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### The Guide to the Post Index

2006



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Statistics Canada Prices Division

# The Guide to the Post Index

2006

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### The Guide to the Post Index

Table of Contents	Page
Introduction	5
1.0 What is a Post Index?	5
2.0 What is included and excluded?	5
3.0 The main components of the Post Index	6
3.1 The importance of weights in the Post Index	6
3.2 Post purchasing patterns	7
3.3 Prices	8
4.0 The Post Index survey	9
4.1 Individual Reports of Consumer Information	9
4.2 Pricing Schedules	9
5.0 Processing the price data	10
6.0 Monthly review of the Post Index	10
6.1 Exchange rates	11
6.2 Inflation factors	11
6.3 Monthly movements For each reported source	12
6.4 The 3% rule	12
7.0 The Post Index and the Post Living Allowance (PLA)	13
7.1 Purchasing power maintained	13
7.2 Retroactive adjustments to the Post Index	14
8.0 Post visits	15
9.0 Post Indexes where Statistics Canada surveys are not undertaken	15
10.0 General comments	15
Appendix A - Annual Post Living Allowance	16

#### Introduction

The Canadian government employs military and civilian expatriates in more than 300 locations throughout the world. Canada-based personnel who serve at these posts may experience considerably different living conditions from those at home. Among these differences are the prices they may have to pay for consumer goods and services. Higher price levels, fluctuating exchange rates and inflation at the post may mean that the purchasing power of their Canadian dollar is not as great as it would be in Ottawa.

The federal government has developed a foreign service compensation system that is embodied in the Foreign Service Directives (FSD), the Military Foreign Service Instructions (MFSI) and the Technical Assistance Regulations (TARs).

One element of foreign service compensation is known as the Post Living Allowance (PLA), the level of which is regulated by what is called the Post Index (PI). Applied to salary bands, the Post Index is intended to provide employees with the financial means to maintain a lifestyle comparable to that which would be enjoyed by similar family income earners in Ottawa. The Post Index is not designed nor intended to create incentive or inducement for service abroad.

Post Indexes are compiled and updated by the Government Allowance Indexes Section of Statistics Canada which has provided statistical support for various Canadian Government systems of expatriate employee compensation for more than 50 years. Its role is that of a neutral third party. The provisions of the FSD, including the use of the Post Index in administering the PLA, are determined by employer and employee representatives working within the National Joint Council Foreign Service Directives Committee (NJC). At the request of this NJC Committee, Statistics Canada publishes the level of Post Indexes on its web site monthly. (See: <a href="http://www.statcan.ca/bsolc/english/bsolc?catno=62-013-XIE">http://www.statcan.ca/bsolc/english/bsolc?catno=62-013-XIE</a>.)

Information and explanations contained in this guide reflect determinations made by the National Joint Council. Throughout this Guide reference is made to the FSD 55 but the provisions of the MFSI Section 15 are parallel and apply equally to Canadian Forces members.

#### 1.0 What is a Post Index ?

A Post Index is, at any given point in time, a comparative measurement that numerically expresses the difference between the retail price of a representative basket of goods and services at a foreign location with prices for a similar basket of goods and services in Ottawa.

Ottawa price levels are always expressed as 100. Thus, a Post Index of 110 means that prices at the foreign location are estimated to be about 10 percent higher than those in Ottawa.

#### 2.0 what is included and excluded?

The post index includes price comparisons for the following household expenditure categories:

Food purchased from stores Meals purchased in restaurants Personal care supplies Personal care services Patented medicines Pharmaceutical products Household maintenance Household supplies Household services Financial services Household Insurance Reading and Recreation Clothing Communications Transportation Tobacco and Alcohol Domestic help

In total, more than 400 consumer items or price specifications are included in the Post Index "basket".

**Excluded** from the basket are items such as shelter, fuel & utilities, furnishings, education, vacation trips, etc., for which other provisions of the FSD provide relief for excess costs while serving abroad. No attempt is made in the Post Index to compare the costs of such things as savings & investments.

Likewise, no attempt is made to attach a price tag to the physical or environmental factors that determine the eligibility of a foreign location for a Post Differential Allowance (FSD 56).

#### 3.0 The main components of the Post Index

Three main components form the basis of the Post Index:

- 1) Weighting diagrams or the relative importance of each item measured in the Post Index.
- 2) **Purchasing patterns**, or the relative importance of each source or outlet where purchases are made, as reported by post personnel.
- 3) **Prices**, converted to the \$CAD, from all sources used by post personnel and prices for the same goods and services in Ottawa.

#### 3.1 The importance of weights in the Post Index

To begin calculating the Post Index, Statistics Canada first determines what a typical Canadian family buys and what proportion of its budget it spends on each item or service.

