

## URBAN PLANNING

In a study of the City of Sydney Strategic Plan—an examination which informs the area of urban planning and focuses on the problems facing all city planners — DR JOHN PATERSON, managing director of John Paterson Urban Systems Pty Ltd, of Melbourne, argues that while the plan is excellent in many of its details, it is completely lacking in economic logic, and presents no real quantitative support for important choices which were made by the planners. Techniques of evaluation are available and are well known in the profession. It seems remarkable, Dr Paterson says, that no significant effort was made to determine whether the plan was economically viable and, if viable, whether it was socially desirable.

# Can we afford it—and do

THE City of Sydney Strategic Plan proposes to put between 360,000 and 400,000 jobs in the 315 acres of the Tank Stream, midtown and Brickfield Hill precincts of the central business district (CBD) by the year 2000.

The CBD of Sydney is already by far the most highly capitalised piece of real estate in the whole of Australia.

Capital investment currently involved in making the central area work includes not only the surface circulation system and the buildings in the CBD itself, but also the underground rail system, the extensive reaches of road and rail lines, the Harbour Bridge and other transport facilities necessary to carry the unidirectional peak loads towards the centre each morning and to carry them home again in the afternoon.

The plan envisages that central area employment will grow by at least 50 per cent over the next 30 years and puts forth a number of proposals for improvements in transport facilities and for changes in the land use mix which will involve very large capital expenditure during that period.

The level of capital expenditure required in total from the public and private sectors is not evaluated anywhere in the report.

The cost per additional worker in the CBD will depend very heavily on whether or not actual growth in the year 2000 is of the order presented by the planners.

If growth were to stop tomorrow and were to be diverted to other parts of the city and the metropolitan areas, then capital expenditure related to central area facilities could justifiably be held at a low level.

On the other hand, should the upper projection of 400,000 workplaces by the year 2000 be met, then a vast program of public construction works and private building will be called for.

Capital expenditures per worker will be of the order of three to four times the average expenditure per worker required to provide a workplace anywhere else in Sydney. This is not necessarily undesirable.

A huge volume of social sources will inevitably be involved, and the actual scale of the required works program will be highly sensitive to the growth actually occurring.

It would appear that a major effort should have been made by the planners to test and validate their predictions of central area growth.

Evidently the planners saw it differently. The projections made were of almost a frivolous nature. They were simply extrapolations of past trends.

The past trends are based on data of dubious validity because certain important variables were operating on the growth rate during the 1960s which cannot be expected to operate in the future.

The seriousness with which the planners took their growth

projections is perhaps indicated in that they command as much space in the report (one page) as do views of the Queen Victoria building interiors circa 1898.

I am in no position to say that the projected growth will not be achieved. However, I believe there are good reasons to doubt that it will.

It would involve a rate of growth of central Sydney which is not being matched in other large cities in the world at the present time. Sydney may be unique, but if so, the planners have some responsibility to tell us why.

From a reading of the report it would appear that a fundamental variable in determining the level of central area growth was not even considered when the projections were made. This was the future demand for premium office space.

The plan lays heavy emphasis on reducing CBD, floor space ratios to a low level and then permitting bonuses in return for certain desirable forms of activity within buildings.

### Intuitive

Consequently the provision of shops at ground level, or cinemas, or plazas, or contributions to the pedestrian circulation system earn floor space ratio bonuses.

This implies that the planners take the view that private developers will be able to let the office space created at a sufficient rent to cover the cost of office space and to pay what amounts to a direct subsidy to the building space applied to non-office uses. Again this may be true.

I know of no precise estimate of the average rental implied by the floor space ratio codes shown in the plan and attendant documents. However, it is likely that a rent of about \$12 per sq ft may not be too far from the mark in the commercial core.

While a certain amount of office space has been let at these rates, particularly during the boom years of the late 1960s, it is now questionable whether this premium market is growing at any considerable rate.

The success of North Sydney and other decentralised office areas supports this assertion.

From an economic point of view, the CBD proposals involve a heavy cross-subsidisation of non-office uses by office space.

