

Location of the Transfer Oriented Industrial Firm

Transfer Oriented Industrial Firm - a firm for which transport cost is the dominant factor in the location decision and the firm selects the location that minimizes transportation cost.

Assumptions of the Model of Transfer Oriented Firm Location

1. Single output - the firm produces a fixed amount of a single good.
2. Single transferable input - Only one input is shipped from an input source to the factory. All other inputs are available at all locations at the same price.
3. Fixed factor proportions - firm produces its fixed output with a given, fixed amount of each input
4. Fixed prices of output and input

W_i - weight of the transferable input in tons

W_o - Weight of the output in tons

t_i - Transport price per ton-mile of input

t_o - Transport price per ton-mile of output

Monetary Weight of Input = $W_i \cdot t_i$

Monetary Weight of Output = $W_o \cdot t_o$

Procurement Cost (PC) = Monetary weight of the input multiplied by the distance from the transferable input source to the factory or $W_i \cdot t_i \cdot d$.

Distribution Cost (DC) = Monetary weight of the output multiplied by the distance from the factory to the market or $W_o \cdot t_o \cdot d$.

Firms locate at transferable input site if $PC > DC$

Firms locate at the market if $DC > PC$