#### FHWA Policies on Recycling Construction Materials

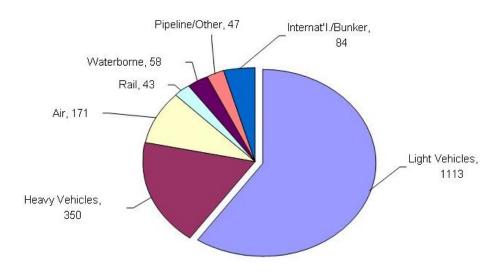


Western Region In-Place Recycling Conference Ontario, CA Sept. 11, 2012 Chris Newman, Deputy Director FHWA California Division, CalSouth Office, Los Angeles

## Consider Transportation CO2 emissions

- The transportation sector is the largest end-use producer of carbon dioxide emissions in the United States.
- CO2 emissions from the transportation sector increased by 27 percent between 1990 and 2007, and will continue to increase, though at a declining rate.
- The current FHWA Strategic Plan includes a goal to find ways to reduce transportation carbon emissions.

#### U. S. Transportation Carbon Emissions by Mode, 2003 (Million metric tons CO2)



# What can we do to improve environmental stewardship, reduce energy consumption and emissions?

- Consider these recycling strategies in your pavement preservation program
  - Reclaimed Asphalt Pavement/ Recycled Asphalt Shingles (RAP/RAS)
  - Recycled Concrete Aggregate (RAC)
  - In-Place Recycling Strategies
    - Cold In-Place Recycling
    - Hot In-Place Recycling

## When appropriately used recycled materials can effectively and safely...

- Reduce cost
- Save time
- Offer equal (possibly improved) performance qualities
- Provide long-term environmental benefits

### FHWA Policy \* is ...

- Recycling and reuse can offer engineering, economic and environmental benefits.
- Recycled materials should get first consideration in materials selection.
- Determination of the use of recycled materials should include an initial review of engineering and environmental suitability.
- 4. An assessment of economic benefits should follow in the selection process.
- Restrictions that prohibit the use of recycled materials without technical basis should be removed from specifications.

## \*Underlying Principles

- Any material used in highway or bridge construction, be it virgin or recycled, shall not adversely affect the performance, safety or the environment of the highway system.
- We support research, field trials and demonstration projects to foster innovation.

### Why bother to recycle?

- Reduce project costs;
- Conserve materials;
- In some areas the traditional sources of aggregate are tapped out or nearly so;
- Reduced capacity in landfills means higher solid waste disposal costs.





#### Conclusions

- As good stewards of the environment, businesses and government agencies can take significant steps to support environmentally-friendly technologies and policies.
- The FHWA will work with transportation agencies and industry to support construction and preservation techniques that make use of recycling
  - Saving time and money
  - Performance is possible!
- Network through your local Pavement Recycling and Reclaiming Center @ Cal Poly and the California Pavement Preservation Center @ CSU Chico.





## Thank you



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