



DARTMOOR TRAINING AREA

Environmental Appraisal

Traffic and Transport

15

15. Traffic and Transport

15.1 Introduction

15.1.1 Military activities on Dartmoor Training Area (DTA) could be having an effect on road traffic flows. Therefore consideration has been given to traffic flows in the Environmental Appraisal (EA). This chapter has been completed by Rachel Dimmick BSc, MSc, AIEEMA.

15.2 Context

1.2.1 Legislative Context

15.2.1 There is considered to be no legislation relevant to the context of the appraisal of traffic and transport effects.

1.2.2 Policy Context

15.2.2 **Table 15.1** summarises the planning policy context relevant to traffic and transport effects.

Table 15.1 Planning Policy: Traffic and Transport

Policy Reference	Policy Content
DNPALP Policy TF1	Planning permission will not be granted for development that would be unsuited to its location relative to the Dartmoor Route Network; or conflict with the standard, nature, capacity and function of local roads; or result in a material increase in the level or a change in the type of traffic generated which would thereby prejudice road safety.
DNPALP Policy TF6	Development will not be permitted which would increase vehicular traffic on footpaths, bridle paths or byways open to all traffic, to the detriment of their enjoyment by walkers and riders, unless there is overriding social, economic or conservation benefits arising from the proposal.
DNPMP Policy MT.M3	Erosion and damage by military vehicles is avoided.

Note 1 – The full names of the plans and guidance cited are given in Appendix 4.4, which details all policies and guidance that are relevant

15.3 Scope of the Assessment

1.3.1 Consultations

15.3.1 Transport and traffic issues have been discussed as part of the Land Use Working Group (LUWG) meetings (see **Chapter 8** for further details). During these meetings, issues regarding traffic congestion on the main access route from Okehampton town centre to Okehampton Camp, were raised. It was agreed that a traffic count would be undertaken and an indication of military traffic flows be provided using the access records for Okehampton Camp.

1.3.2 Effects Requiring Further Consideration

Effects Scoped-in in the Scoping Report

15.3.2 No environmental effects in relation to traffic and transport were scoped-in in the Scoping Report.

Effects Subsequently Scoped-in to the Appraisal

15.3.3 Subsequent to the issue of the Scoping Report, a review of the traffic data flows for the access route to Okehampton Camp has been identified through the LUWG meetings to determine what contribution military traffic makes to road traffic flows.

Effects Scoped-out in the Scoping Report

15.3.4 It was considered that the following traffic and transport effects, which are based on the potential effects from traffic associated with military activities, did not require further consideration in the EA:

- Potential severance effects on the local community: severance is the perceived division that can occur within a community when it becomes separated by a major traffic artery. It may result from the difficulty of crossing a heavily trafficked existing road for example, or as a result of a physical barrier created by the road itself. However, there are no predictive formulae, which give simple relationships between traffic factors and levels of severance. Nevertheless, the Institute of Environmental Assessment's 'Guidelines for the Environmental Assessment of Road Traffic' guidelines suggest that only changes in traffic flow of 30% or more are likely to produce changes in severance. Given that no changes in traffic flow are predicted, and that the existing levels of traffic generation are low and unlikely to be causing severance issues, this effect is scoped-out.
- Delays to drivers using the local highway network: delays to existing traffic on the network can occur due to the additional traffic generated by the proposed activity. The Institute of Environmental Management and Assessment (IEMA) guidelines note that these additional delays are only likely to be significant when the traffic on the network in the study area is already at, or close to, the capacity of the system. Given that the existing network within and around DTA is generally not at capacity, this effect is scoped-out.
- Pedestrian delay: changes in the volume, composition or speed of traffic may affect the ability of people to cross roads and therefore result in pedestrian delay. In general, increases in traffic levels are likely to lead to greater increases in pedestrian delay. However, given that no changes in traffic flow are predicted and that the existing levels of traffic generation and pedestrian activity are both low, this effect is scoped-out.
- Pedestrian amenity: this is broadly defined as the relative pleasantness of a journey, and is considered to be affected by traffic flow, traffic composition and pavement width/separation from traffic. The IEMA guidelines note that changes in pedestrian amenity may be considered to be significant where the traffic flow is halved or doubled. However, given that no changes in traffic flow are predicted, and that the existing levels of traffic generation and pedestrian activity are both low, this effect is scoped-out.
- Fear and intimidation effects on the local population as a result of intimidation from military traffic on local routes: the scale of fear and intimidation experienced by pedestrians is dependant on the volume of traffic, its HGV composition, its proximity to

people or the lack of protection caused by such factors as narrow pavement widths. Whilst there are no commonly agreed thresholds by which to determine the significance of the effect, no changes in traffic flow are predicted, and the existing levels of traffic generation and pedestrian activity are both low. Furthermore, the vehicles in use by the Armed Forces are generally smaller than private HGVs using local roads and are therefore less likely to result in intimidation effects. This effect is therefore scoped-out.

