



Canadian
Transportation
Agency

Office
des transports
du Canada

Guide to Railway Charges for Crossing Maintenance and Construction 2013

Effective July 1, 2013

**Industry Determinations and Analysis Directorate
Industry Regulation and Determinations Branch**



Making Transportation Efficient and Accessible for All

This document and other Canadian Transportation Agency publications are available on our Web site at **www.otc-cta.gc.ca**.

For more information about the Agency, please contact:

Canadian Transportation Agency

Ottawa, Ontario K1A 0N9

Telephone: 1-888-222-2592

TTY: 1-800-669-5575

Facsimile: 819-997-6727

E-mail: info@otc-cta.gc.ca

Web site: www.otc-cta.gc.ca

Catalogue No. No. TT4-3/2013E-PDF

© Minister of Public Works and Government Services Canada

July 2013

Table of Contents

Introduction	1
Application.....	1
Category 1: Billing Guidelines for Scheduled Maintenance of Crossing Warning Systems (Schedule A).....	2
Scheduled Maintenance Direct Labour Rates.....	3
Scheduled Maintenance Direct Material Rates	3
Electricity Costs	3
Scheduled Maintenance Overhead Rates	4
Scheduled Maintenance Vehicle Costs.....	5
Billing Periods	5
Category 2: General Billing Guidelines.....	5
Construction Projects.....	5
Construction Surface Maintenance.....	6
Unscheduled Maintenance	6
Direct Labour Charges.....	6
Indirect Charges, and Construction and Unscheduled Maintenance Overhead Charges — Labour (Schedule B).....	6
Direct Material Charges	7
Construction and Unscheduled Maintenance Overhead Charges — Material (Schedule C).....	7
Miscellaneous Charges (Schedule D).....	7
Transportation Charges.....	8
Contracting Equipment and Services	9
Meals and Lodging	9
Rental Rates of Railway Equipment (Schedule E).....	9
Salvage Values	9
Injury or Death.....	10
Discontinuance of Rail Operations	10

Renewal	10
Railway Contacts	11
Definitions	12
Agency Assistance	12
Other Available Documents.....	13
For More Information.....	13
Schedule A: Scheduled Maintenance of Crossing Warning Systems	14
Type 1: Crossing Warning Systems with Gates.....	14
Type 2: Crossing Warning Systems Without Gates	15
Schedule B: Construction and Unscheduled Maintenance Overhead Charges — LABOUR	17
Schedule C: Construction and Unscheduled Maintenance Overhead Charges — MATERIAL	18
Schedule D: Miscellaneous Charges.....	19
Schedule E: Railway Equipment Rental Rates.....	20
Methodology to apply in calculating operation costs.....	23

Introduction

The Canadian Transportation Agency (Agency) is responsible, among other duties, for resolving disputes or facilitating the resolution of disputes related to railway crossings, as they arise between federal railway companies and other interested parties such as utility companies, road authorities and landowners.

Under section 101 of the *Canada Transportation Act* (CTA), railway companies, road authorities, utility companies and landowners may negotiate agreements for any aspect of a crossing. These agreements usually include rates to be charged for work performed and specify which parties are responsible for paying for this work. Where agreements cannot be reached by the parties, the Agency, upon receiving an application, may resolve issues relating to the construction, maintenance and apportionment of costs of road and utility crossings.

This Guide has been developed **to assist** the railway companies, road authorities, utility companies and landowners, by providing a third-party assessment of rail costs and setting consistent, nation-wide schedules and guidelines for work performed by railway companies. This guide **may be used** by Canadian federal railway companies when charging for work performed at crossings, crossing warning systems, or for any other crossing-related work either agreed to by the parties or authorized by an order of the Agency.

The rates in the attached schedules are developed from Class I railway accounting data in accordance with the principles, methods and procedures established for the costing of Class I railway operations for regulatory purposes. They have been developed to provide a guide to the parties involved in a railway crossing agreement on the total costs incurred by Class I railway companies for work and services performed at road crossings.

Application

Parties are encouraged to negotiate contracts which incorporate:

- specifications;
- rates;
- time frames; and
- the terms and conditions of any crossing-related work.

In the event of a dispute, the Agency will assess the merits of the case and determine whether the rates in this Guide apply. Furthermore, these rates may apply, from the effective date of this guide, to any past orders issued by the Agency's predecessors.

