Asphalt Pavement Mix Production Survey On Reclaimed Asphalt Pavement, Reclaimed Asphalt Shingles, And Warm-mix Asphalt Usage: 2009-2010

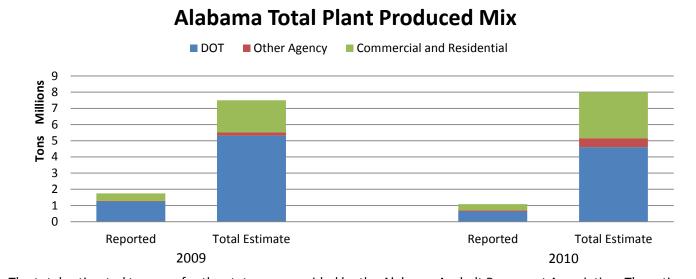
Appendix B

# Alabama

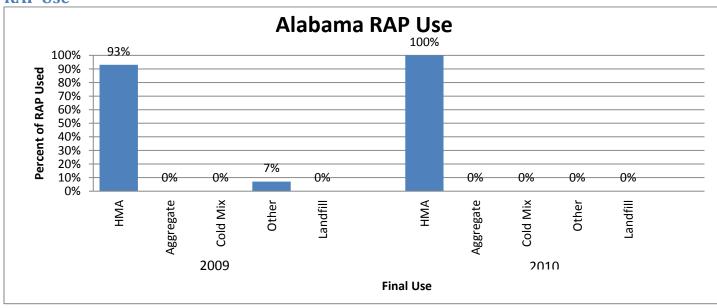
Table B1 summarizes the results received from asphalt mix producers in Alabama. The charts are used to summarize information calculated from information provided by the survey respondents.

### **Total Asphalt Mix Tonnage**

Companies responding: 3

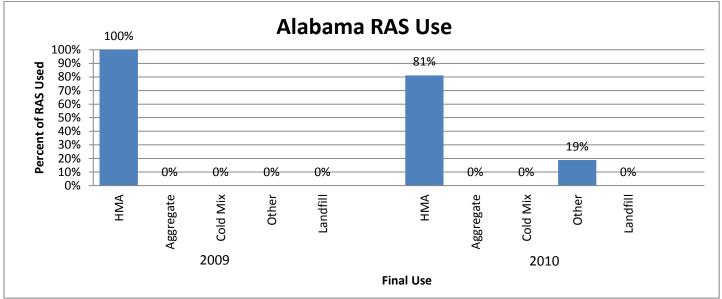


The total estimated tonnage for the state was provided by the Alabama Asphalt Pavement Association. The ratios of DOT, other agency, and commercial and residential tons to the reported values were used to calculate total tonnages for these three categories.

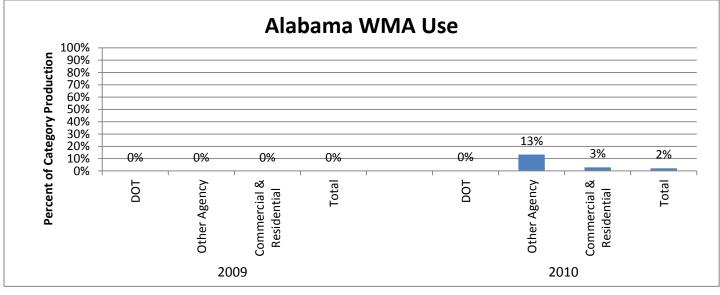


#### **RAP Use**

### **RAS Use**







		Companies	Reporting	3
- HM,	A/WMA			
	Repor	ted	Total Es	timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	1,241,200	626,900	5,319,125	4,603,212
Total Other Agency Tonnage	45,000	75,000	192,846	550,711
Total Commercial & Residential Tonnage	463,900	387,600	1,988,029	2,846,076
Total Tonnage	1,750,100	1,089,500	7,500,000	8,000,000
Reclaimed Asph	alt Pavement (RA	AP)		
·	Repor		Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	501,400	420,900	2,148,734	3,090,592
RAP Tons used in HMA/WMA	332,000	277,400	1,422,776	2,036,898
RAP Tons used as Aggregate	-	-	-	-
RAP Tons used in Cold Mix	-	-	-	-
RAP Tons used as Other	25,000	-	107,137	-
RAP Tons Landfilled	20	20	86	147
Average % RAP in DOT Mixes	16%	21%		L.
Average % RAP in Other Agency Mixes	21%	24%		
Average % RAP in Commercial & Residential Mixes	22%	26%		
	nalt Shingles (RA			
	Report		Total Estimated	
	2009	2010	2009	2010
Percent Companies using RAS	33%	67%	2005	2010
RAS Tons Received	16,000	16,000	68,568	117,485
RAS Tons used in HMA/WMA	13,500	10,800	57,854	79,302
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	_	-		_
RAS Tons used as Other	-	2,500		18,357
RAS Tons Landfilled	-	-	_	-
Average % RAS in DOT Mixes	2%	3%		
Average % RAS in Other Agency Mixes	2%	0%		
Average % RAS in Commercial & Residential Mixes	2%	2%		
	Mix Asphalt	-		
	Report	ted	Total Es	timated
	2009	2010	2009	2010
Percent Companies using WMA	0%	67%	*	
WMA DOT Tonnage	-	2,238	-	16,433
WMA Other Agency Tonnage	-	10,000	-	73,428
WMA Commercial & Residential Tonnage	-	11,528	-	84,648
		23,766	-	174,509
Total WMA Tonnage	-	23,700		
Total WMA Tonnage Percent WMA Tons using Chemical Additives	- 0.0%	0.0%		, 
Percent WMA Tons using Chemical Additives		0.0%		
	- 0.0% 0.0%			

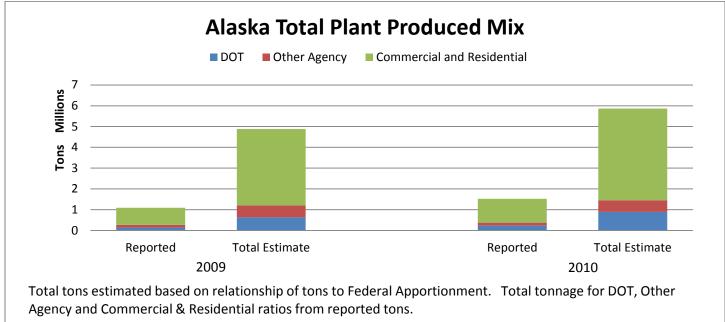
1. Total tonnage of HMA/WMA provided by Alabama Asphalt Pavement Association. Total tonnage for DOT, Other Agency and Commercial & Residential calculated based on ratios from reported tons.

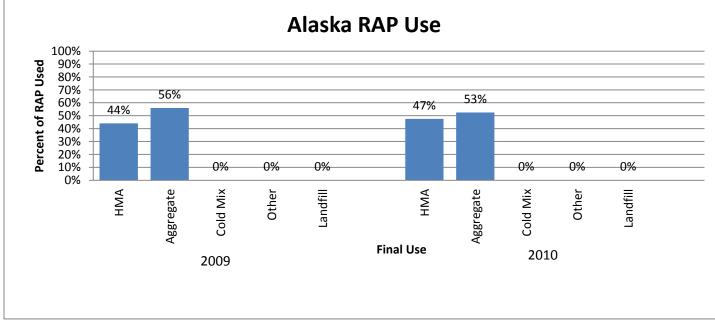
# Alaska

Table B2 summarizes the results received from asphalt mix producers in Alaska.

## **Total Asphalt Mix Tonnage**

Companies responding: 3



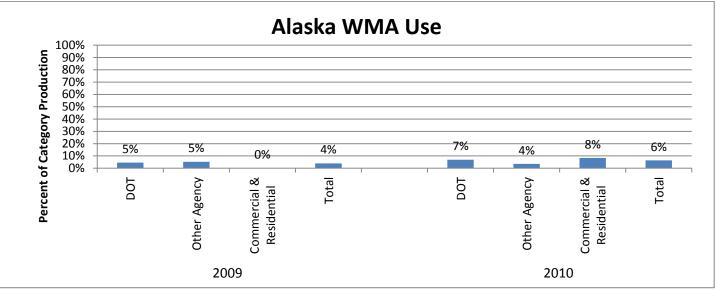


## RAP Use

# RAS Use

No companies reported using RAS.

### WMA Use



	Companies	Reporting	3
A/WMA			
Repor	ted	Total Es	timated <sup>1</sup>
2009	2010	2009	2010
551,263	768,205	2,465,396	2,950,016
142,140	232,269	635,686	891,944
128,014	147,537	572,512	566,564
821,417	1,148,011	3,673,595	4,408,524
alt Pavement (	(RAP)		
Report	ted	Total E	stimated
		2009	2010
67%	67%		
	-	677,633	217,033
			132,861
48,557			146,928
-	-	-	-
-	-	-	-
-	-	-	-
10%	5%		
6%	2%		
1			
	-	Total F	stimated
· · ·			2010
		2005	2010
		-	_
_	_	-	_
_	_	-	_
-	_	-	_
_	_	-	_
_	_	-	_
0%			
	0,0		
	ted	Total F	stimated
2009		2009	2010
67%	33%		
25,487	53,105	113,983	203,930
			31,849
7,460	8,294	33,361	51,045
7,460 -	8,294 12,362	- 33,361	
		<u> </u>	47,472 283,251
-	12,362	-	47,472
- 32,946	12,362 73,760	-	47,472
- 32,946 18.6%	12,362 73,760 0.0%	-	47,472
	2009 551,263 142,140 128,014 821,417 alt Pavement ( Repor 2009 67% 151,519 38,167 48,557 - - - - - - - - - - - - -	A/WMA           Reported           2009         2010           551,263         768,205           142,140         232,269           128,014         147,537           821,417         1,148,011           Reported           2009         2010           67%         67%           151,519         56,517           38,167         34,598           48,557         38,261           -         -           10%         5%           66%         2%           9%         6%           2009         2010           66%         2%           9%         6%           2009         2010           66%         2%           9%         6%           2009         2010           0%         0%           60%         2%           100%         0%           100%         0%           100%         0%           100%         0%           100%         0%           100%         0%           100%         0%           10	Reported         Total Es           2009         2010         2009           551,263         768,205         2,465,396           142,140         232,269         635,686           128,014         147,537         572,512           821,417         1,148,011         3,673,595           Pavement (RAP)         Total Es           2009         2010         2009           67%         67%         151,519           56,517         677,633         38,167           38,167         34,598         170,693           48,557         38,261         217,160           -         -         -           10%         5%         -           66%         2%         -           9%         6%         -           66%         2%         -           9%         6%         -           10%         5%         -           66%         2%         -           9%         6%         -           2009         2010         2009           0%         0%         -           10%         -         -           10%

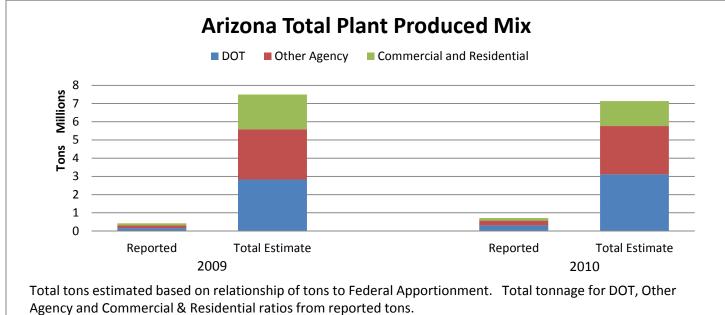
1. Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential ratios from reported tons.

# Arizona

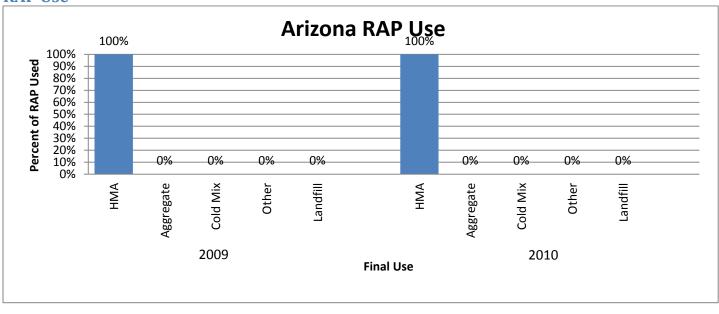
Table B3 summarizes the results received from asphalt mix producers in Arizona.

# **Total Asphalt Mix Tonnage**

Companies responding: 2



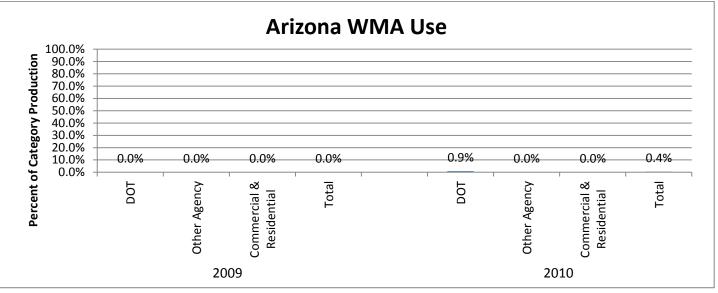




### **RAS Use**

No companies reported using RAS in 2009 or 2010.

### WMA Use



		Companies	Reporting	2
НМ	A/WMA			
	Repor	ted	Total Es	timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	158,523	309,595	2,832,459	3,107,020
Total Other Agency Tonnage	154,262	264,797	2,756,312	2,657,445
Total Commercial & Residential Tonnage	106,754	136,599	1,907,454	1,370,877
Total Tonnage	419,539	710,991	7,496,224	7,135,341
Reclaimed Asph	alt Pavement (	RAP)		
	Repor	ted	Total Es	stimated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	20,000	20,000	357,355	200,715
RAP Tons used in HMA/WMA	54,266	37,000	969,612	371,323
RAP Tons used as Aggregate	-	-	-	-
RAP Tons used in Cold Mix	-	-	_	-
RAP Tons used as Other	-	-	-	-
RAP Tons Landfilled	-	-	-	-
Average % RAP in DOT Mixes	0%	9%		
Average % RAP in Other Agency Mixes	8%	10%		
Average % RAP in Commercial & Residential Mixes	19%	20%		
Reclaimed Aspl	nalt Shingles (F	RAS)		
·	Repor	-	Total Es	stimated
	2009	2010	2009	2010
Percent Companies using RAS	0%	0%		
RAS Tons Received	-	-	-	-
RAS Tons used in HMA/WMA	-	-	-	-
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
Warm-I	4ix Asphalt			
	Reported		Total Es	stimated
	2009	2010	2009	2010
Percent Companies using WMA	0%	50%		
WMA DOT Tonnage	-	2,796	-	28,059
WMA Other Agency Tonnage	-	-	-	-
WMA Commercial & Residential Tonnage	-	-		
Total WMA Tonnage	-	2,796	-	28,059
	0.0%	0.0%		
Percent WMA Tons using Chemical Additives	0.070			
Percent WMA Tons using Chemical Additives Percent WMA Tons using Additive Foaming	0.0%	0.0%		
		0.0%		

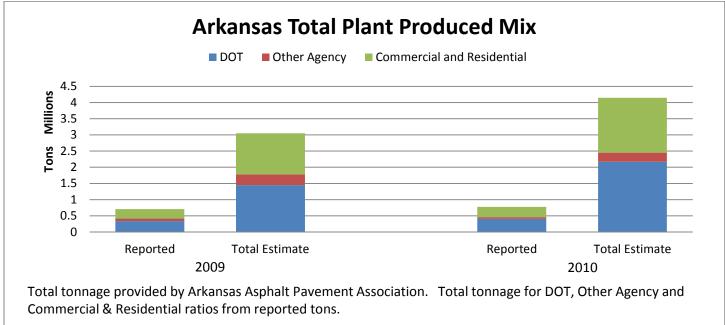
1. Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential ratios from reported tons.

# Arkansas

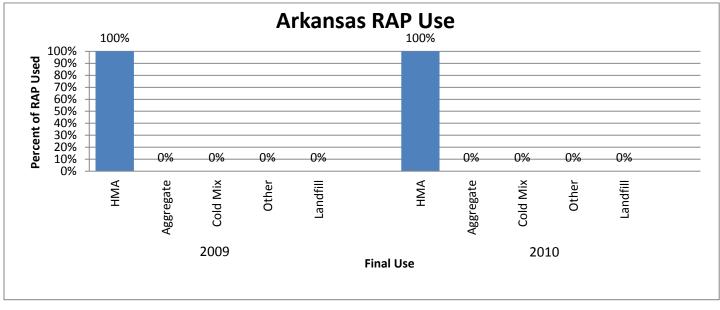
Table B4 summarizes the results received from asphalt mix producers in Arkansas.

### **Total Asphalt Mix Tonnage**

Companies responding: 3



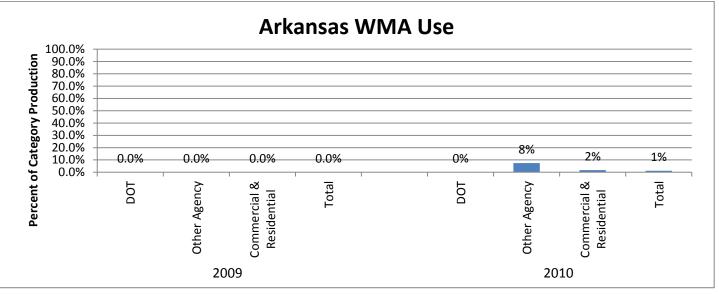
#### **RAP Use**



### **RAS Use**

One company reported receiving RAS in 2010; however, no RAS was used in any mixes

### WMA Use



		Companies F	Reporting	3
НМА	/WMA			
	Report	ted	Total Est	imated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	337,000	407,000	1,448,926	2,172,063
Total Other Agency Tonnage	77,000	52,000	331,060	277,512
Total Commercial & Residential Tonnage	295,000	318,000	1,268,347	1,697,091
Total Tonnage	709,000	777,000	3,048,333	4,146,667
Reclaimed Aspha	lt Pavement (I	RAP)		
	Reported		Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	98,000	100,000	421,349	533,677
RAP Tons used in HMA/WMA	71,085	81,623	305,628	435,604
RAP Tons used as Aggregate	-	-	-	-
RAP Tons used in Cold Mix	-	-	-	-
RAP Tons used as Other	-	-	-	-
RAP Tons Landfilled	22	23	96	124
Average % RAP in DOT Mixes	11%	12%		
Average % RAP in Other Agency Mixes	6%	9%		
Average % RAP in Commercial & Residential Mixes	9%	8%		
Reclaimed Asph				
	Report		Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAS	0%	33%	2005	2010
RAS Tons Received		200	-	1,067
RAS Tons used in HMA/WMA	_	- 200	-	
RAS Tons used as Aggregate	-	_	-	-
RAS Tons used in Cold Mix			-	
RAS Tons used as Other	_	_	-	-
RAS Tons Landfilled	_	_	-	
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
	lix Asphalt	070		
Warm P	Reported		Total Es	timated
	2009	2010	2009	2010
Percent Companies using WMA	0%	33%		
WMA DOT Tonnage	-	-	-	-
WMA Other Agency Tonnage	_	3,900	_	20,813
WMA Commercial & Residential Tonnage	-	5,450	-	29,085
Total WMA Tonnage	_	9,350	_	49,899
Percent WMA Tons using Chemical Additives	0.0%	41.8%		,
Percent WMA Tons using Additive Foaming	0.0%	0.0%		
Percent WMA Tons using Plant Foaming	0.0%	58.2%		
Percent WMA Tons using Organic Additive	0.0%	0.0%		
TOTOLIN WITH TOTIS USING OLGANIC AUDILIVE	0.070	0.070		

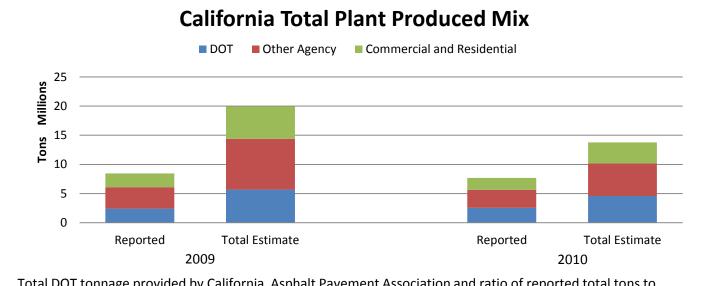
1. Total tonnage provided by Arkansas Asphalt Pavement Association. Total tonnage for DOT, Other Agency and Commercial & Residential ratios from reported tons.

# California

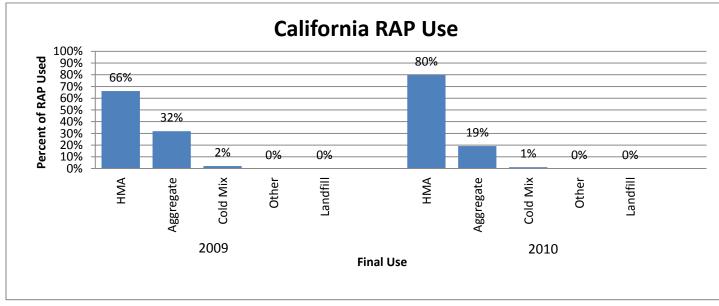
Table B5 summarizes the results received from asphalt mix producers in California. The charts are used to summarize information calculated from information provided by the survey respondents.

### **Total Asphalt Mix Tonnage**

Companies responding: 6

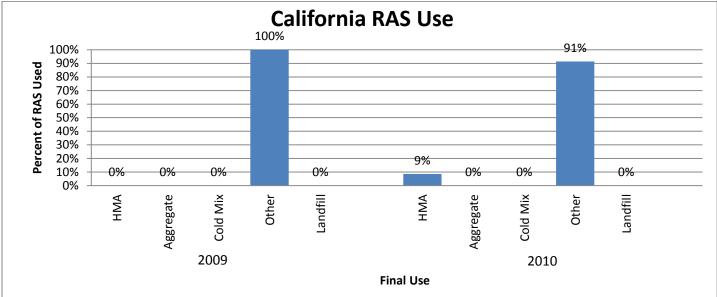


Total DOT tonnage provided by California Asphalt Pavement Association and ratio of reported total tons to reported total tons used to compute estimated total tons. Total tonnage for Other Agency and Commercial & Residential ratios from reported tons.

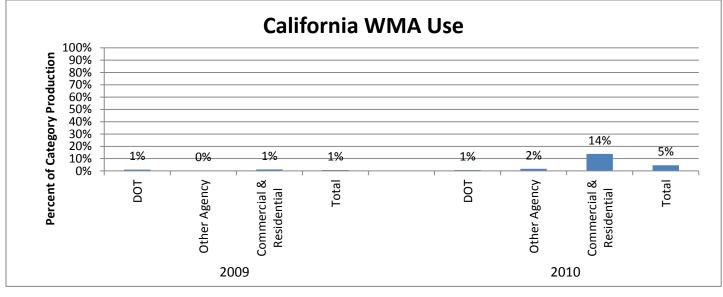


### **RAP Use**

### **RAS Use**







		Companies Re	porting	6
НМ	A/WMA			
	Report	ted	Total Est	timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	2,405,000	2,550,000	5,687,328	4,576,937
Total Other Agency Tonnage	3,672,146	3,106,825	8,683,866	5,576,369
Total Commercial & Residential Tonnage	2,366,205	2,025,000	5,595,585	3,634,626
Total Tonnage	8,443,351	7,681,825	19,966,779	13,787,932
Reclaimed Asph	alt Pavement (	RAP)		
-	Reported		Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	1,020,902	895,514	2,414,222	1,607,338
RAP Tons used in HMA/WMA	826,529	1,440,514	1,954,570	2,585,546
RAP Tons used as Aggregate	397,900	345,630	940,951	620,363
RAP Tons used in Cold Mix	25,000	20,000	59,120	35,898
RAP Tons used as Other	-	-	-	-
RAP Tons Landfilled	-	-	-	-
Average % RAP in DOT Mixes	12%	12%		
Average % RAP in Other Agency Mixes	11%	13%		
Average % RAP in Commercial & Residential Mixes	17%	15%		
Reclaimed Asp				
	Report		Total Es	timated
-	2009	2010	2009	2010
Percent Companies using RAS	17%	33%	2009	2010
RAS Tons Received	12,000	12,050	28,378	21,628
RAS Tons used in HMA/WMA	-	1,030	-	1,849
RAS Tons used as Aggregate	-	-	-	
RAS Tons used in Cold Mix	_	-	-	_
RAS Tons used as Other	12,000	11,000	28,378	19,744
RAS Tons Landfilled	-	-	-	
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	1%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
	Mix Asphalt	070		
Warm	Report	ted	Total Es	timated
-	2009	2010	2009	2010
Percent Companies using WMA	100%	83%	2007	2010
WMA DOT Tonnage	25,200	18,500	59,593	33,205
WMA Other Agency Tonnage	10,450	53,341	24,712	95,741
WMA Commercial & Residential Tonnage	27,632	279,900	65,344	502,386
Total WMA Tonnage	63,282	351,741	149,649	631,332
Percent WMA Tons using Chemical Additives	8.3%	2.4%	10,019	001/002
Percent WMA Tons using Additive Foaming	3.2%	1.5%		
Percent WMA Tons using Plant Foaming	88.4%	96.1%		
Percent WMA Tons using Organic Additive	0.1%	0.0%		
1. Total DOT tonnage provided by California Asphalt F			of reported to	tal tons to

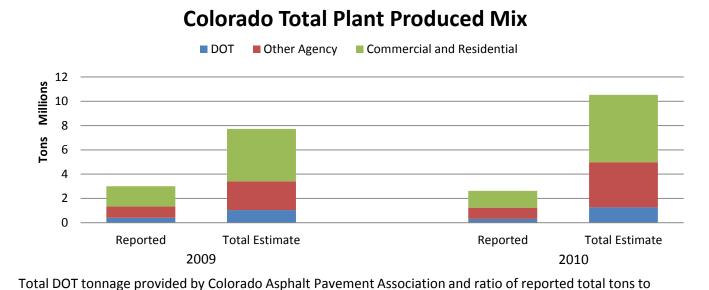
1. Total DOT tonnage provided by California Asphalt Pavement Association and ratio of reported total tons to reported DOT tons was used to compute estimated total tons. Total tonnage for Other Agency and Commercial & Residential based on ratios from reported tons.

# Colorado

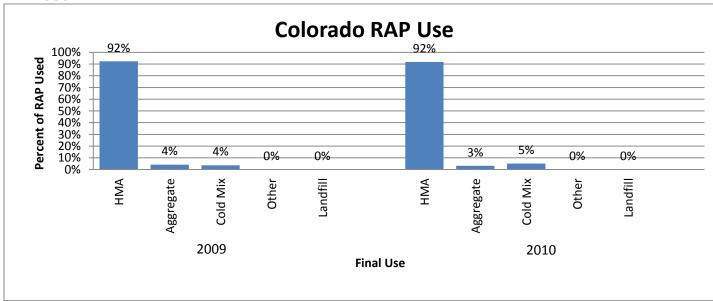
Table B6 summarizes the results received from asphalt mix producers in Colorado. The charts are used to summarize information calculated from information provided by the survey respondents.

## **Total Asphalt Mix Tonnage**

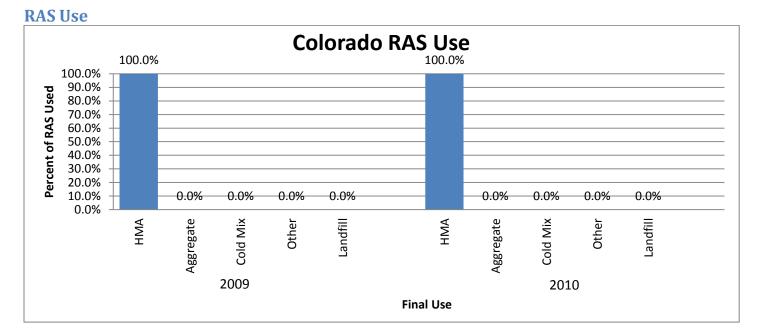
Companies responding: 8



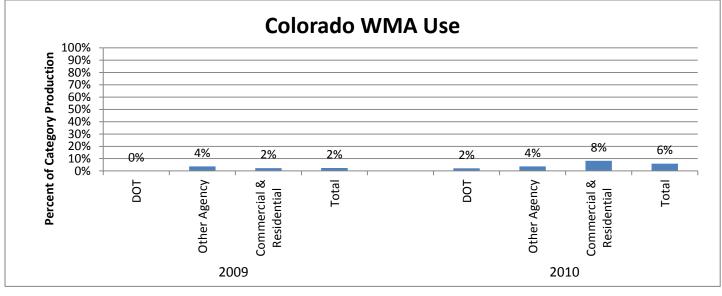
Total DOT tonnage provided by Colorado Asphalt Pavement Association and ratio of reported total tons to reported DOT tons was used to compute estimated total tons. Total tonnage for Other Agency and Commercial & Residential ratios from reported tons.



#### **RAP Use**







		Companies F	Reporting	8
НМ	A/WMA			
	Report	ed	Total Est	timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	401,944	314,268	1,035,394	1,262,143
Total Other Agency Tonnage	922,950	925,580	2,377,488	3,717,256
Total Commercial & Residential Tonnage	1,672,120	1,380,240	4,307,325	5,543,233
Total Tonnage	2,997,014	2,620,088	7,720,208	10,522,633
Reclaimed Asph		RAP)		
- -	Report		Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	676,000	619,000	1,741,353	2,485,989
RAP Tons used in HMA/WMA	567,330	502,160	1,461,424	2,016,745
RAP Tons used as Aggregate	25,000	17,000	64,399	68,274
RAP Tons used in Cold Mix	22,180	28,000	57,135	, 112,452
RAP Tons used as Other	-	-	-	-
RAP Tons Landfilled	42	48	107	191
Average % RAP in DOT Mixes	15%	15%		
Average % RAP in Other Agency Mixes	19%	19%		
Average % RAP in Commercial & Residential Mixes	24%	24%		
Reclaimed Asp	halt Shingles (F	RAS)		
•	Report	· · · · ·	Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAS	25%	25%		
RAS Tons Received	28,000	70,000	72,127	281,130
RAS Tons used in HMA/WMA	5,000	17,000	12,880	68,274
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	3%		
Average % RAS in Commercial & Residential Mixes	0%	2%		
Warm-	Mix Asphalt			
	Reported		Total Es	timated
	2009	2010	2009	2010
Percent Companies using WMA	38%	50%		
WMA DOT Tonnage	-	6,524	-	26,200
WMA Other Agency Tonnage	34,370	34,538	88,536	138,708
WMA Commercial & Residential Tonnage	38,035	113,468	97,977	455,703
Total WMA Tonnage	72,405	154,529	186,513	620,611
Percent WMA Tons using Chemical Additives	0.0%	0.0%		
Percent WMA Tons using Additive Foaming	0.0%	0.0%		
Percent WMA Tons using Plant Foaming	100.0%	100.0%		

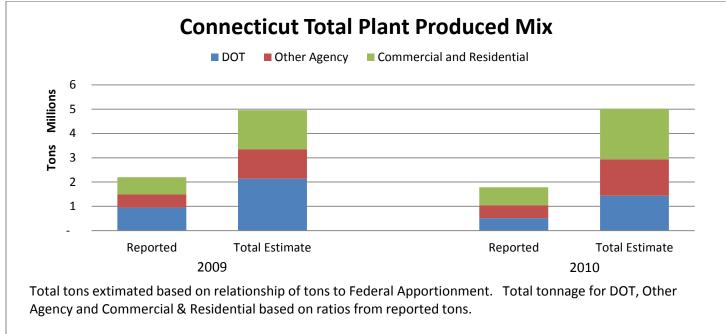
1. Total DOT tonnage provided by Colorado Asphalt Pavement Association and ratio of reported total tons to reported DOT tons was used to compute estimated total tons. Total tonnage for Other Agency and Commercial & Residential ratios based on ratios from reported tons.

