

CONSTRUCTION & DEMOLITION MATERIALS UPDATE

NICOLE L. VILLAMIZAR, CHIEF

MATERIALS MANAGEMENT BRANCH

U.S. EPA OFFICE OF RESOURCE CONSERVATION & RECOVERY

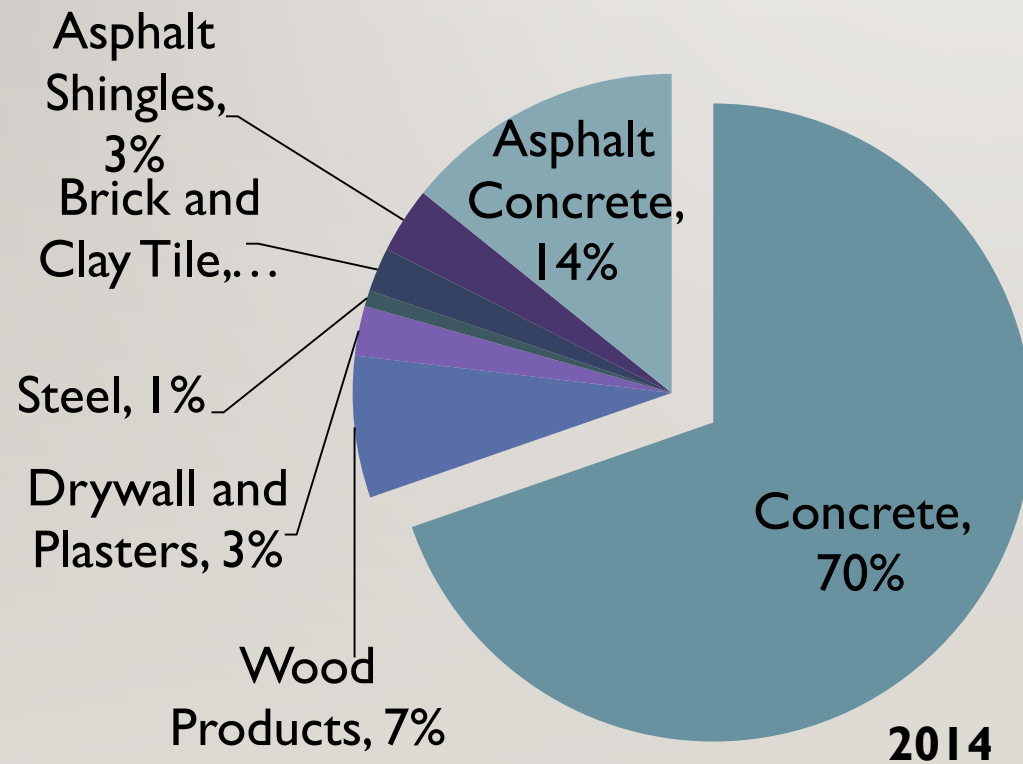
ASTSWMO ANNUAL MEETING

10/26/17

2 WHAT ARE C&D MATERIALS?

- Materials generated when new buildings and civil-engineering structures are built and existing ones renovated or demolished.
- Include:
 - Asphalt, Brick and Concrete;
 - Wood;
 - Gypsum Wallboard;
 - Metals;
 - Glass;
 - Plastics;
 - Salvaged building components; and,
 - Trees, stumps, earth, and rock from clearing sites (landclearing debris).

3 C&D MATERIALS GENERATION ESTIMATES



- C&D materials generation estimates:
 - 516 million tons (2012)
 - 526 million tons (2013)
 - 534 million tons (2014)
- MFA approach based on consumption data, job-site data, and material lifespan assumptions.
- Includes information on different sources and sectors contribution to total.

4 UNDER DEVELOPMENT: C&D MATERIALS MANAGEMENT PATHWAYS

- An ongoing effort to develop estimates for the final disposition (pathway) of C&D materials by material and mass.
 - Pathways: landfill, remanufacture, use in fuel, mulch, aggregate, etc.
- Total C&D generated is grouped into 3 material streams to allow measured data to be used where available to estimate the pathways.

