



# Consulting Fees in perspective

## CEBC - APEGBC Fee Guidelines for Engineering Services

The Fee Guidelines provide a good overview of the basis for and methods of remuneration for consulting engineering services, as well as background into what is involved in providing those services. The purpose of this article is to explain the many costs incurred in providing a quality service to the client.

## The Creativity and Business of Professional Engineering

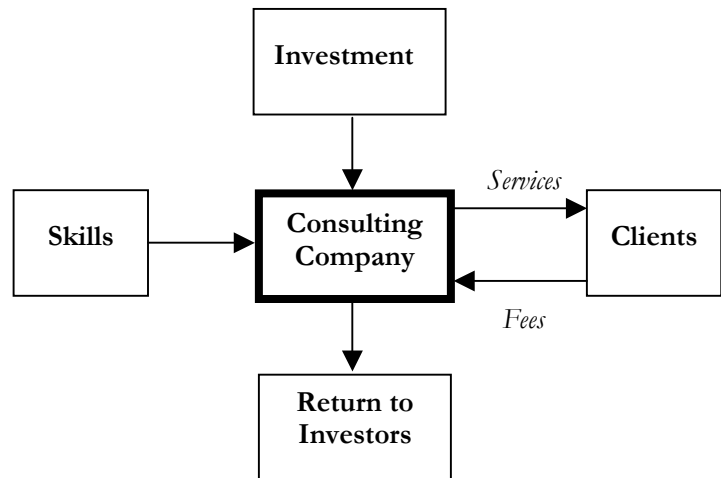
Engineers design a wide range of infrastructure to meet the needs of society (buildings, roads, railways, airports, water supply, sanitation, telecommunications, etc). Some engineers work directly for government departments and private sector business, while others work as independent consultants that provide their services to both government and private sector business. While all engineers have a proud professional interest in their work, consultants also assume business risks and financial obligations.

## Risks in Consulting Engineering

Examples include:

- Cyclical nature of spending
- Domestic and foreign competition
- Government policy changes
- Changing technology
- Direct and indirect liability
- Changing contractual arrangements
- Fee pressures

## The Financial Requirements of a Business



## Margins and Multipliers

To sustain the financial requirements of business, the 'mark-ups' on products are commonly expressed as margins as the product passes from manufacturer to customer, while those for services are termed multipliers. While hourly rates and lump sums are often quoted for professional services, they ultimately depend on the total costs of providing the service as outlined herein.

Few people understand what degree of margins and multipliers are needed to sustain and develop a product or a service. For example, with a typical consumer product passing through the manufacturer-wholesaler-retailer-customer chain, the customer usually pays three to eight times the cost of manufacture, often without realizing it. If a fair margin is not in place, the product will simply not be available, except in a bankruptcy or second-hand sale.

The multipliers of a professional service business present a similar transition from 'manufacturer' (the engineer in this case) to 'customer' (the client) for delivery of a finished project. A typical breakdown of costs behind such a multiplier is presented in this Commentary. The results are revealing - without a reasonable multiplier there is no business opportunity nor a mechanism to deliver a quality service.

The table below explains why the hourly rate charged for a consulting engineer is significantly greater than the hourly salary. The difference relates to the costs of doing business, and it will vary from one firm to another with time, specialty, and employees. The numbers are fairly typical, but could vary by 20% or more. The employee is assumed to be paid \$35/hour for 37.5 hours/week (ie the monthly salary is  $35 \times 37.5 \times 52 \div 12 = \$5,687.50$ ).

<b>Description of Services</b>	<b>Cost to Employer</b>
<b>Basic hourly salary</b>	\$ 35.00
Direct benefits (Canada Pension Plan, UIC, Insurance, WCB, pension plan, group benefit plan, etc) = 16 - 20%	\$ 5.00 - 7.00
	<hr/> \$ 40.00 - 42.00
Vacation + statutory holidays 10% - 12%	\$ 4.00 - 5.00
<b>(A) Payroll Cost</b>	<hr/> <b>\$ 44.00 - 47.00</b>
Time not chargeable (sick time, conferences, education, marketing, overhead, proposals, travel, administration, committees, etc) = 25 - 30% of (A)	\$ 11.00 - 14.00
	<hr/> \$ 55.00 - 61.00
Non-technical and overhead staff (secretarial, business, bookkeeping etc)	\$ 7.00 - 15.00
	<hr/> \$ 62.00 - 76.00
Overhead expenses (rent, general insurance, legal/accounting, travel (non-reimbursable), phone, fax, supplies, printing, utilities, office equipment depreciation and repairs, dues, computers, rentals, bank charges, etc)	\$ 15.00 - 25.00
	<hr/> \$ 77.00 - 101.00
Professional Liability Insurance	\$ 2.00 - 4.00
	<hr/> \$ 79.00 - 105.00
Return on Investment, 10%	\$ 8.00 - 11.00
<b>(B) Charge Out Rate</b>	<hr/> <b>\$ 87.00 - 116.00</b>
<b>Payroll Multiplier (B) ÷ (A)</b> (refer to Fee Guidelines)	<hr/> 2.0 - 2.5

Copies of the following publications are available from CEBC

- Fee Guidelines for Engineering Services
- CEBC Directory of Member Firms and their Fields of Practice
- Awards for Engineering Excellence Magazine
- Consulting Engineering Industry Profile
- Guide to Selecting a Consulting Engineer
- Requests for Proposals
- Are You as Indemnified as You Think You Are?
- Value Engineering
- Design-Build in the Public Sector
- Geotechnical Engineering
- Transportation Engineering
- Electrical Engineering

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