How to maximize the benefit of State investment in land

Lessons from the application of the Urban LandMark Land Release Assessment Tool in the Western Cape and Gauteng

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Nick Graham

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Urban LandMark

Background to the LRA model

- Developed to assess the cost/benefit of integrated housing projects – applied to four case studies in the Western Cape and Gauteng
- Excel-based spreadsheet model with 30 year time horizon
- Divides project into housing typologies
- Calculates NPV of total costs/benefits over specified time period (20 years) for **State**, **Developer** and **Households**
- Discounts all costs and benefits to project start date
- Aims to account for total State investment (explicit and implicit subsidies) and impact of project over the long term.

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Background to the LRA model

Housing Development Financial Model

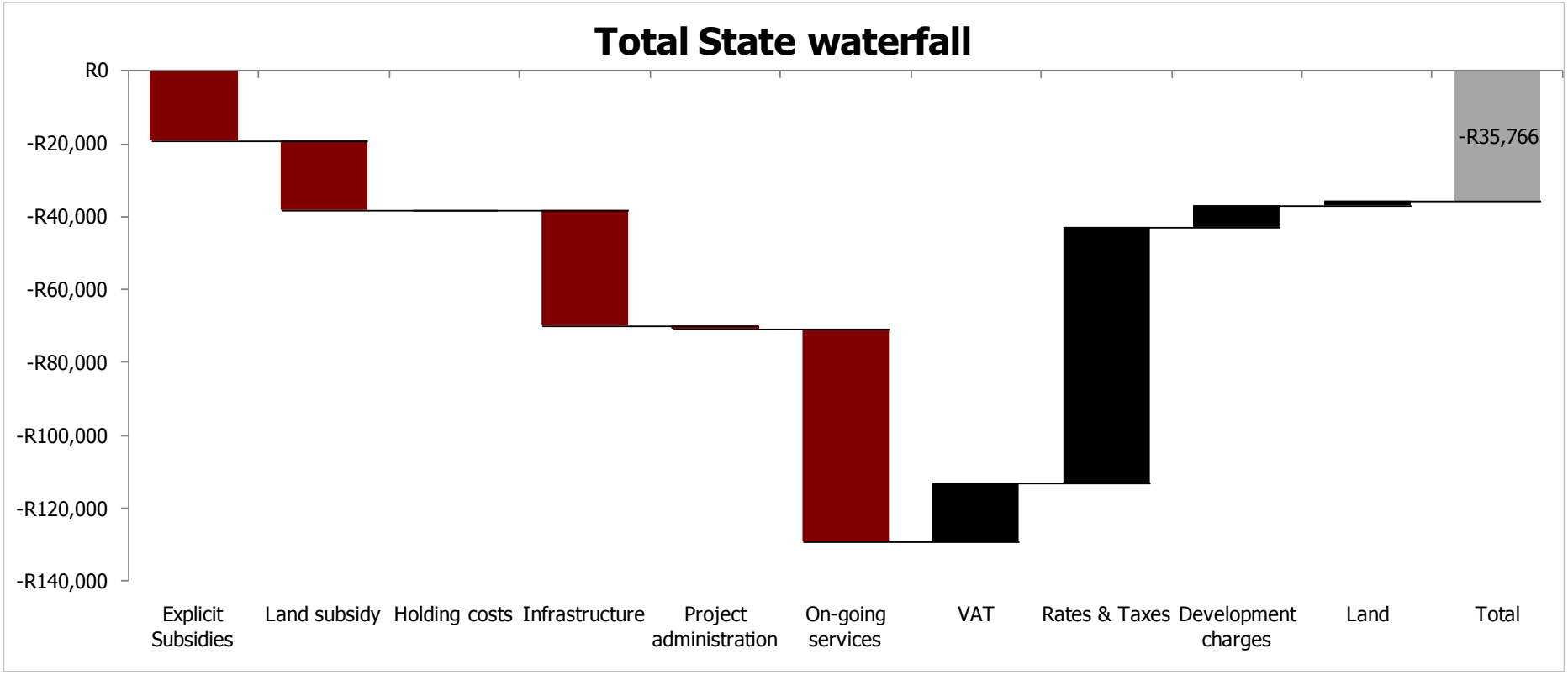
Developed by Eighty20

Inputs	
General	
Project Inputs	Inputs-Project
Global Index Inputs	Inputs-Global Indices
State	
State Cost Inputs	Inputs-State Costs
State Holding Cost Inputs	Inputs-State Holding Costs
FLISP Subsidy Table	Inputs-FLISP Subsidy
Household	
Household Inputs	Inputs-Household
Rate Level Inputs	Inputs-Rates
Developer	
Developer Bulk Infrastructure Costs	Inputs-Bulk Infrastructure
Developer Capital Inputs	Inputs-Dev Capital
Developer Holding Cost Inputs	Inputs-Dev Holding Costs
Developer Operating Cost Inputs	Inputs-Dev Op Costs
Developer Revenue Inputs	Inputs-Dev Revenue

