

# **CORDA**

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## Predicting the Future Demand for Army Accommodation

ISMOR 23  
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## Introduction to Peacetime Army Accommodation

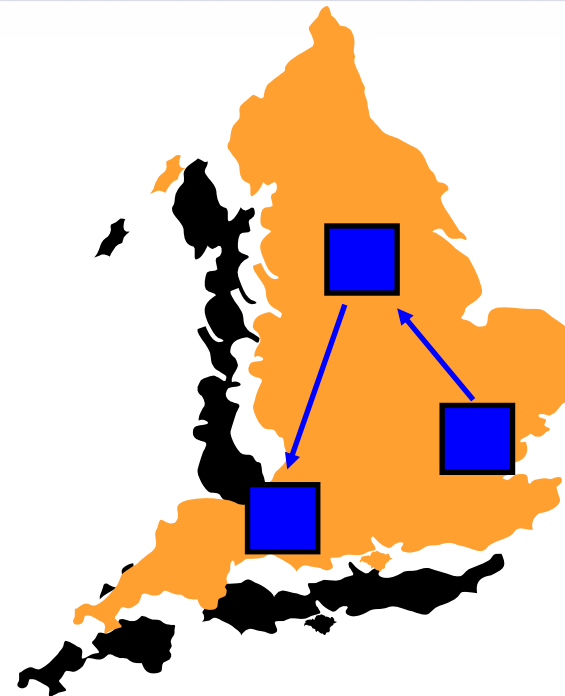
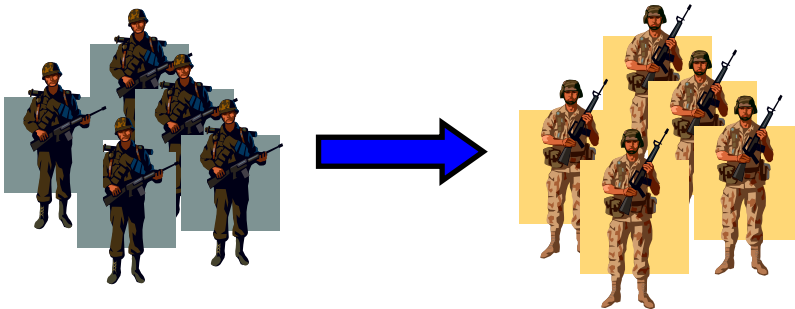
- The Army has an obligation to provide accommodation to all of its personnel who request it
- This includes houses for married personnel and barracks for single personnel



- The Army currently has a policy of encouraging “accompanied service”
  - i.e. the preferred option is for families to live with servicemen/women

## Introduction to Peacetime Army Accommodation

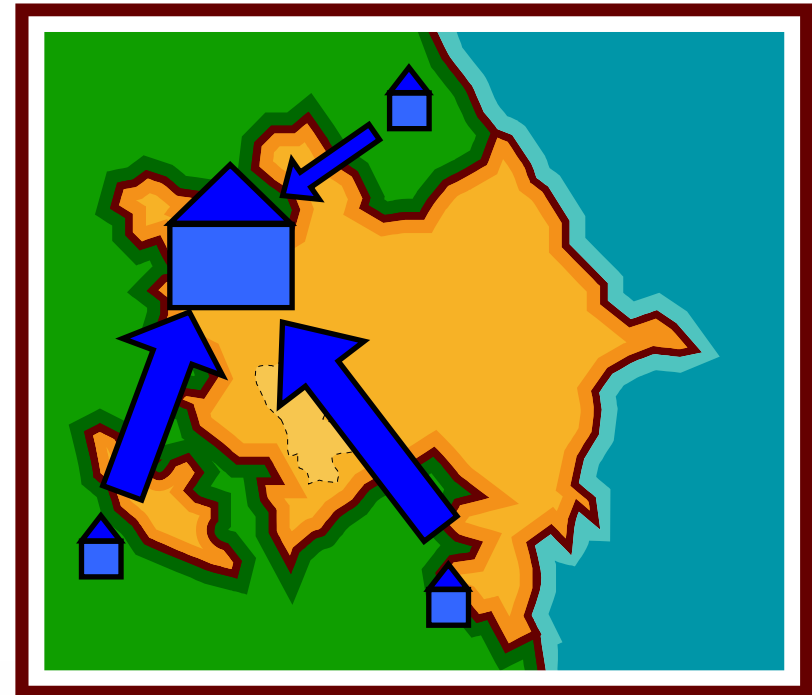
- Currently the Army has high mobility
  - Individuals move between units
  - Units move geographically



- This makes Army accommodation a complex management problem

## MoD Requirement

- Supergarrisons
  - Strategy for the Army Estate 2003
  - Consolidation to some 8 large Garrisons
  - Benefit of increased stability
- Changes over time
  - Which factors drive demand?
  - e.g. attitudes to permanent relationships, property owning, lifestyle aspirations
- Manage transformation
  - Army Infrastructure Organisation (AIO)
  - Method to determine accommodation demand in order to manage transformation period to super garrisons



