Nottinghamshire County Council

Part VI: Adoption, Agreements and Commuted Sums
Chapter 3: Commuted Sums

Updated 22/4/26

3.1 Definitions and scope

3.1.1 Definition (maintenance commuted sum): a payment of a capital sum by an individual, authority or company to the highway authority (or other adopting body) as a contribution towards the future maintenance and replacement of the asset being provided, adopted or transferred.

3.1.2 This chapter applies to commuted sums associated with:

- New highway adoption and assets delivered as part of new roads,
- Alterations/additions to existing highway delivered as development-related works,
- Transfer/adoption of assets from third parties (e.g., other bodies, organisations, or private owners).

3.1.3 The chapter applies to all highway infrastructure asset classes, including (non-exhaustive): carriageways, footways/cycleways, street lighting, traffic signals, signs/markings, retaining features, structures, landscaping and trees, public transport infrastructure, and SuDS where these are to be adopted/maintained by the Highway Authority.

3.2 Legal basis and relationship to planning

Highways Act 1980 – statutory context

3.2.1 The Highway Authority has a statutory duty to maintain highways maintainable at public expense, which extends to the full range of highway infrastructure assets that form the highway.

Section 38 agreements (new roads)

3.2.2 Section 38(6) enables the Authority to seek commuted sums by agreement for assets forming part of new roads constructed on private land and proposed for adoption where those assets would not otherwise be required but for the development. Commuted sums are typically required to be paid prior to adoption (or as otherwise set out in the agreement).

Section 278 agreements (improvements to existing highway)

3.2.3 Section 278(3) enables the Authority to seek commuted sums by agreement for the future maintenance of alterations and additions to the existing highway that would not otherwise be required but for the development. For Section 278 works, commuted sums are typically required on completion of the works (or as otherwise set out in the agreement).

3.2.4 Where Section 278 works remove, downgrade, or reduce maintenance requirements, this will be reflected fairly in the commuted sum assessment.

Planning consent and adoptability

3.2.5 Commuted sums generally cannot be fixed at the planning stage because key items remain undetermined until detailed design and technical approval. Planning permission does not determine adoptability or the commuted sum level; developers must engage with the Highway Authority early to avoid compromising adoptability.

3.3 Core principles

3.3.1 The following principles apply:

- **Objectivity and fairness**: commuted sums will be calculated to reflect the genuine present value of predicted future maintenance and replacement costs.

- **Whole-life costing**: lifecycle maintenance, renewal, and replacement needs are assessed over an agreed evaluation period, discounted to a present value.
- **Consistent treatment**: as far as possible, all asset types (including SuDS) are treated on the same basis for commuted sum calculation.
- **Applies to S38, S278, and transfers**: the methodology is applicable across adoption mechanisms and other transfers of ownership.
- **No "public benefit" offset**: commuted sums for S278 works will not be reduced on the basis that works may also benefit other network users; the test is the transfer of future liability for development-related changes.
- **Evaluation periods**: commuted sums are calculated over 60 years for most assets and 120 years for assets integral to the integrity of the highway (e.g., bridges and other structures).
- **Maintainability first**: the Authority expects designs and specifications that minimise lifecycle burden; commuted sums are not a substitute for poor maintainability.
- **Risk awareness:** risk is a primary consideration—particularly for innovative materials, complex assets, SuDS, and constrained sites—managed through early engagement and transparent assumptions.

3.3.2 Ring-fencing and financial governance: commuted sums received will be ring-fenced for highway network maintenance. The Authority will maintain a transparent protocol to support financial control and reporting.

