

Modelling OSM in Pamwin



Your challenges
expertly solved
in partnership

Background and context

The allure of factory-built housing...

- 35. *Mr. Gresham Cooke*
- asked the Minister of Housing and Local Government and Minister for Welsh Affairs what study is being undertaken of the progress made in factory-built houses in the United States of America, having regard to the fact that one in six of houses erected there are made of manufactured components.
 - [§ Sir K. Joseph](#)
- My Department keeps in touch with progress in this field in the United States of America, as in other countries. The methods of construction used for most factory-built houses there are similar to those used in this country for caravans and mobile homes. The evidence we have indicates that these methods are more expensive than traditional methods in this country. One of our main objectives is to develop house building systems which are competitive in cost with traditional, while achieving the benefits of industrialisation.
- *Mr. Gresham Cooke*
- Will my right hon. Friend agree that when factory-built houses are constructed on a large scale, as in America, experience shows that they are much cheaper and are erected more quickly than traditional houses? Is it not also the case that the public in America has a wider choice of architect-designed houses than is possible with traditional houses? Might not that experience be valuable in this country?
 - [25](#)
 - [§ Sir K. Joseph](#)
- I agree with all that my hon. Friend has said, but America is rich in land and we are not. Very much of America's housing development is at a far lower density than we could afford, and many of these houses, if packed close together, would develop a high fire risk which we could not tolerate.

Back to the present

–

Bromford had a problem...

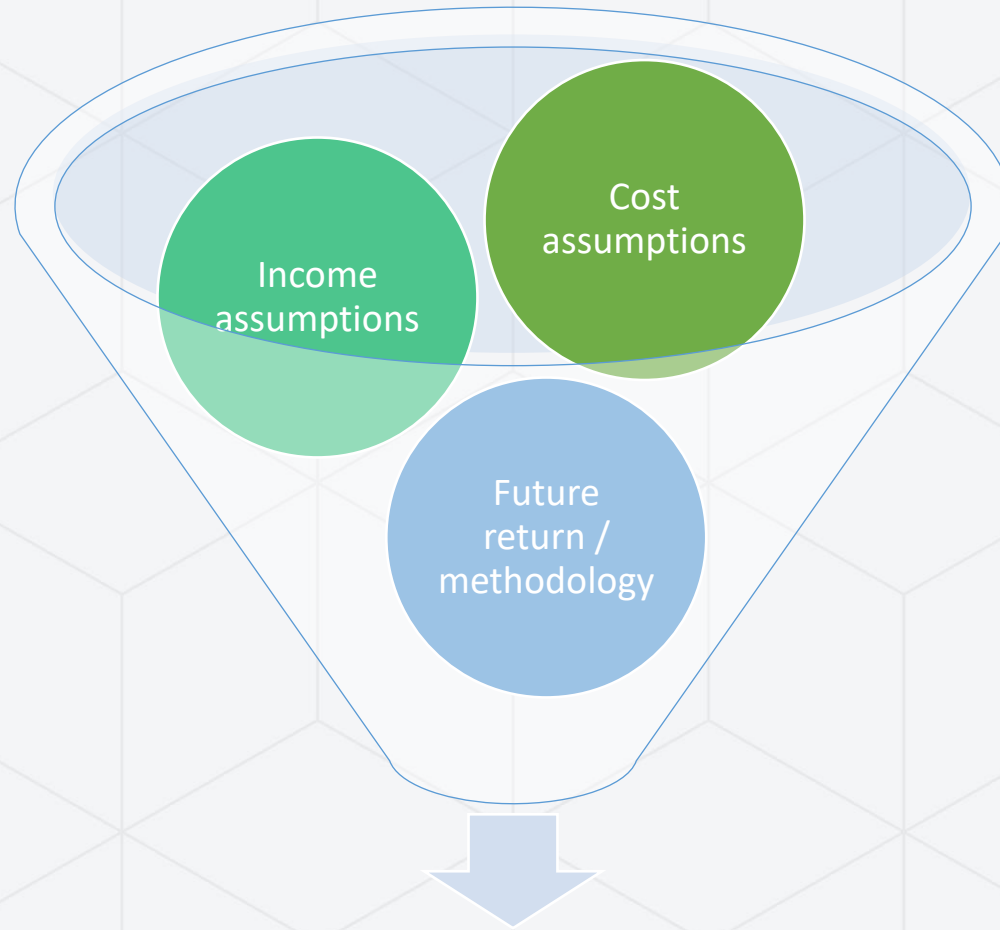
- Government keen on OSM – 25% keen:
- *[We] expect organisations to use categories 1, 2 or with construction processes that achieve a pre-manufactured value (PMV) score of 55% or above.*
- Sites identified to deliver OSM for 21-26
- Appraisals carried out
- The sites weren't viable
- Land couldn't be bought

Why weren't they viable?