To accomplish this, Statistics Canada uses data from Surveys of Household Spending (SHS), conducted annually among a large cross-section of Canadian families. The respondent families are asked to record expenditures they make for various types of consumer goods and services during a given year. With the introduction of the 2001 FSD, the NJC has agreed that the sample of respondents will be restricted to families that have at least one full-time wage earner with a salary that reflects salary levels of Canadian government expatriates. New SHS surveys are introduced into the Post Index at the same time they are used to revise the weights for the Consumer Price Index, about every 4 to 5 years.

The 2001 Survey of Household Spending is the latest survey used to establish this typical profile. The average salary of this group was \$75,700 and the typical size of the family was 3.1 persons.

The SHS serves a twofold purpose:

- a) it identifies the kinds of goods and services bought by typical families in Canada,
- b) it defines what proportion of their expenditures is spent on each of the various goods and services.

This information serves to determine what items to price as well as the relative importance or "weight" of each item. Weights are essential in determining the overall effect of price differences between a foreign post and Ottawa.

To illustrate this concept of weights, Table A shows the average amount reported spent in 2001 on the Post Index 'basket'.

Table A — Computation of weighting patterns						
	Amount <u>spent</u> \$	Relative importance or weight %				
Food (Purchased from stores & restaurants)	8,591	25.3				
Health & Personal care	1,628	4.8				
Household Supplies, Services & Maintenance	1,627	4.8				
Reading & Recreation	4,416	13.0				
Clothing & Home furnishings	3,924	11.6				
Transportation & Communications	12,001	35.4				
Tobacco & Alcohol	1,289	3.8				
Domestic help	424	<u> </u>				
	33,900	100.0				

It is very important to understand that the "weights" in Table A relate to the percentage of total **expenditures**, not of total income.

The weighting patterns ultimately used in the calculation of a given Post Index are based on the Canada Survey of Household Spending. Table A, above, illustrates the "weight" for the 8 major categories of goods and services. Subgroup weights, down to the level of individual items, are established using this information.

Table B — Importance of weights								
Item	Price differential Base = 100	Straight average	Item index	Weighting by expenditure	Item index			
Milk	105	50.0 %	105 x (50/100) = 53	90.0 %	105 x (90/100) = 95			
Waxed paper	150	50.0% Po	$150 \times (50/100) = \frac{75}{128}$	10.0 % Pos	150 x (10/100) = <u>15</u> st Index = 110			

The importance of using weights to establish the difference in costs between two locations is shown in the example in Table B: Consider milk and waxed paper as the only two items included in the Post Index. A 5 percent difference in milk prices will normally have a much greater impact on a family budget than even a 50 percent price difference for waxed paper. The reason is simple: families spend much more on milk than on waxed paper.

Placing the same importance on milk and waxed paper (the straight average) would lead one to believe that the Post Index should be 128. However when the greater expenditure on milk (90%) is reflected in the Post Index, a more accurate cost difference is presented showing a Post Index of 110. If the price differentials were reversed and milk was 50% more expensive than in Canada, then the Post Index would be 146. From this example, it can be appreciated that the overall level of the Index will be more heavily influenced by the price differentials attached to the categories that Canadians spend the most money on.

#### 3.2 Post purchasing patterns

The term "purchasing pattern" refers to the combination of retail outlets or other sources from which personnel at a post report buying the goods and services contained in the Post Index "basket". A post purchasing pattern may be very complex or relatively simple, depending upon the conditions at the post.

The majority of purchases are normally made in **local outlets** at each location. At many locations, purchases of certain goods & services are available **exempt from sales or value-added taxes**. These goods & services are separated from purchases made at full retail values within each post's purchasing pattern.

Special diplomatic or military stores may also be frequented by personnel who have access to such facilities.

At some locations it is common for **imports** from other countries to be reported as well as local purchases. Personnel may import goods that have been purchased while visiting other cities or countries. More often, these imports are from export houses, such as Peter Justesen (P.J.). Purchases made from Internet sources are also considered to be **direct imports**. These last two examples indicate goods for which additional costs need to be added for shipping, handling, insurance, etc., to reflect the 'landed price'.

Items purchased in Canada prior to a posting for inclusion with effects to be shipped to the post on initial transfer or when home on leave are considered to be "**Brought to Post**".

Goods purchased and brought from a previous posting abroad are also considered "Brought to Post". Expenditures reported "Brought to Post" are given an index of 100, or equal to Ottawa, the former because Ottawa or Canadian prices were paid for these goods and the latter because the previous Post Index at that location provided the necessary compensation to equalize these purchases to the level of Ottawa.

Finally, it should be noted that a certain percentage of every index is treated "As Ottawa", as per agreement through the NJC deliberation process. As with "Brought to Post" expenditures, the index for this part of the Post Index is set at 100.

