

Annual Asphalt Pavement Industry Survey on Recycled Materials and Warm-Mix Asphalt Usage: 2009–2012

Appendix A
Survey Forms

RAP, RAS, WMA Survey 2012

Purpose

The National Asphalt Pavement Association is working with the Federal Highway Administration to determine the amount of hot-mix asphalt (HMA), warm-mix asphalt (WMA), reclaimed asphalt pavement (RAP) and reclaimed asphalt shingles (RAS) being produced and used in each state. This survey will be used to collect this data.

It is important to the industry that you complete this survey so that we have accurate information regarding the use of RAP, RAS and Warm-Mix Asphalt and to identify areas needing assistance in implementation.

DATA FROM THIS SURVEY WILL BE CONFIDENTIAL AND WILL BE USED ONLY FOR THE PURPOSES OF DETERMINING THESE QUANTITIES. IT WILL NOT BE USED FOR ANY OTHER PURPOSE. DATA WILL BE REPORTED BY STATE ONLY. NO COMPANY-SPECIFIC INFORMATION WILL BE DISCLOSED OR USED IN ANY WAY.

Survey results will be shared with industry and government agencies and officials to help in the implementation of recycling and warm-mix technologies.

By completing this survey you will be eligible to receive a complimentary copy of the full report.

Your participation is greatly appreciated.

Contact Information

The following information will be used only to confirm that we do not get duplicate information from a company and to contact you if we have any questions regarding your answers.

Contact Kent Hansen, khansen@asphalt pavement.org, or Audrey Copeland, acopeland@asphalt pavement.org, or by phone at 888-468-6499 at NAPA if you have any questions.

*1. Company/Branch Name:

*2. Contact Person's Name & Address

*3. Contact Person's Email

*4. Contact Person's Phone Number

State

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Please select the state for which you are providing the information.

If your branch operates in more than one state, please complete a separate questionnaire for each state. If a plant provides mix for more than one state, please divide the tonnage accordingly, using your best estimate if specific data is not available.

*5. Which state is the information provided for?

- | | | |
|--------------------------------------------|--------------------------------------|-----------------------------------------|
| <input type="radio"/> Alabama | <input type="radio"/> Kentucky | <input type="radio"/> Ohio |
| <input type="radio"/> Alaska | <input type="radio"/> Louisiana | <input type="radio"/> Oklahoma |
| <input type="radio"/> Arizona | <input type="radio"/> Maine | <input type="radio"/> Oregon |
| <input type="radio"/> Arkansas | <input type="radio"/> Maryland | <input type="radio"/> Pennsylvania |
| <input type="radio"/> California | <input type="radio"/> Massachusetts | <input type="radio"/> Puerto Rico |
| <input type="radio"/> Colorado | <input type="radio"/> Michigan | <input type="radio"/> Rhode Island |
| <input type="radio"/> Connecticut | <input type="radio"/> Minnesota | <input type="radio"/> South Carolina |
| <input type="radio"/> Delaware | <input type="radio"/> Mississippi | <input type="radio"/> South Dakota |
| <input type="radio"/> District of Columbia | <input type="radio"/> Missouri | <input type="radio"/> Tennessee |
| <input type="radio"/> Florida | <input type="radio"/> Montana | <input type="radio"/> Texas |
| <input type="radio"/> Georgia | <input type="radio"/> Nebraska | <input type="radio"/> US Virgin Islands |
| <input type="radio"/> Guam | <input type="radio"/> Nevada | <input type="radio"/> Utah |
| <input type="radio"/> Hawaii | <input type="radio"/> New Hampshire | <input type="radio"/> Vermont |
| <input type="radio"/> Idaho | <input type="radio"/> New Jersey | <input type="radio"/> Virginia |
| <input type="radio"/> Illinois | <input type="radio"/> New Mexico | <input type="radio"/> Washington |
| <input type="radio"/> Indiana | <input type="radio"/> New York | <input type="radio"/> West Virginia |
| <input type="radio"/> Iowa | <input type="radio"/> North Carolina | <input type="radio"/> Wisconsin |
| <input type="radio"/> Kansas | <input type="radio"/> North Dakota | <input type="radio"/> Wyoming |

*6. How many plants does this survey response cover?

Number of plants

Total Asphalt Tonnage for 2012

Please complete the following information for the total tonnage of all asphalt production in 2012.

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***7. What was your total tonnage of asphalt mixes in 2012 for the following sectors? (Use best estimate if data is not available.)**

State DOT

Other Agency (City, County, FAA, Military)

Commercial & Residential

RAP Supply and Use 2012

Please complete the following information on the amount of RAP received and used for 2012.

***8. Did you accept, process, or use RAP in the state during 2012?**

- Yes
- No

RAP Supply and Use 2012

Please complete the following information regarding the amount of RAP received and used for 2012.

