The need for fine spatial scale information: a user perspective
Assessing Mill locations

• Depending on mill size and type, a radius around a location may not provide statistical confidence required
  • Large mills might operate in a 100 mile radius
  • Other mills might want to operate in a 40-50 mile radius

• Sawmills need only a portion of the resource
  • There may be adequate confidence in the total volume estimate
  • However, for the portion of the inventory the facility is interested in, the statistical confidence may not be adequate
Assessing Sustainability

• Some discussion in the bioenergy sectors using FIA to monitor sustainability within the wood basket
  • Again, depending on the size of the wood basket the confidence in the estimate might inadequate
Strategic Planning

– **TIMO/REITS**
  • What are will future markets look like?
  • Where do they own and where do they divest?
  • What management regimes should be applied?
  • Given current available resources and age class structure around current ownership is there market niche to fill?

– **Wood Products**
  • What will future markets look like?
  • Where and how to invest new capital?
  • What are the transportation strategies wood yards, sort yards, satellite chip facilities?
  • What is the availability of volume?
    – How much is on small tracts?
    – How much is restricted?
Role of Remote Sensing

• Several consultants use Landsat data to provide insight into the resource
  – Use annual change detection over time to estimate current age class structure
  – FIA data is used to attribute this age class structure with species, volume and other attributes of interest.

• The big unknown is error structure around these estimates
  – How much change constitutes a clearcut?
  – What is the error associated with assigning an age to an area of change?
Role of Remote Sensing

• Other possibilities
  – Seasonal change analysis of Landsat images to assign broad cover type
  – Use of NAIP imagery to develop a height canopy
  – Use of NAIP imagery to provide some density estimates using automated crown cover classification
  – Combining all the data to map representative FIA plots to the resulting polygons.

• Use of small area estimation techniques to provide estimates with confidence interval.