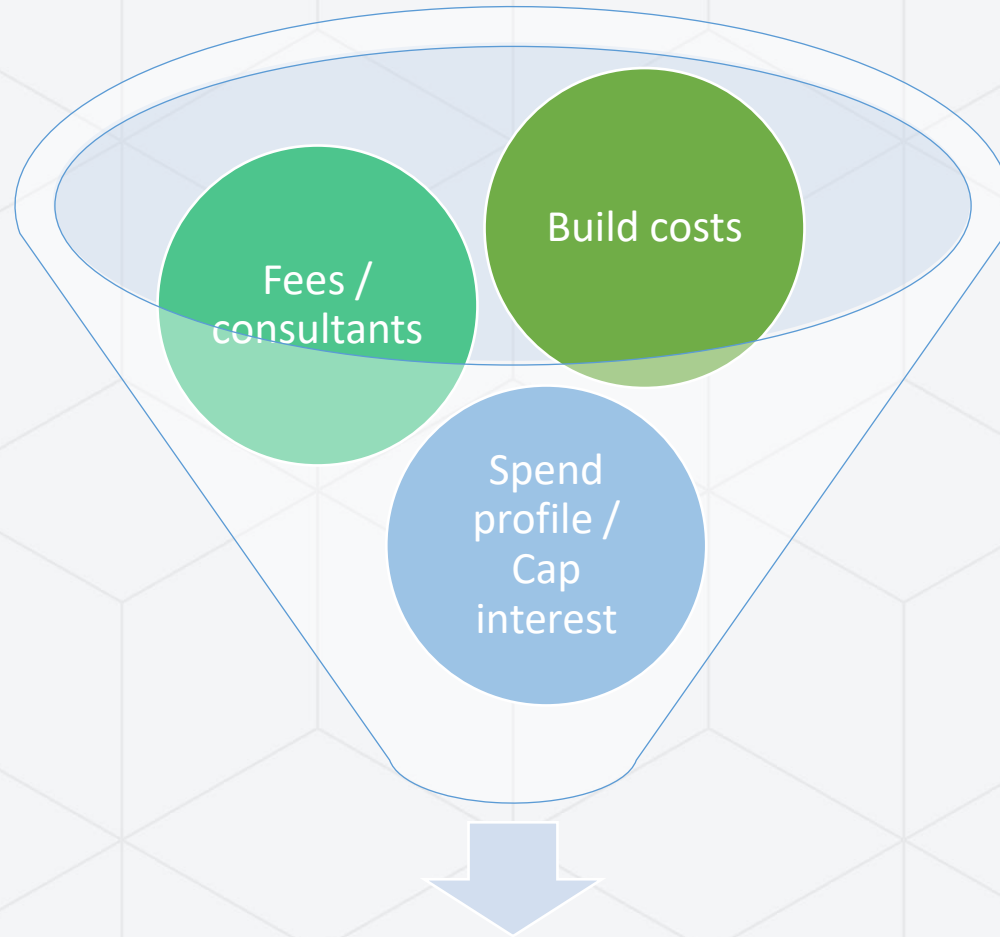
- Working assumption – OSM is 20% more expensive than Trad build
- Land offer = NPV less capital costs
- 20% higher build costs = lower land offer
- But...
- The Appraisal assumptions were still based on Trad units

The initial appraisal is the most important

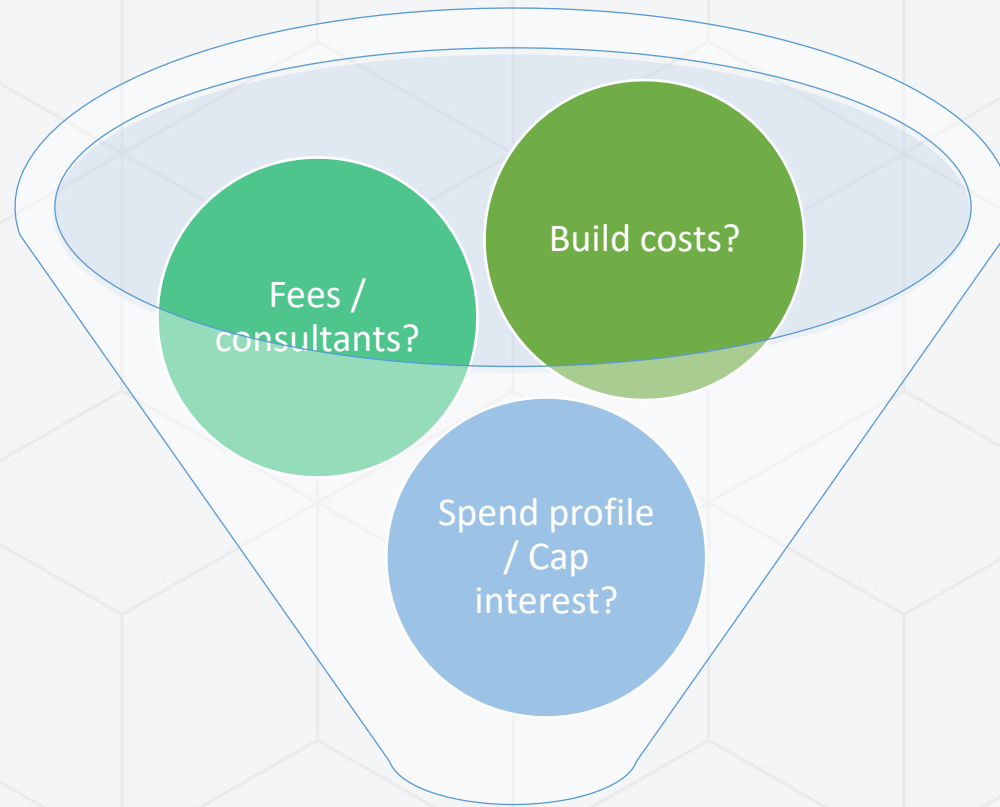
- It works – money is spent
- Once money spent, emotional commitment kicks in
- Second appraisal fails, site becomes strategic
- But...
- If the initial appraisal fails completely, no offer is made
- What is an initial offer based on?



