

Survey documentation

The Guide to the Post Index

Consumer Prices Division



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The Guide to the Post Index

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Symbols

The following standard symbols are used in Statistics Canada publications:

- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0 true zero or a value rounded to zero
- 0^s value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
- p preliminary
- r revised
- x suppressed to meet the confidentiality requirements of the *Statistics Act*
- E use with caution
- F too unreliable to be published

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Introduction

The Canadian government employs military and civilian expatriates in more than 400 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 ranges, 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 acting in a role 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 (NJC) Foreign Service Directives Committee. At the request of this NJC Committee, Statistics Canada publishes the level of Post Indexes on its web site monthly (see: <http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?lang=eng&catno=62-013-X>).

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.

The Guide to the Post Index

1 What is a Post Index?

A Post Index, at any given point in time, is a comparative measure between the retail price of a representative “basket” (or selection) of goods and services at a foreign location and prices for the same or a very similar basket of goods and services in Ottawa.

Ottawa price levels are 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 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 and 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 and 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 58).

3 The main components of the Post Index

Three main components form the basis of the Post Index:

1. **Weights** or the relative importance of each item whose price is 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 Canadian dollar (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 goods and services 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 the Survey of Household Spending (SHS), conducted 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. For the purposes of the Post Index, the sub-sample of respondents considered is 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 2005 Survey of Household Spending is the latest survey used to establish this typical profile. The average salary of this group was \$80,200 and the typical size of the family was 3.0 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 include in the Post Index basket for pricing 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 1 shows the average amount reported spent in 2005 on the Post Index basket, grouped into eight major categories, although the weighting patterns ultimately used in the calculation of a given Post Index are at the level of individual items.

Table 1
Computation of weighting patterns

	Amount spent	Relative importance or weight
	dollars	percent
Food (purchased from stores and restaurants)	9,106	24.8
Health and personal care	1,763	4.8
Household supplies, services and maintenance	1,678	4.6
Reading and recreation	4,457	12.1
Clothing and home furnishings	4,170	11.3
Transportation and communications	13,755	37.4
Tobacco and alcohol	1,422	3.9
Domestic help	418	1.1
Total	36,768	100.0

The weights in Table 1 relate to the percentage of total household consumption **expenditures**, not of total household income.

The importance of using weights to establish the difference in costs between two locations is shown in the example in Table 2: Consider milk and waxed paper as the only two items included in the Post Index. A five 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.

Table 2
Importance of expenditure weights

Item	Price ratio base = 100	Equal weights	Item index	Weights by expenditure	Item index
		percent		percent	
Milk	105	50	53	90	95
Waxed paper	150	50	75	10	15
Post Index	...	...	128	...	110

Note(s): Calculation of Item Index = price ratio X weights and calculation of Post Index = Item index (milk) + Item index (waxed paper).

Placing the same importance on milk and waxed paper (the equal-weighted or unweighted 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. Using expenditure weights means that the overall level of the Post Index will be more heavily influenced by the price differentials attached to the categories of goods and services on which Canadians spend the most money.

3.2 Post purchasing patterns

The term “purchasing pattern” refers to the combination and relative importance 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 on 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 and services are available to some Canadian expatriates **exempt from sales or value-added taxes**. These goods and 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 referred to as **"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 automatically 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 exist 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.

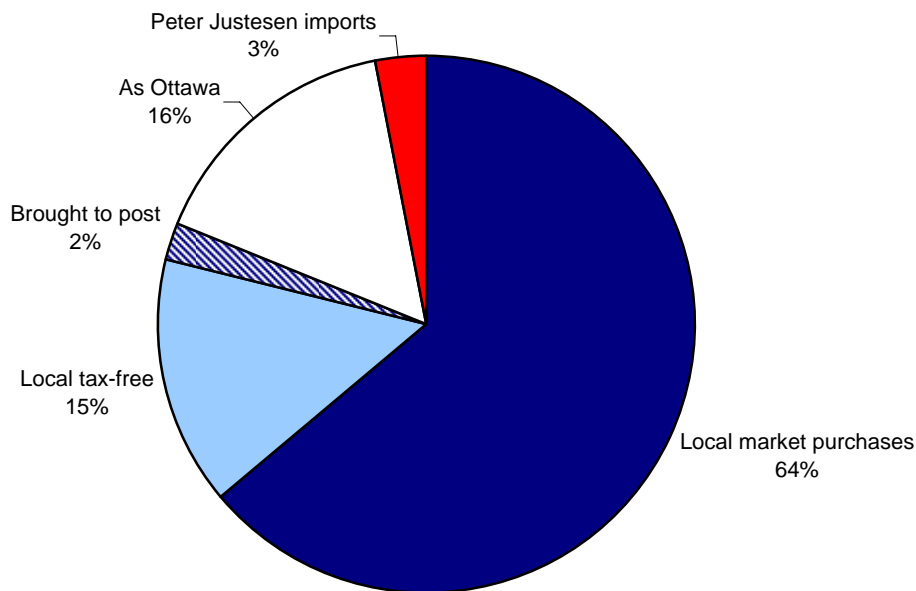
Household maintenance costs, where crown owned/leased housing or other shelter allowances are provided, as well as legal services and certain household items, e.g. rugs, small electrical appliances or equipment, etc., also are treated **"As Ottawa"**.

