

**Bristol City Council
Home Zones Sub-Committee
23rd January 2002**

**Home Zones/Residential Street Improvements Report
Ward: Citywide**

Report of the Head of Scrutiny and Equalities

Summary

This report outlines the findings of the Home Zones working group and recommendations on Home Zones and Residential Street Improvements for the Council's consideration.

Decisions to be made

To agree recommendations on Home Zones and Residential Street improvements for the Council's consideration.

Important points to be considered

Home Zones are one of a range of options that can be used to improve the street environment. Different streets will have different requirements and Home Zones and other measures to improve the street environment will depend on community wishes and available funding and other resources.

Important sections in full report

27. Recommendations.

1. Purpose of Report

This report outlines the findings of the Home Zones working group, which has met between September 2001 and January 2002 and makes recommendations on Home Zones and

Residential Street Improvements for the Council's consideration.

2. Introduction:

At its meeting of the 27 September 2001, the Chair identified the need for a greater understanding of Home Zones and their use in the urban environment. It was resolved that a formal working group, chaired by Councillor Simon Cook, would be established; it would meet monthly with a view to preparing a report for the consideration by the Environment, Transport and Leisure Scrutiny Commission with a view to making recommendations for the Council's consideration.

3. Objectives of Working Group

At its inaugural meeting on the 27 September the working group debated the contents and programme of the report. It was resolved that the report should endeavour to address:

What is a Home Zone?

What are the benefits and disbenefits?

How can they be funded?

And then consider how a programme of introduction could be drawn up.

4. Home Zones - Background

The Home Zone concept, derived from the Dutch 'woonerf', meaning living yard, was pioneered in the 1970's. Since then many other European countries have successfully transferred the core concepts and creating similar residential streets and community areas.

A home zone is a street or group of streets designed primarily to meet the interests of pedestrians and cyclists rather than motorists, opening up the street for social use. The key to creating a successful home zone is to develop

street design that makes drivers feel it is normal to drive slowly and carefully. Features often include traffic calming, shared surfaces, trees and planters, benches and play areas.

Home zones can create attractive urban environments, foster positive community spirit, and provide safer streets for everyone. Home zones are common and popular in many European countries.

5. Legislation in the UK?

The Government's commitment to the development of home zones was reflected in provisions in the Transport Act 2000 which came into force on 1 February 2001. Legal recognition has been given to home zones, and local traffic authorities in England and Wales now have a specific power to designate home zones in their area. In due course they will also be able to make orders about the use of the roads, and about speed reduction measures, subject to regulations to be made by the Secretary of State (for England) or the National Assembly (for Wales).

1. 'Use' orders have the potential to make improvements to the quality of life of home zone residents. The orders will permit the use of the road for purposes other than moving up and down the road. These activities should reflect the wishes of local residents and could include children's play, or benches for older residents to meet. They would be subject to requirements not to obstruct the lawful use of the road by others, or to deny reasonable access to premises.
2. 'Speed' orders would enable local traffic authorities to take measures to reduce the speed of motor vehicles and cycles. The scope of the orders is not limited to traffic calming and local authorities will have to specify the speed below which they intend to hold the traffic. Speed orders will not, by themselves, impose speed limits at this level – these will still need to be set for individual roads. Local speed limits below 20 mph will

continue to require the consent of the Secretary of State.

DTLR are currently considering options for appropriate home zone sign designs which would reflect the new provisions in the Transport Act. The Department plans to include proposals for signing for home zones in the consultation exercise.

6. Designing a home zone

In the UK the home zone concept is still in its infancy and there is still a great deal to learn about design and introduction. Reference to the pilot schemes currently being developed will prove useful. As home zones are far more than just another traffic management tool design expertise from landscape architects or urban designers and using ideas from Dutch, and other European, examples will prove beneficial .

