

I have given you a copy of a paper ‘Imperfect Price Information and Valuation by Comparable Sales’ by D.G. Wiltshaw in the Journal of Property Research. The idea of this assignment is to make you more critical of Linear Programming models and to identify what issues need to be questioned. Please comment on the validity of the models presented on page 87 and then on page 95. Don’t worry about typos such as the first inequality in (27) which should have right hand side $45000+(49000-45000)\times.025$ I am seeking comments on all aspects of the model. Does the basic idea that you can predict prices from comparable sales make sense? Is linearity sensible? Is it appropriate to minimize or maximize? etc. I do not find the model very convincing. Be a critic. Make alternative suggestions. You probably need some general knowledge about real estate prices in Vancouver or elsewhere.

This paper came to me while I was on sabbatical in Australia. A student in Commerce came to me with some data and a run of the LP on page 87 that was infeasible. Roughly speaking, if there are more equations than unknowns then you would expect infeasibility, even before you impose positivity. This example might help you in thinking about the problem.