

# Durham County Council Tree Inspection Procedures (March 2024)

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# 1. Introduction

## Background

- 1.1 We have a legal duty of care to manage the risk from our trees. That duty requires that we should be reasonable, proportionate, and reasonably practicable when managing the risk.
- 1.2 The council is adopting the VALID approach to Tree Risk-Benefit Management & Assessment. This involves a combination of active and passive assessment.
- 1.3 Passive assessment is carried out on all sites. It will be augmented by giving staff who work outside training in recognising obvious tree risk features.
- 1.4 Active assessment is carried out by qualified arborists either as part of programmed and unprogrammed inspections or where passive assessment has picked up a tree that needs a closer look. It is also carried out at a basic level as part of other types of programmed site or asset inspections undertaken by other staff who have received training in recognising obvious tree risk features.
- 1.5 The management of our trees as a whole is influenced by a range of considerations in addition to risk. We also need to ensure our trees don't cause a legal nuisance and we need to deliver high quality tree care generally for the wider benefits that it brings to the environment and our communities.
- 1.6 The tree inspection procedures described below are designed to allow us to manage risk, to meet our statutory and other legal duties, and to manage our trees and woodlands in accordance with good arboricultural practice.
- 1.7 Programmed tree inspections will include 'Zonal Tree Inspections' in urban area and 'Highway Tree Inspections' on the road network.
- 1.8 These procedures are under development and are likely to evolve depending on the choice of asset management software and information fed back from initial inspections and surveys.
- 1.9 More detailed technical notes will be produced to set out the systems and processes to be used for the day to day management of inspections.

## Guidance

- 1.10 Our inspection procedures reflect current legislation and arboricultural best practice including the following:
  - ISO31000 (2018) – Risk Management guidelines
  - National Tree Safety Group - Common sense risk management of trees
  - VALID Tree Risk-Benefit Assessment

- Health & Safety at Work Act 1974 & associated regulations & guidance
- HSE SIM – Management of the Risk from falling trees 2007
- Highways Act 1980
- Local Government (Miscellaneous Provisions) Act 1976
- Government Circular ROADS no. 52/75
- Well Managed Highway Infrastructure (October 2016) – A code of Practice.

## 2. Inspection procedures

### Background

- 2.1 Our tree inspection procedures need to be tailored to identify risks that are not acceptable or not tolerable, to identify trees causing or likely to cause a legal nuisance, and trees that would benefit from intervention to maintain their health or amenity value.
- 2.2 To manage risk, active assessment in the form of programmed tree inspections needs to be carried out in 'areas of high confluence': areas where there is a combination of high use, in all weathers, and large trees.
- 2.3 The term 'high use', spans the 'very high' and 'high likelihood of occupancy' categories in VALID's risk model. For roads, this is where traffic is 1400 or more vehicles a day. All railway lines are zoned as high use. For people, it's an average of someone passing every minute between 7am – 7pm, Monday to Friday which is around 1200 a day.
- 2.4 Combinations of traffic and people include urban areas rich with offices, shops, bars, and restaurants. Shopping centres and markets are also included in this category. Areas in and immediately around schools, colleges, universities, hospitals, bus and railway stations and stops, sports stadiums, and many pedestrian crossings, also qualify. They will also include places where events are held, emergency service access, and campsites.
- 2.5 We have mapped potential zones of high use / occupancy from a range of available GIS datasets. These area shown in Figure 1. The data behind them is shown in Table 1.

