**TAMP Phase 2 – Data Refresh 2021**

**Asset Condition Definition**

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| **Asset Category** | **Condition Measure** | **Condition Methodology** | **Explanation of Condition Score** |
| **A, B & C Roads** | % RED  % AMBER | The condition of the A, B and C road network is determined each year via the use of **S**urface **C**ondition **A**ssessment for the **N**ational **NE**twork of **R**oads (SCANNER) surveys which are carried out by vehicles travelling at normal traffic speed and collect information relating to a number of different parameters that are used to assess the condition of the road. Parameters include: -   * The longitudinal profile is used to determine the 'ride quality' and can be an indication of the structural condition of the road, * The transverse profile across the road, is also used as an indication of the structural condition of the road. This also detects if ruts are present and their impact on ride quality and safety, * Carriageway edge condition is measured to determine the need for edge treatment, serviceability and safety, * Texture depth is required to determine serviceability and safety. Variations in texture depth may be an indication of surface deterioration, * Surface cracking is measured, which if present may be an indication of surface or structural deterioration which may indicate the need for maintenance intervention dependent upon how widespread this is.   All measurements are recorded and loaded into a software programme which calculates an overall Road Condition Index (RCI) for each 10-metre subsection. The RCI is then used to classify a section of road as being RED, AMBER or GREEN. | GREEN classification (score <40) indicates lengths of carriageway which are generally in a good state of repair.  AMBER classification (score >40, <100) indicates those lengths of carriageway where some deterioration is apparent and needs to be investigated at an early opportunity.  RED classification (score >100) indicates lengths of road which are in poor overall condition and are likely to require planned maintenance soon. |
| **Residential and Rural Unclassified roads and Footways** | % RED  % AMBER | The condition data is collected by Detailed Video Survey identifying each road sections as Grade 1 Free from Defects, Grade 2 Signs of Surface Wear, Grade 3 Mid Life, Grade 4 Functionally Impaired, Grade 5 Structurally Impaired. Various types of damage and deterioration are recorded as a percentage of the overall area assessed for each grade. | GREEN classification is the % of the area generally in good state of repair.  AMBER classification is the % of the area of damage for grade 3 plus the residual % area (not damaged) for grades 4 & 5. This relates to the areas considered for surface dressing (preventative maintenance) works.  RED classification is the % of the area of damage for grades 4 & 5. This relates to the areas considered for resurfacing (planned structural maintenance) works. |
| **Bridges, Similar Structures and Retaining Walls** | Bridge Condition Index (CRIT) | The Bridge Condition Index (BCI) score represents the relative risk of an individual bridge failure and is calculated using the information collected from visual bridge inspections. Individual BCI scores are aggregated to produce appropriate district/Lancashire scores.  Two scores can be calculated – BCI Critical (BCI CRIT) represents the condition of just the critical elements of the bridge, whilst BCI Average (BCI AVE) takes into account all aspects of the bridge. It is thought BCI CRIT is a more useful indicator as to bridge serviceability/condition.  In order that funds are directed to priority bridges, 4 maintenance categories have been approved – these are in order of importance:-  **Planned Targeted Strategy -** Interventions aimed towards delivering a required target condition for the structure. All elements are considered for treatment when they reach a condition of 3C. This should be linked to Resilient Route Network Assets and Ancient Monuments.  **Planned Preventative Strategy - T**o be used for regular and frequent minor intervention that slow down the rate of deterioration. All critical elements are considered for treatment when they reach a condition of 3C. This should be linked to all gritting routes and all listed structure.  **Planned Do Minimum Strategy** To be used for infrequent, but major interventions. The Structures Asset Management Planning Toolkit suggests intervention at an element condition score of 4D. This should be linked to all roads that are not on the gritting route network  **Unplanned Reactive Strategy** All elements are considered for treatment when they reach condition 5B (ie failure). The Structures Asset Management Planning Toolkit states that this would be very unlikely in practise, however under the present financial constraints this maintenance strategy may be used where it is known the existing bridge is to be replaced in the medium term. Eg there is a proposed development at the site. This strategy will provide the most cost-effective solution to manage the deterioration in the medium term | Bridge Inspections are carried out to inspect and assess the various component parts of a bridge whose condition is assessed according to severity and extent with 1A being the best condition and 5E being the worst – assessments are carried out in accordance with national guideline.  Various types of bridge inspections (principal, general, special etc) are carried out at various frequencies and all scores, regardless of inspection type are used to determine the overall BCI score.  with severity and extent scores being assessed in accordance with national guidelines  The TAMP / National Guidance grade BCI grade boundaries are shown below   |  |  |  | | --- | --- | --- | | **BCI range** | **Code of Practice Definition** | **TAMP Service Standard** | | 0 – < 40 | Very Poor | POOR | | 40 ≤ – < 65 | Poor | ACCEPTABLE | | 65 ≤ – < 80 | Fair | FAIR | | 80 ≤ – < 90 | Good | GOOD | | 90 ≤ - ≤ 100 | Very Good | EXCELLENT | |
| **Street Lighting** | No Columns ≥40 years old | Is based on the period of time between a column is erected and the point at which the calculation is made. The basis behind the methodology is that the older column the greater the risk of failure. By aged 40 these are considered life expired and ought to be removed/replaced to reduce the risk of catastrophic failure. | Lighting columns have a design life of 25 years. After which their service life can be extended through testing and inspection. By the age of 40 they need to be removed. Green = columns <26 years of age, Amber = columns aged 26 to 39, Red = columns aged 40 years and over |
| **Traffic Signals** | % vulnerable installations | This measures the % number of traffic signal installations that are either life expired or obsolete. Traffic signal junctions are considered to be life expired when they reach 20 years of age, LCC however tries to extend their life to 25 years. The other factor measured is the serviceability of the controller. Due to their age many are now considered to be obsolete and in need of replacement. Where obsolete equipment is unlikely to be supported by the original manufacturer. | Service standard measures whether equipment is supported by the original manufacturer. The higher the % of vulnerable equipment the greater the risk of failure and disruption. |