**Site selection**

Every 12 months, site selection is invoked for choosing a single investment, , in a specific number of neighborhoods that is established by budgetary constraints. Formally, this involves using 0-1 (or binary) programming model (Dykstra 1984) in which the objective function maximizes the total suitability score for a given budget. In this way, the model simulates a preference for investing in the neighborhoods where infrastructure is most needed; formally:

subject to

where is the number of neighborhoods where actions take place; , is the 0-1 decision variable (equals 1, if census block is selected for action ,or 0 otherwise); and is the number of possible actions according with scenario .

Operationally, the census blocks are sorted in descending order by their suitability scores. Each action has a budget assigned . Census blocks are selected sequentially until the budget is over. Several actions can be applied to a given census block. In this way, the model simulates an investment preference in the census blocks where it is most needed.