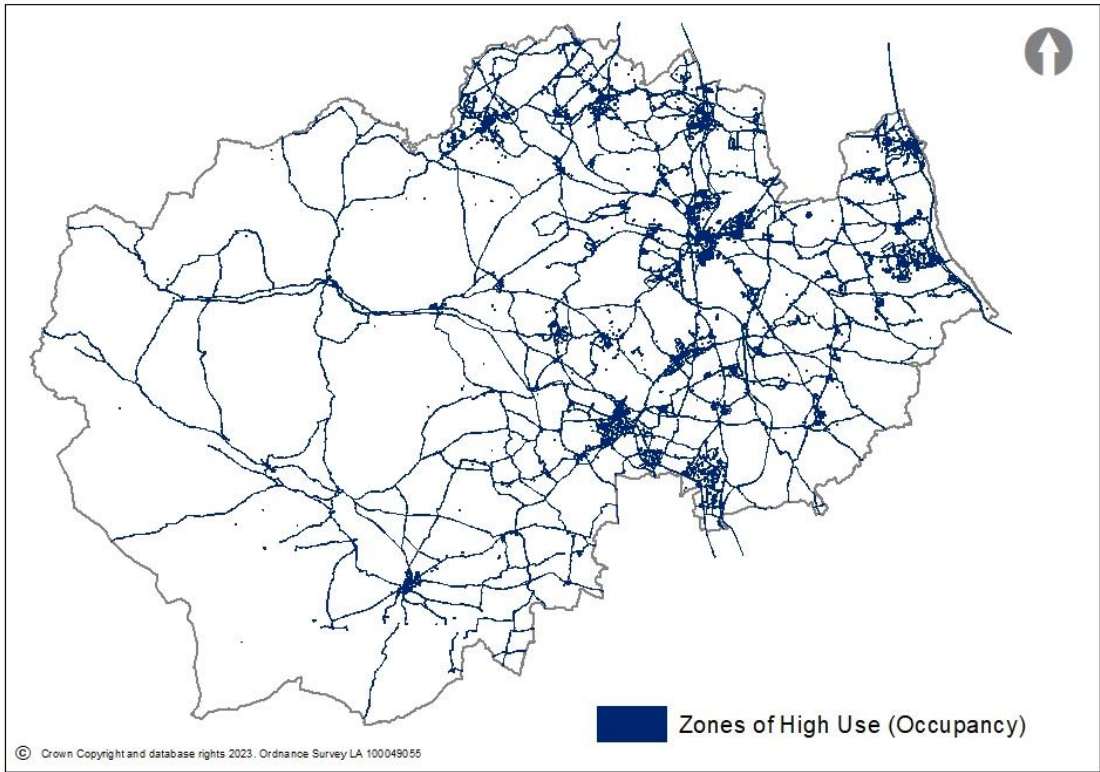


Figure 1: Zones of high use (occupancy)

2.6 In VALID’s risk model the term ‘high consequences’, covers trees that have a stem diameter of 50cm/20in or more. That’s because we’re most likely to find risks that are ‘not acceptable or tolerable’ in these larger trees. We do not currently have an inventory of trees that would allow us to identify the presence or absence of larger trees, and so at this stage we aren’t able to map zones of high confluence. As part of our inspections we will capture information on the presence of trees, and particularly large trees, to help identify zones of high confluence in future. Until that information is available, we will carry out active assessment in ‘zones of high use’.

DATA	SOURCE	CATEGORIES SELECTED	BUFFER
Road inspection hierarchy	DCC	<ul style="list-style-type: none"> <li>• Strategic route</li> <li>• Main distributor</li> <li>• Secondary distributor</li> <li>• Link Road</li> </ul>	20m
New Footway Categories	DCC	<ul style="list-style-type: none"> <li>• Primary walking routes</li> <li>• Prestige walking routes</li> <li>• Medium usage feeding primary routes</li> <li>• Link footways</li> </ul>	20m
Railway Lines	OS	All	30m
Transport hub	DCC	<ul style="list-style-type: none"> <li>• Bus station</li> <li>• Railway station</li> <li>• Park &amp; Ride</li> </ul>	20m
Bus stops	DCC	All	20m

Bus shelters	DCC	All	20m
Town centres	DCC	All	20m
County Durham Plan Retail Primary Shopping Areas	DCC	All	20m
Retail and offices	National gazetteer	<ul style="list-style-type: none"> <li>• All retail</li> <li>• All offices</li> </ul>	50m
Schools	DCC	All	20m
Crossing patrol	DCC	All	20m
Sport and leisure facilities	DCC	All	20m
Fixed play (point)	DCC	All	50m
Hospitals	DCC	All	20m
Colleges and Universities	DCC	All	20m
Cemeteries (open) and crematoria	DCC	All	20m