Features that are often included in a Dutch *woonerf*, are:

a shared surface for vehicles, pedestrians and cyclists — with no separate raised pavements

a variety of surface treatments suited to a pedestrian environment

trees, planting and street furniture

bollards and street lighting

simple "gateways" at entry points to a home zone

shared community spaces, such as seating areas or play spaces

All *woonerf* streets, however, are different. This stems from the simple fact that every successful street is designed and adapted according to local preferences and circumstances, with residents and users involved at the outset.

7. How is a home zone different from traffic calming?

Home zones aim to change the function of a street, whereas traffic calming still allows motor traffic to dominate the street. Though 20mph zones may reduce accidents, they do little to improve the quality of the street environment.

8. How is a home zone different to a pedestrianised zone?

Home zones allow car access as well as pedestrian access. Pedestrianised zones normally have restrictions on access by motor vehicles.

9. What about play streets?

Local authorities have powers to create play streets or street playgrounds, although very few have actually done so because they rely mainly on restricting access which is difficult to enforce. Home zones do not present the same enforcement problems and they represent a fairer balance between the needs and wishes of children and other residents.

10. Where else are there home zones?

Home zones have been around in many other European countries for over 25 years. They are recognised as playing a key role in improving the quality of life of residents in towns and cities.

The Netherlands has introduced over 6,500 woonerven since the late 1960's. They use extensive redesign to reinforce the change in status of the road space. Local authorities are now focussing on implementing 30 km/h zones using many of the features identified in home zones.

11. SEGREGATION versus INTEGRATION

Can traffic, people and places be reconciled?

Home zones present a challenge to many conventional urban planning principles. The defining characteristics of post-war planning in Europe, and especially in the UK, have focused upon the separation of space for different uses. Highway design and traffic systems have followed the same principles, reinforced by a hierarchy of road types set out by Buchanan in 1961.

Pedestrians and motor traffic have been seen as incompatible, and the design of streets and cities attempted to define distinct space for both. The motorway and the pedestrian precinct represent the opposite ends of the spectrum, and the pavement or sidewalk distinguishes the pedestrians space in the street from the carriageway. The Radburn concept, piloted in the USA, kept networks for pedestrians entirely distinct from those designed for cars. This resulted in unsightly car-dominated areas and little used pedestrian areas. The Dutch experience indicates that it is beneficial to integrate the differing modes.

Home zones challenge separation, and indeed reverse most of the principles that have governed traffic engineering to date. The *woonerf* principle mixes limited vehicle use with a wide range of other functions. Most importantly, it attempts to interweave the social function of the street with the need for access and mobility. An understanding of home zones and their potential for the UK thus has to take into account some of the underlying planning principles.

Jan Gehl, head of the Department of Urban Planning at the Copenhagen School of Architecture, pointed out the four basic patterns governing the relationship between traffic and more vulnerable road users. Either cars share space with others and the car dominates (eg. Los Angeles), or cars are kept distinct from others (eg. Radburn), or cars share space with all traffic but the pedestrians and cyclists dominate. The final example of Venice (where cars are entirely excluded) is rare on any large scale. The third example provides the principle within which the first *woonerven* were introduced in Delft.

People and Traffic: Four Types
from Jan Gehl "Life Between Buildings
Los Angeles
Venice
Delft
Radburn

12. The Traffic World and the Social World

Space has tended to be designed either for traffic or for social activities.

Traffic Zone

Single purpose
Uniform
Regulated
Impersonal
Predictable

Social Zone

Multi-Functional
Diverse
Culturally defined
Personal
Unpredictable

13. Culture

There are no inherent cultural or social differences between Britain and other countries in continental Europe which should inhibit a change in the balance between people, places and transport represented by the development of home zones.

14. Demonstration Projects

The widespread and continuing influence of the woonerf examples in Rijswijk and Delft demonstrate the vital importance of implementing high-quality, demonstration

projects as early as possible, both to test ideas and more importantly to raise public awareness of the potential benefits from such changes.

