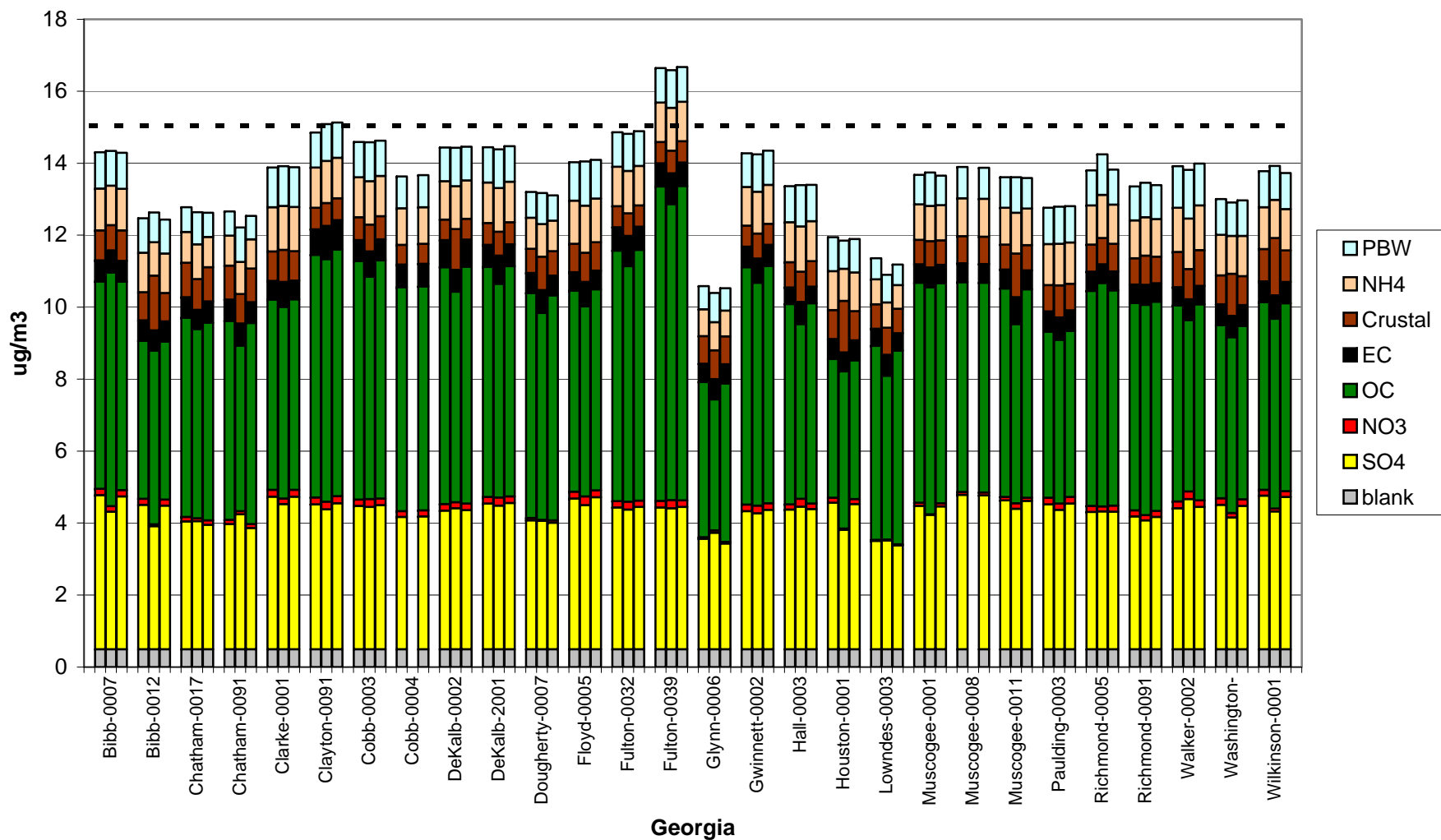
State	Base G2	Best and Final	Difference BaF - G2
AL	479,297	479,297	0
FL	251,565	354,482	102,917
GA	471,436	462,666	-8,769
KY	326,611	308,087	-18,524
MS	102,143	102,210	67
NC	284,822	284,823	0
SC	172,933	176,315	3,382
TN	326,088	320,374	-5,714
VA	255,672	232,816	-22,856
WV	333,463	324,550	-8,913
Total	3,004,030	3,045,620	41,589



