CHAPTER 6

The Socio-Economic and Planning Consequences of Changes to Shopping Trips

6.1 The Problem of Shopping Times and Shopping Places

The retail aggregate space-time trip (RASTT) model assumes that 'where' and 'when' people shop are fundamentally interconnected. This model has been applied in the previous chapters to a number of time-space contexts. One of the major conclusions, coming explicitly from the testing of this model, is that time is not benign in its impact on retail hierarchies. The planning implication is that shopping hours can substitute the equivalent of retail floorspace. The unfortunate thing for planning authorities is that there is no coincidence between central shopping places and locations of time convenience. This is because, theoretically, in the time-space convergence, the spatial function (β) is linear but the time function (k^2) is quadratic ($\beta = k^2/M$). This means that there is an area of accessible time convenience surrounding the line joining an origin-destination pair in space. Off-centre retail locations can therefore become centres of time convenience under trading hour deregulation.

Central time locations can occur along major arterial roads rather than town or suburb centres. For example, the sites of 24-hour large supermarkets in southern Sydney in 1995 were not in the regional centres of Hurstville and Miranda but along the major southern arterial roads at Ramsgate and off the Princes Highway at Kareela (see Chapter 2, Figure 2.6). Trading hour deregulation allows for new central time places to be successfully located away from traditional central places in areas of time convenience. This provides many major commercial opportunities for new developments. Consequently, it is not surprising that, after the deregulation of shopping hours, there was a proliferation of new shopping developments in off-centre locations in the UK in the 1980s and NSW, Victoria and Queensland in the 1990s.

Ferris (1990) argued that the inability of store owners to discriminate between consumers on the basis of distance, or time of day, gives the owners the incentive to compete for marginal customers by increasing shopping hours. In other words, an increase in trading hours increases market area and, implicitly, is equivalent to the expansion of retail floorspace. For example, a 3000 sq m supermarket trading 24-hours per day may have the same trade area as a 4000 sq m supermarket operating 14 hours per day. Shopping hour deregulation appears, in Chapter 4, to have led to a shift towards 'large centre' behaviour and higher frequency behaviour, underpinned by the multi-purpose trip. The reason for such a shift towards 'large centre' behaviour is simple: longer hours allow mobile affluent consumers, living a greater distance from planned shopping centres and major supermarkets, the ability now to access shopping opportunities not previously available from the restricted

hours. This greater propensity to travel further to larger retail units is at the expense of local shopping patronage in lower order centres. The growth in multi-purpose shopping is more puzzling, but it means that supermarkets, with their functional diversification can capture such trips as part of one-stop shopping convenience on their floorspace. Both trends appear to have seriously undermined the viability of many small businesses in traditional shopping hierarchies. The corollary to this substitution for space by time and the expansion of primary trade areas of higher order retail centres, is a higher demand for shopping at planned shopping centres, large hypermarkets and supermarkets at the expense of local shopping centres. The result is the rise in vacant shops and the loss of retail amenity and variety in these town and neighbourhood centres. This has been a feature of the retail landscape in south-east Australia, since the effective deregulation of trading hours in NSW in 1992 and Victoria in 1996 and deregulation (including Sundays from 2002) in Queensland. This feature is not peculiar to Australia, but also widespread in the UK and Canada (Baker, 2002).

This chapter looks at what underpins the proliferation of vacant shops in the 1990s in these retail landscapes. What are the economic consequences of changing the character of trip assignments to supermarkets and planned shopping centres? Their impacts on shopping precincts have been observed in the UK and in New South Wales, Australia. Further, the role of carparking and distance-minimising walking strategies, investigated in Armidale, New South Wales, show the importance of supermarket and bank location as anchors to the spatial distribution of shopping trips. In the time-space convergence, the distance that consumers are prepared to walk can also have a significant impact on the viability of retail precincts. Despite technological change in accessibility, through the automobile and the Internet, estimating what is 'walking distance' is critical in successful retail planning. Shopping trips, whether real or virtual, walked or driven, have planning policy implications. These issues are briefly reviewed with reference to the RASTT model.

6.2 The Role of Parking and Walking

A fundamental component of the shopping trip is the walk from the carpark (origin) to shops (destinations). Such a trip is part of the time-space convergence and walkers are assumed to minimise distance as part of time-discounting behaviour (Figure 1.5). Therefore, the same operators as the Internet should govern a walk to the shops. This is a significant but unexpected conclusion.

'Tracking Armidale' (1995) was a project funded by the University of New England to study the distance consumers were prepared to walk from carparks in Armidale and the sequencing of shop visitations within the shopping trip. Shoppers were tracked at a distance from carparks at K-mart, Woolworths and behind the Commonweath Bank. There were 179 consumers tracked on Saturday morning 11th, Tuesday afternoon 14th, Thursday morning 16th and Saturday morning 18th of November, 1995. The routes were plotted around the mall, any purchases made were