# Connecticut

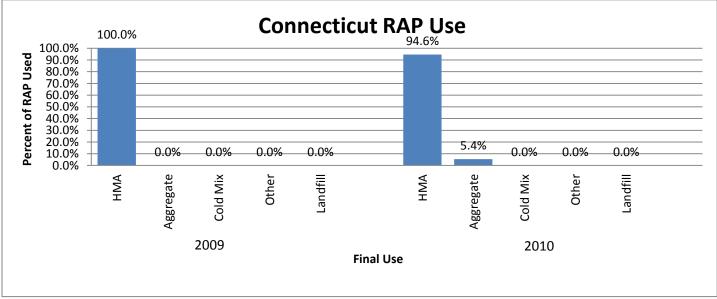
Table B7 summarizes the results received from asphalt mix producers in Connecticut. The charts are used to summarize information calculated from information provided by the survey respondents.

# **Total Asphalt Mix Tonnage**

Companies responding: 2



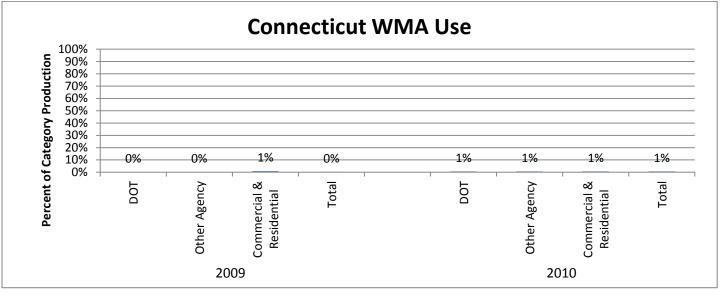




### RAS Use

No contractors reported using RAS in 2009 or 2010.

### WMA Use



		Companies F	Reporting	2
НМ	A/WMA			
	Report	ed	Total Esti	mated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	946,000	511,000	2,134,920	1,434,638
Total Other Agency Tonnage	540,000	535,000	1,218,664	1,502,018
Total Commercial & Residential Tonnage	712,000	740,000	1,606,832	2,077,558
Total Tonnage	2,198,000	1,786,000	4,960,416	5,014,214
Reclaimed Asph	alt Pavement (	RAP)		
	Report	ed	Total Est	imated
	2009	2010	2009	2010
Percent Companies using RAP	50%	100%		
RAP Tons Received	350,000	349,000	789,875	979,821
RAP Tons used in HMA/WMA	327,364	300,000	738,791	842,253
RAP Tons used as Aggregate	-	17,000		47,728
RAP Tons used in Cold Mix	-	-	-	-
RAP Tons used as Other	-	-	-	-
RAP Tons Landfilled	16	18	36	49
Average % RAP in DOT Mixes	13%	14%		
Average % RAP in Other Agency Mixes	16%	17%		
Average % RAP in Commercial & Residential Mixes	17%	19%		
Reclaimed Aspl	halt Shingles (F	RAS)		
	Reported		Total Estimated	
	2009	2010	2009	2010
Percent Companies using RAS	0%	0%		
RAS Tons Received	-	-	-	-
RAS Tons used in HMA/WMA	-	-	-	-
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
Warm-I	Mix Asphalt			
	Reported		Total Estimated	
	2009	2010	2009	2010
Percent Companies using WMA	50%	0%		
WMA DOT Tonnage	-	3,507	-	9,846
WMA Other Agency Tonnage	-	3,500	-	9,826
WMA Commercial & Residential Tonnage	6,620	4,900	14,940	13,757
Total WMA Tonnage	6,620	11,907	14,940	33,429
Percent WMA Tons using Chemical Additives	0%	0%	,, , , , , , , , , , , , , , , , , ,	20,129
Percent WMA Tons using Additive Foaming	0%	0%		
Percent WMA Tons using Plant Foaming	100%	90%		
	_00.0	20.3		

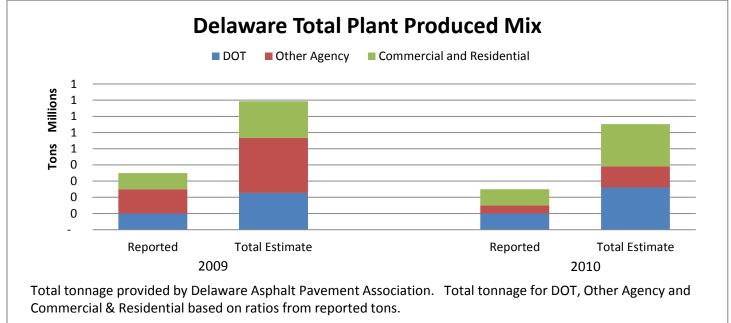
1. Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

## Delaware

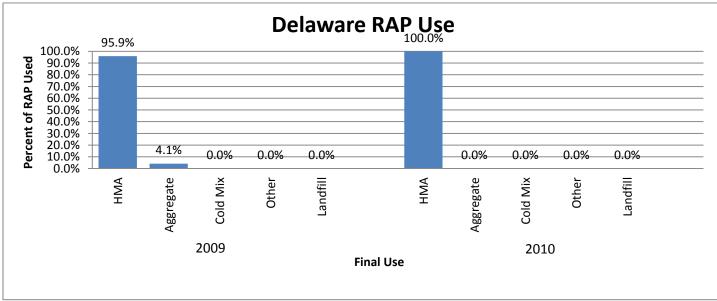
Table B8 summarizes the results received from asphalt mix producers in Delaware. The charts are used to summarize information calculated from information provided by the survey respondents.

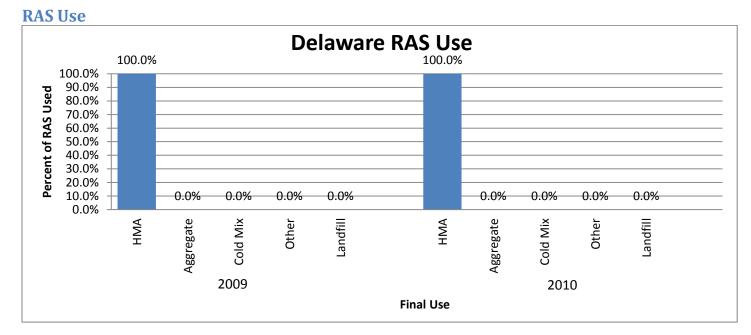
## **Total Asphalt Mix Tonnage**

Companies responding: 1

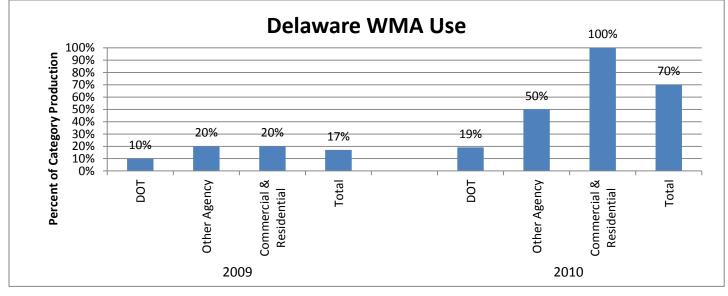












		Companies	Reporting	1
НМ	A/WMA		1	
	Repor	ted	Total Es	timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	100,000	100,000	226,753	260,664
Total Other Agency Tonnage	150,000	50,000	340,129	130,332
Total Commercial & Residential Tonnage	100,000	100,000	226,753	260,664
Total Tonnage	350,000	250,000	793,634	651,660
Reclaimed Asph				
	Repor		Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%	2009	2010
RAP Tons Received	70,000	50,000	158,727	130,332
RAP Tons used in HMA/WMA	70,000	50,000	158,727	130,332
RAP Tons used as Aggregate	3,000		6,803	
RAP Tons used in Cold Mix				-
RAP Tons used as Other				
RAP Tons Landfilled				
Average % RAP in DOT Mixes	20%	20%	_	_
Average % RAP in Other Agency Mixes	20%	20%		
Average % RAP in Commercial & Residential Mixes	30%	30%		
Reclaimed Aspl		2		
	Repor			stimated
	2009	2010	2009	2010
Percent Companies using RAS	100%	100%		
RAS Tons Received	12,000	9,000	27,210	23,460
RAS Tons used in HMA/WMA	12,000	9,000	27,210	23,460
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	3%	10%		
Average % RAS in Other Agency Mixes	2%	3%		
Average % RAS in Commercial & Residential Mixes	5%	5%		
Warm-I	Mix Asphalt			
	Reported		Total Es	stimated
	2009	2010	2009	2010
Percent Companies using WMA	100%	100%		
WMA DOT Tonnage	10,000	50,000	22,675	50,000
WMA Other Agency Tonnage	30,000	25,000	68,026	65,166
			45,351	260,664
	20,000	100,000	TJ,JJI	200/001
WMA Commercial & Residential Tonnage	20,000 60,000			
WMA Commercial & Residential Tonnage Total WMA Tonnage	60,000	175,000	136,052	375,830
WMA Commercial & Residential Tonnage Total WMA Tonnage Percent WMA Tons using Chemical Additives	60,000 0.0%	175,000 0.0%		
WMA Commercial & Residential Tonnage Total WMA Tonnage	60,000	175,000		

1. Total tonnage provided by Delaware Asphalt Pavement Association. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

# **District of Columbia**

No contractors submitted data for the District of Columbia. Total tons were estimated based on a relationship tons to federal apportionment. Because RAP use is prevalent in all areas of the US it was estimated that RAP use in the District followed a national average. Table B9 summarizes this data.

Table B 9: Summary of District of Columbia Data

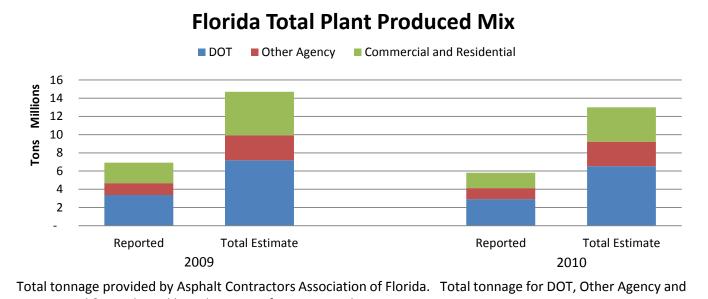
HMA/WMA				
	Total Estimated <sup>1</sup>			
	2009 201			
Total DOT Tonnage	-	-		
Total Other Agency Tonnage	-	-		
Total Commercial & Residential Tonnage	-	-		
Total Tonnage	1,623,511	1,807,690		
Reclaimed Asphalt Pavement (RAP)				
	Total Estir	mated		
	2009 2010			
Percent Companies using RAP				
RAP Tons Received	304,216	368,017		
RAP Tons used in HMA/WMA	253,788	310,816		
RAP Tons used as Aggregate	28,186	36,736		
RAP Tons used in Cold Mix	6,712	7,877		
RAP Tons used as Other	3,336	4,003		
RAP Tons Landfilled	652	23		

# Florida

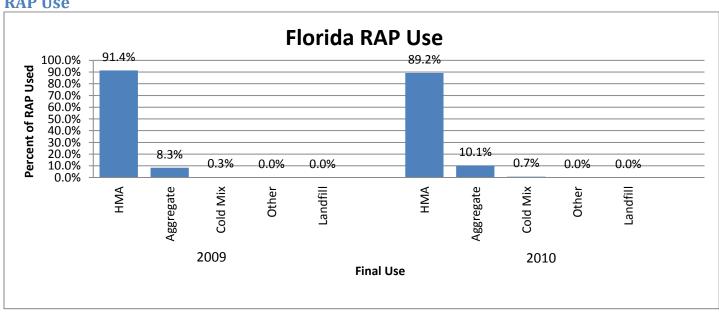
Table B10 summarizes the results received from asphalt mix producers in Florida. The charts are used to summarize information calculated from information provided by the survey respondents.

## **Total Asphalt Mix Tonnage**

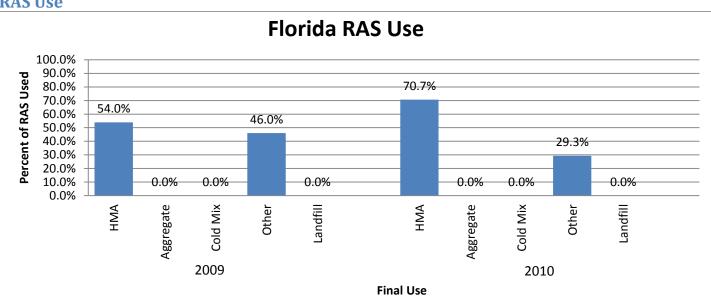
Companies responding: 6



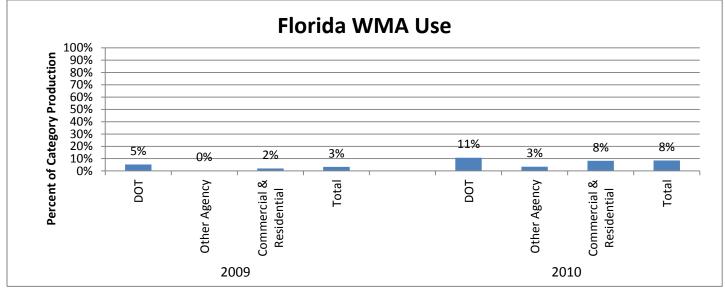
Commercial & Residential based on ratios from reported tons.



### **RAP Use**







### **RAS Use**

		Companies	Reporting	6
НМ	IA/WMA			
	Repor	ted	Total Es	timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	3,378,702	2,919,247	7,184,378	6,533,888
Total Other Agency Tonnage	1,285,682	1,201,295	2,733,838	2,688,750
Total Commercial & Residential Tonnage	2,248,799	1,687,671	4,781,784	3,777,362
Total Tonnage	6,913,183	5,808,213	14,700,000	13,000,000
Reclaimed Aspl	nalt Pavement (	(RAP)	• · · ·	
·	Repor		Total Es	stimated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	1,803,479	1,635,850	3,834,868	3,661,376
RAP Tons used in HMA/WMA	1,666,030	1,368,930	3,542,599	3,063,952
RAP Tons used as Aggregate	151,800	155,000	322,783	346,923
RAP Tons used in Cold Mix	5,200	10,500	11,057	23,501
RAP Tons used as Other	-		-	
RAP Tons Landfilled	42	44	88	99
Average % RAP in DOT Mixes	21%	21%	00	55
Average % RAP in Other Agency Mixes	27%	26%		
Average % RAP in Commercial & Residential Mixes	31%	31%		
	halt Shingles (			
Reclaimed Asp	Repor		Total Fr	stimated
Percent Companies using DAC	2009 17%	2010 17%	2009	2010
Percent Companies using RAS RAS Tons Received	2,000	1,000	4,253	2,238
	7,030			
RAS Tons used in HMA/WMA		4,829	14,949	10,809
RAS Tons used as Aggregate RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	6,000	2,000	- 12,758	4,476
RAS Tons Landfilled	0,000	1	12,730	7,770
Average % RAS in DOT Mixes	0%	- 0%	-	-
		0%		
Average % RAS in Other Agency Mixes	0%			
Average % RAS in Commercial & Residential Mixes	3%	0%		
warm-	m-Mix Asphalt			
	Repor 2009	2010	2009	stimated 2010
Percent Companies using WMA	83%	83%	2003	2010
WMA DOT Tonnage	177,125	312,662	376,634	699,804
WMA Other Agency Tonnage	4,220	41,850	8,973	93,669
WMA Commercial & Residential Tonnage	44,970	138,620	95,623	310,261
Total WMA Tonnage	226,315	493,132	481,230	1,103,734
Percent WMA Tons using Chemical Additives	0.9%	0.0%	101/230	
Percent WMA Tons using Additive Foaming	0.9%	0.0%		
Percent WMA Tons using Additive Foaming Percent WMA Tons using Plant Foaming	99.1%	100.0%		
Percent WMA Tons using Organic Additive	0.0%	0.0%		
1. Total tanaga provided by Apphalt Contractors Ac	0.0%		page for DOT	

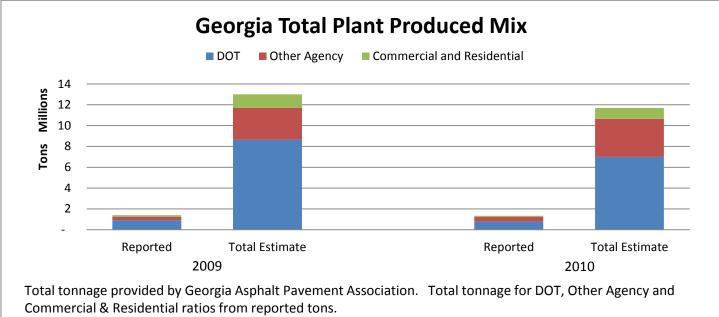
1. Total tonnage provided by Asphalt Contractors Association of Florida. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

# Georgia

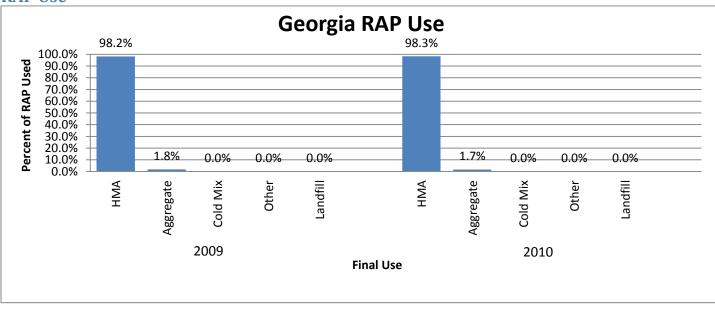
Table B11 summarizes the results received from asphalt mix producers in Georgia. The charts are used to summarize information calculated from information provided by the survey respondents.

## **Total Asphalt Mix Tonnage**

Companies responding: 2







## RAS Use

No contractor reported using RAS in Georgia in 2009 and 2010. The Georgia DOT does allow RAS in mixes.

## WMA Use

No contractos reported using WMA in Georgia in 2009 and 2010. The Georgia Asphalt Pavement Association reports there are 3 companies that have installed foaming systems in Georgia, and two are actively using theirs to produce WMA. They estimate about 50,000 tons were placed on DOT work last year, and expect to meet that same amount this in 2011. They do not have any information on WMA use for other purposes.

		Companies	Reporting	2
HI	MA/WMA			
	Repor	Reported Total Estim		
	2009	2010	2009	2010
Total DOT Tonnage	925,000	800,000	8,651,079	6,985,075
Total Other Agency Tonnage	325,000	420,000	3,039,568	3,667,164
Total Commercial & Residential Tonnage	140,000	120,000	1,309,353	1,047,761
Total Tonnage	1,390,000	1,340,000	13,000,000	11,700,000
Reclaimed Asp	halt Pavement	(RAP)	-	
-	Repor	ted	Total Es	timated <sup>1</sup>
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	250,000	300,000	2,338,129	2,619,403
RAP Tons used in HMA/WMA	270,000	295,000	2,525,180	2,575,746
RAP Tons used as Aggregate	5,000	5,000	46,763	43,657
RAP Tons used in Cold Mix	-	-	-	-
RAP Tons used as Other	-	-	-	-
RAP Tons Landfilled	-	-	-	-
Average % RAP in DOT Mixes	18%	18%		
Average % RAP in Other Agency Mixes	24%	25%		
Average % RAP in Commercial & Residential Mixes	27%	28%		
Reclaimed As	phalt Shingles (	RAS)		
				stimated
	2009	2010	2009	2010
Percent Companies using RAS	0%	0%		
RAS Tons Received	-	-	-	-
RAS Tons used in HMA/WMA	-	-	-	-
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
Warm	-Mix Asphalt			
	Reported Total Estimation		timated	
	2009	2010	2009	2010
Percent Companies using WMA	0%	0%		
WMA DOT Tonnage	-	-	-	-
WMA Other Agency Tonnage	-	-	-	-
WMA Commercial & Residential Tonnage	-	-	-	-
Total WMA Tonnage	-	-	-	-
Percent WMA Tons using Chemical Additives	0%	0%		
Percent WMA Tons using Additive Foaming	0%	0%		
Percent WMA Tons using Plant Foaming	0%	0%		
Percent WMA Tons using Organic Additive	0%	0%		

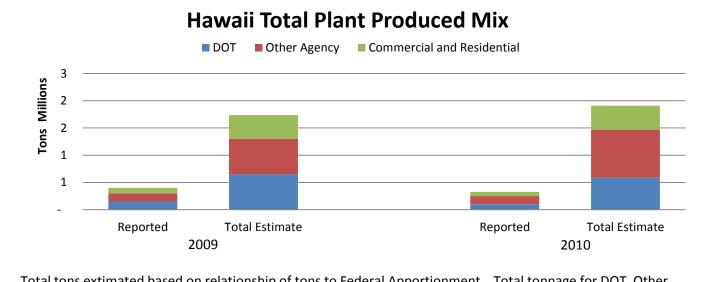
1. Total tonnage provided by Georgia Asphalt Pavement Association. Total tonnage for DOT, Other Agency and Commercial & Residential ratios from reported tons.

# Hawaii

Table B12 summarizes the results received from asphalt mix producers in Hawaii. The charts are used to summarize information calculated from information provided by the survey respondents.

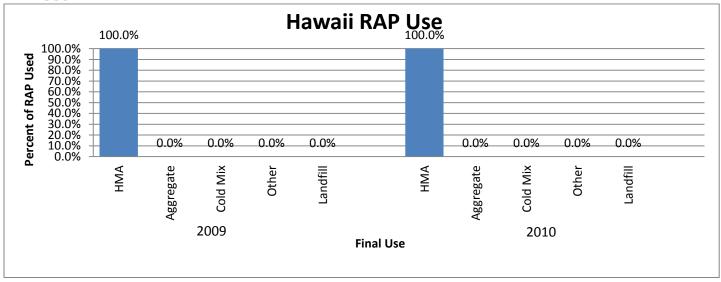
### **Total Asphalt Mix Tonnage**

Companies responding: 1



Total tons extimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

**RAP Use** 



### **RAS Use**

The contractor did not report accepting or using RAS in 2009 and 2010.

### WMA Use

The contractor did not report using WMA in 2009 and 2010.

	Companies	Reporting	1
A/WMA			
Report	ted	Total Es	timated <sup>1</sup>
2009	2010	2009	2010
150,000	100,000	650,490	587,730
150,000	150,000	650,490	881,596
100,000	75,000	433,660	440,798
400,000	325,000	1,734,640	1,910,124
alt Pavement (	(RAP)		
Report	ted	Total Es	stimated
2009	2010	2009	2010
100%	100%		
40,000	30,000	173,464	176,319
40,000	30,000	173,464	176,319
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
10%	10%		
	-	Total Es	stimated
			2010
		2005	2010
	-	_	-
_	_	_	-
-	-	_	_
-		_	-
-	-	_	-
-	_	_	-
0%			
	070		
		Total Fe	stimated
			2010
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
00/	0%		۱ 
0%	0/0		
0%	0% 0%		
	2009         150,000         150,000         100,000         400,000         alt Pavement (         Repor         2009         100%         40,000         40,000         40,000         40,000         40,000         40,000         40,000         40,000         40,000         40,000         40,000         40,000         40,000         40,000         40,000	A/WMA           Reported           2009         2010           150,000         100,000           150,000         150,000           100,000         75,000           400,000         325,000           Natt Pavement (RAP)           Reported         2009           2009         2010           100,000         30,000           40,000         30,000           40,000         30,000           40,000         30,000           40,000         30,000           40,000         30,000           40,000         30,000           40,000         30,000           40,000         30,000           40,000         30,000           40,000         30,000           40,000         30,000           40,000         30,000           40,000         30,000           40,000         30,000           40,000         30,000           10%         10%           10%         10%           0%         0%           0%         0%           0%         0%           0%         0%	Reported         Total Es           2009         2010         2009           150,000         100,000         650,490           150,000         75,000         433,660           400,000         325,000         1,734,640           Total Es           2009         2010         2009           100,000         75,000         433,660           400,000         325,000         1,734,640           Total Es           2009         2010         2009           100%         100%         40,000         30,000           40,000         30,000         173,464         40,000         30,000         173,464           40,000         30,000         173,464         -         -         -           -         -         -         -         -         -           -         -         -         -         -         -           -         -         -         -         -         -         -           100%         10%         173,464         40,000         10%         -         -         -         -         -         -         -         -         -<

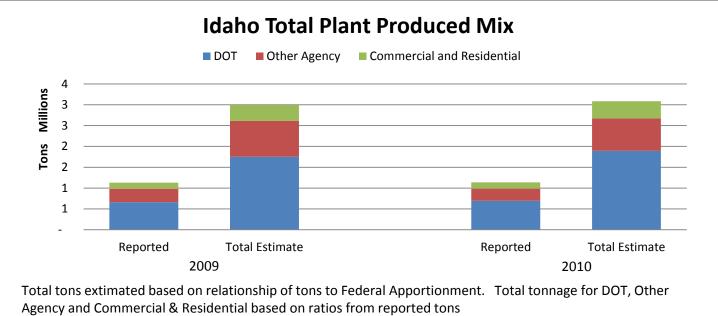
1. Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

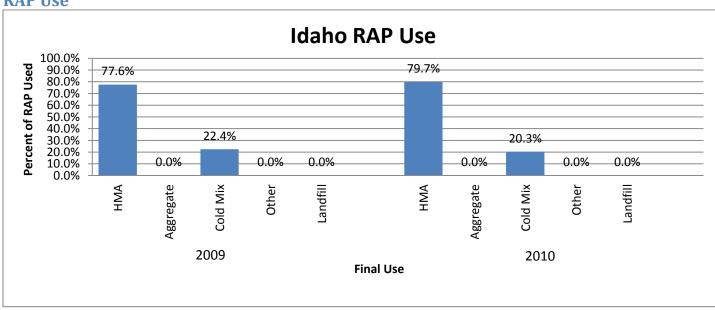
# Idaho

Table B13 summarizes the results received from asphalt mix producers in Idaho. The charts are used to summarize information calculated from information provided by the survey respondents.

## **Total Asphalt Mix Tonnage**

Companies responding: 5



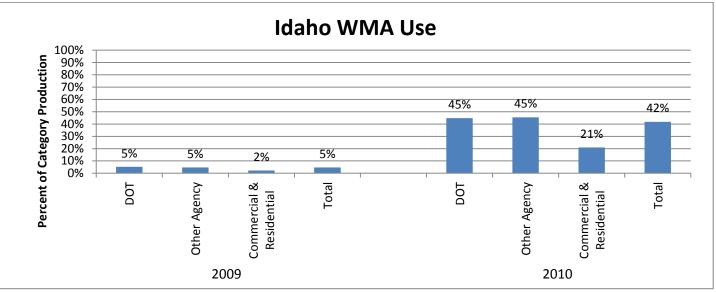


#### **RAP Use**

### **RAS Use**

No contractors reported using RAS in 2009 and 2010.

### WMA Use



		Companies	Reporting	5	
HM	IA/WMA				
	Reported		Total Estimated <sup>1</sup>		
	2009	2010	2009	2010	
Total DOT Tonnage	660,000	696,917	1,751,597	1,892,602	
Total Other Agency Tonnage	323,857	288,484	859,495	783,430	
Total Commercial & Residential Tonnage	145,200	151,520	385,351	411,480	
Total Tonnage	1,129,057	1,136,921	2,996,444	3,087,512	
Reclaimed Aspl	nalt Pavement (	(RAP)			
· · · · ·	Repor		Total Estimated		
	2009	2010	2009	2010	
Percent Companies using RAP	80%	80%			
RAP Tons Received	60,000	104,200	159,236	282,974	
RAP Tons used in HMA/WMA	72,775	118,095	193,140	320,707	
RAP Tons used as Aggregate	-	-		-	
RAP Tons used in Cold Mix	21,000	30,000	55,733	81,470	
RAP Tons used as Other	-	-	-	-	
RAP Tons Landfilled	38	47	101	128	
Average % RAP in DOT Mixes	5%	9%			
Average % RAP in Other Agency Mixes	10%	11%			
Average % RAP in Commercial & Residential Mixes	16%	17%			
	halt Shingles (				
	Reported			Total Estimated	
	2009	2010	2009	2010	
Percent Companies using DAC	2009	0%	2009	2010	
Percent Companies using RAS RAS Tons Received	0%	0%			
	-	-	-	-	
RAS Tons used in HMA/WMA RAS Tons used as Aggregate	-	-		-	
RAS Tons used in Cold Mix	-	-	-	-	
	-	-		-	
RAS Tons used as Other	-	-	-	-	
RAS Tons Landfilled	- 00/	-	-	-	
Average % RAS in DOT Mixes	0%	0%			
Average % RAS in Other Agency Mixes	0%	0%			
Average % RAS in Commercial & Residential Mixes	0%	0%			
Warm-	Mix Asphalt		<b>T 1 1 5 1 1</b>		
	Repor			timated	
	2009	2010	2009	2010	
Percent Companies using WMA	20%	60%			
WMA DOT Tonnage	34,300	312,138	91,030	847,666	
WMA Other Agency Tonnage	15,430	131,175	40,950	356,229	
WMA Commercial & Residential Tonnage	3,360	31,838	8,917	86,462	
Total WMA Tonnage	53,090	475,151	140,897	1,290,357	
Percent WMA Tons using Chemical Additives	0%	0%			
Percent WMA Tons using Additive Foaming	0%	0%			
Percent WMA Tons using Plant Foaming	100%	100%			
Percent WMA Tons using Organic Additive	0%	0%			

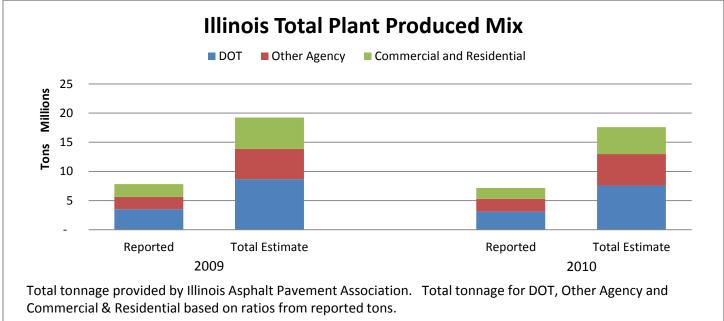
1. Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

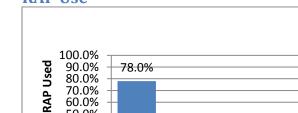
# Illinois

Table B14 summarizes the results received from asphalt mix producers in Illinois. The charts are used to summarize information calculated from information provided by the survey respondents.