Table 1: Zones of high use (occupancy) data

- 2.7 In addition to active assessment for risk management, we also need to inspect trees in areas of lower occupancy where a high level of arboricultural management may be expected. This will include areas such as amenity open space within housing estates and other residential areas, cemeteries and crematoria, and parks and gardens irrespective of levels of use.
- 2.8 As part of our tree inspection programme we will therefore carry out active assessment in zones of high confluence (or high use) to manage risk, and within other areas where we consider that high level of arboricultural management is appropriate. Should resources be limited, active assessment to manage risk will take priority.
- 2.9 In other parts of our wider green estate such as woodlands, country parks, and railway walks, we will rely generally on passive assessment to manage risk. These sites are nevertheless managed by staff who will have training in recognising obvious tree risk features. They will be carrying out passive assessment as they go about their duties, and a basic level of active assessment when they carry out other programmed site inspections.
- 2.10 We will only undertake inspections on land we own and / or are otherwise responsible for.
- 2.11 We will not undertake inspections on land we own if the responsibility for inspection and management of trees lies with another party, except where a service level agreement or other specific arrangement is in place.

## Zonal Tree Inspections

- 2.12 We have mapped a series of settlement zones across the County. These are urban areas where the council owns or manages land. These form the basis for programmed area-based or zonal inspections. Larger settlements are subdivided and smaller settlements grouped to form manageable inspection units. These are shown on Figure 2.

