CalRecycle Pavement Preservation Grant Program

Nate Gauff
Waste Management Engineer

2017 WRAPP Workshop February 1st & 2nd
Overview

- CalRecycle
- Tire Program
- RAC Program
- Grants
Who we are

- Department of Resources Recycling and Recovery (aka CalRecycle)

- Formerly known as the Integrated Waste Management Board
CalRecycle regulates and provides oversight for all of California’s non-hazardous waste handling and recycling programs.

In 2013, Californians sent about 30 million tons of solid waste to landfills, which translates to a per capita waste disposal of 4.4 pounds per person per day.
What we do

• Household waste
• Organics management
• Beverage container
• Electronic-waste recycling,
• Used motor oil, carpet, paint, mattresses, construction and demolition debris, medical sharps waste, household hazardous waste
• TIRES
How we do it

- Our funding comes from disposal fees charged by landfills and recycling fees on new electronics, beverage containers, used oil, carpet, and tires.

- Much of this money is returned through payments and grants to industry and local jurisdictions in support of waste reduction, recycling, and safe disposal efforts, and the remainder covers CalRecycle’s annual operating budget.
Tire Program

- Started in early 1990’s
- Largest program in the country
- Deals with all aspects of tire management
  - Hauling
  - Storage
  - Market development
Overview: 2015

Total = 44.3 Million PTE

- Recycling Rate: 36.7%
- Diversion Rate: 80.9%

- Civil Engineering: 3%
- Exported TDF: 15%
- Exported Bales: 6%
- TDF (California): 19%
- ADC: 4%
- Disposal: 19%
- Retread: 10%
- Used Tires (Domestic and Export): 7%
- Crumb Rubber: 17%
RAC Program

- RAC has been a tire diversion strategy used by the CalRecycle since the very beginning of the Tire Program.

- The use of RAC by State and Local Government Agencies currently diverts about four million waste tires per year from landfill disposal.

- Over the past 25 years of the Tire program RAC has diverted over 75 million waste tires.
RAC Program Support

- Caltrans
- Local Government
  - Technology Centers
  - Contracted Experts
- Research Contracts
- Grants
Caltrans-CalRecycle Collaborations

- Laboratory Research

- Field Evaluated Research
  - 1993, 2002 – Side by side comparison of various materials and processes
CIWMB partnered with Los Angeles County DPW in 1997 to create the first center.

The center was created to promote the use of RAC by local governments via peer to peer.

The center provided RAC technology transfer and technical assistance to local agencies.

Added Northern Center using Sacramento County in 2000.
RAC Expert Contracts

- RAC technology transfer
- Direct technical support of our expanding RAC grant programs
- Engineering evaluation and design assistance
- Increased field support of grantees
- Technical Investigations
RAC Expert Contracts

- 2005 - MACTEC Engineering and Consulting
- 2009 - Jacobs Engineering
- 2012 - Quincy Engineering Inc.
- 2015 - Interwest Consulting Group
Research Contracts

- Use contracts to fill in gaps in knowledge base, determine feasibility of technology, investigate new processes and materials

- Partner with entities that have a proven expertise and record of accomplishment with RAC projects and/or research.
Research Contracts

Past Research Contracts

- Terminal Blend Chip Seal Demonstration Project
- Reclaimed Asphalt Pavement (RAP) in Chip Seal Demonstration Project
- Warm Mix Asphalt Performance Evaluations
- UCPRC - RAP in RAC and Rubber RAP in Hot Mix
Research Contracts

**Current Contracts**

- CSU Chico - RAC Chip Seal Performance Model Development
- Caltrans - PG+5 Research
Provided Grants for RAC since the beginning of the Tire Program

Grants for overlay and chip seal

Available to cities, counties and Indian tribes
Grants

- Awarded over $74M in the last 15 years
  - $55.4M for overlay projects
  - $18.7M for chip seal projects
- 230 Different agencies have received grants
- Awarded over 700 grants
Next Grant Cycle is anticipated to be opening in early August 2017

Online Process — All documents are online

For grant notification get on our listserv at:

http://www.calrecycle.ca.gov/Listservs/
Why CalRecycle Will Continue to Support RAC

- Largest recycling use of waste tire rubber

- Demonstrated superior performance of RAC over conventional AC. Long-lasting durability; resists reflective cracking; lower maintenance.

- Shown to be a cost effective resurfacing option over conventional AC
Nate Gauff
CalRecycle
(916) 341-6686
nathan.gauff@calrecycle.ca.gov
www.calrecycle.ca.gov
Questions?