3.4 When commuted sums will be required (typical triggers)

3.4.1 Commuted sums will normally be required where adoption/transfer would result in maintenance liabilities that are additional to, different from, or more costly than the Authority's standard asset baseline, including (non-exhaustive):

- Non-standard / premium materials or bespoke components that increase lifecycle cost or replacement complexity,
- Additional highway assets created to serve development (e.g., added carriageway, new islands, crossings, traffic signals, lighting, signs),
- Landscaping, trees, and hard landscape areas proposed for adoption that generate ongoing maintenance burdens,
- Structures (bridges, culverts with structural function, retaining walls, tunnels, gantries) and any assets integral to highway integrity,
- SuDS where the Highway Authority is proposed to adopt/maintain the system or components,
- Assets transferred in impaired condition (or requiring early refurbishment) unless remedied pre-transfer.

3.4.2 The Authority may also require commuted sums where long-term replacement is likely to be difficult due to availability/lead times of specialist materials and may alternatively / additionally require a stockpile of materials where practicable (with commuted sum adjustment accordingly).

3.5 Early engagement and design expectations

3.5.1 Developers must engage the Highway Authority at the earliest stage where innovative materials, non-standard layouts, landscaping for adoption, SuDS adoption, or structures are proposed so that:

- adoptability can be confirmed,
- ownership/responsibility lines are clear, and
- commuted sum implications can be understood early.

3.5.2 The Highway Authority is the maintenance expert. Where alternatives are proposed, the Authority will assess whether the asset can be maintained in perpetuity and at what cost.

3.6 Methodology – how commuted sums are calculated

Overview – net present value (NPV) of lifecycle costs

3.6.1 Commuted sums are calculated using a whole-life costing approach in which future maintenance and replacement costs are estimated, assigned to the years in which they are expected to occur, and then discounted to a present value.

Core calculation:

Worked Example – Commuted Sum (Net Present Value, 60 Years)

This worked example demonstrates calculation of a commuted sum over a 60-year assessment period using Net Present Value (NPV).

Primary formula:

$$NPV = \sum \frac{Ct}{(1+D)^t}$$

Where:
Ct = cost of intervention (maintenance / renewal / replacement) at present-day prices
D = discount rate (effective annual rate)
t = year in which the cost is incurred

Example assumptions

Asset: Residential estate footway
Assessment period: 60 years
Discount rate (D): 3.5% (0.035)
All costs are expressed at present-day prices (no inflation applied).

Planned lifecycle interventions

C_{10} = £20,000 (Minor resurfacing, Year 10)
C_{20} = £40,000 (Major resurfacing, Year 20)
C_{30} = £80,000 (Full reconstruction, Year 30)
C_{40} = £40,000 (Major resurfacing, Year 40)
C_{50} = £20,000 (Minor resurfacing, Year 50)
C_{60} = £80,000 (Full reconstruction, Year 60)

Expanded NPV calculation

$$NPV = \frac{C_{10}}{(1+D)^{10}} + \frac{C_{20}}{(1+D)^{20}} + \frac{C_{30}}{(1+D)^{30}} + \frac{C_{40}}{1+D^{40}} + \frac{C_{50}}{1+D^{50}} + \frac{C_{60}}{1+D^{60}}$$

Substituting values:

$$NPV = \frac{20{,}000}{(1.035)^{10}} + \frac{40{,}000}{(1.035)^{20}} + \frac{80{,}000}{(1.035)^{30}} + \frac{40{,}000}{(1.035)^{40}} + \frac{20{,}000}{(1.035)^{50}} + \frac{80{,}000}{(1.035)^{60}}$$

The example discount rate is illustrative only.

Result

Total Commuted Sum (NPV, 60 years) ≈ £86,600 (rounded).

(Discounting approach consistent with ADEPT principles and standard accounting practice.)

Unit costs and maintenance regimes (local standards)

3.6.2 Unit costs will be based on current local contract rates and the Authority's maintenance practices. Maintenance frequency and lifecycle assumptions must take account of:

- network hierarchy and location,
- specification and materials,
- intervention frequencies and replacements.

Discount rate – governance and approach

3.6.3 Discount rates allow costs with different time spans to be compared on a common present value basis. The appropriate discount rate must be set with reference to public sector discounting practice. The Authority will:

- on request, confirm the discount rate applied for a commuted sum, and
- apply the confirmed rate consistently within the calculation period unless otherwise agreed in the legal agreement.