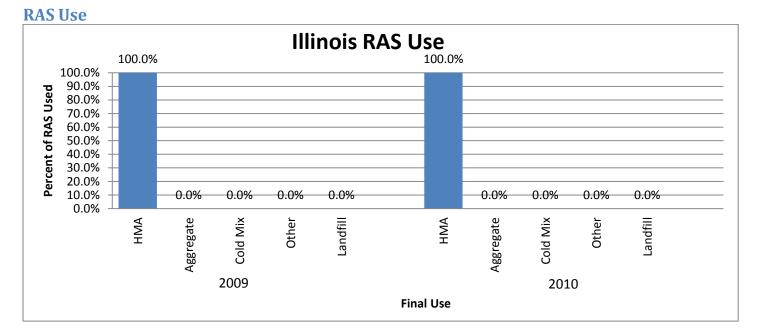
## **Total Asphalt Mix Tonnage**

Companies responding: 16





**Illinois RAP Use** Percent of RAP Used 70.7% 50.0% 40.0% 27.5% 30.0% 16.1% 20.0% 3.1% 1.6% 1.1% 0.9% 0.9% 0.0% 10.0% 0.0% HMA Other НMA Aggregate Cold Mix Landfill Aggregate Cold Mix Other Landfill 2009 2010 **Final Use** 





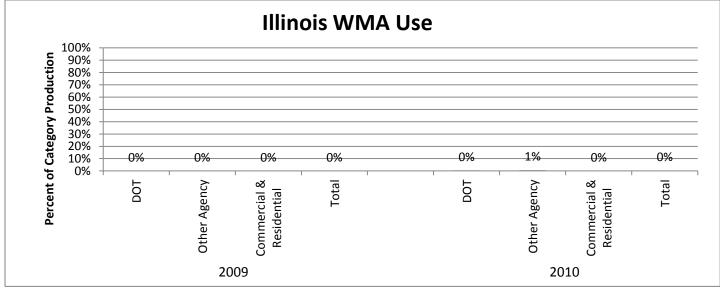


Table B 14: Summary of Illinois Data		Companies F	Reporting	16
HM	A/WMA			
	Repor	ted	Total Estimated <sup>1</sup>	
	2009	2010	2009	2010
Total DOT Tonnage	3,512,816	3,086,094	8,660,332	7,578,622
Total Other Agency Tonnage	2,110,029	2,204,674	5,201,967	5,414,090
Total Commercial & Residential Tonnage	2,185,367	1,876,136	5,387,701	4,607,288
Total Tonnage	7,808,212	7,166,904	19,250,000	17,600,000
Reclaimed Aspl	nalt Pavement	(RAP)		
	Repor	ted	Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	2,519,275	2,234,925	6,210,903	5,488,378
RAP Tons used in HMA/WMA	1,374,700	1,416,650	3,389,121	3,478,914
RAP Tons used as Aggregate	283,000	551,500	697,695	1,354,337
RAP Tons used in Cold Mix	20,000	18,000	49,307	44,203
RAP Tons used as Other	28,800	17,800	71,002	43,712
RAP Tons Landfilled	55,000	-	135,594	-
Average % RAP in DOT Mixes	17%	16%		
Average % RAP in Other Agency Mixes	20%	21%		
Average % RAP in Commercial & Residential Mixes	31%	32%		
Reclaimed Asp	halt Shingles (			
	Repor		Total Estimated	
	2009	2010	2009	2010
Percent Companies using RAS	19%	38%		ľ
RAS Tons Received	2,000	8,750	4,931	21,488
RAS Tons used in HMA/WMA	1,740	14,250	4,290	34,994
RAS Tons used as Aggregate		14,250 -		
RAS Tons used as Aggregate RAS Tons used in Cold Mix	1,740		4,290	
RAS Tons used as AggregateRAS Tons used in Cold MixRAS Tons used as Other	1,740 -	-	4,290	
RAS Tons used as Aggregate RAS Tons used in Cold Mix RAS Tons used as Other RAS Tons Landfilled	1,740 - - - - -		4,290 -	
RAS Tons used as AggregateRAS Tons used in Cold MixRAS Tons used as OtherRAS Tons LandfilledAverage % RAS in DOT Mixes	1,740 - - - - - 0%	- - - - 4%	4,290 -	
RAS Tons used as AggregateRAS Tons used in Cold MixRAS Tons used as OtherRAS Tons LandfilledAverage % RAS in DOT MixesAverage % RAS in Other Agency Mixes	1,740 - - - - - - 0% 0%	- - - - 4% 1%	4,290 -	
RAS Tons used as AggregateRAS Tons used in Cold MixRAS Tons used as OtherRAS Tons LandfilledAverage % RAS in DOT MixesAverage % RAS in Other Agency MixesAverage % RAS in Commercial & Residential Mixes	1,740 - - - - - - - - - 0% 0% 0%	- - - - 4%	4,290 -	
RAS Tons used as AggregateRAS Tons used in Cold MixRAS Tons used as OtherRAS Tons LandfilledAverage % RAS in DOT MixesAverage % RAS in Other Agency MixesAverage % RAS in Commercial & Residential Mixes	1,740 - - - - - - - 0% 0% 0% 0% 0% Mix Asphalt	- - - - 4% 1% 2%	4,290	34,994
RAS Tons used as AggregateRAS Tons used in Cold MixRAS Tons used as OtherRAS Tons LandfilledAverage % RAS in DOT MixesAverage % RAS in Other Agency MixesAverage % RAS in Commercial & Residential Mixes	1,740 - - - - - - - - - - - - - - - - - - -	- - - - 4% 1% 2%	4,290 - - - - - - - - - - -	34,994 - - - -
RAS Tons used as Aggregate RAS Tons used in Cold Mix RAS Tons used as Other RAS Tons Landfilled Average % RAS in DOT Mixes Average % RAS in Other Agency Mixes Average % RAS in Commercial & Residential Mixes <b>Warm</b> -	1,740 - - - - - - - 0% 0% 0% 0% 0% <b>Mix Asphalt</b> Repor 2009	- - - - 4% 1% 2% ted 2010	4,290	34,994
RAS Tons used as Aggregate         RAS Tons used in Cold Mix         RAS Tons used as Other         RAS Tons Landfilled         Average % RAS in DOT Mixes         Average % RAS in Other Agency Mixes         Average % RAS in Commercial & Residential Mixes         Warm-         Percent Companies using WMA	1,740 - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	4,290 - - - - - - - - - - -	34,994 - - - - stimated 2010
RAS Tons used as Aggregate         RAS Tons used in Cold Mix         RAS Tons used as Other         RAS Tons Landfilled         Average % RAS in DOT Mixes         Average % RAS in Other Agency Mixes         Average % RAS in Commercial & Residential Mixes         Warm-         Percent Companies using WMA         WMA DOT Tonnage	1,740 - - - - - - - 0% 0% 0% 0% 0% <b>Mix Asphalt</b> Repor 2009	- - - - 4% 1% 2% ted 2010 38% 12,650	4,290 - - - - - - - - - - -	34,994 - - - - - stimated 2010 31,065
RAS Tons used as Aggregate         RAS Tons used in Cold Mix         RAS Tons used as Other         RAS Tons Landfilled         Average % RAS in DOT Mixes         Average % RAS in Other Agency Mixes         Average % RAS in Commercial & Residential Mixes         Warm-         Percent Companies using WMA	1,740 - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	4,290 - - - - - - - - - - - - - - - - - - -	34,994 - - - - stimated 2010
RAS Tons used as Aggregate         RAS Tons used in Cold Mix         RAS Tons used as Other         RAS Tons Landfilled         Average % RAS in DOT Mixes         Average % RAS in Other Agency Mixes         Average % RAS in Commercial & Residential Mixes         Warm-         Percent Companies using WMA         WMA DOT Tonnage         WMA Other Agency Tonnage	1,740 - - - - - - - - - - - 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 13% - - -	- - - - - - - - - - - - - - - - - - -	4,290 - - - - - - - - - - - - - - - -	34,994 - - - - - stimated 2010 31,065 29,211
RAS Tons used as Aggregate         RAS Tons used in Cold Mix         RAS Tons used as Other         RAS Tons Landfilled         Average % RAS in DOT Mixes         Average % RAS in Other Agency Mixes         Average % RAS in Commercial & Residential Mixes         Warm-         Percent Companies using WMA         WMA DOT Tonnage         WMA Other Agency Tonnage         WMA Commercial & Residential Tonnage	1,740 - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	4,290 - - - - - - - - - - - - - - - - 892	34,994 - - - - - - - - - - - - - - - - - -
RAS Tons used as Aggregate         RAS Tons used in Cold Mix         RAS Tons used as Other         RAS Tons Landfilled         Average % RAS in DOT Mixes         Average % RAS in Other Agency Mixes         Average % RAS in Commercial & Residential Mixes         Percent Companies using WMA         WMA DOT Tonnage         WMA Other Agency Tonnage         WMA Commercial & Residential Tonnage         Total WMA Tonnage	1,740 - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -	4,290 - - - - - - - - - - - - - - - - 892	34,994 - - - - - - - - - - - - - - - - - -
RAS Tons used as Aggregate         RAS Tons used in Cold Mix         RAS Tons used as Other         RAS Tons Landfilled         Average % RAS in DOT Mixes         Average % RAS in Other Agency Mixes         Average % RAS in Commercial & Residential Mixes         Percent Companies using WMA         WMA DOT Tonnage         WMA Other Agency Tonnage         WMA Commercial & Residential Tonnage         Total WMA Tonnage         Percent WMA Tons using Chemical Additives	1,740 - - - - - - - - - - 0% 0% 0% Mix Asphalt Repor 2009 13% - - 362 362 0%	- - - - - - - - - - - - - - - - - - -	4,290 - - - - - - - - - - - - - - - - 892	34,994 - - - - - - - - - - - - - - - - - -

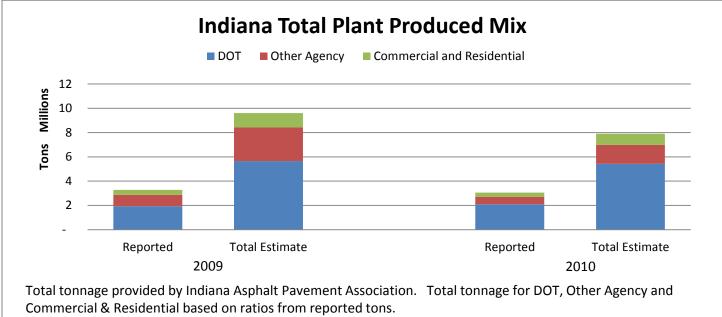
1. Total tonnage provided by Illinois Asphalt Pavement Association. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

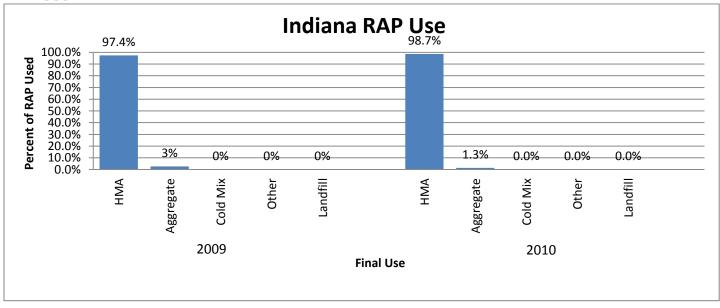
# Indiana

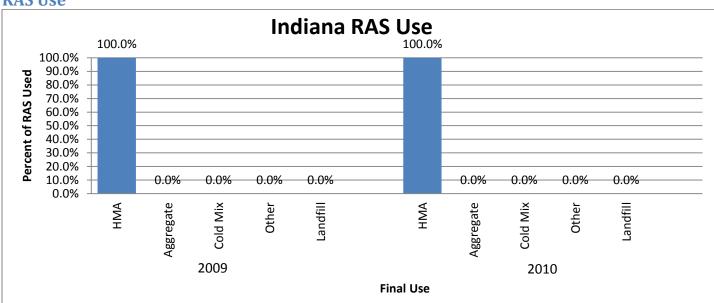
Table B15 summarizes the results received from asphalt mix producers in Indiana. The charts are used to summarize information calculated from information provided by the survey respondents.

## **Total Asphalt Mix Tonnage**

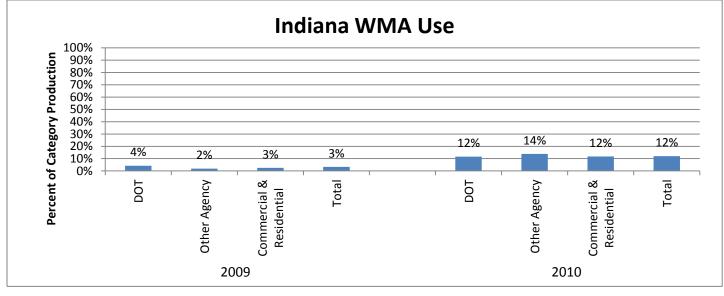
Companies responding: 3











#### **RAS Use**

		Companies R	Reporting	3
HM	A/WMA			
	Repor	ted	Total Estimated <sup>1</sup>	
	2009	2010	2009	2010
Total DOT Tonnage	1,931,000	2,097,000	5,654,293	5,422,684
Total Other Agency Tonnage	943,000	602,000	2,761,263	1,556,727
Total Commercial & Residential Tonnage	404,500	356,000	1,184,444	920,589
Total Tonnage	3,278,500	3,055,000	9,600,000	7,900,000
Reclaimed Asph	nalt Pavement (	(RAP)		
	Repor	ted	Total Es	stimated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	780,000	665,000	2,283,971	1,719,640
RAP Tons used in HMA/WMA	756,000	734,000	2,213,695	1,898,069
RAP Tons used as Aggregate	20,000	10,000	58,563	25,859
RAP Tons used in Cold Mix	-	-	-	-
RAP Tons used as Other	-	-	-	-
RAP Tons Landfilled	-	-	-	-
Average % RAP in DOT Mixes	24%	26%		
Average % RAP in Other Agency Mixes	27%	26%		
Average % RAP in Commercial & Residential Mixes	31%	30%		
Reclaimed Asp	halt Shingles (	RAS)		
•	ted	Total Es	timated	
	2009	2010	2009	2010
Percent Companies using RAS	33%	100%	2009	2010
RAS Tons Received	2,900	11,000	8,492	28,445
RAS Tons used in HMA/WMA	8,000	8,700	23,425	22,498
RAS Tons used as Aggregate	-	-	-	
RAS Tons used in Cold Mix	_	-		-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	4%	9%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	4%	6%		
	Mix Asphalt	0.0		
	Reported		Total Es	timated
	2009	2010	2009	2010
Percent Companies using WMA	67%	100%		_
WMA DOT Tonnage	81,000	242,820	237,182	627,914
WMA Other Agency Tonnage	18,000	82,885	52,707	214,334
	10,164	41,665	29,760	107,743
WMA Commercial & Residential Tonnage	10,101			-
WMA Commercial & Residential Tonnage Total WMA Tonnage	109,164	367,370	319,649	949,991
5	,	367,370 1%	319,649	949,991
Total WMA Tonnage	109,164		319,649	949,991
Total WMA Tonnage Percent WMA Tons using Chemical Additives	109,164 0%	1%	319,649	949,991

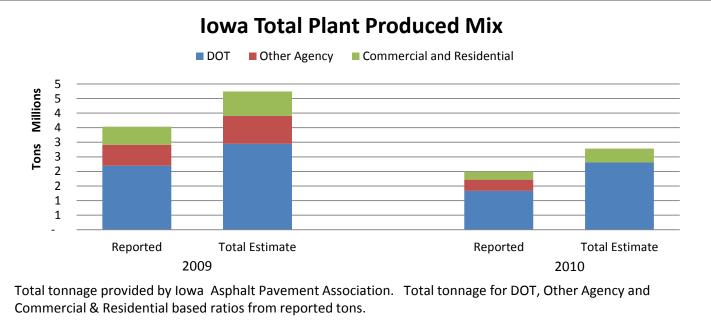
1. Total tonnage provided by Indiana Asphalt Pavement Association. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

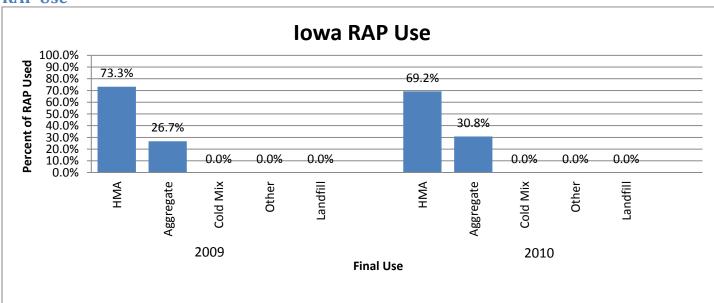
## Iowa

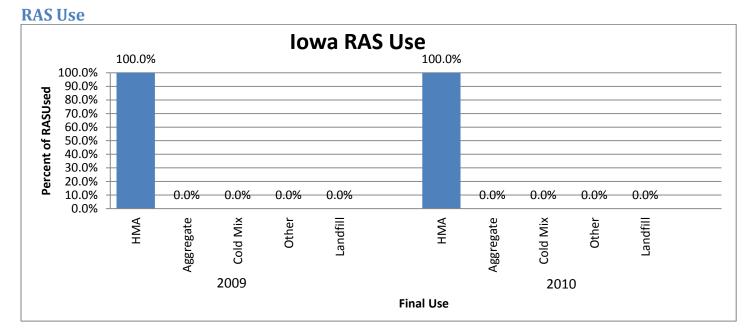
Table B16 summarizes the results received from asphalt mix producers in Iowa. The charts are used to summarize information calculated from information provided by the survey respondents.

## **Total Asphalt Mix Tonnage**

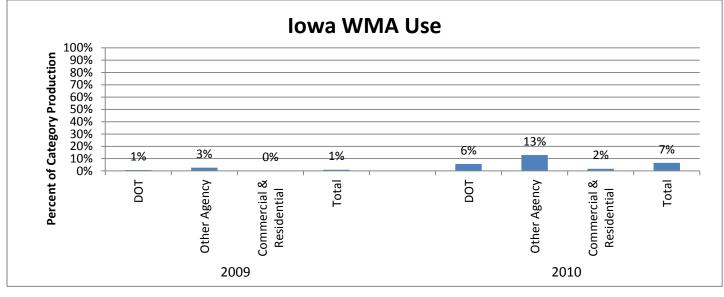
Companies responding: 7











		Companies	Reporting	7
Н	IA/WMA			
	Repor	ted	Total Es	timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	2,197,527	1,333,000	2,948,284	2,307,501
Total Other Agency Tonnage	716,512	384,000	961,299	664,727
Total Commercial & Residential Tonnage	621,939	276,000	834,417	477,772
Total Tonnage	3,535,978	1,993,000	4,744,000	3,450,000
Reclaimed Asp	halt Pavement (	(RAP)		
	Repor	ted	Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	606,000	533,000	813,032	922,654
RAP Tons used in HMA/WMA	417,183	341,923	559,708	591,889
RAP Tons used as Aggregate	152,000	152,000	203,929	263,121
RAP Tons used in Cold Mix	-	-	-	-
RAP Tons used as Other	-	-	-	-
RAP Tons Landfilled	55	50	74	87
Average % RAP in DOT Mixes	10%	11%		
Average % RAP in Other Agency Mixes	8%	15%		
Average % RAP in Commercial & Residential Mixes	10%	13%		
Reclaimed Asp	halt Shingles (			
	Reported		Total Estimated	
	2009	2010	2009	2010
Percent Companies using RAS	43%	86%		
RAS Tons Received	6,900	22,000	9,257	38,083
RAS Tons used in HMA/WMA	6,700	12,734	8,989	22,043
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	- 10/	-	-	-
Average % RAS in DOT Mixes	1%	1%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	1%	1%		
warm	-Mix Asphalt	Fod	Total Estimated	
	Repor			
Dereent Companies weine 14/44	2009	2010	2009	2010
Percent Companies using WMA	43%	86%	20 121	121 560
WMA DOT Tonnage	15,005	76,000	20,131	131,560
WMA Other Agency Tonnage	19,080	49,720	25,598	86,068
WMA Commercial & Residential Tonnage	1,100	4,850	1,476	8,396
Total WMA Tonnage	35,185	130,570	47,206	226,024
Percent WMA Tons using Chemical Additives	73%	22%		
Percent WMA Tons using Additive Foaming	0%	0%		
Percent WMA Tons using Plant Foaming	18%	78%		
Percent WMA Tons using Organic Additive	8%	0%		

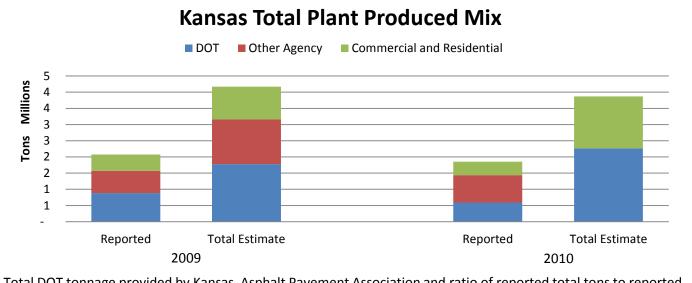
1. Total tonnage provided by Iowa Asphalt Pavement Association. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

## Kansas

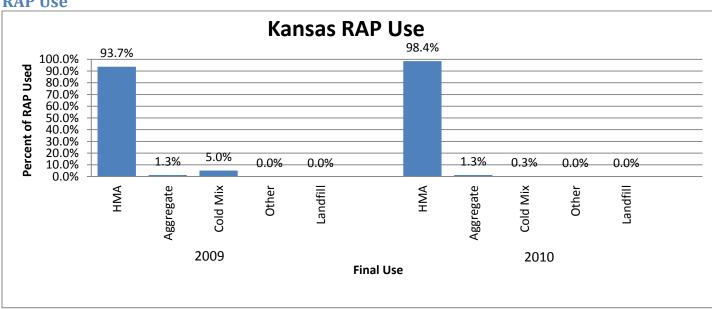
Table B17 summarizes the results received from asphalt mix producers in Kansas. The charts are used to summarize information calculated from information provided by the survey respondents.

### **Total Asphalt Mix Tonnage**

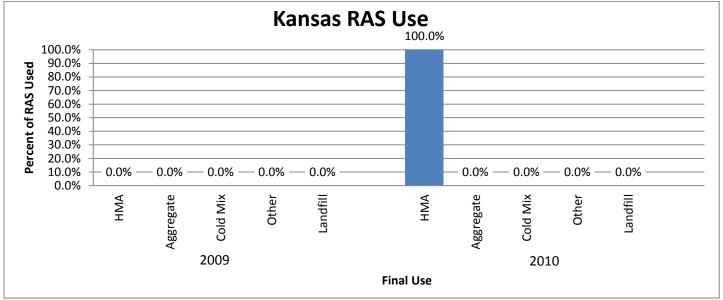
Companies responding: 6



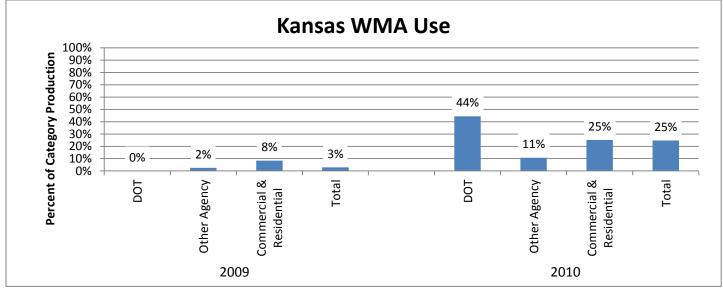
Total DOT tonnage provided by Kansas Asphalt Pavement Association and ratio of reported total tons to reported total DOT tons used to compute estimated total tons. Total tonnage for Other Agency and Commercial & Residential based on ratios from reported tons.



#### **RAS Use**







		Companies	Reporting	6
НМ	IA/WMA			
	Repor	ted	Total Es	timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	885,000	590,000	1,778,559	2,268,554
Total Other Agency Tonnage	686,000	847,000	1,378,634	3,256,721
Total Commercial & Residential Tonnage	505,000	416,000	1,014,884	1,599,523
Total Tonnage	2,076,000	1,853,000	4,172,077	7,124,799
Reclaimed Asp			. , ,	, ,
	Repor		Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	359,250	382,000	721,974	1,468,793
RAP Tons used in HMA/WMA	373,133	379,838	749,875	1,460,479
RAP Tons used as Aggregate	5,000	5,000	10,048	19,225
RAP Tons used in Cold Mix	20,000	1,000	40,193	3,845
RAP Tons used as Other	-		-	-
RAP Tons Landfilled	29	41	58	156
Average % RAP in DOT Mixes	14%	15%		
Average % RAP in Other Agency Mixes	23%	20%		
Average % RAP in Commercial & Residential Mixes	22%	26%		
	halt Shingles (	1		
	Repor		Total Fe	timated
	2009	2010	2009 2010	
Percent Companies using DAC			2009	2010
Percent Companies using RAS RAS Tons Received	0%	33%	-	15 200
	-	4,000	-	15,380 5,768
RAS Tons used in HMA/WMA	-	1,500		
RAS Tons used as Aggregate RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-		-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%	_	_
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
		0%		
warm	-Mix Asphalt Reported		Total Estimated	
	2009	2010	2009	2010
Percent Companies using WMA	0%	50%	2005	2010
WMA DOT Tonnage	-	262,150		1,007,969
WMA Other Agency Tonnage	17,000	91,150	34,164	350,472
WMA Commercial & Residential Tonnage	42,500	104,500	85,411	401,803
Total WMA Tonnage	59,500	457,800	119,575	1,760,244
Percent WMA Tons using Chemical Additives	0%	0%		_,
Percent WMA Tons using Additive Foaming	0%	0%		
Percent WMA Tons using Plant Foaming	100%	99%		
Percent WMA Tons using Organic Additive	0%	1%		
	0.10	170		

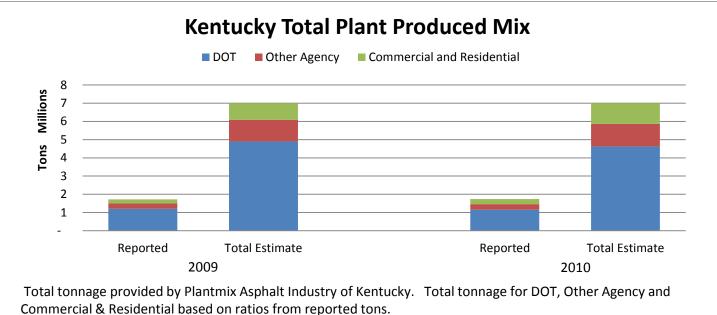
1. Total DOT tonnage provided by Kansas Asphalt Pavement Association and the ratio of reported total tons to reported total DOT tons used to compute estimated total tons. Total tonnage for Other Agency and Commercial & Residential based on ratios from reported tons.

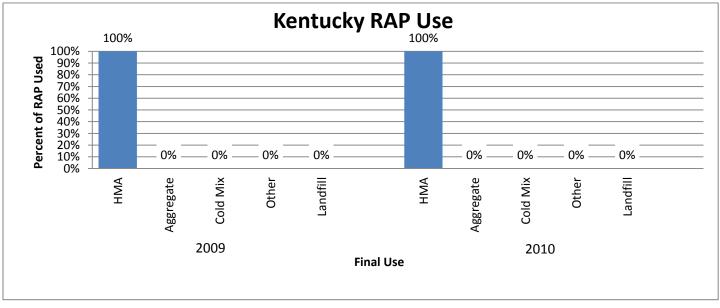
# Kentucky

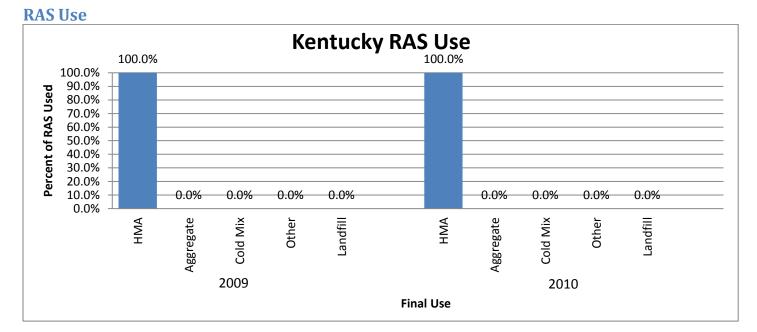
Table B18 summarizes the results received from asphalt mix producers in Kentucky. The charts are used to summarize information calculated from information provided by the survey respondents.

### **Total Asphalt Mix Tonnage**

Companies responding: 3









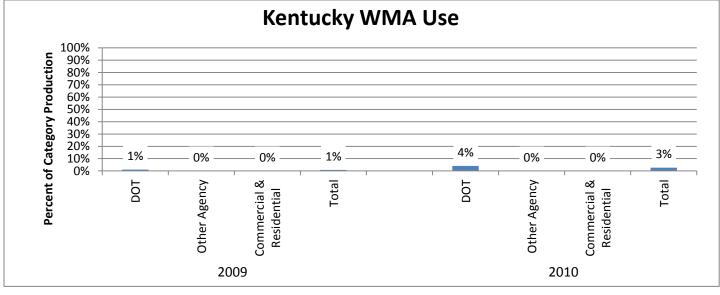


Table B 18: Summary of Kentucky Data		Companies	Reporting	3
НМ	IA/WMA		1	
	Repor	ted	Total Estimated <sup>1</sup>	
	2009	2010	2009	2010
Total DOT Tonnage	1,200,996	1,148,067	4,896,565	4,626,443
Total Other Agency Tonnage	291,380	308,817	1,187,982	1,244,461
Total Commercial & Residential Tonnage	224,536	280,189	915,453	1,129,096
Total Tonnage	1,716,912	1,737,073	7,000,000	7,000,000
Reclaimed Aspl	nalt Pavement (	(RAP)		
	Repor	ted	Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	195,000	165,000	795,032	664,912
RAP Tons used in HMA/WMA	155,000	158,000	631,949	636,703
RAP Tons used as Aggregate	-	-	-	-
RAP Tons used in Cold Mix	-	-	-	-
RAP Tons used as Other	-	-	-	-
RAP Tons Landfilled	11	11	44	46
Average % RAP in DOT Mixes	11%	12%	-	
Average % RAP in Other Agency Mixes	11%	14%		
Average % RAP in Commercial & Residential Mixes	15%	14%		
Reclaimed Asp	halt Shingles (	2		_
	Repor			stimated
	2009	2010	2009	2010
Percent Companies using RAS	33%	33%		I
RAS Tons Received	3,000	3,000	12,231	12,089
RAS Tons used in HMA/WMA	3,000	3,000	12,231	12,089
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	1%		
Average % RAS in Other Agency Mixes	3%	1%	-	
Average % RAS in Commercial & Residential Mixes	1%	1%		
Warm-	Mix Asphalt			
	Repor	ted	Total Es	timated <sup>2</sup>
	2009	2010	2009	2010
Percent Companies using WMA	67%	100%		
WMA DOT Tonnage	13,435	46,901	54,776	188,999
WMA Other Agency Tonnage	-	-	-	-
WMA Commercial & Residential Tonnage	-	-	-	-
Total WMA Tonnage	13,435	46,901	54,776	188,999
Percent WMA Tons using Chemical Additives	0%	18%		
Percent WMA Tons using Additive Foaming	0%	0%		
Percent WMA Tons using Plant Foaming	76%	64%		
Percent WMA Tons using Organic Additive	24%	18%		

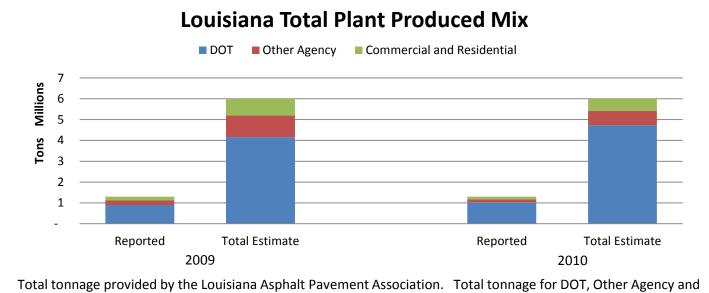
Total tonnage provided by Plantmix Asphalt Industry of Kentucky.
 Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.
 The Kentucky DOT reports in 2009 they placed about 930,000 tons of WMA (6300 tons by wax additive; the rest by water injection). In 2010, the Department purchased approximately 980,000 tons of WMA

# Louisiana

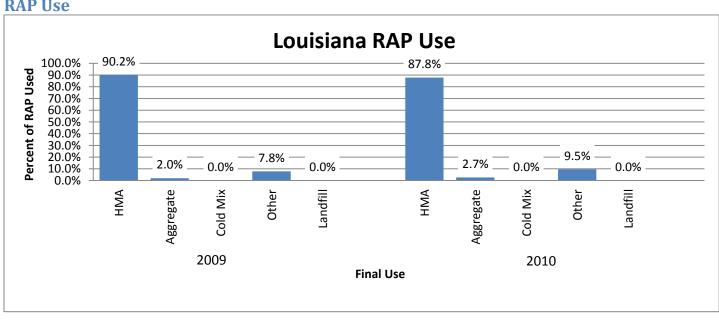
Table B19 summarizes the results received from asphalt mix producers in Louisiana. The charts are used to summarize information calculated from information provided by the survey respondents.

## **Total Asphalt Mix Tonnage**

Companies responding: 2



Commercial & Residential based on ratios from reported tons.

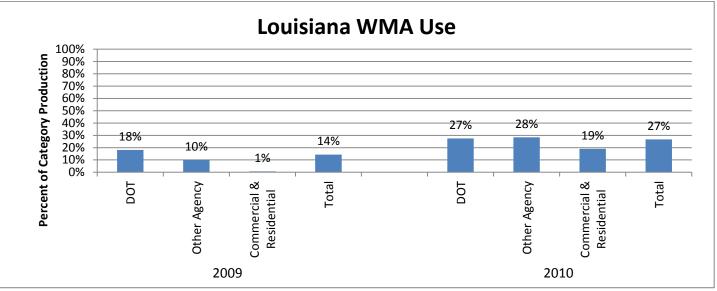


#### **RAP Use**

## **RAS Use**

No contractors reported using RAS in 2009 and 2010.