The most important component treated in this manner is the purchase, depreciation and re-sale cycle pertaining to automobiles. The NJC has agreed that this component of the Post Index should be based on the principle that Canadians serving abroad are no worse off for this cycle of capital expenditures than they would be had they remained in Canada.

Two premises are the basis for this determination. The first is that under the provisions of FSD 15, a vehicle may be shipped to post, under certain conditions, at no cost to the employee and therefore the costs related to that vehicle are those of Ottawa.

The second premise is that in many locations vehicles may be purchased free of taxes or duties and may well have a lower capital cost than the same vehicle in Ottawa. Further, there still exists certain countries where these duty-free vehicles can be sold on the 'open' market and, even after a typical three-year posting, the selling price may exceed the original purchase cost.

Although it is possible that there are circumstances where this approach may not be reasonable, e.g., for countries where right-hand drive vehicles are used, every Post Index is subject to this same treatment.

Household maintenance costs, where crown owned/leased housing or other shelter allowances are provided, as well as legal services and certain household items, e.g. rugs, small electrical appliances or equipment, etc., also are treated **"As Ottawa".** 

This fixed amount of "As Ottawa" that is set at 100 means that every PI contains input that relates to Ottawa price levels. Therefore, even where all purchases are made from local retailers at a post, the overall Post Index level does not reflect only those local price differentials. For all Post Indexes that are greater than 100, there is some abatement because of the "As Ottawa" portion.

The complete "all-items" post pattern is the sum of all the percentages reported for each purchasing source for each item, combined to reflect the relative importance (weight) of each item in the basket. (See Chart 1 for a sample post pattern.)

The aggregation of the patterns reported by each member family is weighted by family size, excluding those that are either age or household specific, e.g., children's articles are weighted by the number of children only, alcohol & tobacco by adults only, household insurance is weighted equally by the number of respondent families who report this category. In general, therefore, the reported patterns of families with 5 members, for example, carry much more weight in establishing the average patterns than those of single person family units. Every post's average purchasing pattern is unique to those serving there at the time the survey is conducted.



#### 3.3 Prices

The information obtained from the Survey of Household Spending, supplemented by the knowledge gleaned from successive surveys and on-site visits, enables Statistics Canada to select the goods and services to be included in the "basket" to establish Post Index price differences.

It is much easier to compare the prices of most consumer items between two cities in Canada than to do so between a foreign post and Ottawa. Within Canada, matching brands, sizes and quantities can usually be found and prices are stated in Canadian dollars. For Post Index purposes, on the other hand, adjustments for package/container weights and measures are often necessary and, since foreign service personnel pay for goods in foreign currencies, exchange rates must also be considered.

It is neither necessary nor practical that the basket include all items people buy within the range of goods and services shown in Table A, above.

Through a careful selection of key representative items, it is possible to ensure that the Post Index reflects price differences for a much wider range of commodities than is actually sampled. For example, the Post/Ottawa price difference for towels and pillowcases may be a good indicator of the price difference that exists generally for linens and bedding products.

Some important criteria and considerations for designing a basket of goods and services are as follows:

- The item should be universally available at all locations because the same survey must be used at all posts. Availability may be a particularly constraining consideration in establishing baskets for international price comparisons because of the wide variation in markets, climates and products.
- The item should also be commonly purchased by Canadians and have some significance in their expenditure patterns. Bread and gasoline meet these requirements. Diamond necklaces and shoe laces do not. Diamonds are not frequently purchased and shoe laces have little significance in expenditure patterns.
- The item should be easy to identify and be apt to conform to a reasonably precise description. Most of the price collection required in the conduct of a Post Index survey is undertaken by personnel at the post and not by trained price collectors. As a result, item specifications tend to be focused on basic items. In the area of clothing, for example, items such as suits are avoided because of the wide variety of quality differences that exist in the market place.
- Finally, items are neither included nor excluded on the basis of any moral or social judgments. Many people may regard the inclusion of tobacco or alcohol products as socially undesirable or harmful. They are included however, because they continue to represent significant elements of reported average household expenditures. Other goods and services that might be held to be reprehensible are not included but only because they are not identified in reported consumer expenditures.

#### 4.0 The Post Index survey

A Post Index survey is undertaken at each foreign post in sequence at approximately 30 to 36 month intervals. Normally, the task of collecting prices and other data is shared by the personnel of all departments at the post. Necessary reports, pricing schedules and instructions are forwarded to the post by Statistics Canada through the department responsible for coordinating the survey.

A Post Index survey consists of two parts:

#### 4.1 Individual Reports of Consumer Information

Canada-based members of missions abroad are requested to complete an Individual Report of Consumer Information that determines the **Post purchasing pattern**. The sources of purchases, in percentage terms, made at local retailers, by direct importation, at commissaries, etc. for each commodity grouping or service is requested. (see Section 3.2).