15. Community Involvement

Home Zones stem from local communities taking collective decisions about what their streets and neighbourhoods should be for. Stronger community organisations may be necessary in order to exploit the potential; for shared-use streets, and such bodies may in turn grow from participation in such decisions. It is vital that the evolutionary nature of home zones is accepted and understood, so that schemes can experiment and adapt over time through a number of small changes. To achieve this it is imperative that consultation with the local community commences at an early stage and with a blank sheet. Experience suggests that about one year should be allowed for this consultation period alone.

16. Speed Reduction

General speed reduction in urban areas and minor roads is a key condition to the introduction of home zones. 20mph limits provide the context for home zones. Reductions in speed can free up significant amounts of space for other purposes, space that can sometimes be sold to raise funding for home zone schemes. However, 20mph is considered to fast for the home zone principal and speeds should be kept below 10mph.

17. Cycling

The promotion of walking and in particular, cycling is essential to the creation of successful home zones. It is vital to exploit the presence of cyclists as a means to determine appropriate speeds, and to encourage cycling to exist as part of the "social" zone (as opposed to the "traffic" zone). Creating safe and extensive links between home zones can be combined with the creation and extension of cycle networks.

18. Parking

The creation of home zones requires local communities to take clear decisions about parking, and to set up mechanisms to solve the problems that arise from rationing space. Controlled parking zones are essential to their success, and it is vital that parking provision is clearly defined in the design of streets, rather than simply being allowed to take space wherever kerbs exist. Residents parking priority measures may be a prerequisite to a successful zone.

19. Street Design

Removed from the regulated world of traffic, limitless creativity is possible in the use and combination of the planting, street furniture and surfaces. Low level lighting (designed for the pedestrian rather than the car), “walking trees” or lamp columns positioned to defined space, enclosures, gateways, sculpture, variations in levels, different surfaces and textures offer the opportunity for huge variations, interest and individuality within the built environment.

20. Human Interaction

Home zones succeed through extending the social environment into the traffic zone. This works best when the regulations and signage associated with the traffic world are all but removed. Indications from recent junction designs suggest that stripping out all control including traffic signals, signs and road markings may allow junctions to function more safely, more efficiently and more cheaply.

Encouraging the use of eye contact, the most effective means of human communication, would seem to be an appropriate governing principle for taming traffic and successfully integrating the use of the car into environments designed for people. Recently, DTLR have been challenged to consider the need for yellow lines (waiting restrictions) in home zones. It is possible that in future scheme parking may only be lawfully permitted in marked parking places.

21. Current Status in Bristol

In 1998 one-off expenditure was identified to promote the Home Zone concept in two areas of Bristol.

In Brislington East Councillors had requested that Home Zones be introduced in several residential streets, particularly in the areas around Allison Road, Broomhill Road and School Road.

In Henbury as part of a joint programme of Safer Routes to School, new development, the National Cycle network and local safety schemes Home Zones were considered in Marrisal Road and Marmion Crescent.

In Brislington, surveys and consultation resulted in the Home Zone principal being substituted for traffic calming and parking measures.

In Henbury, the objective of Home Zones was accepted and Sustrans were initially employed as Liaison Officers. This work resulted in improved street environments for the neighbourhood and created a community spirit which will help progress this work in the future.

The clear message from these two areas is the need for community involvement and acceptance. Home Zones are not just another traffic management tool.

In 1999 Trafalgar Terrace, Bedminster was formally closed as a rat-run to industrial estate traffic. The area was identified as a potential pilot Home Zone, meeting many of the criteria and requirements for this type of treatment. The area was included in the Residential Street Improvement section of the 2000-01 Traffic Management Work Programme and work commenced shortly afterwards. To date two engineers from the South and East Traffic Management Section have spent many hours educating the local community as to the benefits. Work has commenced in Trafalgar Terrace this year and it is hoped that Nelson Street

and Hardy Street will be undertaken next year – completing the ‘Victory’ Home Zone.