Discount rates used by local authorities vary (including approaches derived from interest rates or the Green Book.

Evaluation period (time horizon)

3.6.4 Unless otherwise agreed:

- 60 years will be used for most highway assets,
- 120 years will be used for assets integral to highway integrity (e.g., bridges and other structures).

3.6.5 For structures in particular contexts (e.g., strategic route function), longer horizons may be justified within a structure-specific commuted sum schedule. The ADEPT Bridges Group guidance recognises evaluation periods such as 60 years or 150 years depending on context; where adopted locally, the chosen period will be set by the Highway Authority.

Indexation and price fluctuations

3.6.6 Commuted sums are often calculated well before adoption/issue of final certificate (being the second/final certificate of completion issued under the relevant Section 38 or Section 278 agreement). The agreement will therefore include a mechanism to apply an indexation to reflect cost movements between agreement and payment. The indexation index will be that specified in the legal agreement. Maintenance contract rates and commuted sum unit rates will be adjusted periodically.

3.7 Timing, bonds, and payment triggers

3.7.1 Commuted sums are commonly calculated at (or close to) technical approval / legal instruction stage, with provisional estimates possible earlier but subject to caveats where asset scope may change.

3.7.2 **Best practice timing:** commuted sums should, where practicable, be payable immediately before adoption, following satisfactory completion of the maintenance period and prior to the issue of the final certificate.

3.7.3 **Bonding:** commuted sums should be included within the bond required under the S38 or S278 agreement unless payment is made prior to engrossment.

3.7.4 **Section 278 typical timing:** commuted sums for S278 works are usually required prior to final certificate (unless the agreement states otherwise).

3.8 Existing assets, impaired condition, and pre-adoption remediation

3.8.1 Where adoption/transfer involves existing assets, commuted sums may require:

- substantial pre-adoption remedial works, or
- adjustment to reflect impaired condition and early intervention needs.

3.8.2 For structures, where the asset is in poor condition or requires early refurbishment, the Bridges Group methodology explicitly includes an allowance for early refurbishment costs discounted to present value.

3.9 SuDS (where adoption/maintenance by the Highway Authority is proposed)

3.9.1 SuDS can impose additional burdens on future maintenance budgets and therefore must be considered explicitly within commuted sums where the Highway Authority will adopt or maintain SuDS assets. ADEPT confirms that SuDS should be treated on the same basis as other assets for commuted sum purposes.

3.9.2 Early agreement on ownership and responsibility is essential. The developer must identify:

- adopting/maintaining party for each SuDS component,
- inspection and maintenance regime,
- access arrangements, and
- asset inventory and handover information. (Early engagement expectation is consistent with ADEPT's approach to non-standard assets.)

3.9.3 Where SuDS adoption is proposed, the commuted sum schedule will clearly state:

- asset type(s) and quantities,

- maintenance activities and frequencies,
- renewal/replacement assumptions, and
- any unusual risks/cost drivers (e.g., confined access, specialist plant).

3.10 Structures (bridges, culverts with structural function, retaining walls, tunnels, gantries)

General approach

3.10.1 Structures are normally calculated over 120 years (Authority baseline for assets integral to highway integrity).

3.10.2 The commuted sum for a structure should reflect the net present value of all future costs of:

- management and inspection,
- predictable maintenance,
- refurbishment (where needed), and
- replacement/reconstruction within the evaluation period.

ADEPT Bridges Group structure methodology (three components)

3.10.3 For bridges/structures, the commuted sum is commonly expressed as:

Commuted Sum (Structure) = SUM A + SUM B + SUM C

SUM A = discounted cost of planned reconstruction(s)/replacement(s)

SUM B = discounted cost of predictable maintenance activities

SUM C = discounted cost of early refurbishment (if required due to condition)

3.10.4 Discounting uses standard net present value methods where:

- NPV_Y = Net Present Value of the cost occurring in year *y*
- $Cost_Y$ = cost of the intervention in year *y*, expressed at present-day prices
- d = discount rate (effective annual rate)
- y = number of years from the present to when the cost is incurred

$$NPV_y = \frac{Cost_y}{(1+d)^y}$$

The structure schedule must identify:

- structure type and key elements,
- predicted intervention types, costs, and years,
- discount rate and evaluation period used (stated explicitly).

