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Doncaster MBC. Air Quality Action Plan

1.0 INTRODUCTION

Clean air is an essential ingredient of a good quality of life. People have a right to expect that the air they breathe will not harm them.

The Government published its revised Air Quality Strategy for England, Scotland, Wales and Northern Ireland in early 2000, and produced objectives for seven pollutants recognised as being important with regard to human health effects. The Air Quality (England) Regulations 2000 put these objectives into legislation. In order to determine whether or not the objectives will be achieved by their due dates, Doncaster, as well as every other local authority, has carried out a Review and Assessment of air quality.

This review and assessment was carried out in 3 stages and was completed in 2001. The result of the assessment was that the air quality of the majority of the Borough is good and is below the Government's health based objectives for specific air pollutants. The conclusion of the Review and Assessment process for DMBC is that six out of the seven pollutants specified by the Government are currently well below their objectives and will continue to be so by their respective target dates.

The one pollutant out of the seven specified by the Government that may not meet the objective by its target date is nitrogen dioxide. Nitrogen dioxide has two objectives that must be met by 31/12/2005. These relate to one hour and one year periods. It is only the one year (annual) objective that is unlikely to be met.

Nitrogen dioxide comes from some industrial processes, but mostly from road traffic exhausts. The three areas where the annual objective will be exceeded by 2005 have high densities of traffic and the exceedence of the objective is due to traffic emissions. These areas are, broadly, the area of Doncaster around the Frenchgate Centre to Holmes Market, Carr House Road between the Racecourse roundabout and the Trafford Way roundabout and along the length of the A630 from Balby Bridge to the A630/A1 interchange. These areas have been declared to be Air Quality Management Areas (AQMAs). Following the declaration of the AQMAs a further review and assessment had to be carried out in order to reassess the conclusions of the third stage review and to take account of any new or proposed planning developments which could affect air quality and changes in Government legislation and initiatives.

This process is known as the Stage 4 review and assessment of air quality and the findings of this process are that a further AQMA will need to be declared in the Hatchell Wood area of Cantley, adjacent to the M18 due to the likely exceedence of the annual objective for nitrogen dioxide, again due to traffic emissions.

As a result of declaring these AQMAs, the council has a statutory duty to develop an action plan of measures aimed at reducing pollution in order to meet the Government's air quality objectives.

The Action Plan must consider a number of alternate measures to be used to reduce air pollution both within the AQMAs and in areas located outside the boundaries of the AQMAs, which may have an effect on the air quality within the AQMAs.
The measures considered must be practical, workable, cost effective and not cause social disadvantage.

In developing the action plan, the council has used Government guidance and the relevant publications by the National Society for Clean Air and Environmental Protection (NSCA), a list of the guidance used is contained in appendix 6.

The action plan contains a wide range of proposed measures to improve air quality within the Borough.

A draft consultation version of the plan was produced in November 2002. The results of the consultation are detailed in this plan and where appropriate the plan has been amended to reflect the consultee's views including the comments from the Department for Environment, Food and Rural Affairs (DEFRA).

2.0 RESULTS OF CONSULTATION

In choosing the proposed measures that have been included in the Action Plan stakeholder consultation has been carried out. This consultation took place both during the production of the plan and on release of the draft consultation version of the plan. The opinion of various external bodies e.g. public transport operators were obtained by inviting them to attend meetings of the working group.
The results of this consultation exercise are detailed below.

2.1 Citizens Panel

There are 1,000 members of the citizen's panel. The members of the panel have been carefully selected in respect of age, gender, social grouping and geographical area of Doncaster. A total of 467 members of the panel responded to the questions.

Respondents were asked to indicate the extent to which they agreed or disagreed with various options available to improve air quality. The mean scores are shown in table 1 below (where 1 indicates strongly agree and 5 strongly disagree):

Table 1 Response From Citizens Panel

Proposed Actions	Mean Score
Roadside Emission Testing of Polluting Vehicles	1.58
Improved Access To And Frequency of Public Transport	1.69
Subsidised Public Transport	1.82
Quality Bus Corridors	2.23
Bus Only Lanes/Routes	2.51
Parking Restrictions (e.g. Park & Ride etc.)	2.70
Low Emission Zones (e.g. only low polluting vehicles allowed).	2.61
H.G.V Strategy (e.g. special routes, time restrictions etc.)	1.85
Traffic Re-routing (avoidance of Air Quality Management Areas)	2.34
Traffic Information Signing (e.g. Air quality Information)	2.15
Planning Restrictions On New Developments	2.05
Increased Number of Cycling Lanes	2.06
Improve Public Awareness	1.65
Convert The Councils Vehicle Fleet to Low Emission/Alternate Fuelled Vehicles	1.82

According to the panel, the most favourable options include; Roadside emission testing, improved access to and frequency of public transport, improved public awareness, subsidized public transport and conversion of the Council's vehicle fleet to low emission/alternate fuelled vehicles. There appears to be moderately strong public resistance to parking restrictions, low emission zones and bus only lanes.

2.2 Responses To Questionnaire

The questionnaire, an example of which can be found in appendix 5 was distributed with all copies of the action plan. Delegates to a business forum, which included a presentation on air quality, and members of the public attending an exhibition on the department's work were also requested to complete the questionnaire. The questionnaire was also sent to all service users upon receipt of a request for service. The results of the responses received are detailed in table 2 below

Table 2 Response to Air Quality Action Plan Questionnaire

Proposed Actions	Mean Score
Roadside Emission Testing of Polluting Vehicles	1.26
Improved Access To And Frequency of Public Transport	1.43
Subsidised Public Transport	1.65
Quality Bus Corridors	2.04
Bus Only Lanes/Routes	2.13
Parking Restrictions (e.g. Park & Ride etc.)	2.39
Low Emission Zones (e.g. only low polluting vehicles allowed).	2.39
H.G.V Strategy (e.g. special routes, time restrictions etc.)	1.65
Traffic Re-routing (avoidance of Air Quality Management Areas)	2.35
Traffic Information Signing (e.g. Air quality Information)	2.04
Planning Restrictions On New Developments	1.87
Increased Number of Cycling Lanes	2.04
Improve Public Awareness	1.78
Convert The Councils Vehicle Fleet to Low Emission/Alternate Fuelled Vehicles	2.04

The most popular options from the results of the questionnaire are roadside emissions testing, improved access to and frequency of public transport, subsidised public transport and a H.G.V. strategy. The least popular proposed actions are traffic rerouting, parking restrictions and bus only lanes.

The results from the citizen's panel and the questionnaire show a high degree of commonality in terms of the most and least popular actions.

2.3 Statutory Consultation

The draft action plan was submitted to a number of statutory bodies, including DEFRA. The consultants employed by DEFRA have reviewed the draft action plan and made a number of comments and suggestions, of which the principal ones were as follows: -

"*It is suggested that the policies included under the theme of "general" are reconsidered under the theme of "non transport" measures as they specifically relate to industry and statutory nuisance under the powers of the Environmental Protection Act 1990. These inclusions are welcomed and shows the Council recognises the need to reduce background concentrations as part of the overall reduction in pollutant emissions to assist the action plan in achieving the pollutant objective"*

Those polices included under the theme of General have been reconsidered under the theme of Non Transport.

"…..We additionally look forward to the inclusion of the outcome of the public response to the questionnaire consultation and a clearer statement of intent with respect to those proposed measures chosen for implementation."

The copy of the action plan sent to DEFRA was the Draft Consultation Version and as such did not contain the results of the public consultation. These have been included in the final plan together with clear statements of intent.

"The plan falls short on a number of issues that should be addressed in the revised plan. These include a clearer statement of the problems in each AQMA, the extent of exceedences of the annual mean objective and any detailed consideration to source apportionment work…….details of available funding for the implementation of measures…….proposals for monitoring the effectiveness of any measures implemented. A firm commitment to any monitoring programmes should be made. For "soft" measures (e.g. workplace travel plans) some targets should be set with respect to uptake in order to set criteria for effectiveness"

At the time of submission of the draft action plan to DEFRA the Stage 4 air quality review and assessment report was still awaiting final acceptance by DEFRA and it was deemed prudent not to include the relevant findings of the Stage 4 report until it had been accepted. This has now occurred and the findings of the report in respect of exceedences of the annual mean objective and the source apportionment work have been included in this plan.

Monitoring of the air quality within the AQMAs will continue as a matter of course in order to assess the effectiveness of the measures proposed in the action plan. Commitment to these monitoring programmes is assured by the need for the Council to carry out Phase 2 of the statutory air quality review and assessment programme. An Air Quality Partnership is being set up within the Council in order to explore funding sources and monitor targets.

