



pennsylvania

DEPARTMENT OF TRANSPORTATION

STRATEGIC RECYCLING PROGRAM (SRP) UPDATES

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Overview

- ❖ Strategic Recycling Program Details
- ❖ Updates
- ❖ What's in the horizon?
- ❖ Q/A



Memorandum of Understanding: PENNDOT-PADEP

- ❖ Strategic Recycling Program (SRP)
- ❖ **Establishing and implementing a waste reduction program for materials used in PENNDOT operations;**
- ❖ **Continually reviewing and revising existing procedures and specifications;**
- ❖ Evaluating materials that may be recycled in transportation and civil engineering applications;
- ❖ Employs procurement and contract bidding options encouraging recycled materials use.



SRP Five Key Focus Areas

- ❖ **Research** - To collect information on recycled materials and to identify and resolve data gaps associated with the use of recycled materials.
- ❖ **Specifications** - To develop, obtain, and/or disseminate user guidelines, provisional special provisions and Publication 408 specifications at the Municipal, District and Statewide levels.
- ❖ **Projects** - The overall objective is to successfully incorporate recycled materials in transportation-related projects, including post-construction monitoring.
- ❖ **Outreach** - To disseminate the results and experiences of recycled materials projects to PENNDOT, Commonwealth agencies and the public.
- ❖ **Contracting** - To provide technical assistance to the Engineering Districts in developing construction contract mechanisms to specify or provide for recycled material use.

SRP Updates

❖ Conferences:

- ❖ TRB ADC60 summer workshop
- ❖ N.E In-place recycling conference (FHWA funded)

❖ Provided presenter for **PROP conference 206**

- ❖ Post-consumer asphalt shingles

❖ **specifications review/updates**

- ❖ Post consumer asphalt shingles
- ❖ In-place pavement recycling processes
 - ❖ Hot in-place pavement preservation methods
- ❖ RMRC: Leachate in quarry material
- ❖ STIC: Asphalt rubber, bituminous pavement (Cold-in-place, Full depth reclamations), Mulch compost, RAP/RAS, Deicing systems

❖ **Recycling Projects (Allegheny, Indiana, and Armstrong)**

SRP Updates

❖ Recycling Projects

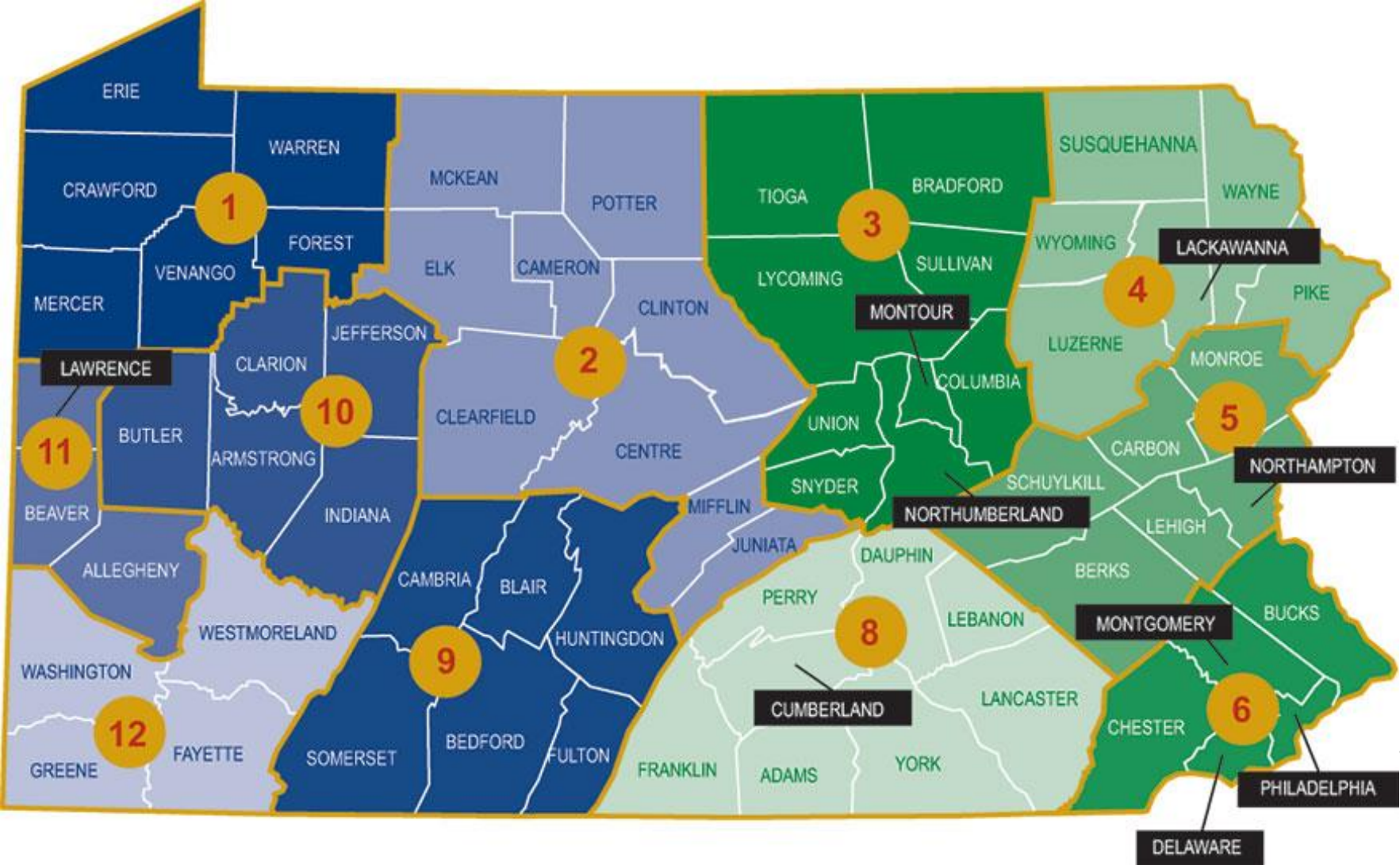
- ❖ Allegheny,
- ❖ Indiana,
- ❖ Armstrong