As indicated above, the rates in this guide are developed from Class I railway accounting data to represent total costs and therefore:

- may not accurately reflect the costs incurred by non-Class I railway companies; and
- do not take into consideration any costs related to crossing maintenance and construction that are incurred by parties other than the railway companies.

The rates contained in this guide fall into two categories:

1. **scheduled maintenance rates (Schedule A)** which cover routine maintenance of crossing warning systems; and
2. **general billing guidelines (Schedules B to E)** which cover construction and unscheduled maintenance projects based on the actual activities performed.

Category 1: Billing Guidelines for Scheduled Maintenance of Crossing Warning Systems (Schedule A)

Scheduled maintenance is the standard preventative maintenance which is intended to ensure the reliable and safe operation of a crossing warning system. The scheduled maintenance rates cover all labour, material, vehicle costs and overheads associated with ensuring the functional operation of a crossing warning system. A breakdown of the rates to be charged for each category is contained in **Schedule A** of this document.

For the purposes of this guide, and to better reflect the costs involved, scheduled maintenance rates have been divided into two categories: **crossing warning systems with gates (Type 1)** and **crossing warning systems without gates (Type 2)**. No scheduled maintenance rates are to be charged for crossings having only passive warning systems such as reflectorized signboards.

This section addresses:

- scheduled maintenance direct labour rates;
- scheduled maintenance direct material rates;
- electricity costs;
- scheduled maintenance overhead rates;
- scheduled maintenance vehicle costs; and
- billing periods.

Scheduled Maintenance Direct Labour Rates

The scheduled maintenance labour rates include the labour costs associated with all routine service calls and maintenance work, and scheduled testing and inspections. The labour portion of the work has been divided into two categories: work performed by signal maintainers, and work performed by track and roadway crews.

The work performed by signal maintainers includes regular service calls and inspections, as well as all scheduled safety tests (e.g. weekly, monthly, 3-month, 6-month, 1, 2, 4, 8 and 10-year tests). It also includes such functions as painting and parts replacement. The work performed by track and roadway crews includes: weekly testing for certain regions of the country, in place of signal maintainers; flagging during routine maintenance; and the replacement of insulated joints and temporary bond wires.

Weekly tests are performed on all crossing warning systems across Canada where railway companies operate. In some regions, these tests are performed by the signal maintainers and in other regions, by the track and roadway crews. The system-wide time spent on the weekly tests has been apportioned between the two labour groups.

The base labour rate is calculated for both maintainers and track and roadway crews by dividing the total dollar amount paid to employees in each labour category by the total hours worked in the same labour category. The amount paid includes straight time, vacation, statutory holidays, overtime and other pay-related benefits as well as a standby charge.

Scheduled Maintenance Direct Material Rates

The scheduled maintenance direct material rate covers the costs associated with the replacement of basic material items and includes paint, batteries, and light bulbs as well as any other material components replaced due to normal wear. This rate also covers any additional charges for the replacement of materials such as masts, cantilevers, gates, etc. due to normal wear.

The basic material cost includes the total material items purchased for crossing maintenance.

Electricity Costs

The electricity cost includes the base cost of electricity supply and consumption required to maintain the operation of a crossing warning system. No material overhead is added to the electricity costs.

Scheduled Maintenance Overhead Rates

In addition to the direct costs of labour and material, the railway company also incurs costs related to planning, supervising, and administering the maintenance activity, as well as administration costs of the railway company as a whole. The overhead costs applied to scheduled maintenance of crossing protection systems are the standard overheads that apply to all activities involving the maintenance of track and roadway structures. These include the maintenance project's share of expenses (labour and material) related to the wages paid to, and materials used by, railway company employees involved in:

1. **Track and roadway administration:** the planning and supervision activities to support the railway company's maintenance activities.
2. **General administration:** the accounting, finance, human resources, legal, management services, information systems and other management functions needed to support the railway company's operations.
3. **Dispatching:** the dispatching activities to ensure coordination of movements on the track network, control of the project area, and safety of work crews.

