

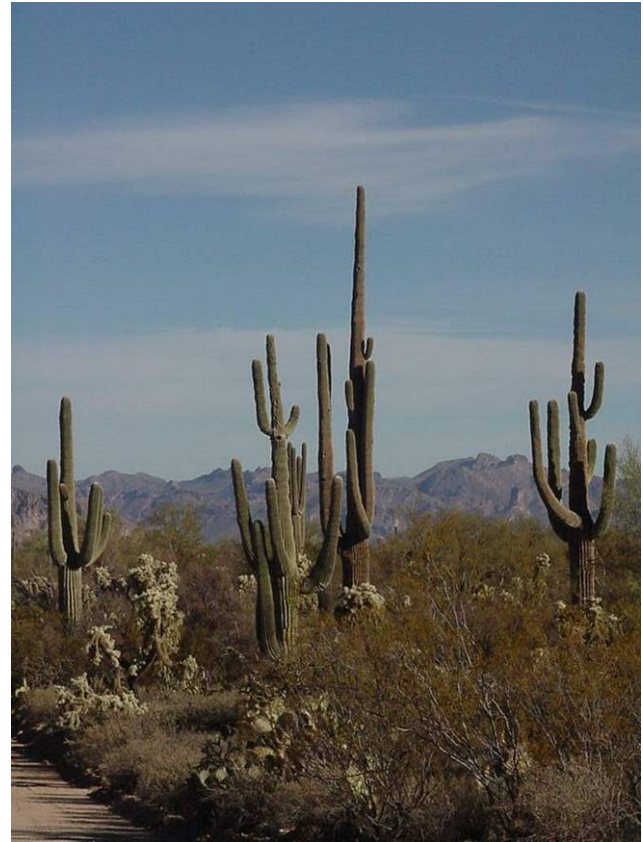
PM₁₀ and Pinal County

Regulatory Background
Standards, Statutes and Sanctions

Pinal County Air Quality
11/6/08
S:\..\segment2_dp4

Dust.

Health Issue. Quality of life issue
I can't define it. But I know it when I see it.



PM₁₀ and Weather

Wind vs. Stagnation

Flow vs. Diffusion



The Players in the Process

The Federal Government

- The Congress of the United States
 - Adopted the Clean Air Act
 - Directed EPA to adopt uniform standards
 - Required states to adopt plans to fix problems
- The US EPA
 - Adopted the NAAQS
 - Reviews local air quality monitoring
 - Designates areas attainment or nonattainment
 - Passes judgment on state implementation plans
 - Imposes sanctions if states don't act

The Players in the Process

The Arizona Legislature

- Designated air quality planning agencies
 - MPOs (i.e. MAG) develop urban area plans
 - ADEQ develops rural area plans
 - ADEQ Director signs all EPA submittals
- Imposed specific mandates
 - ADEQ administers emission testing, Ag BMPs, etc.
 - Cities/counties must address dirt roads, ban burning, etc.
- Allowed counties to regulate local air quality
 - Authority defaults to ADEQ if counties don't act
- Denied cities discretionary authority

The Players in the Process

Local Governments

- **Counties**
 - Monitor air quality
 - Adopt and enforce rules & ordinances
 - Address specific statutory mandates
 - “At least as stringent” as ADEQ
 - More stringent rules require justification
 - Voluntary SIP commitments
- **Cities**
 - Adopt and enforce ordinances
 - But only to address statutory mandates
 - Comply with statutes and county-adopted rules
 - Voluntary SIP commitments

The Rules of the Road

- The NAAQS
 - National Ambient Air Quality Standards
 - Uniform across the country
 - Primary NAAQS – health based
 - Secondary NAAQS – nuisance based
- Six pollutants
 - PM₁₀
 - Ozone
 - Carbon monoxide
 - Sulfur dioxide
 - NO_x (oxides of nitrogen)
 - Lead
- Ozone is some concern in central Arizona

The Rules of the Road

The PM₁₀ NAAQS

- 24-hour PM₁₀ standard – 150 µg/m³
 - Standard looks at a 24-hour average
- Exceedance-based standard
 - 3 free bites at the apple in 3 years
 - 4th bite (in 3 years) is “poison” ... and grounds for a nonattainment designation
- PM₁₀ is the issue in Pinal

The Rules of the Road

The SIP - If it's broke you have to fix it.

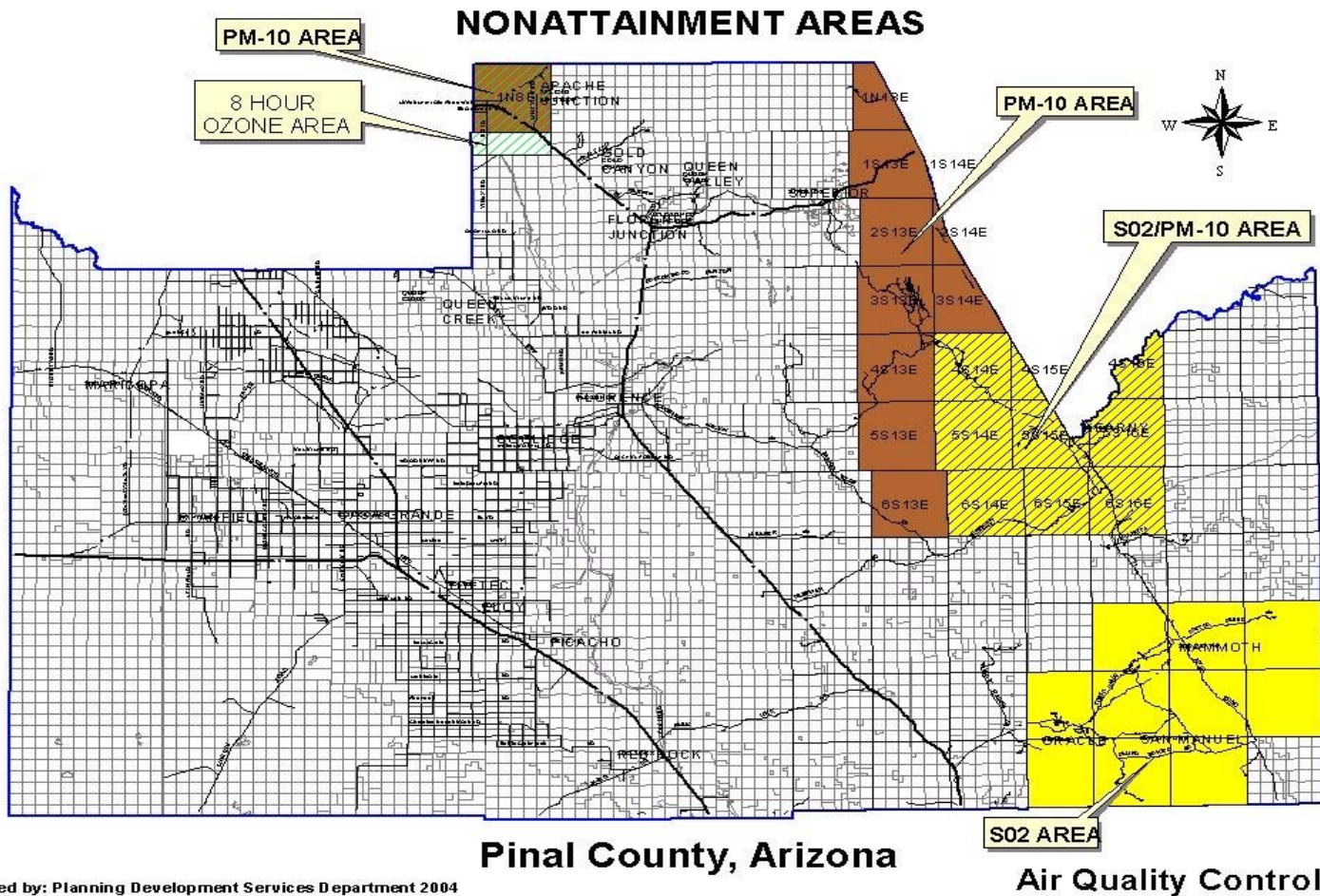
- **EPA's State Implementation Plan Requirements**
 - **Show compliance with NAAQS**
 - **Measures must be legally enforceable**
 - **Once approved, changes require EPA approval**
- **State/Local SIP elements**
 - **Statutes and legislative mandates (auto emission testing)**
 - **ADEQ rules (Ag BMPs)**
 - **City/County ordinances & rules**
 - "Point source" or "smokestack" emissions
 - Fugitive emissions – construction, OHVs, parking lots, etc.
 - **City/County commitments by resolution**
 - Dirt road paving

