

# WHQS?



£3Bn backlog to 2012, £4Bn required to maintain the standard for 30 years. Not many as bad as this anymore...thankfully.

# IF ONLY IT WAS THIS SIMPLE!

## CARE AND REPAIR CYMRU'S HOUSE, TAI 2009



# According to BRE (2007) we now need to consider:

## **Technical refurbishment standards**

- structural repairs
- regular maintenance
- insulation and energy efficiency
- updating of services, kitchens and bathrooms
- adapting for changing needs
  - disability
  - home working
  - tele-assisted care
  - leisure
  - spatial reconfiguration
  - security

**But also we need to add: Climate-change, Communities, Places and Spaces, People, Jobs, Regeneration, Health and Wealth, just to list a few.**

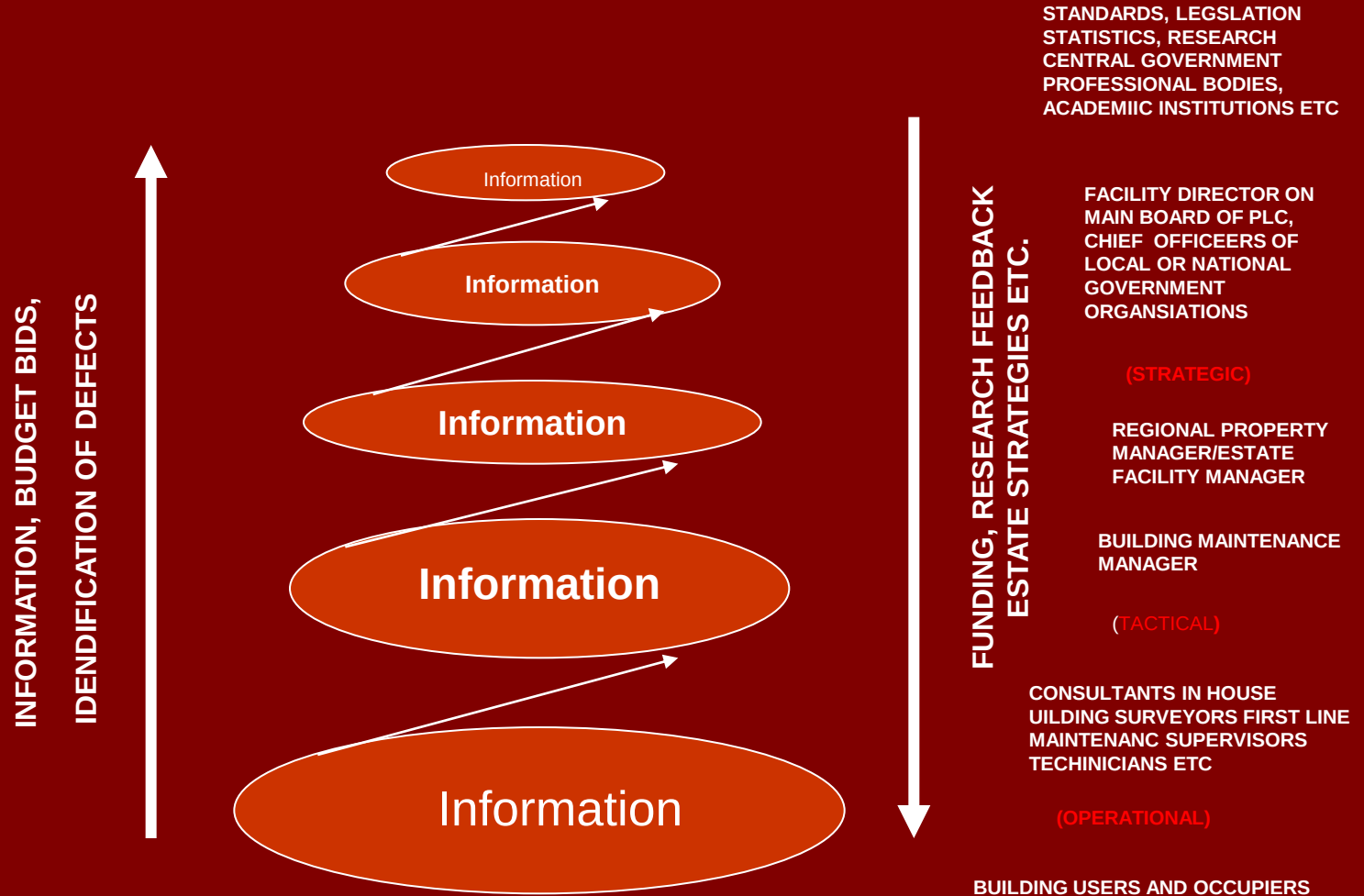


## Condition surveys:

- Establishes investment needs and decision making.
- Major areas of expenditure
- If survey is inaccurate, business plan is lost!
- The basis of all Asset Management policies and in future, operational viability.