In addition to this, the Individual Reports serve to indicate whether the individual has access to **tax-free purchasing privileges** for liquor, cigarettes and gasoline.

Particulars about Communications and Television service (including internet access) are requested.

If a car is owned or leased, the details of automobile insurance premiums and coverage are reported.

The types of **domestic help** employed and the costs are also requested. The NJC has agreed that the <u>minimum</u> index for this category will be 100. Where hourly labour costs are low relative to Canada (producing low price differentials), it is recognized that expatriates may engage more of these services and spend at least as much as typical Canadians.

Finally, Household contents insurance premiums for tenants are reported as well.

#### 4.2 Pricing schedules

Pricing schedules are concerned with the actual prices paid for consumer items as well as the identity of the retail outlet where the item was priced.

Typically, prices are obtained from sources patronized by post personnel, including a minimum of three local outlets and for most items two price quotations are required from each outlet or source.

At many posts, personnel rely on the importation of commodities from export houses in Denmark or Hong Kong, for example. Where this condition prevails, the survey requires the submission of suppliers' invoices for typical import shipments, along with evidence of freight insurance, customs clearance or other charges that apply. This enables Statistics Canada to determine the total price paid by consumers for imported goods.

10

#### 5.0 Processing the price data

The following steps are applied to determine the index level of each reported source of purchase:

- a) For every item priced at a given purchase source, an average price is calculated. An average price calculation requires adjustments for measures and sizes. For some sources, transportation, packing, insurance charges, etc. must be added.
- b) The average price for each source is converted to Canadian dollars using the exchange rate in effect for each applicable currency at the time the survey is conducted.
- c) Each source average price is compared to the average price in Ottawa and expressed as a ratio. For example a ratio of 2.0 for a particular item would indicate that the post price from that source is twice the prevailing price in Ottawa.
- d) These ratios are then assigned the weight, or relative importance, based on the SHS. The item ratio is multiplied by the item weight and the results are aggregated to produce the index for that source.

Once each reported source index has been calculated, they are combined to form the total Post Index for the location. Based on the Post purchasing patterns illustrated in Chart 1, Section 3.2, a Post Index might appear as follows:

Table C — Calculation of the Post Index								
Source (Outlet)	Post purchasing pattern	Source index	Index points					
Purchases on the local market	64.0%	150	(150 x 0.64) = <b>96.0</b>					
Purchases exempt from taxes	15.0%	126	(126 x 0.15) = <b>18.9</b>					
Brought to Post	2.0%	100	(100 x 0.02) = <b>2.0</b>					
As Ottawa	16.0%	100	(100 x 0.16) = <b>16.0</b>					
P.J. imports	3.0%	90	(90 × 0.03) = 2.7					
Post Index Post Index Level	100.0%		135.6 136					

The Post Index level is calculated to be 136 (Ottawa = 100) at the time of the survey. The new Post Index is subjected to a monthly review process for the time between the survey month and the time it is actually released (see Section 6, below). On the release date, the current Post Index level, based on the new survey, is posted on the Statistics Canada web site. The previous Post Index continues to be monitored until the survey is processed and the new Post Index is released.

#### 6.0 Monthly review of the Post Index

Once established, Post Indexes are subject to a monthly review to assess their continuing validity. The monthly update of each Post Index is effective on the first day of the month, based on the circumstances prevailing in the previous month. (See FSD 55.)

Three factors are considered:

- 1. Fluctuations in exchange rates for all currencies in use at a given post relative to the Canadian dollar.
- 2. Movements in Ottawa prices.
- 3. Movements in post prices, for those goods and services obtained from each source.

#### 6.1 Exchange rates

Since foreign service personnel pay for most goods in foreign currencies, exchange rates must be considered. Various types of exchange rates may be obtained for the same currency, e.g. "official rate", "commercial rate", "tourist rate", "parallel rate", "free market rate". Thus, it is imperative to identify the actual exchange rate obtained by Canadian expatriate employees. "Black market" rates are never used because Canada based employees are not permitted to exchange funds at these rates.

The average monthly exchange rate for all currencies used in each Post Index are calculated. Bank transaction fees are added to the officially published rates in order to calculate the effective rates actually received by Canadian employees posted abroad.

Exchange rates are received from a number of sources:

- a) Bank of Canada noon-hour daily rates are available for a large number of currencies
- b) Bank of Montreal daily rates as published in the *Globe and Mail* for those countries in which local currency rates are not available through the Bank of Canada daily reports
- c) Bank of Montreal weekly rates as published in the Globe and Mail for additional currencies
- d) U.S. Department of State Rates bi-weekly rates obtained by American government employees posted abroad. A conversion of the U.S. dollar vis-à-vis the Canadian dollar is required.
- e) DND Official Rates used by the Department of National Defence to pay Canadian Forces members posted outside Canada directly in the local currency of the country. These rates do not require any bank transaction fees.
- f) Not every currency used by employees is contained in these reports, nor are all of these exchange rates the appropriate ones to use in the calculation of Post Indexes. Posts may be required to submit a monthly report to Statistics Canada confirming the minimum and maximum rate actually received by employees at the Post, as well as the rate most frequently received during the month.
- g) Finally, a number of Posts provide rate information before the end of each month to ensure these rates are reflected in the Post Index each month.