Enforcement and the SIP

- EPA will only approve enforceable measures
- SIP approved measures are enforceable by:
 - The local governing body
 - The EPA
 - Citizen suit
- Penalties for violation of approved measures
 - Under AZ law Up to \$10,000 per day/violation
 - Under the Clean Air Act, up to \$25,000 per day/violation

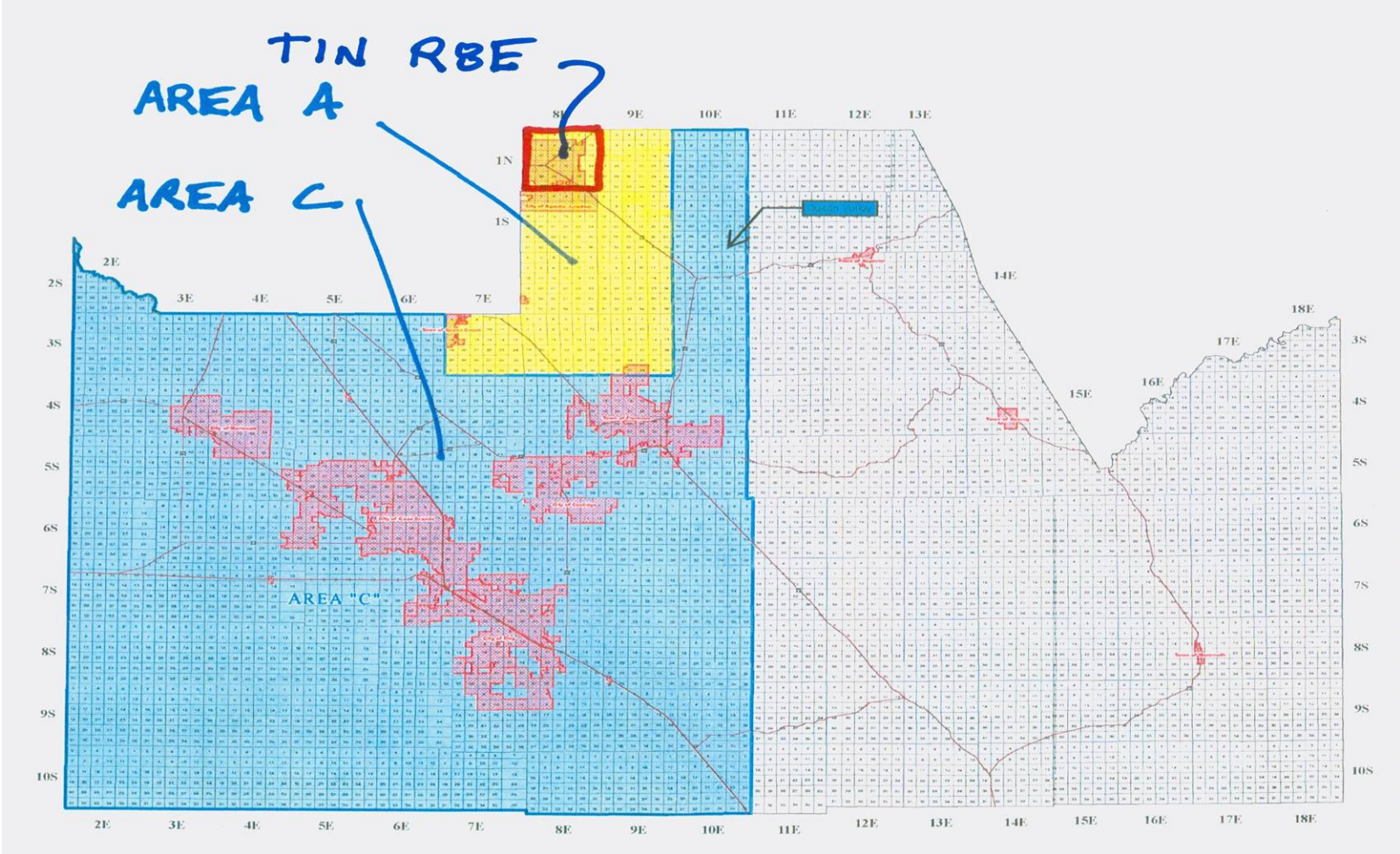
The EPA's Map of Pinal

What's already broke?