#### WMA Use



		Companies	Reporting	2
HI	MA/WMA			
	Repor	ted	Total Es	timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	900,000	1,025,000	4,153,846	4,730,769
Total Other Agency Tonnage	225,000	150,000	1,038,462	692,308
Total Commercial & Residential Tonnage	175,000	125,000	807,692	576,923
Total Tonnage	1,300,000	1,300,000	6,000,000	6,000,000
Reclaimed Asp	halt Pavement (	(RAP)		
	Repor	ted	Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	300,000	400,000	1,384,615	1,846,154
RAP Tons used in HMA/WMA	230,000	230,000	1,061,538	1,061,538
RAP Tons used as Aggregate	5,000	7,000	23,077	32,308
RAP Tons used in Cold Mix	-	-	-	-
RAP Tons used as Other	20,000	25,000	92,308	115,385
RAP Tons Landfilled	-	-	-	-
Average % RAP in DOT Mixes	19%	19%		
Average % RAP in Other Agency Mixes	20%	20%		
Average % RAP in Commercial & Residential Mixes	29%	28%		
Reclaimed As	phalt Shingles (	RAS)		
	Reported		Total Estimated	
	2009	2010	2009	2010
Percent Companies using RAS	0%	0%		
RAS Tons Received	-	-	-	-
RAS Tons used in HMA/WMA	-	-	-	-
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
Warm	-Mix Asphalt			
	Reported		Total Estimated	
	2009	2010	2009	2010
Percent Companies using WMA	50%	100%		
WMA DOT Tonnage	162,500	281,250	750,000	1,298,077
WMA Other Agency Tonnage	22,500	42,500	103,846	196,154
WMA Commercial & Residential Tonnage	1,250	23,750	5,769	109,615
	106 252	247 500		1 602 046
Total WMA Tonnage	186,250	347,500	859,615	1,603,846
Percent WMA Tons using Chemical Additives	0%	0%		
Percent WMA Tons using Additive Foaming	0%	0%		
Percent WMA Tons using Plant Foaming	100%	100%		
Percent WMA Tons using Organic Additive	0%	0%		

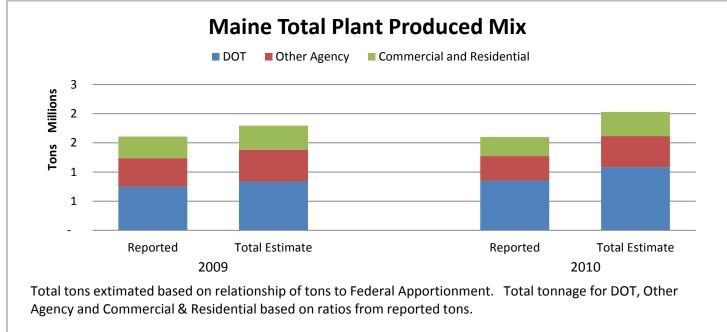
1. Total tonnage provided by the Louisiana Asphalt Pavement Association. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

# Maine

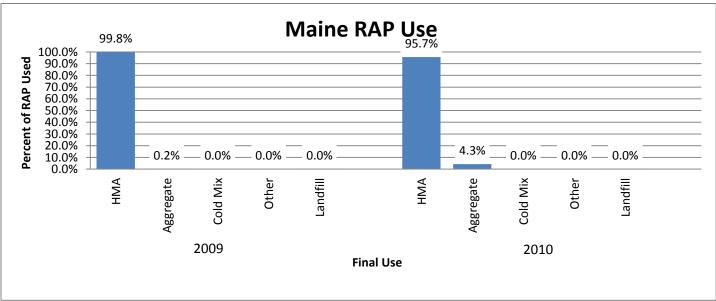
Table B20 summarizes the results received from asphalt mix producers in Maine. The charts are used to summarize information calculated from information provided by the survey respondents.

## **Total Asphalt Mix Tonnage**

Companies responding: 2



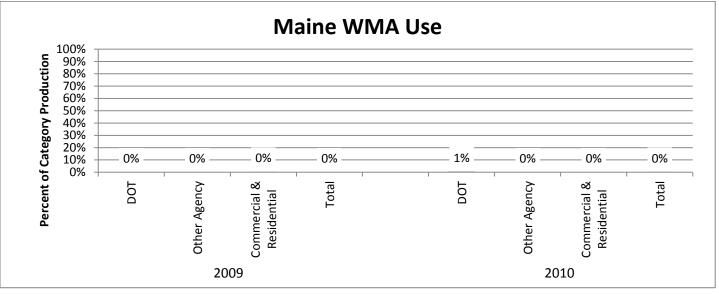




## **RAS Use**

No contractors reported using RAS in 2009 and 2010.

#### WMA Use



		Companies	Reporting	2
НМ	A/WMA			
	Report	ted	Total Es	timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	748,000	853,000	835,701	1,083,249
Total Other Agency Tonnage	490,000	419,000	547,451	532,100
Total Commercial & Residential Tonnage	369,000	327,000	412,264	415,267
Total Tonnage	1,607,000	1,599,000	1,795,416	2,030,616
Reclaimed Aspl	halt Pavement (	(RAP)		
	Report	ted	Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	147,000	240,000	164,235	304,783
RAP Tons used in HMA/WMA	210,000	222,000	234,622	281,924
RAP Tons used as Aggregate	400	10,000	447	12,699
RAP Tons used in Cold Mix	-	-	-	-
RAP Tons used as Other	-	-	-	-
RAP Tons Landfilled	15	15	16	18
Average % RAP in DOT Mixes	14%	13%		
Average % RAP in Other Agency Mixes	16%	17%		
Average % RAP in Commercial & Residential Mixes	16%	17%		
Reclaimed Asp	halt Shingles (I	RAS)		
	Report	ted	Total Estimated	
	2009	2010	2009	2010
Percent Companies using RAS	0%	0%		
RAS Tons Received	-	-	-	-
RAS Tons used in HMA/WMA	-	-	_	-
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
Warm-	Mix Asphalt			
	Reported		Total Estimated	
	2009	2010	2009	2010
Percent Companies using WMA	50%	100%		
WMA DOT Tonnage	-	4,750	-	6,032
WMA Other Agency Tonnage	-	-	-	-
WMA Commercial & Residential Tonnage	1,400	48	1,564	60
Total WMA Tonnage	1,400	4,798	1,564	6,093
Percent WMA Tons using Chemical Additives	1000/	0%		
refeelie white rolls using chemical Additives	100%	0 /0		
Percent WMA Tons using Additive Foaming	0%	0%		

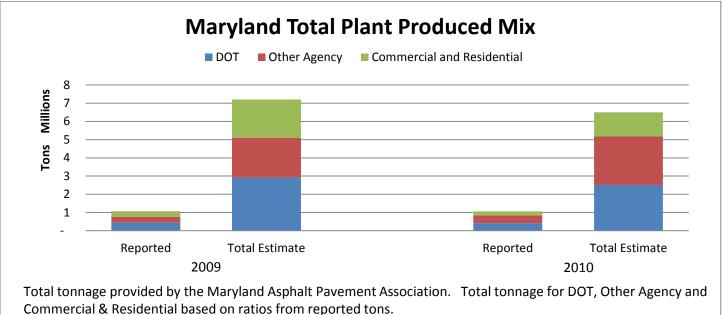
1. Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

# Maryland

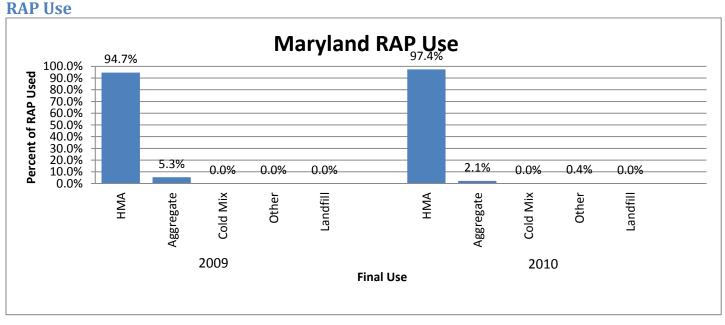
Table B21 summarizes the results received from asphalt mix producers in Maryland. The charts are used to summarize information calculated from information provided by the survey respondents.

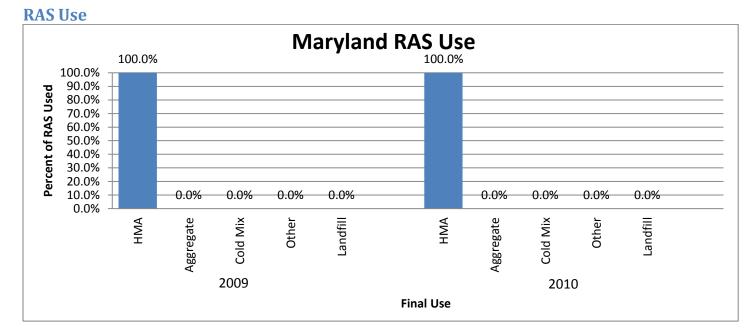
### **Total Asphalt Mix Tonnage**

Companies responding: 4

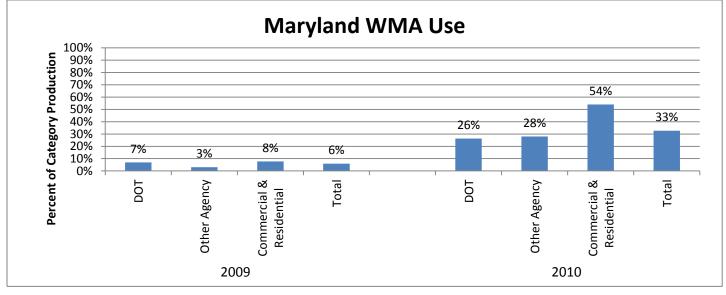












		Companies	Reporting	4
HM	1A/WMA			
	Repor	ted	Total Es	timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	435,100	410,086	2,921,441	2,510,746
Total Other Agency Tonnage	325,000	434,445	2,182,184	2,659,884
Total Commercial & Residential Tonnage	312,220	217,129	2,096,374	1,329,370
Total Tonnage	1,072,320	1,061,660	7,200,000	6,500,000
Reclaimed Asp			. , ,	, ,
•	Repor		Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	307,608	211,000	2,065,407	1,291,845
RAP Tons used in HMA/WMA	205,608	227,000	1,380,537	1,389,805
RAP Tons used as Aggregate	11,500	5,000	77,216	30,612
RAP Tons used in Cold Mix	-	-	-	-
RAP Tons used as Other	-	1,000	-	6,122
RAP Tons Landfilled	-	-	-	-
Average % RAP in DOT Mixes	20%	20%		
Average % RAP in Other Agency Mixes	19%	21%		
Average % RAP in Commercial & Residential Mixes	25%	26%		
	halt Shingles (			
Kedumea As	Repor	-	Total Fe	timated
	2009	2010	Total Estimated20092010	
Percent Companies using RAS	50%	50%	2009	2010
RAS Tons Received	12,000	28,000	80,573	171,430
RAS Tons used in HMA/WMA	15,400	17,500	103,402	107,144
RAS Tons used as Aggregate	13,400		- 105,402	-
RAS Tons used in Cold Mix	_	_	-	_
RAS Tons used as Other	_	-	_	
RAS Tons Landfilled	_	_	_	
Average % RAS in DOT Mixes	2%	6%	_	
Average % RAS in Other Agency Mixes	1%	2%		
Average % RAS in Commercial & Residential Mixes	2%	2%		
		270		
Warm	-Mix Asphalt Reported		Total Fr	timated
	2009	2010	2009	2010
Percent Companies using WMA	75%	100%	2003	2010
WMA DOT Tonnage	30,000	108,086	201,432	661,755
WMA Other Agency Tonnage	10,000	121,885	67,144	746,239
WMA Commercial & Residential Tonnage	24,000	117,249	161,146	717,856
Total WMA Tonnage	64,000	347,220	429,722	2,125,850
Percent WMA Tons using Chemical Additives	04,000	2%	123,122	2,123,030
Percent WMA Tons using Additive Foaming	0%	0%		
Percent WMA Tons using Additive Foaming Percent WMA Tons using Plant Foaming	100%	98%		
Percent WMA Tons using Organic Additive	0%	98% 0%		
	0%	U%0		

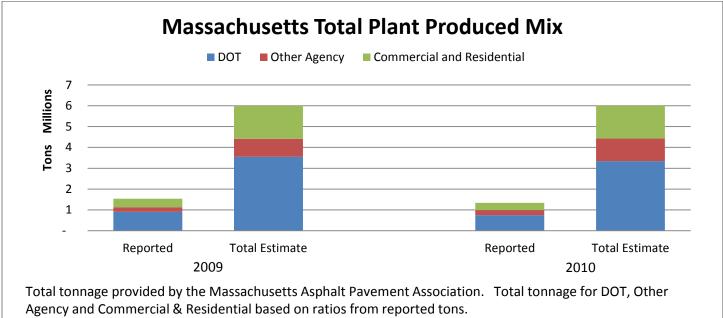
1. Total tonnage provided by the Maryland Asphalt Pavement Association. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

## **Massachusetts**

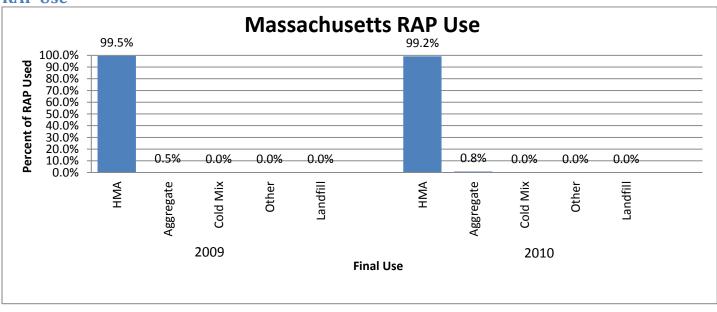
Table B22 summarizes the results received from asphalt mix producers in Massachusetts. The charts are used to summarize information calculated from information provided by the survey respondents.

### **Total Asphalt Mix Tonnage**

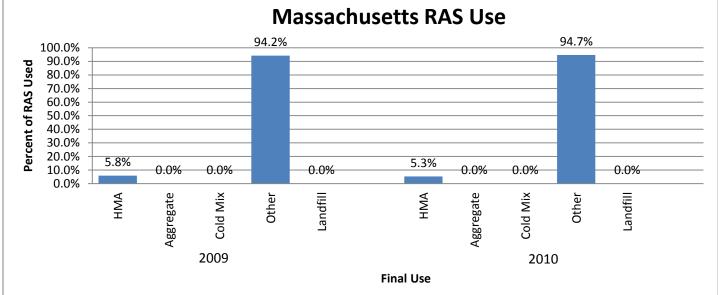
Companies responding: 2



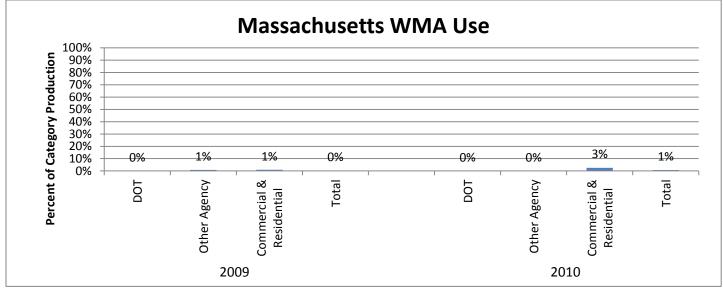












		Companies	Reporting	2
НМ	IA/WMA			
	Repor	ted	Total Estimated <sup>1</sup>	
	2009	2010	2009	2010
Total DOT Tonnage	907,358	744,491	3,546,568	3,339,388
Total Other Agency Tonnage	220,933	242,950	863,555	1,089,744
Total Commercial & Residential Tonnage	406,756	350,213	1,589,877	1,570,868
Total Tonnage	1,535,047	1,337,654	6,000,000	6,000,000
Reclaimed Aspl	halt Pavement (	(RAP)	• • •	
	Repor		Total Es	stimated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	216,000	105,900	844,274	475,011
RAP Tons used in HMA/WMA	218,100	185,500	852,482	832,054
RAP Tons used as Aggregate	1,000	1,500	3,909	6,728
RAP Tons used in Cold Mix				
RAP Tons used as Other	-	-	_	-
RAP Tons Landfilled	0	0	1	0
Average % RAP in DOT Mixes	1%	1%	1	0
Average % RAP in Other Agency Mixes	22%	23%		
Average % RAP in Commercial & Residential Mixes	2%	4%		
	halt Shingles (			
Reclaimed As	Repor		Total E	timatod
			Total Estimated	
	2009	2010	2009	2010
Percent Companies using RAS	50%	50%	160.256	1 ( 1 4 7 7
RAS Tons Received	41,000	36,000	160,256	161,477
RAS Tons used in HMA/WMA	1,300	1,000	5,081	4,485
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	21,000	18,000	82,082	80,738
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
Warm-	Mix Asphalt			
	Repor	ted	Total Es	timated
	2009	2010	2009	2010
Percent Companies using WMA	100%	50%		
WMA DOT Tonnage	-	-	-	-
WMA Other Agency Tonnage	1,769	-	6,916	-
WMA Commercial & Residential Tonnage	3,720	9,030	14,540	40,504
Total WMA Tonnage	5,489	9,030	21,456	40,504
Percent WMA Tons using Chemical Additives	0%	0%		
Percent WMA Tons using Additive Foaming	0%	0%		
Percent WMA Tons using Plant Foaming	68%	33%		
Percent WMA Tons using Organic Additive	32%	67%		

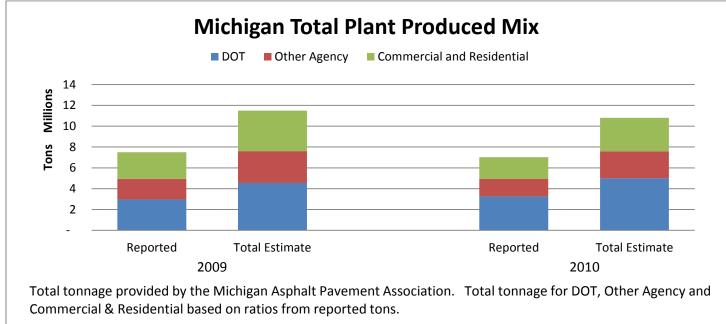
1. Total tonnage provided by the Massachusetts Asphalt Pavement Association. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

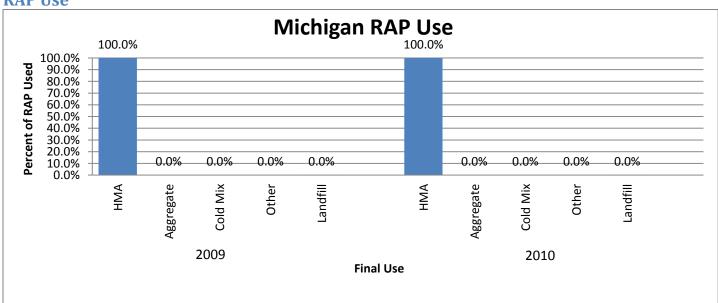
# **Michigan**

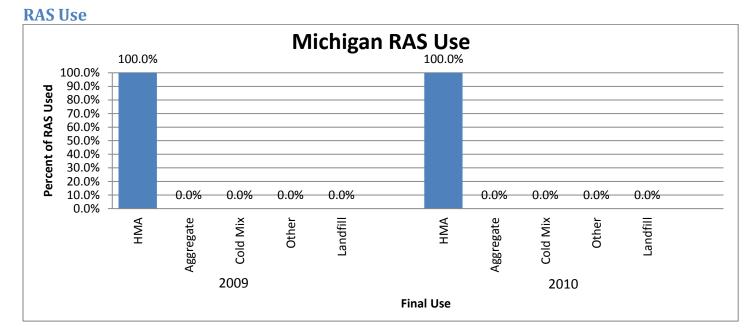
Table B23 summarizes the results received from asphalt mix producers in Michigan. The charts are used to summarize information calculated from information provided by the survey respondents.

# **Total Asphalt Mix Tonnage**

**Companies responding: 8** 









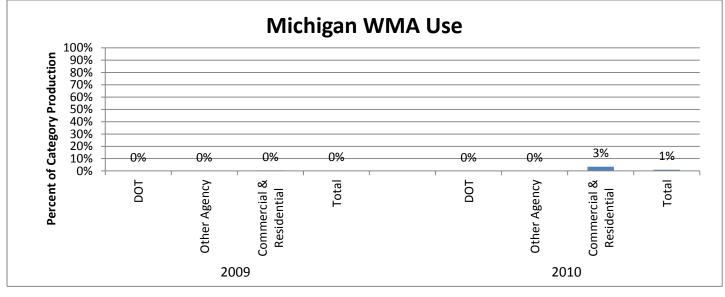


Table B 23: Summary of Michigan Data		Companies F	Reporting	4
HM	A/WMA			
	Repor	ted	Total Estimated <sup>1</sup>	
	2009	2010	2009	2010
Total DOT Tonnage	2,964,000	3,252,000	4,549,046 <sup>2</sup>	4,996,671 <sup>2</sup>
Total Other Agency Tonnage	1,990,000	1,688,000	3,054,184	2,593,598
Total Commercial & Residential Tonnage	2,539,000	2,089,000	3,896,770	3,209,731
Total Tonnage	7,493,000	7,029,000	11,500,000	10,800,000
Reclaimed Aspl	nalt Pavement	(RAP)		
	Repor	ted	Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	2,305,000	2,185,000	3,537,635	3,357,234
RAP Tons used in HMA/WMA	2,024,000	2,107,000	3,106,366	3,237,388
RAP Tons used as Aggregate	-	-		
RAP Tons used in Cold Mix	-	-		
RAP Tons used as Other	-	-	-	-
RAP Tons Landfilled	27	31	42	47
Average % RAP in DOT Mixes	17%	17%		
Average % RAP in Other Agency Mixes	23%	24%		
Average % RAP in Commercial & Residential Mixes	38%	38%		
Reclaimed Asp	halt Shingles (	RAS)		
	Repor	ted	Total Estimated	
	2009	2010	2009	2010
Percent Companies using RAS	100% <sup>3</sup>	50% <sup>3</sup>		
RAS Tons Received	5,000	8,000	7,674	12,292
RAS Tons used in HMA/WMA	5,636	11,017	8,650	16,928
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	1%	1%		
Warm-	Mix Asphalt			
	Repor	ted	Total Es	timated
	2009	2010	2009	2010
Percent Companies using WMA	25%	25%		
WMA DOT Tonnage	-	-	-	-
WMA Other Agency Tonnage	-	-	-	-
WMA Commercial & Residential Tonnage	12,000	72,000	18,417	110,627
Total WMA Tonnage	12,000	72,000	18,417	110,627
Percent WMA Tons using Chemical Additives	0%	0%		
Percent WMA Tons using Additive Foaming	0%	0%		
Percent WMA Tons using Plant Foaming	100%	100%		
Percent WMA Tons using Organic Additive	0%	0%		
1. Total tonnage provided by the Asphalt Pavement	Accordiation of Mi	chigan (ADAM)	Total toppa	an for DOT

1. Total tonnage provided by the Asphalt Pavement Association of Michigan (APAM). Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

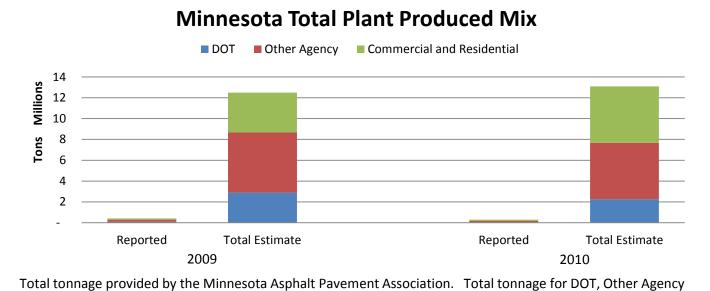
2. APAM reports Total DOT Tonnage: 2009 = 3.2 M tons, 2010 = 2.5 M tons. Some differences likely due to local aid projects bid through DOT that are not part of the DOT system. 3. APAM estimates 50% of companies used RAS in 2009 with fewer in 2010 due to excess RAP.

## Minnesota

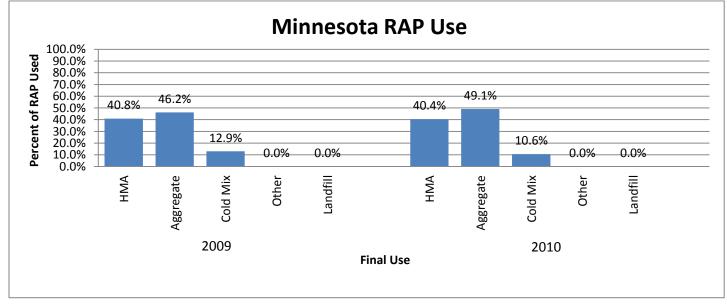
Table B6 summarizes the results received from asphalt mix producers in Minnesota. The charts are used to summarize information calculated from information provided by the survey respondents.

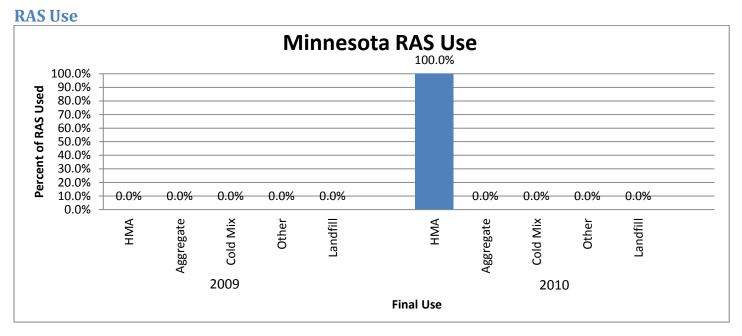
### **Total Asphalt Mix Tonnage**

Companies responding: 8



and Commercial & Residential based on ratios from reported tons.





### WMA Use

No contractors reported using WMA in 2009 or 2010.

		Companies	Reporting	2
HM	A/WMA			
	Repor	ted	Total Es	timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	96,000	49,000	2,891,566	2,252,281
Total Other Agency Tonnage	192,000	118,000	5,783,133	5,423,860
Total Commercial & Residential Tonnage	127,000	118,000	3,825,301	5,423,860
Total Tonnage	415,000	285,000	12,500,000	13,100,000
Reclaimed Aspł	alt Pavement (	(RAP)		
	Repor	ted	Total Es	stimated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	135,000	130,000	4,066,265	5,975,439
RAP Tons used in HMA/WMA	66,166	53,463	1,992,955	2,457,424
RAP Tons used as Aggregate	75,000	65,000	2,259,036	2,987,719
RAP Tons used in Cold Mix	21,000	14,000	632,530	643,509
RAP Tons used as Other		-	-	-
RAP Tons Landfilled	16	14	486	627
Average % RAP in DOT Mixes	22%	28%		022
Average % RAP in Other Agency Mixes	10%	13%		
Average % RAP in Commercial & Residential Mixes	11%	16%		
	halt Shingles (			
Reclamed Asp	Repor		Total Fe	timated
	2009	2010	2009	2010
Percent Companies using DAC	0%	50%	2009	2010
Percent Companies using RAS RAS Tons Received	0%	2,000		91,930
RAS Tons used in HMA/WMA	-	558	-	25,642
RAS Tons used as Aggregate	-	220		23,072
RAS Tons used in Cold Mix	-			-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-			-
	- 0%	- 4%	-	-
Average % RAS in DOT Mixes				
Average % RAS in Other Agency Mixes	0%	2%		
Average % RAS in Commercial & Residential Mixes	0%	1%		
Warm-	Mix Asphalt			
	Repor 2009	ted	Total Es 2009	timated 2010
Percent Companies using WMA	0%	0%	2009	2010
WMA DOT Tonnage			-	
WMA Other Agency Tonnage				
WMA Commercial & Residential Tonnage	-	-	-	-
Total WMA Tonnage	-			-
	-	- 	-	-
Percent WMA Tons using Chemical Additives	0%	0%		
Percent WMA Tons using Additive Foaming	0%	0%		
Percent WMA Tons using Plant Foaming	0%	0%		
Percent WMA Tons using Organic Additive	0%	0%		

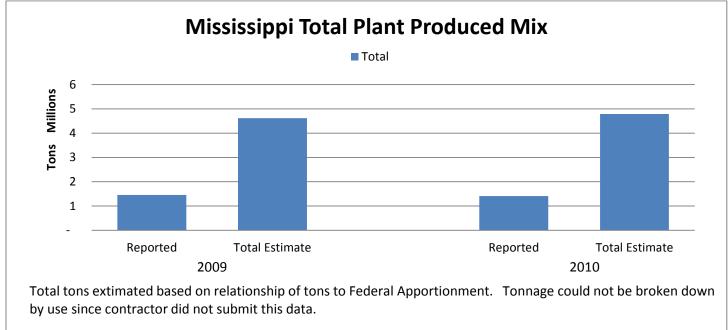
1. Total tonnage provided by the Minnesota Asphalt Pavement Association. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

# Mississippi

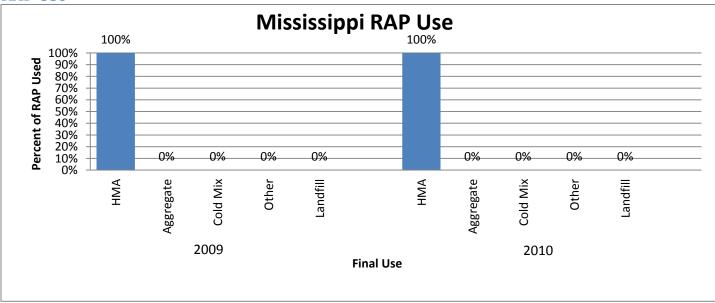
Table B25 summarizes the results received from asphalt mix producers in Mississippi. The charts are used to summarize information calculated from information provided by the survey respondents.

## **Total Asphalt Mix Tonnage**

Companies responding: 1







## **RAS Use**

The contractor did not report any RAS use in 2009 or 2010.

#### WMA Use

The contractor did not report an WMA use in 2009 or 2010.

		Companies	Reporting	1	
HM	A/WMA				
	Repor	ted	Total Estimated <sup>1</sup>		
	2009	2010	2009	2010	
Total DOT Tonnage	-	-	-	-	
Total Other Agency Tonnage	-	-	-	-	
Total Commercial & Residential Tonnage	-	-	-	-	
Total Tonnage	1,454,000	1,411,000	4,615,667	4,786,725	
Reclaimed Aspt	alt Pavement (	(RAP)			
	Repor	ted	Total Es	timated	
	2009	2010	2009	2010	
Percent Companies using RAP	100%	100%			
RAP Tons Received	-	-	-	-	
RAP Tons used in HMA/WMA	236,493	238,632	750,738	809,543	
RAP Tons used as Aggregate	-	-	-	-	
RAP Tons used in Cold Mix	-	-	-	-	
RAP Tons used as Other	-	-	-	-	
RAP Tons Landfilled	16	17	52	57	
Average % RAP in DOT Mixes	0%	0%			
Average % RAP in Other Agency Mixes	0%	0%			
Average % RAP in Commercial & Residential Mixes	0%	0%			
Reclaimed Asp					
Reclamed Asp	Repor		Total Fs	timated	
	2009	2010	2009	otal Estimated           09         2010	
Percent Companies using RAS	0%	0%	2009	2010	
RAS Tons Received	0.10	070	_	_	
RAS Tons used in HMA/WMA					
RAS Tons used as Aggregate					
RAS Tons used in Cold Mix		-			
RAS Tons used as Other					
RAS Tons Landfilled					
Average % RAS in DOT Mixes	0%	0%		_	
	0%	0%			
Average % RAS in Other Agency Mixes Average % RAS in Commercial & Residential Mixes		0%			
	0%	0%			
warm-	n-Mix Asphalt				
	Repor 2009	2010	2009	timated 2010	
Percent Companies using WMA	0%	0%	2005	2010	
WMA DOT Tonnage	-	-	-	-	
WMA Other Agency Tonnage	-	-	-	-	
WMA Commercial & Residential Tonnage	-	-	-	-	
Total WMA Tonnage	-	-	-	-	
Percent WMA Tons using Chemical Additives	0%	0%			
	0%	0%			
Percent WMA Tons using Additive Foaming Percent WMA Tons using Plant Foaming	0%	0%			

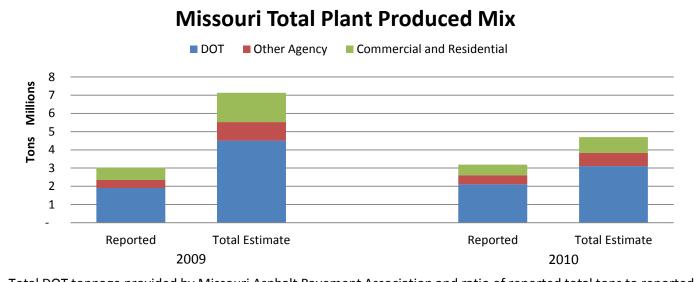
1. Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential ratios from reported tons.