"The action plan should focus on emission sources identified in Stage 4 and propose measures that are more specific to these sources."
The measures contained in the action plan do primarily focus on the emission sources identified in Stage 4 in that it principally is intended to deal with transport emissions.

3. REQUIREMENT FOR AN AIR QUALITY ACTION PLAN FOR DONCASTER

Section 84(2) of the Environment Act 1995 requires local authorities who have declared AQMAs to then produce an action plan. The purpose of the action plan is to set out what the authority intends to do in order to achieve the relevant air quality objectives.

Doncaster has declared 3 AQMAs, which came into operation on the 1st August 2001. These AQMAs were declared due to the fact that the air quality review and assessment process showed that the annual average air quality objective for nitrogen dioxide was unlikely to be met by the relevant date (2005).

A new vehicle emissions inventory has been issued by the Government, which shows that the emissions of some traffic pollutants will not decrease as much by 2005 as had been estimated in the previous inventory, used in compiling the Stage 3 review and assessment. The new inventory was used in the Stage 4 review and assessment and has resulted in the need to declare a further AQMA. Maps of the existing and proposed AQMAs are contained in Appendix 3 of this plan.

It is anticipated that the measures proposed in the action plan, although originally targeted at the 3 declared AQMAs, will be comprehensive enough to assist in reducing air pollution in the proposed AQMA. Many of the proposed measures are of necessity Borough wide in their scope and impact.

4.0 THE FINDINGS OF THE STAGE 4 REVIEW

The 1st three stages of the review and assessment process identified traffic emissions as the sole source of pollution responsible for the projected exceedence of the annual average objective for nitrogen dioxide.

There are no industrial sources within the boundaries of the 3 existing and 1 proposed AQMAs, nor are they're any significant sources of nitrogen dioxide close enough to the AQMAs which could significantly influence the nitrogen dioxide concentrations within the AQMAs.

In order to further quantify the relevant contributions of the individual roads and different vehicle types within each AQMA; a source apportionment exercise was carried out. Air pollution dispersion modelling software was used to predict these relative contributions in 2005 in respect of "points of maximum concentration". These points consisted of locations, where all the relevant exposure conditions were met, which were expected to receive the highest concentration of pollutants. These receptors are illustrated in table 3 below

Table 3 Points of Maximum Concentration

Address	AQMA No.	Grid Ref.
Market Road	AQMA 1	457661 403673
Grosvenor Crescent	AQMA 2	454950 400772
Balby Road	AQMA 2	456758 401777
Carr House Road	AQMA 3	458631 402658
Highgrove Court	AQMA 4 (proposed)	462526 400762

Tables 6 to 10, Appendix 2 of this plan, detail the percentage contribution each road link makes to the level of nitrogen oxides (NO_x) at the points of maximum concentration. In order to further quantify the contribution of the various vehicle types the percentage of each vehicle type on the roads within each AQMA was obtained (Table 11, Appendix 2) and this was then further broken down into the percentage of each vehicle type using the individual road links. This information was used to model each vehicle type's contribution. This is illustrated in Tables 12 to 16 in Appendix 2

4.1 Level Of Improvement Required To Achieve The Objective

Before identifying the options available for improving air quality it is necessary to determine the overall level of improvement required.

This determination has been carried out by identifying the point(s) of maximum concentration, where exposure is likely, for each AQMA and modelling the predicted level of pollution in 2005 at these points and using this information to calculate the required improvement. i.e.:-

Required improvement = Predicted Concentration – Objective

And as a percentage: -

$$\text{Percentage improvement} = \frac{\text{Required Improvement}}{\text{Predicted Concentration}} \times 100$$

The required improvement and the percentage improvement at the relevant locations where the maximum concentration is likely to be experienced are tabulated in Table 4

Table 4 Required Improvements In NO_2 & NO_x

	Predicted NO_2 Conc. – Objective ($\mu g/m^3$)	Predicted NO_x Conc. – Objective ($\mu g/m^3$)	Required Improvement ($N0_2$ $\mu g/m^3$)	Required Improvement ($N0_x$ $\mu g/m^3$)	Percentage Improvement NO_2 (%)	Percentage Improvement NO_X (%)
AQMA 1	50.6-40	97.3-69	10.6.	28.3	20.9	29
AQMA 2 (A1M interchange)	50.8-40	103.6-69	10.8	34.6	21.25	33.3
AQMA 2 (Balby Rd)	41-40	80.5-69	1.0	11.5	2.5	14.3
AQMA 3	42 -40	82.5-69	2.0	13.5	4.9	16.4
AQMA 4 (proposed)	47.9-40	93.3-69	7.9	24.3	16.4	26

4.2 Percentage Improvement From Traffic Emissions Required To Achieve The Objective

The percentage improvement from traffic emissions that is required in order to achieve the annual average objective for nitrogen dioxide in 2005 has been calculated using the method contained in Appendix B of the NSCA publication "Air Quality Action Plans: Interim Guidance for Local Authorities". The point of maximum concentration (where the relevant locations conditions are met) in each area has been used as the receptor for the purpose of carrying out the calculations.

The percentage improvement required has been calculated using the following method: -

Percentage Traffic Contribution x Total NO_x level/100 = Value of NO_x contribution from road traffic

In the case of AQMA 1 the percentage traffic contribution is 62.8% (61.1μg/m^3) of a total NO_x level of 97.3μg/m^3 with the background level contributing 37.2%.

e.g. $\frac{62.8 \times 97.3}{100} = 61.1 \mu g/m^3$

A reduction of 28.3μg NO_x is required to achieve the objective level (see table 4 above).
In order to achieve this the road traffic contribution must be reduced by 28.3μg to 32.8μg/m^3.

Therefore, as all the emission reduction is expected to come from road traffic sources the percentage improvement needed is calculated using the following equation: -

$$\text{Improvement from road traffic} = \frac{(\text{Predicted Value} - \text{Required value})}{\text{Predicted Value}} \times 100$$

$$\text{i.e. in the case of AQMA1} = \frac{(61.1 - 32.8)}{61.1} \times 100$$

$$= 46.3\%$$

The results applying this method to all the existing and proposed AQMAs are presented in table 5 below

Table 5 Required Percentage Improvement In Traffic Emissions

Air Quality Management Area	Percentage Improvement in Traffic Emissions [1]
AQMA 1	46
AQMA 2 (A1M Interchange)	50
AQMA 2 (Balby Road)	25
AQMA 3 (Carr House Road)	30
AQMA 4 (proposed)	36

[1] rounded to nearest whole number

The above method does present a somewhat simplistic result as it can be seen from tables 12 to 16 that HGVs and PSVs contribute a disproportionately high amount of NO_x compared to the percentage of vehicles using the road links.
From the information contained in tables 12 to 16, the ratio of vehicle type percentage to NO_x contribution can be calculated. The results of this exercise are presented in tables 17 to 21 in Appendix 2

4.3 Conclusions

The use of the revised exhaust emission factors issued in 2002 has resulted in a slightly more widespread predicted exceedence of the annual average objective.

It was concluded that as a result of the Stage 4 Review and Assessment that the annual mean objective for nitrogen dioxide is still considered likely to be exceeded in the following areas:
The Market Place and Frenchgate area of the town of Doncaster
The A1 (M), Warmsworth Road junction and the A630 Balby Road area.
The A18 Carr House Road area between the Racecourse and Trafford Way Roundabouts.

When determining the boundaries of the AQMAs in the Stage 3 report the Co –2SDM contour was used to decide which relevant locations, e.g. property facades, would fall within the zone of predicted exceedence of the objective, which would allow a degree of uncertainty to be incorporated. The boundaries of the AQMAs were then determined using clearly defined physical features, which lay outside the Co – 2SDM contour. This approach was taken to avoid the AQMA boundary bisecting a building or other relevant location.

As a result of the reassessment of the M 18 From Hatchell Wood to Black Carr Plantation, Cantley it was found that the Co – 2SDM contour now intersected a number of residential property facades. In view of the fact that the relevant location conditions are now met it will be necessary to declare an Air Quality Management Area covering the affected properties.

In the case of the AQMA covering the A1 (M), Warmsworth Road junction and the A630 Balby Road area (AQMA No. 2), the use of the new emission factors has resulted in the Co – 2SDM contour intersecting a slightly greater number of residential property facades in the area around the A1 (M), Warmsworth Road junction. However this contour is still contained within the existing boundary of the AQMA and as such no changes to the extent of AQMA 2 are considered necessary.