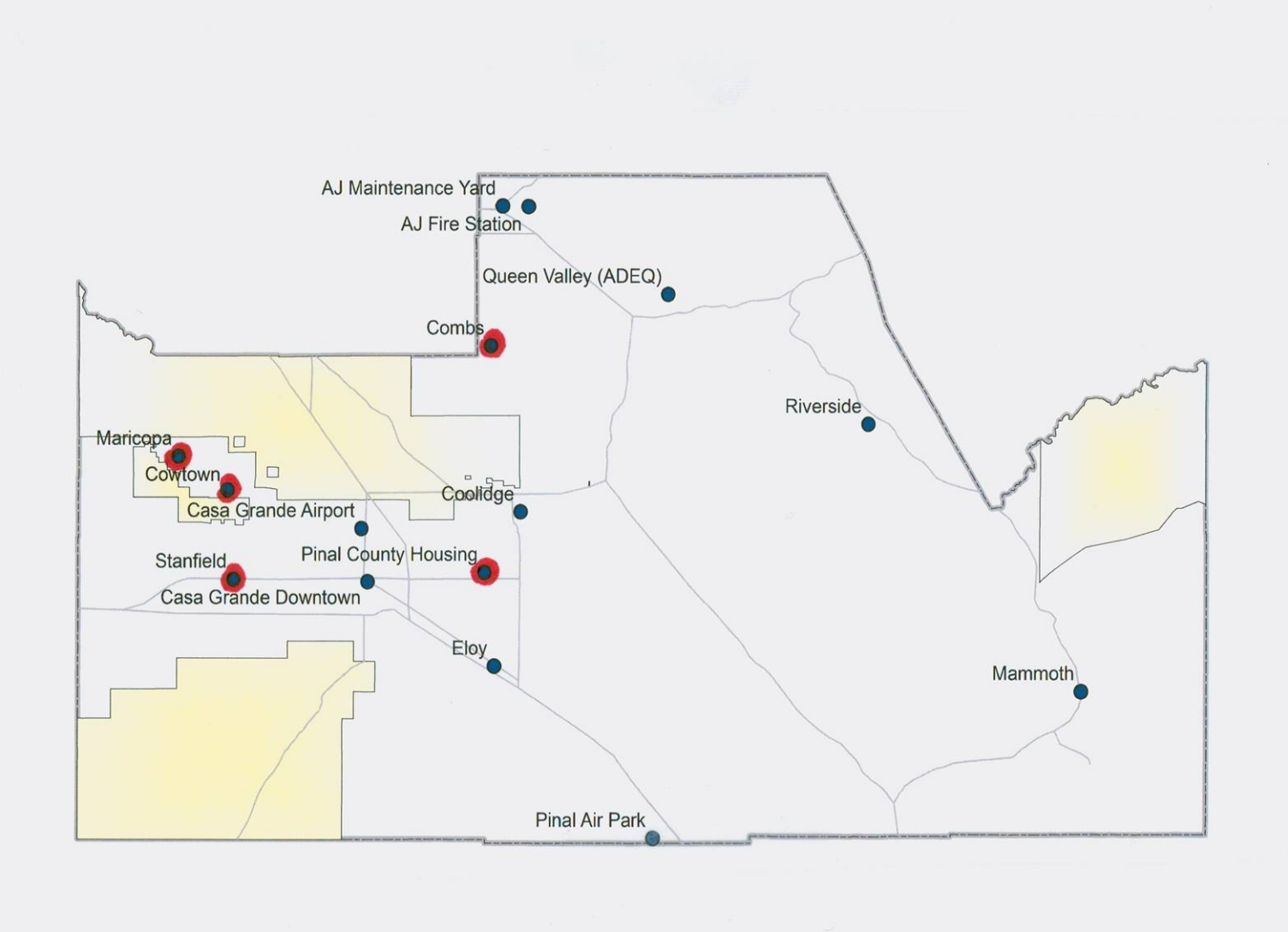
The Legislature's Map of Pinal

What has the Legislature tried to fix?



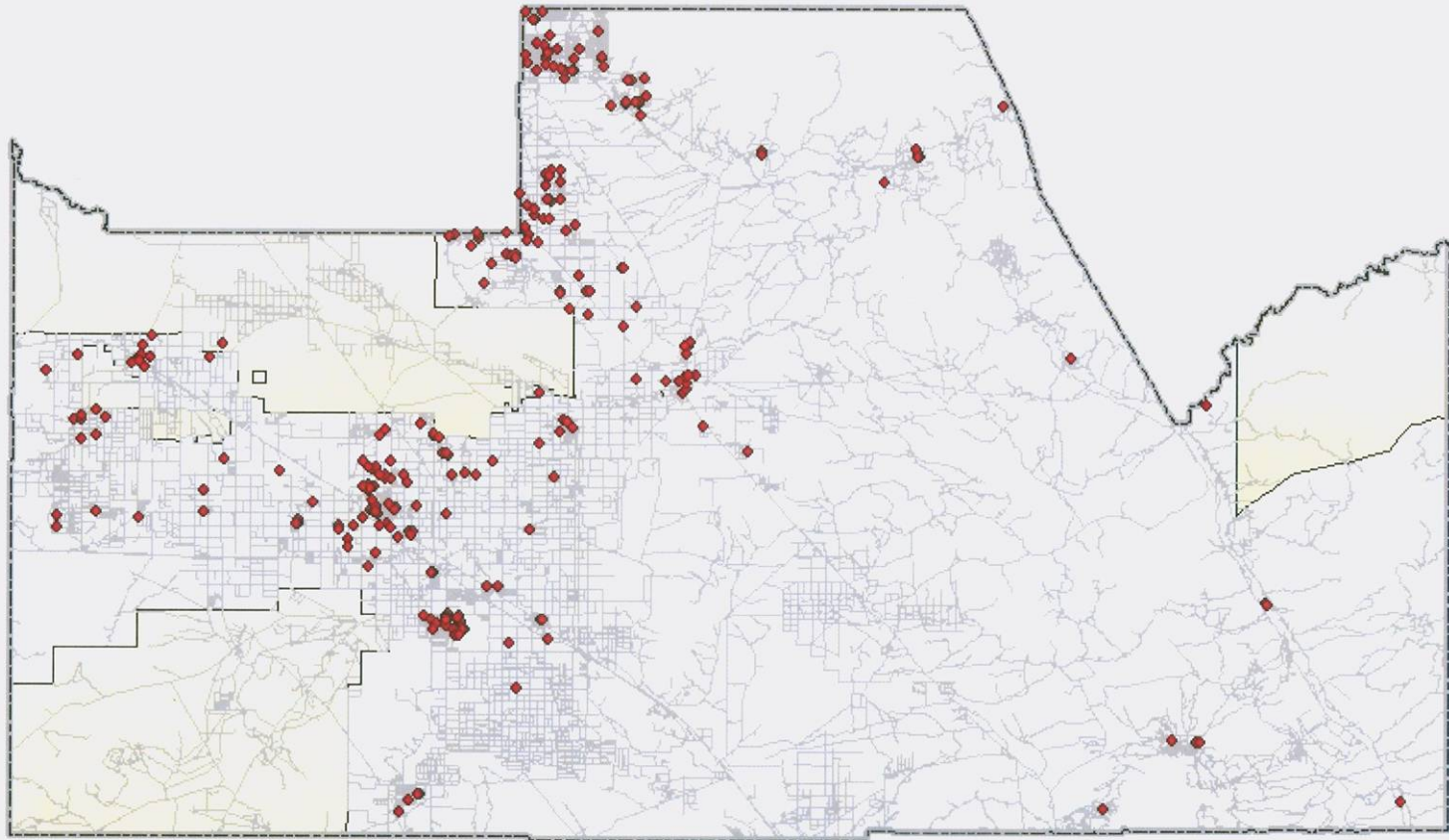
Map of Pinal County Monitors

Where are we seeing issues?



Map of Complaints – 2006

Where do citizens think there's a problem?



