City of York Council Highways Assets Hierarchy and Inspection Frequencies

Current Asset Data and Structure of the Network

Currently data relating to the majority of CYC Highways Assets is located within the EXOR asset management system and linked to the National Street Gazetteer (NSG).

A hierarchy of importance is assigned to all sections of the network and this derives an inspection frequency which ensures defects on key assets are identified in a timely manner.

Code Requirements

Well Managed Highways Infrastructure code of practice (The Code) has further developed this risk based approach and sets out the need to develop a hierarchy based on function and usage. The West Yorkshire Combined Authorities have agreed to use local amenities which generate traffic flows as a definition of the functionality of the network, this is used to extend the minimum inspection frequencies detailed within the code.

The Code identifies the need for authorities to consider consistency with their neighbours. As such, this approach supports a joined up approach with neighbouring authorities.

The below table sets out the CYC categories for carriageways and footways and the maximum frequency of safety inspections that we will adopt. This following table details the amenities will use to further assess localised variances in function and usage hierarchy needs.

Category 1 Assets

CYC Carriageway Categories					
Hierarchy Description Type of Road General Description Description		Description	Inspection frequency		
Motorway	Limited access motorway regulations apply	Routes for fast moving long distance traffic. Fully grade separated and restrictions on use.	N/A		
WY Strategic Key Route Network	National primary, County regional and freight routes	Inter-economic roads forming the strategic backbone of the Authority's network, diversion routes for motorways, catering for HGV'S and longer distance traffic connection the district to adjoining counties and the national road network	Monthly		
Main Distributor	Heavily trafficked routes, freight and major bus routes	Roads connecting the larger towns and industrial estates to each other and to the strategic routes	Monthly		
Secondary Distributor	other heavily trafficked routes	Important links in the network connecting towns and the larger villages/residential estates.	Monthly		

Local Distributor	Roads connecting towns, smaller villages and urban areas to the distributor road network	Roads within towns and urban areas and rural roads that connect the smaller villages/residential estates and industrial estates to the distributor road network and has a timetabled bus route.	3 Monthly			
Collector Road	Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions	In rural areas these roads link the smaller villages to the distributor roads. They are of varying width and not always capable of carrying two way traffic. In urban areas they are residential or industrial interconnecting roads with random pedestrian movements.	6 Monthly			
Local Access Road	Roads serving limited numbers of properties carrying only access traffic	In rural areas these roads serve small settlements and provide access to individual properties and land. They are often only single lane width and unsuitable for HGVs. In urban areas they are often residential loop roads or cul-desacs	12 Monthly			
Minor Access Road		Highways Adopted unpaved/non metalled surface Minor routes and low use tracks- some may already be unsuitable for motors	12 Monthly			
	CYC Footway and Cycleway* Categories					
Prestige Walking Zones	Very bust areas of towns and cities with high amounts of public space and street scene assets					
Primary Walking Routes	Busy urban shopping and business areas and main pedestrian routes					
Secondary Walking Routes	Medium usage routes through local areas feeding into primary routes, local shopping centres etc.					
Link Footways	Linking local access footways through urban areas and busy rural footways					
Local Access Footways	Footways associated with low usage, short estate roads into the main routes and cul-de-sacs					
Minor Footways	Little used adopted footways serving very limited numbers of properties 12 Monthly					
* The Code recommends that cyclepaths should be considered by the same metrics defining the hierarchy and inspection frequency of the adjoining footway or carriageway						

			Example (all definitions to be agreed with WYCA)	Suggestion
Grouping	Service		Definition	
Medical Facilities	Hospitals and large clinics	Н	No of patients	>500 parking spaces
		M	No of patients	20 - 500
		L	No of patients	<20
Educational Institutions	School, College, University	Н	No of pupils	>1000 pupils
		M	No of pupils	200 - 1000
		L	No of pupils	<200
Retail facilities	Shopping Centres	Н	No of shops	>15 shops
		M	No of shops	3 - 15
		L	No of shops	<3
	Supermarkets	Н	Superstore	>200 Parking spaces
		M	Aldi/Lidl	50 - 200
		L	Local supermarket	<50
	Out of town shopping centres	Н	No of stores	>10
		M	No of stores	4 - 10
		L	No of stores	<4
Commercial:	Industrial estates , Business Parks	Н	No of units	>10
·		M	No of units	5 - 10
		L	No of units	<5
Recreational	Sports stadia, Entertainment Venue	Н	No of seats	>10,000 Seats

		М	No of seats	500 - 10,000
		L	No of seats	<500
Transport	railway Stations	Н	No of trains per hour	>100k entry/exit PA
		М	No of trains per hour	50k - 100k
		L	No of trains per hour	<50k
	Bus routes	Н	No of buses per hour	Frequent - Every 15 mins or more often
		М	No of buses per hour	Regular - Every 2 hours or more often
		L	No of buses per hour	Less frequent - less frequent than 2hours
	Airports	Н		
Emergency Services:	Ambulance, Fire Station, Police, Mountain Rescue	Н	No of vehicles	All considered as High if manned 24hrs
		М	No of vehicles	
		L	No of vehicles	

Usage information – vehicle, pedestrian and cycle counts - have been obtained from the Department for Transport and the CYC Transport team, this is being used in conjunction with data from the Business Intelligence team to revise all existing network hierarchy assessments.