## CORDA Requirement

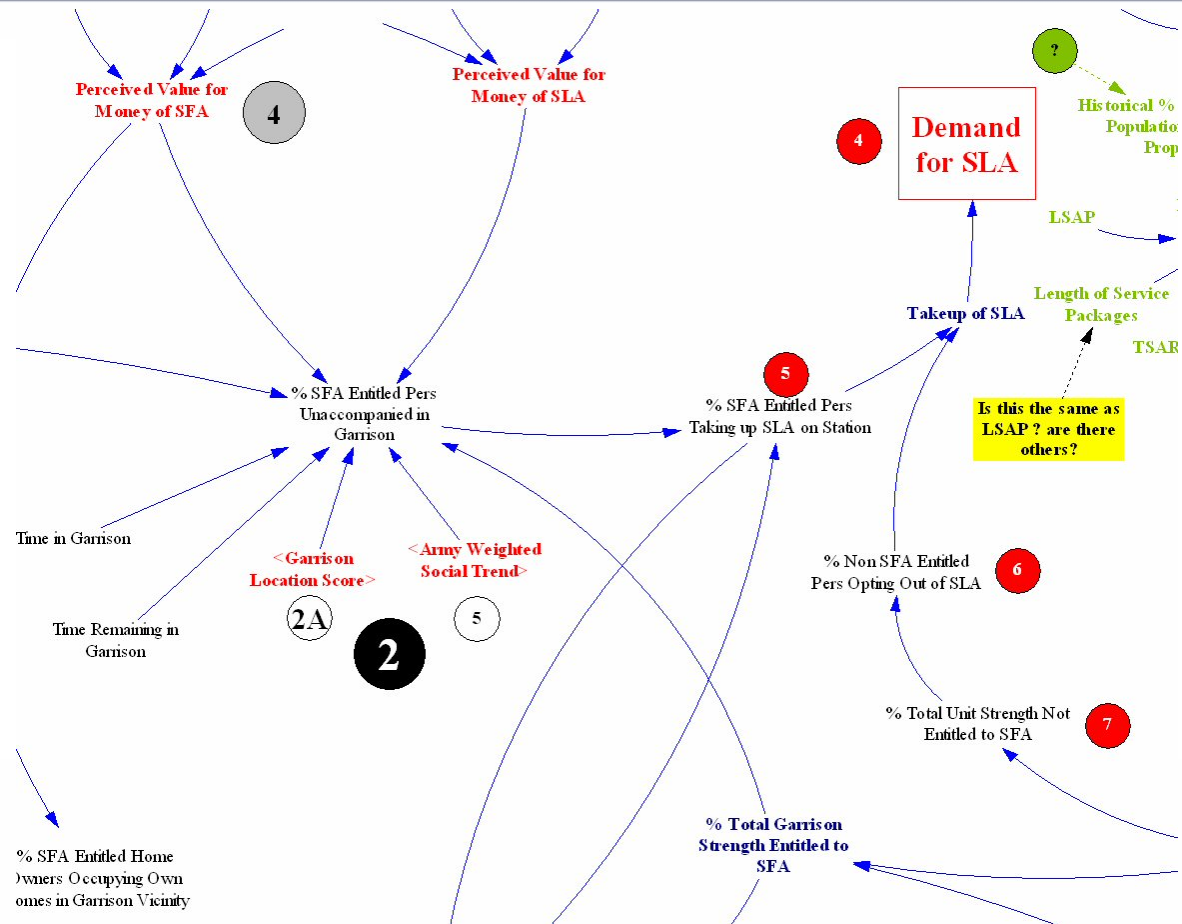
- Develop model
  - To develop a verified model to manage transformation
  - Ability to calculate **demand** for houses and barracks over various scenarios and timeframes
- Validate model
  - To validate the model using data representing a sample garrison
- Analysis
  - To use the model to calculate demand across a range of scenarios
  - To deliver the model for use as a permanent analysis capability

## Key Challenges

- Stakeholder management
  - Directorate Army Personnel Strategy, Defence Estates, Garrison/Bde HQs, Service Personnel (Policy), Defence Analytical Services Agency, etc
- Model development and delivery
- Individual's perceptions and circumstances
  - These influence policy impact and hence model results
  - e.g. importance of schools and/or spouse's career
- Identification of key drivers
  - Relative importance of policy areas to external drivers
  - e.g. housing allowances vs housing market