#### 6.2 Inflation factors

Information concerning price movements in Ottawa and all sources used at the post is based on the most recent inflation indicator available. This information is obtained from host country national statistical indicators (Consumer Price Index (CPI) or similarly named indexes) or from international organizations that monitor price movements, e.g., the International Monetary Fund, the United Nations, the International Labour Organization, etc.

Inflation rate calculations for Post Index purposes **exclude the Shelter and Fuel and Utilities** components since these are not Post Index inclusions. As such, Post Index inflation may vary from the normally published Consumer Price Indexes.

Since CPI type data is never available immediately, inflation for the current month is always projected to ensure that Post Index levels are kept up to date. In circumstances where information from such sources is available on a frequent and current basis, the Post Index can be monitored over a long period of time with a reasonably high degree of confidence.

At some foreign locations, however, reliable information concerning local price behaviour may be difficult to obtain. Where such difficulties occur one of two options exists:

1) Post Index surveys are conducted on a more frequent basis, perhaps semi-annually in extreme cases.

2) "Local Price Surveys" can be undertaken by mission personnel on a regular continuing basis or whenever a post has experienced a major local price change for important expenditures, usually following a significant devaluation of the local currency.

A Local Price Survey differs from a full scale survey in that it requests price information for the local market only. In order to determine price movement through time, prices are required for the same brands and sizes from the same local outlets that were priced at the time of the last full scale survey. This is, in essence, a miniature Consumer Price Index Survey.

Since Local Price Surveys do not measure changes in purchasing patterns, they are not an appropriate alternative to address situations where other factors may also have been subject to change. Such surveys are useful only when local inflation rates are in doubt and where other factors (source of purchases) remain relatively constant.

#### 6.3 Monthly movements in each reported source

The application of the three factors in the monthly review of each Post Index can be demonstrated using the patterns identified in Chart 1 (above), for the source of purchases made on the local market. Each month the change in the value of the local currency is calculated along with any difference that may have occurred in inflation rates (excluding shelter and fuel and utilities) between the post and Ottawa, weighted by the importance of the local source in the index (64% in this case).

Table D — Calculation of the revised local index										
Local outlet index	х	Post inflation ratio ÷ Ottawa inflation ratio	Х	Exchange rate fluctuation	=	Projected local outlet index	х	Weight or importance	=	Local outlet index points
150	x	(1.10 ÷ 1.02) = 1.078	x	0.89	=	144	x	0.64	=	92.2

Where:

1) The local rate of inflation (excluding shelter) is 10% (or a ratio of 1.10) since the last survey.

2) The rate of inflation (excluding shelter) in Ottawa is 2% (or a ratio of 1.02) since the last survey.

3) The local currency is worth only 89% of its value in terms of the Canadian dollar at the time of the last survey.

The projected Local Index (144) is lower than it was at the time of the survey (150) because the local currency devaluation has exceeded the difference in the rate of inflation between the Post and Ottawa. In other words, the \$CAD has appreciated by 12.4% ( $1.00 \div 0.89$ ) while the inflation factor changed by 7.8%. The factor applied to the Local Index is 0.9594 ( $1.078 \times 0.89$ ).

At the current time, of the total Post Index, 92.2 index points are generated from this source compared to 96.0 points at the time of the survey.

The same factors as shown above apply to the movement for the Local Tax Free portion of the Index and the revised Index would now be 121. The two sources that reflect Canadian dollar expenditures always remain at the same level, i.e., 100.

For this example, the P.J. Imports portion of the Post Index might move as shown in Table E. The higher rate of inflation at this source and the currency appreciation combine to increase this outlet index from 90 to 95 since the time of the survey.

	Table E — Calculation of the <b>revised</b> P.J. index									
P.J. outlet index	х	Post inflation ratio ÷ Ottawa inflation ratio	Х	Exchange rate fluctuation	=	Projected local outlet index	х	Weight or importance	=	P.J. outlet index points
90	x	(1.03 ÷ 1.02) = 1.010	x	1.042	=	95	x	0.03	=	2.8

#### 6.4 The 3% rule

When the total change in circumstances for all sources is sufficient to cause the Post Index to move by 3%, either upwards or downwards, a revised Post Index becomes effective on the first day of the month following the month in which the change occurred, in accordance with the provisions of FSD 55. Each time a Post Index is revised, an additional 3% change in circumstances, either upwards or downward, must occur before the next revision is put into place. Current and revised Post Indexes are posted on the Statistics Canada website on the third working day of each month.