Pinal Monitoring Data

- Circulate actual filters
 - New
 - Used
- PM₁₀ data – 2007 vs. 2008
 - Stagnation exceedances are red
 - Wind exceedances are yellow
- To quote Sergeant Joe Friday:
 - **The facts ma'am. Nothing but the facts.**

Combs School/Johnson Ranch

2007 Data

	January	February	March	April	May	June	July	August	September	October	November	December
1				43.5	214.6	66.6	68.9	58.4	145.9	116.1	95.7	12.8
2				76.3	57.2	63.6	97.3	52.1	23.5	94.1	112.8	20.4
3				95.6	80.0	60.2	114.0	52.6	52.9	140.2	95.1	AN
4				91.8	123.1	104.2	130.1	56.9	70.2	96.3	79.0	AN
5				104.4	86.8	113.7	211.6	28.2	114.7	296.9	135.9	AN
6				57.5	32.1	360.5	521.4	30.1	34.5	71.0	132.1	48.5
7				50.1	66.8	106.9	98.4	46.5	55.1	55.0	133.7	97.4
8				70.5	326.2	105.0	81.2	82.0	57.6	167.0	123.1	8.8
9				76.3	70.6	66.9	77.2	77.9	53.1	166.0	112.3	9.8
10				74.8	86.7	45.4	84.6	81.1	65.3	180.7	99.2	7.9
11				106.3	83.5	237.4	79.0	55.0	118.4	123.4	67.2	6.4
12				160.2	74.0	67.7	82.3	59.9	83.4	147.3	92.0	17.6
13				43.3	56.8	111.1	84.0	248.4	119.4	99.2	106.4	23.6
14				24.5	118.1	88.5	55.6	72.0	104.1	66.8	107.5	15.9
15				57.7	108.8	179.2	40.9	64.8	133.5	130.5	190.6	18.7
16				64.8	167.8	BJ	223.8	969.5	53.2	164.8	66.9	16.1
17				64.5	71.2	BJ	78.7	130.8	65.3	109.7	67.8	41.9
18				97.9	79.2	210.8	108.4	64.6	121.5	135.5	61.8	44.1
19				85.0	46.9	125.4	866.9	68.0	125.7	207.8	92.8	56.3
20			80.5	90.5	60.4	124.8	59.2	114.4	123.7	77.8	86.6	48.9
21			273.2	20.4	100.6	128.7	85.9	106.4	94.7	166.2	91.9	49.7
22			18.0	16.6	115.0	119.9	23.2	121.3	68.3	86.5	63.4	23.0
23			9.6	34.4	102.2	73.4	160.9	230.9	24.8	96.2	69.5	21.3
24			11.9	58.7	102.1	49.0	49.3	197.7	72.3	385.2	51.9	30.3
25			13.4	58.5	85.9	146.8	54.0	43.5	116.1	126.7	42.1	23.5
26			35.3	77.1	54.5	114.0	42.2	30.1	113.0	157.5	97.4	31.9
27			170.1	80.4	39.3	90.0	95.6	41.4	126.3	81.4	125.9	33.4
28			60.7	56.0	38.5	86.1	110.2	61.9	131.5	74.5	188.5	40.7
29			44.5	21.4	102.0	135.4	21.4	102.6	102.2	130.3	114.3	34.2
30			32.3	65.7	83.2	72.5	83.9	283.0	50.9	103.0	12.3	30.6
31			41.1		91.9		127.5	65.0		108.0		35.4

2008 Data

	January	February	March	April	May	June	July	August	September	October	November	December
1	39.6	53.6	40.9	69.7	67.5	49.8	73.4	89.8	17.4	91.1		
2	68.5	25.8	31.7	85.4	59.4	60.5	60.7	49.2	29.5	106.2		
3	64.0	31.1	77.4	62.7	50.1	66.5	74.1	48.8	54.7	78.1		
4	39.3	8.9	58.0	65.5	40.1	79.6	51.2	54.3	63.0	61.8		
5	29.4	10.6	58.4	63.4	76.5	98.6	40.0	107.6	62.9	76.5		
6	8.4	17.8	42.1	37.6	65.0	70.6	67.2	27.9	52.7	71.7		
7	9.9	26.1	68.2	55.2	65.1	56.5	41.7	85.4	35.0	78.3		
8	15.9	39.7	35.4	77.5	82.5	62.4	42.9	74.4	94.7	92.5		
9	18.8	43.5	28.1	75.8	86.4	73.3	44.5	26.2	55.4	61.2		
10	27.7	29.4	70.3	68.7	83.1	63.6	23.6	27.9	79.5	97.7		
11	32.6	38.1	63.7	54.4	62.4	46.4	18.5	60.5	194.7	88.0		
12	28.7	48.8	54.3	46.1	84.2	85.3	17.1	92.2	75.3	51.7		
13	16.0	86.6	60.3	48.0	62.7	92.4	20.2	97.5	71.2	56.3		
14	54.6	55.2	79.4	80.0	47.2	65.0	25.6	32.1	39.9	65.2		
15	60.1	12.4	55.4	79.7	121.1	51.6	42.8	35.9	101.9	70.4		
16	52.2	7.5	28.3	93.4	56.9	84.0	54.4	34.9	75.2	69.9		
17	54.2	12.1	32.6	53.5	42.9	81.8	54.9	33.1	76.6	81.1		
18	57.5	26.3	61.9	81.9	45.2	73.1	59.4	41.5	70.4	62.4		
19	33.5	40.2	72.9	64.8	59.0	77.7	81.6	54.0	87.3	44.4		
20	27.9	28.6	76.0	44.0	52.5	97.9	12.7	61.8	41.1	66.0		
21	41.6	21.8	75.6	65.5	170.7	85.8	30.4	51.3	28.2	72.2		
22	70.2	27.6	40.1	78.6	72.6	75.9	32.8	77.4	67.0	86.1		
23	81.4	17.6	43.3	83.5	19.6	73.0	43.4	55.6	70.8			
24	49.2	18.0	90.7	72.1	24.5	70.9	48.4	41.1	109.5			
25	37.0	36.0	97.2	69.4	19.9	101.0	59.0	67.9	148.2			
26	37.7	53.5	94.5	53.5	16.6	54.8	40.9	13.4	59.9			
27	12.4	50.0	73.4	93.0	28.8	37.3	36.0	14.4	52.9			
28	6.7	60.2	87.8	87.8	34.3	40.9	69.4	23.6	45.5			
29	27.3	74.3	51.4	73.2	43.9	61.9	74.0	24.2	192.1			
30	16.1		57.7	84.3	54.2	47.1	81.0	33.9	104.5			
31	40.5		80.5		52.7		66.1	15.0				

