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**PART 1**

*Issues,  
objectives,  
concept  
and process*



# Issues, objectives, concept and process

## 1.1 Purpose

### 1.1.1 The purpose of Part 1

The purpose is to:

- examine the issues associated with the conflict between traffic and frontage functions;
- list the basic objectives;
- outline the concept of environmental adaptation;
- indicate the process; and
- stress the need to involve the stakeholders.

### 1.1.2 The focus

Most roads and streets have movement and frontage access functions. On some roads, the traffic function is dominant and the frontage activity functions must be adapted to this traffic function. These, typically, are arterial roads with major through traffic functions (*'Type I' road/ environments*). On other roads and streets, the frontage activity function is dominant and the traffic is, or should be, subservient. These comprise residential streets and streets used for access and circulation within commercial centres. Local area traffic management is especially

appropriate here (*'Type III' road/ environments*).

The Guidelines are concerned with *'Type II' road/ environments* (Fig. 1.1). These are roads where both traffic and frontage functions are important - although their relative importance may change during the day, week or year (e.g. during peak hours or tourist seasons).

The Main Street of rural towns and sub-arterial roads in urban areas are examples of *'Type II' road/ environments*. The traffic functions consist of local and through vehicular traffic (including buses and cyclists) and pedestrian traffic, on-street parking and delivery, and parking manoeuvres. The frontage activity functions comprise the retailing, services and special buildings which attract people and their vehicles to the centre.

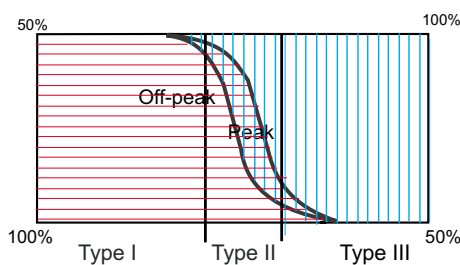
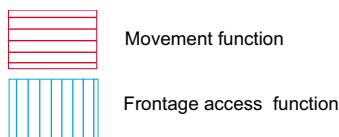


Fig. 1.1 The focus of the Guidelines is on Type II road/environments.

## 1.2 Issues

### 1.2.1 Understanding the critical issues

Environmental adaptation requires an understanding of the issues associated with the conflict between pedestrians and vehicles and the factors that are important

in the management of the road space and its frontage.

There are four critical issues:

- the transport function
- the frontage function
- traffic management
- the road as a space.



Fig. 1.2 A typical Main Street (Ulladulla, before partial adaptation).

Fig 1-3 A typical sub-arterial road (Archer Street, Chatswood).

**1.2.2 Issues associated with the transport function**

There are three types of vehicle movements which are relevant in Type II road/ environments: local travel; regional travel with a destination in or near the Main Street or sub-arterial centre; and through traffic. The local and regional traffic is the result of the service function of the centre and its relationship with its hinterland. In many rural towns, the main highway runs through the Main Street.

The roads may have been upgraded progressively and traffic volumes, speeds and heavy vehicles have increased. This has caused seven types of general problem (Fig 1.4):

- it becomes harder for pedestrians to cross the road safely

There usually are few designated pedestrian crossings. “Mid-block” crossing or jay walking are common, and can be hazardous when roads are wide, traffic speeds and volumes are high, or vision is impaired. The incidence of jay running is a sign of a mismatch between vehicle flows and speeds and pedestrian desires to cross the street.

- pedestrian safety is affected

Vehicle speed is one of the critical factors in pedestrians crossing and correctly selecting safe gaps in the traffic stream. Below 25 km/h, accidents involving pedestrians are seldom serious, but above 50 km/h, fatalities often occur (Fig 1.5). Pedestrians misjudge vehicle speeds in excess of 50 km/h. The problem is aggravated when traffic volumes are high, there are few gaps in the traffic stream, there is no median to permit crossing in stages or there are many aged pedestrians (see Section 2.3.9).

- it becomes more hazardous for cyclists

The absence of lanes and right hand turns at intersections for cyclists makes cycling hazardous when traffic volumes and vehicle speeds increase and there are more heavy vehicles.

- traffic noise is increased

Traffic volume, vehicle speed, the proportion of heavy vehicles in the traffic stream, and the grade and pavement design of the road influence the level of traffic noise on the footpath. An ambient noise level of 65 dB(A) at the footpath is considered reasonable and 68 dB(A) the maximum acceptable in a shopping centre. These noise levels are expressed in  $dB(A)L_{10,18hr}$  which represents the noise level which is exceeded for 10% of the time averaged over the period 6 am to midnight.