In addition, the overheads applied to scheduled maintenance projects include each project's share of the following expenses incurred by the railway company:

4. **Rail communication system expenses:** the investment, maintenance, operation and amortization expenses for rail communication systems, which are needed to coordinate movements and ensure safety of the work crews on the project.
5. **Employee benefits expenses:** payment of the employment benefits to the employees who work directly on the project or perform the administrative, supervisory and management activities to support the maintenance project, including health and welfare, pensions, Canada and Quebec pension plans, employment insurance, and other employee benefits.
6. **Office buildings expenses:** the expenses related to the upkeep of office buildings needed to house the work crews and the administrative, supervisory and management support staff, including the costs of investments, maintenance, operation and depreciation of the buildings.
7. **Taxes:** the costs of municipal property taxes paid on the office buildings.
8. **Insurance:** the costs of insurance against injuries to employees and loss, damage and destruction of third-party property.
9. **Working capital:** interest paid on the working capital needed to sustain day-to-day operation.

The scheduled maintenance overhead rates are calculated using the Agency's costing model and are applied to the labour and material used in the maintenance project. The labour overhead rate is applied to the hours of direct labour employed in the project, and the material overhead rate is applied to each of the material items used in the project.

Scheduled Maintenance Vehicle Costs

Vehicle costs incurred for transportation to and from each crossing are also included as part of the scheduled maintenance rates. Vehicle costs are developed using a per hour rate which reflects the costs of ownership and maintenance of these vehicles multiplied by the number of hours the vehicle is used for maintenance purposes.

Billing Periods

The rates have been presented, for convenience, on an annual basis. Parties to a crossing agreement for scheduled maintenance are free to negotiate the frequency and timing of billing periods (e.g. monthly or annually) that best meet their needs.

Category 2: General Billing Guidelines

The general billing guidelines apply to all work at crossings except for scheduled maintenance of crossing warning systems. Charges under the general billing guidelines should be billed separately from any scheduled maintenance charges and should include a full description of the actual work performed and the related charges. The general billing guidelines include three types of projects:

- construction projects
- crossing surface maintenance
- unscheduled maintenance

The charges relating to all three categories can be found in Schedules B through E of this guide.

Construction Projects

Construction projects which are captured under the general billing guidelines are:

- the initial construction, reconstruction or upgrade of a grade crossing, including the crossing surface and/or the installation of the associated crossing warning system;
- the initial construction, reconstruction, or upgrade of a grade-separated crossing (no crossing warning system required); and

- the initial construction, reconstruction, or upgrade of a utility crossing (no crossing warning system required).

Construction Surface Maintenance

Maintenance performed by a railway company on the crossing surface of a grade crossing or on a grade separation is not included in the standard maintenance rates. Any such costs incurred by the railway company are captured under the general billing guidelines.

Unscheduled Maintenance

Unscheduled maintenance refers to corrective work on any crossing warning system damaged by accidents, vandalism, or weather to restore the reliable, safe, and effective operation of the system.

The remainder of this section outlines the general billing as it pertains to:

- direct labour charges;
- indirect charges, and construction and unscheduled maintenance overhead charges – Labour (Schedule B);
- direct material charges;
- construction and unscheduled maintenance overhead charges - Material (Schedule C);
- miscellaneous charges (Schedule D); and
- rental rates of railway equipment (Schedule E).

Direct Labour Charges

Direct labour charges are directly related to the labour hours used in the construction of new or upgraded crossings, or for unscheduled maintenance of the crossings. The labour charges applicable under this guide for any general billing project should be based on the actual hours worked multiplied by an hourly labour rate, as specified in each employee's collective agreement. For construction purposes, the labour charges are applicable to the actual on-site installation of materials.

Indirect Charges, and Construction and Unscheduled Maintenance Overhead Charges — Labour (Schedule B)

The overall labour rate is comprised of three components:

- a direct wage rate (discussed above)

- an indirect labour factor
- a labour overhead rate

Schedule B of this guide outlines the appropriate indirect labour factor and labour overhead rate to be applied to direct wage rates for labour costs that fall into the general billing guidelines.

The indirect labour factor covers allowances for vacation, statutory holidays and other types of leave, and is applied to the direct hourly wage. The labour overhead rate for construction, upgrade, or unscheduled maintenance of crossings covers the same types of expenses as described previously for scheduled maintenance of crossings, and is calculated using the Agency's costing model.

Direct Material Charges

Direct material charges are directly related to the material used in the construction of new or upgraded crossings or unscheduled maintenance of the crossings. The direct material charge is the actual price (including applicable net sales tax¹) paid by the railway company for any material items used in unscheduled maintenance or construction work, including any pre-wired and/or pre-assembled items.