It can be seen from table 4 above that, percentage improvements of between 2.5% and 20.9% are required in order to meet the annual average air quality objective for nitrogen dioxide, equating to nitrogen oxide improvements of between 14.3% and 33.3%.
The principal source of the emissions, once the background levels are accounted for, is road traffic. The percentage improvement required from road traffic emissions is tabulated in table 5 for each AQMA and varies from 25% to 50%. From tables 12 to 16 it can be seen that the HGV traffic in particular and to a lesser extent the PSV traffic is producing a disproportionately high percentage of the total traffic emissions. For example in AQMA 1 (Table 17) it would require a traffic reduction in excess of 12 private cars to achieve the same reduction in nitrogen dioxide emissions as could be obtained by removing 1 HGV.

Any traffic reduction measures contained within the Air Quality Action Plan will of necessity have to be targeted against those vehicle types with the highest ratio of vehicle type to contribution

5.0 DEVELOPMENT OF THE ACTION PLAN

5.1 Principals Of The Action Plan

Guidance note LAQM. G2(00) “Developing Local Air Quality Action Plans and Strategies: The Main Considerations” sets out the principles of air quality action plans and strategies. The guidance states that local authorities should:-

- Carefully assess the options available to improve the air quality in AQMAs;
- Involve all relevant local authority professionals and departments to ensure a properly balanced and integrated approach;
- Strike a balance between regulatory powers and non-regulatory powers;
- Ensure that the relative contributions from different sources are cost effective and proportionate;
- Appraise the wider environmental, economic and social consequences of each option.

The above principles have been followed when developing the action plan.

5.2 The Consensus Based Approach

In order for an action plan to be effective the effects of any actions contained in the plan need to be considered and balanced against the likely improvements in air quality. In order to be certain of achieving this goal it will be necessary to gain the consensus of as many stakeholders as possible in developing the final plan.

A working group drew up the draft plan and all stakeholders were consulted on its proposals and invited to contribute proposed actions before the publication of the final plan. Feedback from the consultation exercise has been used to modify the plan as necessary. A consultation exercise involving a questionnaire sent to members of the public and the citizen's panel was undertaken. In addition the publication of the draft plan was publicised in the local press, copies were deposited at the central library, at the reception areas of council offices and placed on the council's Internet site. The results of this exercise are detailed in section 2 of this action plan. A copy of the questionnaire used is contained in appendix 5 of the plan.

5.3 The Action Plan Working Group

A working group was initiated in order to draw up the draft action plan. External representatives from transport, health and the Highways Agency were invited to join along with officers from the council's Health & Public Protection section, Planning, Borough Strategy and Development (Transportation Unit), Fleet Management & Town Centre Management. The group was facilitated by an officer from the Pollution Control Section and a total of six meetings were held. A list of the members comprising the working group is contained in appendix 4

Representatives from various external bodies and stakeholder groups were invited to specific meetings of the working group in order that they may contribute to the formation of the plan.

It was found during the initial meetings that the various council departments were already implementing a number of initiatives considered suitable for inclusion in an action plan, e.g. Car Sharing, Council's Commuter Plan, A638 Quality Bus Corridor. These initiatives have been included in the proposed action plan.

5.4 Cost - Benefit Analysis

The cost – benefit analysis included in the draft plan is of necessity crude. This is due to the wide-ranging nature of the actions, the cost of a number of which are not readily or easily measurable and the benefits of which in terms of improvements in air quality and health will not become apparent until an extended period of monitoring results are obtained and analysed.
In order to provide some indication of the costs and benefits of each proposal the following criteria have been adopted: -

Costs
Low……...under £5,000
Medium……under £50,000
High……..over £50,000

Benefits

Low……air quality improvement (pollutant specific) under 0.2$\mu g/m^3$
Medium…….air quality improvement (pollutant specific) of 0.2$\mu g/m^3$ to 1$\mu g/m^3$
High…….air quality improvement (pollutant specific) over 1$\mu g/m^3$

The benefits in air quality improvement were arrived at by using the dispersion modelling techniques employed in carrying out the Stage 4 review and assessment source apportionment. Varying levels of traffic flow reduction and changes in vehicle mix, for example, were input into the model and the resultant change in pollution levels at the points of maximum concentration noted. Again it must be stressed that the resulting benefits using this method are relatively crude and continuing monitoring will be required to establish the effectiveness of the actions.

In all cases where the actions relate to work carried out by DMBC the costs of officer time has been included.

Since the publication of the draft consultation version of this plan, Doncaster MBC, together with the other 3 South Yorkshire local authorities, has been successful in obtaining funding from the Government to enable roadside vehicle emission testing to be carried out. The funding will pay for the entire programme leaving minimal costs for each local authority in respect of officer time.

An Air Quality Partnership is being formed within the Council. Its remit will include investigating and obtaining funding from various sources e.g. the Energy Savings Trust, Powershift and Clean Up.

6.0 THE ACTION PLAN

In respect of the government guidance referred to in Para 5.1 of this document the following ingredients are considered necessary to the successful implementation of an action plan: -

- The use of inclusive and sustainable partnerships
- The existence of an efficient public transport infrastructure
- A local employment policy
- No decrease in equality as a result of action plan measures
- A reduction in the need to travel
- All objectives must have a balanced solution
- Strong local community involvement
- Local business involvement and commitment
- Co-operation and agreement between the Local Authority and the Government Agencies
- A clear agreement on priorities
- The engenderment of a cultural change to travel habits

The proposals contained within the draft action plan have been formulated in accordance with the above ingredients.

The proposals have been divided into those that are primarily aimed at improving the air quality within the AQMAs in particular and within the Borough generally, those that are designed to improve the quality of life and the health of the residents of the Borough and more general proposals not specifically aimed at reducing traffic emissions. In respect of Air Quality further subdivisions have been used to enable more effective targeting of the proposed measures. These subdivisions are: -

Vehicle Emission Reduction
Traffic Reduction & Management
Development Plan Review & Planning Applications
Public Transport
Publicity and Promotion

The above subdivisions have not been used in respect of those actions relating to improving the quality of life and health and which are more general in nature for the reason explained below.

There is of necessity a degree of overlap between the various proposals and their targets e.g. the introduction of a pedestrian area will affect traffic density, improve air quality within the immediate area and have an impact on health. Proposed actions, which impact on more than one target, have not been duplicated for each target within the action plan. This is especially true in the case of those actions targeted to improve the quality of life and health

Appendix 1 details the proposed actions in tabular form, together with the section or organisation responsible for its implementation, a proposed implementation date and an estimate of cost versus air quality benefit.

6.1 Prioritisation And Targeting Of Actions

6.1.1 Prioritisation

Those actions, which received the greatest support from the consultation process (mean score less than 2.0), are: -

Roadside Emission Testing (Action No1)
Improved Access To And Frequency of Public Transport (Actions 31 & 32)
H.G.V. Strategy (Action No 9)
Improve Public Awareness (Action No 36)
Planning Restrictions On New Developments (Actions17 -29)
Convert The Council's Vehicle Fleet To Low Emission/Alternate Fuelled Vehicles (Action No 6)

Despite much popular support for subsidised public transport, it has not been possible to include this as a proposed action per se. This is because the subsidisation of public transport is not within the control of the local authority. However it is intended to lobby for subsidised public transport under the terms of Action No 8.

A number of the least popular actions e.g. Parking Restrictions, Bus Only Lanes and Quality Bus Corridors were already the subject of initiatives and schemes by the Council when the Action Plan was being debated and drawn up. This being the case those measures have been included in the list of actions.

The roadside vehicle emission testing, which was the measure that received most overall support, has now been given Government funding and a joint scheme involving all the 4 South Yorkshire Local Authorities is scheduled to commence in April 2003.

From tables 17 to 21 it can be seen that HGVs and PSVs have the highest vehicle type/contribution ratio in respect of pollution emission. This being the case it is clearly necessary to ensure that the countywide HGV strategy is pursued and applied to the AQMAs as a priority action.

Similarly in respect of improving access to and frequency of public transport, work is due to commence on Doncaster's new transport interchange in the very near future. The use of modern low emission public service vehicle will be encouraged on routes passing through the AQMAs as a priority action.

The A638 Quality Bus Corridor, although one of the least supported measures, is already progressing towards implementation and its effect on the air quality within AQMA No. 4 will be assessed before any extension of the scheme to routes passing through other AQMAs are considered.

The transport related actions in this plan are designed to be fully integrated with the goals of the Local Transport Plan.

