

B/F Thursday

Prime Minister:

John - I think we should have an infrastructure paper (it will have to be by me - to Cabinet - for a cross the whole of gov - discuss?)

Two issues here:

i) the roads programme, on which the Policy Unit propose a discussion on the balance between construction and maintenance

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ii) contracts, on which they are worried about over-runs and propose asking the Efficiency Unit to remind depts to tighten up their procedures.

Agree these suggestions?

The Government is accused of neglecting the fabric of the nation. Some months ago we drew attention to the dangers of the argument that simply increasing capital spending would solve the jobs problem. Some efforts have been made to counter this, but the public still believe:

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- a. the nation's infrastructure is in a sorry state;
- b. the Government is cutting expenditure on it;
- c. capital spending is good for jobs.

There is a danger in leaving the Government associated with public squalour and tattiness. This Government should believe in modernising those things which are part of the public sector, which are worthwhile, and are not suitable candidates for privatisation. It should claim credit for the £22bn of public investment it is undertaking each year; should take another look at the priorities in its capital programme; and at the way it is handled, to see if more can be bought for the same money.

Health

In 1984/85, 46 hospital projects were under construction in the UK, costing over £10m each, and a further 10 schemes are

scheduled to start in 1985/86. The Blood Products Manufacturing Unit, the Central Public Health Laboratories, and the National Biological Institute are being reconstructed.

The DHSS have introduced better preparation and tougher disciplines over contract management, leading in their view to a saving of the order of 5% on estimated costs of the total programme. But there have been problems with some contracts. The worst is at Great Ormond Street, where £11.5m is having to be spent on remedial works. The design consultant and others are being sued. There is also litigation pending over the Newcastle teaching hospital, where there was a £6m overspend on a £15m contract.

Despite the changes in procedures, the main pressure is to spend as nearly as possible the amount budgeted. It may be that a further tightening of procedures could reduce contract prices still further.

We have begun to be proud of our new hospital building programme. Far too many of our hospitals are old and out-dated, and this Government is tackling the problem with some vigour. But we need to re-present it, perhaps in a document with illustrations setting out the national plan for renewing our hospital fabric, and showing what has been achieved to date.

Roads

Over the last 3 years, capital expenditure on motorways and trunk roads has been 25% or more above the level of the late 1970s in real terms. Capital and current expenditure on local roads has been held steady.

Road-users are spending nearly £50bn each year on road transport. £11bn of this is paid in tax and duty - roughly four times the public expenditure on roads. 60% of all households have at least one car, and for households headed by an employee or a self-employed person, the proportions are 80% and over 90% respectively. Road traffic has increased threefold since 1961. Latest projections show this trend continuing, so that by 2000 there could be up to 50% more cars on the roads. As we are now planning to do with airports, there is a compelling need to follow and set out a coherent long-term roads policy. In the past, there has been too much wasteful muddling through.

Maintenance vs. new construction

The motorways of the early 1960s proved to be more popular than expected. As repairs were not carried out quickly enough, and suffered from cuts in programmes in the mid-1970s, we now face expensive structural renewal. Over an 8-10 year period, we will end up spending over £200m on

this, with the delay and disruption to motorways users put at an additional estimated £50m per annum.

Much of the recent 25-30% increase in capital expenditure on trunk roads has been swallowed up by motorway reconstruction. Department of Transport fear that the diversion of resources to motorway maintenance is increasing the backlog of maintenance work on other roads. They foresee the backlog mounting rapidly from 300 miles now to 500 miles in 5 years' time, and 700 miles in 10 years. Local roads too, they believe, are deteriorating, and our bridges and viaducts are also in need of repair. Major work is needed on the Severn Bridge and the Midland Links Viaducts. There are also fears about the durability of concrete in some of our structures, because of the interaction of the cement with certain aggregates used in earlier construction.

Some of this reflects the usual lobbying by a spending department. Much of their information comes from the industry dependent upon maintenance and reconstruction contracts. Some of it reflects the way in which traffic growth and the axle weight of traffic has increased beyond all reasonable forecasts in the early 1960s. But given the way they think about the problem, more of our road budget will be taken up on reconstruction work; and the maintenance backlogs as they record them will grow, enabling lobbies to build around the theme that we are neglecting the infrastructure.

A policy for roads

New roads must be built to high standards with low maintenance costs in mind. The Victorians can still teach us lessons, as they had unshakeable confidence in the future and built to last. Engineers have been working to too tight a set of tolerances on specifications, egged on by Treasury-type analysis, using high real-terms discount rates which puts most of the emphasis on saving initial capital cost without worrying about subsequent high-cost maintenance. Transport are beginning to improve their specification to rectify this problem.