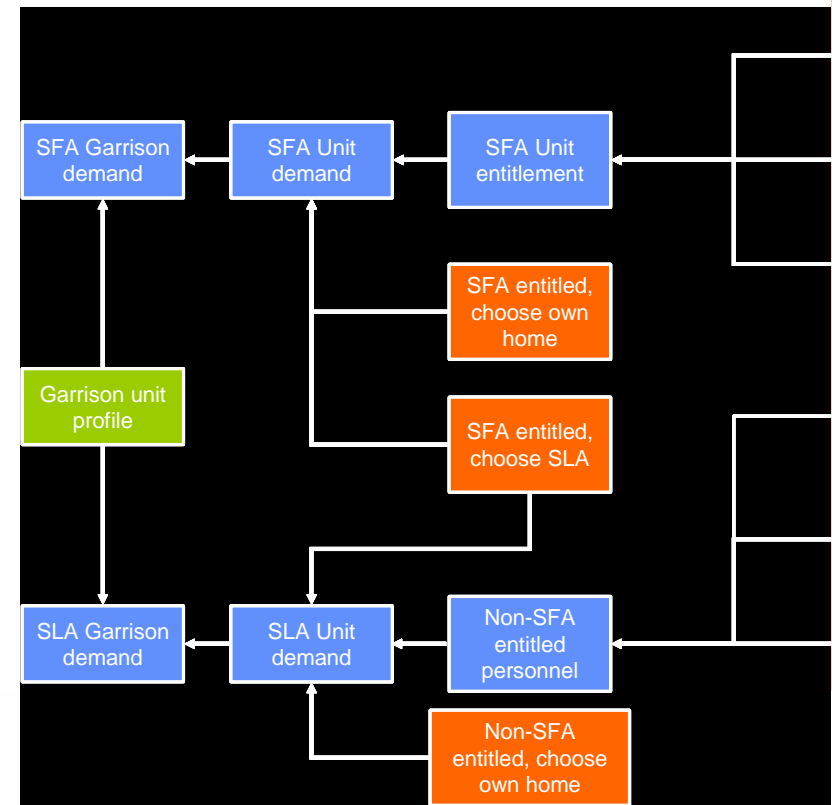
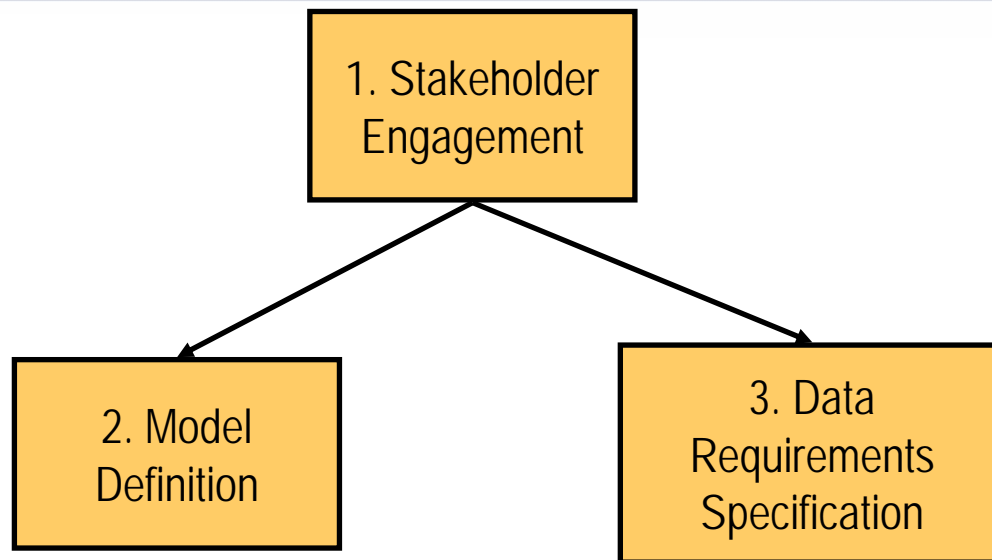
## Study Method

