Using Processed Glass Aggregate in Road and Infrastructure Projects
The Northeast Resource Recovery Association (NRRA)

- Nonprofit organization in Epsom, NH that provides cooperative marketing and purchasing programs, education, and technical assistance in the areas of **solid waste and recycling**.

- Over 400 members including municipalities, businesses and individuals throughout New Hampshire, Vermont, Massachusetts, Connecticut and Southern Maine.
Glass Recycling Challenges in the Northeast

- Transporting and disposing of glass is expensive.
- Markets for recycled glass are limited.
- Recycling glass back into bottles and jars has become increasingly cumbersome.
- NRRA offers two programs for managing glass.
Glass Recycling into Fiberglass Insulation

- Glass bottles and jars only
- Canadian vendor cleans and crushes
- Made into fiberglass insulation back in US
- 40 communities participating in NH, VT & MA
Processed Glass Aggregate (PGA)

- Recycled, crushed glass that can be used as subbase in road and infrastructure projects in place of sand or gravel.

- Can include glass-like material (ceramics, porcelain etc. depending on the state)

- 65 participating communities in NH, VT & MA
Creating PGA
Collecting Glass for PGA
Processed Glass Aggregate Host Sites

(#) communities served

Littleton, NH (7)
New London, NH (25)
Rochester, NH (25)
Springfield, VT (3)
Dennis, MA (5)
Uses for PGA (varies by state)

- Construction projects, including under roads, sidewalks, foundations, pipe bedding, landfill cover
- Can be mixed with gravel
- Can use up to 100% in some private and municipal applications
- Must be covered and not left on surface
PGA Specifications

- Varies by state and state agency
- Certain materials (pyrex, ceramics) allowed up to a certain percentage
- Different contamination requirements
- Different gradation requirements (crushed to 1” or less or 3/8” or less)
- Various subgrade construction applications
Benefits of PGA

Environmental Benefits – Alternative to landfilling, glass is inert

Physical Benefits - Not frost susceptible, compactable, can store uncovered outdoors and won’t freeze

Financial Benefits – saving in transportation and disposal costs
Examples of PGA Use
New London, NH – Subbase when laying Bog Road
New London, NH – Public Works Department Garage Floor Base

Laying PGA

Compacting PGA
Parking Lot Base – New London
Lee, NH – Foundation under Bulky Waste Building
Lee, NH – Foundation Under Open Top Dumpsters
Parsons Marsh Trail, Lenox MA

Subbase for kiosk, bench and fully accessible picnic table
Questions?