# THE INFORMATION SPIRAL

THE POTENTIAL FLOW OF CONDITION SURVEY DATA, THROUGH THE PROPERTY WORLD



# Sample Sizes

- Statistical Accuracy.
- Business Planning (10 -15%)
- Asset Management (15 – 30%)
- Works planning (30%+)
- How robust is the data?
- Why not 100%?

Designed for sustainability but with long-life, loose-fit and appropriate, low maintenance, characteristics?



# The Context

## UK construction industry:

- Turnover £149Bn per year (8% of GDP)
- Conservation, repair & maintenance 49% of total spend at £3.5Bn per year
- 2.1M employees, 0.23M are professionals. **In Wales we need up to 393 additional staff for WHQS Plus..**
- 6% of the UK building stock is of heritage value: of these 5M are pre-1919 buildings and in England 0.48M are Listed.

Source: Fidler, J (2005) *English Heritage. Preservation Education in the UK: a strategic overview*

Add: the Black economy, DIY, private D.L.O.,s and the Refurbishment sector...?

- Maintenance as defined in BS 7913 as:

*‘Routine work necessary to keep the fabric of a building... in good order’.*

It is hard to conclude exactly where maintenance ends and repair starts.

- BS 7913 defines repair, as distinct from maintenance, claiming that a repair is:

*‘Work beyond the scope of regular maintenance to remedy defects, significant decay or damage caused deliberately or by accident, neglect, normal weathering or wear and tear, the object of which is to return the building or artifact to good order, without alteration or restoration.’*

*But does anybody really, really undertake maintenance effectively?*

# Nice Car!



My Car! Must be something in this maintenance game, after all.



# Designed for Maintenance?



The design and detailing is critical but so is the....



The design and detailing is critical but so is the....

**MANAGEMENT!**



# Public or Private?



According to the CIOB:

‘Obsolescence (in its many forms) is the challenge to our building stock.’

Physical – Functional – Location – Legal –  
Economic – Aesthetic – Technical – and  
ever increasingly, Environmental.

# Obsolescence?



# Non Traditional Homes



£22 to £40k - on average, to repair



## Traditional building craft skills

As Sustainable Development is enforced by legislation, lobbying to raise the central role of conservation and maintenance, is key.

Demand: estimated that an extra 6,590 craftspeople needed to solve the current skills shortage: to maintain the required labour levels of a skilled and fit for purpose workforce to meet demand in the next 12 months (2005).



Source: NHTG (2005) TRADITIONAL BUILDING CRAFT SKILLS – ASSESSING THE NEED, MEETING THE CHALLENGE, P.12

Nice plumbing, but who is going to repair it?





The Church of England, have  
12000 buildings similar to this!



There are also 6200 Non-Conformist Chapels in Wales, many suffering a similar plight. Source: RCAHM(W).