### 1. Stakeholder Engagement

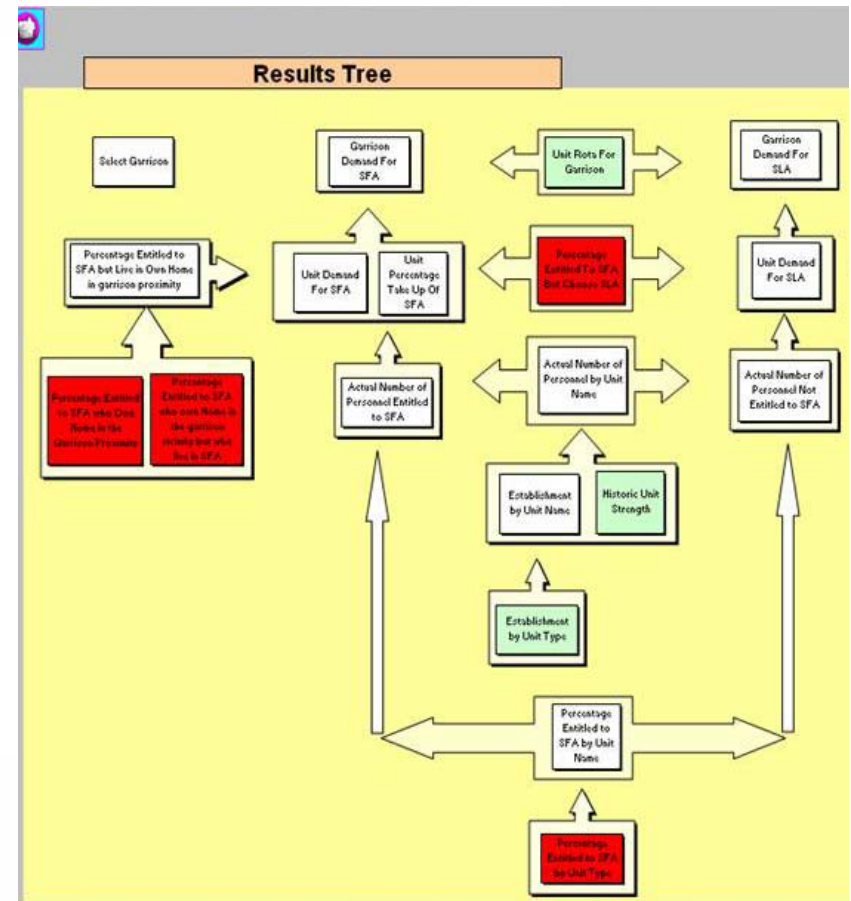
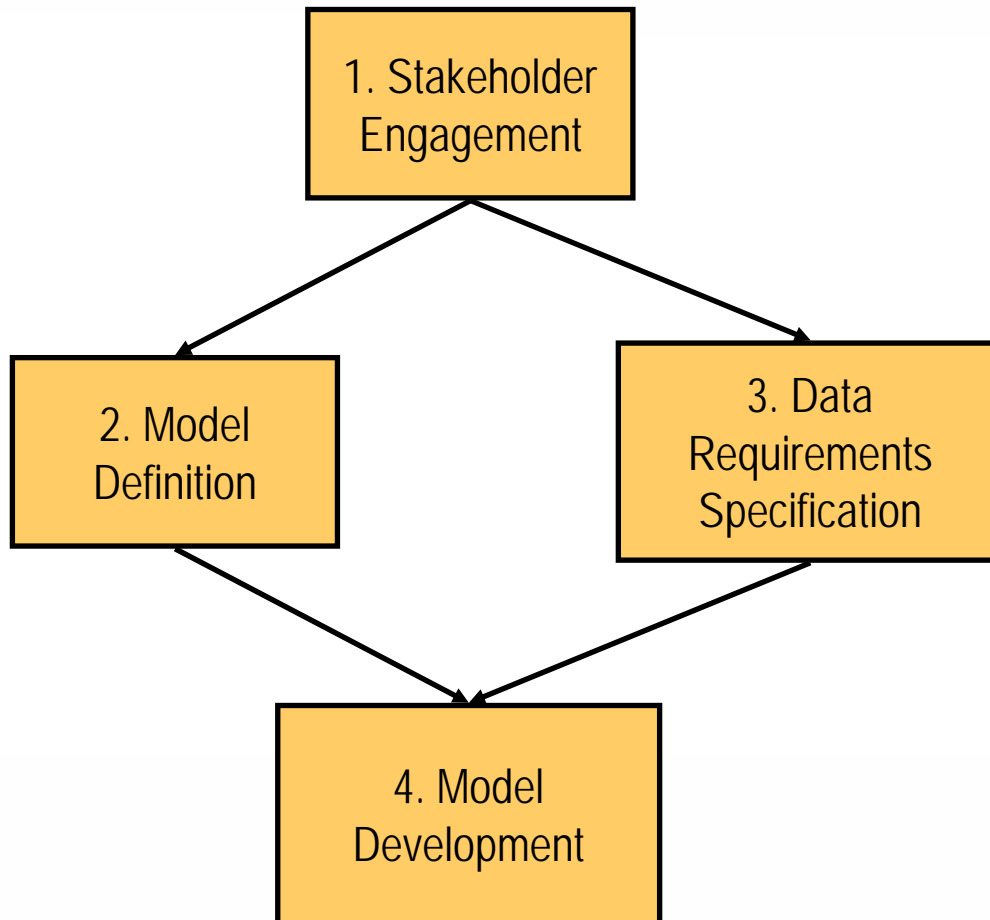