The CORTN Manual (U.K. Department of the Environment, 1975) can be used to make predictions. It can be shown that the lowest traffic noise levels are produced when vehicle speeds are about 30 km/h (Fig 1.6). With vehicle speeds at such level, and assuming not more than 10 per cent of heavy vehicles, the maximum acceptable noise exposure on roads of 20 metres width is likely to be exceeded when traffic volumes are greater than 12,000 - 13,000 vehicles (during an 18 hour period).

- air quality also is a factor

Similar factors (with the addition of vehicle technology and type of fuel used) contribute to air pollution. There are different types of pollutants with different impacts. In very general terms, air quality can become an issue in areas where there are pedestrian concentrations and traffic volumes greater than 12,000 vpd.

- driver vision is confined

Vehicle speed affects the angle of vision of a driver (Fig. 1.7). At high speeds the driver’s peripheral vision is narrowly focussed, but at lower speeds the driver can take in much more of what happens in the street space and respond accordingly.

- stopping distance is increased when speeds are high

At speeds of 50 km/h, the average stopping distance is 27.2 metres; at speeds of 25 km/h it is 9.6 metres (Fig. 1.8).

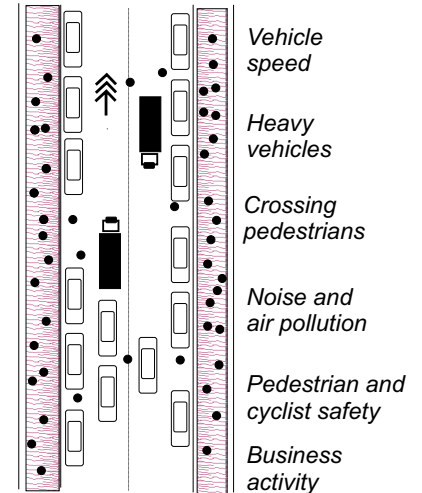


Fig 1.4 Issues associated with the traffic function

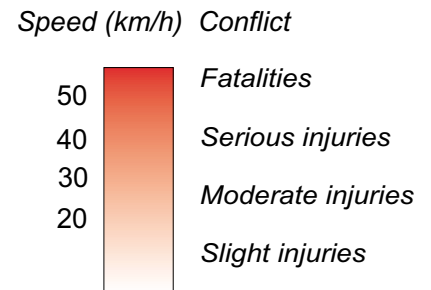


Fig. 1.5 Pedestrian and cyclist safety and vehicle speed

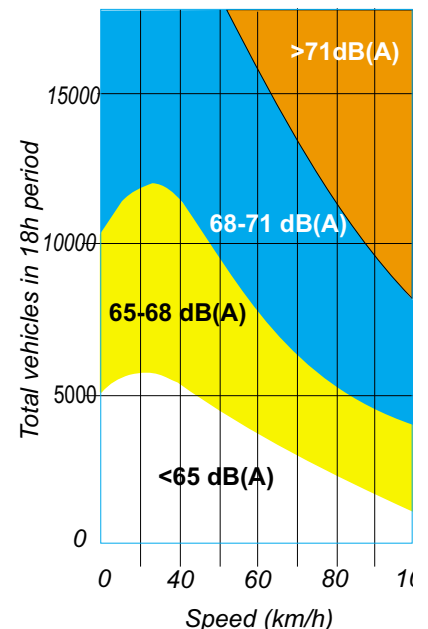


Fig 1.6  $dB(A)L_{10,18hr}$  noise level related to speed and volume (with 10 per cent of heavy vehicles and level grade)



Vision at 50 km/h



Vision at 25 km/h

Fig 1.7 Peripheral vision and speed

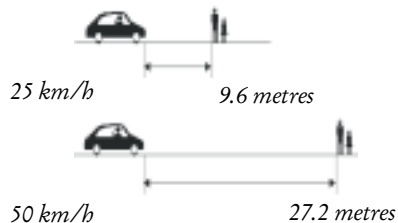


Fig. 1.8 With increased speed, the stopping distance is increased

- heavy and large vehicles affect the pedestrian environment

The presence of heavy vehicles in the traffic stream affects the visibility of pedestrians crossing, increases noise

exposure levels and further contributes to a reduction in air quality.