The actions relating to planning matters will be implemented in respect to the Government guidance in the form of Planning Policy Guidance Note 23 – Planning and Pollution Control (PPG 23). This deals with all forms of pollution in relation to planning, including matters regarding air quality. The Local Planning Authority must have regard to it, along with other material planning considerations, when determining planning applications and formulating planning policy.

6.1.2 Targeting

The following actions are primarily targeted at the AQMAs

The vehicle emission testing, (Action No 1), will be targeted at vehicles using the roads within the AQMAs. Because of the funding received, (£300,000), the cost to Doncaster MBC will be minimal.

Action No.9, the implementation of the county wide HGV Strategy, will be specifically targeted at the AQMAs in view of the findings of the Stage 4 report (tables 12 to 21).

Action No. 10 (SCOOT) will initially be targeted at AQMA No 2 and then expanded to the other AQMAs

Action No. 13 (Bus Only Lanes), bus only lanes are already in the process of being introduced within AQMAs 1 & 2.

Action No. 29 in the Planning Actions section is principally aimed at controlling new development within or adjacent to the AQMAs.

Action No. 30 (Quality Bus Corridor) will initially affect AQMA No. 4 in that the A638 crosses through it. The success of this scheme will be monitored in terms of its effect on air quality and if successful will be extended to the A630 route through AQMA 2.

The remaining actions are designed to have a Borough wide effect, rather than being specifically targeted at the AQMAs, although improving the air quality within the Borough as a whole will improve air quality within the AQMAs.

In respect of DMBC's Commuter Plan (Action No. 11), the proposed measures do have specific implementation targets in line with the South Yorkshire Local Transport Plan targets, e.g.: -

Increase cycling by 50% over 5 years in line with recommendations contained in the National Cycling Strategy (DoT1996) and Doncaster Cycle Action programme (DMBC 1994).

100% increase in walking trips to or whilst at work in the next 5 years

5% increase in public transport patronage over the next 5 years

Increase in car occupancy rates from 1.1 to 1.5 within 5 years.

APPENDIX 1: PROPOSED ACTIONS

	Action	Responsibility	Implementation Date	Cost/Benefit
	Air Quality **Vehicle Emission Reduction**			
1.	Carry out the Authority's duties under Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regs. 2002 in respect of carrying out roadside vehicle emission testing and issuing fixed penalty notice in partnership with the other South Yorkshire local authorities and the Police	Pollution Control Section, South Yorkshire Police	2003	Med/Med
2	Carry out the Authority's duties under Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regs. 2002 in respect of stopping of engines when vehicles are stationary and together with the SYPTE encourage bus drivers to switch off their engines when stationary	Pollution Control Section & SYPTE	2003	Low/Low
3.	Ensure that all transport termini and bus stops are provided with prominent signs requiring drivers to switch off their engine when stationary	Pollution Control & SYPTA	Implementation in progress	Low/Low
4.	Liase with the Vehicle Inspectorate to ensure that all vehicles producing excessive and visible exhaust emissions "smoky vehicles" are inspected, tested and their emission reduced to acceptable levels	Pollution Control, Vehicle Inspectorate	Ongoing to 2005	Low/Low

5.	Undertake a feasibility study into the introduction of a Low Emission Zone (LEZ) within the AQMAs and in other areas of the Borough where vehicle emissions have a major impact on air quality.	Pollution Control, Planning, Borough Strategy and Development (Transportation Unit)	Begin study by 2004	Full analysis as part of study
6.	The council will continue to ensure that its own vehicle fleet is progressively "greened" by carrying out the following initiatives: - • Ensuring that all vehicles are properly maintained • Ensure 5% of the councils fleet are dual fuel vehicles • Ensure all diesel engined vehicles are to Euro 2 standard • Use of fuel management system to monitor efficient vehicle use • Provide an LPG gas station at North Bridge Depot • Investigate feasibility of electric & hybrid fuel vehicles • Continue to take advantage of all Government initiatives and grant aid from such bodies as the Energy Saving Trust (Powershift)	Transport & Fleet Management	Ongoing End of 2002 Completed Ongoing Installed 2002/3 Demonstration vehicles tested	Med/Med High/Low High/Low Med/Med High/Low Low/Low
7.	The council will review its car allowance and car loan schemes in order to identify and implement reforms which encourage the use of the cleanest and most fuel efficient vehicles and minimise business mileage inline with Inland Revenue payment guidelines	Green Transport Officer	By Dec 2003	Low/Low (N.B. possible savings to council budget)
8.	Lobby the various Government bodies to create a legislative and policy framework that encourages continuing improvements in vehicle emission technology and a greater usage of cleaner vehicles.	Pollution Control	Ongoing to December 2005	Low/Med

	Traffic Reduction & Management			
9.	Implement the findings of the county wide study into the feasibility of producing a HGV strategy	Borough Strategy and Development (Transportation Unit)	Ongoing to 2005	Low/Med
10.	Investigate the use of the Split Cycle Offset Optimisation Technique (SCOOT) traffic signal control system to predict and link traffic emissions to traffic light sequencing in order to maximise traffic flow and minimise slow moving or stationary traffic during periods of elevated air pollution.	Neighbourhood Services (Infrastructure Services)	Pilot Study Balby Rd by 2003, then ongoing expansion	Med/Med
11.	Implement the specific policies contained in the Doncaster MBC Commuter Plan which are detailed in the plan under the following headings: - Reducing the need to travel Promoting alternative and more sustainable modes of transport to the car Reducing pollution through the use of environmentally acceptable vehicles and fuels Raising awareness e.g. promotion of travel plans	Borough Strategy and Development (Transportation Unit)	Commuter Plan in place, policies being progressively developed to reach targets by 2006	Detailed analysis contained in each specific policy
12.	Introduce a DMBC car sharing scheme	Borough Strategy and Development (Transportation Unit)	Scheme in Place	Low/Low
13.	Expand the existing network of bus only lanes, targeting the AQMAs as a first priority	Borough Strategy and Development (Transportation Unit), Planning	Ongoing	High/Med

14.	Expand the existing network of cycle lanes within the Borough, with particular emphasis on the AQMAs	Borough Strategy and Development (Transportation Unit), Planning	Ongoing	Med/Med
15.	Implement 2 Park & Ride sites by 2005 and complete a feasibility study to identify other sites for implementation in future years, targeting as a priority those routes that traverse AQMAs. Continue to provide P & R sites over the Christmas period	Borough Strategy and Development (Transportation Unit), Planning, SYPTA	Ongoing to 2005, feasibility study by 2002	High/Med
16.	Investigate the feasibility of introducing High Occupancy Vehicle Lanes on the major arterial routes into town	Borough Strategy and Development (Transportation Unit), Planning	Feasibility study to start in 2004	Detailed analysis as part of scheme
	Development Plan Review & Planning Applications			
	The Unitary Development Plan was adopted in July 1998 and is presently undergoing a process of revision. The plan contains policies relating to pollution but not exclusively to air quality. Many policies are aimed at promoting sustainability including the reduction of air pollution, most notably many of the transport policies aimed at reducing car travel and promoting public transport. Many of these transport policies are in need of revision in light of the latest Government and Regional Planning advice. The following policies will be relevant to the action plan.			
17.	Ensure that new developments are located, designed and managed so that the number of additional vehicle journeys they are likely to generate are minimised	Strategic Planning & Planning Development Control	Ongoing Revision of UDP & determination of planning applications	Low/Med

18.	Ensure that new development provides a real choice of transport, including walking, cycling and public transport and that such development contributes to meeting the demand for the transport provision that it generates	Strategic Planning & Planning Development Control	Ongoing Revision of UDP & determination of planning applications	Low/Med
19.	Active management of the pattern of urban growth to make the fullest use of public transport and focus major transport generators of travel demand in town and district centres and near to major public transport interchanges	Strategic Planning	Ongoing Revision of UDP	Low/Med
20.	Ensure that day to day facilities which need to be near their clients in local centres are located so that they are accessible by walking and cycling	Strategic Planning	Ongoing Revision of UDP	Low/Low
21.	Place new housing principally within existing urban areas, with emphasis on locations which are highly accessible by public transport, walking and cycling	Strategic Planning	Ongoing Revision of UDP	Low/Med
22.	Ensure that development comprising employment, shopping, leisure and services offers a realistic choice of access by public transport, walking and cycling.	Strategic Planning	Ongoing Revision of UDP	Low/Med
23.	Ensure that the strategies in the UDP and Local Transport Plan complement each other and that development plan allocations and local transport and investment are closely linked	Strategic Planning	Ongoing Revision of UDP	Low/Med
24.	Promote the use of parking policies, alongside other planning and transport measures, to promote sustainable transport choices and reduce the reliance on the car.	Strategic Planning & Planning Development Control	Ongoing Revision of UDP & determination of planning applications	Low/Med