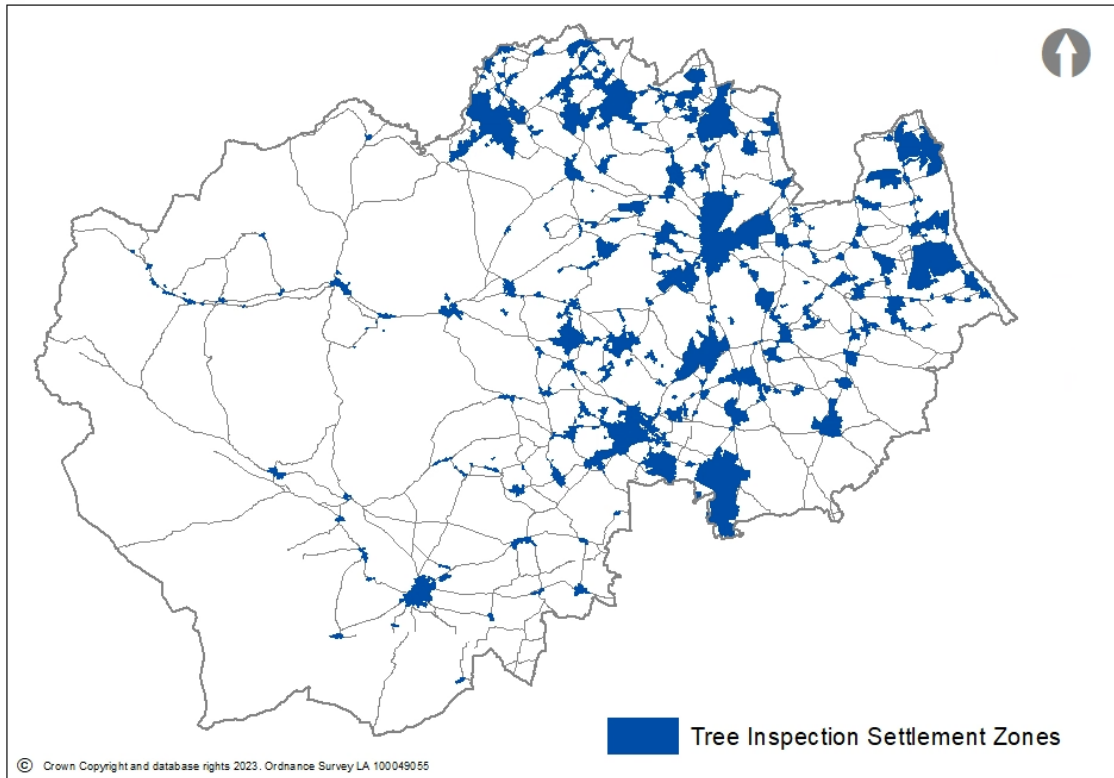


Figure 2: Tree Inspection Settlement Zones

- 2.13 Within these settlement zones the council's land will be classified into appropriate asset types such as schools, public open space, parks & recreation grounds, cemeteries and crematoria, woodlands etc. Asset types will be assigned to an active or passive assessment regime based on whether they are, or lie within, an area of high use or an area where a higher level of arboricultural management is appropriate.
- 2.14 All land identified for active assessment within a settlement zone will be subject to regular programmed inspections on a 5 year cycle.
- 2.15 All land subject to active assessment will be inspected to assess the health & condition of trees and to identify any management requirements. Tree inspections will be undertaken by qualified arborists through a combination of drive-by or walkover ground-based visual assessment as appropriate.
- 2.16 This will include a basic, detailed or advanced assessment depending on the observations and findings at the time of the inspection and will follow a 3 stage process based on the standard Visual Tree Assessment Method (VTA).

- A qualified visual inspection to assess the health & condition of the tree noting the presence or absence of any obvious risk features, including any structural defects or other signs or symptoms of ill health or disease. The inspection is concluded here in the absence of any notable obvious risk features.
- An evaluation of any signs or symptoms noted to determine their significance and the need for remedial works and/or further detailed investigations, for example, signs of disease or decay, structural weakness, adaptive growth. The inspection is concluded in the absence of significant signs of ill health or actionable structural defects.
- Measurement and analysis of structural defects, or significant health issues. This may include further testing and analysis of timber using specialist equipment prior to further management recommendations being made. For example, using sonic tomography or drill testing.

2.16 During inspections, the tree inspector will note and record:

- trees showing significant signs of ill health, structural defects or other obvious risk features:
- trees requiring statutory or essential maintenance:
- trees requiring more detailed inspection (e.g. decay testing).

2.17 Information will be recorded on the Tree Inspection GIS Database using a mobile data capture device. The position of the tree will be logged and details such as species, size, age and condition will be recorded, together with any recommendations for work required or for further 'advanced' inspections such as decay testing.

2.18 Where the level of risk needs more detailed analysis, we will use VALID's Tree Risk App to assess risk and the report will be logged. Other factors will be assessed using the tree inspectors professional judgement. Any works recommended will be recorded and assigned a level of priority.

2.19 Only trees requiring work or further assessment will generally be recorded. Other trees or groups of trees may be plotted as resources allow to contribute to the development of the tree asset database.

2.20 For trees not requiring any intervention the date of the zonal survey will be the record of their basic assessment / inspection.

2.21 Only trees on land owned or managed by the council will be inspected. Any trees that are observed on neighbouring land with obvious tree risk features which have the potential to effect council land or property or a public highway will be recorded and reported.



- 2.22 Trees identified as requiring more detailed assessment will be programmed for that work. Depending on the outcome of the detailed assessment follow up inspections may be programmed on a more regular cycle than the 5 year zonal inspection as required.
- 2.23 Works recommended and logged on the Tree Inspection GIS Database ( or any successor asset management software) will be programmed for action by Clean & Green Managers / Area Supervisors according to resources and the priorities given in Section 2.

**Highway tree inspections**

- 2.24 Highway Tree Inspections have in the past been carried out on all rural roads irrespective of levels of use (occupancy) on a three year cycle. We are implementing a new regime of inspections based on the risk management principles of VALID. This will allow us to focus our active inspections and our resources for tree works on zones of high confluence – those areas where larger trees lie close to our busier roads.

**Inspections by Highway Inspectors**

- 2.25 All of the highways in the county are inspected on a regular basis by Highway Inspectors. The inspection hierarchy is based on a range of factors including road category, traffic use, incident / inspection history, other characteristics of the highway network and local knowledge. The inspection hierarchy is given in the Table 2 below and shown on Figure 3.