Pinal County Housing

2007 Data

	January	February	March	April	May	June	July	August	September	October	November	December
1	18.2	137.8	BA	44.5	2252.8	77.4	90.5	24.5	130.2	48.9	99.1	19.3
2	18.3	BA	56.2	98.1	81.9	77.3	86.5	35.6	28.3	27.1	86.8	20.1
3	20.7	23.7	50.1	109.6	56.6	62.8	85.7	41.9	44.0	53.3	109.6	26.6
4	AT	20.8	241.7	73.7	135.5	71.0	74.8	44.2	47.8	39.5	108.3	35.9
5	BA	31.3	52.8	101.0	135.3	101.1	196.7	22.6	109.4	153.9	132.3	44.9
6	16.6	49.6	100.5	91.5	48.4	414.2	93.5	17.9	16.8	68.5	164.6	33.8
7	23.2	57.9	122.6	47.2	74.9	98.7	109.3	31.1	34.2	57.5	148.2	272.7
8	38.0	84.8	76.1	95.4	434.0	97.0	66.3	55.9	39.9	83.1	128.7	7.8
9	45.4	79.7	75.5	67.2	55.7	65.6	57.6	47.5	40.1	104.6	154.0	8.8
10	77.8	66.1	87.1	65.0	72.5	47.3	73.6	54.3	47.9	93.3	106.0	8.2
11	37.4	49.7	88.1	126.8	91.1	146.9	65.4	48.0	79.9	122.3	77.0	4.8
12	50.5	27.9	68.2	447.7	205.1	56.7	79.3	50.1	60.2	93.7	113.9	7.0
13	27.2	24.6	86.8	48.5	64.8	76.6	58.4	202.6	61.4	55.9	127.2	12.2
14	41.4	47.9	84.5	30.7	70.6	74.5	62.7	26.8	66.8	54.6	134.0	13.4
15	61.1	26.0	81.3	221.4	75.5	74.0	64.2	43.4	103.4	97.9	217.2	13.7
16	47.5	33.0	90.5	67.6	89.9	68.2	199.3	184.4	53.0	97.0	89.2	15.2
17	34.5	50.0	84.8	39.2	142.9	106.0	69.1	71.5	62.1	71.5	103.9	26.0
18	62.7	35.8	42.2	118.4	74.4	71.6	114.7	51.8	37.1	120.0	123.2	36.6
19	35.5	50.3	77.5	72.5	69.0	AT	1838.6	58.3	48.1	129.6	147.0	27.0
20	10.9	14.2	67.5	91.7	59.0	AN	93.7	61.6	61.0	90.2	113.9	38.3
21	15.2	16.0	184.3	37.4	101.7	87.6	130.8	55.7	61.3	142.7	199.8	43.7
22	9.4	28.4	15.5	24.1	88.7	108.3	21.5	50.4	36.7	127.1	63.7	26.4
23	19.9	189.4	7.1	60.3	101.1	72.0	72.9	111.0	26.3	51.2	76.5	31.0
24	17.7	27.1	10.4	33.5	94.7	73.6	44.6	142.5	37.5	63.6	76.2	34.7
25	15.0	33.2	20.2	55.4	79.4	89.5	33.3	23.0	65.2	73.4	54.1	41.5
26	16.5	58.1	26.9	62.0	68.5	97.8	29.8	18.0	72.8	129.8	132.3	36.6
27	20.5	AT	AT	75.0	54.6	76.2	40.4	26.8	90.7	94.0	149.5	33.8
28	32.9	AI	AI	87.3	57.8	78.5	111.8	43.2	56.7	81.1	139.2	49.4
29	59.2		BA	36.5	56.6	79.0	20.4	253.9	70.8	73.9	112.7	42.2
30	26.1		31.4	51.5	117.4	83.4	50.8	45.8	65.1	83.8	28.4	45.7
31	6.9		44.4		89.7		133.1	44.8		102.8		41.6

2008 Data

	January	February	March	April	May	June	July	August	September	October	November	December
1	264.9	29.6	50.6	76.9	62.8	64.7	159.2	76.5	16.0	79.5		
2	71.8	23.9	51.5	62.4	67.0	58.5	64.6	69.6	32.4	118.3		
3	53.9	34.7	36.4	57.3	106.5	63.6	106.2	32.7	47.7	85.6		
4	32.1	8.6	55.4	69.9	60.6	99.3	67.1	39.6	50.7	144.6		
5	33.4	7.5	61.7	72.0	63.3	64.7	61.9	59.8	80.7	81.1		
6	9.0	12.3	75.9	36.3	113.3	93.9	75.8	22.0	65.2	93.7		
7	9.4	36.4	65.8	64.1	47.6	79.4	22.8	60.5	53.8	101.4		
8	7.8	19.4	64.0	70.3	68.4	71.0	55.1	69.3	129.9	95.4		
9	11.8	24.7	54.7	71.4	88.6	80.7	33.4	31.0	68.1	70.4		
10	15.2	27.6	51.9	59.6	130.8	65.6	23.4	38.2	33.6	71.9		
11	23.3	29.7	63.9	64.9	AN	62.2	22.4	50.4	217.1	97.5		
12	18.1	32.6	56.7	116.5	AN	76.8	17.4	60.1	55.9	50.1		
13	18.3	27.1	60.3	65.5	77.4	100.4	24.0	58.7	40.1	85.9		
14	17.1	50.6	66.1	77.2	52.4	110.2	27.2	25.4	70.3	88.5		
15	23.5	11.8	54.8	64.9	221.1	64.0	37.3	204.1	92.3	78.3		
16	38.4	8.1	37.5	78.8	36.9	75.5	55.3	89.1	46.7	90.8		
17	44.0	12.1	29.7	67.7	AN	80.0	77.9	22.2	64.4	81.2		
18	60.1	18.1	45.5	102.7	AN	105.6	61.0	42.0	80.0	62.5		
19	43.7	24.4	83.1	102.3	AN	88.0	77.9	43.5	87.3	60.7		
20	42.0	19.6	75.9	46.9	64.0	110.9	12.9	54.3	61.0	79.5		
21	46.9	34.1	73.5	67.4	273.8	86.4	24.7	66.3	31.7	78.2		
22	68.0	18.5	78.3	73.8	98.7	141.6	49.4	66.8	60.7			
23	58.7	24.5	72.4	83.0	24.4	89.7	46.5	67.7	59.1			
24	27.4	25.1	69.9	83.8	25.6	73.9	54.1	57.1	57.0			
25	37.6	50.4	107.5	94.8	18.6	103.3	71.2	45.9	65.5			
26	53.0	42.1	80.2	75.1	17.6	71.0	27.5	15.1	56.4			
27	14.3	38.4	63.7	127.7	33.1	33.6	29.1	23.6	66.4			
28	5.8	42.3	95.6	80.2	33.8	55.3	52.2	19.7	47.9			
29	20.1	63.2	49.2	72.4	44.9	68.3	74.8	16.6	68.3			
30	16.7		80.1	106.0	51.8	64.2	59.8	22.6	86.9			
31	14.0		66.8		49.6		96.9	37.6				