Although the work in this area, possibly, does not meet the requirements of full and formal Home Zones as the pavements have been retained, this will represent the first and most advanced step in the right direction.

22. Definition of a Home Zone for Bristol

A Home Zone could be considered an extension to the front garden of each and every dwelling abutting the treated street but where drivers are invited to enter and pass through providing that they recognise that the pedestrian has priority at all times.

A Home Zone will be a street or group of streets where pedestrians have priority, all traffic travels at walking pace and where the built environment encourages the resident and passing pedestrians to spend more leisure time. Street play for children will be encouraged and a greater ownership and degree of responsibility will be required of the local community.

23. Purpose and Benefits

The purpose and benefits of Home Zones are many and they include:

Improved road safety

Improved community safety, particularly for the very young and old

Improved quality of life both socially – strengthening neighbour relations, and in health terms – less pollution and more walking and cycling activity.

Enhanced sustainability – may reduce car dependency

Enhanced street environment using planting, furniture and play areas and equipment to ameliorate the dominance of the car.

24. Other considerations:

It is clear that every area requesting the home zone treatment will not be a suitable candidate. Residents and community groups are likely to seek introduction as a panacea to parking problems, speed and accident problems (whether real or perceived), traffic volume and possibly pollution problems. It is clear that home zones do not address all of these traffic issues.

The emerging Institute of Highway Incorporated Engineers 'Home Zone Design Guidelines', to be issued in the summer of 2002, should provide a basis for application and the suitability of streets.

The non-inclusion in the home zone programme should not preclude streets from the Residential Street Improvement programme and discussions held by the working group has highlighted the need for a wider approach. Many streets would benefit from parking management and other forms of traffic management. There is a clear need for an alternative approach in many areas.

Furthermore, it is recognised that home zones are expensive, both to create and maintain. They must therefore, only be applied after careful consideration as to the resources required and the maintenance commitment.

25. Future funding sources

Funding is and will remain the most critical element of the new initiative. Every effort must therefore be made to secure funding from additional or external sources. Currently, in addition to the Local Transport Plan, the Council is attempting to secure finance from SRB V and VI, New Deal for the Community sources, Europe – through the Vivaldi

and New Opportunities Fund and new development (section 106 funds).

However, the aligning of street maintenance, street lighting improvement and other improvement funding as well as the traffic management scheme budgets such as Safer Routes to School, National Cycle Network and Walking Strategy projects may all contribute.

26. Programme of introduction

Currently beyond the 'Victory' Home Zone in Brislington, new developments in Horfield and Brentry and the three DTLR bids for St Werburghs North, Southville and the Dings, there is no confirmed programme of introduction, despite several requests having been received. The Group are reminded that the DTLR bid includes three areas but a further three were initially shortlisted and it is anticipated that these others will wish to continue the process in their areas.

Work is progressing to define a new hierarchy of roads in Bristol, from the main distributors through to potential home zone areas. Once the distributors are identified neighbourhood cells will emerge and it is envisaged that these areas should or could be the focus of home zone or similar proposals. Although as identified at the working group meetings the principals should not be cellular but spread throughout areas.

External requests are already trickling in to the Traffic Management Team requesting treatment in other areas such as Easton and St Pauls. However, analysing the request and then consulting with the residents is very staff-hungry and without adequate resources very little progress can be achieved at this time. This may be improved with the DTLR bid, if successful a Home Zone Co-ordinator has been identified.

Inevitably, progress will be dictated by funding opportunity, this must be carefully co-ordinated. The Traffic Management team has to evaluate schemes and determine the level of

treatment required to create a street improvement that would be acceptable to residents and within the funds available.

Home zones can inform and influence the larger planning and transport strategy for the City and can assist the co-ordination of various council services to deliver urban design and traffic planning that will enhance the quality of life in Bristol.