Large vehicles, such as buses, reduce the ability of crossing pedestrians to see other vehicles.

### 1.2.3 Issues associated with the frontage function

The frontage function of the Main Street or sub-arterial shopping centre attracts trade, pedestrians and bicycles, and vehicles which need to park or service sites. Some businesses depend on the passing trade and on patronage close to bus stops.

Centres may have grown over time and, as centres become larger and more diversified, pedestrian activity is increased and people make multiple purpose trips. This has caused the following problems (Fig. 1.9):

- frontage activity attracts pedestrians with a potential for conflict with moving vehicles

Pedestrian movements in the Main Street or sub-arterial centre are a measure of the activity of the centre. They depend on the amount and type of land-use activities and how they are distributed. Centres may be long ribbons extending for more than 1000 metres in large centres with different attractions e.g active retailing, post office and local hotel. The greater the frontage activity, the more pedestrians there will be and the greater the potential for conflict with moving vehicles.

- pedestrian activity is often dispersed

In many centres there are long strips of shops often mixed with drive-in vehicle-oriented businesses near the fringe with the result that pedestrian activity is dispersed and the potential for conflict with moving vehicles is increased. Zoning plans seldom reflect the need to distinguish between pedestrian-generating and vehicle-generating uses.

- pedestrians who want to cross are delayed

Traffic volumes determine the presence of gaps in the traffic stream for pedestrians to cross the road. The distribution of these safe crossing gaps will influence pedestrian

delay (Guo, et al., 1998). When vehicle speeds are low, a higher proportion of crossers are prepared to jaywalk instead of using designated crossing facilities.

- people with impairment are not well catered for

One of the factors is the ability to cross. Wide carriageways increase the exposure time of pedestrians to moving vehicles. Typical crossing speeds for people with physical impairment is 0.5 m/s and 0.8 m/s for elderly. This compares with 1.2 m/s for adults and to 1.5 m/s for children (Studiecentrum Verkeerstechiek, 1984). A median strip allows pedestrians to cross in two stages, waiting for a gap in each of the two directions (Song, 1992). Kerbside parking reduces exposure time to moving vehicles.

Other factors to be considered in planning and design for people with

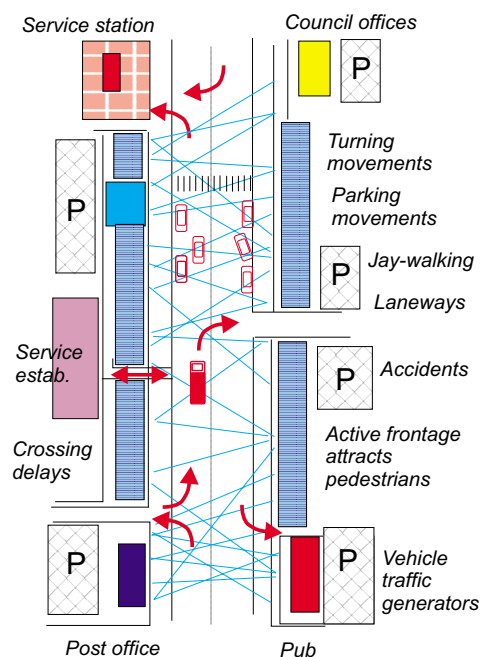


Fig. 1.9 Issues associated with the frontage function

impairment are addressed elsewhere in the Guide.

■ parking manoeuvres affect flow

Vehicles manoeuvring into and out of a parking space delay traffic behind them, depending on traffic volumes and vehicle speed (Black, 1992). When the number of parking movements exceeds 30 per hour along a 100m section, there is a discernible reduction in the average vehicular speeds of traffic in the adjacent through lane. With frequent manoeuvres, traffic speeds can decrease to about 20 km/h. This reduction may be beneficial if traffic speeds are to be decreased, but can reduce pedestrian safety if overtaking at higher speeds is attempted (Fig.1.10).

■ delivery/pick up from the kerb may affect flow

Many small retailing establishments do not have rear and side access with the result that loading and unloading occurs along the road frontage. Space for delivery and pick up must be provided at the kerb in front. This space may be used for parking and can lead to double parking which delays traffic or leads to potentially dangerous over-taking.

