HIGHWAYS INTEGRATED WORKS PROGRAMME (IWP) AND FORWARD WORKS PROGRAMME (FWP)

Categories of Schemes and Prioritisation

A1   General

A summary of the six main categories of work promoted each year are set out below including a brief background on how schemes are identified, categorised, selected and prioritised within each programme. For full details, Members are recommended to refer to two key Environment Department documents about the core procedures and guidance regarding the IWP and FWP schemes:

- 'Transport Asset Management Policy and Plan' (and the various annual Asset Performance Reports); and the
- 'Highways and Transport Programme Entry' document.

A2   Carriageway Refurbishment Schemes (IWP project code: ARP – A classified Roads or CWY for other routes)

The objective of our strategy, using an asset management approach, is to optimise the works programme to keep the average condition of the network as good as possible for a given level of investment.

Condition data is derived from the results of various surveys, but most importantly:

- SCANNER (machine-based condition survey) – A, B & C Roads
- CVI (Coarse Visual Inspection) – U Roads

Additional information (used where it is available) is:

- Age of the carriageway;
- Historical work undertaken (both schemes and reactive repairs on faults);
- Strength / construction of the road; and
- Traffic counts.

With this data it is possible to model the likely deterioration of each section of road and identify an optimum programme of maintenance activity that best improves the condition of the network overall with the funding available. By considering the overall condition of the carriageway construction and the rate of deterioration of road sections across the network, our maintenance strategy gives priority to sections whose residual life will be extended substantially with modest intervention.

This approach can mean that the worst looking carriageway surfaces will not always be prioritised for immediate major refurbishment, and the programmed action may involve some low cost short term patching and dressing for example.

Identifying situations where earlier treatment of faults will prevent further deterioration of the asset, while returning the asset to better condition, entails developing alternative repair strategies over a longer period. This will then enable cost analysis, which will minimise the whole of life cost over the whole asset.

The early intervention strategy has two advantages:
- The cost of the repairs is lower the earlier in the deterioration process they occur. Plus more assets can be repaired for the same amount of expenditure; and
- The overall condition of the asset is kept at a higher value.

Carriageway maintenance and refurbishment schemes are initially identified by using the deterioration modelling; the proposed scheme lists are then refined using engineering judgement of the initially identified lists.

A3   Footway and Cycleway Refurbishment Schemes (IWP project code: FWY)

Footway and cycleway refurbishment schemes have historically been identified from local engineering knowledge and then prioritised across the County by consideration of:
- Hierarchy of the footway/cycleway;
- Condition of footway/cycleway;
- Proposed treatment;
- History of insurance claims; and
- History of reactive work previously undertaken.

Since the 2015/16 year an increasing proportion of the programme has been identified and then assessed and refined by use of more objective data gathered about future asset deterioration in a similar fashion to that used for the carriageway programmes in Section A2,; however the techniques used are not as well established as carriageway measurements.

A4   Drainage Schemes (IWP project code: DRN)

Drainage improvement schemes are initially identified from local engineering knowledge to tackle identified and reported drainage problems. These are then prioritised across the County by consideration of:
- Severity of the problem for pedestrians;
- Severity of the problem for vehicles;
- Frequency of the problem;
- Repeat maintenance caused by the problem;
- Potential pollution caused by the problem; and
- Accidents and/or claims linked to the problem.

A5   Integrated Transport Schemes (IWP project code: ITP)

Integrated Transport Projects (ITP) cover improvements to the network including provision for buses, cyclists, pedestrians and traffic management. This also includes the Casualty Reduction schemes (see Section A6 below).

ITP schemes are identified, selected and prioritised through Target Delivery Groups in line with Hertfordshire's Local Transport Plan (LTP) goals, and/or the Corporate Plan priorities. They are devised to deliver specific transportation targets/objectives in areas such as:

- Improve Air Quality
- Reduce Greenhouse Gas Emissions
- Reduce Congestion
- Improve Speed Limit Compliance
- Increase Cycling Trips
- Increase Mode share of sustainable school journeys
- Increase Walking Trips
- Improve Passenger Transport Patronage
- Improve Rights of Way
- Improve User satisfaction with PT Information
- Improve Road Safety and Casualty Reduction
- Improve Bus Punctuality
- Improve Accessibility
- Improve User satisfaction with local Buses
- Maintain Roads and Footways
- Reduce the impact of Transport Noise
- Reduce Crime
- Design new infrastructure and maintenance in the light of threats from changing climate

Schemes have also been included which assist in supporting economic growth. Increasing numbers of schemes are included which are fully or partly supported by the Strategic Economic Plan (SEP) Fund administered by the Hertfordshire Local Enterprise Partnership (LEP).

A6   **Casualty Reduction Schemes** (IWP project code: SAR)

Casualty Reduction schemes are identified based on analysis of police collision data and a ranking system to prioritise schemes and initiatives in locations where people have been killed or seriously injured (KSI). Each location is reviewed to assess if a pattern of collisions has formed that could be reasonably addressed by some form of engineered intervention. Schemes can be based around junctions, bends, routes or areas. Links are also made to the wider road safety picture by combining with enforcement or educational programmes.

A ranking list is analysed annually, from which schemes and initiatives are selected. As such the Casualty Reduction programme forms part of the IWP and not the FWP. Because it is necessary to use the most up-to-date accident data possible when prioritising this programme, the decisions regarding the exact schemes to be included in the IWP are normally finalised later than in most other programmes.

A7   **Highway Locality Budget** (Code MEM)

Members are responsible for directing how a proportion of highways funding is spent in their Division. The value of this funding is £90,000 per Member per year.

The Highway Locality Budget (HLB) can support a range of works to deliver schemes that meet local needs and priorities within the division, but are not a high enough priority to feature on the various technically-led programmes described above. This can include a wide range of works including road resurfacing, pavement repairs, drainage clearing and traffic calming schemes, as well as smaller projects and works such as hedge trimming, sign cleaning and white line painting.

HLB works are not formally part of the IWP or FWP, however larger HLB funded works currently chosen and identified for delivery via the IWP route do appear on IWP lists. This is to provide clarity of the total programme and for co-ordination purposes (since these are delivered by the IWP contractors alongside IWP schemes), to provide economies of scale and programming logic in design and construction.

A8   **Invest to Improve** (Code NCM)

Additional funding has been provided for local (unclassified) roads to improve their condition. These schemes are referred to as Invest to Improve or 'i2i' for short.

The i2i programme focuses solely on unclassified roads in a poor condition with the overall aim of halving the number of such roads from the current 16% which are 'poor' down to around 8% over the projected five year project. Within those parameters, scheme selection is based on a combination of factors including:
- The condition of the road (with worse roads having priority);
- How important those roads are to local communities (with priority given to highly populated areas or rural roads used frequently); and
- Whether the scheme offers good value for money (to allow as many roads as possible to be treated).