If there is a large enough market for office space at the rents necessary to pay this premium, then the plan could succeed. Otherwise it must fail.

This would appear to be a vital point for the planners to have evaluated. There is no evidence in the report that it was considered.

The lack of economic evaluation, indeed the complete lack of any effort to put numbers to the implications of the plan, runs right through the report.

It is intriguing, for example, to observe the pedestrian densities implied for the street system by the number of people proposed to be working in the CBD and to contrast this with the perspective sketches in the report which show largely deserted streets with

a few cars and a handful of pedestrians standing around in picturesque attitudes.

The gulf between implied numbers and stated concepts makes one wonder about the research and analysis undertaken in the formulation of the plan.

The planners argue passionately that office development should be concentrated in the Tank Stream area of the existing central business district. This may be so and it may be that strong social arguments can be made in support of the proposition.

The only effective argument actually made in the document, however, is that, from a transport point of view, it is easier to cater for southward extension of the existing CBD, than it would be to engineer for development at Woolloomooloo or Pyrmont or other locations.

Appendices to the report indicate that the transport facilities required within the proposed future CBD will be extremely expensive to construct, yet office development in the Woolloomooloo basin is ruled out simple because of interchange problems of the Town Hall Station.

No effort is made to work out the relative cost of providing interchange facilities at Town Hall as compared with constructing pedestrian and vehicle movement systems and the model interchange facilities implied by the proposed concentrated growth in the central area.

Other aspects of pedestrian circulation, discussed in a highly general way and in terms of novel technologies, appear in fact to have been given scant attention from a quantitative point of view. The William Street (boulevard) precinct is a case in point.

The road is seen as a major traffic artery and engineering problems are recognised as likely to arise from heavy traffic flows of conflicting north-south, and east-west vehicles. Yet the walkways on either side of this major traffic artery are conceived to be suitable for a grand boulevard.

The environmental effects, noise and air pollution, of a slow moving traffic stream on the pedestrians promenading on the boulevard appear not to have been considered.

The flanking buildings, proposed to present a continuous frontage of hotels, shops, showrooms and entertainment uses linked by subway arcades under the streets and topped by hotel, entertainment and consulting rooms, offices and residential uses will doubtless provide an impressive built-up strip between Kings Cross and College Street.

It may however, be predicted that the principal pedestrian flows along the boulevard will be peak flows emerging from the offices, shops etc over a 20-minute period in the late afternoon and converging on Museum Station.

Back-of-the envelope calculations suggest that footpath widths of something like 10 metres would be necessary under crush conditions to carry such a volume of pedestrians in the vicinity of Museum Station. Stairways in the station of approximately 15 metres will be required.

There is a sharp contrast between the vague concept of a pedestrian promenade or boulevard, and the reality of a 10 metre wide stream of pedestrians, 20 to 30 people, walking shoulder to shoulder at high speed during the peak hours.

I believe that many people would find this a frightening prospect rather than an appealing one. Yet, as far as can be told, the interchange problems at Museum Station have not been evaluated and are not seen to be in any way significant as were the interchange problems at Town Hall.

### High rents?

The functioning of areas outside the CBD appears to have received no real thought whatsoever. Hunches or intuition by the planner seem to be the sole basis for the highly specific proposals made for particular precincts in the plan.

A case in point is the Woolloomooloo area. Woolloomooloo is undoubtedly ripe for redevelopment. It is undoubtedly going to see a major rise in the density of activity because of the already committed development of the Commonwealth Centre employing 15,000 people, if for no other reason.

Substantial interchange facilities will thus be required within the city rail loop to handle passenger flows to Woolloomooloo.

The plan however forsee Woolloomooloo as suitable for predominantly residential use. The nature of the Woolloomooloo precinct will be substantially changed when the Eastern Distributor is constructed.

If the CBD grows to over 360,000 workers as intended, then for four hours a day the eastern distributor will be occupied by three lanes of virtually stationary traffic, seeking parking

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## we want it?

places in and around the central area.

