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.