Economy & Place Non Highway Category 2 Asset Types

Existing CYC car parks are already inspected and maintained by the Highways section under agreement with Parking Services, similarly Highways undertake works on behalf of the Park and Ride sites but this is not formalised. The below table summarises how a formalised approach to the inspection of parking sites will be developed.

Car Parking					
Category	Hierarchy Description	Type of Road General Description	Description	Inspection frequency	
P	Park and Ride Sites	Orbital Park and Ride Sites	Park and Ride sites with frequent bus services but limited opening hours	6 Monthly	
S	Short Stay Shoppers	Short Stay Shopping Car Parks	Short Stay Car Parks centrally located with a large number of local traffic generators	Monthly	
L	Long Stay Central Parks	Long Stay Centrally located Car Parks	Long Stay Car Parks Centrally Located with large numbers of local Traffic Generators	3 Monthly	
LO	Long Stay Outer Car Parks	Long Stay Non- Centrally Located Car Parks	Other Car Parks not located near the City Centre with few or little traffic generators	6 Monthly	

Additional factors from the variances in function and usage table could be considered to further amend the suggested inspection frequencies above.

The approach to the inspection of street lighting assets is being developed by a WYCA task group, the below table shows the City of York Council approach to inspection based on the ideals of The Code and the work of the group:

Street Lighting Assets						
Category	Hierarchy Description	General Description	Description	Inspection frequency		
Concrete Columns	Columns of a Pre- stressed or cast concrete construction	Concrete Columns	Older columns made from concrete usually with pre- stressed metal supports, installed prior to 1997	Informed by prior visual inspections, risk based frequency set to 5, 3, or 12 monthly intervals		
Metal Columns	Metal Street Lights	Steel, Cast-iron, Stainless, and Aluminium Columns	All Metallic street lights	Informed by prior specialist non- destructive testing methods, risk based frequency set to 5, 3, or 12 monthly intervals		
Signs	Sign Posts	Signs	Sign posts of a none structurally designed construction, normally under 5m in height	Visual inspection 6 yearly in conjunction with electrical testing		
All Electrical	All Highway Electrical Items	All fed highway electrical items	All Highway Electrical Items of a 3 phase or 240v rating located in or feeding items in the public highway	6 yearly in line with requirements of wring regulations		

A WYCA Bridges and Structures task group has identified a shared approach to a risk based inspection across all members, the below table outlines the approach to be adopted by City of York Council:

Bridges and Structures					
Category	Hierarchy Description	General Description	Description	Inspection frequency	
Principal	Priority CYC Highways bridge structures	All Priority Highways bridges structures	Risk based structural inspection process based on WYCA methodology	6 to 12 yearly cyclic programme	
General	All CYC Highways bridge structures	All Highway bridge structures	Risk based structural inspection process based on WYCA methodology	2 yearly cyclic programme	
Special	All CYC Highways bridge structures	All Highways bridges and structures	Ad Hoc reactive inspection	Frequency as required in response to reported issues	

Footways and carriageways in our parks do not naturally translate across the hierarchies of the carriageways and footways that surround them, footfall information will be used to develop any variances in inspection needs but the detail provided in the below table will be used as a default inspection frequency.

The inspection of the City Walls will be revised, with a heavy footfall a monthly inspection will be established to ensure the walls are aligned with the other city centre 'prestige walking zones' footways.

Cyccleways remote from the public highway are to be assessed according with usage and function to determine inspection frequencies based on usage and their location/intended use.

Parks, City Walls and Cycleways					
Category	Hierarchy Description	General Description	Description	Inspection frequency	
Park Footways	Footways in parks and gardens	Footways of mixed construction type and materials	All footways in parks and gardens, metalled and unmetalled construction, inc associated street furniture and structures	12 Monthly	
Park Play Equipment	All play equipment in parks and gardens	Mixture of type and construction	All equipment, safety fencing and paving/surface treatments	Monthly	
City Walls	York's historic city walls	Mixture of asset types and construction	All walls, access points and associated assets i.e. lighting	Monthly	
Cycleways	Cycleways remote from the public highway	Cycleways of mixed construction type and materials	Cycleways serving areas remote from the adopted highway network	12 Monthly (minimum, variances to be determined by function and usage)	

Inspection Type

The inspection type will be largely dictated by the hierarchy, safety inspections will be either walked or driven with the highways inspector driven by a dedicated driver, this will be determined on hierarchy, risk and access needs. Other asset owners will identify the appropriate inspection process for each asset type.

The code also provides for the consideration of an inspection and repair programme that is reactive to changes in the highway network and inspection or repair targets can be altered to reflect a change in risks in the short or medium term.