## **Missouri**

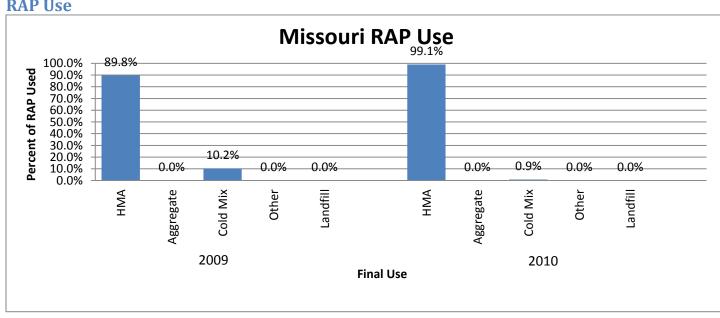
Table B26 summarizes the results received from asphalt mix producers in Missouri. The charts are used to summarize information calculated from information provided by the survey respondents.

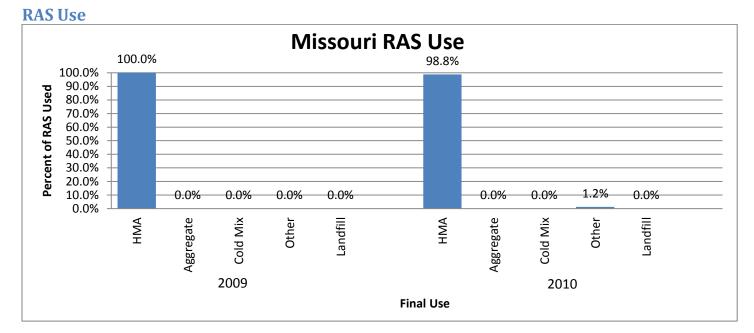
## **Total Asphalt Mix Tonnage**

**Companies responding: 6** 

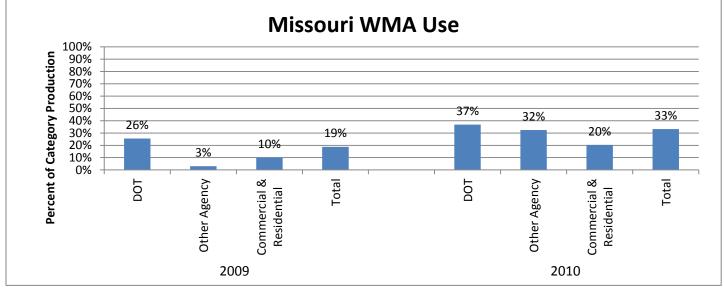


Total DOT tonnage provided by Missouri Asphalt Pavement Association and ratio of reported total tons to reported DOT tons used to compute estimated total tons. Total tonnage for Other Agency and Commercial & Residential based on ratios from reported tons.









		Companies	Reporting	6	
НМ	A/WMA				
	Repor	ted	Total Estimated <sup>1</sup>		
	2009	2010	2009	2010	
Total DOT Tonnage	1,906,900	2,109,800	4,502,775	3,104,824	
Total Other Agency Tonnage	433,500	493,900	1,023,626	726,833	
Total Commercial & Residential Tonnage	679,766	588,000	1,605,136	865,313	
Total Tonnage	3,020,166	3,191,700	7,131,537	4,696,970	
Reclaimed Aspl		(RAP)	• • •		
•	Repor		Total Estimated		
	2009	2010	2009	2010	
Percent Companies using RAP	100%	83%			
RAP Tons Received	379,000	411,000	894,935	604,836	
RAP Tons used in HMA/WMA	359,345	386,014	848,523	568,066	
RAP Tons used as Aggregate	-		-	-	
RAP Tons used in Cold Mix	41,000	3,500	96,814	5,151	
RAP Tons used as Other	-		-		
RAP Tons Landfilled	11	13	26	19	
Average % RAP in DOT Mixes	12%	27%	20	19	
Average % RAP in Other Agency Mixes	8%	15%			
Average % RAP in Commercial & Residential Mixes	8%	14%			
Reclaimed Asphalt Shingles (RAS) Reported			Total Fe	Total Estimated	
	2009 2010		2009	2010	
Percent Companies using RAS	83%	83%	2009	2010	
RAS Tons Received	56,500	67,500	133,414	99,334	
RAS Tons used in HMA/WMA	70,566	80,424	166,628	118,354	
RAS Tons used as Aggregate		00,727		110,554	
RAS Tons used in Cold Mix					
RAS Tons used as Other		1,000		1,472	
RAS Tons Landfilled		1,000		1,772	
Average % RAS in DOT Mixes	2%	6%	_	_	
Average % RAS in Other Agency Mixes	2%	1%			
Average % RAS in Commercial & Residential Mixes	2%	4%			
		70			
warm-	Mix Asphalt	tod		timated	
	Repor 2009	2010	2009	timated 2010	
Percent Companies using WMA	83%	83%		2010	
WMA DOT Tonnage	486,602	778,186	1,149,016	1,145,194	
WMA Other Agency Tonnage	13,355	160,160	31,535	235,695	
WMA Commercial & Residential Tonnage	68,165	119,260	160,958	175,505	
Total WMA Tonnage	568,122	1,057,606	1,341,510	1,556,394	
Percent WMA Tons using Chemical Additives	14%	9%	1,0 11,010	1,000,001	
Percent WMA Tons using Additive Foaming	0%	0%			
Percent WMA Tons using Plant Foaming	86%	71%			
Percent WMA Tons using Organic Additive	0%	20%			
recent whith rons using organic Additive	L 070	2070			

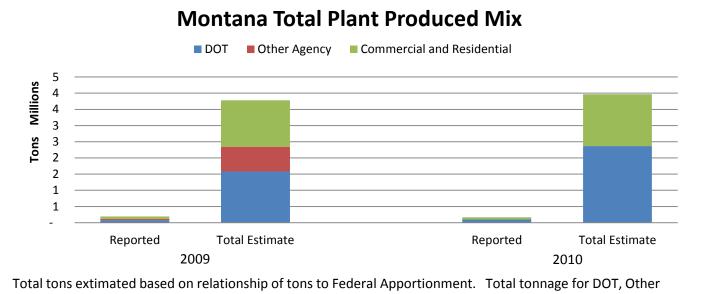
1. Total DOT tonnage provided by Missouri Asphalt Pavement Association and ratio of reported total tons to reported total DOT tons used to compute estimated total tons. Total tonnage for Other Agency and Commercial & Residential based on ratios from reported tons.

## Montana

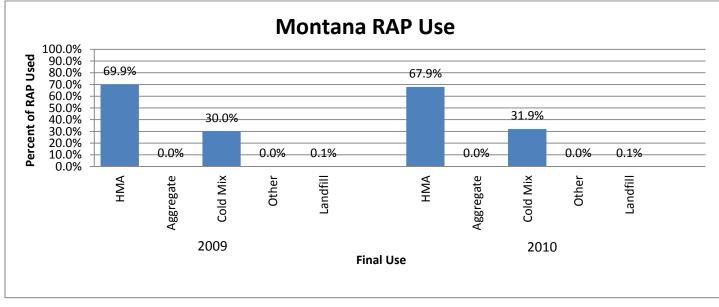
Table B27 summarizes the results received from asphalt mix producers in Montana. The charts are used to summarize information calculated from information provided by the survey respondents.

### **Total Asphalt Mix Tonnage**

Companies responding: 2



Agency and Commercial & Residential based on ratios from reported tons.

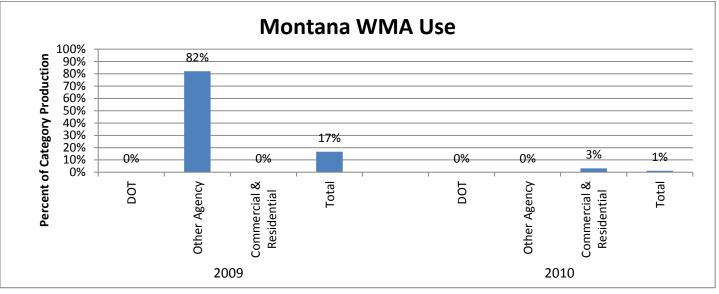


#### **RAP Use**

### **RAS Use**

No contractors reported usin RAS in 2009 or 2010.

#### WMA Use



		Companies	Reporting	2
HM	IA/WMA			-1
	Repor			timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	80,265	98,153	1,578,063	2,368,118
Total Other Agency Tonnage	39,000	1,000	766,766	24,127
Total Commercial & Residential Tonnage	73,003	66,222	1,435,287	1,597,725
Total Tonnage	192,268	165,375	3,780,115	3,989,969
Reclaimed Asph	alt Pavement (R	AP)		
	Repor	ted	Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	76,000	53,700	1,494,210	1,295,609
RAP Tons used in HMA/WMA	13,993	12,761	275,113	307,889
RAP Tons used as Aggregate	-	-	-	-
RAP Tons used in Cold Mix	6,000	6,000	117,964	144,761
RAP Tons used as Other	-	-	-	-
RAP Tons Landfilled	16	21	317	501
Average % RAP in DOT Mixes	4%	5%		
Average % RAP in Other Agency Mixes	9%	20%		
Average % RAP in Commercial & Residential Mixes	12%	13%		
	halt Shingles (RA			
	Report	1	Total Estimated	
	2009 2010		2009	2010
Percent Companies using RAS	0%	0%	2005	2010
RAS Tons Received	0 70	070	_	_
RAS Tons used in HMA/WMA				
RAS Tons used as Aggregate				
RAS Tons used in Cold Mix		-	-	
RAS Tons used as Other		_		_
RAS Tons Landfilled		_		
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
	Mix Asphalt	070		
Waim	Repor	ted	Total Fe	timated
	2009	2010	2009	2010
Percent Companies using WMA	0%	100%		
WMA DOT Tonnage	-	21	_	502
WMA Other Agency Tonnage	32,000	-	629,141	-
WMA Commercial & Residential Tonnage	-	2,112		50,961
			620 141	51,463
	32,000	2,133	029,141	
Total WMA Tonnage	32,000 100%	2,133	629,141	51,105
Total WMA Tonnage Percent WMA Tons using Chemical Additives	100%	0%	029,141	51,105
Total WMA Tonnage			029,141	51,105

1. Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

## Nebraska

No contractors submitted data for the Nebraska. Total tons were estimated based on a relationship tons to federal apportionment. Because RAP use is prevalent in all areas of the US it was estimated that RAP use in the District followed a national average. Table B28 summarizes this data.

Table B 28: Summary of Nebraska Data

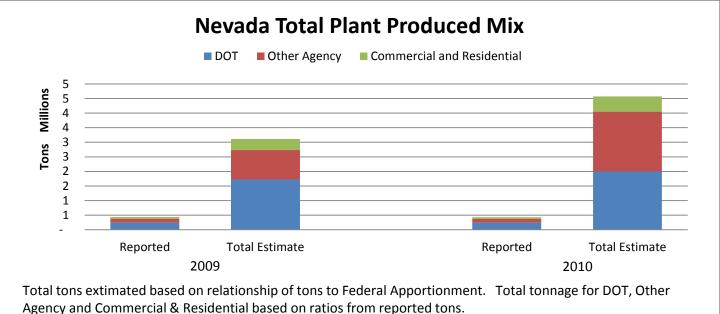
HMA/WMA				
	Total Estimated <sup>1</sup>			
	2009 2010			
Total DOT Tonnage	-	-		
Total Other Agency Tonnage	-	-		
Total Commercial & Residential Tonnage	-	-		
Total Tonnage	2,961,613	3,091,465		
Reclaimed Asphalt Pave	ement			
Total Estimated				
	2009	2010		
Percent Companies using RAP				
RAP Tons Received	554,952	629,373		
RAP Tons used in HMA/WMA	462,962	531,550		
RAP Tons used as Aggregate	51,416	62,824		
RAP Tons used in Cold Mix	12,244	13,471		
RAP Tons used as Other	6,086	6,847		
RAP Tons Landfilled	1,189	39		

## Nevada

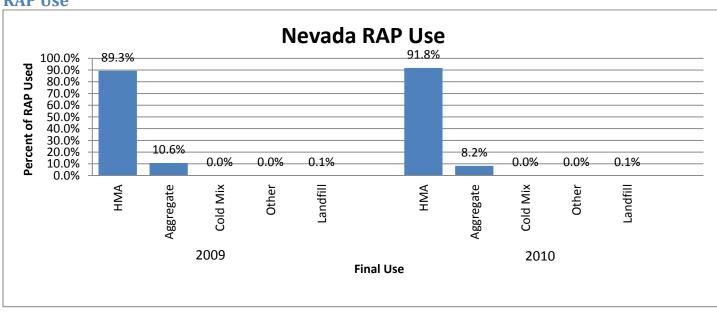
Table B29 summarizes the results received from asphalt mix producers in Nevada. The charts are used to summarize information calculated from information provided by the survey respondents.

### **Total Asphalt Mix Tonnage**

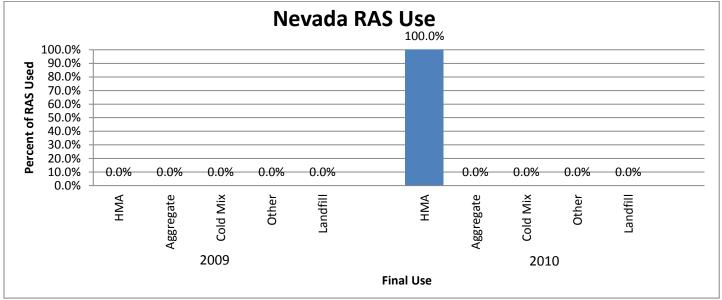
Companies responding: 2



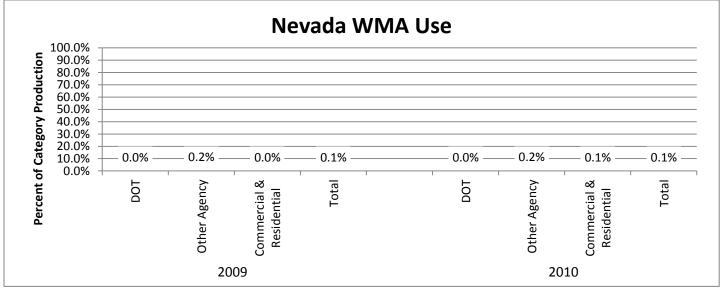




#### **RAS Use**







Companies Reporting					
НМ	A/WMA				
	Repor	ted	Total Es	timated <sup>1</sup>	
	2009 2010		2009	2010	
Total DOT Tonnage	239,283	239,966	1,724,595	1,996,379	
Total Other Agency Tonnage	139,642	125,822	1,006,444	2,052,325	
Total Commercial & Residential Tonnage	52,881	62,941	381,128	523,629	
Total Tonnage	431,805	428,728	3,112,166	3,566,770	
Reclaimed Asph	alt Pavement (	(RAP)	• • •		
	Repor		Total Es	stimated	
	2009	2010	2009	2010	
Percent Companies using RAP	100%	100%			
RAP Tons Received	32,595	33,839	234,923	281,521	
RAP Tons used in HMA/WMA	25,255	31,305	182,020	260,437	
RAP Tons used as Aggregate	3,000	2,784	21,622	23,160	
RAP Tons used in Cold Mix	-	-	-	-	
RAP Tons used as Other	-	-	-	-	
RAP Tons Landfilled	14	21	102	175	
Average % RAP in DOT Mixes	0%	2%			
Average % RAP in Other Agency Mixes	14%	11%			
Average % RAP in Commercial & Residential Mixes	19%	14%			
Reclaimed Asp	halt Shingles (I	RAS)			
	Repor	-	Total Estimated		
	2009 2010		2009	2010	
Percent Companies using RAS	0%	50%			
RAS Tons Received	-	5,000	-	41,597	
RAS Tons used in HMA/WMA	-	5,000	-	41,597	
RAS Tons used as Aggregate	-	-	-	-	
RAS Tons used in Cold Mix	-	-	-	-	
RAS Tons used as Other	-	-	-	-	
RAS Tons Landfilled	-	-	-	-	
Average % RAS in DOT Mixes	0%	0%			
Average % RAS in Other Agency Mixes	0%	1%			
Average % RAS in Commercial & Residential Mixes	0%	0%			
Warm-	Mix Asphalt				
	Repor	ted	Total Es	stimated	
	2009	2010	2009	2010	
Percent Companies using WMA	50%	50%			
WMA DOT Tonnage	-	-	-	-	
	239	240	1,725	3,909	
WMA Other Agency Tonnage	239			222	
WMA Other Agency Tonnage WMA Commercial & Residential Tonnage	-	40	-	332	
		40 280	- 1,725	332 4,241	
WMA Commercial & Residential Tonnage	-				
WMA Commercial & Residential Tonnage Total WMA Tonnage	- 239	280			
WMA Commercial & Residential Tonnage         Total WMA Tonnage         Percent WMA Tons using Chemical Additives	- 239 0%	280 0%			

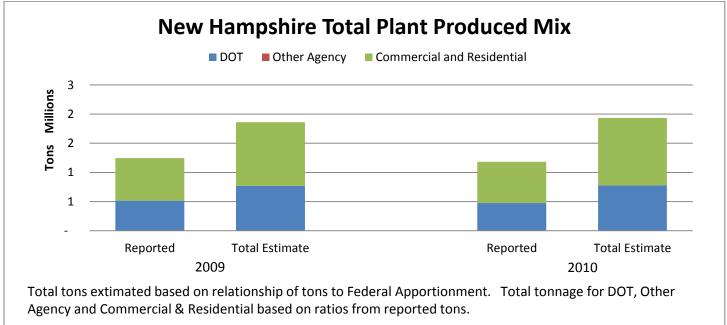
1. Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

## **New Hampshire**

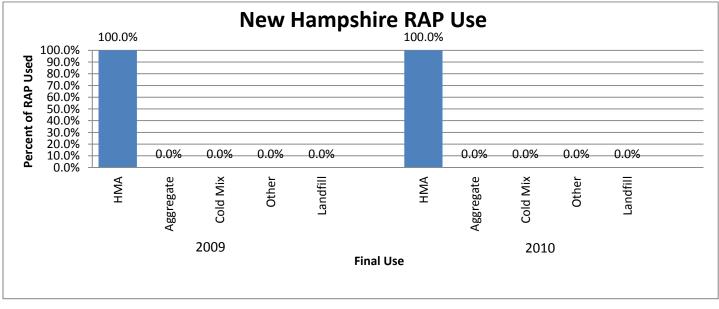
Table B30 summarizes the results received from asphalt mix producers in New Hampshire. The charts are used to summarize information calculated from information provided by the survey respondents.

### **Total Asphalt Mix Tonnage**

Companies responding: 1



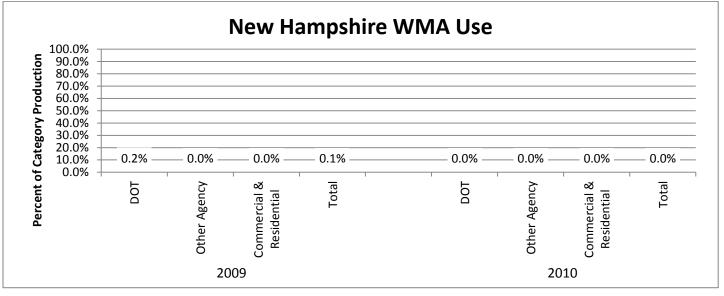
#### **RAP Use**



#### **RAS Use**

No contractors reported using RAS in 2009 or 2010.

#### WMA Use



		Companies	Reporting	1	
HM	IA/WMA		1		
	Repor	ted	Total Estimated <sup>1</sup>		
	2009	2010	2009	2010	
Total DOT Tonnage	515,000	474,000	769,264	776,146	
Total Other Agency Tonnage	-	-	-	-	
Total Commercial & Residential Tonnage	731,000	708,000	1,091,907	1,159,306	
Total Tonnage	1,246,000	1,182,000	1,861,171	1,935,452	
Reclaimed Aspl	halt Pavement (	(RAP)			
	Repor	ted	Total Es	timated	
	2009	2010	2009	2010	
Percent Companies using RAP	100%	100%			
RAP Tons Received	171,000	246,000	255,426	402,810	
RAP Tons used in HMA/WMA	183,000	212,005	273,350	347,145	
RAP Tons used as Aggregate	-	-	-	-	
RAP Tons used in Cold Mix	-	-	-	-	
RAP Tons used as Other	-	-	-	-	
RAP Tons Landfilled	15	18	22	30	
Average % RAP in DOT Mixes	15%	20%			
Average % RAP in Other Agency Mixes	0%	0%			
Average % RAP in Commercial & Residential Mixes	15%	15%			
Reclaimed Asp	halt Shingles (	RAS)			
	Repor	ted	Total Estimated		
	2009	2010	2009	2010	
Percent Companies using RAS	0%	0%			
RAS Tons Received	-	-	-	-	
RAS Tons used in HMA/WMA	-	-	-	-	
RAS Tons used as Aggregate	-	-	-	-	
RAS Tons used in Cold Mix	-	-	-	-	
RAS Tons used as Other	-	-	-	-	
RAS Tons Landfilled	-	-	-	-	
Average % RAS in DOT Mixes	0%	0%			
Average % RAS in Other Agency Mixes	0%	0%			
Average % RAS in Commercial & Residential Mixes	0%	0%			
Warm	Mix Asphalt	•			
	Repor	ted	Total Es	timated	
	2009	2010	2009	2010	
Percent Companies using WMA	100%	0%			
WMA DOT Tonnage	1,185	-	1,769	-	
WMA Other Agency Tonnage	-	-	-	_	
WMA Commercial & Residential Tonnage	-	-	-	-	
Total WMA Tonnage	1,185	-	1,769	_	
Percent WMA Tons using Chemical Additives	0%	0%	_,		
Percent WMA Tons using Additive Foaming	0%	0%			
Percent WMA Tons using Plant Foaming	100%	0%			
Percent WMA Tons using Organic Additive	0%	0%			
I CICCIL WITH TOTIS USING OLYATIC AUDILIVE	070	070			

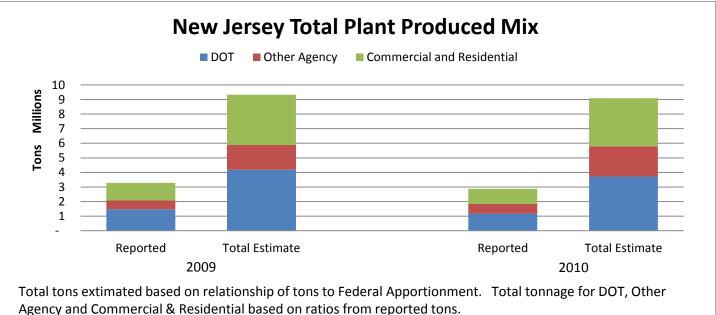
1. Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

## **New Jersey**

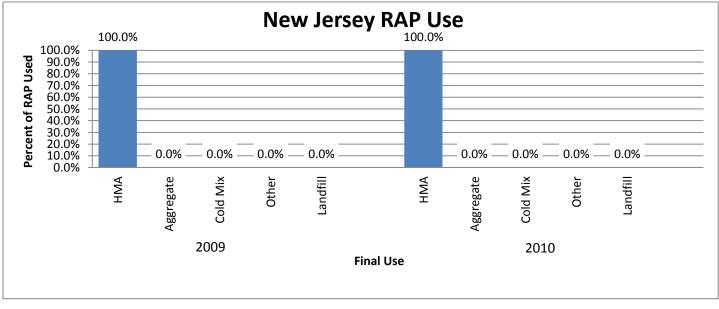
Table B31 summarizes the results received from asphalt mix producers in New Jersey. The charts are used to summarize information calculated from information provided by the survey respondents.

### **Total Asphalt Mix Tonnage**

Companies responding: 2



#### **RAP Use**



#### **RAS Use**

No contractors reporte using RAS in 2009 or 2010.

#### WMA Use

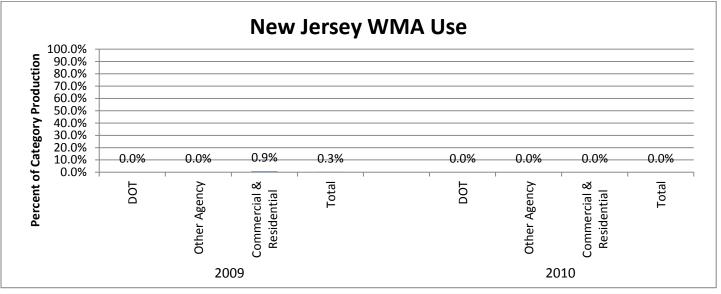


Table B 31: Summary of	f New Jersey Data
------------------------	-------------------

Companies Reporting

	HMA/WMA				
	Report	Reported		Total Estimated <sup>1</sup>	
	2009	2010	2009	2010	
Total DOT Tonnage	1,471,000	1,176,700	4,179,781 <sup>2</sup>	3,723,531 <sup>2</sup>	
Total Other Agency Tonnage	599,500	653,100	1,703,453	2,066,659	
Total Commercial & Residential Tonnage	1,212,600	1,044,100	3,445,549	3,303,934	
Total Tonnage	3,283,100	2,873,900	9,328,783	9,094,124	
	Asphalt Paveme			_ , ,	
	1	Reported		stimated	
	2009	2010	2009	2010	
Percent Companies using RAP	100%	100%			
RAP Tons Received	190,000	655,000	539,877	2,072,672	
RAP Tons used in HMA/WMA	141,000	474,980	400,645	1,503,018	
RAP Tons used as Aggregate	-	-	-	-	
RAP Tons used in Cold Mix	_	_	_	_	
RAP Tons used as Other	_	_	_	_	
RAP Tons Landfilled	17	18	48	56	
Average % RAP in DOT Mixes	15%	15%			
Average % RAP in Other Agency Mixes	6%	7%			
Average % RAP in Commercial & Residential Mixes	22%	22%			
	Asphalt Shingle				
	Report		Total E	stimated	
	2009	2010	2009 2010		
Percent Companies using RAS	0%	0%	2009	2010	
RAS Tons Received	0%	0%	-	_	
RAS Tons used in HMA/WMA	-	-	-		
RAS Tons used as Aggregate	-	-		-	
RAS Tons used in Cold Mix		-			
RAS Tons used as Other	-	-			
RAS Tons Landfilled	-	-			
	- 0%	-	-	-	
Average % RAS in DOT Mixes		0%			
Average % RAS in Other Agency Mixes	0%	0%			
Average % RAS in Commercial & Residential Mixes	0%	0%			
Wa	arm-Mix Asphal				
	Report			stimated	
Deveent Companies using 14/144	2009	2010	2009	2010	
Percent Companies using WMA	50%	0%			
WMA DOT Tonnage WMA Other Agency Tonnage	-	-	-	-	
	- 10,606	-		-	
WMA Commercial & Residential Tonnage		-	30,136	-	
Total WMA Tonnage	10,606	00/	30,136	-	
Percent WMA Tons using Chemical Additives	0%	0%			
Percent WMA Tons using Additive Foaming	0%	0%			
Percent WMA Tons using Plant Foaming	100%	0%			
Percent WMA Tons using Organic Additive	0%	0%			

1. Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

2. The NJDOT reports 2009 FY HMA tonnage was 2,069,891 and 2010 FY HMA tonnage was 2,101,755

3. The NJDOT reported RAP usage in HMA was 0.33 M tons in 2009 and 0.31 tons in 2010.

2

### **New Mexico**

No contractors submitted data for the New Mexico. Total tons were estimated based on a relationship tons to federal apportionment. Because RAP use is prevalent in all areas of the US it was estimated that RAP use in New Mexico followed a national average. Table B32 summarizes this data.

Table B 32: Summary New Mexico Data

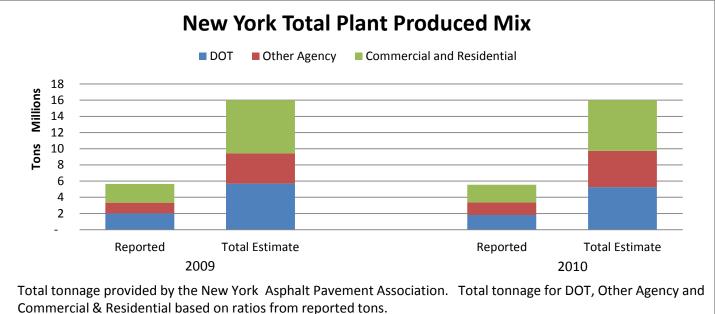
HMA/WMA					
	Total Estimated <sup>1</sup>				
	2009 2010				
Total DOT Tonnage	-	-			
Total Other Agency Tonnage	-	-			
Total Commercial & Residential Tonnage	-	-			
Total Tonnage	3,779,122	3,840,870			
Reclaimed Asphalt Paveme	ent (RAP) <sup>2</sup>				
	Total Estir	nated			
	2009	2010			
Percent Companies using RAP					
RAP Tons Received	708,138	781,941			
RAP Tons used in HMA/WMA	590,755	660,404			
RAP Tons used as Aggregate	65,609	78,054			
RAP Tons used in Cold Mix	15,624	16,737			
RAP Tons used as Other	7,766	8,506			
RAP Tons Landfilled	1,517	49			

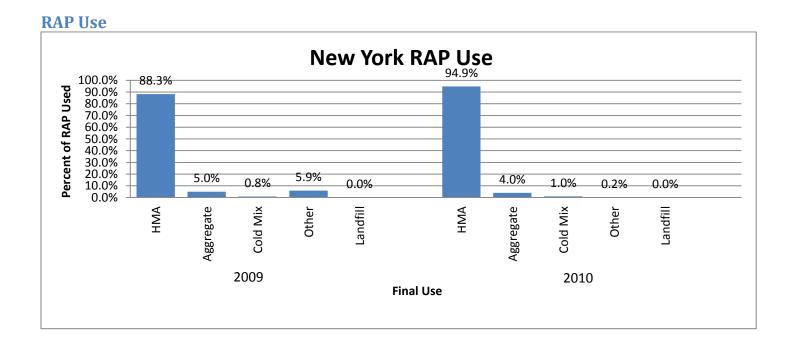
## **New York**

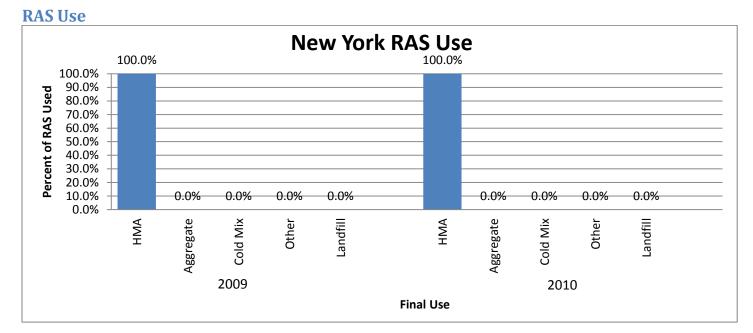
Table B33 summarizes the results received from asphalt mix producers in New York. The charts are used to summarize information calculated from information provided by the survey respondents.