Using the example movements shown above, the newly calculated Post Index would be as shown in Table F, below. Given that the new Post Index of 131.2 is more than 3.2% lower than the survey result (135.6) shown in Table C, a revised PI level of 131 would be implemented.

Table F — Revised calculation of the Post Index								
Source (Outlet)	Post purchasing pattern	Source index	Index points					
Purchases on the local market	64.0%	144	(144 x 0.64) = <b>92.2</b>					
Purchases exempt from taxes	15.0%	121	(121 x 0.15) = <b>18.2</b>					
Brought to Post	2.0%	100	(100 x 0.02) = <b>2.0</b>					
As Ottawa	16.0%	100	(100 x 0.16) = <b>16.0</b>					
P.J. Imports	3.0%	95	(95 x 0.03) = 					
Post Index Post Index Level	100.0%		131.2 131					

#### 7.0 The Post Index and the Post Living Allowance (PLA)

Employing departments are responsible for the application of the Post Index to salary bands to arrive at the amount of PLA, in accordance with prescribed allowance tables outlined in FSD 55 – Post Living Allowance.

The percentage of salary that is adjusted by the Post Index is dependent on the salary range of each expatriate employee. The SHS shows that as income increases, the relative percentage of income that is spent on the Post Index basket of goods & services decreases. See Appendix A, below, extracted from FSD 55.

#### 7.1 Purchasing power maintained

The most frequent issue raised by expatriates is the loss of allowance dollars experienced when a Post Index decreases. The amount of Canadian dollars provided in the PLA does decrease when a Post Index decreases, but this does not mean that the purchasing power required to obtain the PI goods & services at a foreign location is diminished when this occurs. The focus must be placed on the entire portion of income used to buy the PI goods & services, not just on the additional allowance dollars provided to cover the difference in price levels.

Using the post example from above, and the average salary of \$75,700 noted in section 3.1, above, it can be demonstrated that the same amount of purchasing power exists whether the Post Index is 136 or 131. This means that the same amount of each currency that is used at that location at the time of a survey remains available to purchase those goods & services at either PI level. From Appendix A, this salary level falls in the range \$75,450 - \$76,449. Using the midpoint for this range (\$75,950), typical Canadians spend 45% of salary to acquire the PI goods & services. This equates to \$34,178 annually or \$2,848 per month.

In our example, at the time of the survey (when the PI was 136) expenditures at the post looked like Table G. On average, 36% more Canadian dollars are required to purchase the basket, i.e., \$3873 (1.36 x 2848). The distribution of those Canadian dollars are shown according to the importance of each currency used at this post. At this PI level 1965 units of local currency are used to purchase local goods & services. It is the purchasing power of this amount of currency that must be maintained through time to permit posted personnel to continually purchase that portion of the PI basket on the local economy.

Table G — Post Index basket expenditures – Post Index = 136							
Source (Outlet)	Index points	Percentage of PLA	\$CAD expenditures	Exchange rate	Local currency expenditures		
Purchases with the local currency	114.9	84.7%	3281	1.670	1965		
Purchases with \$CAD	18.0	13.3%	515	1.000	515		
Purchases with Danish Krone	2.7	2.0%	77	0.215	358		
Post Index Post Index Level	135.6 136	100.0%	3873				

When the Post Index decreased to 131, typical monthly expenditures in \$CAD would decrease to \$3,731 (1.31 x 2848) and the distribution of that amount is shown in Table H. More local currency is available to purchase goods & services because the cost to exchange local currency has dropped from 1.670 to 1.486. Because local inflation is higher in the post than in Ottawa for the period between the PI level change (by more than 7%), a greater amount of local currency is needed to make the same purchases as previously. The 2112 units of local currency now available reflects both the improved exchange rate and the inflation difference compared to Ottawa. This permits posted personnel to continue to purchase the same local items as when the PI was 136.

For all Index levels, the amount of \$CAD expenditures remains fixed. In this example, the small change in Danish Krone expenditures is due to rounding.

Table H — Revised Post Index basket expenditures – Post Index = 131						
Source (Outlet)	Index points	Percentage of PLA	\$CAD expenditures	Exchange rate	Local currency expenditures	
Purchases with the local currency	110.4	84.1%	3138	1.486	2112	
Purchases with \$CAD	18.0	13.8%	515	1.000	515	
Purchases with Danish Krone	2.8	2.1%	80	0.224	357	
Post Index Post Index Level	131.2 131	100.0%	3731			

The above demonstration can be shown at any level of income and for any change in the PI, either upwards or downwards. When one looks at the entire amount of income that is spent on the PI basket of goods & services the purchasing power of that \$CAD income (plus the PLA) is maintained for every Post Index level set. It is only during the periods between Post Index changes when the Post Index is fluctuating within the +/- 3% range that personnel may be absorbing a higher difference in costs or gaining a benefit depending on whether the monthly calculated Index is higher or lower than the PI level that is applied to salary.