For new construction, we need to set out clearly to the public our priorities, including the expansion of the network of motorways and primary trunk roads; the relief of London's traffic problems (neglected under the GLC); and our bypass programme. We need to reduce the average of 11 years from inception to the start of construction for new trunk road schemes (Patrick Jenkin's Planning Review should help); and to consider the balance of the future road programme (see Annex of likely new road programmes; map available in the Policy Unit if required).

The execution of new construction projects offers considerable scope for savings. The Endacott Report brought out large over-runs on contract costs. The M25 work in the Heathrow area is over-running the estimate by over 40%.

There have been many areas of defective work, particularly with bridges and overhead sections (Spaghetti Junction, Severn Bridge, and sections of roads - as with the M40 in the Chilterns - where there have been design and fabrication errors).

The latest Supply Estimates do show considerable savings being achieved as the construction industry is becoming more competitive. But this should not allow us to relax, as there are still design and supervision failures that are all too costly.

Prisons

Prisons and Crown Courts

There is a large prison building programme with some quite significant cost over-runs. Wymott (+40%); Frankland (+20%); and Bicester (not yet started, +16%). Seventeen major Crown Court buildings are under way. The recently completed Crown Court in Liverpool exceeded the estimate of £37m by almost 50%.

The PSA

Although a larger number of buildings are now completed on time and to budget, there are still some big projects that go awry. The Wellington Barracks has proved to be all too costly, and many defence projects seem to over-run.

Conclusions

Management of contracts

You could ask the Efficiency Unit to remind departments of the need for good contract management within government, paying particular attention to:

- a. Ensuring the design problems are thought through before the contract is let: all too often expensive renegotiations take place with the contractor once he is on site.
- b. Ensuring that most contracts are usually put out to competitive tender, and that adequate protection is taken to ensure that there are no bidding rings.
- c. An investigation into the balance between initial capital cost and subsequent maintenance costs.
- d. An examination of whether over-specification (as opposed to high standards of construction) is a common phenomenon.

Presentation of the Government's case

You could write to Norman Fowler/Kenneth Clarke in Health, and Nicholas Ridley for Roads, that in these two areas in

particular, the Government accords capital spending a high priority, and is undertaking a firm programme to renovate the hospital sector and extend the road network.

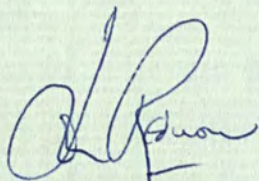
A statement of what has been achieved and what can be achieved in the next 3 years could be considered for these two areas.

The Government should stress that it is rebuilding the infrastructure where necessary, but that not all capital spending is worthwhile or to be encouraged.

Policy Review

It would be worth having a meeting on the roads programme to explore with Department of Transport:

- a. The balance between remedial maintenance, reconstruction and new construction.
- b. The shape of the road programme over the next 4-5 years and what can be achieved.



JOHN REDWOOD

(David Hobson has researched cost over-runs and contract management. John Wybrew has worked on the roads programme.)

Major Improvements (Costing more than £20m) to Trunk Roads and Motorways
Completed between Spring 1979 and Spring 1985

1. A3(M) Horndean-Bedhampton
2. M26 Dunton Green-Wrotham
3. M20 West Kingsdown-Wrotham
4. M67 Denton Relief Road Stage 1
5. M25 A111-A10
6. M20 Sellindge-Folkestone
7. M20 Ashford-Sellindge
8. M63 Stockport East/West Bypass
9. M25 Yeoveney-Airport Spur
10. M602 Extension
11. M25 A12-M11 Contract 1
12. M25 A12-M11 Contract 2
13. M25 A13-A12 Contract 3
14. M25 A10-M11 Contract 1
15. M25 A10-M11 Stage 3
16. M1 Widening
17. M65 Burnley-Huncoat
18. Chertsey-Wisley *M25*
19. A5 Milton Keynes Bypass
20. Ladymead-Burpham *A3*
21. Mar Dyke-East of Grays *A13*
22. A120 Colchester Eastern Bypass
23. A19 Billingham Diversion
24. A45 Ipswich Bypass (Orwell Bridge)
25. A180 Ulceby - *Grimsby*
26. M25 M4-Maple Cross (M40-Maple Cross Section)

N.B. TO BE READ IN CONJUNCTION WITH PROGRESS MAP (BLUE DOTS)