Double parking becomes a problem when traffic volumes exceed 800 veh/h (Allan, 1994), and if there is a median which prevents overtaking traffic from using a lane in the opposite direction. With double parking of large vehicles, pedestrian crossing and cycling become more hazardous because visibility is impaired.

■ parking restrictions can affect retail turnover

Parking restrictions associated with clearways affect the passing trade. Parking should be close by and clearly signposted to offset these disadvantages.

■ searching for parking space affects traffic performance

Slow-moving vehicles with drivers searching for a parking space affect the flow and speed of traffic and air quality.

■ activity centres require side streets

There is a need for internal circulation in activity centres with a greater frequency of side streets than is necessary for other land uses. However, some side streets can often be closed to increase footpath continuity and improve traffic flow (Fig. 1.11).

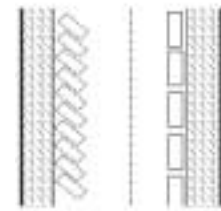


Fig. 1.10 Type of on-street parking affects flow. Parking layout and duration can be used to influence driver behaviour and to meet different needs during the day.

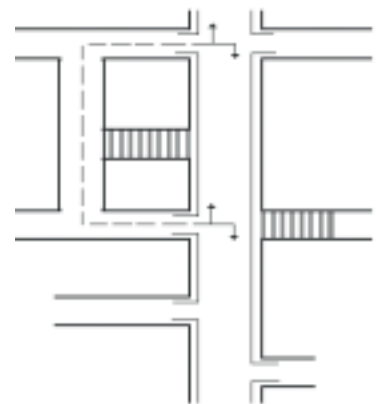


Fig. 1.11 Activity centres require side streets for internal circulation.

1.2.4 Issues associated with traffic management

Traffic management must take account of safety, yet facilitate vehicle movement, crossing pedestrians, parking, deliveries and many other factors. However, there are relationships which can produce problems when they are ignored:

■ parallel and angle parking

Angle parking tends to reduce vehicle speed in the adjacent lane more than is the case with parallel parking (Fig. 1.10). Replacing angle parking with parallel parking without narrowing the carriageway (or similar measure) is likely to lead to an increase in vehicle speed and diminished pedestrian crossability.

Bus stops are generally not compatible with angle parking. Where there are many access laneways from the front, angle parking may not be appropriate because

large vehicles need space to enter and exit.

■ duration of on-street parking

The number of on-street parking manoeuvres per space per hour during business hours is closely related to the time permitted for parking, and thereby can have an impact on vehicle speed. It also can have a bearing on the viability of businesses depending on passing traffic.

■ rear and front end angle parking

Both rear and front end angle parking can have a significant impact on vehicle speed in the adjoining lane and can be used as tools for speed reduction .

Rear end parking has a greater impact on the speed of traffic than front end

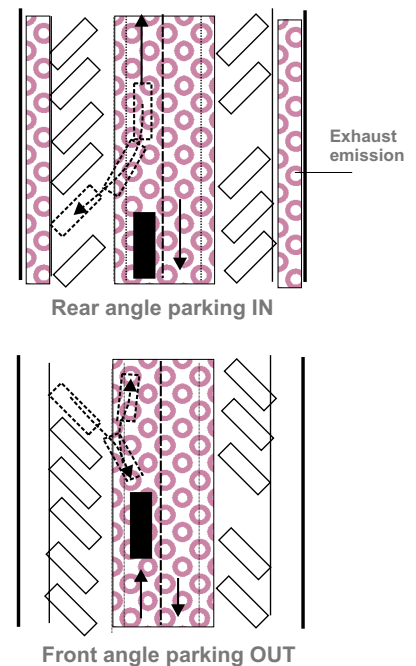


Fig 1.12 Front and rear end parking retard traffic flow. Rear end parking provides a better view of oncoming traffic when exiting from the parking space, but causes pollution on the footpath.

parking, but the safety comparison with front end parking is unresolved. Front end angle parking is more dangerous to cyclists, but exhaust fumes disperse towards the footpath affecting pedestrian amenity (Fig. 1.12).

For both rear and front end parking, there is a need for visibility space which allows drivers to see and be seen by oncoming traffic.

- peak hour clearways and S-lanes

Peak hour clearways and S-lanes (where right hand turning lanes are provided) are

sometimes used on sub-arterial roads to increase traffic flow by removing kerbside parking. The proximity of fast-moving traffic to the footpath increases traffic noise on the footpath and reduces the perceived safety of pedestrians, especially the elderly.