This fixed amount of "As Ottawa" that is set at 100 means that every PI contains some components that are taken to be at Ottawa price levels. Therefore, even in cases where all purchases are made from local retailers at a post, the overall Post Index level does not reflect only those local-to-Ottawa price ratios. So, for Post Indexes that are greater than 100, there has been some abatement because of the "As Ottawa" portion of the Index.

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 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 and tobacco by the number of 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.

Chart 1
Post purchasing pattern



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 goods and services 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 it is between a foreign post and Ottawa. Within Canada, matching brands, sizes and quantities can usually be found and prices are already 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 possible that the basket include all items people buy within the range of categories of goods and services shown in Table 1, 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 (or nearly) at all locations because the same survey must be conducted 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.

4 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. Required 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 is used to determine the **Post purchasing pattern**. The sources of purchases, in percentages, 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. This is in addition to the automobile insurance quotes collected in the pricing schedules referred to in section 4.2.

Information on the types of **domestic help** employed and their costs are also requested. The NJC has agreed that the minimum 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 goods and services as well as identifying 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.

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 final price paid by consumers for imported goods.

5 Processing the price data

The following steps are applied to determine the index level for 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, shipping, 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 that 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 good or service weight, or relative importance, based on the SHS. The item price ratio is multiplied by the item weight and the results are aggregated across all items in a source to produce the index for that source.

Once indexes have been calculated for all reported sources, they are in turn 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 3
Calculation of the Post Index

Source (outlet)	Post purchasing pattern (outlet significances)	Source index	Index points
	percent		
Purchases on the local market	64	150	96
Purchases exempt from taxes	15	126	19
Brought to post	2	100	2
As Ottawa	16	100	16
Peter Justesen imports	3	90	3
Total percent	100	...	...
Post Index	...	...	136

Note(s): Index points are the product of the source index and the outlet significances.

The effective Post Index is 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, to ensure the Post Index is up to date (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. From that point on, the index will undergo monthly updating based on tracking data, until it is replaced by the release of the next survey results.

6 Monthly update of the Post Index

Once established, Post Indexes are subject to a monthly review, or tracking process, to assess their continuing validity. Three tracking factors are considered:

1. Fluctuations in exchange rates for all currencies in use at a given post (dependent on the outlets used), relative to the Canadian dollar.
2. Inflation in Ottawa prices.

3. Inflation in prices at each outlet used in the post.

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, i.e., there is a one-month lag. For example, for an index effective on August 1, tracking factors occurring in real-time July are taken into account (see FSD 55).

6.1 Exchange rates

Since foreign service personnel pay for most goods in foreign currencies, exchange rates must be used for converting prices to Canadian dollars. 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 bank transaction fees to be added.
- (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. Some 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 indicators 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 whenever possible 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).

Calculation of the updated local index										
Post local outlet index	X	Post inflation change ÷ Ottawa inflation change	X	Exchange rate change	=	Projected local outlet index	X	Weight or importance	=	Local outlet index points
Example:										
150	X	(1.10 ÷ 1.02) = 1.078	X	0.89	=	144	X	0.64	=	92

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 (that is, the Canadian dollar has strengthened relative to the local currency).

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 ÷ 0.89) while the net inflation changed by only 7.8%. The final factor applied to the Local Index is 0.9594 (1.078 x 0.89), or a 4% decrease.

At the current time, of the total Post Index, 92 index points are generated from this source compared to 96 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 updated 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 **image (2)**. The higher rate of inflation at this source, versus Ottawa, and the currency *appreciation* both increase the outlet index. The factors combine to move the value from 90 to 95 since the time of the survey.