Woolloomooloo is in a depressed basin where wind movements are relatively sluggish. It can be predicted that noise and atmospheric pollution densities will climb to very high levels at least in the am and pm peaks and in all probability for long periods during the day in the hot months.

This may not matter for air-conditioned offices with double glazing but would preclude all but the most highly capitalised forms of residential development since air-conditioning throughout will be required in such an environment.

On the other hand, the Woolloomooloo precinct offers a possibility of office development which could be economic at rents of \$6 and \$8 a sq. ft., very much less than the rents which would be required in the CBD.

The planners may not regard it desirable that low cost office accommodation should be available in the City of Sydney. However, no real arguments are presented for this view.

It would seem inevitable that if low cost office use is restricted in Woolloomooloo it will simply cross the bridge to North Sydney and other points on the North Shore, where commercial redevelopment is already strongly under way.

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One would have thought that accommodation of this sort, mixed with low-intensity offices and other forms of land use which would not be able to find a place in the high cost central area, would have been complementary in their activities to the Kings Cross precinct and would have strengthened the night-life of that area.

land values, noise, bustle, confusion and restricted access is not considered.

The mid-town precinct is seen as potentially the largest, most exciting, intense, specialised, diverse and interesting shopping centre in the nation.

It is held to be capable of maintaining a total of three million sq ft of retail selling space over an average of at least three levels. We are not told what degree of cross-subsidisation from other forms of land use or in the form of rate or land tax concessions would be required to make this occur.

It is quite likely that if employment in the central area were to stop growing right now, then retailing may, in fact, find a new equilibrium and thus find a permanent place in the Central Area system.

It seems highly unlikely, on the other hand, that at the activity densities proposed for the Tankstream and Midtown areas, there will be a sympathetic environment for low intensity uses such as retailing in the central core.

The Midtown and Tankstream precincts have both become more specialised in their natures and have seen rapid change in uses over recent years. Hotels, restaurants, and other night-life type activities, together with some retailing, have however found their way into other parts of the city and in particular into Kings Cross.

In the large cities of the Western world the bright lights area is rarely combined with the main commercial office area. Yet for some reason the Sydney planners appear to have decided, in the face of all evidence to the contrary, that this is an appropriate mix of activities for Sydney.

By flying in the face of economic forces instead of attempting to bend and channel them, the planners have ensured that the plan will fail to see realisation.

Planning can do much to mould the urban environment. It cannot and should not attempt to create patterns which lack economic justification.

"Economic" is used here not in the sense of maximising private

gain, but in the sense of making efficient use of total social resources, both public and private.

The Sydney strategic plan is very much like Australian rural and tariff policies. It proposes a vastly expensive and uneconomic structure and devises various manipulations of the market, prohibitions, restrictions and subsidies in order to confirm the dubious projectives from which that structure derives.

The ungainly and uneconomic result which emerges in due course crashes under its own weight, but only after extensive waste of community resources and painful and expensive re-thinkings.

Australia is in the process of rationalising its agricultural economic structure and in the process of rationalising the tariff structure. Let us try to avoid building into our cities the ungainly economics of cross-subsidisation, quantitative restrictions and controls based on ill-conceived aesthetic and political judgments.

The Sydney strategic plan is long on imagination and short on economics and arithmetic. It would appear likely to crash in a short time because the anomalies I have indicated will emerge as attempts are made to implement it.

It is to be hoped that the Sydney City Council will be quick to recognise failure as weaknesses in the logic of this particular plan, rather than planning in general?

The Woolloomooloo precinct would appear to be an ideal location for tourist facilities since it puts them in close proximity both to central Sydney and to Kings Cross.

This brings me to a final major point of criticism of the plan. Some strange and totally untested preconceptions appear to lie behind the combinations of land use which the plan seeks to foster. By way of example, we may consider the uses thought appropriate for the central area.

Central area retailing in Sydney has been stagnating for many years. A number of reasons for this are advanced in the report, of which competition from suburban centres, high operating costs, high land tax and rates, and congested traffic conditions are the most important.

The hypothesis that central area retailing may be declining because there is no real economic justification for this type of activity in an area of premium