Construction and Unscheduled Maintenance Overhead Charges — Material (Schedule C)

In addition to the direct material charges, a material overhead rate is applied to the actual purchase price paid by the railway company for all material items used in the construction, upgrade, or unscheduled maintenance of a crossing, including pre-wired and/or pre-assembled items. The applied rate covers the same types of expenses as previously described for scheduled maintenance projects, and is calculated using the Agency's costing model.

Schedule C of this guide outlines the material overhead rate applicable to all material charges used in construction and unscheduled maintenance projects.

Miscellaneous Charges (Schedule D)

Miscellaneous charges cover three types of costs incurred by railway companies in construction of new or upgraded crossings and unscheduled maintenance of existing crossings:

¹ The applicable sales tax credits should be deducted from the sales taxes being paid for the material item.

- transportation charges for work crews, material and equipment to and from the crossing site;
- contracting charges for equipment and services; and
- meals and lodging allowances paid to work crews for the duration of the construction or unscheduled maintenance project.

Transportation Charges

Transportation expenses incurred for moving company-owned railway equipment to and from job sites may be charged except when the equipment moves directly from one project to another under its own power (excluding locomotives). Invoices can include charges for the transportation of cars, cars loaded with roadway machines and other miscellaneous equipment to work sites either by rail or road. Charges for transporting equipment in work trains cover all operating and ownership costs associated with the train movement of the equipment to the work site. Charges for work trains used for storage may also be billed.

Schedule D, transportation charges, lists the hourly charges (or fractions of them) applicable in the absence of a third party bill, for locomotives, work trains, equipment transported in work trains, revenue trains and by road, as well as trackage charges. Transportation charges for the movement of railway company employees to and from job sites are applicable for projects billed under the general billing guidelines.

In cases where the actual labour hours relating to the railway transportation function are known, the charges may be calculated using the rates in **Schedule B**, as follows:

1. A **direct hourly wage** as specified in each employee's collective agreement.
2. An **indirect labour factor** to cover allowances for vacation, statutory holidays and other types of leave. This factor is applied to the direct hourly wage.
3. A **transportation labour overhead rate** to cover administrative expenses related to the operations of the railway and rail communications systems. It includes costs for general administration activities incurred in the management of the railway company, such as accounting, finance, human resources, legal, management services, and information systems. It also includes costs relating to the company's portion of employment insurance, pensions, health plans, and other benefits. This overhead is applied to the result of the application of the indirect labour factor to the direct hourly wage.

In cases where the materials used relating to the railway transportation function are known, charges may be calculated using the rates in **Schedule C** as follows:

1. The **actual purchase price** (including applicable net sales tax) paid by the railway company for any material item.

2. A **transportation material overhead rate** which covers the charges associated with administration, supervision, purchasing, storage, accounting, legal matters, inspections and quality control, customs clearance activities and other associated costs, such as utilities.

Contracting Equipment and Services

Charges for any service contracts such as the contracting of non-railway company-owned equipment, services performed by any outside parties and any freight charges related to the transportation of materials, are based on the actual **invoiced** contract price. A contract overhead rate is added to the invoice to cover basic administration costs as outlined in **Schedule D, Contracting equipment and services**.

Meals and Lodging

Meals and lodging expenses for railway company employees working on a project under the general billing guidelines are applicable for employees that are entitled to such allowances in their collective agreements. The allowable charges are those that are specifically identified in each employee's collective agreement.

Rental Rates of Railway Equipment (Schedule E)

Where company-owned railway equipment is used for projects that fall under the general billing guidelines, the daily rental rates shown in **Schedule E: Railway Equipment Rental Rates** are applicable.

The rental charges may include the actual time required for moving railway-owned equipment from its home base or point of storage to the project site and back again, provided the railway equipment is not being transported directly to the site of another project. If the equipment goes directly from the site of one project to another, the time to move to the first project cannot be applied to the second project.

The applicable methodology is outlined in **Schedule E**.

Salvage Values

Proper credit is allowed for salvaged crossing warning system materials. Crossing warning system materials removed from service for re-use should be salvaged at 60% of current new price, and when used again, charged out at the same percentage. Material such as relays or other apparatus which must be repaired or rebuilt should be salvaged at 25% of the current new price, and when used again after being repaired, charged out at 75% of current new price.

Injury or Death

No direct charges are to be made for payment of compensation claims for injury or death of railway employees on a crossing construction or maintenance project.