25.	Give priority to people over the ease of traffic movement and provide more road space for pedestrians, cyclists and public transport in urbanised areas	Strategic Planning & Planning Development Control	Ongoing Revision of UDP & determination of planning applications	Low/Low
26.	Ensure that new development shall, where appropriate, contribute to the provision of transport infrastructure for walking, cycling, public transport and highway improvements, secured through Section 106 agreements	Strategic Planning & Planning Development Control	Ongoing Revision of UDP & determination of planning applications	Low/Med
27.	Take part in and adopt the county wide production of a guidance document aimed at advising developers wishing to submit planning applications for developments in or adjacent to AQMAs that could adversely affect air quality	Strategic Planning & Planning Development Control together with other S. Yorkshire councils	By Dec 2003	Low/Med
28.	The council will have regard to the guidelines contained in the forthcoming revision of Planning Policy Guidance note PPG23, Planning and Pollution Control, when determining planning applications	Strategic Planning & Planning Development Control	Ongoing to Dec 2005	Low/Med

29.	When considering a planning application the council shall: - A. Ensure that air quality impacts are fully considered in all Environmental Impact Assessments B. Ensure that air quality impacts are fully considered in all Traffic Impact Assessments C. Fully consider air quality impacts where traffic volumes are anticipated to increase on roads within or near to AQMAs. D. Ensure that new developments do not lead to the declaration of further AQMAs if they are planned to be located near to busy roads etc	Planning – Development Control	Ongoing determination of planning applications	Low/Low
	Public Transport			
30.	Implement the A638 Quality Bus Corridor and investigate the feasibility of expanding the Quality Bus Corridor scheme to other major routes that traverse the AQMAs, beginning with the A630 Balby Road Corridor.	Planning, Borough Strategy and Development (Transportation Unit), SYPTA	Ongoing to 2005 (under investigation as part of the Doncaster – Barnsley Implementation Study	High/Med
31.	Improve the attractiveness of public transport use by a process of continual upgrading of passenger pick up points and vehicles	SYPTA	Ongoing to 2005	Med/Med

32	The council will support and promote the new transport interchange in order to ensure a fully integrated road/rail public transportation system is provided for the residents of and visitors to the borough	Pollution Control, Planning, Borough Strategy and Development (Transportation Unit), SYPTA, Rail Companies	Construction work on new interchange due to commence in early 2003 and will be completed by 2005	High/Med
33.	The council, together with the SYPTA will carry out a feasibility study into the use of guided bus lanes.	Borough Strategy and Development (Transportation Unit), SYPTA	To commence in 2003	Low/Low
34.	The council will investigate the feasibility of carrying out vehicle emission testing on the Borough's fleet of private hire vehicles as part of the licensing procedure	Licensing Section, Transport & Fleet Management	By Dec 2003	Low/Med
	Promotion & Publicity			
35.	The council will, together with the operators of the new transport interchange, ensure that air quality information, in particular the current level of air pollution within the Borough is made available to all users of the interchange and other stakeholders	Pollution Control, SYPTA, Rail Companies	To commence on opening of new interchange	Low/Low
36.	The council will expand its existing air quality information provision service to include more use of strategically located electronic information message units. Air quality information is already broadcast and updated 3 times daily on the council's web site, local radio, recorded answer phone message, electronic sign and message boards.	Pollution Control	Ongoing, continuous process of enhancement	Low/Low

37.	The council will approach the Highways Authority in order to investigate the possibility of using the new electronic message signs located on the motorways traversing the Borough to provide air quality information and pollution episode warnings.	Pollution Control, Highways Agency	2003	Low/Low
38.	The council will produce an air quality promotion and project pack for use in schools to encourage children to become aware of the importance of good air quality and the role that private car use and public transport can play in decreasing and improving air quality respectively	Pollution Control, Education	Dec 2003	Low/Low
39.	Acquire, produce if necessary and distribute relevant leaflets and promotional material relating to improving air quality and reducing (in particular vehicle) emissions. This material to be distributed in all council offices where the public may visit, major retail outlets, libraries, GP's surgeries and hospitals and all public events.	Pollution Control, Green Transport Officer	Dec 2003	Low/Low
40.	The council will actively support and take part in all national and local events targeted towards reducing private car use, increasing public transport and cycling use and reducing traffic pollution. Examples include "Walk to Work Day", "Don't Choke Britain Campaign" "DMBC Car Sharing Promotion Week"	Pollution Control, Green Transport Officer	Ongoing	Low/Low
41.	The council will carry out a pilot scheme providing free voluntary vehicle emission testing events for private motorists at a number of venues within the Borough	Pollution Control, Green Transport Officer, Transport & Fleet Manager	Pilot scheme underway, one event already held	Low/Low
42.	Ensure that all travel information leaflets, maps and information for the Borough contain information on the public transport, cycling and walking amenities	Green Transport Manager and all relevant Directorates	Ongoing to 2005	Low/Low

	Improvements In The Quality Of Life and Health			
43.	The council will liase closely with the Primary Care Trusts responsible for the Borough in respect of identifying any linkage between areas of the Borough where the residents suffer increased levels of respiratory problems and air pollution, particularly from traffic emissions.	Pollution Control, Primary Care Trusts	Dec 2003	Low/Low
44.	The council will expand the Borough's successful "Quality Streets" initiative to extend the amount of pedestrianised streets, both within the town centre and the retail centres of the satellite towns	Neighbourhood Services (Infrastructure Services)	Ongoing to 2005	High/Med
45.	The council will continue to develop the Safe Routes to School Programme, the object of which is to assess and where applicable improve the safety of the routes taken by children to and from school in order to encourage more walking and cycling and reduce the number of journeys made by car	Road Safety, Education, Health Authority, Police, Transportation Unit	Scheme in operation, expansion ongoing	Med/Low
46.	The council will continue its ongoing commitment to producing School Travel Plans by engaging schools in the process of researching all aspects of travel to and from school, linking directly into the Safe Routes to School Programme. One aspect of this commitment is the implementation of a Walking Bus network.	Road Safety, Education, SYPTA, Transportation Unit	Walking Bus pilot Scheme began 09/09/02	Low/Med
47.	The council will actively participate in "Walk to School Week" in order to use this as a starting point for sustainable walking to school	Road safety	30th October 2002, then annually	Low/Low

	Non Transport			
48.	The council will continue to use all its powers to control industrial & commercial emissions to the atmosphere by liaison with the Environment Agency in respect of Part A processes and the institution of risk based process inspection in respect of Part B Processes.	Pollution Control, Environment Agency	Ongoing process	Low/Low
49.	The council will continue to minimise domestic emissions to the atmosphere by rigorous enforcement of the Clean Air Act	Pollution Control	Ongoing	Low/Low
50.	The council will continue to work towards achieving a 30% energy saving by 2010 by reducing CO_2 emissions and fuel poverty, increasing the energy efficiency and affordable warmth indices of properties within the Borough by such methods as: - • Provision of energy advice to householders • Freephone advice, • Tailored home energy reports • One to one home energy advice visits • Insulation grants and bulk discount insulation and heating schemes	Energy Team	Ongoing commitment	Med/Low
51	The council will continue to expand its air quality monitoring and modelling capabilities in order to identify and predict areas of current or potential elevated air pollution	Pollution Control	Ongoing commitment. New NO_x monitor purchased in January 2003 for use in AQMA No. 4	High/Low

APPENDIX 2. TABLES FROM THE STAGE 4 REPORT

Tables 6 – 10 Percentage Contribution Of Individual Road Links To NO_x Concentrations

Table 11 Composition Of Traffic Within Each AQMA

Tables 12 – 16 Percentage Contribution Of Traffic Classes To NO_x Concentrations

Tables 17 – 21 Vehicle Type Contribution Ratio

Table 6

AQMA1 (at point of maximum concentration where exposure is likely))

Road Link	NO_x Road +Background	NO_x Road Only	% Contribution
St Georges Bridge	45.1	8.9	14.5
A630 Frenchgate-Market Place	52.6	16.4	26.7
A630 Market Place-Holmes Rdbt	46.5	10.3	16.8
North Bridge	36.5	0.3	0.5
Market Road	39.9	3.4	5.6
A630 Trafford Way	37.4	1.2	1.9
Market Place Gyratory	56.9	20.7	33.8

Table 7

AQMA2 (at Grosvenor Crescent, point of maximum concentration where exposure is likely))