Graphs	
State	
Waterfall Chart	State-Waterfall
Household	
Waterfall Chart	HH-Waterfall
Developer	
Waterfall Chart	Dev-Waterfall

Output	
State Cash Flows	
Cost	State-Costs
Holding Costs	State-Holding Costs
Revenue	State-Revenue
Summary	State-Real Cash Flow
Performance Summary	State-Performance
Cost Flow Chart	State-CF Chart
Household Cash Flows	
Costs	HH-Costs
Revenue	HH-Revenue
Value of Household	HH-Value
Summary	HH-Real Cash Flow
Performance Summary	HH-Performance
Developer Cash Flows	
Capital Expenditure	Dev-Capex
Holding Costs	Dev-Holding Costs
Loans Issued	Dev-Loans Issued
Operating Costs	Dev-Op Costs
Revenue	Dev-Revenue
Value of Developer	Dev-Value
VAT	Dev-VAT
Summary	Dev-Real Cash Flow
Performance Summary	Dev-Performance

Example: LRA outputs



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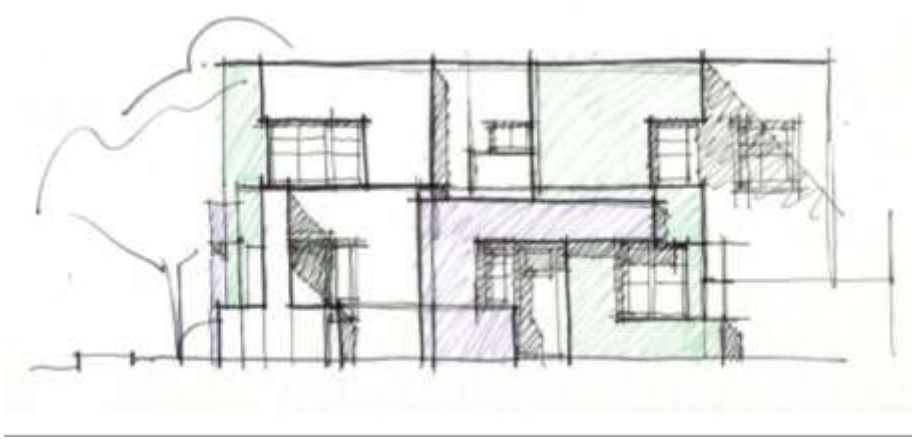
Case studies

Mitchell's Plain

Cosmo City



Blue Downs

Pennyville

Overview of case studies

	Western Cape		*Gauteng*	
	Mitchell's Plain	**Blue Downs**	**Cosmo City**	**Pennyville**
No. of housing opportunities	682	3,406	11,785	2,751
Total area (ha)	14	75	11,05	100
Project period (years)	3	N/A	11	4.5
Housing products				
Subsidy units	341	352	4,992	1,552
FLISP units		703	669	
Gap units	341	796	2,483	
Bonded units		1,555	3,360	
Social rental units				395
Market rental units			281	804

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Land release strategies

- **Mitchell's Plain**: Land purchased from City by the developer. Land for the subsidy units was sold at a discounted rate, while the remainder was sold at market value.
- **Blue Downs**: Land Availability Agreement between Province and developer released land for development, with payment of assessed market value on transfer.
- **Cosmo City**: Land Availability Agreement between City and developer released the land for development, with payment of agreed fixed value per erf on transfer of subsidised units, and a fixed value plus 50% of profits on bonded and commercial sites.
- **Pennyville**: A Land Exchange Agreement between City and developer meant that the land originally owned by the developer was transferred to the city, but with the developer having rights to develop and transfer the property to subsidy beneficiaries. Market rental units were sold to the developer at an assessed market vale.