***9. How many tons of removed asphalt pavement and asphalt millings were accepted/delivered to your facilities in the state in 2012?**

Tons:

***10. How many tons of RAP were used in 2012 for the following purposes? (Use best estimate if data not available.)**

Recycled Back into HMA/WMA Mixes:

Aggregate Base:

Cold Mix:

Other:

Landfilled:

***11. What was the average RAP percentage used in asphalt mixes during 2012 for the following sectors? (Use best estimate if data not available.)**

State DOT

Other Agency (City, County, FAA, Military)

Commercial & Residential

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***12. At the end of the year 2012 did you have excess RAP (processed or unprocessed) in inventory?**

- Yes
 No

Reclaimed Asphalt Shingles (RAS) Supply and Use for 2012

Please complete the following information on the amount of waste shingles received (processed and unprocessed) and used for 2012.

***13. Did you accept waste shingles and/or process or use reclaimed asphalt shingles (RAS) in 2012?**

- Yes
 No

Reclaimed Asphalt Shingles (RAS) Supply and Use for 2012

Please complete the following information regarding the amount of waste shingles received (processed and unprocessed) and used during 2012.

***14. How many tons of unprocessed shingles (manufacturers waste and tear-offs) were accepted/delivered to your facilities in the state in 2012?**

Tons:

***15. How many tons of reclaimed asphalt shingles (RAS) were used for the following purposes in 2012? (Use best estimate if data not available.)**

Recycled into HMA/WMA Mixes:
Aggregate Base:
Cold Mix:
Other:
Landfilled:

***16. What was average RAS percentage used in asphalt mixes in 2012 for the following sectors? (Use best estimate if data not available.)**

State DOT
Other Agency (City, County, FAA, Military)
Commercial & Residential

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***17. At the end of the year 2012 did you have any excess RAS? (Include processed and unprocessed shingles.)**

- Yes
 No

Warm-Mix Asphalt Production for 2012

Warm-mix asphalt is the generic term for a variety of technologies that allow the producers of asphalt pavement material to lower the temperatures at which the material is mixed and placed on the road by 10 to 100 degrees F.

***18. Did any of your plants in this state use Warm-Mix Asphalt technologies in 2012?**

- Yes
 No

Warm-Mix Asphalt Production for 2012

Warm-mix asphalt is the generic term for a variety of technologies that allow the producers of asphalt pavement material to lower the temperatures at which the material is mixed and placed on the road by 10 to 100 degrees F.

***19. What was average percent of mixes produced using warm-mix asphalt technologies in 2012 for the different sectors? (Use best estimate if data not available.)**

State DOT	<input type="text"/>
Other Agency (City, County, FAA, Military)	<input type="text"/>
Commercial & Residential	<input type="text"/>

***20. What percentage of the total warm-mix asphalt (WMA) for 2012 was produced using the following technologies? (Use best estimate if data not available.)**

Chemical Admixture	<input type="text"/>
Additive (Zeolite) Foaming	<input type="text"/>
Plant Foaming	<input type="text"/>
Organic (Wax) Additive	<input type="text"/>

Other Recycled Materials

Please let us know if you used any other recycled in HMA/WMA mixes in 2012.

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***21. Did you use any other recycled materials (excluding RAP and RAS) in HMA/WMA mixes in 2012?**

- Yes
- No

Other Recycled Material

***22. What other recycled material (excluding RAP and RAS) did you use in your mixes in 2012?**

	Yes	No
Ground Tire Rubber	<input type="radio"/>	<input type="radio"/>
Steel Slag	<input type="radio"/>	<input type="radio"/>
Blast Furnace Slag	<input type="radio"/>	<input type="radio"/>
Other 1*	<input type="radio"/>	<input type="radio"/>
Other 2*	<input type="radio"/>	<input type="radio"/>
Other 3*	<input type="radio"/>	<input type="radio"/>

* Please describe the other recycled materials used.

***23. How many tons of HMA/WMA was produced using this product. (Use best estimate if data not available.)**

Ground Tire Rubber	<input type="text"/>
Steel Slag	<input type="text"/>
Blast Furnace Slag	<input type="text"/>
Other 1	<input type="text"/>
Other 2	<input type="text"/>
Other 3	<input type="text"/>

24. How many tons of the recycled product was used in 2012? (Enter 0 if you do not have a reasonable estimate of this quantity)

Ground Tire Rubber	<input type="text"/>
Steel Slag	<input type="text"/>
Blast Furnace Slag	<input type="text"/>
Other 1	<input type="text"/>
Other 2	<input type="text"/>
Other 3	<input type="text"/>

Thank You

25. Would you like a complimentary copy of the final report?

- Yes
- No