Small retail and office uses are most affected where the traffic or traffic management limit accessibility to the frontage (for vehicles as well as pedestrians).

### 1.2.5 Issues associated with the road as a space

The 'quality' of the road as a space can be expressed in amenity and convenience, heritage and character, and the appeal as a place to meet, do business and for special events. The overall quality of many Main Streets and most sub-arterial centres is often poor because of the following factors:

- catering for vehicles has been given priority

More attention has been given to facilitating traffic flow and parking than to the development of the space as an environment for people.

- footpaths are not attractive

There is discontinuity in shopping frontage and climate protection. Pavement materials, street furniture and landscaping are often sterile; traffic noise and vehicle emissions reduce the quality of the pedestrian environment.

- there are no bicycle facilities

Cycleways and secure bicycle parking are hardly provided in the development of the space.

- there is little appreciation of the wide range of users needs

For example, pedestrians comprise adults, elderly people, young people, mothers with prams, and people with different kinds of impairment. There are people

coming to shop, browse, sit and observe, meet others over coffee, or do business. They all have different needs.

- there is not a sense of social place

Frequently, the Main Street or sub-arterial centre is not a place for meeting others by choice, for pavement cafes to relax in or for holding stalls on a Saturday morning.

- facades are disjointed and cluttered

Many roads and main streets have a commercial and community centre which has developed over many years. Some may contain buildings of heritage character, but there are many buildings of dubious merit. Advertising on the facade generally lacks coordination and taste. Beyond the core there often is a mixture of activities ranging from service establishments and motels to isolated retail outlets of generally very limited (if at all) urban design quality.

- the road pavement dominates

The view of the Main Street or sub-arterial centre is often dominated by the road pavement. This tends to reinforce the vehicular function of the road and does not convey the shared nature of the space.

### 1.2.6 There are positive associations

This review of issues indicates that there is a conflict in functions between the road as a transport route and as a place for retail, commercial and community activity. However, there are also positive associations between the road as a transport route and the activities along its frontage.

- Service stations and motels serve tourists travelling on the route, and businesses are visible and accessible to the passing trade.
- The 'image of the town' or centre can present a distinctive character to the traveller, whereas freeway by-passes all tend to look the same.

- Public transport operates effectively where a number of trip generators are concentrated along the route.
- Main streets with moving vehicles and adequate street lighting provide a more secure environment for visitors and traders at night than a deserted pedestrian space.

The issues and solutions will be perceived differently by different stakeholders (such as the Roads and Traffic Authority, local Council, truck drivers, business community, local community and pedestrians). The aim of environmental adaptation is to develop and implement proposals which provide an acceptable and workable balance between these diverse interests.

### 1.3.1 Key objectives

The key objectives of environmental adaptation of the Main Street and sub-arterial roads are to:

- reduce conflict between pedestrians, cyclists and vehicles;
- increase safety of all road users;
- improve the quality of the road environment for all users;
- maintain/enhance the economic performance of the commercial functions along the frontage;
- consistent with the above, maintain/enhance the performance of the transport and parking functions on the roads in the area; and
- develop and implement an integrated plan which offers an acceptable balance between benefits and costs, is acceptable to the community and can be funded.

### 1.3 Objectives

### 1.4.1 An integrated approach

Problems of safety, conflicting functions, excessive vehicle speeds, high traffic volumes, crossing pedestrians, parking and access movements, noise and fumes, inappropriate location of activities and unattractive environment will occur to different degrees in a particular location.

*There is often an inclination to address a specific problem with a single solution, but experience shows that there usually are no single solutions and that solutions may create new problems elsewhere. For this reason, environmental adaptation should be approached in an integrated way.*

An integrated approach can involve making changes in the road and/or activity function, the design and management of the road space and the traffic within it, and the design and management of the frontage. Generally, there is a need for a strategic overview of the area as a whole (see Part 3) and for an assessment of the possible consequences beyond the adapted Main Street (Part 5).

A central feature of the concept in an integrated approach is the management of friction and impact.

### 1.4 An integrated approach

**1.4.2 Managing friction and impact**

There is a mutual dependency between the Main Street or sub-arterial road as an activity centre and the traffic along it, but there comes a point where it starts to break down. When the land-use activity in the Main Street/sub-arterial increases, the impediments for traffic travelling through it increase. This ‘friction’ consists of: frequent intersections, turning movements, parking manoeuvring, delivery of goods, and crossing pedestrians (many of whom are jaywalking). If the friction becomes excessively high, traffic speeds decrease, frequent vehicle delays may be experienced, vehicle operating costs rise and vehicle emissions increase.

