Introduction and Welcome
Context and Background
The Eco-town concept

- Developed by previous Labour Government

“Eco-towns should have the functional characteristics of a new settlement; that is to be of sufficient size and have the necessary services to establish their own character and identity and so have the critical mass necessary to be capable of self containment whilst delivering much higher standards of sustainability”
The Eco-town concept

• Whitehill Bordon - ‘Green Town Vision’
• Bid submitted in October 2007
• Whitehill Bordon designated Eco-town July 2009 along with Bicester, Rackheath, Cornwall China Clay

• Project partners;
  – MoD Defence Estates
  – Hampshire County Council
  – East Hampshire District Council
  – Whitehill Town Council
  – Homes and Communities Agency
  – Whitehill Bordon Town Partnership
Issues: Whitehill Bordon today

- Economic decline
- Poor town centre
- Lack of community
-Disconnected town
- Poor public transport links
- Poor range of house types & tenure
- Lack of employment and business opportunities
- Need to protect heathland and wildlife
Establishing a Planning Context

• EHDC Local Plan Policies for re-development of MoD Land
• South East Plan designation for 5,500 dwellings
• Eco-Towns PPS
• Development of a Masterplan
• EHDC Core Strategy – Allocation Vs Location

• MoD Position ??
Key Challenges
Key Challenges for the project

- Regeneration of the Town
- Integrating the Community
- Dealing with MoD Legacy
- Localism
- Establishing a step-change in Travel
- Managing Traffic
- Creating internalisation
- Delivering the Project
- Government Support ??
Minimum PPS Eco-towns Standards

• Enabling at least 50% of trips originating in the town to be made by non-car modes, with the potential to increase this to 60% over time.

• Inclusion of good design principles, drawing from Manual for Streets, Building for Life and community travel planning principles

• Demonstration of how transport choice messages, infrastructure and services will be provided from ‘day one’

• Close future monitoring of the carbon impact of transport as part of a low-carbon approach to travel

• Inclusion of measures to ensure that travel demand from private vehicles does not cause congestion on local roads

• Inclusion of measures to support children walking and cycling safely and easily to school. All homes provided within a maximum walking distance of 800m to the nearest school
Masterplan and Aspiration
Community Led Vision
A range of employment locations to replace the 1300 jobs lost when the MoD leaves and provide at least one new job per new home.

Executive eco-homes: homes built to lower than normal densities within the existing wooded landscape around BOS C.

A variety of housing areas containing a range of housing types and styles. Based on average densities around 4000 new homes would be built in these areas.

Town centre locations for office development, leisure or cultural uses.

A new town centre with shopping for clothes and shoes (comparison shopping) as well as food shops and markets. A new hotel in the Sorgensh/ Moos.

Employment and leisure uses at Viking Park with some new homes fronting the High Street.
Masterplan Housing

• Overall the Masterplan provides:
  – Around 4000 new homes (at the mid point densities)
  – Ultimate 5300 cap due to the Habitats Regulations Assessment
  – Around 70% houses, 30% flats
  – Green Town Vision
  – No high rise development
  – High levels of water and energy efficiency
  – Potential for other landowners to improve or redevelop their estates eg. Annington estates.

• Tenure mix:- Affordable 35% : social rented, low cost home ownership, intermediate rent
Employment Locations

Dispersed employment areas to provide up to 5,500 jobs

• Immediate use of all MoD stock
• Louisburg becomes a focus
• Viking park, Quebec and town centre edge flexible locations
• Town Centre
• Home working and small businesses wi-fi, facilities

Employment types:

• Sustainable development & green industries
• Innovation and technology
• Tourism and leisure – South Downs National Park
• Technical skills training
Community Facilities

The masterplan includes:
• community space in town centre
• retention of the Phoenix Theatre and Garrison Church
• new health and dental care
• emergency services
• new leisure hub plus BOSC and Whitehill Club
• space for commercial leisure

Education up to:
• 3 new primary schools
• 1 children’s centre
• early years centres
• skills centre
• secondary school
What could the town centre contain?