Major Improvements (costing more than £20m) to Trunk Roads and Motorways due to be completed between Spring 1985 and Spring 1988

1. M25 M4-Maple Cross (M4-M40 Section)
2. M25 Airport Spur to M4
3. M25 Swanley-Sevenoaks
4. Micklefield Green-South Mimms Contract 1 M25
5. M25 Micklefield Green-South Mimms Contract 2
6. M25 Micklefield Green-South Mimms Contract 3
7. M25 Micklefield Green-South Mimms Contract 4
8. A1(M) Roestock-Stanborough
9. A406 South Woodford-Barking Relief Road
10. A20 Sidcup Bypass
11. A406 Hanger Lane-Harrow Road
12. A12 Chelmsford Bypass
13. A45 Ipswich Bypass (Western Section)
14. A361 North Devon Link Stage 2A (Tiverton-Newtown)
15. A38 Marsh Mills-Manadon
16. M42 Bromsgrove (Umberslade Section)
17. M42 Tamworth (Kingsbury Section)
18. M42 Tamworth (Water Orton Section)
19. M63 South docks Road, Hull
20. A6138 Kirkhamgate-Dishforth (A63 Austhorpe-Al Branham)
21. A629 Airedale Route, Kildwick-Beechcliffe
22. M63/M66 Portwood-Denton
23. A6 Chapel-en-le-Frith Bypass
24. A27 Havant-Chichester Bypass
25. M5 Widening and reconstruction, Warndon-Catshill

N.B. TO BE READ IN CONJUNCTION WITH PROGRESS MAP (GREEN DOTS)

Major Improvements (costing more than £20m) to Trunk Roads and Motorways due to be completed after Spring 1988

1. M3 Bar End-Compton
2. M20 Maidstone-Ashford
3. A20 Folkestone-Dover
4. A406 Popes Lane-Western Avenue
5. A406 Falloden Way-Finchley High Road
6. A406 Great Cambridge Road (A10) Grade Separated Junction
7. NOT ALLOCATED
8. A406 Regents Park Road Junction
9. A406 East of Silver Street-A1010
10. A406 Chingford Road-Hale End Road
11. A406 Dysons Road-Hall Lane
12. A406 Wilmer Way Grade Separated Junction
13. A406 Green Lanes Grade Separated Junction
14. A406 East London River Crossing
15. A12 Eastway-Eastern Avenue
16. M40 Oxford-Birmingham (Otmoor Section)
17. M40 Oxford-Birmingham (Banbury Bypass)
18. M40 Oxford-Birmingham (Gaydon Section)
19. M40 Oxford-Birmingham (Warwick Section)
20. A43 Peartree Hill-Wendlebury Improvement
21. A47 Norwich Southern Bypass
22. A604 M1-A1 Link (M1 -Kettering)
23. A604 M1-A1 Link (Kettering Section)
24. A46 Leicester Western Bypass
25. A42 Castle Donington
26. A42 Measham-Ashby Bypass

continued

N.B. TO BE READ IN CONJUNCTION WITH PROGRESS MAP (RED DOTS)

27. A446 Essington-Bassetts Pole
28. A5 Telford-Shrewsbury
29. A564 Stoke-Derby Link (Derby Bypass-Derby Spur)
30. A46 Newark Relief Road
31. M66 Denton-Middleton
32. A6(M) Stockport North/South Bypass
33. A650 Airedale Route, Shipley Eastern Bypass
34. A1 Kirkhamgate-Dishforth (A1 Improvements Wetherby-Dishforth)
35. A6125 Newcastle Western Bypass
36. A428 Bedford Bypass
37. A27 Brighton Bypass

N.B. TO BE READ IN CONJUNCTION WITH PROGRESS MAP (RED DOTS)

It is likely that further proposals for major improvements will be added to the programme of road schemes following studies being carried out by the Department's consultants and the programme review which is currently under way.

PRIME MINISTER

Infrastructure

You asked to discuss John Redwood's note. You also suggested that you might circulate a paper to Cabinet on infrastructure. It seems to me that John's note contains three suggestions:

- (i) Better publicity for the Government's case.
- (ii) The size of the roads programme and the priorities within them.
- (iii) The management of Government capital projects.

In each case different Ministers will be in the lead, e.g. Lord Whitelaw on (i), Secretary of State for Transport on (ii), and Treasury/Environment on (iii). The officials involved are also likely to be different. This points to setting out three separate remits rather than trying to roll them up into one.

AT

Andrew Turnbull

18 April 1985