Stanfield

2007 Data

	January	February	March	April	May	June	July	August	September	October	November	December
1	25.7	14.8	46.7	47.5	74.0	73.0	145.6	74.7	126.0	62.4	117.4	17.4
2	41.8	32.8	69.5	48.3	44.1	135.0	155.1	42.6	59.2	53.6	136.1	18.8
3	48.5	35.0	68.1	87.2	62.9	76.9	212.6	50.1	57.4	38.8	176.9	22.1
4	46.6	32.8	117.9	86.0	72.5	111.5	102.6	62.0	60.6	30.6	111.3	25.2
5	AT	58.5	104.0	104.8	82.8	129.9	136.4	30.3	141.2	177.4	159.1	32.1
6	BJ	63.7	90.0	45.5	105.4	273.4	347.6	23.0	32.7	72.8	111.0	32.7
7	BJ	59.5	130.3	54.8	61.9	136.2	80.0	41.1	47.4	85.2	131.4	257.1
8	67.5	77.2	91.4	88.8	206.1	127.5	108.3	53.6	49.6	131.0	112.5	9.3
9	62.4	93.6	77.0	44.4	99.8	89.6	81.9	46.9	54.8	81.2	110.6	10.4
10	124.9	64.9	68.3	82.6	100.4	73.7	83.8	58.1	64.1	94.2	91.7	7.0
11	57.8	43.9	74.0	64.1	79.0	285.8	106.8	59.6	87.9	89.9	71.1	5.4
12	32.8	35.8	58.1	347.7	89.1	147.4	150.1	55.3	83.9	60.7	117.0	7.9
13	54.3	32.0	91.5	48.5	97.1	141.8	86.3	61.3	82.6	63.1	111.3	13.1
14	39.4	36.4	86.3	90.3	106.1	170.3	62.2	29.7	86.4	77.1	98.5	12.4
15	47.0	36.6	113.6	92.8	85.0	115.3	92.7	38.9	111.1	80.2	246.6	18.4
16	113.2	66.9	121.2	60.1	123.5	131.3	251.0	122.8	32.5	186.6	57.9	21.0
17	74.0	54.2	82.5	32.2	76.7	180.4	38.3	75.1	52.0	111.0	62.9	25.0
18	72.9	42.7	50.3	78.1	91.4	73.1	122.9	44.3	46.2	101.8	81.5	22.0
19	49.3	136.3	81.3	64.4	81.2	94.4	1062.2	40.7	39.7	129.7	97.9	27.0
20	BJ	19.0	82.9	90.3	62.6	139.0	53.2	45.5	65.9	81.6	75.6	26.4
21	BJ	26.2	126.4	31.7	107.1	146.8	61.6	50.1	58.7	356.8	85.0	65.9
22	19.5	BA	28.2	24.2	79.6	135.8	26.4	49.3	51.9	142.1	57.8	26.6
23	23.4	260.0	8.7	44.8	82.7	75.1	89.7	216.2	44.7	184.0	58.8	22.4
24	25.8	26.0	14.2	34.7	92.4	112.3	23.3	68.9	60.9	83.2	71.5	26.1
25	42.9	27.9	18.4	71.0	72.2	127.0	115.5	20.7	79.3	136.3	59.9	298.2
26	44.5	57.4	26.4	100.7	71.1	128.9	19.6	21.7	110.1	88.9	133.4	AN
27	39.2	84.2	482.3	82.0	64.9	144.3	23.9	34.1	100.8	102.8	123.7	49.3
28	51.0	144.1	39.5	360.1	32.9	103.1	106.5	48.2	54.0	121.0	113.6	42.3
29	68.9		27.5	47.3	77.4	125.7	22.3	159.4	73.7	112.6	104.2	40.9
30	23.2		23.6	51.3	63.9	120.2	44.4	56.8	72.8	90.6	20.1	32.3
31	10.2		49.5		124.6		40.2	61.5		106.6		46.6

2008 Data

	January	February	March	April	May	June	July	August	September	October	November	December
1	255.3	24.2	52.3	57.4	57.3	52.6	127.5	74.8	20.8	96.6		
2	61.8	23.8	141.9	50.3	72.2	71.6	116.4	60.9	33.1	105.8		
3	58.9	45.2	49.3	67.5	106.3	79.5	157.8	54.5	34.3	55.8		
4	40.0	14.5	45.3	55.2	43.0	114.4	43.4	52.5	48.8	74.0		
5	21.5	12.3	44.7	75.9	125.2	76.2	57.0	115.3	43.9	76.1		
6	10.1	19.7	49.6	44.9	43.2	59.4	44.3	35.2	59.1	118.3		
7	10.6	22.7	58.5	76.0	43.4	69.7	67.1	364.3	65.2	105.3		
8	10.0	34.7	54.4	46.3	81.8	54.5	86.6	58.3	264.2	86.3		
9	9.7	31.6	62.4	66.6	79.7	111.4	41.8	31.2	36.5	49.6		
10	13.8	26.3	66.8	104.9	161.7	60.6	29.5	40.7	31.4	98.6		
11	22.2	33.0	60.3	68.9	56.9	54.4	24.4	67.7	178.2	103.6		
12	21.3	38.0	75.2	144.2	83.9	102.3	20.4	90.7	55.1	83.0		
13	20.4	40.9	49.1	152.9	89.0	115.0	44.2	53.4	42.0	104.7		
14	36.5	57.3	74.0	97.1	56.2	146.6	29.5	34.5	51.8	94.5		
15	39.3	18.4	69.9	58.2	89.6	134.3	26.5	33.8	65.4	119.6		
16	30.4	10.2	25.3	95.3	65.7	107.7	36.4	63.3	35.9	115.1		
17	29.7	14.9	18.6	49.6	55.2	89.1	49.2	32.0	36.1	131.6		
18	40.0	18.2	49.0	82.1	46.9	83.7	52.0	46.8	75.3	91.2		
19	40.5	28.8	56.8	88.3	115.4	84.2	101.2	42.1	52.8	67.2		
20	30.4	24.7	65.7	49.0	61.6	126.8	13.6	41.1	47.8	107.5		
21	27.5	28.2	64.6	AN	323.0	106.3	24.5	54.7	25.6	94.1		
22	51.3	17.4	83.5	100.4	134.1	149.3	41.9	71.2	56.3			
23	42.7	18.5	153.0	141.4	25.2	103.2	60.2	100.7	73.7			
24	19.7	26.2	112.5	67.8	24.4	78.0	145.5	99.8	74.6			
25	22.9	38.0	94.1	145.3	19.2	105.9	67.4	49.0	64.7			
26	33.0	48.1	57.3	207.5	18.8	52.2	24.2	23.8	65.8			
27	14.5	44.2	57.8	125.4	30.3	47.1	28.6	58.0	64.4			
28	10.1	60.0	62.2	92.6	30.3	73.9	49.4	14.5	56.5			
29	22.7	60.5	66.6	63.1	36.9	78.7	57.2	18.9	79.8			
30	28.5		60.3	89.1	53.4	70.9	78.2	34.6	122.2			
31	14.0		71.2		75.1		70.5	10.9				