#### 7.2 Retroactive adjustments to the Post Index

Statistics Canada is bound by the provisions of FSD 55 which state that changes to the Post index resulting from the **monthly review** go into effect on the first day of the month following the month the determination for a change is made. This means that there is a "built in" delay of one month for any change felt at the post and applies to both increases and decreases.

When a survey is conducted, the time elapsed between when the survey is carried out and the release of the result is dependent on the transmission of the information by the post to Ottawa. The majority of fully completed surveys are now processed within the same month they are received. Protracted delays are often encountered when incomplete survey data are forwarded and follow-up is necessary.

There is no retroactive application of a change resulting from a survey, however the monthly review process is applied to the index at it's release so that it is current at that time.

The NJC has decided that retroactive adjustments to Post Indexes will apply only in cases involving currency revaluations or devaluations. If, after the fact, it is determined that an erroneous rate of exchange was applied to the calculation of a Post Index, then it will be amended retroactively. These become effective on the 1<sup>st</sup> day of the month following the change in the value of the currency.

Retroactive changes to Post Indexes also occur if it is discovered that Statistics Canada has made an error in either a survey or monthly review calculation. Likewise, if after the fact, a particular situation has been clarified by a department that changes the PI level, revised Post Indexes are issued from the time that either the error or that situation came into being.

Finally, Post Indexes are released retroactively if a department identifies a new location where personnel are already in place but had not yet asked for a Post Index. These PIs are effective from the time that posted personnel arrived at the post.

#### 8.0 Post visits

Statistics Canada makes periodic visits to foreign posts. Visits serve as a forum whereby Statistics Canada representatives meet with post personnel to explain the Post Index system, to discuss Statistics Canada's role in the FSD and to provide an opportunity for expatriate staff to raise any questions they may have regarding the system and its application.

Visits are usually timed to coincide with the conduct of either a full scale survey or a local price survey at the post. Another purpose of the visits is to assess the price and market supply situation on the spot and to keep abreast of the retail conditions faced by Canada based personnel, particularly in countries where consumer price information is lacking. The Statistics Canada representative will assist with the price collection exercise and provide additional instructions to all employees involved in carrying out the survey.

Representatives may also take the opportunity to contact local statistical agencies and other sources of price data to improve the fund of information available for monthly index review purposes.

Typically, between 10 and 15 posts abroad receive visits each fiscal year. These may be to embassies or to DND units. Given the scope of the total number of locations where Canada based staff serve abroad, most missions receive a visit only once every 10 years. Larger missions, those where the economic situation is volatile and those where inflation information is less reliable, often receive more frequent visits.

#### 9.0 Post Indexes where Statistics Canada surveys are not undertaken

Statistics Canada does not normally conduct Post Index surveys at posts where there are fewer than four or five Canada based staff members for statistical reasons and due to limited post resources. For small missions the procedure normally followed involves linking the required Post Index to an existing Statistics Canada Post Index where one exists in the same country.

Alternatively, US Department of State information is used. Where U.S. figures are used, they are converted from a Washington to an Ottawa base. For consistency of methodology this conversion mechanism uses the Ottawa/Washington relationship determined by the Department of State and not the Post Index relationship for these locations. This base index is then subjected to the normal Canadian monthly review process that takes into consideration currency fluctuations and inflation factors (see Section 6).

The US Department of State information produces two separate indexes for each location they survey. The first type is called the "Government Index" and it is produced specifically for U.S. Government employees who typically enjoy certain duty free privileges along with access to special purchasing facilities not necessarily available to others. The second type is called the "Local Index". It is computed and published for use by the private sector and other interested organizations.

The "Local index" is almost always higher than the Government index for obvious reasons and except in a small number of cases where it is known for certain that Canadians have access to all U.S. facilities at a given post, it is the Local Index that is routinely used for Canadian Post Index purposes.

#### **10.0 General comments**

The Post Index is a measurement founded on standard statistical procedures. It is designed to meet a very specific purpose, i.e., to ensure insofar as possible that a Canadian government employee serving outside the country is placed in neither a more nor less favourable financial situation than he/she would be in serving in Ottawa. Other provisions of the FSD are designed to provide incentives for personnel serving abroad.

As a measure of price differences between locations, the Post Index can be regarded as an attempt to represent and compare the many thousands of retail transactions made each month by foreign service personnel and their counterparts at home. It should be apparent that the Post Index has its limitations. Based, as it is, on retail prices, purchasing patterns and expenditure patterns reported by Canadians performing a temporary diplomatic or military role in a foreign country, it does not purport to reflect the experiences of expatriates who may be serving under different arrangements. It cannot, for example, measure the differences in living costs that any one family experiences by going abroad.

