

1. A description of the commodity that the agency is seeking to procure;

This Mississippi Forest Inventory is designed to assess the forest resources in Mississippi. It provides critical data about the state's forest resources, with an unparalleled degree of accuracy, which is used by wood using industries as well as industries looking to create new facilities in Mississippi. The inventory is completed on 20% of the state's forestlands per year, completing a total re-inventory of the state on a 5 year cycle. This re-inventory began in 2013 and stands to be completed in early 2017. This data is used not only by forest industry but also for economic development authorities.

2. An explanation of why the commodity is the only one that can meet the needs of the agency;

This inventory was unique to Mississippi and does not exist in any other state. This forest inventory provides an unparalleled degree of accuracy, giving industry the capacity to examine forest resources on a county or regional basis. This inventory is used by existing wood using facilities as well as interested industries looking to create new facilities in Mississippi. The Mississippi Legislature added the Forest Inventory to the MFC as a program area; it serves as one of our key performance metrics.

3. An explanation of why the source is the only person or entity that can provide the required commodity;

The design and development of this inventory system and all the supporting software was completed through the assistance provided by Mississippi State University and their Forestry Department. Professional services provided by Mississippi State include the following services:

- a) Provide processing of GIS data (forest type classification derived from most recent Landsat imagery) to produce inventory sampling frame.
- b) Provide inventory plot latitude/longitude coordinates from an optimal stratified (forest type: pine, mixed, and hardwood) sample allocation.
- c) Provide enhancements, maintenance, and technical support for inventory software (Dynamic Inventory Reporter, Data Error Checker and Creator, Server Common Gateway Interface, Server Side Dynamic Reporter .dll, TCruise, TCruise Navigator, custom import/export .dll's).
- d) Provide inventory audit software.
- e) Assist with inventory data transfer from MFC forester to a secure ftp site.
- f) Edit, prepare, and process inventory data.
- g) Provide technical assistance as questions arise.
- h) Provide server maintenance.
- i) Provide technical assistance for special report requests from MIFI inventory clients.

4. An explanation of why the amount to be expended for the commodity is reasonable;

Without the services of Mississippi State University the MFC would be forced to re-create a similar forest inventory system. The process to re-create a new system would be extremely expensive and take several years to complete. This time delay would cause existing forest resource analysis to become outdated and unreliable to its end users.

5. The efforts that the agency went through to obtain the best possible price for the commodity;

Mississippi State University is the only vendor that offers all the required components especially the services of a Ph.D. Biometrician, who specializes in forest inventory design.