City of Maricopa

2007 Data

	January	February	March	April	May	June	July	August	September	October	November	December
1	27.9	23.4	41.5	56.8	94.3	75.1	64.7	61.4	197.5	69.0	132.1	18.3
2	35.6	31.9	47.0	57.5	39.7	62.6	69.2	45.2	30.5	90.8	111.3	29.6
3	55.2	43.3	40.0	64.5	46.8	46.8	70.9	36.4	50.3	105.0	108.8	33.9
4	50.6	37.7	53.9	72.9	103.8	79.3	64.3	36.3	74.4	73.7	100.7	40.0
5	37.6	45.1	59.9	73.3	72.6	126.8	148.0	29.0	116.2	157.5	135.0	41.3
6	22.2	61.2	89.6	72.2	22.4	213.4	232.0	20.8	47.0	55.9	137.8	45.1
7	25.0	78.7	80.6	52.3	56.2	101.3	69.4	34.3	51.8	44.5	138.6	94.7
8	45.8	83.5	65.5	92.1	130.2	114.6	97.4	48.7	74.5	81.0	121.7	17.4
9	54.5	70.1	72.2	71.7	70.5	69.1	52.1	57.1	52.8	83.3	114.5	14.8
10	87.5	57.8	57.7	47.7	97.5	61.7	75.1	41.7	106.7	127.4	103.2	12.6
11	76.4	64.7	50.7	98.1	69.0	158.3	55.4	46.4	89.4	189.3	61.8	8.5
12	40.8	42.5	56.7	259.9	56.0	74.7	72.4	44.2	70.6	170.5	111.5	18.0
13	23.7	30.6	63.9	52.4	63.3	95.0	66.4	331.7	76.0	70.8	142.4	26.7
14	27.7	41.2	78.5	34.3	AT	99.5	37.3	28.9	108.5	59.0	139.1	37.3
15	39.6	46.7	100.0	67.6	BA	86.3	44.5	52.8	91.6	115.6	162.6	23.9
16	31.5	75.1	114.4	62.6	94.2	67.1	143.1	249.4	57.7	213.0	83.7	29.9
17	40.9	52.4	82.0	44.7	57.1	67.1	45.3	61.7	40.3	116.1	88.0	40.7
18	65.8	36.8	60.6	89.4	75.2	96.0	94.2	63.8	57.4	115.2	83.5	50.0
19	25.2	88.3	64.5	51.9	46.6	106.7	724.4	54.0	62.4	166.5	108.7	49.9
20	17.6	17.2	72.8	97.0	67.9	42.3	53.5	44.5	72.1	94.8	83.8	46.8
21	14.6	30.0	146.3	27.8	118.7	72.1	56.9	43.0	76.6	328.9	72.7	69.8
22	21.1	51.5	37.6	22.2	77.7	78.9	28.1	51.6	43.4	57.3	44.1	22.0
23	31.3	103.5	17.0	26.9	48.7	51.9	90.1	203.8	38.2	67.1	49.3	30.7
24	41.0	31.9	15.0	28.4	52.6	60.9	33.1	117.5	40.6	93.5	44.7	35.9
25	35.0	31.8	19.0	50.7	67.7	92.5	80.5	28.5	91.5	113.2	64.5	86.1
26	49.5	47.2	29.0	64.1	52.9	86.7	27.2	27.2	70.5	110.1	64.7	34.2
27	37.5	62.8	268.7	53.5	48.5	76.4	30.0	40.6	109.2	85.7	114.1	28.7
28	37.3	57.1	36.5	525.1	47.6	70.8	32.4	61.4	115.3	104.0	106.4	39.7
29	60.6		37.4	61.8	91.9	101.4	19.8	97.7	71.9	156.2	114.3	47.0
30	43.1		27.6	65.9	82.6	56.6	129.2	158.5	62.7	103.3	18.5	41.5
31	15.2		45.3		62.9		46.9	46.1		103.9		57.2

2008 Data

	January	February	March	April	May	June	July	August	September	October	November	December
1	20.0	37.2	42.8	63.9	56.8	45.2	106.1	67.7	16.9	73.9		
2	134.7	37.4	91.5	62.4	42.2	69.4	87.8	49.3	28.2	98.2		
3	42.6	24.2	25.3	39.5	59.7	58.0	65.3	37.6	34.5	104.7		
4	55.3	14.9	50.8	58.8	58.5	103.5	54.2	42.0	39.4	76.8		
5	29.9	33.3	44.7	85.9	93.9	136.3	34.0	92.7	56.8	82.0		
6	12.4	27.5	35.2	43.0	54.0	58.6	61.4	29.4	61.0	67.4		
7	12.7	41.7	42.1	59.7	40.4	71.4	60.9	213.3	57.2	63.9		
8	17.5	53.4	60.0	70.3	65.2	49.2	108.8	51.4	78.8	79.0		
9	27.5	39.1	28.8	72.7	114.2	81.9	80.3	26.8	37.5	75.6		
10	34.4	30.6	56.0	63.0	79.1	71.3	65.4	31.6	30.8	68.7		
11	42.3	42.4	61.4	48.3	62.0	54.8	15.8	36.2	170.4	157.0		
12	33.4	51.6	70.2	50.2	104.6	65.1	21.0	50.8	60.6	30.3		
13	19.5	50.2	72.3	45.2	74.4	78.2	45.9	46.1	21.7	40.8		
14	16.9	73.1	78.2	56.8	104.8	60.8	23.3	36.4	37.8	38.9		
15	41.2	19.8	53.3	73.3	94.3	54.1	35.0	35.1	59.2	91.1		
16	39.6	11.8	30.7	81.7	41.1	67.3	38.3	34.3	31.3	79.6		
17	24.2	20.3	25.5	48.6	62.6	63.6	50.6	28.3	42.0	100.7		
18	47.4	29.9	52.0	96.8	52.6	86.6	AN	32.4	61.2	79.3		
19	34.9	32.7	74.3	75.6	74.3	63.8	AN	38.5	AV	61.3		
20	35.6	34.7	61.9	38.8	84.2	76.6	16.1	45.9	52.8	69.5		
21	38.2	29.7	69.0	68.2	317.1	87.5	38.8	46.8	43.1	73.1		
22	51.0	27.4	55.3	81.1	86.5	123.1	42.2	49.1	71.7			
23	47.7	20.8	46.3	72.5	27.8	106.5	53.7	51.7	63.8			
24	36.9	24.6	65.8	61.3	26.0	108.2	61.3	43.1	87.4			
25	23.8	39.2	91.2	47.8	18.8	98.6	70.9	99.2	59.3			
26	32.9	37.3	63.9	62.5	20.0	68.5	21.1	21.1	67.5			
27	15.2	33.6	68.7	54.5	34.3	43.3	23.3	38.2	55.3			
28	16.5	51.5	76.4	73.6	34.4	47.5	32.1	AN	31.2			
29	37.7	63.3	63.8	95.7	29.2	56.0	50.2	AN	75.8			
30	30.7		91.2	75.4	49.8	80.0	52.4	27.2	51.4			
31	20.1		39.9		43.4		64.1	13.6				