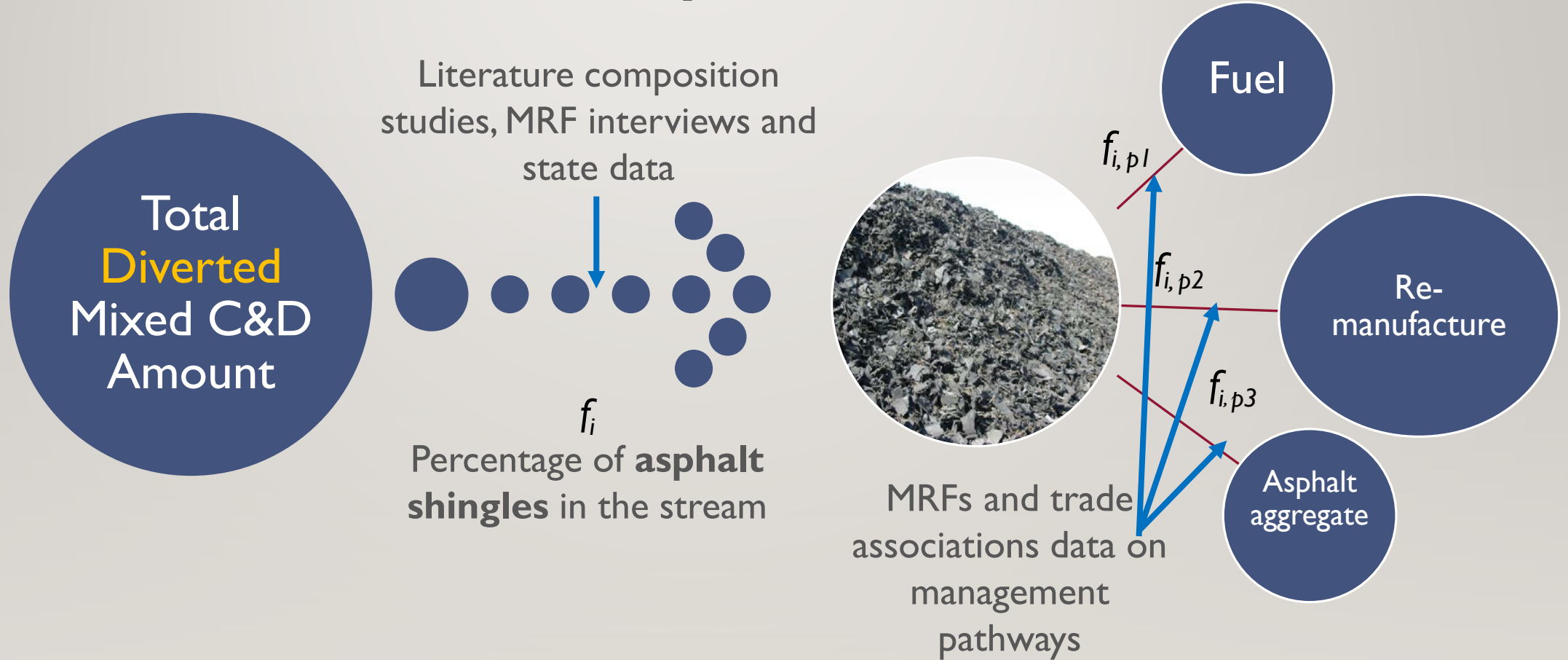
Mixed C&D
Waste
Stream

Source-
Separated
Bulk
Aggregate

Source-
Separated
RAP

5

Mixed C&D: Asphalt Shingles Pathways Example



THE STATE OF THE PRACTICE OF CONSTRUCTION & DEMOLITION MATERIAL RECOVERY REPORT



7 STATE OF THE PRACTICE REPORT OVERVIEW

- Product of EPA's Office of Research & Development
- Report addresses the following questions:
 - **How are C&D materials managed?**
 - Amounts generated/recycled; recycling process; and end markets.
 - **What are example key factors that influence recovery?**
 - Economics, state and local policies, green building programs.
 - **What are example key environmental and human health considerations associated with processing materials?**
 - Best practices to reduce worker exposure and cross-contamination of materials.

Report POC: Thabet Tolaymat: Tolaymat.Thabet@epa.gov