27. Recommendations

1. In light of the evidence, that the Council adopt a Policy to transform street environments and draw up an urban design plan across the City for improving street environments.
2. That the Council determine to introduce home zones across the City subject to funding, staff resources, residential support and advice from disabled groups and employs at least 1 designated Home zones Officer.
3. That the Council produce a comprehensive leaflet on Home Zones/Residential Street Improvement schemes containing a questionnaire which can be used to collate residents views. The leaflet will detail a range of treatments and potential funders.
4. That the Council hold a Home Zones seminar for Members, Officers and Stake-holders, co-ordinated by the Environment, Transport and Leisure Director to educate and inform relevant officers from across the Council. Specific training should be given to officers dealing with housing developments to ensure that home-zones are considered as a priority objective, when dealing with applications.
5. That the Council introduce a Home Zones implication section for all planning applications for housing developments to ensure that home zones are considered as a priority objective when dealing with

applications and that home zones are embedded in the emerging local plan alterations and through supplementary planning guidance.

6. To encourage developers, the authority will adopt roads wherever possible in support of home zones and will revise the guidelines on residential road design.

Appendices

- Appendix 1 - Original terms of reference and Membership
- Appendix 2 - Typical Street Treatments - Costs, Advantages and Disadvantages
- Appendix 3 - Home zones - The Henbury Experience - Cllr Richard Pyle

Local Government (Access to Information) Act 1985. Background Papers

Minutes of home zone working group meetings have been attached to Environment Transport and Leisure Scrutiny Commission Meeting held on the 16th October 2001, 7th November 2001, 11th December 2001 and 23rd January 2002.

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Appendix 1

Terms of Reference

The terms of reference were determined at a scoping session held on the 21st August 2001.

The Group will concentrate on strategy

There is a need to develop a definition and a strategy

Menu of options

The work of the Working Group will need to inform the rest of the Council and promote corporate responsibility and prepare the authority for future bids.

There is a need to concentrate on social and community aspects.

Residents support and involvement is crucial.

Membership

Cllr Simon Cook - Chair

Cllr Jo Hargreaves

Cllr Rosalie Brown

Cllr Richard Pyle

Mike Stanley - Traffic Management Group Manager

Ben Hamilton-Baillie-Director for Sustainable Transport
& Urban Design. Whitby Bird & Partners

Peter Lipman - Home Zones Manger - Sustrans

John Winterson - Transport 2000

Rob Enticott - Environment Policy and Protection Manager

John Hastie - Traffic Management - Co-ordinator

Mike Ginger - Traffic Management - Co-ordinator

Pete Fryer - Environmental Quality Officer

Thank you for your unique contributions, time and the commitment that you have given to this project.

Appendix 2

Typical Street Treatments - Costs, Advantages and Disadvantages

Section 1: Crossings

Zebra Crossing, Pelican Crossing, Puffin Crossing, Traffic Island & Pedestrian Refuge

Section 2: Cycle Lanes

Cycle Lanes and Tracks

Section 3: Speed Reduction

Speed Camera, Round Topped Road Humps, Flat Topped Road Humps, Speed Cushions, Mini-roundabout, Chicanes, 20mph Zone, Junction Tables, Kerb Build Outs, White Lining, Road Surface Changes, Gateways, Road Narrowings

Section 4: Miscellaneous

Permanent Road Closure, New Bus Shelters, 'Walking Bus', Heavy Goods Vehicle (HGV) Ban, Pavement Reconstruction

Section 1: Crossings

Zebra Crossing Approx cost: £10,000

The most familiar pedestrian crossing, the 'zebra', is characterised by black and white stripes and flashing yellow beacons on either side of the road.