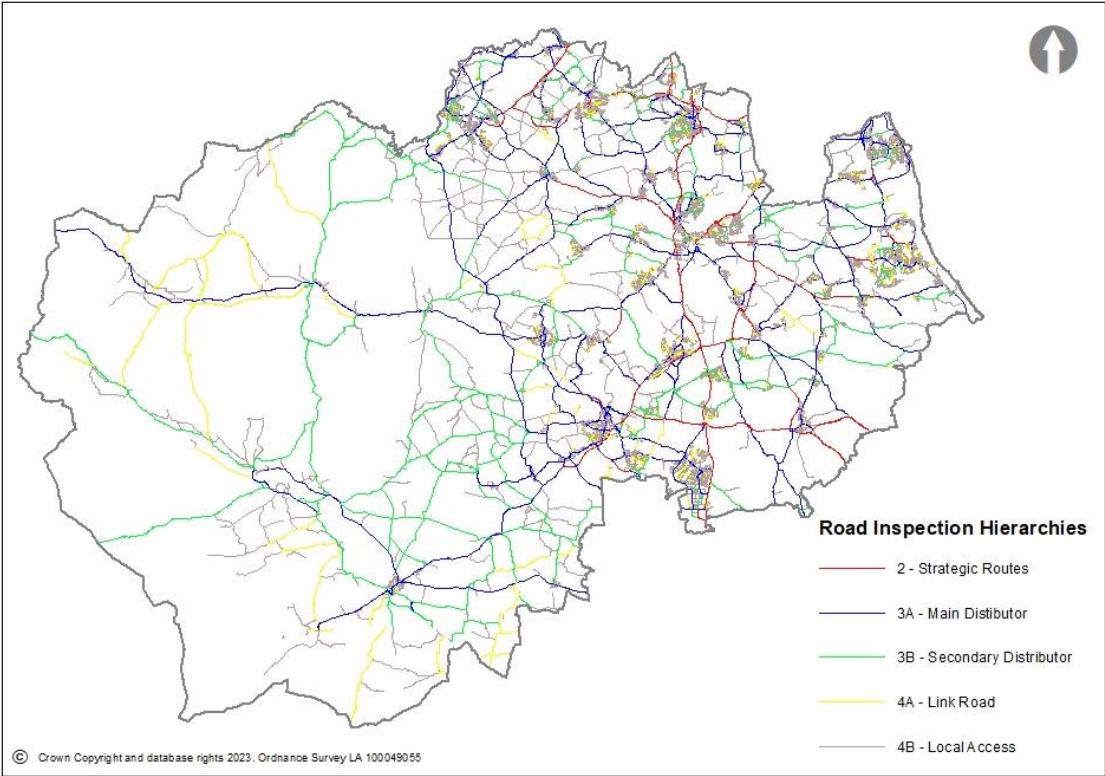


Figure 3 Road Inspection Hierarchy



Description	Inspection Category	Frequency
Strategic Route	2	1 month
Main distributor	3(a)	1 month
Secondary distributor	3(b)	1 month
Link Road	4(a)	3 months
Local Access	4(b)	1 year

- 2.26 Highway Inspectors identify some tree-related risks including obstruction of the highway or signage and trip hazards. They have been given training in recognising tree failure risks and will be given further training as Basic Validators in recognising obvious tree risk features. They will carry out a basic level of active assessment as they undertake their inspections.
- 2.27 Any emergency works they encounter will be referred directly to Clean & Green Tree Teams and/or the landowner (if known and if appropriate) for immediate action.
- 2.28 Any non-emergency cases of trees with obvious tree risk features will be reported to the Tree Officers who will arrange for a detailed inspection and action as appropriate.
- 2.29 Recording and reporting procedures may change with future developments in the use of asset management software.

#### Inspections by Tree Officers (Highway Tree Inspections)

- 2.30 In addition to the inspections carried out by highways inspectors, Highway Tree Inspections by qualified arborists will be undertaken on the busier roads.
- 2.31 VALID identifies a threshold of high occupancy for roads as being an average daily total of 1400 vehicle movements. Traffic flow data is not uniformly available across the entire highway network. Some roads, and generally the busiest roads, have been surveyed frequently. Other roads, and particularly minor roads, have no or little data. Some data is recent; some of it is older.
- 2.32 From analysis of the data we have, we can be reasonably confident that the higher categories of road used in the current highway inspection hierarchy (strategic routes, main distributors, secondary distributors and link roads) will be the only roads with traffic flows at or approaching 1400 vehicles per day. We have identified these roads as being zones of high use (occupancy) - see Appendix 3 and 4.
- 2.33 Data isn't currently available on the presence of large trees and so we can't identify zones of high confluence at this stage. The sporadic nature of tree cover along many roads means that zones of high confluence are often patchy in their distribution. We will capture data on the presence or absence

of larger trees as part of future inspections. Until that time we will carry out Highway Tree Inspections on the basis of high use.