(2)

Calculation of the updated Peter Justesen (P.J.) index										
P.J. outlet index	X	P.J. (Denmark) inflation change + Ottawa inflation change	X	Exchange rate change	=	Updated P.J. outlet index	X	Weight or importance	=	P.J. outlet index points
Example:										
90	X	(1.03 ÷ 1.02) = 1.01	X	1.042	=	95	X	0.03	=	3

6.4 The "three percent" rule

When the total change in circumstances for all sources is sufficient to cause the overall Post Index to move by 3% from its last established level, either upwards or downwards, a new Post Index value becomes effective in accordance with the provisions of FSD 55. Each time a Post Index is reset, an additional overall 3% change in circumstances, either upwards or downward, must occur before the new level is put into place. The most current 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 4, below. Given that the new Post Index of 131 is more than 3.6% lower than the survey result (136) shown in Table 3, a revised PI level of 131 would be implemented.

Table 4
Updated calculation of the Post Index

Source (outlet)	Post purchasing pattern (outlet significances)	Source index	Index points
	percent		
Purchases on the local market	64	144	92
Purchases exempt from taxes	15	121	18
Brought to post	2	100	2
As Ottawa	16	100	16
Peter Justesen imports	3	95	3
Total percent	100	...	...
Post Index	...	...	131

Note(s): Index points are the product of the source index and the outlet significances.

7 The Post Index and the Post Living Allowance (PLA)

Employing departments are responsible for the application of the Post Index to salary ranges 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 and services decreases. See Appendix, below, extracted from FSD 55.

7.1 Purchasing power maintained equal to Ottawa

The most frequent issue raised by expatriates is the loss of allowance dollars experienced when a Post Index decreases. While the amount of Canadian dollars provided in the PLA does decrease when a Post Index decreases, the important point to note is that this does not mean that the purchasing power required to obtain the PI goods and services at a foreign location is diminished when this occurs, as compared with Ottawa.

Using the post example from above, and the average salary of \$80,200 noted in section 3.1 above, it can be demonstrated that although the Post Index decreases from 136 to 131, this does not necessarily result in less local currency available to make local purchases. In fact, any inflation experienced locally that goes beyond the inflation observed in Ottawa in the same period is covered by the Post Living Allowance. From the Appendix, this salary level falls in the range \$79,450 - \$80,449. Using the midpoint for this range (\$79,950), typical Canadians spend 46.3% of their salary to acquire the PI goods and services. This equates to \$37,017 annually or \$3,085 per month.

In our example, at the time of the survey (when the PI was 136) expenditures at the post looked like Table 5. Overall, 36% more Canadian dollars are required to purchase a similar basket, i.e., \$4,195 (1.36 x 3,085). The distribution of those Canadian dollars are shown by outlets, grouped by currency used. At this PI level 2,124 units of local currency are needed to purchase local goods and services.

Table 5
Post Index basket expenditures – Post Index = 136

Source (outlet)	Index points	CAD expenditures	Exchange rate	Expenditures in source-specific currency
Purchases with the local currency	115	3,547	1.670	2,124
Purchases with CAD	18	555	1.000	555
Purchases with Danish krone	3	93	0.215	433
Post Index	136	4,195	...	...

When the Post Index decreased to 131, typical monthly expenditures, expressed in CAD, decreased to \$4,041 (1.31 x 3,085) and the distribution of that amount is shown in Table 6. Even though the lower index results in a lower allowance, or fewer CAD available for purchases, *more local currency* is available to purchase goods and services because the cost to exchange to local currency has dropped from 1.670 to 1.486. Also, because local inflation is higher in the post than in Ottawa for the period between the PI level change (by 7.8%), a greater amount of local currency is now needed – and this is accounted for in the Post Index level. The 2,283 units of local currency now available reflects both the improved exchange rate and how much local inflation exceeds that of Ottawa.

At all levels, for any given Post Index, the amount of currency needed for purchases made in CAD remains fixed.

Table 6
Updated Post Index basket expenditures – Post Index = 131

Source (outlet)	Index points	CAD expenditures	Exchange rate	Expenditures in source-specific currency
Purchases with the local currency	110	3,393	1.486	2,283
Purchases with CAD	18	555	1.000	555
Purchases with Danish krone	3	93	0.224	415
Post Index	131	4,041	...	...

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 and services the purchasing power of that CAD income (plus the PLA) is maintained the same as for Ottawa in the same period, for any given month. 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 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 its release so that it is current at that time.

The NJC has decided that retroactive adjustments to Post Indexes will apply in cases involving the use of erroneous exchange rates (as, for example, when currency revaluations or devaluations have occurred suddenly, without enough reaction time for Statistics Canada to implement the new rates). If, after an Index has been produced, it is determined that an erroneous rate of exchange was applied to the calculation of a Post Index, then it will be amended retroactively.