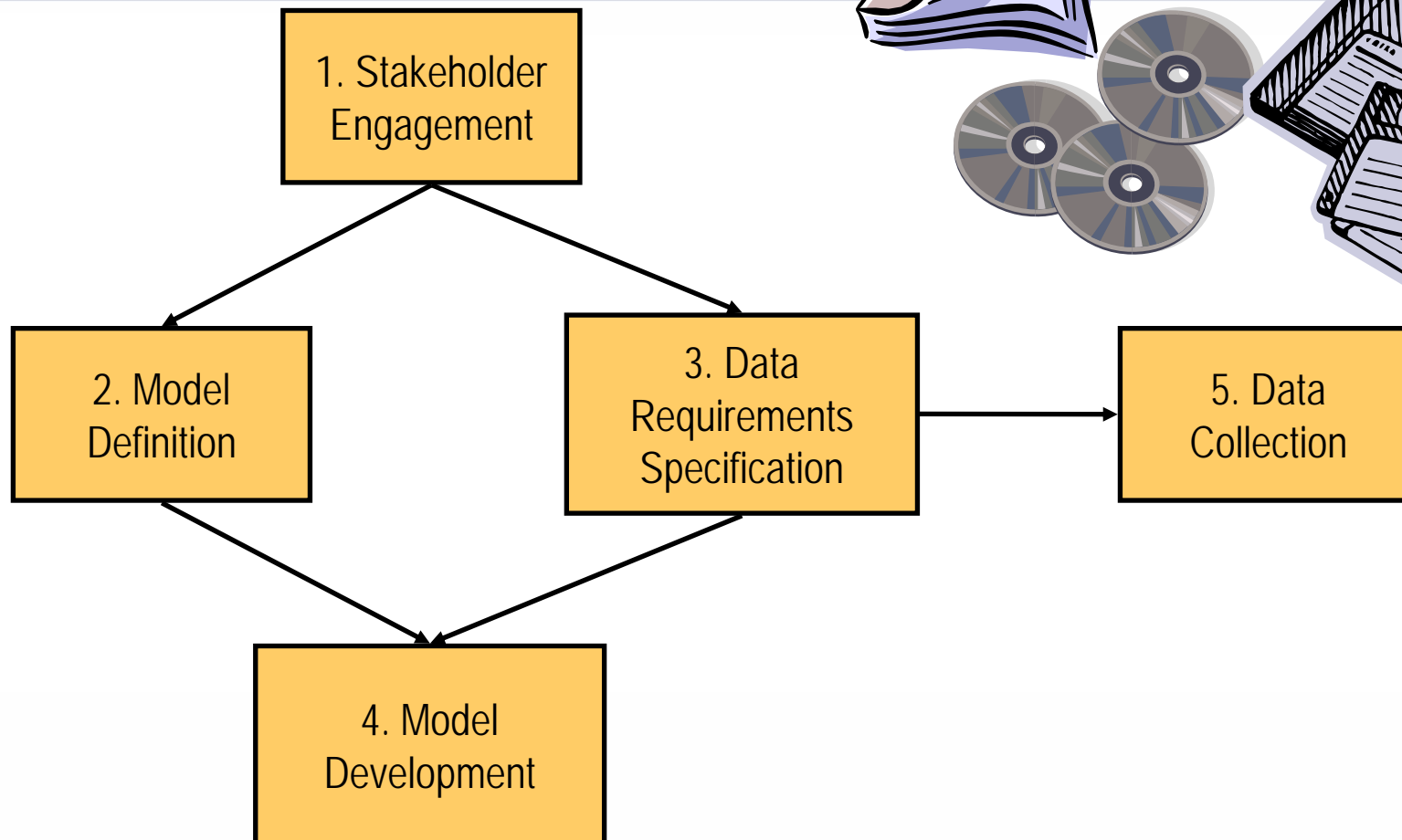
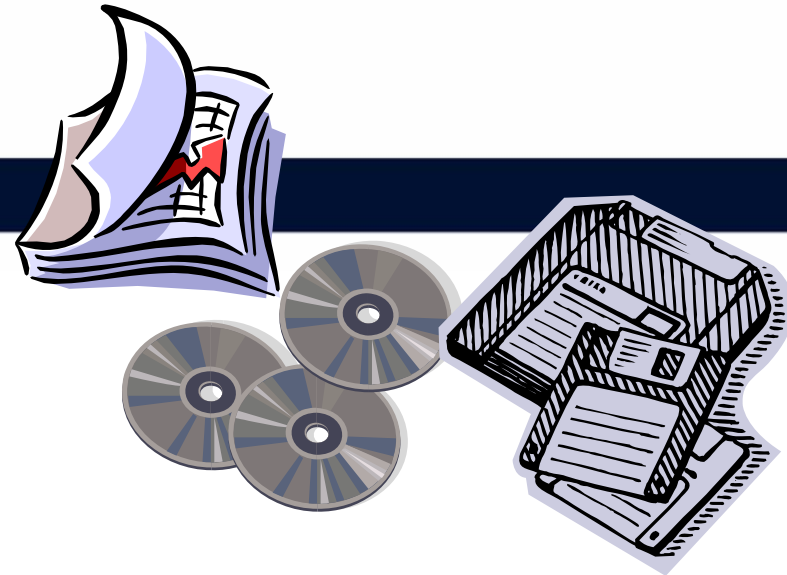
## Study Method



