

Assembling FRASS Data

As used here, ‘Organization’ can be interpreted as your company, agency, county, Indian tribe, or any other ‘entity’ that becomes a client for the FRASS program. These data are used to describe the properties used in FRASS.

Data	Format	Source(s)	Comments
Cadastral	GIS	Organization County Assessor Geospatial Resource Analysis	Cadastral GIS data can include property boundaries for organization owned lands, or all lands in the area of the analysis ‘footprint’. The primary database field associated with the GIS data includes the parcel number.
	Database	Organization County Assessor Geospatial Resource Analysis	The database information for the cadastral data holds the specific information about the parcels, beginning with the parcel number: all else is linked to it, including owner name(s), physical site address, owner address, legal land description, county location, county tax category, county appraised value(s), and land area (acres or hectares).
Public Land Survey System	GIS	General Lands Office (GLO)	This GIS layer is based on Geographic Coordinate Data Base (GCDB) coordinate data. These are used to reference parcels in a large mosaic of properties (within states and regions).
Digital Elevation	GIS	U.S. Geological Survey (USGS)	These can be the 10m DEM data “mostly” available for the continental USA, but may also include LiDAR data collected by other sources (including the client’s organization).
Stream Networks, channels, & Riparian Zones	GIS	Created from DEM data & integrated with Regulatory Requirements by the Organization or Geospatial Resource Analysis	Stream networks can be generated from digital elevation data to generate stream centerlines, active channel zones, aquatic lands, and riparian buffers, each documents the boundary between operable and non-operable timber production lands.
Soil Survey	GIS	USDA Natural Resource Conservation Service (NRCS)	Mapped by the NRCS within mapping areas that include many commercial forestlands, but sometimes not certain federal lands, such as National Park Service properties. Other sources of data are available for integration and will be identified for use in FRASS.

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Road Networks	GIS	Organization Geospatial Resource Analysis	Road networks include specific road placement in the GIS layers, detailed road segment attributes, and can include mapped placement of “proposed roads” that would be needed to accommodate timber harvest activities before harvesting begins. Road centerline characteristics are combined with road widths to identify “non-operable” lands to best define the operable forestland areas available for management. Road slope distances should be used by combining centerline location with DEM models to generate actual haul distances.
	Database	Organization Geospatial Resource Analysis	Timber hauling “least cost” solutions from every parcel to either a destination (specific point, like a mill or sort yard) or to a specific road classification (paved haul road). These are used for cost allocations of timber harvest/hauling. Database characteristics also include access fees or road maintenance fees for each road segment in the database. Road networks eclipse the footprint of the properties of the client organization to include all road networks from the properties to the destination points of interest.
Forest Mensuration Data	GIS & G&Y	Organization	Timber stand boundaries must be mapped in GIS and be reflective of parcel ownership lines (eliminate the orphan slivers of timber stands of unreasonably small acreage created by parcel boundaries slicing near the edges of the timber stand boundaries). All timber stands must be given a timber stand ID number. Eliminate non-operable lands such as roads, rivers, and quarries.
	Database	Organization	<p>Forest mensuration data includes the timber stand ID number and is associated with the current timber stand rotation, explained with 5 year increments of growth for 200 years. Future timber stand rotations are explained through 5 year increment growth records for 200 years and these data are used for the second rotation and all future rotations into perpetuity.</p> <p>Current timber stand vegetation labels are associated with each timber stand (eg., WH33, DF12, etc.). These are used to link representative photographs of the timber stands. These are updated periodically as the timber stands mature.</p> <p>To the extent practicable and useful, the timber stand databases should include log merchandising details in each time period for each species (ex., Export 12”+, Export 8-12”, 2 Sawmill, 3 Sawmill, 4 Sawmill, pulp, etc.).</p>
Timber Stand Photographs	Digital Photographs	Organization	Representative photographs of timber stands held by the client to be matched with timber stand records of these characteristics.

Data	Format	Source(s)	Comments
Delivered Log Market Data	Database	Organization Forest Econometrics	Log market area records for delivered log market price data specific to the area of the properties. These can be acquired by Forest Econometrics or supplied by the client's organization. The market data must be matched with log merchandising and delivery date(s). Generally speaking, record lists spanning 20 or more years are most useful for identifying market price trends for each log sort in a working forest.
Threatened, Endangered, and Sensitive Species Habitat	GIS	Organization Geospatial Resource Analysis	Sources such as the US Fish and Wildlife Service can provide these mapped habitat areas, other sources include the GAP analysis efforts by many states, or from negotiated agreements between the client and the USFWS.
Parcel Maps	GIS/Maps	Organization Geospatial Resource Analysis	Maps include references for the land management and appraisal uses and include aerial photography, parcel boundaries, topography, road networks, timber stand boundaries, TES habitat, and soil survey interpreted data.

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