Discontinuance of Rail Operations

The provisions of the CTA cease to apply to any crossings on a line once the operation of that line is discontinued pursuant to Division V of the CTA. No maintenance charges are to be billed for crossings on which train and line operations are permanently ceased. Should a railway company temporarily cease operations pursuant to Transport Canada regulations, a reduced scheduled maintenance rate may apply to cover the ongoing fixed maintenance costs.

Renewal

The *Guide to Railway Charges for Crossing Maintenance and Construction* will be reviewed by the Agency on an ongoing basis. More specifically, the Agency intends to review the overhead rates for labour and material on an annual basis (schedules B and C), the workload and accounting data necessary for the production of schedules A (standard maintenance rates) and D (miscellaneous charges) on an bi-annual basis, and the information necessary for the determination of equipment rental rates (Schedule E) on a tri-annual basis. Once the cost base has been established according to these schedules, the Agency intends to simply price inflate it.

Railway Company Contacts

Canadian Pacific Railway Company

Non Freight Billable Projects
Gulf Canada Square, Suite 600
401 9th Avenue S.W.
Calgary, Alberta
T2P 4Z4
Phone: 403-319-3053
Fax: 403-319-3640

Canadian National Railway Company

Manager Legislative Affairs
953 de La Gauchetière Street West
Montréal, Quebec
H3B 2M9
Phone: 514-399-6416
Fax: 514-399-4296

Definitions

road: includes any way or course, whether public or not, available for vehicular or pedestrian use.

road crossing: that part of a road that passes over, under or across a line of railway and includes any structure supporting or protecting that part of the road or facilitating the crossing.

crossing warning systems: an active system consisting of lights, bells and/or gates used at road/railway crossing intersections to warn the public of the presence or approach of rail traffic.

crossing surface: means the planking, pavement or other suitable material placed between the rails and to the ends of the ties for the full width of the road crossing.

maintenance: work which is required to keep an existing facility in its fully functional condition.

unusual weather-related damage: damage to crossing warning systems due to exceptional forces of nature such as lightning, high winds, extreme temperature and humidity, which are inconsistent with normally expected weather to the local geography.

Agency Assistance

If any party wishes to seek Agency assistance in resolving issues relating to work performed at crossings, an application must be made in writing, include all supporting information, be signed by the applicant and be sent to the Agency at the following address:

Secretary, Canadian Transportation Agency
Ottawa, Ontario
K1A 0N9

If you wish to hand deliver or courier your application, please use the following address:

Secretary, Canadian Transportation Agency
15 Eddy Street, 17th Floor, Mailroom
Gatineau, Québec
J8X 4B3
Fax: 819-997-6727

In addition, a copy of the application should be sent to each other party involved at the same time the application is filed with the Agency.

Other Available Documents

- *Apportionment of Costs of Grade Separations: A Resource Tool*
- *Canadian Transportation Agency General Rules*
- *Crossings: A Resource Tool*
- *Guidelines Respecting Net Salvage Value Determination Applications*
- *Environmental Self-Assessment Handbook for Rail Infrastructure Projects*
- *Guide to Certificates of Fitness*
- *Railway Crossings of Other Railways: A Resource Tool*
- *Railway Line Construction: A Resource Tool*
- *Railway Operation Compensation: A Resource Tool*
- *Railway Safety Management Systems Regulations*
- *Railway Third Party Liability Insurance Coverage Regulations*
- *Relocation of Railway Lines in Urban Areas: A Resource Tool*
- *Transfer and Discontinuance of Railway Line Operations and Railway Track Determinations*

These documents are available on the Agency website, and in alternate formats.

For More Information

Canadian Transportation Agency

Ottawa, Ontario K1A 0N9

Telephone: 1-888-222-2592

TTY: 1-800-669-5575

Facsimile: 819-997-6727

E-mail: info@otc-cta.gc.ca

Web site: www.otc-cta.gc.ca

Schedule A: Scheduled Maintenance of Crossing Warning Systems

Type 1: Crossing Warning Systems with Gates

2013/2014 – Standard maintenance rates: labour costs

	Annual labour hours	Annual labour rate ¹	Labour costs ²
Work performed by signal maintainers	71.6	\$72.85	\$5,216.09
Work performed by track and roadway crew	9.4	\$54.65	\$512.42

Note 1: The Labour Rate is calculated by adding a labour overhead rate of 77% to a base labour rate indexed for 2013/2014.