- Two public squares and a town park
- Around 30,000 sqm new shops plus food & drink
- Offices and services
- Hotel
- Community, civic, cultural and leisure uses
- Churches and meeting halls
- Public transport hub
- Car parking
- About 580 homes
- New uses for Sergeants’ Mess and Sandhurst Block
- Tourist information

Flexibility to expand over time

Space for relocation of Forest Centre businesses over time
Step-Change in Travel
Emerging Transport Strategy

Vision

“Achieve sustainable growth in the long Term by delivering an integrated low Carbon transport system that will be at the forefront of innovative thinking, providing high quality, affordable and deliverable alternatives to the private car, managing transport demand and maximising the use of existing assets to become an example for modern day sustainable living”

Focuses on three overarching themes

- Reducing the Need to Travel outside of the town
- Managing Car Demand within and external to the town
- Enabling Sustainable Transport for all trips
Transforming the Transport

- Establish sustainable patterns of movement to and within the town

- Requires employment and retail growth within the town to prevent out-commuting

- Minimise use of the private car by providing appropriate and realistic alternatives

- Real integration of Planning and Transport

- Modal shift from the car – Target 25% car-based trips in 2035
Walking and Cycling

• Establish a network of safe, attractive and convenient walking and cycling routes
  
  • Green Grid
  • Green Loop
  • External routes

• Street design to facilitate walking and cycling – permeable grid style network of interconnecting streets – Connecting land uses

• Provide attractive cycle facilities, in the town, at home and at work

• Home Zones
• Shared Spaces
• Car free / Car reduced areas
• Discounted purchase
Public transport
Central transport hub

What could the central transport hub contain?

Travel Information
Eco-Cycle hire
Interchange between local, town wide and strategic services
Eco-Car Club
A Smarter Choices Area Strategy for the Town

- Considers most appropriate measures
- Draws on Best Practice
- Considers town as a whole
- Review and map sustainable transport improvements
- Consider containment and mode share targets
- Provide guidance on future travel monitoring strategy for the town
- Evaluates Early Win Projects

Study available from DfT Website
Smarter Choices Strategy

- Establish a Town Travel Team to implement the **Town Travel Plan**
- The Town Travel Plan will promote sustainable transport through a flexible combination of measures including:
  
  - Provision of incentives (discounted bus and rail fares, promotion of smart ticketing and walking and cycling)
  - Provision of high-quality travel information and intensive marketing and promotion (including creation of a branded web site, newsletters, high-quality signage, smart travel points in the home)
  - Promotion of smarter working practices (e.g. information on broadband, remote working, tele-conferencing, flexible working hours, peak spreading)
  - Personalised Journey Planning and travel information services (e.g travel Kiosks)
  - Instigation of travel events, such as ‘Bike to Work’ weeks
Delivering Public Transport
Public transport
Strategic : Local : Town Wide
Sub-regional Bus Strategy

• Phase 1 – Improving Existing Bus Routes

• Phase 2 – Providing New Linkages to Guildford, Aldershot and Farnborough

• Phase 3 – Providing New Linkages to Basingstoke and Petersfield
• The estimated total annual operating costs
  – £8.6 million (midi-bus operation)
  – £9.8 million (single deck bus)

• The total daily patronage required to recover operating costs is
  – 6,525 (midi bus operation)
  – 7,390 (single deck bus operation)

• The required patronage level compares favourably with the 2036 target bus mode share of 8.2%

• Other Public Transport requirements;
  – Restraints on car demand
  – Provision of high quality interchange / supporting infrastructure
  – Provision of quality information / RTPI
  – Pump-priming PT funding in the early years
  – Potential use of alternative fuel vehicles
  – Need for bus priority measures on the network / ITS
  – Potential travel incentives and subsidised fares
  – Investigate Smart-ticketing
Rail Study
Study Purpose

• Emerging Transport Strategy for the Whitehill Bordon Eco-town 2010
  – High quality public transport will be needed to cater for future travel needs

• Rail Pre-Feasibility Study in 2010 considered potential rail routes
  – Engineering feasibility only

• DCLG funded further study into the business case for a direct rail connection

• Followed Network Rail’s investment guidelines process (GRIP) and the Department for Transport’s (DfT) appraisal guidance

• The Whitehill Bordon Rail Study Option Selection Report has now been completed
Study Approach