Allowances commonly associated with structures

3.10.5 Structures often require additional allowances (where relevant) for:

- traffic management and access constraints,
- contract preliminaries,
- design / supervision costs,
- possessions (e.g., railway) where applicable.

3.10.6 The Bridges Group guidance includes typical uplifts such as:

- works contract preliminaries (example 12.5%), and
- design and supervision (example 10%), applied to maintenance-related costs (as structured in the proformas). The Authority will adopt a transparent approach and state applied percentages within the schedule.

3.11 Procedure and documentation (what developers must provide)

3.11.1 A commuted sums schedule will form part of the S38/S278 agreement and will be based on:

- a complete asset inventory and quantities,
- confirmed specifications/materials,
- agreed maintenance regimes and lifecycle assumptions,

- stated discount rate and evaluation period,
- stated indexation/re-calculation mechanism, and
- dispute resolution mechanism.

3.11.2 Where commuted sums are identified or estimated at an early stage, they shall be treated as provisional. Final commuted sum values will be determined through the mechanisms provided within the Section 38 and/or Section 278 agreement and must allow for recalculation having regard to:

- design changes affecting the scope, specification or extent of assets to be adopted,
- confirmation of asset quantities and inventory at *as-built* stage prior to adoption, and
- indexation or other agreed price-fluctuation mechanisms between the date of the agreement and the date of payment.

The commuted sums schedule shall clearly reflect this provisional status and identify the triggers for recalculation in accordance with the legal agreement.

3.11.3 Developers must provide, as a minimum at handover/adoption stage:

- as-built drawings and asset inventory,
- operation/maintenance information for relevant assets,
- manufacturer details for non-standard components,
- any warranties/guarantees,
- inspection/maintenance access details (especially for SuDS and structures). (Transparency and auditable standards align with ADEPT's recommended approach.)

3.12 Dispute resolution and changes in circumstances

3.12.1 The agreement should contain a dispute resolution mechanism, particularly where:

- there is a significant divergence between provisional and final commuted sum, or
- developer insolvency/liquidation or other circumstances create delivery risk.

3.12.2 Any agreed scope change that alters the lifecycle burden (materials, quantities, maintainability) will trigger a commuted sum review and recalculation consistent with the schedule provisions.

3.13 Financial management and reporting (Authority commitments)

3.13.1 Commuted sums will be ring-fenced for highway maintenance and managed under a formal protocol that supports:

- allocation to appropriate asset categories, and
- annual reporting/out-turn as required for financial control.

3.13.2 Commuted sums will be treated as additional to normal maintenance budget allocations for the year and must not be used to substitute for baseline funding.

Appendix 1 – Typical process timeline (S38/S278)

A typical commuted sum procedure includes:

- Early discussions (planning pre-app): identify commuted sum items in principle,
- Legal/technical stage: calculate provisional commuted sum for bond and agree schedule assumptions,
- Construction: monitor design changes affecting commuted sums,
- Pre-adoption: recalculate using actual quantities and apply indexation; invoice commuted sum,
- Adoption/final certificate: commuted sum paid and adoption completed.

Appendix 2 – Notes for schedules (practical drafting points)

- The schedule should list each asset item, quantity, unit cost, lifecycle interventions, and the discounting approach used (transparent and auditable).
- For specialist materials, consider whether a stockpile approach is appropriate and how that affects the commuted sum (and storage practicality).

- For structures, use the SUM A / SUM B / SUM C structure where appropriate and state any adjustment factors and additional cost allowances applied.

-End-