Initial appraisal



Costs excluding land - Trad



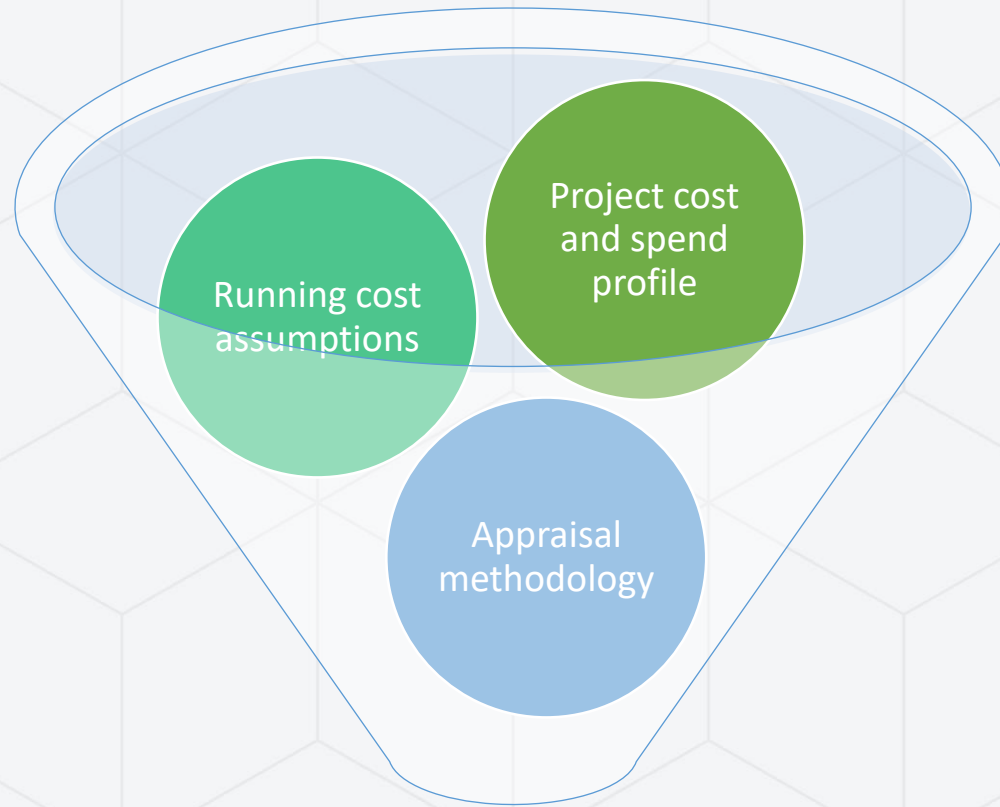
Costs excluding land – MMC?

MMC needed a model for initial appraisals

- Build costs
- Consultant costs
- Running costs
- Appraisal methodology

Not covered:

- Sales values (insufficient response)
- Charging question (separate NHF project)



New model for MMC

Outcomes

Capital costs - conclusions

- Build costs
 - Have to compare like with like – OSM is already compliant with the Future Homes Standard (75%)
 - OSM likely cheaper or equal to Trad
- Consultants
 - Anticipated 15k reduction per unit in later RIBA stages
- Cost profile and dev interest
 - Build cost to be split into substructure and superstructure
 - Substructure – S curve or similar
 - Superstructure – Stage payments
 - 10, 40, 40, 8.5, 1.5
- Total Capital costs
 - OSM likely cheaper in many cases

Running costs - conclusions

- Insufficient data – assume same as current stock
- More study needed, more data

Appraisal methodology - conclusions

- Appraisal should discount to project start
 - Only way to compare Trad vs OSM
 - Both start at same time, OSM finishes a year early
 - Therefore OSM rent lower in 30 year model
 - Therefore OSM looks worse
 - Can rents be set for following year? (manipulation of rent setting)

Reflecting this in Pamwin

- Two accounts for works – superstructure and substructure
- New template – both works accounts, changes to consultants
- (M3 to split cost base out on appraisal screen)