#### **Total Asphalt Mix Tonnage**

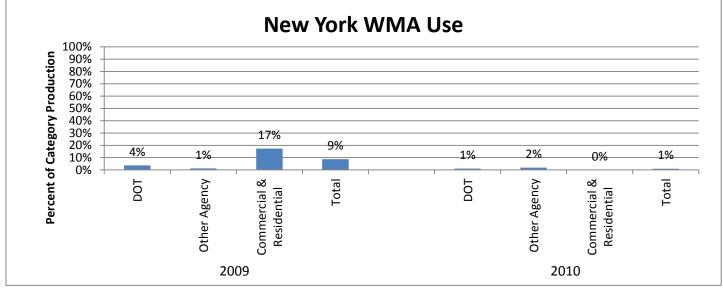
Companies responding: 13











		Companies	Reporting	13
Н	1A/WMA			
	Repor	ted	Total Estimated <sup>1</sup>	
	2009	2010	2009	2010
Total DOT Tonnage	2,009,374	1,820,500	5,687,243	5,255,864
Total Other Agency Tonnage	1,324,000	1,551,000	3,747,391	4,477,806
Total Commercial & Residential Tonnage	2,319,626	2,170,500	6,565,366	6,266,330
Total Tonnage	5,653,000	5,542,000	16,000,000	16,000,000
	halt Pavement (		, ,	. , ,
·	Repor	ted	Total E	stimated
	2009	2010	2009	2010
Percent Companies using RAP	92%	92%		
RAP Tons Received	564,000	617,000	1,596,321	1,781,306
RAP Tons used in HMA/WMA	547,000	583,500	1,548,204	1,684,590
RAP Tons used as Aggregate	31,000	24,500	87,741	70,733
RAP Tons used in Cold Mix	5,000	6,000	14,152	17,322
RAP Tons used as Other	36,500	1,000	103,308	2,887
RAP Tons Landfilled	44	40	124	117
Average % RAP in DOT Mixes	10%	10%		
Average % RAP in Other Agency Mixes	14%	16%		
Average % RAP in Commercial & Residential Mixes	19%	20%		
Reclaimed As	ohalt Shingles (	RAS)		
	Reported		Total Estimated	
	2009	2010	2009	2010
Percent Companies using RAS	15%	15%		
RAS Tons Received	20,000	10,000	56,607	28,870
RAS Tons used in HMA/WMA	2,600	43,300	7,359	125,009
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
Warm	-Mix Asphalt			
	Repor	ted	Total E	stimated
	2009	2010	2009	2010
Percent Companies using WMA	31%	31%		
WMA DOT Tonnage	74,600	20,295	211,145	58,593
WMA Other Agency Tonnage	15,800	29,250	44,720	84,446
WMA Commercial & Residential Tonnage	402,300	1,699	1,138,652	4,905
Total WMA Tonnage	492,700	51,244	1,394,516	147,944
Percent WMA Tons using Chemical Additives	98%	50%		
Percent WMA Tons using Additive Foaming	0%	0%		
Percent WMA Tons using Plant Foaming	0%	48%		
Percent WMA Tons using Organic Additive	2%	2%		

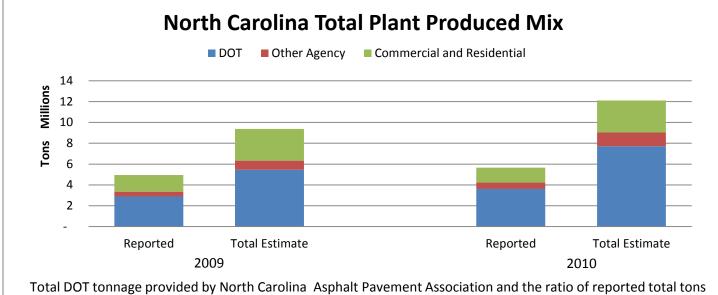
1. Total tonnage provided by the New York Asphalt Pavement Association. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

## **North Carolina**

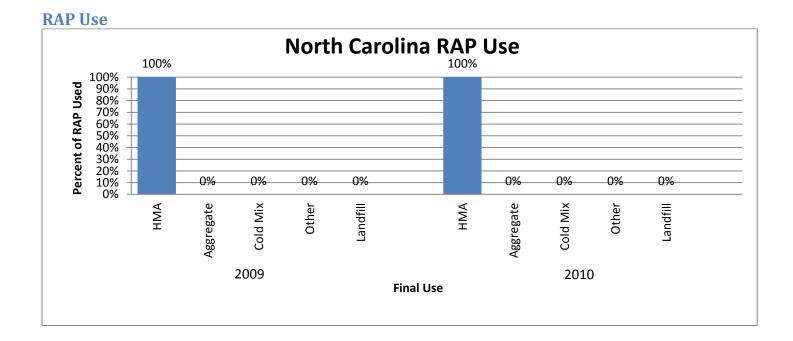
Table B34 summarizes the results received from asphalt mix producers in North Carolina. The charts are used to summarize information calculated from information provided by the survey respondents.

### **Total Asphalt Mix Tonnage**

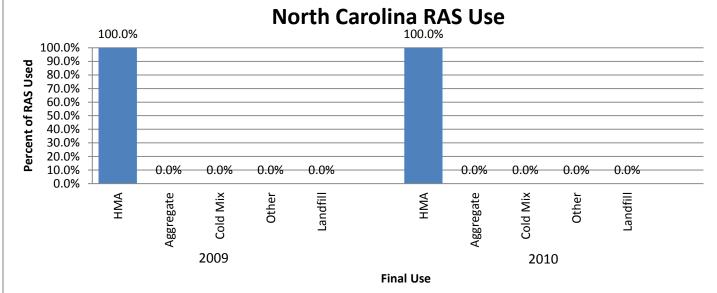
Companies responding: 6



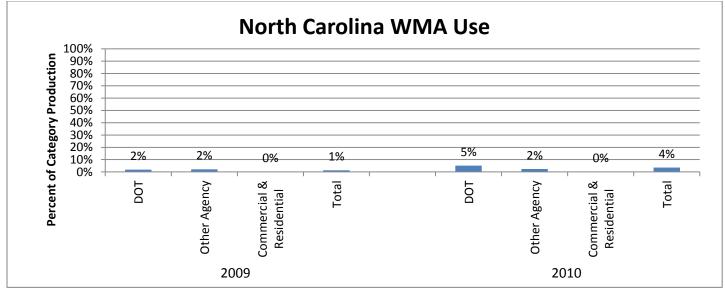
to reported DOT tons used to compute estimated total tons. Total tonnage for Other Agency and Commercial & Residential based on ratios from reported tons.



### RAS Use



#### WMA Use



The North Carolina DOT reviewed Table B34 at the request of the Carolina Asphalt Pavement Association prior to publication and offered the following comments:

- Total DOT tons for 2009 and 2010 4,734,017 and 7,569,654, respectively.
- Percent companies using RAP 96% for 2009 and 2010
- Average percent RAP in DOT mixes 19 and 20 for 2009 and 2010, respectively.
- Average % RAS in DOT mixes 9.9% and 10% for 2009 and 2010, respectively.
- Percent companies using WMA 80 and 90 for 2009 and 2010, respectively.
- Percent WMA by additive for 2009 and 2010:
  - Chemical 1.6 and 1
  - Additive foaming 2 and 2
  - Plant Foaming 95 and 95
  - Organic Additive 1.2 and 0.

**Companies Reporting** 

6

HMA/WMA				
	Reported		Total Estimated <sup>1</sup>	
	2009	2010	2009	2010
Total DOT Tonnage	2,884,195	3,611,296	5,456,659	7,720,518
Total Other Agency Tonnage	462,457	615,047	874,930	1,314,897
Total Commercial & Residential Tonnage	1,605,161	1,435,931	3,036,832	3,069,848
Total Tonnage	4,951,813	5,662,274	9,368,421	12,105,263
Reclaimed A	sphalt Paveme	ent (RAP)	•	
	Repor		Total E	stimated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	1,189,324	1,303,917	2,250,103	2,787,618
RAP Tons used in HMA/WMA	997,713	1,223,063	1,887,591	2,614,762
RAP Tons used as Aggregate	-	-	-	-
RAP Tons used in Cold Mix	-	-	-	-
RAP Tons used as Other	-	-	-	-
RAP Tons Landfilled	31	40	59	86
Average % RAP in DOT Mixes	20%	22%		
Average % RAP in Other Agency Mixes	23%	23%		
Average % RAP in Commercial & Residential Mixes	22%	23%		
Reclaimed	Asphalt Shingle		r	
	Repor	ted	Total E	stimated
	2009	2010	2009	2010
Percent Companies using RAS	17%	50%		
RAS Tons Received	-	41,500	-	88,722
RAS Tons used in HMA/WMA	600	32,450	1,135	69,374
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	3%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	1%		
Wa	rm-Mix Asphal	t	r	
	Repor			stimated
	2009	2010	2009	2010
Percent Companies using WMA	100%	83%		
WMA DOT Tonnage	53,943	185,049	102,056	395,613
WMA Other Agency Tonnage	10,000	14,667	18,919	31,356
WMA Commercial & Residential Tonnage	5,692	2,860	10,768	6,114
Total WMA Tonnage	69,635	202,575	131,743	433,082
Percent WMA Tons using Chemical Additives	7%	1%		
Percent WMA Tons using Additive Foaming	3%	0%		
Percent WMA Tons using Plant Foaming	90%	99%		
Percent WMA Tons using Organic Additive	0%	0%		

1. Total DOT tonnage provided by North Carolina Asphalt Pavement Association and ratio of reported total tons to reported DOT tons used to compute estimated total tons. Total tonnage for Other Agency and Commercial & Residential based on ratios from reported tons.

### **North Dakota**

No contractors submitted data for North Dakota. Total tons were estimated based on a relationship tons to federal apportionment. Because RAP use is prevalent in all areas of the US it was estimated that RAP use in New Mexico followed a national average. Table B35 summarizes this data.

Table B 35: Summary of North Dakota Data

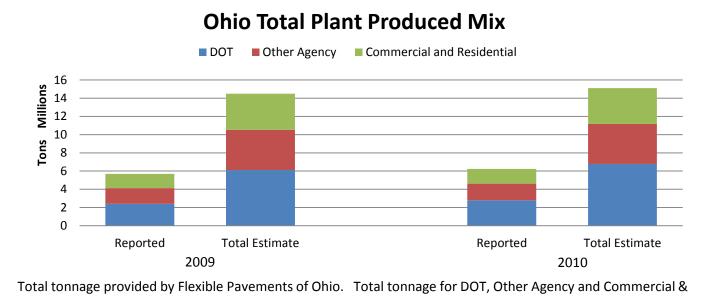
HMA/WMA				
	Total Estimated			
	2009 2010			
Total DOT Tonnage	-	-		
Total Other Agency Tonnage	-	-		
Total Commercial & Residential Tonnage	-	-		
Total Tonnage	2,549,882	2,698,591		
Reclaimed Asphalt Pavement	(RAP)			
Total Estimated				
	2009	2010		
Percent Companies using RAP				
RAP Tons Received	477,801	549,391		
RAP Tons used in HMA/WMA	398,600	463,999		
RAP Tons used as Aggregate	44,268	54,840		
RAP Tons used in Cold Mix	10,542	11,759		
RAP Tons used as Other	5,240	5,976		
RAP Tons Landfilled	1,024	34		

# Ohio

Table B36 summarizes the results received from asphalt mix producers in Ohio. The charts are used to summarize information calculated from information provided by the survey respondents.

### **Total Asphalt Mix Tonnage**

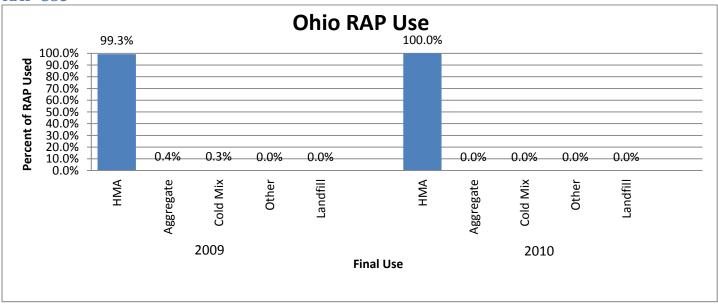
Companies responding: 5

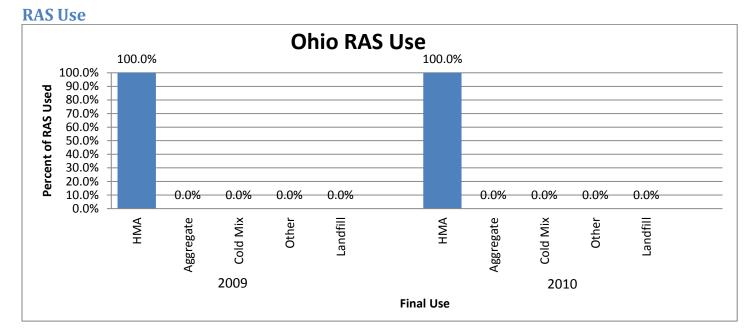


Residential are based on ratios from reported tons.

Flexible Pavements of Ohio reports Total DOT Tons for 2009 and 2010 of 6,104,867 and 4,953,472, respectively









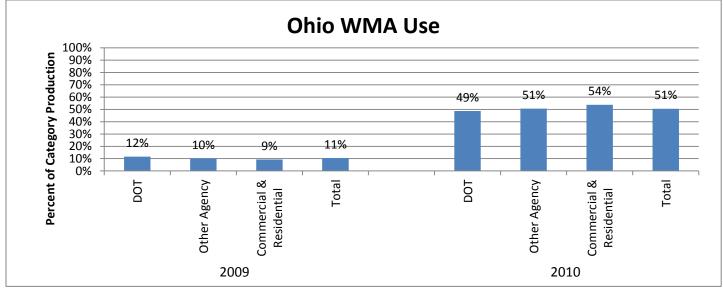


Table B 36: Summary of Ohio Data		Companies	Reporting	5	
	HMA/WMA				
	Reported		Total E	stimated <sup>1</sup>	
	2009	2010	2009	2010	
Total DOT Tonnage	2,399,500	2,797,000	6,112,033 <sup>2</sup>	6,775,983 <sup>2</sup>	
Total Other Agency Tonnage	1,732,000	1,816,000	4,411,770	4,399,422	
Total Commercial & Residential Tonnage	1,561,000	1,620,000	3,976,197	3,924,595	
Total Tonnage	5,692,500	6,233,000	14,500,000	15,100,000	
Reclaimed	Asphalt Pavem	ent (RAP)	• •		
	Repor	ted	Total Estimated		
	2009	2010	2009	2010	
Percent Companies using RAP	100%	100%			
RAP Tons Received	1,568,000	1,257,000	3,994,027	3,045,195	
RAP Tons used in HMA/WMA	1,317,000	1,474,000	3,354,677	3,570,897	
RAP Tons used as Aggregate	5,000	-	12,736	-	
RAP Tons used in Cold Mix	4,000	200	10,189	485	
RAP Tons used as Other	-	-	-	-	
RAP Tons Landfilled	82	89	210	216	
Average % RAP in DOT Mixes	22%	23%			
Average % RAP in Other Agency Mixes	22%	26%			
Average % RAP in Commercial & Residential Mixes	21%	23%			
Reclaimed	Asphalt Shing	es (RAS)			
	Repor	ted	Total Estimated		
	2009	2010	2009	2010	
Percent Companies using RAS	60%	60%			
RAS Tons Received	38,000	10,300	96,794	24,953	
RAS Tons used in HMA/WMA	22,000	11,000	56,039	26,648	
RAS Tons used as Aggregate	-	-	-	-	
RAS Tons used in Cold Mix	-	-	-	-	
RAS Tons used as Other	-	-	-	-	
RAS Tons Landfilled	-	-	-	-	
Average % RAS in DOT Mixes	0%	4%			
Average % RAS in Other Agency Mixes	4%	2%			
Average % RAS in Commercial & Residential Mixes	3%	2%			
Wa	arm-Mix Aspha	lt	r		
	Repor	ted	Total E	stimated	
	2009	2010	2009	2010	
Percent Companies using WMA	100%	100%			
WMA DOT Tonnage	277,720	1,361,110	707,412 <sup>3</sup>	3,297,411 <sup>3</sup>	
WMA Other Agency Tonnage	176,680	917,970	450,041	2,223,864	
WMA Commercial & Residential Tonnage	144,090	870,780	367,028	2,109,542	
Total WMA Tonnage	598,490	3,149,860	1,524,480	7,630,818	
Percent WMA Tons using Chemical Additives	0%	0%			
Percent WMA Tons using Additive Foaming	0%	0%			
Percent WMA Tons using Plant Foaming	100%	100%			
Percent WMA Tons using Organic Additive	0%	0%			

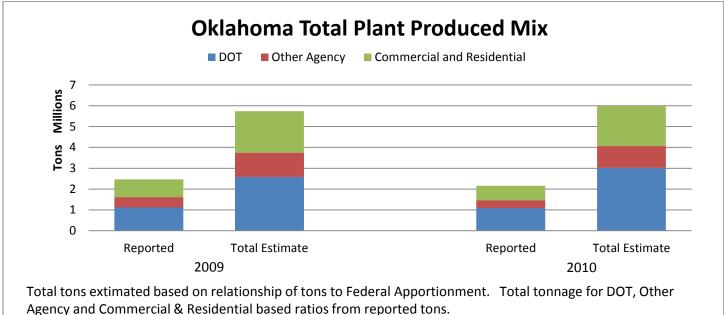
Total tonnage provided by Flexible Pavements of Ohio.
 Total tonnage for DOT, Other Agency and Commercial & Residential are based on ratios from reported tons.
 Flexible Pavements of Ohio reports Total DOT Tons for 2009 and 2010 of 6,104,867 and 4,953,472, respectively
 Flexible Pavements of Ohio reports Total DOT Tons for 2009 and 2010 of 148,576 and 1,948,162, respectively.

## Oklahoma

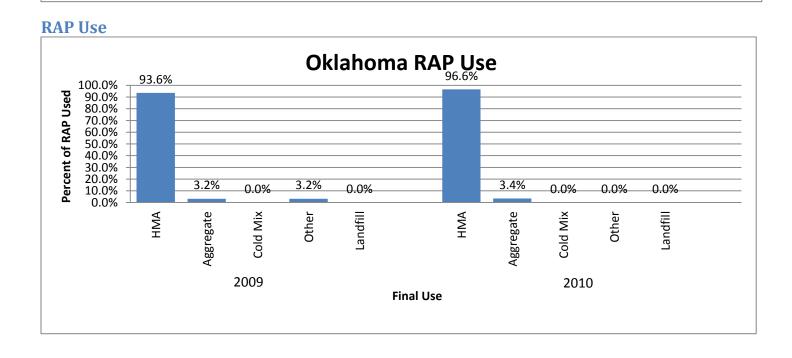
Table B37 summarizes the results received from asphalt mix producers in Oklahoma. The charts are used to summarize information calculated from information provided by the survey respondents.

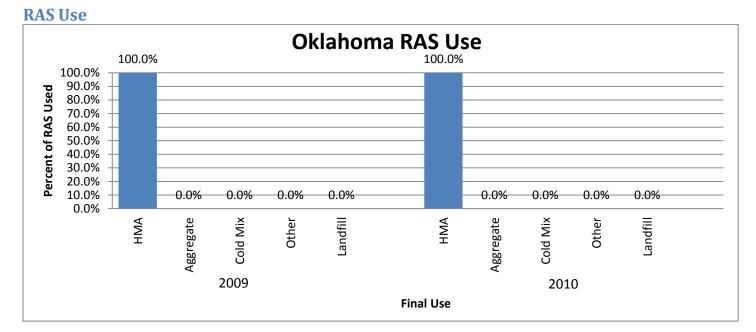
### **Total Asphalt Mix Tonnage**

Companies responding: 4

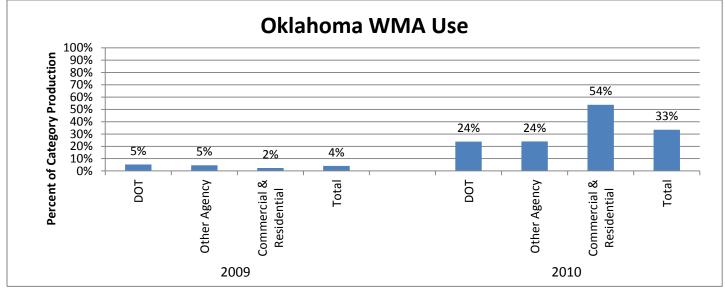












Companies Reporting				4	
НМ	A/WMA				
	Reported		Total Estimated <sup>1</sup>		
	2009 2010		2009	2010	
Total DOT Tonnage	1,110,900	1,089,000	2,582,202	3,020,841	
Total Other Agency Tonnage	502,000	376,000	1,166,861	1,043,009	
Total Commercial & Residential Tonnage	855,400	695,000	1,988,312	1,927,901	
Total Tonnage	2,468,300	2,160,000	5,737,374	5,991,751	
Reclaimed Asph				. , ,	
	Repor		Total Estimated		
	2009	2010	2009	2010	
Percent Companies using RAP	100%	100%			
RAP Tons Received	354,400	542,000	823,776	1,503,486	
RAP Tons used in HMA/WMA	290,920	285,870	676,221	792,992	
RAP Tons used as Aggregate	10,000	10,000	23,244	27,740	
RAP Tons used in Cold Mix	-	-	-	-	
RAP Tons used as Other	10,000	-	23,244	-	
RAP Tons Landfilled	6	6	14	18	
Average % RAP in DOT Mixes	11%	11%			
Average % RAP in Other Agency Mixes	16%	16%			
Average % RAP in Commercial & Residential Mixes	14%	13%			
Reclaimed Asp	1				
	Repor		Total Es	stimated	
	2009 2010		2009	2010	
Percent Companies using RAS	50%	50%	2009	2010	
RAS Tons Received	17,200	45,200	39,980	125,383	
RAS Tons used in HMA/WMA	983	8,000	2,285	22,192	
RAS Tons used as Aggregate	-	-	-	-	
RAS Tons used in Cold Mix	-	-	-	-	
RAS Tons used as Other	-	-	-	-	
RAS Tons Landfilled	-	-	-	-	
Average % RAS in DOT Mixes	0%	1%			
Average % RAS in Other Agency Mixes	0%	0%			
Average % RAS in Commercial & Residential Mixes	1%	2%			
	Mix Asphalt				
	Reported		Total Estimated		
	2009	2010	2009	2010	
Percent Companies using WMA	50%	75%			
WMA DOT Tonnage	57,790	259,400	134,328	719,565	
		89,930	53,462	249,462	
wima Other Agency Tonnage	23,000				
WMA Other Agency Tonnage WMA Commercial & Residential Tonnage	23,000 20,720	373,790	48,162	1,036,878	
WMA Commercial & Residential Tonnage				1,036,878 2,005,905	
	20,720	373,790	48,162 235,952	1,036,878 2,005,905	
WMA Commercial & Residential Tonnage Total WMA Tonnage	20,720 101,510	373,790 723,120			
WMA Commercial & Residential Tonnage Total WMA Tonnage Percent WMA Tons using Chemical Additives	20,720 101,510 0%	373,790 723,120 0%			

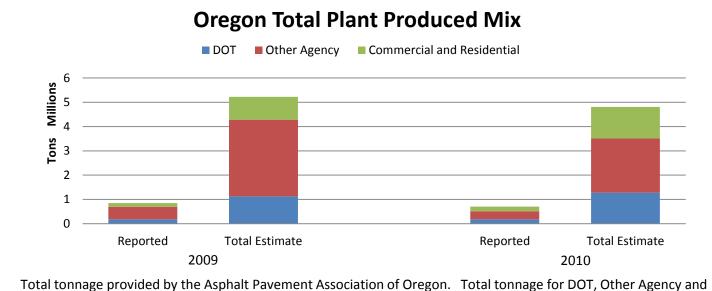
1. Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

## Oregon

Table B38 summarizes the results received from asphalt mix producers in Oregon. The charts are used to summarize information calculated from information provided by the survey respondents.

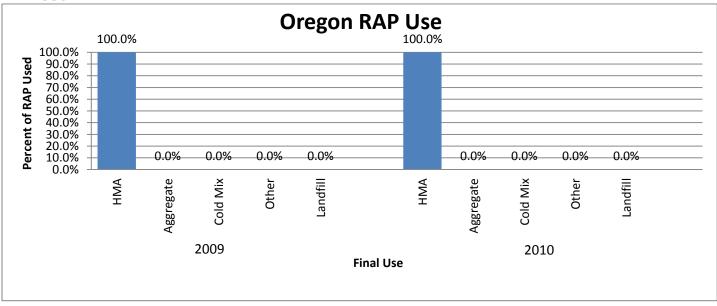
### **Total Asphalt Mix Tonnage**

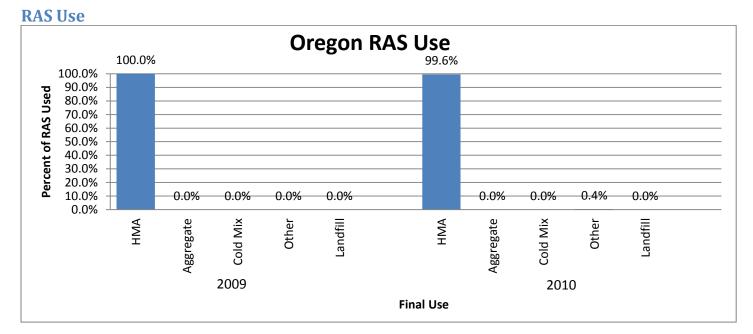
Companies responding: 8



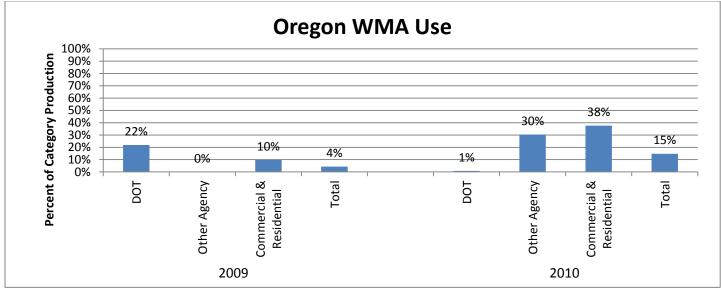
Total tonnage provided by the Asphalt Pavement Association of Oregon. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons. Total reported tonnage includes three companys/branchs that did not break out tonnages by different uses.

#### **RAP Use**









The Asphalt Pavement Association of Oregon estimates fewer WMA tons than the survey indicates. The APAO estimates are shown in the following table:

	2009	2010
WMA DOT Tonnage	150,000	0
WMA Other Agency Tonnage	80,000	80,000
WMA Commercial & Residential	90,000	90,000
Tonnage		
Total WMA Tonnage	320,000	170,000

		Companies	Reporting	6	
НМ	IA/WMA				
	Reported		Total Estimated <sup>1</sup>		
	2009	2010	2009	2010	
Total DOT Tonnage	182,870	186,234	1,124,858	1,277,036	
Total Other Agency Tonnage	512,823	326,210	3,154,444	2,236,874	
Total Commercial & Residential Tonnage	153,280	188,899	942,846	1,295,310	
Total Tonnage <sup>2</sup>	1,269,973	1,159,343	5,222,148	4,809,220	
Reclaimed Aspl	· · · ·		, , _	,,	
	Repor		Total Estimated		
	2009	2010	2009	2010	
Percent Companies using RAP	100%	100%	2009	2010	
RAP Tons Received	228,500	228,100	939,595	946,211	
RAP Tons used in HMA/WMA	325,273	295,112	1,337,527	1,224,193	
RAP Tons used as Aggregate	-				
RAP Tons used in Cold Mix	_	-	_	-	
RAP Tons used as Other	-	_	-	-	
RAP Tons Landfilled	120	88	495	366	
Average % RAP in DOT Mixes	24%	21%			
Average % RAP in Other Agency Mixes	20%	22%			
Average % RAP in Commercial & Residential Mixes	24%	23%			
	halt Shingles (				
Kedullieu Ab	Repor		Total F	stimated	
	2009 2010		2009	2010	
Percent Companies using RAS	33%	33%	2009	2010	
RAS Tons Received	6,500	36,000	26,728	149,336	
RAS Tons used in HMA/WMA	2,362	4,070	9,711	16,883	
RAS Tons used as Aggregate			-		
RAS Tons used in Cold Mix	-	_	-	_	
RAS Tons used as Other	_	17	_	71	
RAS Tons Landfilled	-	-	_	-	
Average % RAS in DOT Mixes	0%	4%		l de la constante de la consta	
Average % RAS in Other Agency Mixes	0%	5%			
Average % RAS in Commercial & Residential Mixes	2%	3%			
		570			
Waim	Mix Asphalt Reported		Total Estimated		
	2009	2010	2009	2010	
Percent Companies using WMA	17%	50%	2007	2010	
WMA DOT Tonnage	40,000	1,610	246,045	11,040	
WMA Other Agency Tonnage	-	98,837	-	677,740	
WMA Commercial & Residential Tonnage	15,000	71,000	92,267	486,858	
Total WMA Tonnage	55,000	171,447	338,312	1,175,638	
Percent WMA Tons using Chemical Additives	0%	, 0%			
Percent WMA Tons using Additive Foaming	0%	0%			
Percent WMA Tons using Plant Foaming	100%	100%			
Percent WMA Tons using Organic Additive	0%	0%			
1. Total tonnage provided by the Asphalt Pavement			tonnage for D	OT Other	

1. Total tonnage provided by the Asphalt Pavement Association of Oregon. Total tonnage for DOT, Other Agency and Commercial & Residential based ratios from reported tons.

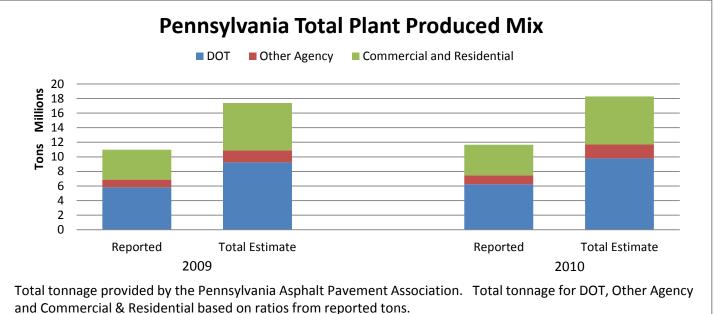
2. Total reported tonnage includes three companys/branchs that did not break out tonnages by different uses.

# Pennsylvania

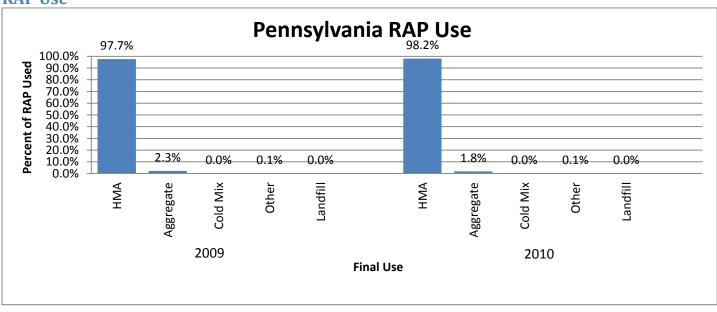
Table B38 summarizes the results received from asphalt mix producers in Pennsylvania. The charts are used to summarize information calculated from information provided by the survey respondents.