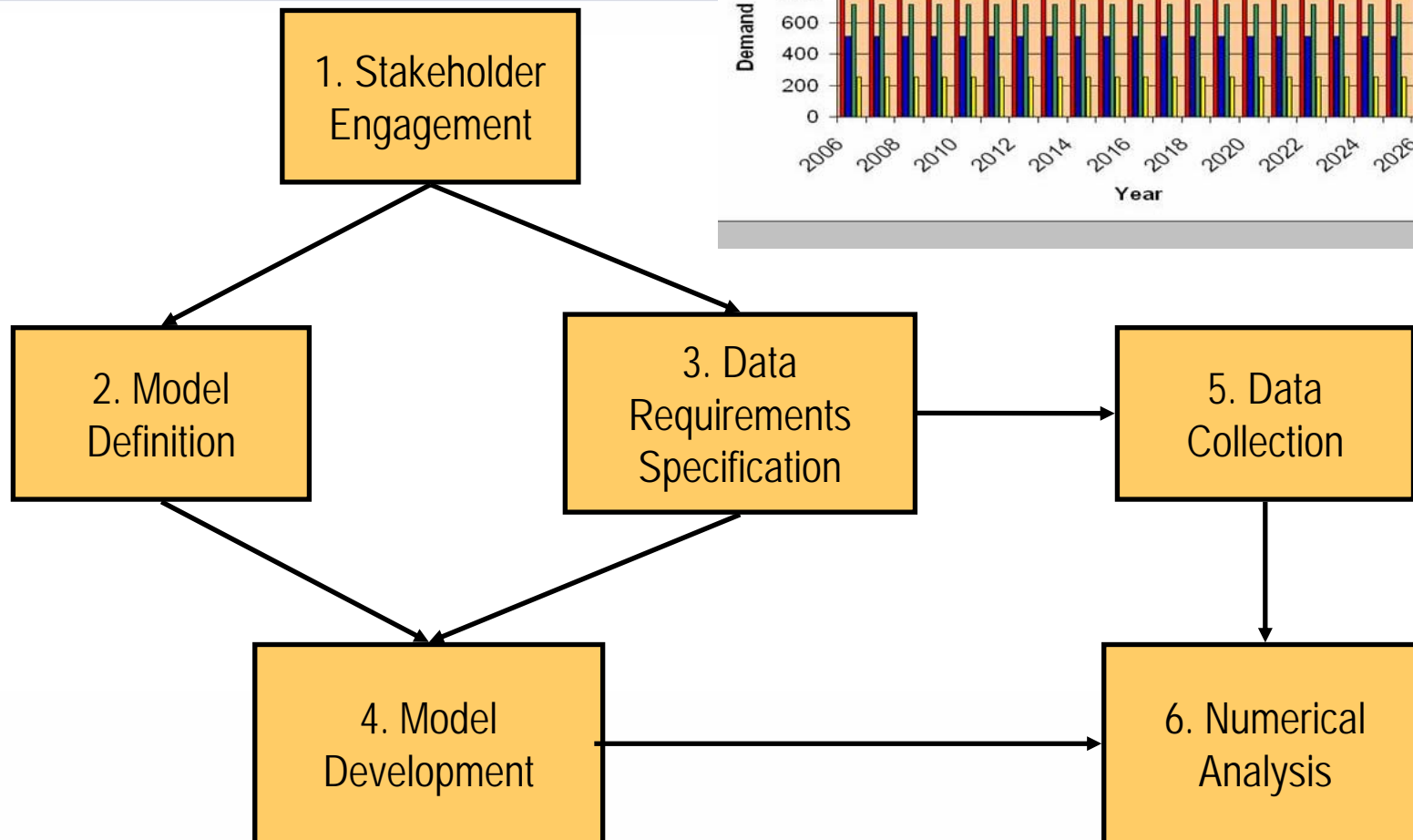
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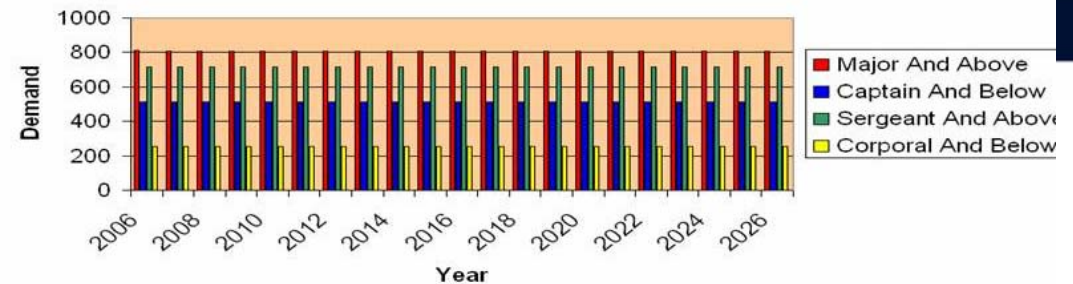
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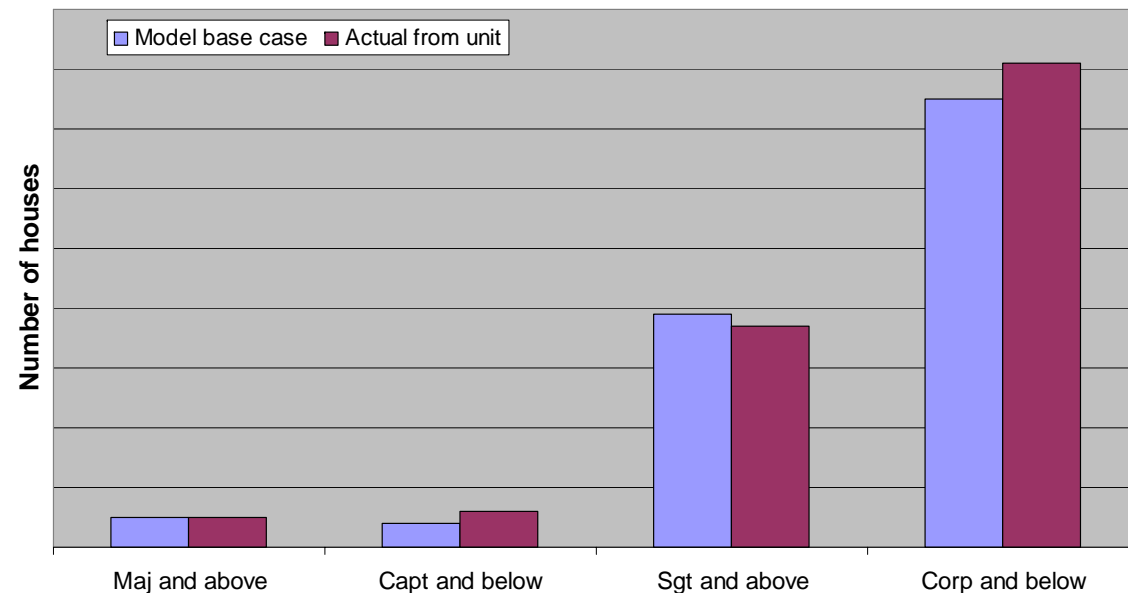