It is unrealistic to ascribe to or demand of the Post Index a degree of precision that goes beyond the real life limitations imposed by both statistical theory and the constraints of the data on which they are based. Nonetheless, as a general measure of the effect of price differences, exchange rate fluctuations and inflation on the purchasing power of the foreign service community - and that is what its purpose is - the Post Index stands comparison with the best of its counterparts anywhere in the world.

Appendix A							
	Annual Post Living Allowance						
Effective 1	lune 2003 (not applicable to som	e members - see grandfathering	provisions)				
Salary (\$C	Salary range (\$CAD)		% adjustment				
30,450	31,449	30,950	0.742				
31,450	32,449	31,950	0.727				
32,450	33,449	32,950	0.712				
33,450	34,449	33,950	0.699				
34,450	35,449	34,950	0.686				
35,450	36,449	35,950	0.674				
36,450	37,449	36,950	0.662				
37,450	38,449	37,950	0.651				
38,450	39,449	38,950	0.641				
39,450	40,449	39,950	0.631				
40,450	41,449	49,950	0.622				
41,450	42,449	41,950	0.613				
42.450	43.449	42.950	0.605				
43.450	44.449	43.950	0.596				
44.450	45.449	44,950	0.589				
45.450	46.449	45.950	0.581				
46.450	47,449	46.950	0.574				
47,450	48,449	47.950	0.568				
48 450	49 449	48 950	0.561				
49 450	50 449	49 950	0.555				
50 450	51 449	50,950	0.549				
51 450	52 //9	51,950	0.543				
52 450	53 //9	52 950	0.537				
53 450	51 119	53 950	0.532				
54 450	55 //9	54 950	0.532				
55 450	56 449	55 950	0.527				
56 450	57 //9	56 950	0.517				
57 450	58 449	57,950	0.513				
58 450	59 //9	58 950	0.508				
59.450	60 449	59,950	0.500				
60.450	61 449	60,950	0.500				
61 450	62 449	61 950	0.496				
62 450	63 449	62 950	0.492				
63 450	64 449	63 950	0.488				
64 450	65 449	64,950	0.484				
65 450	66 449	65 950	0.481				
66 450	67 449	66 950	0.477				
67,450	68 449	67,950	0.474				
68 450	69,449	68,950	0.471				
69,450	70 449	69,950	0.468				
70,450	70,449	70,950	0.464				
70,450	71,449	70,950	0.464				
71,400	72 449	71,900	0.401				
72,450	73,449	72,900	0.409				
73,430	75 449	73,900	0.450				
74,400 75 450	70,449 76,440	74,900	0.450				
70,400	70,449	70,900	0.400				
70,450	70,449	70,900	0.448				
70,450	70,449	70,050	0.440				
70,450	19,449 90,440	70,900	0.440				
79,400	00,449	19,900	0.440				

#### Appendix A (continued)

#### Annual Post Living Allowance

Effective 1 June 2003 (not applicable to some members - see grandfathering provisions)			
Salary range (\$CAD)		Midpoint/nominal salary (\$CAD)	% adjustment
80,450	81,449	80,950	0.438
81,450	82,449	81,950	0.436
82,450	83,449	82,950	0.433
83,450	84,449	83,950	0.431
84,450	85,449	84,950	0.429
85,450	86,449	85,950	0.427
86,450	87,449	86,950	0.425
87,450	88,449	87,950	0.423
88,450	89,449	88,950	0.421
89,450	90,449	89,950	0.419
90,450	91,449	90,950	0.417
91,450	92,449	91,950	0.415
92,450	93,449	92,950	0.414
93,450	94,449	93,950	0.412
94,450	95,449	94,950	0.410
95,450	96,449	95,950	0.409
96,450	97,449	96,950	0.407
97,450	98,449	97,950	0.405
98,450	99,449	98,950	0.404
99,450	100,449	99,950	0.402
100,000			0.401

#### Formula for calculating allowances

- 1. Select the salary range in which your annual salary falls.
- 2. Take the Midpoint/Nominal salary and multiply by the adjoining percentage.
- 3. Take the product and multiply by the Post Index, e.g. 130, then divide by 100.
- 4. Subtract the product of #2 from the result, and you will have your annual Post Living Allowance.

#### Example

- A salary of \$69,700 falls into the salary range of \$69, 450 to \$70,449, of which the Mid-point/Nominal salary is \$69,950.
- Multiply \$69,950 by 46.8%, which yields \$32,737.
- Multiply \$32,737 by a Post Index of 130, then divide by 100.
- The result is 42,558. Subtract \$32,737 and the result is an annual Post Living Allowance of \$9,821.