- Accidents and safety issues for local pedestrian and drivers: due to the numerous local causation factors involved in personal injury accidents, the IEMA guidelines do not recommend the use of thresholds to determine significance. However, given that no changes in traffic flow are predicted, and that the existing levels of traffic generation are low, this effect is scoped-out.

Effects Subsequently Scoped-out of the Appraisal

15.3.5 No other effects have been scoped-out of the Appraisal since the issue of the Scoping Report.

15.4 Environmental Management Measures

15.4.1 Responsibility for the implementation of the mitigation measures lies with the MoD through DTE to Commandant (Comdt) DTA assisted by Senior Land Agent (SLA) DTE SW and MoD's Service Provider. Implementation and compliance will be ensured through DTA's EMS, management plans and DTE SW Standing Orders (SOs).

15.4.2 The existing management measures which are in place to minimise effects from traffic associated with the military use of DTA are outlined below.

- In unenclosed areas vehicles are not normally permitted to move more than 15yds from roads.
- Vehicles are not permitted to leave tracks without the authority of Comdt DTA or Training Area Marshals and Supervisors.
- No tracked vehicles are to be used within DTA except the BV206, which may be allocated the Okehampton, Merrivale and Willsworthy Training Areas. BV206 routes must be agreed with Comdt DTA..
- Sites for embussing/debussing must be carefully selected so as not to inconvenience other road users. Traffic sentries are to be posted when necessary and public house car parks should not be used unless the landlord has given prior permission.
- Vehicular entry and exit is strictly limited to specified access.
- Ringmoor: vehicular entry and exist is restricted to the metalled roads leading up to and bordering the training areas. No MOD vehicles are to proceed any further north beyond the gate to Brisworthy Plantation.
- Ringmoor: wheeled vehicles may move up to 15yds off roads provided they do not rut the ground or enter any wooded area. Access to the Refuge (SX 581673) and Ditsworthy Warren House (SX 584663) is only permitted along the track for visiting units using these facilities.

- Cramber: Use of vehicles is limited and only vehicles up to 3/4T. Access is confined to the existing track with access only from the west. Vehicles can only leave the track in an emergency.
- Cramber: Only vehicles up to and including trucks Utility Medium (TUM) are permitted on the tracks from Norsworthy Bridge (SX 568693) to SX 578701 and SX 579688. Only one vehicle is permitted to use the track beyond the gate at a time, except in an emergency. No vehicles are to use the track between SX 602708 to SX 603710 and the track that leads to Nuns Cross Farm between SX 604708 to SX606698.

15.4.3 Additional mitigation measures have also been identified through the Land Use Working Group meetings. Although these measures will not have a direct effect on military traffic flows, they will help to reduce overall traffic flows, particularly long distance traffic movements associated with the delivery and supply of goods and services to Okehampton Camp.

- DTA will aim to procure food locally wherever possible and increase existing procurement of local food. This will help to reduce traffic movements associated with deliveries to Okehampton Camp.

15.5 Assessment of Potential Effects

Data Gathering and Survey Work

- 15.5.1 A traffic count survey was completed by Count on Us on Tors Road (SX 58791 94444), Okehampton for a seven day period between Thursday 26 July and Wednesday 1 August 2007. To undertake the count, a set of parallel pneumatic road tubes were installed at the monitoring location separated by a distance of 36 inches. The tubes were then connected to an automatic traffic counter which was set to obtain classified directional traffic flows in hourly intervals. Data on the type and speed of vehicles were recorded.
- 15.5.2 The location on Tors Road was selected to represent a likely worst-case scenario for those residents who live along the route from Okehampton Camp to the town centre. Actual levels of traffic on Station Road, closer to the town centre, are greater, as traffic from the residential roads (such as Brandize, Park, Station Road and Klondyke Road) move towards the town centre, thus reducing the percentage of vehicles associated with Okehampton Camp.
- 15.5.3 A review of the access records for Okehampton was also completed to provide data on the number of vehicle movements into and out of the Camp.