- **Options considered**
  - Heavy rail
  - Tram/light rail
  - Bus Rapid Transit (BRT)

- Filter out solutions that would not achieve the value for money criteria

- Study considered the following areas in detail for each route option:
  - Policy Integration
  - Operational issues associated with existing rail lines
  - Environmental planning considerations
  - Engineering constraints
  - Cost estimations
  - Demand forecasting
  - Economic appraisal
**Heavy Rail Route Options**

ML1 - Bordon - Bentley  
ML2 – Bordon – Liss  
ML2a – Bordon – Liss (Alt)  
ML4 – Bordon – Liphook  
ML5 Bordon - Alton

Also considered a combination of route options to assess potential benefits of connection of rail lines.
Light Rail / BRT Route Options

LR1 – Bordon – Bentley
LR2 – Bordon – Liss
LR3 – Bordon – Liphook
LR4 – Bordon – Alton
LR6 – Bordon – Farnham
Summary Findings

• One option with a business case sufficiently strong to warrant further study - Heavy rail ‘through-route’ to Bentley
  – Could generate up to 1 million trips per annum
  – Capital construction cost of circa £130 million
  – Benefit to Cost ratio of 2.14 (represents ‘High’ value for money - DfT)
  – Least environmental impact
  – Likely to be deliverable in engineering and operational terms
  – Existing service levels to Alton could be maintained by splitting trains at Farnham or Aldershot

• Liphook and Liss (BCR 0.45 / 0.41)
  – Lack of train paths in peak hours on Portsmouth line
  – lower levels of daytime off-peak service frequency
  – Increased environmental constraints to the south east of Whitehill Bordon

• Alton (BCR 0.22)
  – Most viable in terms of railway operations (creates least impact on existing services)
  – Engineering costs almost double that of other options - requires a tunnel of 2.5km

• Tram and BRT options have low Benefit to Cost Ratios (BCR < 0.2)
  – longer journey times
  – high infrastructure costs in relation to demand
  – need to acquire and maintain a fleet of bespoke vehicles (tram option)
Summary Findings

Key Considerations

• The study relies on certain assumptions;
  
  – quantum of development (BCR reduces as housing drops below 5,300)
  – Car parking at Whitehill Bordon station
  – Macro-economic benefits

• If the Bentley line could be built as single track with passing loops, the BCR improves significantly
  
  – but may not be acceptable to Network Rail and SWT

• There is currently **no funding beyond GRIP 3**. As part of the GRIP 3 study, the consultants will be required to investigate potential funding streams, both public and private.
Managing Traffic
Traffic Management

New through street connecting up the development areas

A325 changes character to public transport and pedestrian friendly

Network of smaller streets, quiet residential lanes and paths
Traffic Management - Wider Area

Traffic management schemes across a wider area to avoid / mitigate negative impact on villages

Discourage access along inappropriate roads

Wider benefits of improved bus network

Manage freight and construction traffic
Freight Strategy

A Freight Strategy will be developed to manage future delivery demand in the expanding town.

Co-ordination and co-operation with local business and retailers will ensure that deliveries and HGV traffic in the town are managed so as to reduce any negative impact, and will include:

- Establishment of Freight Partnerships
- Promote increased ‘back-loading’
- Co-ordinated supply chains
- Determination of delivery routing and timing
- Eco-Delivery Service
- Potential town distribution Hub
Car Parking / Sharing

• Parking Strategy to be produced

• Reduced Standards – LDF Policies
  – Car-Free zones
  – Car Reduced areas
  – Preferential parking allocation
  – Remote parking

• Impact on viability ??
• Potential for Park and Ride ??

