

## **Emission Inventory Improvement Plan**

- 1) Add shortline locomotive activity in GA, include activity in neighboring states if available. Shortlines are not currently included in the GA emissions inventory, and are likely not included in inventories of most other states.
- 2) Add AL line-haul locomotive activity (not included in the current inventory).
- 3) Update line-haul and yard locomotive emissions in GA.
  - a) Line-haul locomotives
    - i) Improve emission factors if fleet averages can be obtained.
    - ii) Update fuel use estimates.
    - iii) Improve temporal estimates (daily, weekly, monthly/seasonal, annual).
  - b) Yard locomotives (switchers)
    - i) Locate rail yard emissions appropriately. (Rail yard locomotive emissions are currently allocated to tracks rather than within yard extents.)
    - ii) Update engine counts per yard and improve emission factor estimates if fleet averages can be obtained (through model numbers and use patterns).
    - iii) Refine/update fuel use estimates.
    - iv) Improve temporal estimates (daily, weekly, monthly/seasonal, annual). SMOKE applies a diurnal pattern to emissions while yards appear to be operating 24 hours per day, seven days per week.
- 4) If possible, obtain more accurate estimates of emissions from rail-yard related activities such as the use of cranes, truck activity (at Intermodal facilities), rail fabrication, etc.