

Topics

- Recycled Tire Rubber
 - Asphalt Rubber Gap-Graded (AR-GG)
 - Crumb Rubber Modified Asphalt Binder (CRMAB) Dense-Graded
- Warm Mix Asphalt (WMA)

Recycled Tire Rubber

Asphalt Rubber Gap-Graded (AR-GG)

- Intent/Objective
- Mixing at high temperature and subsequent agitation
- 15-20% rubber
- Gap graded mix
- 4 Pilot projects
(on next slide)



ARGG (Gap-Graded) Pilot Projects

Project #	ECMS	District	SR	CRMAB Pavement Layers	Year Paved	Paving Status
1	87631	5-0	I-78	Wearing	2012	Completed
2	87769	3-0	15	Wearing	2013	Completed
3	81954	11-0	376	Wearing	2014	Completed
4	90201	8-0	15	Wearing	2015	Completed

Recycled Tire Rubber (AR Cont'd.)

Asphalt Rubber Gap-Graded (AR-GG)

- Final Report
- Special Provision
- Use Guidelines
- Cost?
- Long term evaluation
- Future



Recycled Tire Rubber (CRMAB)

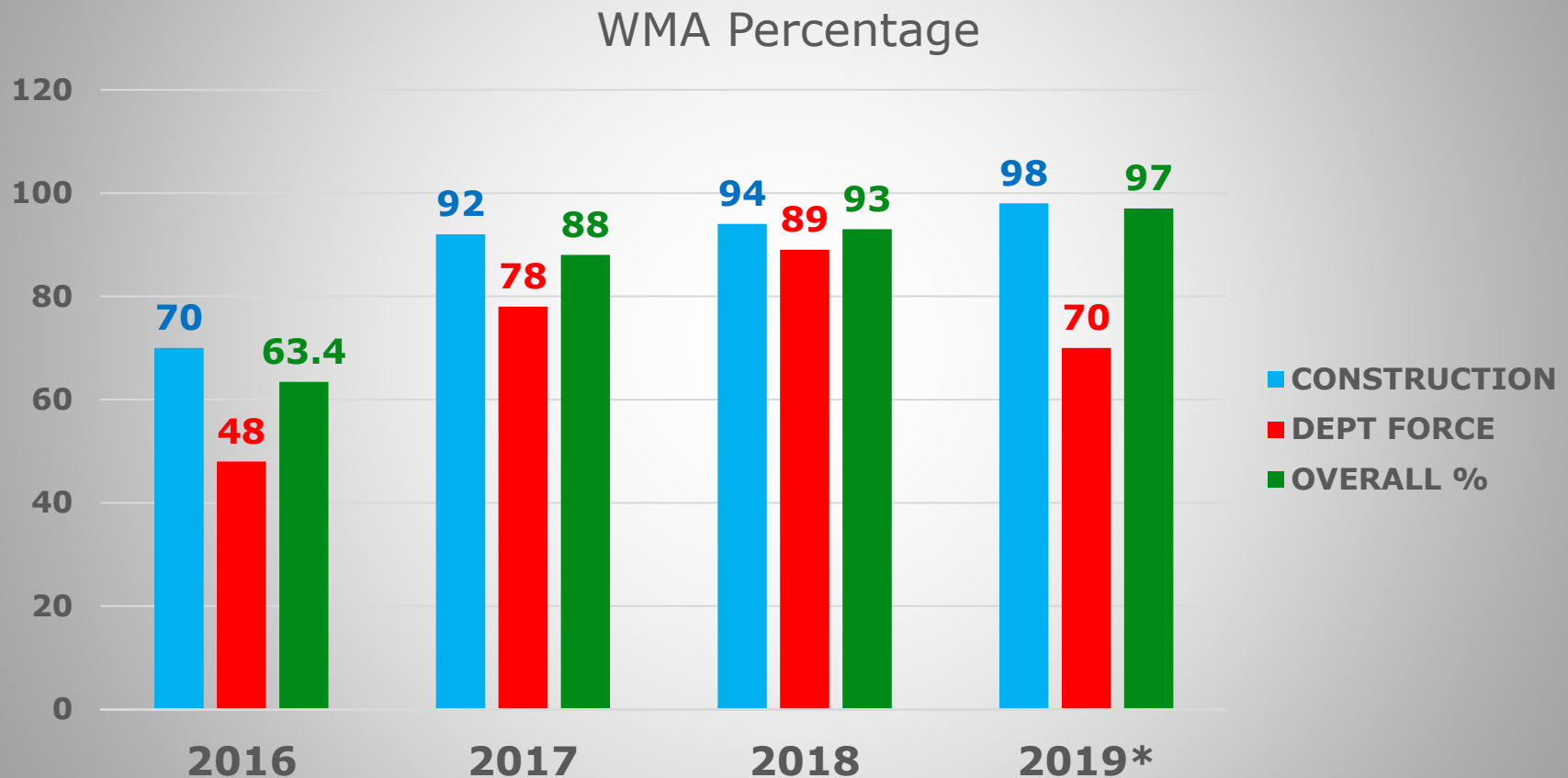
Crumb Rubber Modified Asphalt Binder (CRMAB)

- Intent/Objective
- Mixing at high temperature but doesn't require subsequent agitation
- 10% rubber
- Dense graded mix
- 6 pilot projects (2@3 years; and 4@2 years)
- OPI
- Special Provision / Clearance Transmittal
- Use Guidelines
- Future

CRMAB Dense-Graded Pilot Projects

Project #	ECMS	District	SR	CRMAB Pavement Layers	Year Paved	Paving Status
1	98449	12-0	366	Wearing	2015	Completed
2	104237	6-0	63	Wearing	2015	Completed
3	101922	4-0	924	Wearing	2016	Completed
4	93255	2-0	322	Wearing	2016	Completed
5	90908	8-0	272	Wearing	2016	Completed
6	105503	10-0	954	Wearing	2016	Completed

Warm Mix Asphalt (WMA)



* Percentages through February 28, 2019