# St. Paul's Cathedral

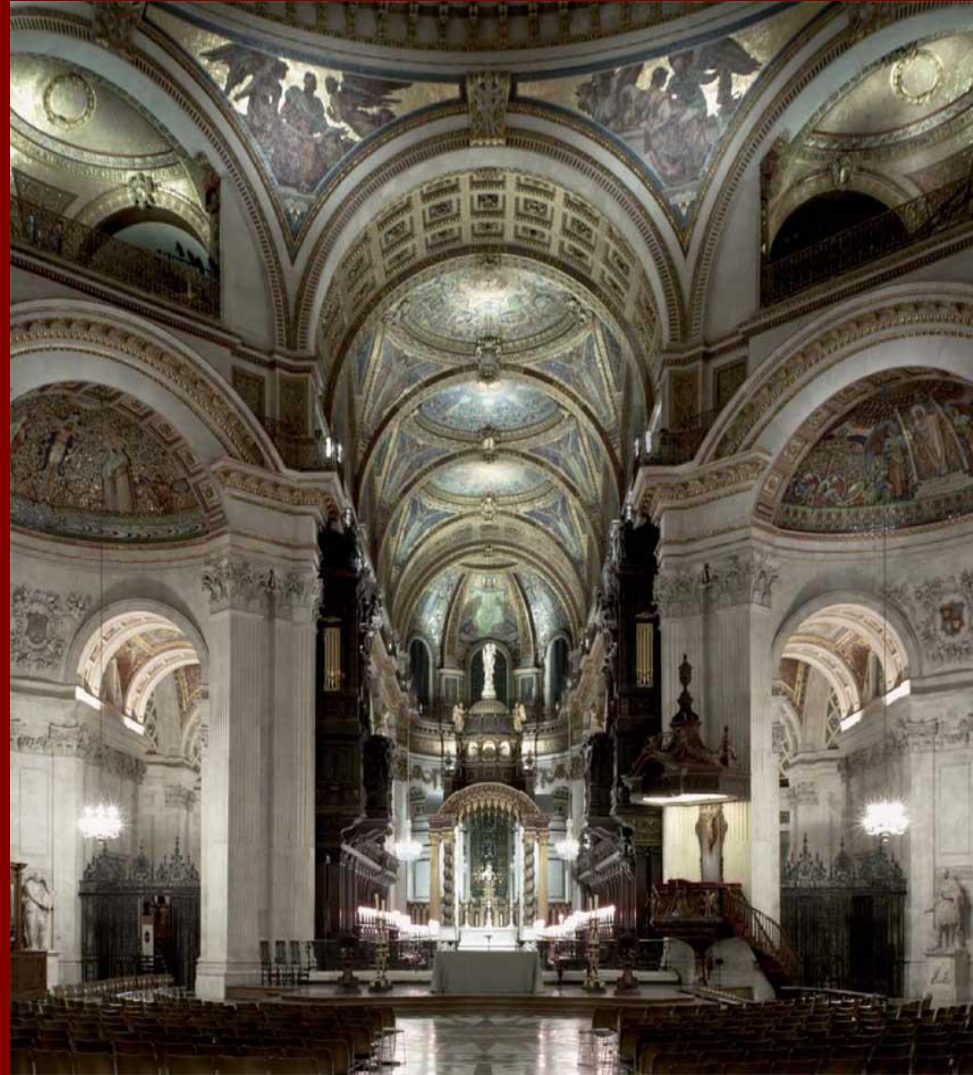


# St. Paul's Cathedral





Might be worth investing in a decent roof covering and hot-dip galvanising, the steps.