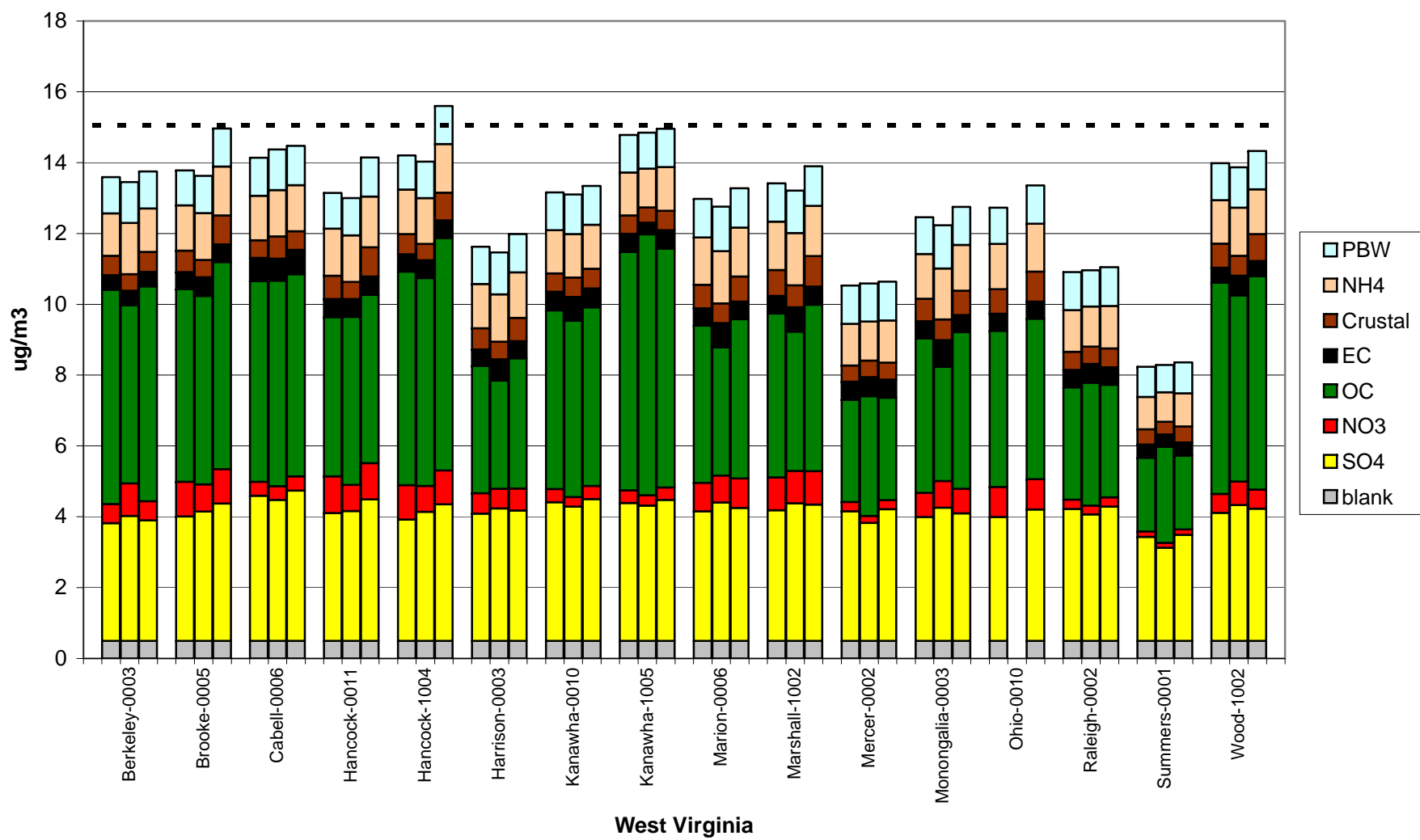
ASIP 2009 Best and Final (Base G4) PM_{2.5} Design Value Projections

- Bottomline, 2009 emissions change slightly between Base G2 and Best and Final (except FL increases)
 - Consent decrees, local sources
- Bottomline, Best and Final results in slight decreases (0.0-0.1 µg/m³) in PM_{2.5} for most states
 - Except WV, where 2009 Best and Final shows all monitors in attainment (better than Base G2)
 - Except FL, where PM_{2.5} increases due to increased SO₂, still low PM_{2.5} (mostly <10 µg/m³)

Georgia 12km 2009 Projected DVF by G4a_EXCEL(Left) and G4a_MATS (Middle) and G2a_EXCEL (Right)



West Virginia 12km 2009 Projected DVF by G4a_EXCEL(Left) and G4a_MATS (Middle) and G2a_EXCEL (Right)



Design Values for 2002 Baseline and 2009 Best and Final for Selected Monitors in Nonattainment Areas

State	County	2002 Baseline DVC	2009 B&F DVF	State	County	2002 Baseline DVC	2009 B&F DVF
AL	Jefferson	18.4	17.2	NC	Catawba	15.6	13.0
AL	Jefferson	15.0	13.8	NC	Davidson	16.0	13.3
AL	Jefferson	17.1	15.8	NC	Guilford	0.0	0.0
AL	Jefferson	15.1	13.8	TN	Hamilton	16.3	14.4
DC	D. Columbia	15.7	13.0	TN	Hamilton	15.3	13.6
DC	D. Columbia	15.1	12.5	TN	Knox	16.0	13.9
GA	Clayton	16.5	14.9	TN	Knox	16.7	14.6
GA	Cobb	16.3	14.6	TN	Knox	16.0	13.9
GA	DeKalb	15.9	14.4	WV	Berkeley	16.2	13.6
GA	DeKalb	16.2	14.4	WV	Brooke	16.7	13.8
GA	Fulton	16.5	14.9	WV	Cabell	16.5	14.1
GA	Fulton	18.3	16.6	WV	Hancock	15.8	13.1
GA	Gwinnett	16.1	14.3	WV	Hancock	17.3	14.2
GA	Richmond	15.6	13.8	WV	Kanawha	15.4	13.2
GA	Walker	15.7	13.9	WV	Kanawha	17.1	14.8
KY	Fayette	15.6	13.4	WV	Marion	15.3	13.0
KY	Jefferson	16.6	14.8	WV	Marshall	15.6	13.4
KY	Jefferson	16.1	14.2	WV	Wood	16.1	14.0
KY	Jefferson	15.4	13.6				



ASIP Questions

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