Garrison Demand For SFA



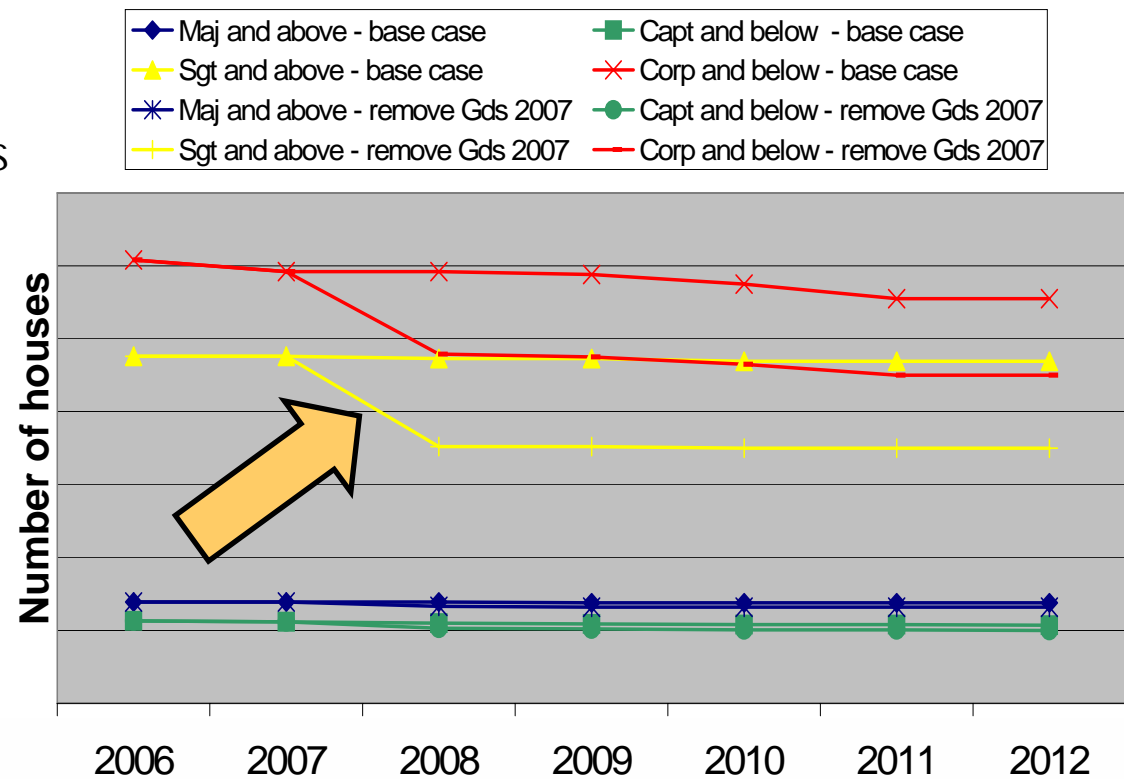
## Model Outputs (1)

- **Output:**
  - Demand for one garrison at a specific time
- **Benefit:**
  - Tactical planning of local resources to inform specific investment
- **Study Applications:**
  - Short-term management of houses/barracks
  - Used in this study to validate the model