• Establishment of an ‘Eco-Car Club’
• ‘Eco-Wheels to Work’
• Specific Car Share domain
Travel Monitoring

- Coordinated by the Travel Plan
- Will measure travel demand, usage and patterns
- Multi-Modal
- Use of Technology
- Measureable against Eco-town targets
Transport Evidence Base

• Essential work to consider the potential impact of the Eco-town on the transport network, local communities and environment

• Work split into two connecting parts;
  
  – Construction of a Transport Model (Saturn / CUBE Voyager)
  – Preparation of a Stage 2 Transport Assessment

• Work being carried out in close consultation with Surrey County Council and the Highways Agency

**Transport Model**

• Utilises the latest strategic transport modelling software and techniques
• Based upon extensive and recent travel surveys (RSI Cordon / ATC / MCC Counts / Journey Time Surveys / Bus Surveys)
• Model has been fully validated and calibrated to comply with DfT requirements
• Will feed HRA Study / LDF / Application
• Considers a range of development scenarios
  – Base-Case
  – Fall-Back Position (Re-use of MoD buildings)
  – Mid-Build 2019 Scenario (1,700 dwellings plus associated facilities)
  – Masterplan (4,000 dwellings plus associated facilities)
  – Extended Masterplan (5,300 dwellings plus associated facilities)

• Consider sensitivity of targets / assumptions
  – Mode-Share targets (75% / 50% / 25%)
  – Internalisation targets (30% / 50%)

• Consider future transport strategy / interventions
  – Future use of A325
  – Inner Relief Road
  – Necessary network improvements and strategy interventions to mitigate impact of development
Initial Findings

• The ‘A325 Traffic Management’ treatment offers greater advantages over do nothing and PT Only options

• Inner Relief Road provides relief to town congestion

• Impact of development is proportionate to development scenarios

• Moderate increases in traffic flow would be experienced on the surrounding road network, particularly on the A31, A3, B3002, B3004 and B3006 links within all of the development scenarios and all peak highway periods.

• A number of junctions on the network experience congestion and delay as a result of either background growth or development flows. Improvements will be required.

• Developer a package of measures that are likely to achieve 50%, 25% would require stronger policy instruments
Funding and Viability
• DCLG Early Wins Funding
  – £9.35m Year 1
  – Transport Projects
  – Team Structure
  – Community Projects
  – Exemplar Housing Development

• LSTF Eco-towns Bid
• Funding Officer
• Infrastructure Cost Plan developed
• Viability work underway
• Limited future public funding
• Potential for private partnerships
Transport Early Wins
Town Transport Manager

- A Town Transport Manager will be appointed to provide a dedicated, flexible and specialised travel resource for Whitehill Bordon.
  
  - Lead the implementation of the Smarter Choices Strategy
  - Assist with the delivery of the Early Wins (Personalised JP)
  - Enhance research on existing travel patterns
  - Inform the development proposals and the wider long-term transport strategy
  - Improve community engagement
  - Work with local schools, employers and residents
  - Oversee marketing and promotion campaigns and manage the web-site
Transport Web Site

- Development of web pages to sit within the existing Eco-town website (www.whitehillbordon.com).
- The content of the pages will be two fold:
  - Provide user travel information (including existing public transport options, walking and cycling routes, links to useful sites, information on offers, events and discounts)
  - Provide transport updates on the development of the Eco-town, including providing a resource to access the latest information and programme of works
- Pages will include an interactive walking and cycling map
- Linkages with specific Whitehill Bordon Liftshare domain
Bus Service Improvements

- Current Public Transport insufficient to effect significant mode shift
- Trial of new bus service – proposals for a 4 year service
- Service level and routing options currently being prepared for consultation
- Will use modern and innovative technology where possible
  - Electric Buses / Hybrid Diesels / Biofuels
- Proposals will be subject to consultation
- Intention to commission new services for late 2011 delivery
Bus Stop Improvements

• Necessary to improve image of Bus Services, provide high-quality waiting facilities and support new bus service proposals

• Initial concept designs have been produced to consider comprehensive corridor improvement to bus infrastructure
  - Modern and innovative technology used where possible
  - Solar power
  - Rain-water harvesting
  - Green Wall ??
  - Passenger information Systems
  - Recycled materials

• Intention to deliver improvements during the middle of 2011 along with service improvements
Conclusion
• Whitehill Bordon seeking to be an exemplar of sustainable development
  – Project brings vitality and regeneration
  – Community Cohesion
  – Provides much needed town facilities
  – ‘Whole town’ approach

• Developed an ‘Emerging Transport Strategy’ which offers a modern and innovative transport approach across all modes

• Investigating possible PT approaches and network improvements

• Planning Processes underway

• Awaiting MoD Decision – need to plan against the alternative

• Early Wins Delivery
Questions?