Note 2: The Labour Costs are calculated by multiplying the labour hours for each category by that categories' labour rate.

2013/2014 – Standard maintenance rates: material and electricity costs

Material cost ¹	Electricity cost ²	Total materials ³
\$809.28	\$298.93	\$1,108.22

Note 1: The Material Cost is calculated by adding a material overhead rate of 55% to the 2013/2014 basic material cost.

Note 2: No overhead has been applied to the electricity cost.

Note 3: Total Materials is a sum of the material cost and the electricity cost.

2013/2014 – Standard maintenance rates: vehicle costs

Vehicle rate per hour	Total annual hours	Total vehicles ¹
\$14.38	81.0	\$1,164.17

Note 1: Total Vehicles is calculated by multiplying the total annual hours by the vehicle rate per hour.

2013/2014 – Standard maintenance rates: all costs

Signal maintainers labour costs	\$5,216.09
Track and roadway crew labour costs	\$512.42
Total materials	\$1,108.22
Total vehicles	\$1,164.17
Total annual rate¹	\$8,000.90
50% of total annual rate	\$4,000.45
Monthly rate²	\$666.74
50% of monthly rate	\$333.37

Note 1: The total annual rate is the sum of the labour, material, and vehicle costs.

Note 2: The monthly rate is the total annual rate divided by 12.

Type 2: Crossing Warning Systems Without Gates

2013/2014 – Standard maintenance rates: labour costs

	Annual labour hours	Annual labour rate ¹	Labour costs ²
Work performed by signal maintainers	63.2	\$72.85	\$4,601.55
Work performed by track and roadway crew	9.0	\$54.65	\$491.81

Note 1: The labour rate is calculated by adding a labour overhead rate of 77% to a base labour rate indexed for 2013/2014.

Note 2: The labour costs are calculated by multiplying the labour hours for each category by that categories' labour rate.

2013/2014 – Standard maintenance rates: material and electricity costs

Material cost ¹	Electricity cost ²	Total materials ³
\$700.50	\$298.93	\$999.43

Note 1: The material cost is calculated by adding a material overhead rate of 55% to the 2013/2014 basic material cost.

Note 2: No overhead has been applied to the electricity cost.

Note 3: Total materials is a sum of the material cost and the electricity cost.

2013/2014 – Standard maintenance rates: vehicle costs

Vehicle rate per hour	Total annual hours	Total vehicles ¹
\$14.38	72.2	\$1,037.47

Note 1: Total vehicles is calculated by multiplying the total annual hours by the vehicle rate per hour.

2013/2014 – Standard maintenance rates: all costs

Signal maintainers labour costs	\$4,601.55
Track and roadway crew labour costs	\$491.81
Total materials	\$999.43
Total vehicles	\$1,037.47
Total annual rate¹	\$7,130.26
50% of total annual rate	\$3,565.13
Monthly rate²	\$594.19
50% of monthly rate	\$297.09

Note 1: The total annual rate is the sum of the labour, material, and vehicle costs.

Note 2: The monthly rate is the total annual rate divided by 12.

Schedule B: Construction and Unscheduled Maintenance Overhead Charges — LABOUR

Cost components to be added to employee's base wage rate to develop labour charges under the general billing guidelines

Cost component	Unscheduled maintenance (%)	Construction projects (%)	Transportation (%)
Indirect labour factor ¹	15	15	15
Overhead rate			
Administration: <ul style="list-style-type: none"> • track and roadway administration (for unscheduled maintenance and construction overheads only) • railway operations administration (for transportation overhead only) • general railway administration 	32	32	23
Working capital	1	4	4
Associated costs: <ul style="list-style-type: none"> • office buildings • taxes • insurance • rail communication systems • dispatching 	13	13	11
Employee benefit allowance	31	31	30
Total overhead rate	77	80	68

Note 1: When charging for work performed by signal maintainers, engineers or conductors, an extra allowance of 15% may be added to the indirect labour factor as allowed pursuant to their collective agreements.