- 2.34 All roads identified as high use will be subject to regular programmed Highway Tree Inspections on a 5 year cycle. The frequency of inspections may be increased where it is considered appropriate on individual sections of road, either because of their particular characteristics or because of the progress of diseases such as Ash Dieback (ADB).
- 2.35 Highway Tree Inspections can take place at any time of year. From 2024/2025 they will be carried out in the summer as this is the best season to assess ADB.
- 2.36 All Highway Tree Inspection routes will be subject to basic active assessment in the form of a drive-by inspection. The aim is to find trees with obvious tree risk features where the risk might not be acceptable or tolerable. We will carry out a detailed assessment on these trees. Trees that aren't picked out for a detailed assessment are 'acceptable' risks at this basic level of assessment.
- 2.37 Drive-by inspections will be carried out by 2 qualified Validators (Tree Officers / Tree Inspectors) using a vehicle compliant with Chapter 8 requirements (flashing beacon & rear chevrons). Inspections may also be undertaken on foot or by bike where there is a public footpath, cycleway or a sufficiently wide roadside verge.
- 2.38 Inspections will be carried out at a maximum speed of 30mph but will often be slower where there are large numbers of trees. Where trees require detailed assessment the assessment team will stop where it is safe to do so and inspect the tree, either from the highway verge or from an area of road protected by the vehicle.
- 2.39 Carrying out tree risk-benefit assessments on roads has a much higher risk of an accident than the risk from trees and branches falling. This is how we're going to manage that risk when we carry out drive-by inspections or when a Tree Officer needs to complete a detailed assessment on a roadside tree when there's no footpath.
- 2.40 Information on trees subject to detailed assessment will be recorded on the Highway Tree Inspection GIS Database using a mobile data capture device. The position of the tree will be logged and details such as land ownership (DCC / private), species, size, age and condition will be recorded. The tree will be photographed. Where the level of risk needs more detailed analysis, we will use VALID's Tree Risk App to assess risk and the report will be logged. Recommendations for work required, or for further 'advanced' inspections such as identification of internal stem decay or sound wood testing, will be logged.
- 2.41 Where possible, trees needing work will be spot marked with high visibility paint to assist with on-site identification.

- 2.42 Only trees requiring work or further assessment will be recorded. For trees not identified as requiring detailed assessment, the date of the route inspection will be the record of their basic assessment / inspection.
- 2.43 Trees that are dead, damaged or diseased but which aren't likely to affect the highway if they fail, and minor/small diameter damaged branches or deadwood, are likely to be assessed as tolerable risks and won't be subject to detailed assessment. They may in some circumstances be logged as requiring removal or pruning for tree management purposes and assigned to a lower priority category.
- 2.44 Trees identified as requiring more detailed assessment will be programmed for that work if it is safe to do so in that location. Depending on the outcome of a detailed assessment follow up inspections on the individual tree may be programmed on a more regular cycle than the 5 year zonal inspection as required.
- 2.45 Where works are required to trees on land owned or managed by DCC Tree Officers raise a Highway Tree Defects Notice (HTDN) which includes a map and details of the tree, the defect and recommendations. This is sent to Clean & Green who programme it for action.
- 2.46 Where works are required to trees on private land Tree Officers raise an HTDN and send it to the Highway Superintendent who contacts the landowner by letter enclosing the HTDN. Landowners are requested to respond to confirm work is being / has been undertaken to assist with monitoring.
- 2.47 A review of the HTI database is undertaken after 6 months from when the initial notices are issued to check if remedial works have been completed or remain outstanding.
- 2.48 Where works have not been completed additional letter may be issued or legal notices may be served under the Highway Act 1980 requiring works to be completed in a specified period.
- 2.49 Where legal notices aren't complied with DCC will enter the land under the provisions of the Act to undertake the required remedial works and seek to recharge all costs to the relevant landowner.
- 2.50 Recording and reporting procedures may change with future developments in the use of asset management software.