Advantages:

provides a good crossing point for pedestrians

pedestrians do not have to wait for traffic lights to change in their favour

Disadvantages:

if a Zebra crossing is not frequently used by pedestrians, drivers tend to forget it is there; this can lead to accidents on the crossing

can cause delays to vehicles when pedestrian flows are high

drivers sometimes ignore pedestrians who are waiting to cross

Pelican Crossing Approx cost: £18,000

A pelican crossing controls vehicle and pedestrian movements with traffic lights. Pedestrians must wait for the 'green man' before crossing the road

Advantages:

provides a good crossing point for pedestrians

visually impaired people benefit from the 'beep' that sounds when the green man is showing can keep vehicle delays to a minimum by making pedestrians wait and cross in a group, rather than one by one

Disadvantages:

the traffic lights and railings may be considered visually intrusive cannot be located on very high speed roads

difficult to locate because, generally, residents do not want a crossing directly outside their home

Puffin Crossing Approx cost: £22,000

A puffin crossing is a new version of the pelican crossing. It has more in-built safety features. It looks very similar to a pelican except that the red and green man are on the same side of the road as the person waiting to cross.

Advantages:

provides a good crossing point for pedestrians
improves road safety
less unnecessary delay for traffic

Disadvantages:

same as the pelican - see above

Traffic Island & Approx cost: £3,000
Pedestrian Refuge

A traffic island is usually situated in the centre of a road to help reduce vehicle speeds and to prevent over-taking. If it includes a gap in the middle of the island it is called a refuge; it allows pedestrians to cross half the road at a time.

Advantages:

reduces vehicle speeds
prevents over-taking
can improve road safety

Disadvantages:

can cause problems for cyclists and wide vehicles
can reduce on-street parking
may be considered visually intrusive
not suitable for large groups of pedestrians

Section 2: Cycle Lanes

Cycle Lanes & Approx cost: £60
Tracks per linear metre

A cycle track is dedicated space provided for cyclists either on-road or off-road.

Advantages:

provides for safer cycling

promotes a healthier lifestyle

encourages more cycling which in turn may reduce traffic fumes, noise and congestion can reduce the speed of other vehicles by limiting the width of road available to them

Disadvantages:

roads and verges are often not wide enough to install cycle facilities for on-road cycle lanes to be effective, parking has to be removed

road signs are needed at frequent intervals along the length of the cycle lane or track

Section 3: Speed Reduction

Speed Camera Approx cost: £25,000

Speed cameras automatically photograph the number plates of drivers exceeding the speed limit. Many speeding drivers have been convicted by the photographic evidence.

Advantages:

reduces vehicle speeds
improves road safety

Disadvantages:

some drivers only slow down at the camera sites
the camera flash can be distracting to drivers
the camera housing may be considered visually intrusive

Round Topped Approx cost: £1,000
Road Humps per hump

Round topped road humps are usually 75mm high. They must be accompanied with a speed reducing feature installed at both ends of a series of humps.

Advantages:

very good at reducing vehicle speeds and improving road safety
do not usually affect on-street parking
self enforcing
relatively cheap

Disadvantages:

can increase traffic noise especially when HGV's pass by can
cause damage to some vehicles

signs, street lighting and white lines are all required and may be
considered visually intrusive

can cause discomfort for drivers and passengers

can cause problems for buses and emergency services

Flat Topped Approx cost: £1,500
Road Humps per hump

Flat-topped are usually 75mm high and can be of any length.

Advantages:

very good at reducing vehicle speeds and improving road safety
do not usually affect on-street parking

self enforcing

flat-topped humps can be used by pedestrians as a crossing point

Disadvantages:

can increase traffic noise especially when HGV's pass by can
cause damage to some vehicles

signs, street lighting and white lines are all required and may be
considered visually intrusive

can cause discomfort for drivers and passengers

can cause problems for buses and emergency services

Speed Cushions Approx cost: £1,500 per cushion

Speed cushions slow down cars but cause minimal inconvenience to larger vehicles such as buses and fire engines.