Road users also vary in their response: through traffic (especially long-distance trucks) is much more sensitive to friction than local traffic, and peak hour traffic is more sensitive to friction than off-peak through traffic.

Conversely, if traffic volumes and speed increase, the quality of the centre is impaired. This environmental impact manifests itself in increased pedestrian delays and accident risks, parking difficulties, excessive traffic noise, loss of trade and an unattractive centre.

There are different tolerance limits for different activities and road users. Some

activities, especially those dependent on the passing traffic, such as service stations and take-away establishments, are not seriously affected by increasing traffic volumes, provided convenient off-street parking is available on-site.

Establishments which are partly dependent on the passing trade, such as delicatessen, newsagents and chemists or specialised retail outlets, are sensitive to the availability of frontage parking. Here, the mutual dependency breaks down when frontage parking is prohibited at times of the day or removed for traffic management reasons.

For all other activities there are limits as to how much impact they can endure. They depend on attracting pedestrians, but pedestrians are sensitive to the local environment, traffic speed, traffic noise and air pollution.

Environmental adaptation attempts to manage friction and impact in such a way that the general objectives of increased safety and amenity are achieved. It requires an approach which achieves desired behaviour through design and does not depend on police enforcement.

**1.4.3 Three related actions**

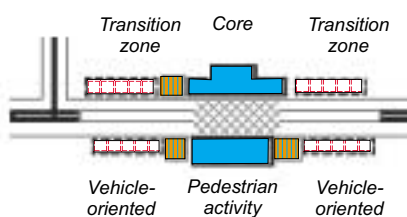
The management of friction and impact is done by three related actions:

- concentrating pedestrian-oriented activities in a ‘core zone’ and vehicle-oriented activities in adjoining ‘transition zones’ (Fig. 1.13)

Activities are grouped (or zoned) according to the degree of conflict with moving vehicles. Small retailing and personal service establishments are treated as pedestrian-oriented activities whereas drive-in commercial establishments are regarded as vehicle-oriented activities. An indicator of pedestrian-oriented activity is the number of pedestrians on the footpath

during the pedestrian peak hour per 100 metres of frontage.

The distribution of this pedestrian-oriented activity along the length of the Main Street or sub-arterial centre is called an ‘activity profile’ (Fig. 1.14). There is likely to be a different activity profile for each side of the street or road. The concentration of pedestrian-oriented activities in a core zone and vehicle-oriented uses in the transition zone is a long-term strategy and requires environmental planning initiatives. Market forces will generally determine the speed and success of the process.



*Fig. 1.13 Pedestrian-generating activities should be confined to the core.*

- reducing vehicle speed in the core and transition zones

Target vehicle speeds\* should be between 25 and 35 km/h in the core zone where pedestrian activity is greatest. However, as there is a potential for accidents if speeds are reduced suddenly, there should be a progressive reduction in speed.

The distribution of the target vehicle speed along the length of the Main Street or sub-arterial centre is called a 'speed profile' (Fig. 1.14). There may be a different speed profile for each direction of traffic flow.

The notion of target vehicle speed is explained in Part 2 (Section 3.3).

- enhancing the quality of the road space (Fig. 1.15)

The actions required to achieve the desired activity and speed profiles usually involve changes of the road space and road frontage. By selective application of design, construction and control measures, the quality of the road space can, at the same time, be improved.

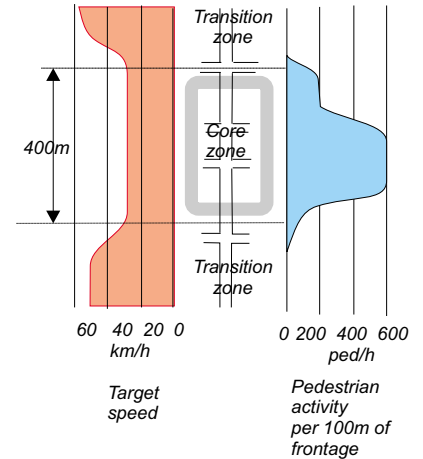


Fig 1.14 Establishing a concentrated pedestrian activity profile and a corresponding speed profile.