### Public Rights of Way

- 2.51 Public Rights of Way form part of the public highway. Due to generally low levels of occupancy during severe weather they will be the subject of passive assessment. Access and Rights of Way Officers will receive training as Basic Validators and will be able to identify obvious tree risk features as they go about their duties and report onwards. A small number of very well-used

routes are currently subject to regular safety inspections. Officers undertaking those inspections will carry out a basic level of active assessment for obvious tree risk features. Some busier routes within settlement zones will be identified for active assessment as part of Zonal Inspections.

## Schools

- 2.52 Schools have a legal duty of care to ensure all trees on land within their management responsibility are subject to an adequate system of inspection and maintenance.
- 2.53 The council offers both maintained schools and academy schools Tree Inspection Services under a Service Level Agreement (SLA) to ensure that trees are inspected to a satisfactory standard in accordance with best practice to help them meet their legal duties. The SLA currently includes:
- Annual Inspection of trees on the school site:
  - Additional inspections for urgent issues on request:
  - Support / guidance by phone / email on matters relating to trees.
- 2.54 An annual inspection is undertaken by a qualified arborist to assess the health and condition of all trees within the site and to recommend any essential maintenance. Further investigations, such as decay detection, are included as part of the annual inspection where it is considered necessary by the inspecting officer.
- 2.55 The inspection will also identify any obvious risk of harm arising from trees immediately adjacent to the site, where observed from within the site and recommendations will be given for appropriate action where necessary.
- 2.56 A Tree Inspection Report is provided. This outlines the findings of the inspection and includes a schedule and site plan detailing any recommended tree work. Trees which are found to be in satisfactory condition and don't require any works will not be recorded in the report.
- 2.57 A copy of the report will be emailed to the school and will provide a formal record of the inspection. Any recommendations within the report will be brought to the school's attention at the time. Recommendations for works to trees are based on arboricultural best practice and in compliance with relevant health and safety legislation.
- 2.58 Tree works are not included in this SLA. It is the responsibility of the school to commission any recommended works from a suitably qualified arboricultural contractor. The inspecting officer will give guidance on this process where necessary.
- 2.59 If any urgent issues relating to tree health and condition are drawn to the council's attention, for example, damage to trees following extreme weather

events or other incidents, we will inspect the trees in question and make appropriate recommendations. This covers urgent issues only. If other inspections or site visits are requested, the council will charge separately for that service per call out.

- 2.60 Additional support and guidance will be given on tree related matters via telephone or email where requested.
- 2.61 The level and frequency of inspection will be subject to the terms and conditions detailed within the SLA.
- 2.62 Local Authority maintained schools not entering into an SLA with the council will be expected to evidence their own arrangements for tree inspections and maintenance works.
- 2.63 Academy schools not entering into an SLA with the council will be responsible for making their own arrangements for tree inspections and maintenance works in accordance with their independent legal responsibilities.

### Other Service Level Agreements

- 2.64 The council may enter into SLA for tree inspections with other parties. The level and frequency of inspection will be subject to the terms and conditions detailed within the SLA.

### Countryside Sites (Country Parks, Railway Paths, Local Nature Reserves)

- 2.65 Due to the generally low levels of occupancy of countryside sites during severe weather they will largely be subject to passive assessment. Parks and Countryside staff (Rangers, Assistant Rangers, LNR Officers) will receive training as Basic Validators in VALID and will be able to identify obvious tree risk features and report onwards as they go about their duties. Land managed by the Countryside team is subject to annual inspection. Staff trained as Basic Validators will carry out a basic level of active assessment for tree risk features as part of those inspections. Some sites within or on the edge of settlement zones with potential for higher levels of use and/or the presence of older parkland trees will be identified for active assessment as part of Zonal Inspections by Tree Officers.

### Woodlands

- 2.66 Due to the generally low levels of occupancy of woodlands during severe weather they will largely be subject to passive assessment. Staff involved in managing woodlands will receive training as Basic Validators in VALID. Some sites or parts of sites within settlement zones with potential for higher levels of use – for example urban woodlands crossed by busy footpaths or lying close to buildings - will be identified for active assessment as part of Settlement Zone Inspections.