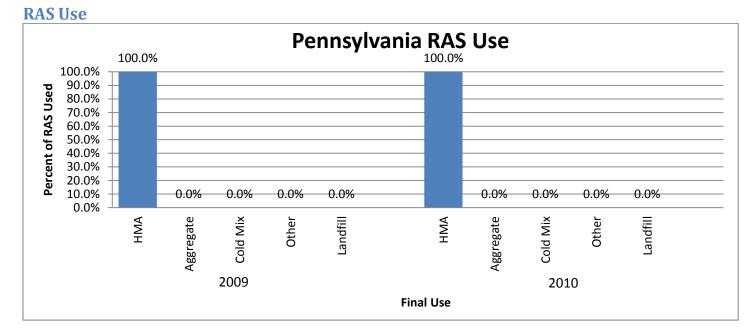
### **Total Asphalt Mix Tonnage**

Companies responding: 17

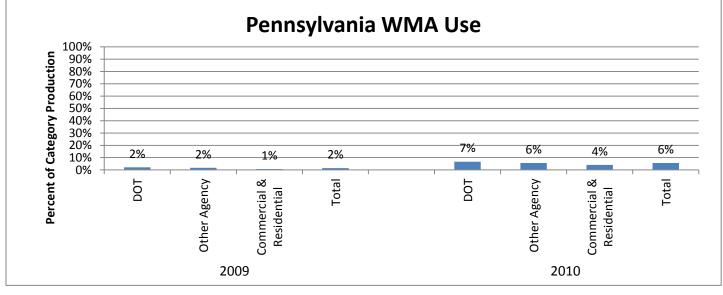












		Companies Rep	porting	17	
Н	MA/WMA		-		
	Reported		Total Estimated <sup>1</sup>		
	2009	2010	2009	2010	
Total DOT Tonnage	5,823,385	6,241,392	9,238,587	9,799,555	
Total Other Agency Tonnage	1,037,664	1,217,886	1,646,216	1,912,192	
Total Commercial & Residential Tonnage	4,106,743	4,196,096	6,515,197	6,588,253	
Total Tonnage	10,967,792	11,655,374	17,400,000	18,300,000	
Reclaimed As	phalt Pavement	(RAP)			
-	Repo	orted	Total Estimated		
	2009	2010	2009	2010	
Percent Companies using RAP	94%	94%			
RAP Tons Received	1,255,680	1,341,322	1,992,090	2,105,998	
RAP Tons used in HMA/WMA	1,379,675	1,567,121	2,188,803	2,460,523	
RAP Tons used as Aggregate	32,000	28,500	50,767	44,748	
RAP Tons used in Cold Mix	-			-	
RAP Tons used as Other	1,000	1,000	1,586	1,570	
RAP Tons Landfilled	30	36	47	57	
Average % RAP in DOT Mixes	14%	15%		3,	
Average % RAP in Other Agency Mixes	15%	15%			
Average % RAP in Commercial & Residential Mixes	17%	18%			
	phalt Shingles				
Kecialined As	1	· ·	Total Ec	stimated	
	2009	Reported			
Deveent Companies using DAC		2010	2009	2010	
Percent Companies using RAS	16 420	24%	26.080	20 620	
RAS Tons Received	16,439	25,234	26,080	39,620	
RAS Tons used in HMA/WMA	23,167	20,456	36,754	32,117	
RAS Tons used as Aggregate	-	-	-	-	
RAS Tons used in Cold Mix	-	-	-	-	
RAS Tons used as Other	-	-	-	-	
RAS Tons Landfilled	-	-	-	-	
Average % RAS in DOT Mixes	0%	1%			
Average % RAS in Other Agency Mixes	0%	0%			
Average % RAS in Commercial & Residential Mixes	0%	1%			
Warm-Mix Asphalt					
	Reported			stimated	
	2009	2010	2009	2010	
Percent Companies using WMA	29%	71%			
WMA DOT Tonnage	120,850	415,348	191,724	652,134	
WMA Other Agency Tonnage	17,855	68,239	28,326	107,141	
WMA Commercial & Residential Tonnage	27,000	171,211	42,835	268,817	
Total WMA Tonnage	165,704	654,798	262,884	1,028,092	
Percent WMA Tons using Chemical Additives	13%	9%			
Percent WMA Tons using Additive Foaming	0%	0%			
Percent WMA Tons using Plant Foaming	86%	91%			

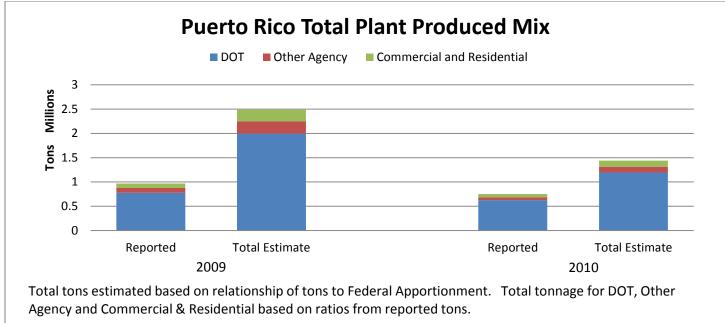
1. Total tonnage provided by the Pennsylvania Asphalt Pavement Association. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

## **Puerto Rico**

Table B40 summarizes the results received from asphalt mix producers in Puerto Rico. The charts are used to summarize information calculated from information provided by the survey respondents.

#### **Total Asphalt Mix Tonnage**

Companies responding: 1



#### **RAP Use**

No contractors reported using RAP in Puerto Rico.

#### **RAS Use**

No contractors reporte using RAS in Puerto Rico.

#### WMA Use

No contractors reported using WMA in Puerto Rico.

#### Table B 40: Summary of Puerto Rico Data

	Companies Reporting			1	
HMA/WMA					
	Reported		Total Estimated <sup>1</sup>		
	2009	2010	2009	2010	
Total DOT Tonnage	777,800	623,777	1,996,884	1,194,513	
Total Other Agency Tonnage	96,951	61,700	248,907	118,154	
Total Commercial & Residential Tonnage	93,671	65,320	240,486	125,086	
Total Tonnage	968,422	750,797	2,486,277	1,437,752	

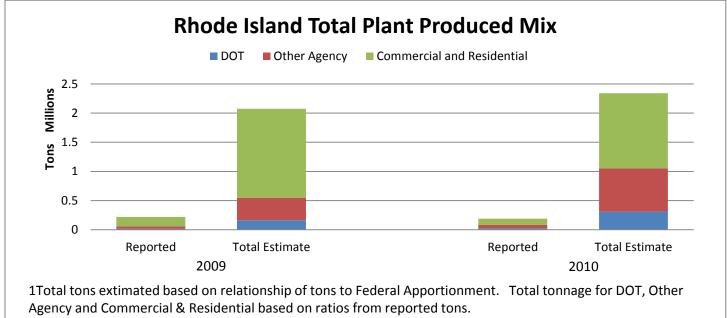
1. Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

# **Rhode Island**

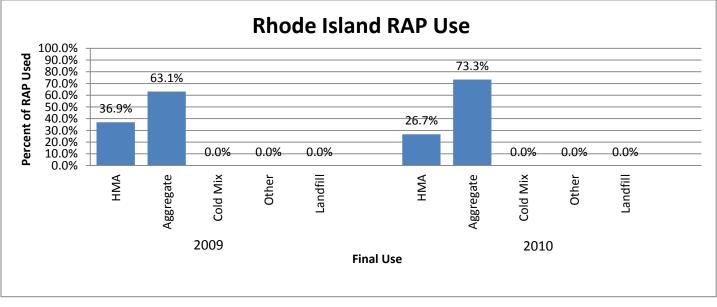
Table B41 summarizes the results received from asphalt mix producers in Rhode Island. The charts are used to summarize information calculated from information provided by the survey respondents.

## **Total Asphalt Mix Tonnage**

Companies responding: 2

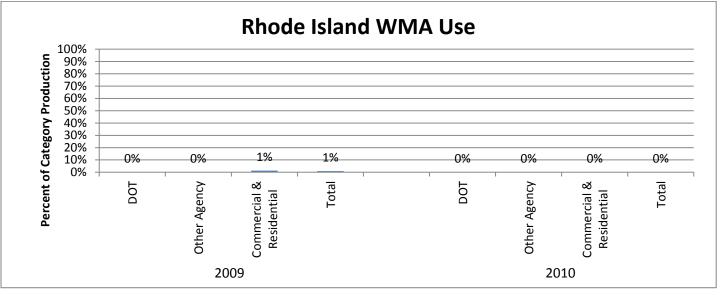






## **RAS Use**

No contractors reported using RAS in Rhode Isand.



		Companies	Reporting	2
HM	A/WMA			
	Reported		Total Estimated <sup>1</sup>	
	2009	2010	2009	2010
Total DOT Tonnage	17,000	25,000	161,007	309,400
Total Other Agency Tonnage	41,000	60,200	388,311	745,035
Total Commercial & Residential Tonnage	161,000	104,000	1,524,831	1,287,104
Total Tonnage	219,000	189,200	2,074,149	2,341,539
Reclaimed Asph	nalt Pavement (	(RAP)		
	Repor		Total Es	stimated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	65,000	75,000	615,615	928,200
RAP Tons used in HMA/WMA	24,000	20,000	227,304	247,520
RAP Tons used as Aggregate	41,000	55,000	388,311	680,680
RAP Tons used in Cold Mix	-			-
RAP Tons used as Other	-	-	_	-
RAP Tons Landfilled	_	_	_	_
Average % RAP in DOT Mixes	0%	0%		
Average % RAP in Other Agency Mixes	13%	10%		
Average % RAP in Commercial & Residential Mixes	10%	6%		
Reclaimed Asp			Total Co	timated
	Repor			stimated
	2009	2010	2009	2010
Percent Companies using RAS	0%	50%		
RAS Tons Received	-	-	-	-
RAS Tons used in HMA/WMA	-	-	-	-
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
Warm-	Mix Asphalt			
	Repor	ted	Total Es	timated
	2009	2010	2009	2010
Percent Companies using WMA	50%	0%		
WMA DOT Tonnage	-	-	-	-
WMA Other Agency Tonnage	-	-	-	-
WMA Commercial & Residential Tonnage	2,200	-	20,836	-
Total WMA Tonnage	2,200	-	20,836	-
Percent WMA Tons using Chemical Additives	100%	0%		
	00/	0%		
Percent WMA Tons using Additive Foaming	0%	0 /0		
Percent WMA Tons using Additive Foaming Percent WMA Tons using Plant Foaming	0%	0%		

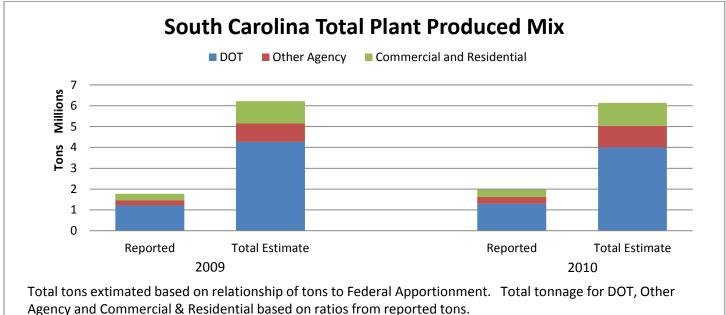
1. Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

# South Carolina

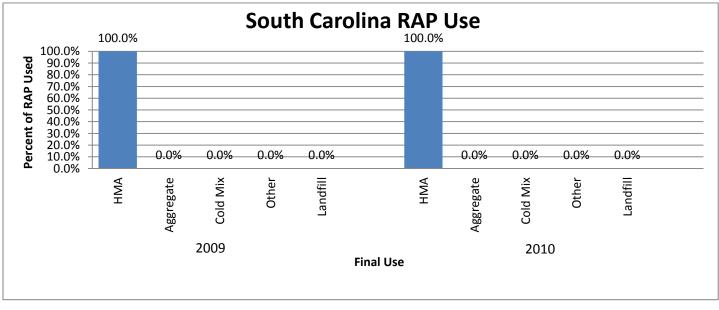
Table B42 summarizes the results received from asphalt mix producers in South Carolina. The charts are used to summarize information calculated from information provided by the survey respondents.

## **Total Asphalt Mix Tonnage**

Companies responding: 4

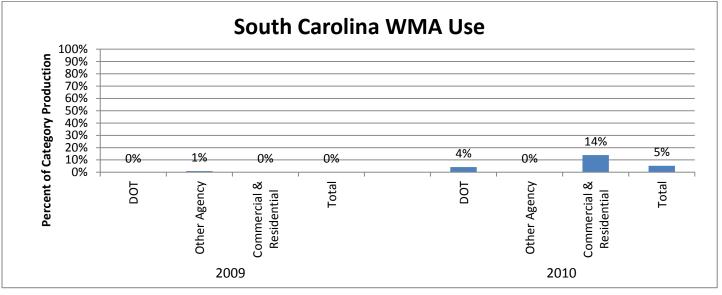


#### **RAP Use**



### RAS Use

No contractos reported using RAS in South Carolina.



		Companies	Reporting	4
НМ	A/WMA			
	Repor	ted	Total Es	timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	1,214,252	1,290,000	4,262,452	4,000,308
Total Other Agency Tonnage	251,700	332,250	883,556	1,030,312
Total Commercial & Residential Tonnage	308,200	357,750	1,081,891	1,109,388
Total Tonnage	1,774,152	1,980,000	6,227,898	6,140,008
Reclaimed Asph		(RAP)	• • •	
•	Repor		Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	405,000	500,000	1,421,693	1,550,507
RAP Tons used in HMA/WMA	294,000	395,000	1,032,044	1,224,901
RAP Tons used as Aggregate	-	-	-	-
RAP Tons used in Cold Mix	-	-	-	-
RAP Tons used as Other	-	-	-	-
RAP Tons Landfilled	-	-	-	-
Average % RAP in DOT Mixes	17%	19%		
Average % RAP in Other Agency Mixes	17%	24%		
Average % RAP in Commercial & Residential Mixes	20%	24%		
Reclaimed Asp	1			
	Repor		Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAS	0%	0%	2009	2010
RAS Tons Received	-	-	-	-
RAS Tons used in HMA/WMA	-	_	_	-
RAS Tons used as Aggregate	-	_	_	-
RAS Tons used in Cold Mix	-	-	_	_
RAS Tons used as Other	_	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
	Mix Asphalt			
	Repor	ted	Total Es	timated
	2009	2010	2009	2010
Percent Companies using WMA	50%	100%		
WMA DOT Tonnage	-	54,500	-	169,005
WMA Other Agency Tonnage	2,475	-	8,688	-
WMA Commercial & Residential Tonnage	-	50,000	-	155,051
	2,475	104,500	8,688	324,056
Total WMA Tonnage	2/1/3			
Total WMA Tonnage Percent WMA Tons using Chemical Additives	100%	50%		
Percent WMA Tons using Chemical Additives		50% 0%		
	100%			

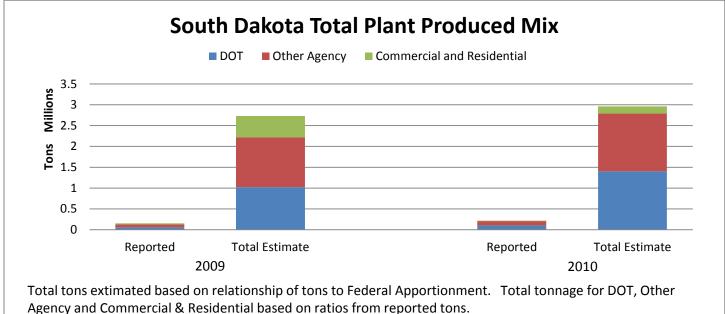
1. Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

# South Dakota

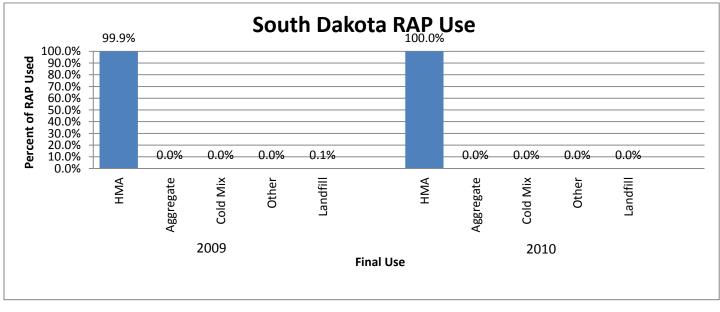
Table B43 summarizes the results received from asphalt mix producers in South Dakota. The charts are used to summarize information calculated from information provided by the survey respondents.

## **Total Asphalt Mix Tonnage**

Companies responding: 1

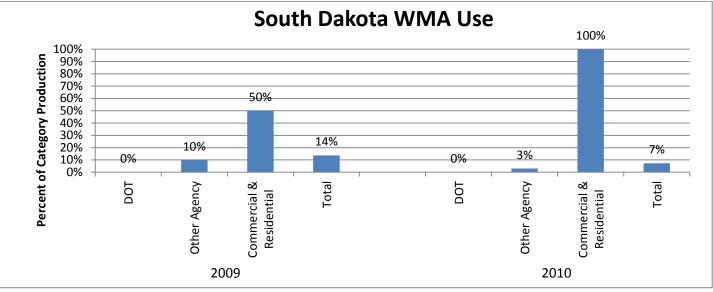


#### **RAP Use**



### **RAS Use**

No contractors reported using RAS in South Dakota.



		Companies	Reporting	1
НМ	A/WMA		1	
	Repor	Reported		timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	58,000	104,000	1,022,507	1,401,092
Total Other Agency Tonnage	68,000	103,000	1,198,801	1,387,620
Total Commercial & Residential Tonnage	29,000	13,000	511,253	175,137
Total Tonnage	155,000	220,000	2,732,561	2,963,849
Reclaimed Aspl	nalt Pavement (	(RAP)	· · ·	
·	Repor		Total Es	stimated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	26,000	13,000	458,365	175,137
RAP Tons used in HMA/WMA	18,692	13,600	329,523	183,213
RAP Tons used as Aggregate	-	-	-	-
RAP Tons used in Cold Mix	-	-	-	-
RAP Tons used as Other	-	-	-	-
RAP Tons Landfilled	12	6	213	88
Average % RAP in DOT Mixes	20%	5%		
Average % RAP in Other Agency Mixes	0%	5%		
Average % RAP in Commercial & Residential Mixes	20%	25%		
	halt Shingles (			
	Repor		Total Estimated	
	2009	2010	2009	2010
Percent Companies using RAS	0%	0%	2005	2010
RAS Tons Received	-	1,000	_	13,472
RAS Tons used in HMA/WMA	_	-	-	
RAS Tons used as Aggregate	_	_	-	-
RAS Tons used in Cold Mix	_	_	_	-
RAS Tons used as Other	_	_	-	-
RAS Tons Landfilled	_	500	-	6,736
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
	Mix Asphalt	0.0		
	Repor	ted	Total Estimated	
	2009	2010	2009	2010
Percent Companies using WMA	100%	100%		
WMA DOT Tonnage	-	-	-	-
WMA Other Agency Tonnage	6,800	3,090	119,880	41,629
WMA Commercial & Residential Tonnage	14,500	13,000	255,627	175,137
Total WMA Tonnage	21,300	16,090	375,507	216,765
Percent WMA Tons using Chemical Additives	0%	0%	, , , , , , , , , , , , , , , , , , ,	
Percent WMA Tons using Additive Foaming	0%	0%		
Percent WMA Tons using Plant Foaming	0%	0%		
Percent WMA Tons using Organic Additive	0%	0%		

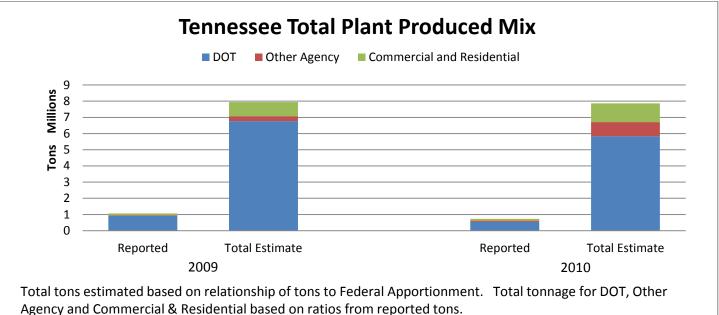
1. Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

## Tennessee

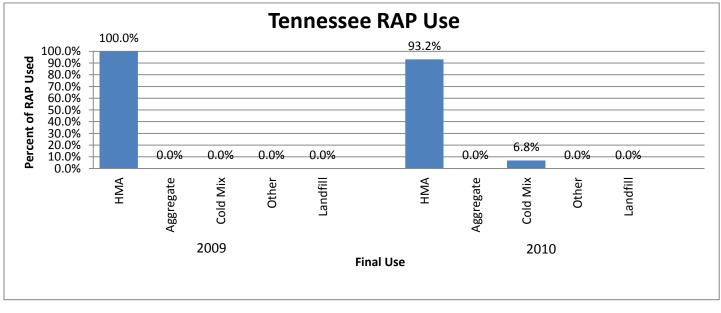
Table B44 summarizes the results received from asphalt mix producers in Tennessee. The charts are used to summarize information calculated from information provided by the survey respondents.

## **Total Asphalt Mix Tonnage**

Companies responding: 2

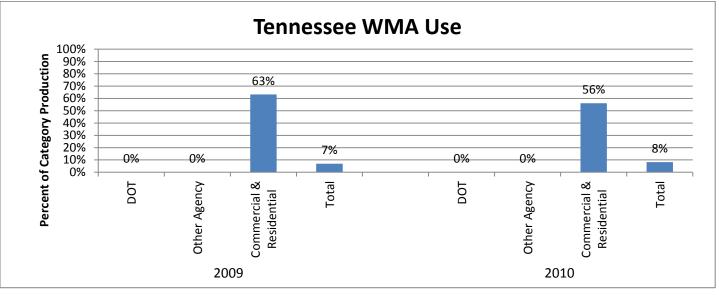


#### **RAP Use**



### **RAS Use**

No contractors reported using RAS in 2009 or 2010.



		Companies	Reporting	2
HM	IA/WMA		r	
	Reported		Total Es	timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	911,000	544,000	6,766,170	5,838,444
Total Other Agency Tonnage	41,000	81,000	304,515	869,327
Total Commercial & Residential Tonnage	118,000	108,000	876,408	1,159,103
Total Tonnage	1,070,000	733,000	7,947,093	7,866,873
Reclaimed Aspl	halt Pavement	(RAP)		
·	Repor	ted	Total Es	stimated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	117,000	89,000	868,981	955,187
RAP Tons used in HMA/WMA	210,639	123,409	1,564,453	1,324,476
RAP Tons used as Aggregate	-	-		
RAP Tons used in Cold Mix	_	9,000	_	96,592
RAP Tons used as Other	_	-	-	-
RAP Tons Landfilled	38	35	280	375
Average % RAP in DOT Mixes	17%	18%	200	373
Average % RAP in Other Agency Mixes	0%	11%		
Average % RAP in Commercial & Residential Mixes	25%	25%		
	halt Shingles (			
Reclaimed As			Total E	stimated
	Repor			
	2009	2010	2009	2010
Percent Companies using RAS	0%	0%		
RAS Tons Received	-	-	-	-
RAS Tons used in HMA/WMA	-	-	-	-
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
Warm-	Mix Asphalt			
	Repor	ted		timated
	2009	2010	2009	2010
Percent Companies using WMA	50%	100%		
WMA DOT Tonnage	-	-	-	-
WMA Other Agency Tonnage	-	-	-	-
WMA Commercial & Residential Tonnage	74,520	60,614	553,474	650,536
Total WMA Tonnage	74,520	60,614	553,474	650,536
Percent WMA Tons using Chemical Additives	0%	0%		
Percent WMA Tons using Additive Foaming	0%	0%		
refeelie wink folio doing Additive Fourning				
Percent WMA Tons using Plant Foaming	0%	100%		

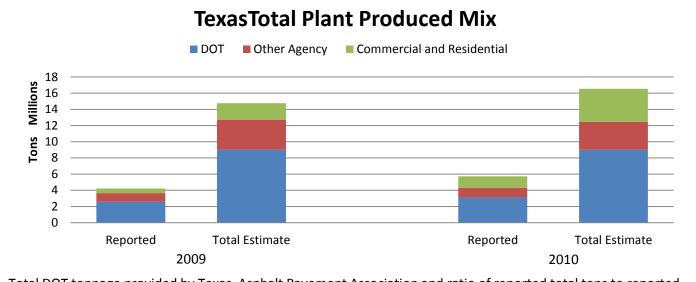
Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

## **Texas**

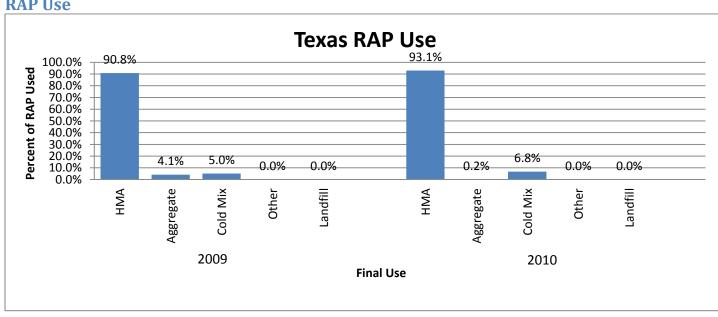
Table B45 summarizes the results received from asphalt mix producers in Texas. The charts are used to summarize information calculated from information provided by the survey respondents.

### **Total Asphalt Mix Tonnage**

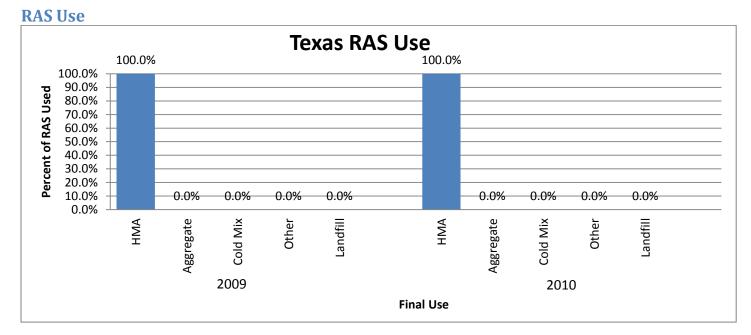
Companies responding: 7



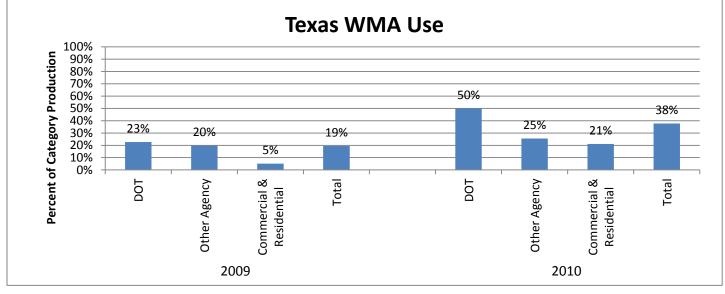
Total DOT tonnage provided by Texas Asphalt Pavement Association and ratio of reported total tons to reported DOT tons used to compute estimated total tons. Total tonnage for Other Agency and Commercial & Residential based on ratios from reported tons.



#### **RAP Use**







		Companies	Reporting	7
HM	IA/WMA			
	Repor	Reported		timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	2,579,899	3,119,074	9,001,949	9,000,645
Total Other Agency Tonnage	1,065,851	1,192,805	3,719,036	3,442,052
Total Commercial & Residential Tonnage	586,103	1,419,612	2,045,068	4,096,544
Total Tonnage	4,231,853	5,731,491	14,766,053	16,539,242
Reclaimed Aspl		(RAP)	• • •	
	Repor		Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	86%		
RAP Tons Received	631,984	801,000	2,205,159	2,311,429
RAP Tons used in HMA/WMA	485,848	564,369	1,695,254	1,628,586
RAP Tons used as Aggregate	22,000	1,000	76,764	2,886
RAP Tons used in Cold Mix	27,000	41,000	94,210	118,313
RAP Tons used as Other			-	
RAP Tons Landfilled	32	35	110	102
Average % RAP in DOT Mixes	16%	15%	110	102
Average % RAP in Other Agency Mixes	17%	13%		
Average % RAP in Commercial & Residential Mixes	21%	10%		
Reclaimed Asp	halt Shingles (		Tatal C	time a tra d
	Repor			timated
	2009	2010	2009	2010
Percent Companies using RAS	29%	57%		
RAS Tons Received	20,180	81,000	70,413	233,740
RAS Tons used in HMA/WMA	37,801	72,349	131,896	208,775
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	2%	5%		
Average % RAS in Other Agency Mixes	2%	1%		
Average % RAS in Commercial & Residential Mixes	4%	4%		
Warm-	Mix Asphalt			
	Repor	ted	Total Es	stimated
	2009	2010	2009	2010
Percent Companies using WMA	71%	71%		
WMA DOT Tonnage	583,431	1,558,444	2,035,745	4,497,170
WMA Other Agency Tonnage	211,090	303,774	736,549	876,593
WMA Commercial & Residential Tonnage	30,219	299,536	105,442	864,363
Total WMA Tonnage	824,740	2,161,754	2,877,736	6,238,127
Percent WMA Tons using Chemical Additives	2%	28%	, , , , , , , , , , , , , , , , , , , ,	, ,
Percent WMA Tons using Additive Foaming	8%	5%		
Percent WMA Tons using Plant Foaming	90%	67%		
Percent WMA Tons using Organic Additive	0%	0%		
TOTOLINE WITH TOTIS USING OTGATILE AUDILIVE	070	070		

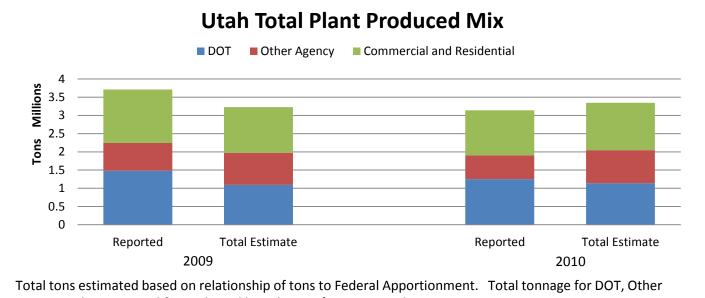
1. Total DOT tonnage provided by Texas Asphalt Pavement Association and ratio of reported total tons to reported DOT tons used to compute estimated total tons. Total tonnage for Other Agency and Commercial & Residential based on ratios from reported tons.

# Utah

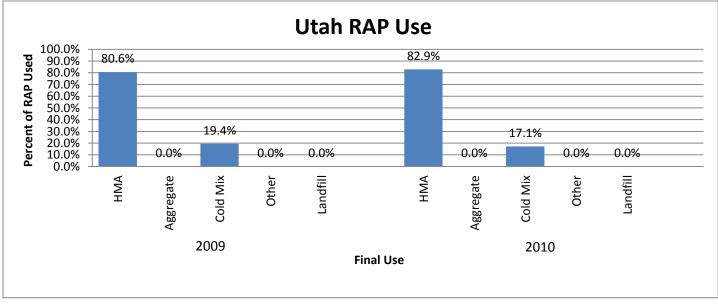
Table B46 summarizes the results received from asphalt mix producers in Utah. The charts are used to summarize information calculated from information provided by the survey respondents.

## **Total Asphalt Mix Tonnage**

Companies responding: 5



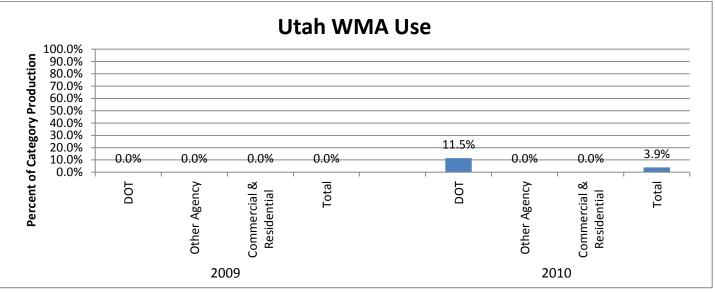
Agency and Commercial & Residential based ratios from reported tons.



### RAP Use

## **RAS Use**

No contractors reported using RAS in 2009 or 2010.