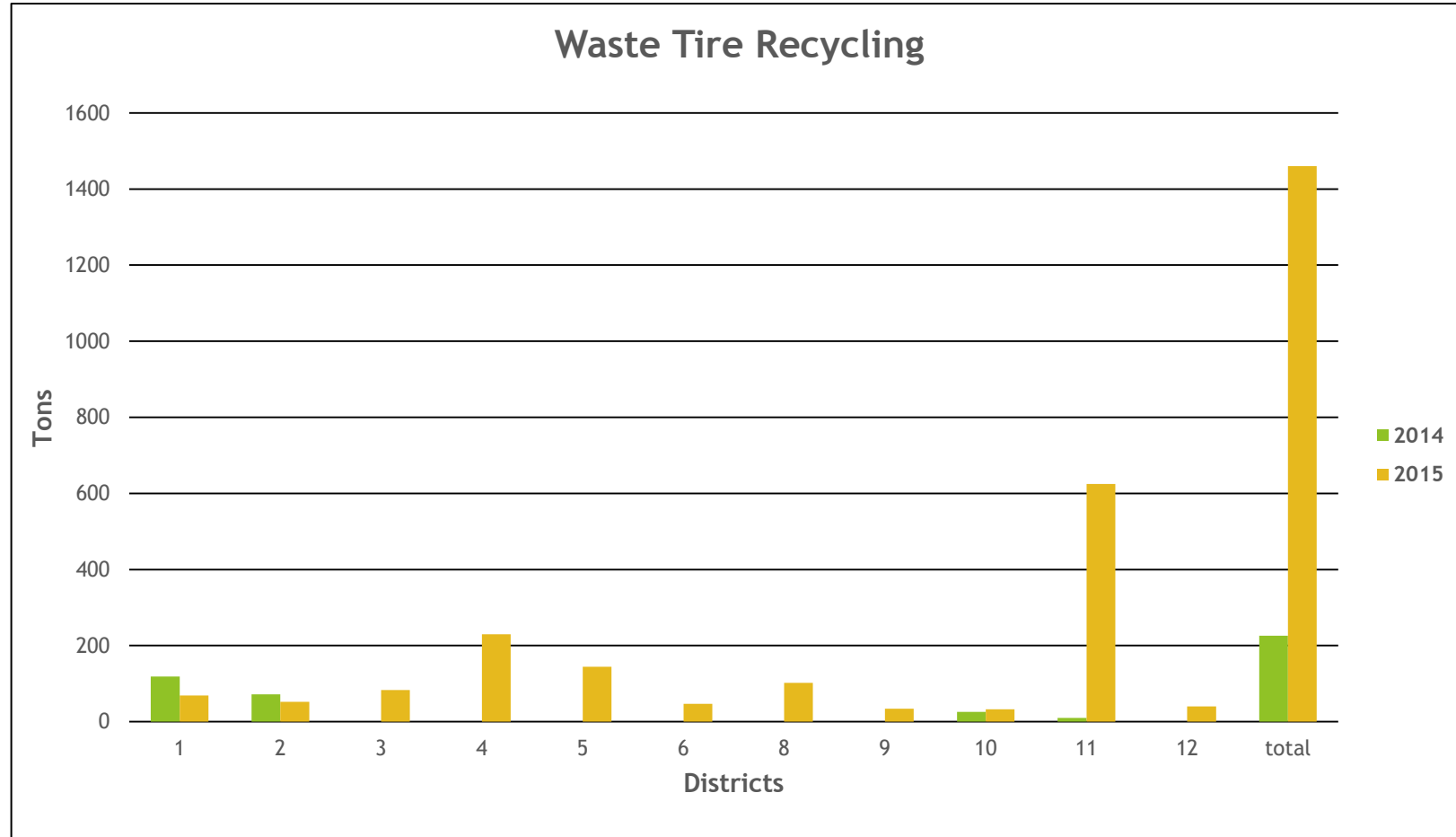
❖ HIPR

- ❖ Treats top surface to an average depth of 1-1/2 inches
- ❖ Allows surface treatments to be added after the HIPR process
 - ❖ chip seals, micro surfaces, slurry seals, 6.3mm, nova chip or hot mix overlays
- ❖ Lower traffic control costs
- ❖ Improves bonding
- ❖ Cost savings
- ❖ Environmentally friendly

