Apartment or Mansions:
The Effect of Constraints on Housing Distribution

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Abstract

A housing developer has many different options for what to build. Apartments, or mansions? Condos, or family homes? The developer also has multiple constraints on what to build, such as, budget, available land, demand for the different types of housing, etc. We use linear programming to model a typical housing developer's situation and optimize the profit for the developer. In particular, we study how changing the constraints will change the developer's optimal choices for housing. This will allow us to suggest under what conditions affordable housing is most likely to be built.