Advantages:

reduces vehicle speeds
improves road safety

Disadvantages:

on-street parking causes problems

can cause problems to some ambulances

signs, street lighting and white lines are required which may be considered visually intrusive

Mini-roundabout Approx cost: £10,000

Mini-roundabouts are often only marked out with white paint. They are used on roads that have an average speed of 30mph or less. They are quite often used as a 'speed reducing feature' before a series of road humps.

Advantages:

reduces vehicle speeds and can improve road safety
can reduce driver delays when emerging from minor roads

Disadvantages:

can generate traffic conflicts, especially at four armed junctions

not ideal for cyclists

signing, street lighting and white lines are required and may be considered visually intrusive

Chicanes Approx cost: £10,000

Chicanes are road narrowings located alternately on either side of the road. They slow traffic down by forcing one stream to give-way to the other. There needs to be a balanced two-way flow of traffic for the chicanes to work.

Advantages:

reduces vehicle speeds and can improve road safety
well accepted by bus companies and the emergency services

Disadvantages:

can reduce on-street parking

can create conflicts between vehicles

usually illuminated bollards, street lighting, signing and white lines are all required, which may be considered visually intrusive

20mph Zone Approx cost: £50,00 - £100,000

20mph zones are usually limited to small residential areas. Traffic calming measures (usually speed humps) have to be installed so that vehicle speeds are physically restricted to 20 mph or less.

Advantages:

very good at reducing vehicle speeds

improves road safety

traffic calming measures situated in a 20mph zone need less signing and street lighting than usual, which keeps visual intrusion to a minimum

Disadvantages:

requires traffic calming measures, usually road humps, to be installed, which have their own disadvantages

very expensive

legislation restricts the size and location of 20 mph zones

Junction Tables Approx cost: £5,000 per table

Junction Tables are large flat top humps constructed across junctions to reduce the speed of approaching vehicles. They also provide a level place for pedestrians to cross.

Advantages:

- reduce vehicle speeds at junctions
- highlights junctions to motorists
- provides level crossing point for pedestrians

Disadvantages:

- pedestrians may not take care when crossing
- may cause problems for buses
- vehicles may drive onto footway

Kerb Build Outs Approx cost: £7,000 per junction

Kerb build-outs are extensions to the footway and are constructed in a similar material. They are used to reduce road width at junctions.

Advantages:

- provide additional space for pedestrians on the footway
- reduce crossing distance
- restricts traffic speeds
- can deter unsafe parking on the junction

Disadvantages:

- can make manoeuvres difficult for large vehicles

usually need bollards to stop cars driving onto them
can cause difficulties for cyclists
may be hit in poor weather or at night

White Lining Approx cost: £0.50p per metre

White Lining can be used to guide drivers through a junction or along a road. Hatch markings indicate which areas of carriageway should not be driven on.

Advantages:

very cheap
very effective
can be removed or modified easily

Disadvantages:

in poor weather faded or 'burned off' markings can be misleading

no physical protection for pedestrians

visibility problem in wet weather or at night

Road Surface Approx cost: £12.00
Changes per m²

Road surface changes can be different colours and textures to highlight particular features. These may include cycle lanes, pedestrian crossings, bus stops or changes in speed limit.

Advantages:

does not reduce parking
highlights certain features to road users
relatively low cost
does not disadvantage buses or emergency vehicles

Disadvantages:

difficult to see in poor weather conditions
colours can fade
limited effectiveness
can create confusion regarding priority

Gateways Approx cost: £5,000 per gateway

Gateways are installed at entrances to towns and villages. They remind drivers that they are entering a residential areas and should reinforce the speed limit.

Advantages:

remind drivers of the change in road environment
highlight speed limit changes

Disadvantages:

not effective in reducing speeds over a long stretch of road
other measures are needed to maintain speed reduction

Road Narrowings Approx cost: £5,000 per narrowing

Road Narrowings are width restrictions which are used to narrow the road on either one or both sides of the carriageway.