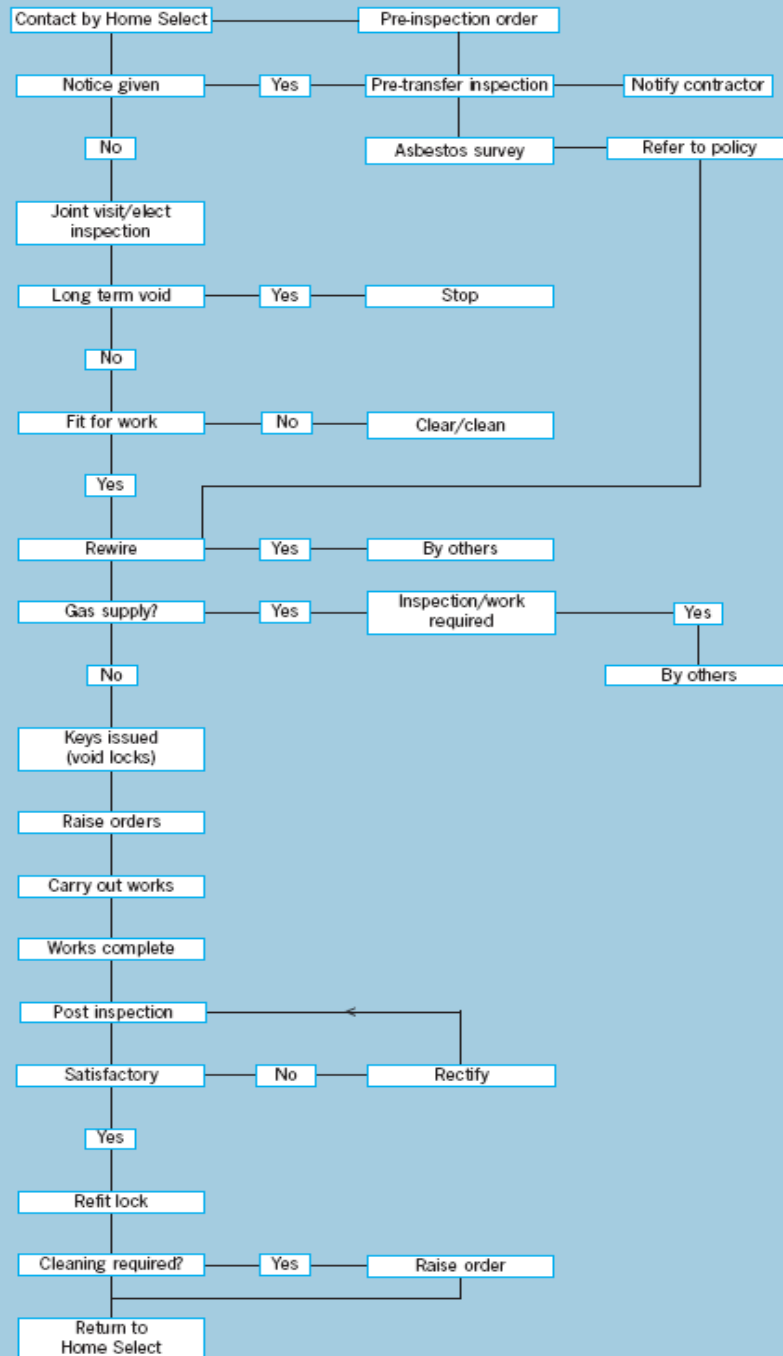
Tenants fixtures and fittings. Perhaps a decoration allowance or B&Q vouchers.

# Sustainable Building Maintenance Management



New or sustainable uses for old buildings?

For many RSL's a very common experience



Void Management.

# Rhubarb tart and custard?



Government targets are for 60 - 80% of new development to be on brown-field land. Is there anywhere within south-Wales you can find developable plots, that do not have significant environmental pollution issues?

Ingvar Maxwell, recently retired, former Head of Technical Services at Historic Scotland claimed in 2007, that :

- *“Climate Change is the greatest threat facing both the built and historic environment.”*

*Cotac Conference, BRE, Watford. Nov. 2007*

Extreme!



# Thermal improvements?



Very severely exposed to driving rain!

# How we maintain our lesser, smaller houses in Wales!



Constructed in 1698 – William and Mary. Grade II Listed in 1995. Roof stripped three months later. Now has a roof-garden. January 2009.



Mary Poppins?

# No Problem!

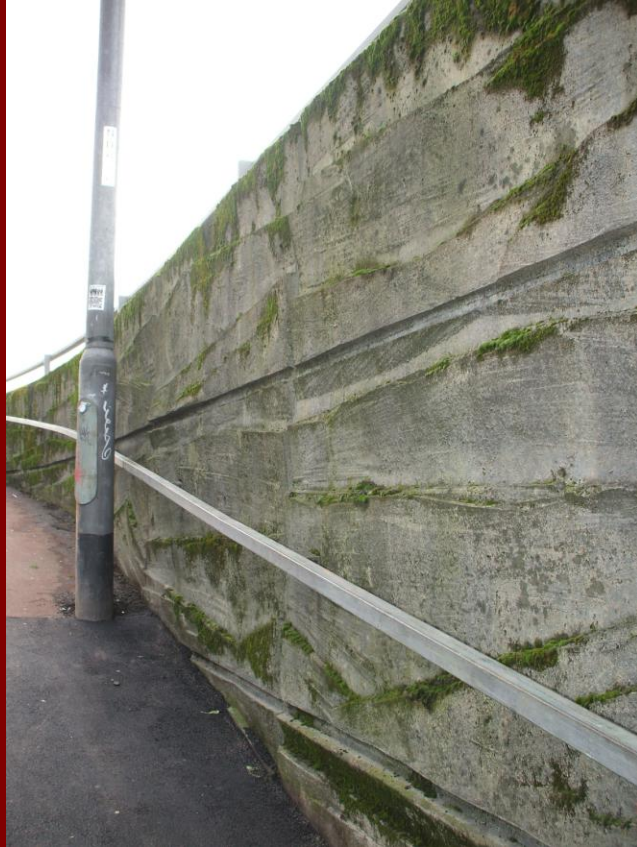


**Break a Leg?**





# Sustainable Building Maintenance Management



# Back to school – no thanks.



# Building Defects



Designed with  
maintenance in mind.