Cowtown

2007 Data

	January	February	March	April	May	June	July	August	September	October	November	December
1	21.4	19.2	172.2	141.2	185.9	216.0	210.7	57.6	205.0	175.3	415.5	22.2
2	50.6	35.6	164.3	149.9	114.2	183.8	253.1	81.4	28.0	176.2	347.3	25.4
3	50.7	38.1	169.6	163.0	216.1	208.7	224.2	79.2	93.8	166.4	335.9	29.4
4	52.6	55.2	66.4	179.3	227.1	296.7	405.2	71.4	136.2	148.9	263.1	42.2
5	66.4	83.9	77.0	219.1	163.4	283.7	265.0	51.0	207.0	319.6	331.4	41.7
6	38.7	152.5	431.9	172.5	71.7	428.7	343.9	52.1	86.8	503.0	338.3	31.7
7	35.7	192.9	211.6	140.3	185.5	494.0	186.9	65.7	158.9	297.3	290.3	126.6
8	124.5	141.8	496.5	190.0	229.5	209.6	185.1	135.3	170.6	311.3	342.2	9.9
9	112.5	135.2	195.5	172.7	369.0	185.1	144.0	108.0	123.1	368.2	208.6	10.3
10	137.3	65.8	331.1	226.4	305.4	168.4	219.8	92.9	214.5	485.3	174.7	10.6
11	94.1	88.4	536.7	261.7	263.0	261.1	76.2	88.3	208.4	536.1	106.3	9.1
12	48.9	71.3	576.8	653.9	254.8	239.0	107.7	102.3	166.8	283.2	265.1	10.9
13	64.3	65.3	234.9	142.8	281.2	252.9	129.7	400.4	189.5	297.6	234.3	36.4
14	59.0	89.5	277.0	94.8	AT	177.7	76.2	41.2	219.9	376.6	200.7	34.5
15	124.6	86.7	1013.8	152.6	157.0	249.0	198.7	63.9	184.9	205.3	186.0	18.8
16	55.7	114.0	334.1	155.3	197.8	279.2	304.8	144.7	52.4	348.6	121.6	26.6
17	88.4	120.8	391.9	142.4	99.8	433.1	48.6	132.2	86.2	273.8	137.8	29.3
18	140.7	148.0	511.5	202.2	215.7	319.3	126.1	126.4	177.5	328.6	152.0	43.5
19	43.3	124.5	AI	336.6	172.5	215.1	978.7	143.6	216.8	378.1	274.5	33.9
20	11.8	16.2	653.2	319.5	250.1	192.6	92.0	150.3	196.0	252.8	137.8	39.6
21	14.8	27.1	349.6	29.3	356.0	324.5	95.1	156.0	122.0	404.3	132.8	82.2
22	25.7	59.2	44.3	123.2	212.2	379.8	20.1	157.1	96.1	358.9	127.8	26.3
23	31.9	195.6	11.0	226.9	334.4	198.3	163.8	254.8	155.7	222.3	153.4	40.8
24	51.1	118.9	8.6	236.2	166.6	297.7	24.7	156.6	181.2	231.6	165.1	37.8
25	42.6	68.7	23.1	163.8	170.7	381.6	79.0	38.6	197.3	526.3	188.9	90.2
26	86.6	156.8	63.3	109.0	263.0	319.9	31.5	22.5	226.5	425.3	231.2	38.7
27	68.1	132.5	519.8	132.1	191.8	226.6	47.4	78.4	231.7	344.0	196.7	88.9
28	64.9	AV	95.9	281.6	304.0	225.1	99.4	175.3	333.9	371.3	262.7	48.0
29	159.3		93.0	99.2	358.1	236.5	19.6	84.3	221.2	307.1	174.1	62.7
30	53.8		142.4	220.8	235.4	440.4	95.6	100.1	196.1	318.3	30.2	56.2
31	23.2		109.7		257.8		54.9	116.4		352.3		58.7

2008 Data

	January	February	March	April	May	June	July	August	September	October	November	December
1	67.7	35.2	111.3	239.0	239.0	133.7	200.3	169.6		26.4		298.8
2	86.4	34.5	135.5	230.4	327.4	240.1	172.2	126.1	87.6	286.1		
3	110.1	30.8	50.9	354.8	306.3	264.2	211.3	137.4	100.5	271.4		
4	51.3	20.3	167.7	436.1	303.5	216.1	91.3	99.9	126.0	237.7		
5	44.2	15.7	114.9	240.7	243.5	280.9	88.7	306.4	163.2	188.8		
6	10.9	15.0	106.4	216.7	303.8	169.4	155.6	56.1	149.3	255.7		
7	22.8	AN	182.6	323.7	199.7	174.2	77.3	336.4	174.0	153.9		
8	14.5	AN	106.1	419.9	225.6	226.5	217.9	47.0	172.8	275.6		
9	19.1	AN	127.8	276.9	272.1	226.0	131.9	41.9	64.2	204.6		
10	22.5	AN	183.3	301.5	344.1	289.3	104.6	61.9	43.0	177.2		
11	27.6	68.7	294.2	389.4	352.7	195.7	21.3	76.1	63.7	326.1		
12	31.4	68.1	159.8	369.6	304.4	228.5	19.9	105.9	70.4	188.3		
13	23.8	65.2	437.9	163.9	180.4	313.4	49.4	114.7	83.8	168.1		
14	13.9	123.6	310.3	337.6	200.9	282.7	23.8	70.5	160.9	263.1		
15	58.4	29.0	224.5	326.4	265.1	217.5	54.8	63.2	83.1	210.1		
16	47.9	11.9	93.3	376.0	268.7	198.3	98.6	73.7	AN	191.8		
17	30.5	13.5	206.8	327.4	363.8	195.4	100.3	82.0	AN	344.6		
18	80.0	28.9	334.1	381.6	290.0	306.3	110.2	102.0	AN	207.6		
19	63.9	36.2	123.3	306.1	224.1	363.8	128.0	185.0	216.8	218.1		
20	61.4	75.3	228.7	162.8	375.2	367.8	25.4	199.3	133.7	223.7		
21	50.7	48.0	539.3	266.6	608.6	250.9	51.9	237.1	173.9	256.3		
22	85.0	27.6	406.0	213.6	167.8	293.5	64.6	126.4		262.8		
23	59.3	55.3	237.7	226.5	27.9	249.4	92.0	239.6	136.4			
24	35.5	AN	372.6	336.6	24.8	326.3	149.6	106.6	166.3			
25	23.0	AN	496.8	404.6	21.3	196.9	147.3	142.8	75.4			
26	57.6	58.4	335.7	246.2	30.8	114.2	21.3	66.2	218.6			
27	20.8	54.8	252.9	168.3	58.8	143.8	47.3	53.6	155.9			
28	10.9	79.4	273.7	238.0	77.0	165.4	83.4	31.5	104.4			
29	26.5	64.0	225.3	334.6	84.8	135.3	121.0	29.1	210.1			
30	33.0		267.9	285.0	113.5	242.5	105.5	37.5	241.2			
31	14.1		134.7		117.2		143.5	17.0				

Questions?

Or, Let's Move to EPA's Perspective