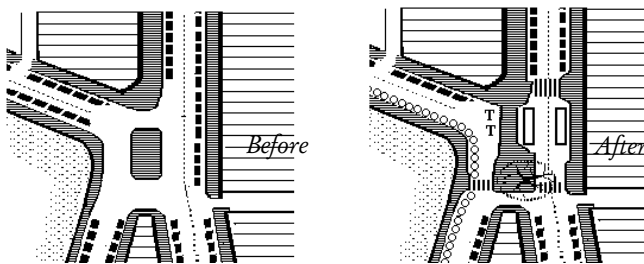


Fig.1-16 Creating a community focus as part of a project for environmental adaptation.

### 1.5.1 Steps in the process

Environmental adaptation requires a systematic process of problem solving. The steps in the process are outlined below.

#### 1. Project initiation

A project may be initiated by the Council, a community group, the local business association or any other interested party. It is important to identify the stakeholders at an early stage so that the different interests and priorities are understood and recognised.

#### 2. Understanding the problem

There is a need to identify actual and perceived problems. The actual problem may be of a technical nature and should be investigated. However, community input is essential and may well indicate other concerns which are not immediately apparent. The community should be involved in this step.

#### 3. Defining the study area

The focus of environmental adaptation will be confined to the Main Street or sub-arterial road, but the study area may need to be larger. There usually are

broader planning and development issues which influence the options available. Furthermore, introduction of a particular set of measures to solve a specific problem should not transfer problems elsewhere. Further details are provided in Part 2.

#### 4. Setting objectives

It is important to set clear and achievable objectives. The objectives for projects of environmental adaptation should be achievable in a reasonably short-term time frame and with modest expenditure. The objectives are derived from the problems identified (2) and should address:

- what the stakeholders want to achieve (with a focus on the end results desired); and, in respect of the Council,
- how the objectives serve the Council's corporate aims.

An example of the kind of objectives which may be determined is set out in Table 1-1.

### 1.5 Generic process

**Table 1-1: Example of defining objectives\***

1. To create an environment which will encourage motorists to drive with care and an awareness of safety of other road users such as pedestrians and cyclists.
2. To improve the physical environment by reducing traffic noise, vibration and vehicle generated air pollution, and to improve the visual appearance of the Main Street/sub-arterial.
3. To reduce the number and severity of pedestrian and vehicle accidents.
4. To reduce the volume of through traffic and heavy vehicular traffic using the Main Street/sub-arterial.
5. To reduce the speed of traffic to a level commensurate with the pedestrian functions of the shopping centre.
6. To encourage the development of land uses within the core of the Main Street/sub-arterial precinct which are compatible with the higher level of anticipated pedestrian activity.
7. To maintain an acceptable level of accessibility for all residents, customers, emergency vehicles, delivery and maintenance services and public transport within the Main Street/sub-arterial precinct.

### **5. Defining performance criteria for the project**

Before conducting a detailed investigation, consideration should be given to:

- What needs to be known to judge that the project is successful;
- what factors must be measured and what data must be collected;
- what opinions (e.g. the general community, business community) need to be monitored; and
- what performance criteria should be used for assessment and evaluation.

### **6. Developing strategies**

Strategies must be developed for each objective. It is useful to develop preliminary strategies as this will influence what data should be collected.

### **7. Collecting and analysing data**

Information required will depend on the nature of the problem, the objectives to be achieved, strategies proposed and funds available. Details are set out in Parts 2 and 3.

### **8. Developing integrated design and implementation options**

The principles of environmental adaptation are used to develop integrated design and implementation options. These options should incorporate control measures (of both frontage development and traffic) and design and construction measures (see Part 4).

### **9. Assessment**

The formulation of integrated options should be followed by an assessment of their likely consequences. The assessment should include the feasibility of a staged implementation program.

Information is provided in Part 5 and Appendix B.

**10. Evaluation**

Evaluation involves the making of judgements about the alternatives. The central question is how each alternative achieves the selected objectives and at what costs (see Part 5 and Appendix B). Many costs and benefits cannot be expressed in money terms and stakeholders will attach different value to them. The determination of preferences and priorities must, therefore, be made in consultation with the general and business community.

**11. Selecting the preferred option**

The preferred proposal is now determined and the objectives it will achieve are further clarified. Details of implementation, including staging and budgeting, are finalised.