Advantages:

reduces crossing width for pedestrians
restricts traffic flows and speeds
highlights hazardous sites e.g. outside schools
prevents parking at hazardous sites

Disadvantages:

requires greater levels of driver skill to negotiate
may cause conflicts
careful signing essential
can reduce available parking for residents

Section 4: Miscellaneous

Permanent Approx cost: £5,000

Road Closure per junction

Permanent Road Closures are used to close one end of a road to prevent 'rat running'.

Advantages:

reduces through traffic
reduces width of carriageway that pedestrians have to cross
can incorporate cycle by pass allowing cycles to use route.

Disadvantages:

can increase emergency service response time

can make certain journeys longer for residents

forces vehicles onto other routes - these may be other residential roads

New Bus Approx cost: £7,000

Shelters depending on style

New Bus Shelters should be used to provide better protection for bus passengers. They can vary in style from simple cantilever styles (roof and front) to fully enclosed units incorporating bus information screens.

Advantages:

provides weather protection for bus users
can incorporate electronic information points for bus users

Disadvantages:

can reduce width of footpath available to pedestrians
can be visually intrusive

'Walking Bus' Approx cost: £100

The 'Walking Bus' is the newest mode of school transport! It is a group of pupils walking in pairs in a long line. The bus has a 'driver' and 'conductor' who are volunteer parents. On a rota basis, the parents walk the children to school picking up pupil 'passengers' at different 'bus stops'. Heavy bags and musical instruments are carried in a trolley which is pushed in front of the bus by the pupils. For safety, the pupil to parent ratio is limited, parents are trained by Road Safety Officers, parents are vetted by the Police and everyone travelling on the bus wears fluorescent jackets.

Advantages:

encourages walking, which in turn reduces traffic and fumes near the school

improves general fitness of pupils

promotes social development of pupils

teaches pupils good road-sense

starts the walking 'habit' which will be beneficial in later years

fun for the pupils and parents

parents get to meet other parents in the area

Disadvantages:

the walking bus may not always be available after extra curricular activities

may need someone to co-ordinate the rota

needs volunteers who will be available at school start and finish times

Heavy Goods Vehicle Approx cost: £8,000

(HGV) Ban for width restriction

An HGV ban can be introduced to prohibit large vehicles from using unsuitable roads, by means of height, weight or width restrictions.

Advantages:

reduces traffic noise and vibration in residential areas
reduces traffic fumes and discolouration of buildings
makes walking and cycling more pleasant

Disadvantages:

physical width and height restrictions can cause problems for emergency services and removal lorries

enforcing this type of ban is difficult and so it is not always very effective road signs are needed and may be considered visually intrusive

Pavement Approx cost: £20 - £100

Reconstruction per m²

Old pavements can be broken out and replaced by new tarmac, block paving or slabs.

Advantages:

provides a good flat surface and reduces the likelihood of people tripping up
good quality materials can improve the 'look' of the area

Disadvantages:

some of the more attractive paving materials have a rough surface, which may not be suitable for all areas

Appendix 3

Home zones - The Henbury Experience - Cllr Richard Pyle

- Proper consultation is critical - 15+ separate consultation meetings took place including planning for real exercise
- Must establish community agreement at least 75% approval for scheme
- When work starts - expect objections from individuals who are directly affected by new features
- Expect objections from people who have not bothered to get involved before work starts
- Different age groups in the community have very different views on what should happen e.g. a childrens' play area is fine until people find that it will be outside their home
- On the positive side, the consultation itself can be a builder of community spirit - residents actually speak to each other!
- The works should not take too long, momentum can be lost and the project be seen to be drifting. A project manager must be appointed. Continuity is critical
- A detailed budget must be provided before the projects starts, otherwise residents request for different elements becomes an unfulfilled wish list as the project runs out of money
- At the outset it must be understood that Home zones are not a method of just providing new parking or perhaps preventing rat running but more a way of building a completely improved local environment.