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Caveats to model results

- Concept of 'the developer'

State	Developer		Household	
	Mitchell's Plain	*Blue Downs*	*Cosmo City*	*Pennyville*
State's cost of capital	REPO	REPO	REPO	REPO
Developer's cost of capital	PRIME -3	PRIME	PRIME	PRIME
Household cost of capital	PRIME -1	PRIME +1	PRIME +1	PRIME +1
Property value escalation	10%	10%	10%	10%
Long term CPI	4.5%	4.5%	4.5%	4.5%
Long term electricity inflation	4.5%	4.5%	4.5%	4.5%
Long term prime rate	12%	12%	12%	12%
Long term Repo rate	9%	8%	8%	8%
Collection assumptions	80%-95%	80%-95%	80%	65%-95%
Imputed rent %	7%	7%	6.5%-7.2%	7%-8.7%

Sales prices, subsidy values and rentals

	Mitchell's Plain	*Blue Downs*	*Cosmo City*	*Pennyville*
Sales price				
FLISP		176,721	185,000	
Gap	368,421	331,450	238,000	
Bonded		452,552	400,000	
Subsidy value				
Subsidy	108,109	101,106	101,232	77,813
FLISP				77,813
Gap				58,455
Bonded				26,476
Rental				
Social Rental (3-bed)				1,500
Market Rental (3-bed)			3,300	2,100

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Subsidy comparison

	Mitchell's Plain	*Blue Downs*	*Cosmo City*	*Pennyville*
Explicit subsidies				
Institutional subsidy	53,227	55,706	63,258	46,039
Internal services	25,492	25,000	28,285	21,553
City subvention grant	8,600	-		
NHBRC enrolment	1,637	1,298		
SCCCA	10,803	10,602		
Geo-tech variance	8,350	8,500	13,336	8,396
Total explicit subsidies	108,109	101,106	104,879	75,988
Other subsidies				-
Land Subsidy	3,740	-	14,610	20,216
Bulk infrastructure	22,720	3,600	59,639	32,679
Land holding costs		2,815		
Total other subsidies	26,460	6,415	74,249	52,895
Total subsidies	134,569	107,521	179,128	128,883

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Comparison of findings: State perspective

	Mitchell's Plain	*Blue Downs*	*Cosmo City*	*Pennyville*
		Return on Investment (ROI)		
Subsidy	-60%	-59%	-88%	-100%
FLISP		7%	-19%	
Gap	108%	95%	2%	
Bonded		99%	26%	
Social rental				-141%
Market rental			-96%	8%
Total NPV	**7,038,344**	**477,045,588**	**-784,238,814**	**-424,187,830**
ROI	**6%**	**68%**	**-32%**	**-75%**

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Comparison of findings: Developer perspective

	Mitchell's Plain	*Blue Downs*	*Cosmo City*	*Pennyville*
		Return on Investment (ROI)		
Subsidy	4%	-18%	-11%	-8%
FLISP		-17%	3%	
Gap	19%	15%	-2%	
Bonded		14%	27%	
Social rental				-5%
Market rental			31%	62%
Total NPV	**20,416,921**	**74,623,042**	**152,691,007**	**150,943,303**
ROI	**14%**	**8%**	**13%**	**29%**

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Comparison of findings: Household perspective

NPV	*Mitchell's Plain*	*Blue Downs*	*Cosmo City*	*Pennyville*
Subsidy	166,222	106,330	147,162	200,431
FLISP		72,623	144,938	
Gap	81,131	66,487	187,800	
Bonded		23,606	322,422	
Social rental				61,879
Market rental			-50,502	-101,188

ROI	*Mitchell's Plain*	*Blue Downs*	*Cosmo City*	*Pennyville*
Subsidy	116%	141%	301%	313%
FLISP		22%	39%	
Gap	13%	11%	52%	
Bonded		3%	46%	
Social rental				39%
Market rental			-6%	-16%

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Conclusions

- Questionable longer term viability for the State in the Gauteng case studies
- Land Availability Agreements and bulk infrastructure funding make a significant difference to the overall project viability – regressive subsidies if applies universally
- Internal cross-subsidisation is essential in integrated housing projects
- Gap housing increases project risk and compromises viability – social rental housing maybe a better alternative
- Subsidy recipients are the big 'winners'
- Developers seem to have got the housing mix right, but is level of subsidy required sustainable?

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