Road Link	NO_x Road +Background	NO_x Road Only	% Contribution
A1 (M) Junctions 36-37	34.3	0.3	0.4
A1 (M) Junctions 35-36	86.7	52.7	75.7
A630 Warmsworth Road	46.5	12.5	17.9
A630 High Road	38.1	4.1	5.8

Table 8

AQMA2 (at Balby Rd., point of maximum concentration where exposure is likely))

Road Link	NO_x Road +Background	NO_x Road Only	% Contribution
A630 Balby Road	80.5	46.5	100

Table 9

AQMA3 (at point of maximum concentration where exposure is likely))

Road Link	NO_x Road +Background	NO_x Road Only	% Contribution
A18 Carr House Road	82.5	45.9	100

Table 10

AQMA4 (at point of maximum concentration where exposure is likely))

Road Link	NO_x Road +Background	NO_x Road Only	% Contribution
M18 (between junctions 4 & 3)	93.3	65.4	98
A 638	27.9	1.3	2.0

Table 11

Composition of Traffic Within Each AQMA

AQMA No.	Percentage Of Vehicle Types			
	Private Cars	PSV	HGV	LGV
AQMA 1	82.2	1.3	5.3	11.2
AQMA 2	73.1	1.6	13.3	11.8
AQMA 3	83.9	1.1	3.7	11.3
AQMA 4 (proposed)	63.6	0.5	24.0	11.9

Table 12

AQMA1 (at point of maximum concentration where exposure is likely) NO_x Annual Average Concentrations % Contribution

Road Link	Private Cars	PSV	HGV	LGV
St Georges Bridge	8.3	0	4.5	1.6
A630 Frenchgate-Market Place	14.1	2.1	7.5	3.1
A630 Market Place-Holmes Rdbt	7.0	0.7	7.5	1.6
North Bridge	0	1.6	0	0
Market Road	2.5	1.1	1.5	0.5
A630 Trafford Way	1.0	0.2	1.5	0.2
Market Place Gyratory	13.9	1.6	15.0	3.1
Totals	46.8	7.3	36.5	3.1

Table 13

AQMA2 (at Grosvenor Crescent, point of maximum concentration where exposure is likely) NO_x Annual Average Concentrations % Contribution

Road Link	Private Cars	PSV	HGV	LGV
A1 (M) Junctions 36-37	0.15	0	0.3	0
A1 (M) Junctions 35-36	13.9	0.7	57.6	2.9
A630 Warmsworth Road	8.0	3.6	5.7	1.9
A630 High Road	2.0	0.7	2.5	0.6
Totals	24.0	5	66.1	5.4

Table 14

AQMA 2 (at Balby Road, point of maximum concentration where exposure is likely) NO_x Annual Average Concentrations % Contribution

Road Link	Private Cars	PSV	HGV	LGV
A630 Balby Road	51	20.9	18.2	9.8

Table 15

AQMA 3 (at point of maximum concentration where exposure is likely) NO_x Annual Average Concentrations % Contribution

Road Link	Private Cars	PSV	HGV	LGV
A18 Carr House Road	60.1	7.2	20.6	11.3

Table 16

AQMA 4 (at point of maximum concentration where exposure is likely) NO_x Annual Average Concentrations % Contribution

Road Link	Private Cars	PSV	HGV	LGV
M18 Between Junctions 4 & 3	17.0	1.07	74.9	5.3
A638	0.8	0.3	0.5	0.1
Totals	17.8	1.37	75.4	5.4

Table 17

Vehicle Type Contribution Ratio AQMA1

Vehicle Type	Cars	PSV	HGV	LGV
% Annual Average NO_x Contribution	46.8	7.3	36.5	3.1
% Traffic Composition	82.2	1.3	5.3	11.2
Ratio of Vehicle Type/Contribution	0.56	5.6	6.9	0.3

Table 18

Vehicle Type Contribution Ratio AQMA2 (Grosvenor Crescent)

Vehicle Type	Cars	PSV	HGV	LGV
% Annual Average NO_x Contribution	24.0	5.0	66.1	5.4
% Traffic Composition	73.1	1.6	13.3	11.8
Ratio of Vehicle Type/Contribution	0.33	3.1	5.0	0.5

Table 19

Vehicle Type Contribution Ratio AQMA2 (Balby Road)

Vehicle Type	Cars	PSV	HGV	LGV
% Annual Average NO_x Contribution	51.0	20.9	18.2	9.8
% Traffic Composition	73.1	1.6	13.3	11.8
Ratio of Vehicle Type/Contribution	0.7	13.1	1.4	0.8

Table 20

Vehicle Type Contribution Ratio AQMA3

Vehicle Type	Cars	PSV	HGV	LGV
% Annual Average NO_x Contribution	60.1	7.2	20.6	11.3
% Traffic Composition	83.9	1.1	3.7	11.3
Ratio of Vehicle Type/Contribution	0.7	6.5	5.6	1.0

Table 21

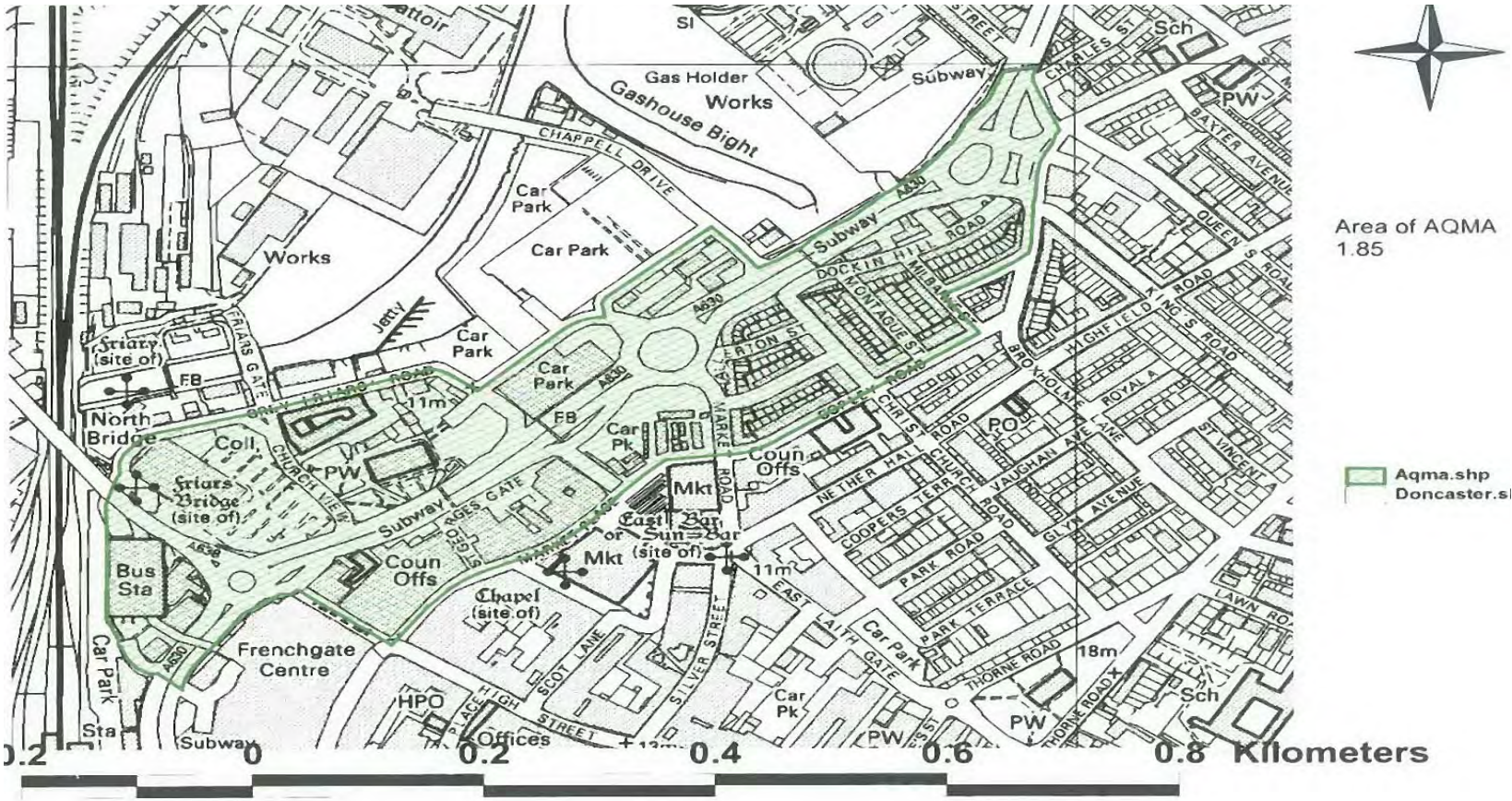
Vehicle Type Contribution Ratio Proposed AQMA4