Schedule C: Construction and Unscheduled Maintenance Overhead Charges — MATERIAL

Cost components of the material overhead rate to be applied to actual material costs under the general billing guidelines

Cost component	Unscheduled maintenance (%)	Construction projects (%)	Transportation (%)
Administration: <ul style="list-style-type: none"> track and roadway administration (for unscheduled maintenance and construction overheads only) railway operations administration (for transportation overhead only) general railway administration 	32	32	22
Working capital	1	4	4
Associated costs: <ul style="list-style-type: none"> office buildings taxes insurance rail communications systems dispatching 	13	13	12
Employee benefit allowance	9	9	7
Total	55	58	45

Schedule D: Miscellaneous Charges

Meals and lodging	
Meals and lodging allowance as per each employee's collective agreement.	
Transportation charges	
Revenue trains and hi-railers	\$0.45 per car mile for each car/vehicle serving the project (minimum 50 miles, maximum 250 miles).
Equipment transported by highway	\$0.45 per vehicle mile (minimum 50 miles, maximum 250 miles).
Work Train using one Locomotive	\$421.55 per hour for first 8 hours.
	\$517.00 per hour for 9th and subsequent hours.
	\$257.00 per hour per additional locomotive.
Trackage charge	\$ 26.05 per train mile.
Contracting equipment and services	
Allowance for contract overheads	3% on amounts up to \$50,000
	2% on amounts of \$50,000 up to \$100,000
	1% on the excess of \$100,000

Note: The rates in this schedule have remained unchanged from 2012 due to lack of cost data from the railway companies.

Schedule E: Railway Equipment Rental Rates

Category	CP billing code	Description	\$ per day
Rail gang oriented	101	tie adzer, self-propelled	348
	191	cribber/adzer	852
	010	anchor squeezer	106
	011	anchor applicator	393
	012	anchor remover, dual	
	013	anchor spreader, dual	182
	712	anchor cribber	107
	719	plucker, plate/dual	180
	619	plucker, plate/single	
	819	plucker,spike	329
	015	plate pre-gauger	73
	108	tie plugger - chemical	597
	919	spike reclaimer (used on tie and rail)	260
	008	spike puller dual rail	227
	099	spiker,dual/gauger	399
	009	spike driver - multi - dual	400
	017	rail heater	105
	077	rail heater,tug	245

	303	large rail saw	48
Ballast gang oriented	211	ballast regulator	441
	404	snow/switch cleaner	146
	214	ballast broom	
	215	undercutter	1,150
	212	ballast cribber	32
	208	power jack/slewer	26
	913	super gopher (super go-4s)	1,303
	201	tamper	128
	202	tamper, surface	501
	206	tamper, switch/surface/line	1,095
	204	tamper - switch	332
	205	tamper - unimat switch 32 tool	88
	3ca	tamper - mark iii/iv production combo	
Tie gang oriented	102	tie crane	275
	105	tie drill	195
	710	tie inserter/extractor - light	53
	110	tie inserter/extractor - production	390
	014	rail lifter	208
	914	tie plate broom	113
	106	tie spacer	
	577	material handler, cartop lucky	52

	507	material handler, cartop jimbo	771
	103	scarifier	283
	320	stabilizer, track, s/f	
	220	stabilizer, track	473
Power generators	814	light, portable c/w generator	
Cranes	502	crawler crane	276
	503	rail mounted crane <20 ton	453
	512	locomotive crane - 30 ton cap	
	501	wheel mounted rubber tire crane	82
	510	speedswing crane	337
	550	speedswing crane - 360 degree	473
Roadway machines	505	bulldozer	389
	508	gradall/excavator	116
	608	road grader (motor)	198
	506	loader < 3 yard	309
	511	backhoe/loader	119
On-track machines	019	on track material (otm) loader	
	601	car mover, brandt	
	700	motor car	29
Brush cutters / mowers	305	on track mower	76
Snow removal / cleaners	401	blower, snow/jet/skid	242
	406	platform cleaner	25

Schedule E is comprised of rates developed from data submitted by Canadian Pacific Railway Company (CP). Canadian National Railway Company (CN) was unable to submit data related to Schedule E, and is therefore excluded. Parties and CN can agree to use the rates in Schedule E, or can negotiate amongst themselves to determine appropriate rate.

Methodology to apply in calculating operation costs

No overheads are to be applied to the rental rates listed above.

Rental rates do not include the costs of operating equipment. Charges for employees operating equipment, equipment supplies and fuel can be charged in addition to rental rates. These labour charges can include the appropriate statutory and other leave, and supervision and administration overheads (see above).

These rental rates apply for each day of 8 hours that the equipment actually works on a project. When more than 8 hours work is performed on any one day by the rented item, additional rental can be charged computed on the basis of an hourly prorate of the per diem rate.