		Companies F	Reporting	5
H	MA/WMA			-1
	Reporte			timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	1,478,000	1,094,323	1,250,953	1,135,154
Total Other Agency Tonnage	766,000	880,000	648,329	912,835
Total Commercial & Residential Tonnage	1,467,000	1,253,000	1,241,643	1,299,752
Total Tonnage	3,711,000	3,227,323	3,140,924	3,347,741
Reclaimed As	phalt Pavement (I	RAP)	-	
	Reporte	ed	Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	80%	100%		
RAP Tons Received	947,000	1,806,000	801,524	1,873,385
RAP Tons used in HMA/WMA	715,427	671,165	605,525	696,208
RAP Tons used as Aggregate	_	_	-	_
RAP Tons used in Cold Mix	172,000	138,000	145,578	143,149
RAP Tons used as Other	-	-	-	-
RAP Tons Landfilled	57	60	49	62
Average % RAP in DOT Mixes	14%	10%	15	02
Average % RAP in Other Agency Mixes	13%	12%		
Average % RAP in Commercial & Residential Mixes	22%	22%		
	sphalt Shingles (R			
Keclainieu As	Reporte		Total Fo	stimated
	2009	2010	2009	2010
Percent Companies using RAS	0%	0%	2005	2010
RAS Tons Received	-	-	_	-
RAS Tons used in HMA/WMA	_	_	_	_
RAS Tons used as Aggregate	_	-	_	_
RAS Tons used in Cold Mix	_	_	_	_
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
	n-Mix Asphalt	0,0		
	Reporte	ed	Total Es	timated
	2009	2010	2009	2010
Percent Companies using WMA	0%	80%		
WMA DOT Tonnage	-	126,292	-	131,004
WMA Other Agency Tonnage	-	-	-	-
WMA Commercial & Residential Tonnage	-	62	-	65
Total WMA Tonnage	-	126,354	-	131,069
Percent WMA Tons using Chemical Additives	0%	0%		
Percent WMA Tons using Additive Foaming	0%	0%		
Percent WMA Tons using Plant Foaming	0%	100%		
Percent WMA Tons using Organic Additive	0%	0%		

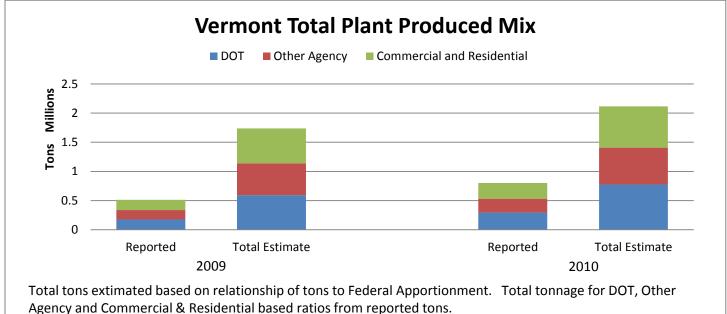
1. Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

## Vermont

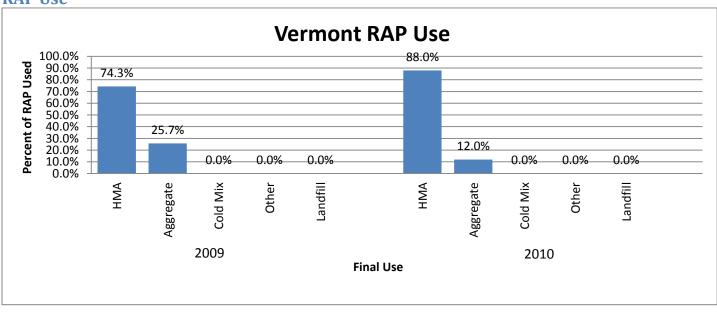
Table B47 summarizes the results received from asphalt mix producers in Vermont. The charts are used to summarize information calculated from information provided by the survey respondents.

### **Total Asphalt Mix Tonnage**

Companies responding: 1







## **RAS Use**

No contractor reported using RAS in 2009 or 2010.

### WMA Use

No contractor reported using WMA in 2009 or 2010.

		Companies	Reporting	1
HN	IA/WMA			
	Reported		Total Es	timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	175,000	293,000	593,505	775,483
Total Other Agency Tonnage	161,000	239,000	546,024	632,561
Total Commercial & Residential Tonnage	176,000	268,000	596,896	709,315
Total Tonnage	512,000	800,000	1,736,425	2,117,360
Reclaimed Asp	halt Pavement (	(RAP)		
-	Repor		Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	91,000	157,000	308,622	415,532
RAP Tons used in HMA/WMA	107,000	162,000	362,886	428,765
RAP Tons used as Aggregate	37,000	22,000	125,484	58,227
RAP Tons used in Cold Mix	-			
RAP Tons used as Other	-	-	-	_
RAP Tons Landfilled	21	20	71	54
Average % RAP in DOT Mixes	15%	15%	71	51
Average % RAP in Other Agency Mixes	25%	25%		
Average % RAP in Commercial & Residential Mixes	25%	25%		
	halt Shingles (			
Reclaimed AS	Repor	-	Total Ec	timated
	· · ·			
Deveryth Commenciate units a DAC	2009	2010	2009	2010
Percent Companies using RAS	0%	0%		
RAS Tons Received	-	-	-	-
RAS Tons used in HMA/WMA	-	-	-	-
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
Warm	Mix Asphalt			
	Repor	ted		timated
	2009	2010	2009	2010
Percent Companies using WMA	0%	0%		
WMA DOT Tonnage	-	-	-	-
WMA Other Agency Tonnage	-	-	-	-
WMA Commercial & Residential Tonnage	-	-	-	-
Total WMA Tonnage	-	-	-	-
Percent WMA Tons using Chemical Additives	0%	0%		
Percent WMA Tons using Additive Foaming	0%	0%		
Percent WMA Tons using Plant Foaming	0%	0%		
Percent WMA Tons using Organic Additive	0%	0%		

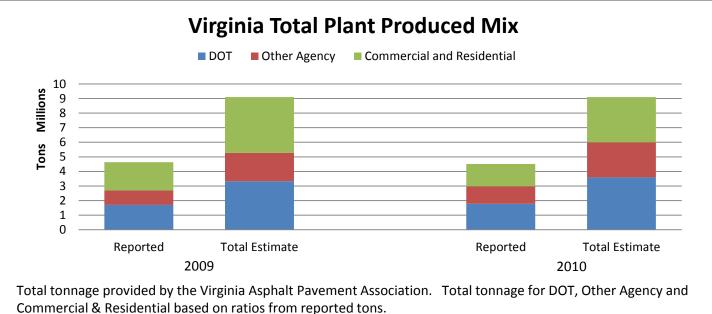
1. Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

# Virginia

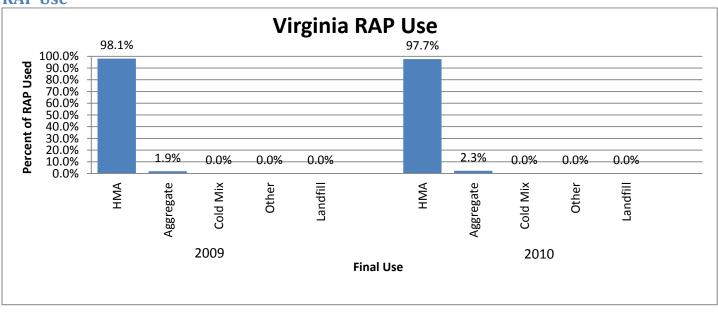
Table B48 summarizes the results received from asphalt mix producers in Virginia. The charts are used to summarize information calculated from information provided by the survey respondents.

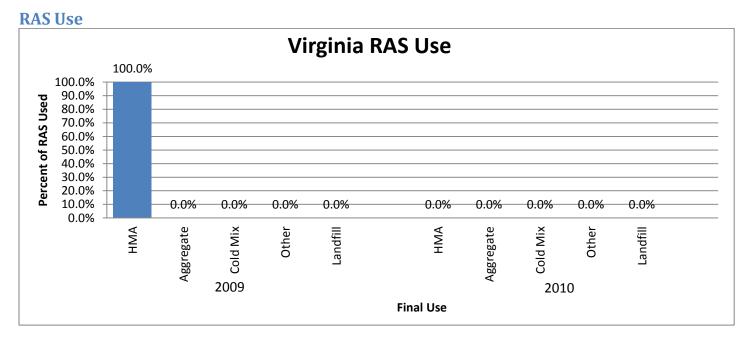
## **Total Asphalt Mix Tonnage**

Companies responding: 5

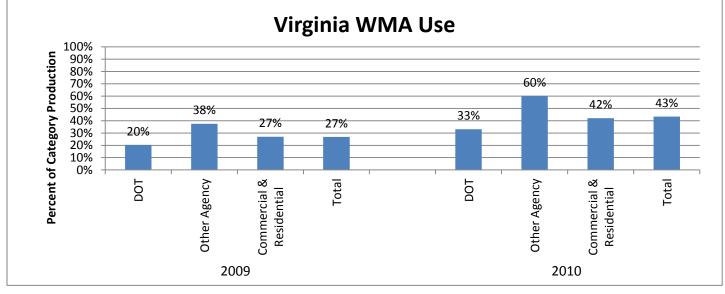












Companies Reporting

	MA/WMA		eporting	5
п	-	tad	Total Ca	timated <sup>1</sup>
	Repo			1
	2009	2010	2009	2010
Total DOT Tonnage	1,695,958	1,776,316	3,327,984	4,296,582
Total Other Agency Tonnage	990,983	1,194,602	1,944,609	2,889,522
Total Commercial & Residential Tonnage	1,950,467	1,535,419	3,827,407	3,713,896
Total Tonnage	4,637,408	4,506,337	9,100,000	10,900,000
Reclaimed Asp	halt Pavement		1	
	Repo			timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	1,087,424	1,493,766	2,133,855	3,016,479
RAP Tons used in HMA/WMA	990,653	1,255,837	1,943,962	2,536,010
RAP Tons used as Aggregate	19,200	29,530	37,676	59,632
RAP Tons used in Cold Mix	1	-	2	-
RAP Tons used as Other	1	-	2	-
RAP Tons Landfilled	11	15	21	30
Average % RAP in DOT Mixes	22%	25%		
Average % RAP in Other Agency Mixes	27%	28%		
Average % RAP in Commercial & Residential Mixes	25%	28%		
Reclaimed As	phalt Shingles (	(RAS)		
	Reported		Total Estimated	
	2009	2010	2009	2010
Percent Companies using RAS	20%	0%		
RAS Tons Received	2,003	-	3,930	-
RAS Tons used in HMA/WMA	1,503	-	2,949	-
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	2%	0%		
Warm	-Mix Asphalt			
	Repo	rted	Total Es	stimated
	2009	2010	2009	2010
Percent Companies using WMA	100%	100%		
WMA DOT Tonnage	344,500	588,138	676,013	1,187,673
WMA Other Agency Tonnage	372,000	718,341	729,977	1,450,602
WMA Commercial & Residential Tonnage	525,178	645,110	1,030,558	1,302,722
Total WMA Tonnage	1,241,678	1,951,589	2,436,548	3,940,997
Percent WMA Tons using Chemical Additives	0%	0%	_,,	
Percent WMA Tons using Additive Foaming	0%	0%		
Percent WMA Tons using Plant Foaming	100%	100%		
Percent WMA Tons using Organic Additive	0%	0%		
TELENE WITH TOTS USING OLGANIC AUDILIVE	U 70	070		

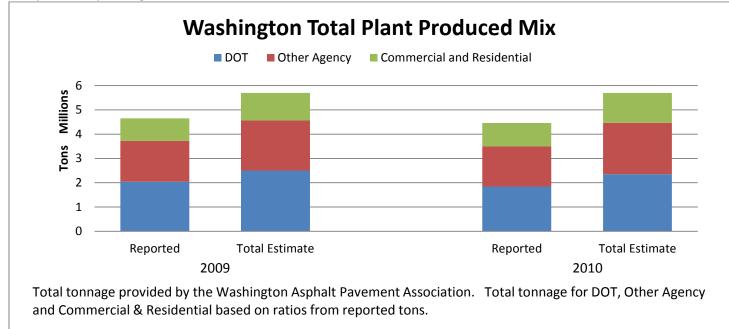
1. Total tonnage provided by the Virginia Asphalt Pavement Association. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

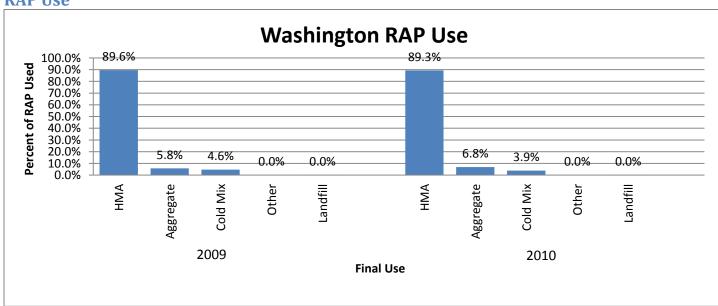
# Washington

Table B49 summarizes the results received from asphalt mix producers in Washington. The charts are used to summarize information calculated from information provided by the survey respondents.

## **Total Asphalt Mix Tonnage**

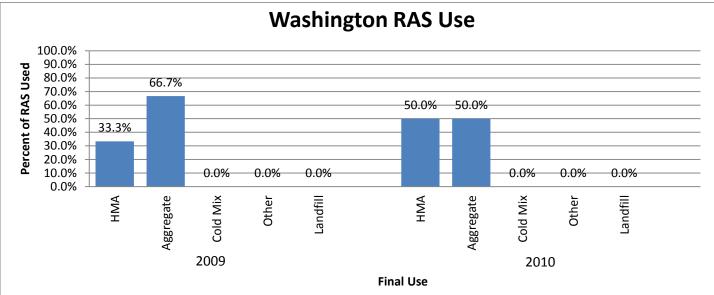
Companies responding: 6





## **RAP Use**

### **RAS Use**





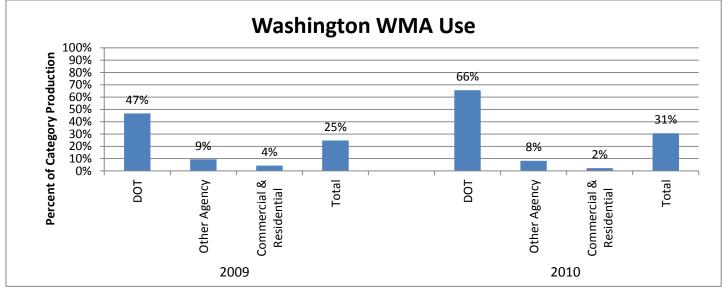


Table B 49: Summary of Washington Data

**Companies Reporting** 

HMA/WMA					
	Repor	ted	Total Estimated <sup>1</sup>		
	2009	2010	2009	2010	
Total DOT Tonnage	2,042,031	1,841,321	2,503,675	2,354,053	
Total Other Agency Tonnage	1,681,673	1,652,877	2,061,851	2,113,135	
Total Commercial & Residential Tonnage	925,293	964,295	1,134,475	1,232,812	
Total Tonnage	4,648,996	4,458,493	5,700,000	5,700,000	
Reclaimed Asph	alt Pavement (	RAP)			
•	Repor		Total Es	timated	
	2009	2010	2009	2010	
Percent Companies using RAP	100%	100%			
RAP Tons Received	837,500	435,900	1,026,835	557,280	
RAP Tons used in HMA/WMA	832,841	710,026	1,021,123	907,739	
RAP Tons used as Aggregate	53,516	54,000	65,614	69,037	
RAP Tons used in Cold Mix	43,000	31,000	52,721	39,632	
RAP Tons used as Other		-			
RAP Tons Landfilled	31	34	38	43	
Average % RAP in DOT Mixes	16%	18%		-	
Average % RAP in Other Agency Mixes	16%	15%			
Average % RAP in Commercial & Residential Mixes	16%	18%			
	halt Shingles (I				
	Reported		Total Estimated		
	2009	2010	2009	2010	
Percent Companies using RAS	17%	17%			
RAS Tons Received	7,500	5,000	9,196	6,392	
RAS Tons used in HMA/WMA	2,500	2,500	3,065	3,196	
RAS Tons used as Aggregate	5,000	2,500	6,130	3,196	
RAS Tons used in Cold Mix	-	-	-	-	
RAS Tons used as Other	-	-	-	-	
RAS Tons Landfilled	-	-	-	-	
Average % RAS in DOT Mixes	0%	0%			
Average % RAS in Other Agency Mixes	0%	0%			
Average % RAS in Commercial & Residential Mixes	1%	0%			
Warm-	Mix Asphalt				
	Report	ted	Total Estimated		
	2009	2010	2009	2010	
Percent Companies using WMA	33%	67%			
WMA DOT Tonnage	953,115	1,206,108	1,168,587	1,541,959	
WMA Other Agency Tonnage	157,697	136,188	193,348	174,111	
WMA Commercial & Residential Tonnage	39,713	22,153	48,691	28,322	
Total WMA Tonnage	1,150,525	1,364,449	1,410,626	1,744,391	
Percent WMA Tons using Chemical Additives	3%	0%			
Percent WMA Tons using Additive Foaming	1%	0%			
Percent WMA Tons using Plant Foaming	97%	100%			

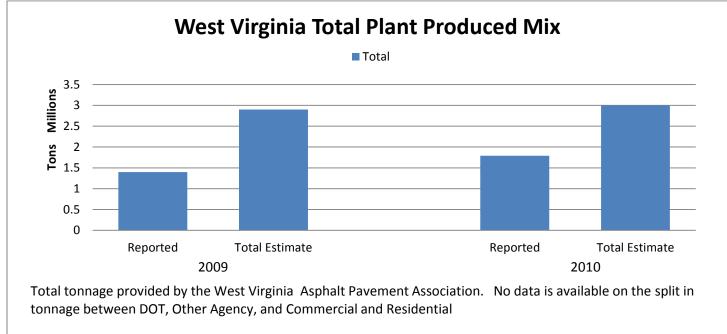
1. Total tonnage provided by the Washington Asphalt Pavement Association. Total tonnage for DOT, Other Agency and Commercial & Residential based on ratios from reported tons.

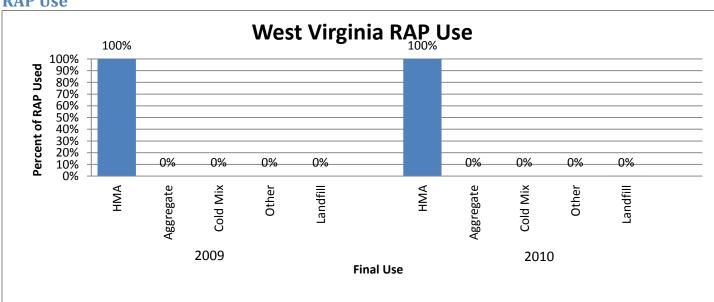
# West Virginia

Table B50 summarizes the results received from asphalt mix producers in West Virginia. The charts are used to summarize information calculated from information provided by the survey respondents.

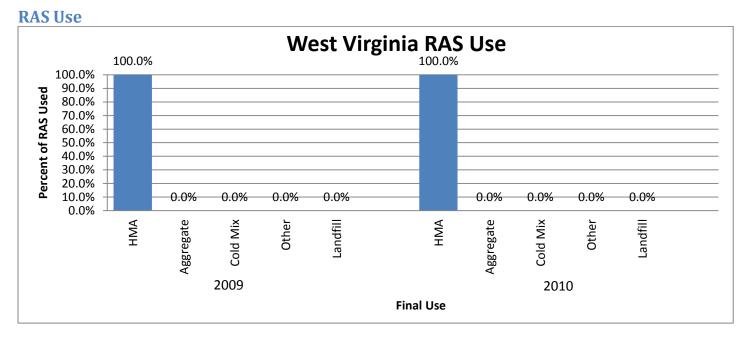
## **Total Asphalt Mix Tonnage**

Companies responding: 8









No contractor reported usin WMA in 2009 or 2010.

, с	IA/WMA	companies		
	Report	ted	Total Fs	timated <sup>1</sup>
	2009	2010	2009	2010
Total DOT Tonnage	- 2005		- 2005	-
Total Other Agency Tonnage	-	_	_	_
Total Commercial & Residential Tonnage	-	-	-	-
Total Tonnage	1,399,092	1,789,000	2,900,000	3,000,000
Reclaimed Aspl	•			-,,
	Report		Total Es	timated
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%	2009	2010
RAP Tons Received	-	-	-	-
RAP Tons used in HMA/WMA	140,265	193,549	290,738	324,566
RAP Tons used as Aggregate	-	-	-	-
RAP Tons used in Cold Mix	-	-	-	-
RAP Tons used as Other	-	-	-	-
RAP Tons Landfilled	10	11	21	18
Average % RAP in DOT Mixes	0%	0%		
Average % RAP in Other Agency Mixes	0%	0%		
Average % RAP in Commercial & Residential Mixes	0%	0%		
Reclaimed Asp	halt Shingles (I	RAS)		
	Reported		Total Estimated	
	2009	2010	2009	2010
Percent Companies using RAS	100%	0%		
RAS Tons Received	5,000	-	10,364	-
RAS Tons used in HMA/WMA	2,447	219	5,072	367
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
Warm-	Mix Asphalt		•	
	Repor	ted	Total Es	timated
	2009	2010	2009	2010
Percent Companies using WMA	100%	100%		
WMA DOT Tonnage	-	-	-	-
WMA Other Agency Tonnage	-	-	-	-
WMA Commercial & Residential Tonnage	-	-	-	-
Total WMA Tonnage	-	-	-	-
Percent WMA Tons using Chemical Additives	0%	0%		
Percent WMA Tons using Additive Foaming	0%	0%		
Percent WMA Tons using Plant Foaming	0%	0%		
Percent WMA Tons using Organic Additive	0%	0%		

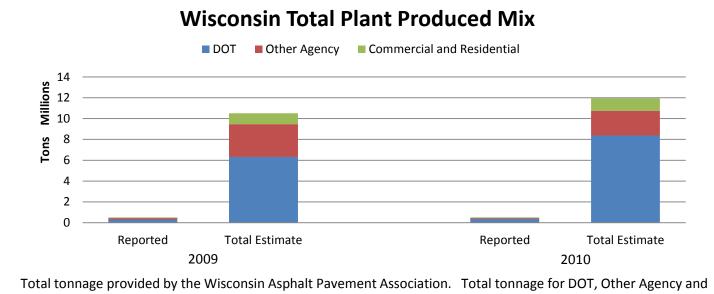
1. Total tonnage provided by the West Virginia Asphalt Pavement Association.

## Wisconsin

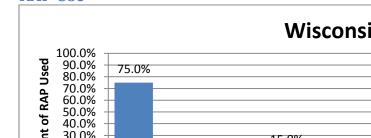
Table B51 summarizes the results received from asphalt mix producers in Wisconsin. The charts are used to summarize information calculated from information provided by the survey respondents.

### **Total Asphalt Mix Tonnage**

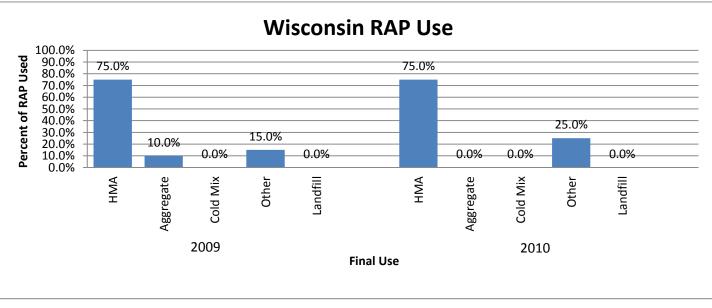
Companies responding: 1



Commercial & Residential based ratios from reported tons.



## **RAP Use**



## **RAS Use**

The contractor did not report any RAS use in 2009 or 2010.

## WMA Use

The contractor did not report any WMA use in 2009 Or 2010.

Table B 51: Summary of Wisconsin Data	Companies Reporting 1			
НМ	A/WMA			
	Reported		Total Estimated <sup>1</sup>	
	2009	2010	2009	2010
Total DOT Tonnage	300,000	350,000	6,310,800	8,370,541
Total Other Agency Tonnage	150,000	100,000	3,155,400	2,391,583
Total Commercial & Residential Tonnage	50,000	50,000	1,051,800	1,195,792
Total Tonnage	500,000	500,000	10,518,000	11,957,915
Reclaimed Aspl	nalt Pavement (	(RAP)		
	Reported		Total Estimated	
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	100,000	100,000	2,103,600	2,391,583
RAP Tons used in HMA/WMA	75,000	75,000	1,577,700	1,793,687
RAP Tons used as Aggregate	10,000	-	210,360	-
RAP Tons used in Cold Mix	-	-	-	-
RAP Tons used as Other	15,000	25,000	315,540	597,896
RAP Tons Landfilled	-	-	-	-
Average % RAP in DOT Mixes	20%	20%		
Average % RAP in Other Agency Mixes	20%	20%		
Average % RAP in Commercial & Residential Mixes	15%	15%		
Reclaimed Asp	halt Shingles (	RAS)		
	Reported		Total Estimated	
	2009	2010	2009	2010
Percent Companies using RAS	0%	0%		
RAS Tons Received	-	-	-	-
RAS Tons used in HMA/WMA	-	-	-	-
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
Warm-	Mix Asphalt			
	Reported		Total Estimated	
Deveent Commencies using 14/44	2009	2010	2009	2010
Percent Companies using WMA	0%	0%		
WMA DOT Tonnage	-	-	-	-
WMA Other Agency Tonnage	-	-	-	-
WMA Commercial & Residential Tonnage	-	-	-	-
Total WMA Tonnage	- 0%	- 0%	_	-
Percent WMA Tons using Chemical Additives	0%	0%		
Percent WMA Tons using Additive Foaming Percent WMA Tons using Plant Foaming	0%	0%		
Percent WMA Tons using Organic Additive	0%	0%		

1. Total tonnage provided by the Wisconsin Asphalt Pavement Association. Total tonnage for DOT, Other Agency and Commercial & Residential ratios from reported tons.

The Wisconsin Asphalt Pavement Association also estimated tonnage based on information available to them which is included in the Alternate Table 1 below:

Alternate Table 1: Wisconsin APA Estimate of Survey Data

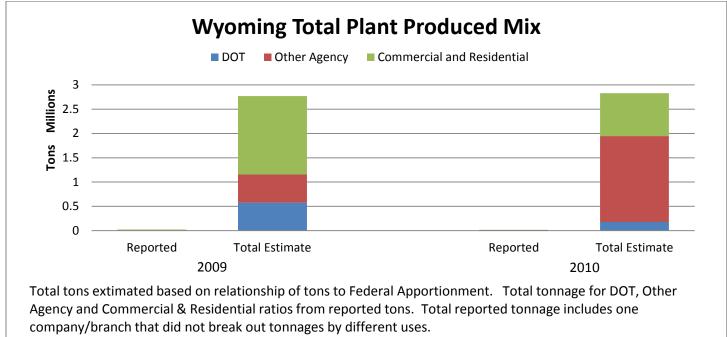
HMA/WMA	۱.			
	Total Es	timated		
	2009	2010		
Total DOT Tonnage	2,924,764	4,792,389		
Total Other Agency Tonnage	6,521,476	7,387,611		
Total Commercial & Residential Tonnage	1,072,270	1,820,000		
Total Tonnage	10,518,510	14,000,000		
Reclaimed Asphalt Pave	ement (RAP)			
· · · · ·	Total Estimated			
	2009	2010		
Percent Companies using RAP	98%	98%		
RAP Tons Received	2,629,628	3,500,000		
RAP Tons used in HMA/WMA	2,103,370	3,095,505		
RAP Tons used as Aggregate	52,592	35,000		
RAP Tons used in Cold Mix	78,888	105,000		
RAP Tons used as Other	5,000	6,000		
RAP Tons Landfilled	1,000	1,500		
Average % RAP in DOT Mixes	18%	20%		
Average % RAP in Other Agency Mixes	23%	24%		
Average % RAP in Commercial & Residential Mixes	20%	20%		
Reclaimed Asphalt Shi	ngles (RAS)	L		
•		Total Estimated		
	2009 2010			
Percent Companies using RAS	79%	80%		
RAS Tons Received	368,148	490,000		
RAS Tons used in HMA/WMA	198,879	279,259		
RAS Tons used as Aggregate	-	-		
RAS Tons used in Cold Mix	-	-		
RAS Tons used as Other	-	-		
RAS Tons Landfilled	-	-		
Average % RAS in DOT Mixes	3.5%	3.5%		
Average % RAS in Other Agency Mixes	3.5%	3.5%		
Average % RAS in Commercial & Residential Mixes	3.5%	3.5%		
Warm-Mix Asp	halt			
	Total Estimated			
	2009	2010		
Percent Companies using WMA	65%	77%		
WMA DOT Tonnage	350,971	797,453		
WMA Other Agency Tonnage	1,173,866	1,920,779		
WMA Commercial & Residential Tonnage	128,672	364,000		
Total WMA Tonnage	1,653,509	3,082,232		
Percent WMA Tons using Chemical Additives	0%	0%		
Percent WMA Tons using Additive Foaming	20%	35%		
Percent WMA Tons using Plant Foaming	5%	10%		
Percent WMA Tons using Organic Additive	75%	55%		

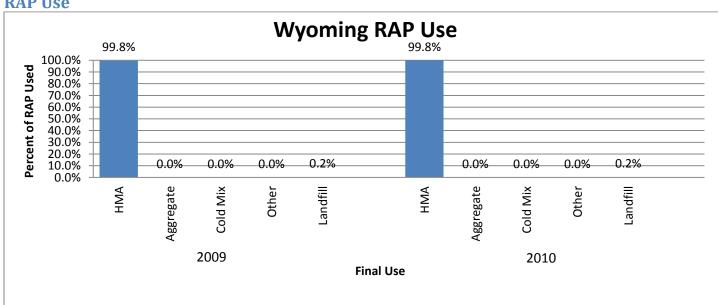
## Wyoming

Table B52 summarizes the results received from asphalt mix producers in Wymoming. The charts are used to summarize information calculated from information provided by the survey respondents.

# **Total Asphalt Mix Tonnage**

Companies responding: 2





## RAP Use

### **RAS Use**

No contractor reported using RAS in 2009 or 2010.

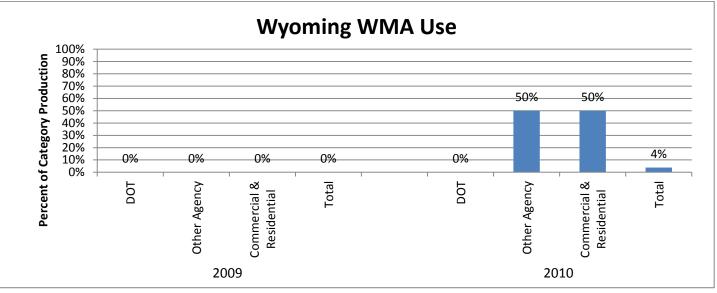


Table B 52: Summary of Wyoming Data	Companies Reporting 2			
HM	IA/WMA			
	Reported		Total Estimated <sup>1</sup>	
	2009	2010	2009	2010
Total DOT Tonnage	5,000	1,000	577,221	176,836
Total Other Agency Tonnage	5,000	10,000	577,221	1,768,362
Total Commercial & Residential Tonnage	14,000	5,000	1,616,219	884,181
Total Tonnage <sup>2</sup>	151,000	197,000	2,770,661	2,829,380
Reclaimed Asp				
•	Reported		Total Estimated	
	2009	2010	2009	2010
Percent Companies using RAP	100%	100%		
RAP Tons Received	3,000	4,000	55,046	57,449
RAP Tons used in HMA/WMA	8,694	9,646	159,525	138,537
RAP Tons used as Aggregate	-	-	-	-
RAP Tons used in Cold Mix	-	-	-	-
RAP Tons used as Other	-	-	-	-
RAP Tons Landfilled	20	16	362	224
Average % RAP in DOT Mixes	0%	0%		
Average % RAP in Other Agency Mixes	15%	11%		
Average % RAP in Commercial & Residential Mixes	15%	11%		
	halt Shingles (			
•	Reported		Total Estimated	
	2009	2010	2009	2010
Percent Companies using RAS	0%	0%		
RAS Tons Received	-	-	-	-
RAS Tons used in HMA/WMA	-	-	-	-
RAS Tons used as Aggregate	-	-	-	-
RAS Tons used in Cold Mix	-	-	-	-
RAS Tons used as Other	-	-	-	-
RAS Tons Landfilled	-	-	-	-
Average % RAS in DOT Mixes	0%	0%		
Average % RAS in Other Agency Mixes	0%	0%		
Average % RAS in Commercial & Residential Mixes	0%	0%		
Warm·	Mix Asphalt			
	Reported		Total Estimated	
	2009	2010	2009	2010
Percent Companies using WMA	0%	50%		
WMA DOT Tonnage	-	-	-	-
WMA Other Agency Tonnage	-	5,000	-	884,181
WMA Commercial & Residential Tonnage	-	2,500	-	442,091
Total WMA Tonnage	-	7,500	-	1,326,272
Percent WMA Tons using Chemical Additives	0%	0%		
Percent WMA Tons using Additive Foaming	0%	0%		
Percent WMA Tons using Plant Foaming	0%	100%		
	070	100 /0		

Total tons estimated based on relationship of tons to Federal Apportionment. Total tonnage for DOT, Other Agency and Commercial & Residential ratios from reported tons.
 Total reported tonnage includes one company/branch that did not break out tonnages by different uses.