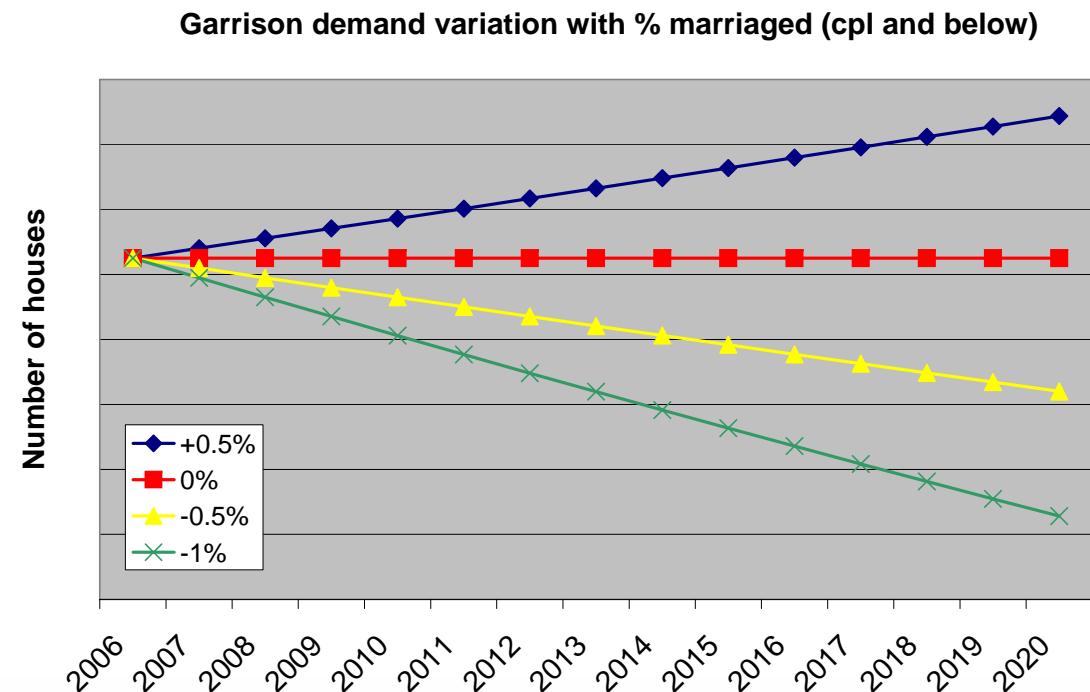
## Model Outputs (2)

- **Output:**
  - Demand given unit movements over time
- **Benefit:**
  - Strategic planning of national resource pool
- **Study Applications:**
  - Implications of unit movement plots
  - Long-term management of houses/barracks



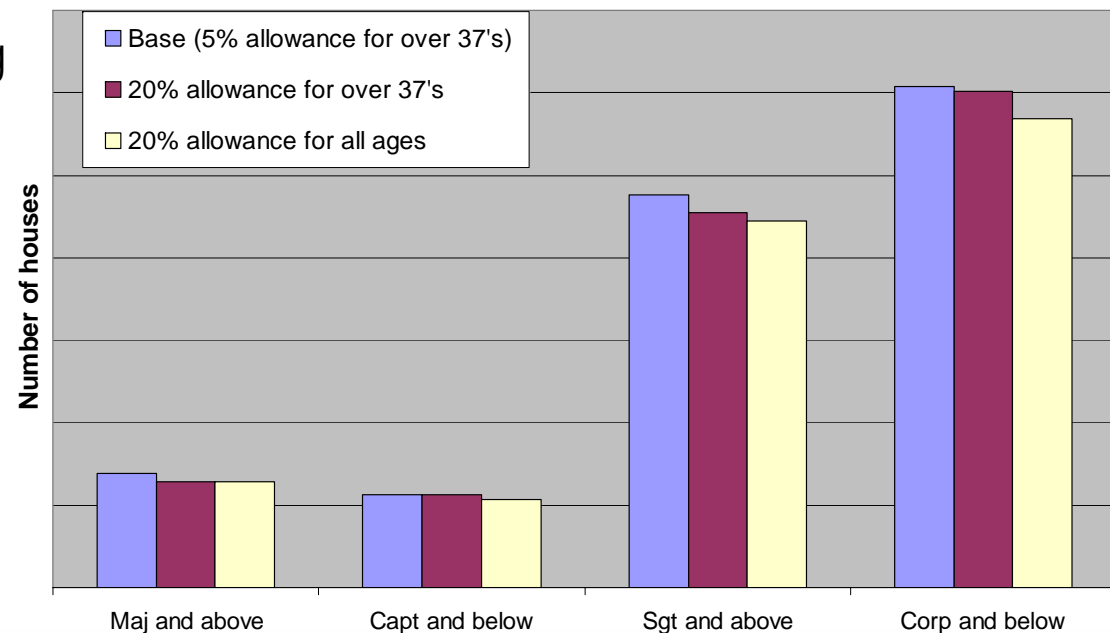
## Model Outputs (3)

- **Output:**
  - Impact of external influences e.g. marriage rate
- **Benefit:**
  - Consideration of softer, people-oriented, issues
- **Study Applications:**
  - “What if” analysis of issues outside the control of the Army



## Model Outputs (4)

- **Output:**
  - Impact of policy e.g. housing allowance
- **Benefit:**
  - Support to policy decision e.g. business case preparation
- **Study Applications:**
  - Lessons learnt on specific policies
  - Can inform SP(Pol) policy decisions





## Conclusions (1)

- CORDA successfully scoped the problem domain, then specified, developed, populated, validated and delivered a model to cover it
- Challenges were overcome through application of:
  - Structured facilitation methods
  - Quantitative modelling through process-driven software development
  - Analysis to identify the impacts of trends in personnel issues
  - Analysis of system behaviour to identify drivers
- Generally the approach worked well. In particular early exposure to, and buy-in from, stakeholders was important and well-received