Current Conditions

- 15.5.4 **Table 15.2** outlines the results from the traffic survey. Information from the table would indicate that average 24 hour flows are 834 vehicle movements.

Table 15.2 Traffic Count Flows (24 hour period)

Date	Total vehicles	Motor cycles	Cars	LGVs	HGVs	Bus
Thu 26-Jul-07	698	3	608	66	13	8
Fri 27-Jul-07	715	0	621	71	17	6
Sat 28-Jul-07	613	8	563	36	6	0
Sun 29-Jul-07	796	18	715	41	6	16
Mon 30-Jul-07	919	15	802	86	11	5
Tue 31-Jul-07	1080	24	947	95	12	2
Wed 01-Aug-07	1015	19	859	117	12	8
Average	834	12	731	73	11	6

15.5.5 Data on visitors to and users of Okehampton Camp for a similar period provides an indication of typical weekly movements. An estimate of 450 visitors was provided. This is considered to comprise of the following.

- 30 staff working at Okehampton Camp with some taking lunch at home (equating to **100** two-way vehicle movements each day);
- 20 non-MOD visitors/deliveries accessing Okehampton Camp (equating to **40** two-way vehicle movements each day); and
- **50** allocated user vehicles: In the period reviewed a 400 person cadet unit arrived over the weekend. As units travel up to Okehampton Camp and then out onto the moor for training it has been assumed that these movements would only be one-way over a 24 hours period.

15.5.6 Therefore, this would indicate that over a 24 hour period, typically there are 190 vehicle movements associated with Okehampton Camp. A 24 hour period has been considered as vehicle movements associated with movements of military personnel may occur outside typical working day hours and at the weekend. **Table 15.3** shows the percentage contribution of the traffic movements associated with Okehampton Camp over an average 24 hour period.

Table 15.3 Contribution of Okehampton Camp Traffic Flows to Overall Flows

Type of vehicle movement	No. of movements	Average daily 24 hour traffic flows	Percentage contribution to flows at survey point (%)
Staff	100	834	12
Visitor/delivery	40	834	5
MOD	50	834	6
Total	190	834	23

- 15.5.7 The information in **Table 15.5** would indicate that in total, traffic flows associated with Okehampton Camp comprise 23% of the total daily average traffic flows along Tors Road at the survey point. Of this 23% only 6% is associated with the movement of troops.
- 15.5.8 It should be noted that the survey was completed at Tors Road, and that traffic flows closer to the town centre are likely to be greater and therefore the flows associated with Okehampton Camp are likely to be a smaller percentage of the overall flows close to the town centre. Overall, it is considered unlikely that vehicle movements associated with troop movements will comprise more than 10% of the daily traffic flows along the access route from Okehampton Town Centre (in addition to staff movements and movements associated with visitors and deliveries). Furthermore, traffic flows associated with the movement of troops can vary considerably, and on some days no troop movements will occur. On such days, traffic from Okehampton Camp would only constitute 17% of total traffic flows.
- 15.5.9 The effects which have been raised in the LUWG meetings have related to:
- permitted parking either side of Station Road, which limits passing places especially if HGV's are travelling up or down the road. Conversely this improves safety as traffic flow is slowed; and
 - the recently changed junction layout and traffic lights in the centre of Okehampton cause delay, which can be exacerbated if there is a large military vehicle movement.
- 15.5.10 Some of these factors are beyond the control of Comdt DTA, for example, parking on Station Road or junction control in Okehampton, however, it is considered that the mitigation measures in place help to minimise these effects.

15.6 Summary of Significance Evaluation

15.6.1 **Table 15.4** summarises the findings of the appraisal for the traffic and transport effects.

Table 15.4 Summary of Significance Evaluation: Traffic and Transport

Receptor and summary of predicted effects	Type of effect ¹	Significance ²
Residents along access route from Okehampton town centre to Okehampton Camp: nuisance effects such as noise, severance, traffic congestion	-ve	NS The traffic flows associated with Okehampton Camp are unlikely to comprise more than 25% of the total traffic flows along Tors Road.
Key/footnotes:		
1.Type of effect	-ve = negative + ve = positive N = Neutral ? = unknown	2. S Significant or NS Not-significant