Vehicle Type	Cars	PSV	HGV	LGV
% Annual Average NO_x Contribution	17.8	1.37	75.4	5.4
% Traffic Composition	63.6	0.5	24.0	11.9
Ratio of Vehicle Type/Contribution	0.3	2.7	3.1	0.45

APPENDIX 3: MAPS OF THE AIR QUALITY MANAGEMENT AREAS

- Map 1 Air Quality Management Area No1
- Map 2 Air Quality Management Area No2
- Map 3 Air Quality Management Area No3
- Map 4 Proposed Air Quality Management Area No 4

MAP 1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Works
Gashouse Bight
CHAPPELL DRIVE
Car Park
Car Park
Works
Jetty
Car Park
Car Park
Subway
DOCKIN HILL ROAD
Area of AQMA
1.85
Aqma.shp
Doncaster.sl
Friars (site of)
FB
North Bridge
Coll.
Friars Bridge (site of)
PW
Subway
11m
FB
Car Pk
Mkt
Coun Offs
Mkt
East Bar or Sun Bar (site of)
11m
Coun Offs
Bus Sta
Chapel (site of)
Frenchgate Centre
Car Park
Sta
Subway
HPO
Offices
SILVER STREET
Car Pk
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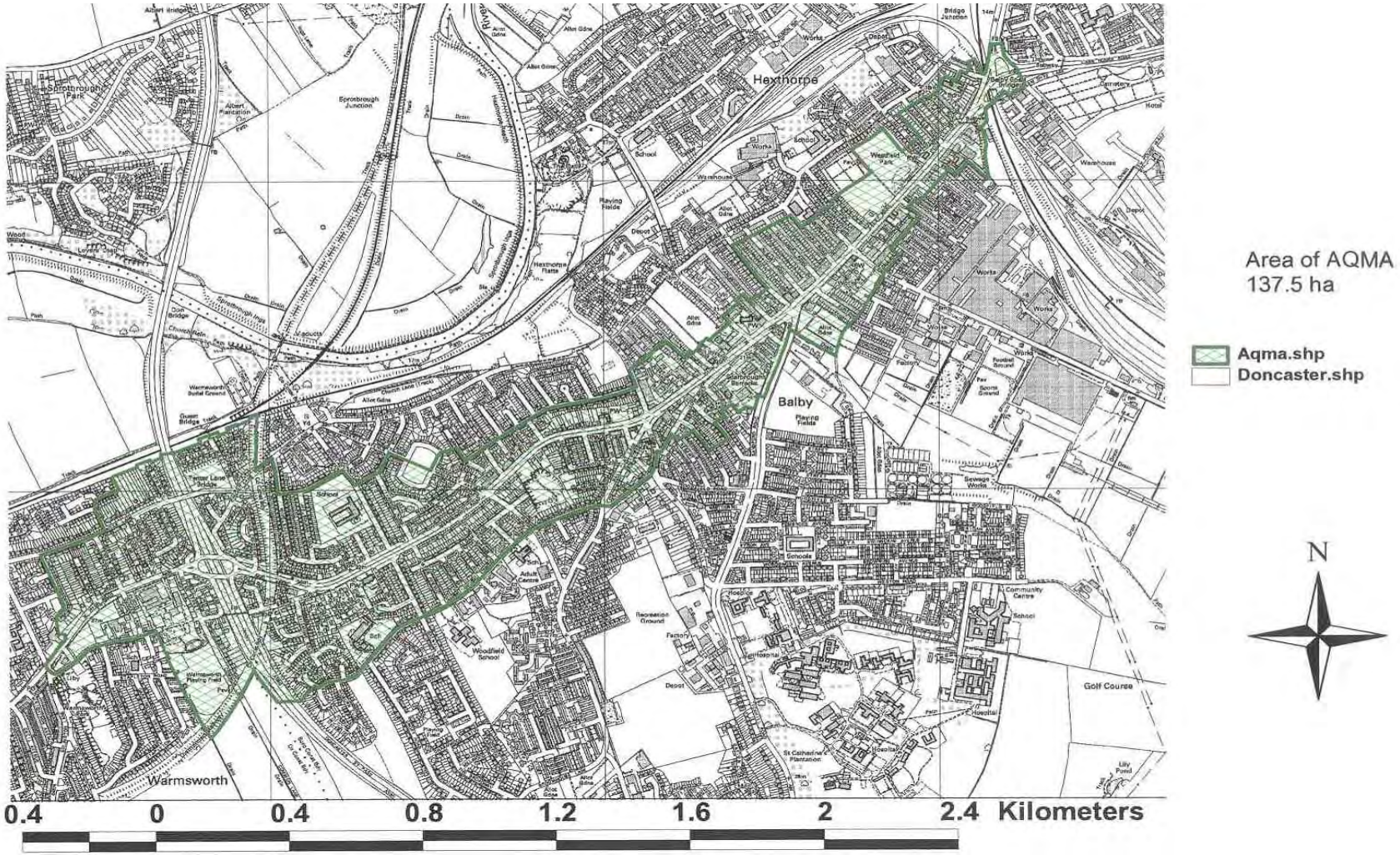
MAP 2