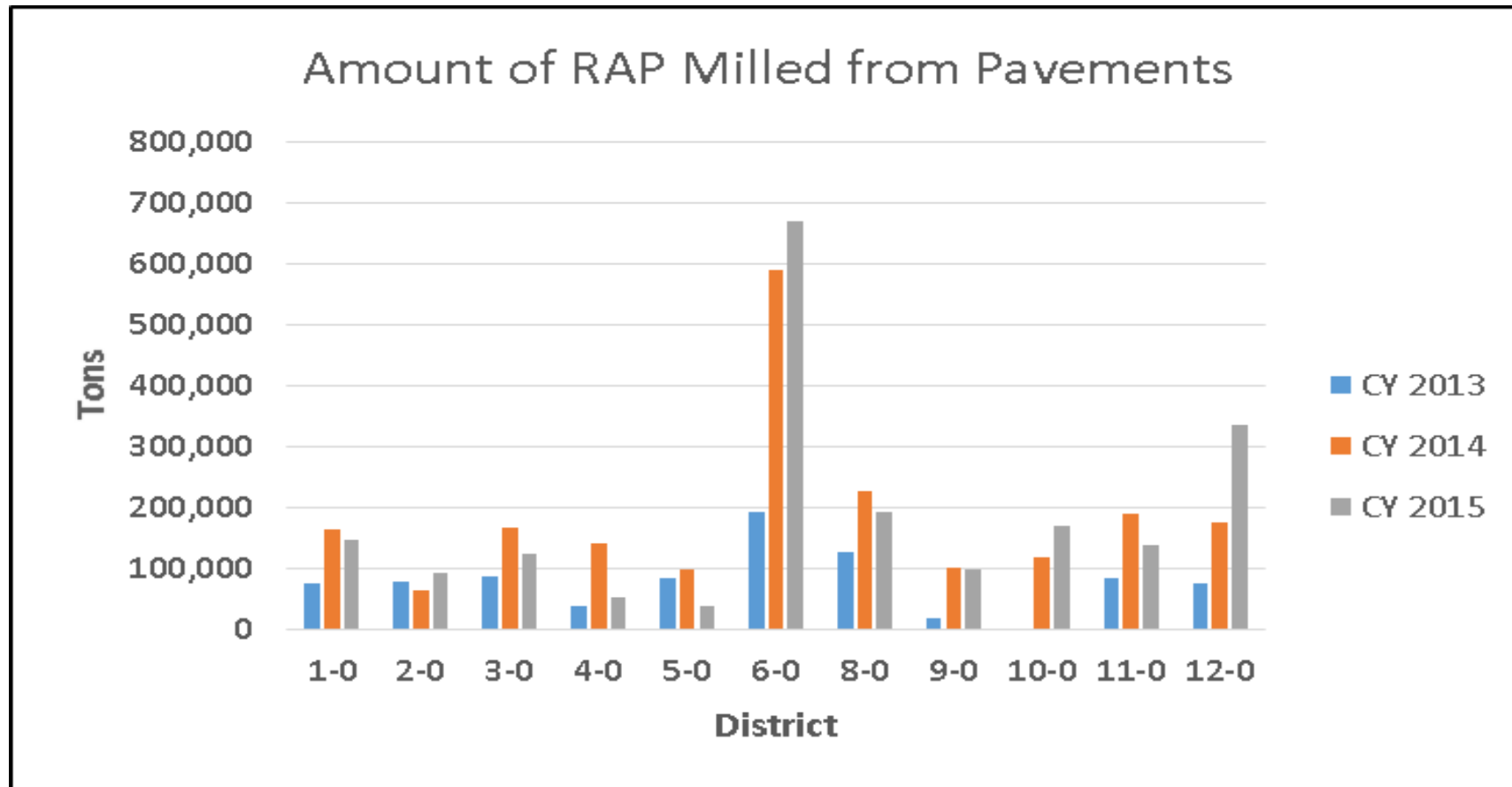
SRP Updates: Non funded initiatives



SRP Updates: Non funded initiatives



SRP Updates: Non Funded initiatives



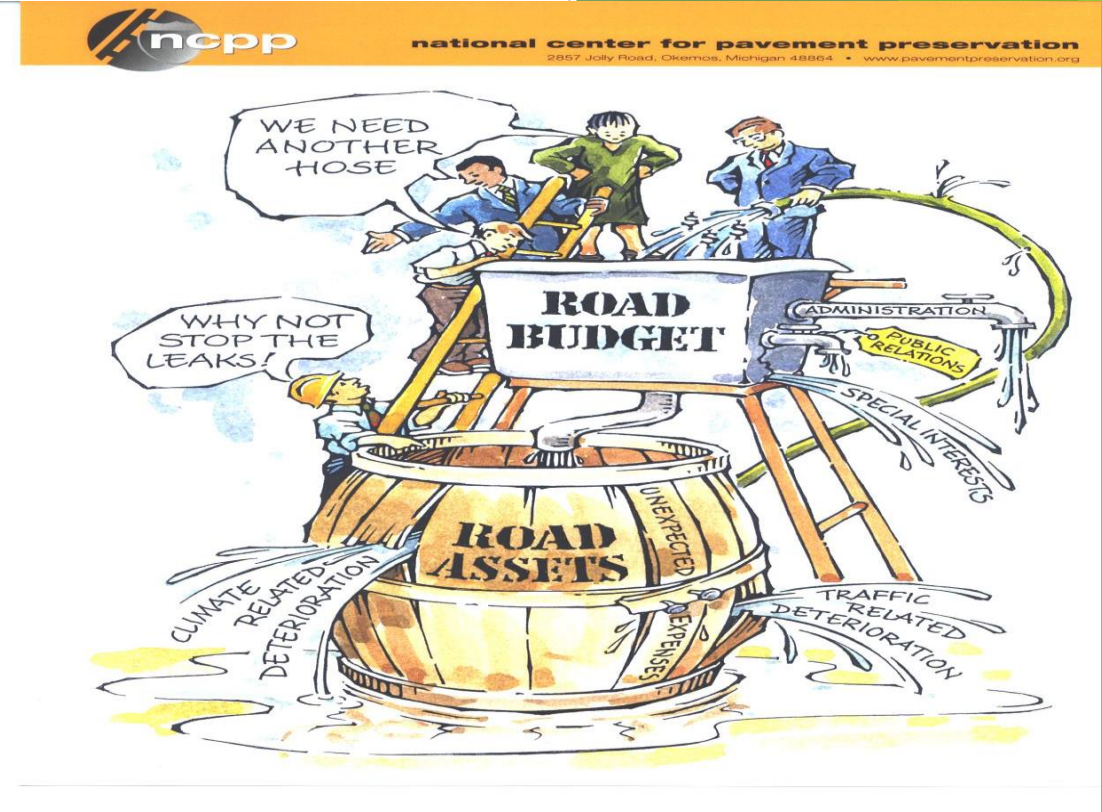
SRP Updates

Partnerships

- ❖ Recycling Markets Center (RMC),
- ❖ Recycled Materials Resource Center (RMRC)
- ❖ New Products & Innovations (NPI)

Resource assistance

- ❖ New vendor application assistance
- ❖ New products/opportunities for recycling (recycling and Stormwater nexus)
- ❖ Technical reviews (PCAS, Glass, Leachate concerns quarry mines, LCA, LCCA, HIPR)
- ❖ Recycling Webinars (Jan 11th, March 17th, May 25th)
- ❖ Workshop/conferences (TRB, PROP, ...)



What in the Horizon?

- ❖ Continued districts outreach for demonstration projects ideas/partnerships
- ❖ Continued partnership with the **RMRC-University of Wisconsin Madison-pooled fund study (RMRC-4G)**
 - ❖ Nationwide interactive map of recycled materials source and vendors <http://rmwm.caps.ua.edu/>
 - ❖ Currently working on; Phase 2 of 3G projects, new research topics
- ❖ Continued partnership with **RMC**
 - ❖ Specifications and technical materials review
 - ❖ Industry Outreach/partnership(workshop/Mini conference)
- ❖ **Specifications: Reviews and Updates**
 - ❖ Assist NPI team in evaluating new product requests
- ❖ **Waste Tracker: Recycling Management Directive**
 - ❖ Quarterly submittal to DGS
 - ❖ Annual waste tire recycling
 - ❖ Tracking tool → Metrics/Evaluation
 - ❖ Updated SRP Website:
<http://www.penndot.gov/ProjectAndPrograms/RoadDesignEnvironment/Environment/PollutionPrevention/>

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