Retroactive changes to Post Indexes also occur if it is discovered that Statistics Canada has made another type of error, such as with a survey or a 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 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 normally timed to coincide with the conduct of a full scale 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 5 and 15 posts abroad receive visits each fiscal year. These may be to embassies or to DND units. Given the number of locations where Canada based staff serve abroad, many missions receive a visit only once every 9 years or so. Larger missions, those where the economic situation is volatile and those where inflation information is less reliable, may receive more frequent visits.

9 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 update 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 and does not account for any special diplomatic privileges or access.

The "Local Index" is almost always higher than the Government index, as would be expected, 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 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 particular 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 I — Annual Post Living Allowance effective June 1, 2008

Table A
Annual Post Living Allowance effective June 1, 2008

Salary range	Midpoint / nominal salary	Adjustment
	dollars	
30,450 to 31,449	30,950	0.773
31,450 to 32,449	31,950	0.757
32,450 to 33,449	32,950	0.742
33,450 to 34,449	33,950	0.728
34,450 to 35,449	34,950	0.715
35,450 to 36,449	35,950	0.703
36,450 to 37,449	36,950	0.691
37,450 to 38,449	37,950	0.680
38,450 to 39,449	38,950	0.669
39,450 to 40,449	39,950	0.659
40,450 to 41,449	40,950	0.649
41,450 to 42,449	41,950	0.640
42,450 to 43,449	42,950	0.632
43,450 to 44,449	43,950	0.623
44,450 to 45,449	44,950	0.615
45,450 to 46,449	45,950	0.608
46,450 to 47,449	46,950	0.600
47,450 to 48,449	47,950	0.594
48,450 to 49,449	48,950	0.587
49,450 to 50,449	49,950	0.580
50,450 to 51,449	50,950	0.574
51,450 to 52,449	51,950	0.568
52,450 to 53,449	52,950	0.563
53,450 to 54,449	53,950	0.557
54,450 to 55,449	54,950	0.552
55,450 to 56,449	55,950	0.547
56,450 to 57,449	56,950	0.542
57,450 to 58,449	57,950	0.537
58,450 to 59,449	58,950	0.533
59,450 to 60,449	59,950	0.528
60,450 to 61,449	60,950	0.524
61,450 to 62,449	61,950	0.520
62,450 to 63,449	62,950	0.516
63,450 to 64,449	63,950	0.512
64,450 to 65,449	64,950	0.508
65,450 to 66,449	65,950	0.504
66,450 to 67,449	66,950	0.501
67,450 to 68,449	67,950	0.497
68,450 to 69,449	68,950	0.494
69,450 to 70,449	69,950	0.491
70,450 to 71,449	70,950	0.488
71,450 to 72,449	71,950	0.485
72,450 to 73,449	72,950	0.482
73,450 to 74,449	73,950	0.479
74,450 to 75,449	74,950	0.476
75,450 to 76,449	75,950	0.473
76,450 to 77,449	76,950	0.470
77,450 to 78,449	77,950	0.468
78,450 to 79,449	78,950	0.465

Table A – continued

Annual Post Living Allowance effective June 1, 2008

Salary range	Midpoint / nominal salary	Adjustment
	dollars	
79,450 to 80,449	79,950	0.463
80,450 to 81,449	80,950	0.460
81,450 to 82,449	81,950	0.458
82,450 to 83,449	82,950	0.456
83,450 to 84,449	83,950	0.453
84,450 to 85,449	84,950	0.451
85,450 to 86,449	85,950	0.449
86,450 to 87,449	86,950	0.447
87,450 to 88,449	87,950	0.445
88,450 to 89,449	88,950	0.443
89,450 to 90,449	89,950	0.441
90,450 to 91,449	90,950	0.439
91,450 to 92,449	91,950	0.437
92,450 to 93,449	92,950	0.435
93,450 to 94,449	93,950	0.434
94,450 to 95,449	94,950	0.432
95,450 to 96,449	95,950	0.430
96,450 to 97,449	96,950	0.428
97,450 to 98,449	97,950	0.427
98,450 to 99,449	98,950	0.425
99,450 to 100,449	99,950	0.424
100,000		0.422

Source(s): National joint Council, www.njc-cnm.gc.ca.

Note(s): 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 adjustment value.
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 49.1%, which yields \$34,345.

* Multiply \$34,345 by a Post Index of 130, then divide by 100.

* The result is \$44,649. Subtract \$34,345 and the result is an annual Post Living Allowance of \$10,304.