Hexthorpe
Balby
Warmsworth
Golf Course
Area of AQMA
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Aqma.shp
Doncaster.shp
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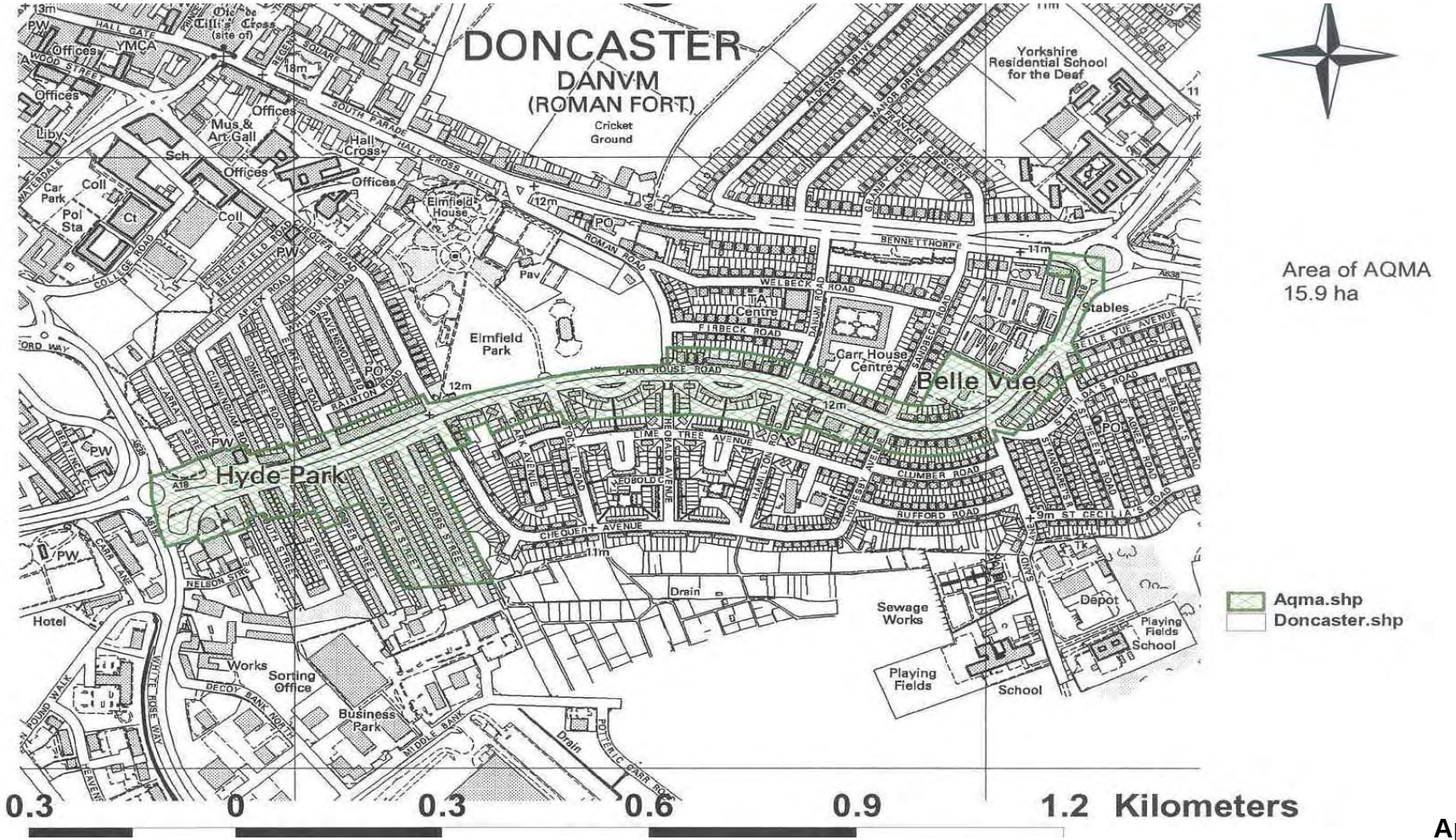
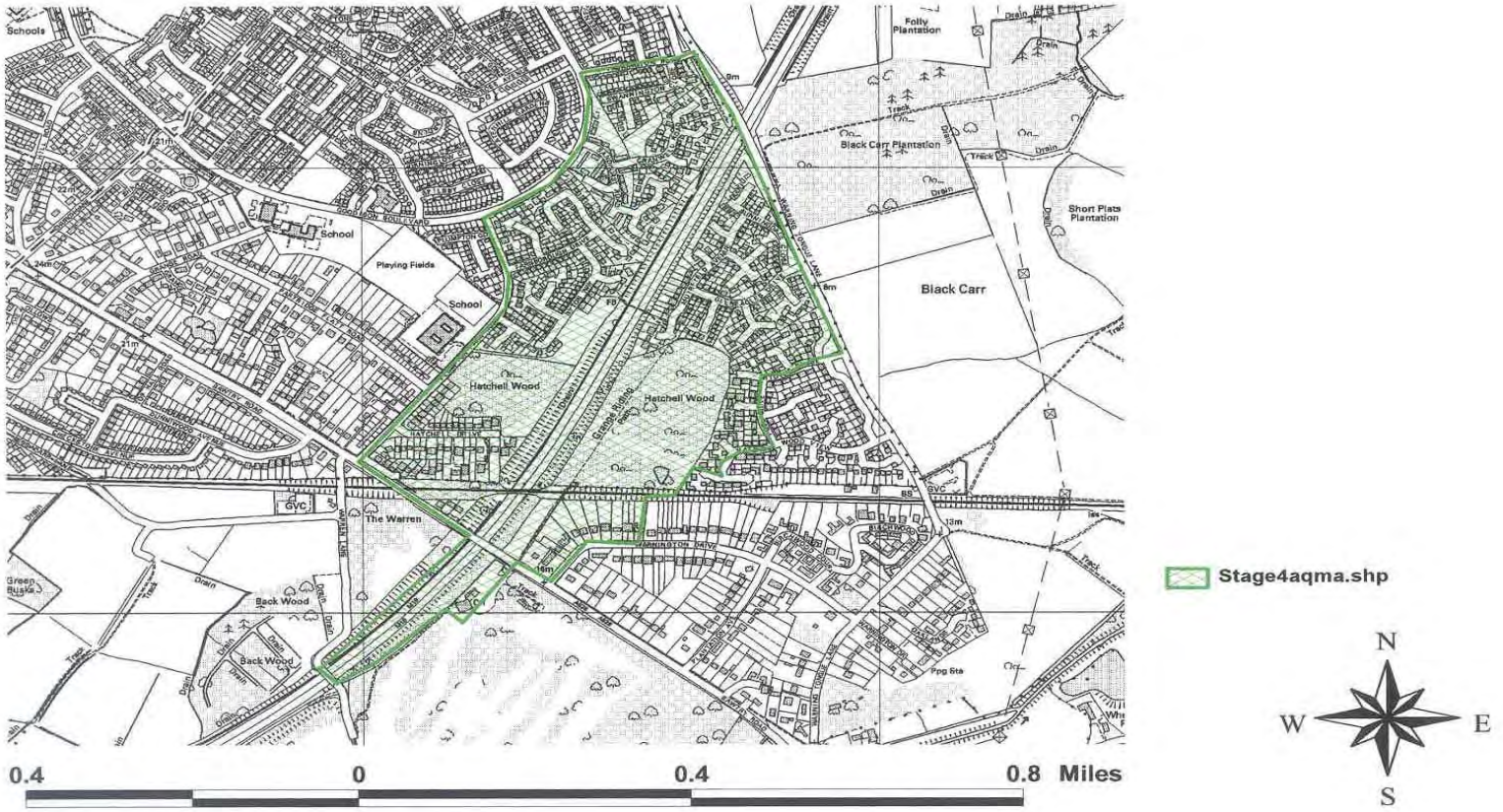
0.4 0 0.4 0.8 1.2 1.6 2 2.4 Kilometers

MAP 3



Appendix

MAP4


Schools
Folly Plantation
Black Carr Plantation
Short Plats Plantation
Black Carr
School
Playing Fields
School
Hatchell Wood
Hatchell Wood
The Warren
Back Wood
Back Wood
Stage4aqma.shp
N
W
E
S
0.4
0
0.4
0.8 Miles

APPENDIX 4: MEMBERS OF THE AIR QUALITY ACTION PLAN WORKING GROUP

D.M. Beal	Pollution Control Section, DMBC
G. Annis-Potter	Pollution Control Section, DMBC
N. Ward	Strategic Planning, DMBC
R. Wallens	Strategic Planning, DMBC
D. Barwick	Construction & Transport, DMBC
M. Hepple	Construction & Transport, DMBC
A. West	Development & Transport, DMBC
S. King	Development & Transport, DMBC
W. Parry	Development & Transport, DMBC
D. Tredgett	Development & Transport, DMBC
C. Pougher	Doncaster Health Authority
T. Robinson	South Yorkshire Passenger Transport Executive
D. Owen	South Yorkshire Passenger Transport Executive

N. B. the above members attended the majority of the meetings, representatives from various groups, including the public service vehicle operators attending one or more meetings. A representative from the highways agency was invited to all meetings but was unable to attend.

APPENDIX 5: AIR QUALITY ACTION PLAN QUESTIONNAIRE

Air Quality Action Plan Questionnaire

Please Tick The Appropriate Box

Proposed Actions	Strongly Agree	Agree	No Comment	Disagree	Strongly Disagree
Roadside Emission Testing of Polluting Vehicles					
Improved Access To And Frequency of Public Transport					
Subsidised Public Transport					
Quality Bus Corridors					
Bus Only Lanes/Routes					
Parking Restrictions (e.g. Park & Ride etc.)					
Low Emission Zones (e.g. only low polluting vehicles allowed).					
H.G.V Strategy (e.g. special routes, time restrictions etc.)					
Traffic Re-routing (avoidance of Air Quality Management Areas)					
Traffic Information Signing (e.g. Air quality Information)					
Planning Restrictions On New Developments					
Increased Number of Cycling Lanes					
Improve Public Awareness					
Convert The Councils Vehicle Fleet to Low Emission/Alternate Fuelled Vehicles					

Comments

Please write any comments you may have on the proposed Action Plan overleaf and return them to the address shown on the previous page. Thank you for your time.

APPENDIX 6: GUIDANCE DOCUMENTS AND REFERENCES

DETR (Now DEFRA), LAQM.G1 (00), Framework for Review and Assessment of Air Quality
DETR, LAQM.G2 (00), Developing Local Air Quality Action Plans and Strategies
DETR, LAQM.G3 (00), Air Quality and Transport
DETR, LAQM.G4 (00), Air Quality and Land Use Planning
DETR, LAQM.TG1 (00), Review and Assessment: Monitoring Air Quality
DETR, LAQM.TG2 (00), Review and Assessment: Estimating Emissions
DETR, LAQM.TG3 (00), Review and Assessment: Selection and Use of Dispersion Models
DETR, LAQM.TG4 (00), Review and Assessment: Pollutant Specific Guidance
NSCA, Air Quality Action Plans: Interim Guidance for Local Authorities
NSCA, Consultation for Local Air Quality Management: The How To Guide
NSCA, Air Quality: Planning For Action
DMBC, Pollution Control Section, Air Quality Review and Assessment, Stage 1 Report
DMBC, Pollution Control Section, Air Quality Review and Assessment, Stage 2 Report
DMBC, Pollution Control Section, Air Quality Review and Assessment, Stage 3 Report
DMBC, Pollution Control Section, Air Quality Review and Assessment, Stage 4 Report (Draft Consultation Version)
DMBC, Pollution Control Section, Air Quality Strategy (Draft Consultation Version)