Much of Indiana is covered by a variable thickness of fine-grained silty material called loess. Throughout the Ice Age, melting glaciers left behind a mixture of sand and gravel deposits called outwash. Prevailing westerly winds swept across the outwash plains, picking up the finer materials, and blowing them eastward where they settled as loess deposits. Former glacial sluiceways, now partly occupied by such rivers as the Ohio, Wabash, and White, contained the outwash and served as major sources of this material.

Although most of the state is covered by only a thin (less than 1 foot thick) mantle of this windblown silt, loess deposits at some localities in southwestern Indiana are more than 100 feet thick. Southwestern Indiana has thicker loess because it is bound by two of the larger glacial sluiceways, the valleys of the Wabash and Ohio Rivers. An interesting characteristic of loess is its capability of standing in steep walls when it is subjected to later erosion.