# Sustainability for Highways

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#### Short BIO on Jason

- Joined FHWA in 1985
- Pavement Recycling assignment 1995
- FHWA Recycling Team Leader 1999
- FHWA Recycling Policy developed- 2002
- Expanded FHWA Recycling role industrial by-products – 2002 – current
- Green Highway Partnership Tri Chair Recycle/Reuse Team
- Environmental Stewardship Team Co-chair
- US EPA Gold and Bronze medal award.

### **FHWA Recycling Policy**

- Recycled materials should get <u>first</u> consideration in overall materials selection.
- Recycling can offer engineering, economic and environmental benefits.
- Engineering, environmental, and economical properties are important.
- Life Cycle Cost benefits assessment is warranted for economic consideration.
- Restrictions prohibiting recycled material that are without technical basis should be removed.

# What is a sustainable road?

- Building Tomorrow's Roads with Today's Roads
- Effective Reuse of existing quality materials
- What ever used to build today needs to be recyclable tomorrow.
- Restore the ride and save the road
  Longer Life Design (30,40,50+)

### Example of Sustainable Road

- Build/Construct a strong aggregate base
   Built to last!!
- Add a HMA asphalt base designed to spread the load out on the aggregate base, thick enough to carry the loads, resist cracking
- Add a high quality wear surface safety is one key.
  - OGFC aids in friction, visibility, sound

### **Sustainability Surface**

 Maintain surface properties by proper preservation technology –

- HIR is one of the tools for surface preservation
- When surface is ready for rehab

Cold In-place Recycling – restore structural capacity, and add on a new wear surface

## Happy Earth Day

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