**12. Making decisions**

The proposal - a summary of what it intends to achieve, costs and benefits, information on the degree of support, budget implications and implementation - is presented to Council for support and approval. It is possible that certain aspects

of the proposal may require further consideration and some steps may have to be retraced.

**13. Implementation**

Following Council approval, the proposal is implemented. Implementation may proceed in stages.

**14. Monitoring**

Once completed - in whole, or in part - the operation of the scheme is monitored (see Part 5).

**15. Review**

The results of the monitoring phase may lead to a need to make changes. In that event, parts of the process may be repeated.

The steps outlined above represent a generic model. They relate to strategic planning, concept planning, and design, with an exploration of options and a decision at each stage before proceeding to the next. An example is provided in Part 2.

In practice, the details of the study components may vary from this generic model.

**1.6.1 Recognition of the stakeholders**

Environmental adaptation projects often present a rare opportunity to revitalise the core of an established community. They can have a profound effect on behaviour, affect the business and general community, and can involve significant expenditure.

Effective public involvement and consultation in the development of a proposal for environmental adaptation are both crucial to its success. The project is likely to affect shop keepers, owners and tenants, office and shop-workers, delivery vehicle drivers, tourists and visitors and members of the community, both young and old. Consideration must also be given to public transport, cyclists, access for people with impairment, emergency vehicles, refuse collection, street and gutter cleansing and the maintenance of street furniture and landscaping. There may also

be regional interests, especially in the case of the adaptation of Type II corridors.

Striking a balance between the often competing and sometimes conflicting interests of all of these groups requires much care. The RTA's Community Involvement Manual provides practical guidance in dealing with these issues.

Community feeling, pride and attachment can only come about if people have an opportunity to participate in shaping the future of their Main Street, the symbolic centre of the community, or, in the case of a sub-arterial centre, the revitalisation of an established urban centre. Experience shows the synergy and positive effects on the community spirit which such projects can generate.

**1.6 Consultation**

### 1.6.2 Consultation process

It is essential to consider carefully the appropriate level of community consultation commensurate with the particular project and to budget for the cost of this phase of the investigations. This is a matter that is often overlooked in planning a project.

Community participation in most local government projects is a multi-staged process. There may be five stages:

- Gathering information

The first stage is gathering of initial information on matters of community concerns, such as high accident rates, traffic noise or pollution, lack of parking or a deteriorating shopping environment.

- Developing objectives and strategies

An important step is to present the results of the collected data to the local community and obtain their response to the information. This response is then used to identify and define the objectives of the project and provide some vision for what might be achieved. The consultation process should be sufficient to ensure that the business people and the residents understand and endorse those objectives.

It is also important to place these objectives into their relative priority and to reach some agreement with the community on this, as it provides the basis for comparing and evaluating alternatives later. Without such a clear understanding, assessment of proposals will always be subjective and may be divisive.

- Developing proposals

The extent of community consultation in developing proposals depends on the particular circumstances. In simple schemes, it may be possible for the professional staff of the Council, or consultants, to develop solutions to the identified problems and present them in the form of a public exhibition as solutions to the agreed objectives. This is an economical way of producing a project but is open to the claim that it has been

prepared by the Council and is not completely “owned” by the people and stakeholders most affected.

In other cases, a representative committee could be used to develop the scheme with the Council staff or its consultant. This will be more time consuming and may prove to be more costly but is also more likely to be accepted as the community’s solution.

- Evaluating proposals

The community should have the opportunity to express its views on the proposals. This aspect is further considered in Part 5 (Section 5).

- Approval of the Traffic Management Plan component

Councils in the Sydney Operation’s Directorate, under the ‘*Delegation to Councils on the Regulation of Traffic*’ are required to submit Traffic Management Plans (TMP) to the RTA where measures proposed in Schedule 3 are to be introduced. Procedures exist which specify their preparation, presentation to the Local Traffic Committee for comment or directly to the Regional RTA Office, and approval.

Many of the traffic measures commonly used in environmental adaptation projects would come within the Schedule.

- Implementation

The community should be advised of the nature and timing of the proposed works. It is likely that there will be disruption to vehicular and pedestrian traffic patterns and possibly business activities.

- Does the project work?

The community should have the opportunity to comment after completion as part of a monitoring program.

Fig. 1.16 People’s day in Taree. The stakeholders had a major influence on the development of the Sharing the Main Street project.

