

Property Impact Assessment of Extension to Gautrain Network



The Gauteng Provincial Government identified the need to extend the rapid rail network in the Gauteng Province. The feasibility study identifies that a project of this magnitude will require an investigation of alternative funding sources.

PDG was commissioned by Pegasys to assess the impact of the proposed extension of the Gauteng rapid rail network on the surrounding property market. Claus's role was that of a Property Economist which included significant quantitative data analysis, drawing on his background in urban economics and well-developed analytical skills.

Claus's individual project contributions included (1) A land-based financing review where he modelled the impact of existing Gautrain stations against unserved nodes for different property market segments. Based on this analysis, Claus was able to project the impact of the proposed Gautrain stations on property rates accruing to the City of Johannesburg (2) Building and populating a Property Development model to assess alternative TOD development scenarios on the proposed Randburg Station site (a 2.5 ha site owned by the Municipality).

PDG applied a statistical technique called Difference-in-Difference which mimics an experimental research design using observational study data, by studying the differential effect of a treatment on a treatment group vs. a control group. The model ingested fifteen years of administrative and third-party property market data to evaluate the impact of the existing rail network on different property market segments both at nodal and regional level, and contrasted these with a control group of unserved business nodes within the urban region. This workstream concluded with Claus conducting a detailed property feasibility study on



Rapid Rail Integrated Network Extension (GRRINE)

alternative TOD development scenarios on the proposed Randburg station site.

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GTAAP PROJECT:

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