The soil survey is defined by Dr. C. F. Marbut, as "The finding out what, and where, the soils are". Soil surveying is the procedure of obtaining this information and it is expressed in the form of maps and reports showing the distribution of the individual soils or groups and describing them according to their natural or field characteristics.

The pedologist or soil surveyor divides the earth's soil mass into two major strata; the solum or upper stratum which has weathered into uniform soil layers, and a lower stratum or soil material which has been only slightly weathered or unaltered and may be composed of uniform layers or a heterogeneous mixture. The material from which these are derived is known as geologic material. Soil surveying is based upon the soil profile or a vertical soil section showing the arrangement and characteristics of the solum and the upper few feet of the soil material. The principal soil characteristics are color, texture, structure, consistency, cementation, compaction, chemical composition and organic content. These characteristics have many variations. Road-cuts often penetrate considerable depths below the solum and in these discussions the soil profile is considered as including all soil or geologic materials below the road surface, the characteristics of which, are reflected in the condition or behavior of the road surface.

A soil type is the unit of soil grouping. The soil has a profile composed of a number of layers differing from each other but each layer uniform throughout the occurrence of the type. Thus it is seen that a soil type is similar wherever found and is as definite a unit as any other classified object. The differentiation is based on the characteristics of the object classified and has no relation to the soil's adaptability for any one particular use. A soil survey is not based upon agronomics but the agricultural discussion accompanying soil survey reports may consist of a correlation of soil types on the basis of their agricultural possibilities. A correlation of soil types could just as well be made according to their subgrade value.