## Other inspections

2.67 Other tree inspections will be undertaken where necessary. These might include:

- checking trees following extreme weather events (high winds/storm damage):
- prior to organised events in public places:
- as part of baseline tree surveys associated with projects and development proposals
- in response to customer enquiries and other service requests:
- ad hoc inspections by tree officers while undertaking other site-based work:
- inspections undertaken under Service Level Agreements with other organisations.

In all of these situations the principles set out in the sections above will be followed. The VALID Tree Risk App will be used to assess risk.

## 3 Ash dieback surveys

3.1 Ash Dieback disease is widespread in the county and is likely to result in the death of around 50% - 75% of all ash trees in the coming years. Detailed information isn't currently available on the distribution or number of ash trees on DCC land or the presence or severity of the disease. Ash trees requiring felling or pruning work will be picked up as individuals or groups as part of routine zonal and highway tree inspections. Additional ash dieback (ADB) surveys will be undertaken on the highway network to provide baseline information and assist in forward planning.

3.1 ADB surveys are currently carried out on roads identified as zones of high use (see above). They are carried out as drive-by surveys with 2 qualified arborists (Tree Officer / Tree Inspector) using a vehicle compliant with Chapter 8 requirements (flashing beacon & rear chevrons).

3.1 From 2023/24 they will be combined with Highway Tree Inspections which will be undertaken during summer months when Ash trees are in leaf. Individual trees requiring work will be subject to Highway Tree Defect Notices. The ADB survey data will be used to prioritise work programmes for dealing with infected ash.

3.1 Data is captured using a hand held device (tablet or smartphone). The ADB survey database will record for each segment of road:

- The presence or absence of ash:

- Ownership – largely DCC / largely private / mixed:
- Frequency of trees in each age class - Young /Semi-mature/Mature:
- Infection rate in each age class - % trees in each age class with significant Infection rate:
- Overall severity – low / medium / high

#### Prioritisation of work

- 3.1 It is anticipated that up to certain levels of infection the HTI system will be the appropriate mechanism for dealing with ADB, with individual ash or small groups being referred for action to Clean & Green or through Highway Defect Notices to private landowners.
- 3.1 As the disease progresses it may be the case that a different approach will need to be taken, with more general area-based notices served on private landowners and more route-base work programmes prioritised by a combination of tree size and frequency, infection severity and traffic volumes.

## 4 Staff and training

#### Validators: Tree Officers / Tree Inspectors

- 4.1 There are currently three Senior Tree Officers in the Landscape and Arboriculture section who have had full VALID training as Validators within the last 5 years. An additional Tree Inspector post is being filled through the recruitment process. That officer will receive training as a Validator.

#### Basic Validators

- 4.2 Staff who will receive training as Basic Validators include:
- Countryside staff: LNR Officer, Assistant Ranger, Ranger, Senior Parks & Countryside Ranger, Principal Parks & Countryside Ranger
  - Highway Inspectors
  - Senior Forestry Officer
  - Clean & Green staff: Area Supervisor, Assistant Team Leader, Team Leader, Arborist
  - Landscape Officers: Landscape Officer, Senior Landscape Officer.
  - Public Rights of Way Officers

#### Other staff

- 4.3 Other staff who work outdoors but who's role does not generally include inspection will receive in-house training or tool-box talks in recognising and reporting obvious tree risk features.



## 6 Management systems

- 6.1 It is essential that the systems that we have in place to manage tree works are robust so that when risks are reported the work is actioned and that there is a clear audit trail in place of how they have been managed.
- 6.2 Tree works will be managed by data entry on the Tree Inspection / Highway Tree Inspection GIS database which is accessed by Tree Officers, Highway Superintendent and Clean & Green. The council is currently investigating procurement options on asset management software which would make the process more resilient. This document will be updated with further information on procedures when that process has been completed.

## 7 Document Control

Version	Review date	Comment
Version 1	March 2024	
Review date	March 2025	
Contact	<a href="mailto:treeofficers@durham.gov.uk">treeofficers@durham.gov.uk</a>	