# Sustainable Building Maintenance



# Asbestos?



# Sustainable Building Maintenance

In good repair?



A Modern Kitchen?





# Building Maintenance Management



Green roofs or somebody please maintain!

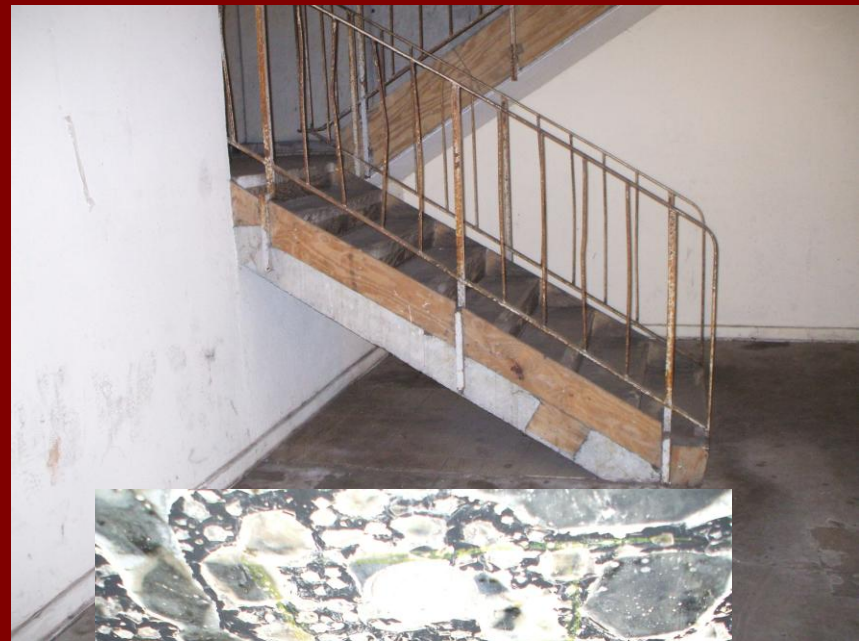
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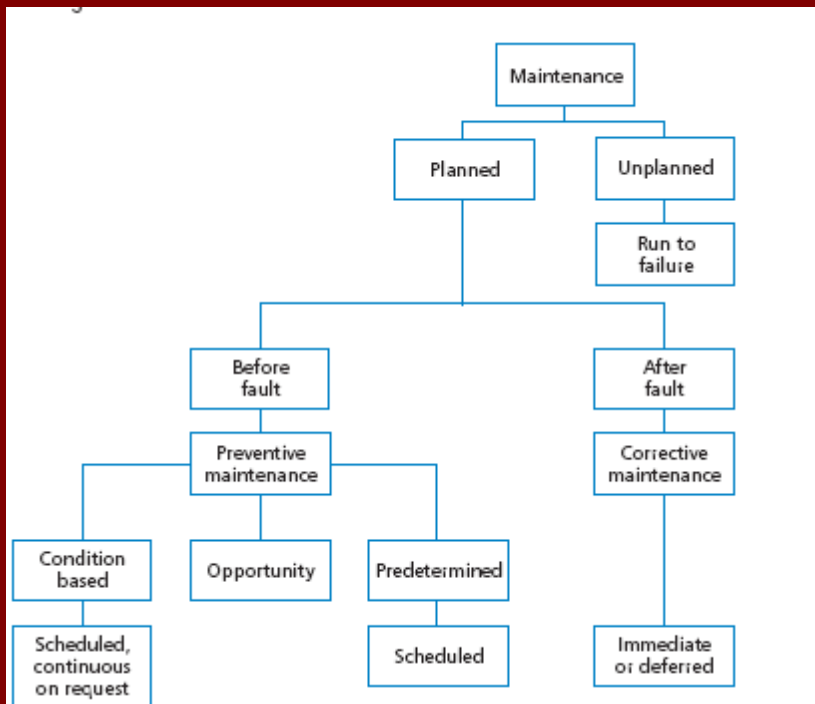


# Spaces and Places?



12 Million Pounds and its  
still the same environment





Systems or People?

