



A Guide to the Norfolk Island Retail Price Index

Government of Norfolk Island
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Introduction

In the life of the First Legislative Assembly when Norfolk Island commenced to tread the path to Self Government, it was obvious that many important decisions would be required on economic and financial matters in both public and private sectors and to make sound decisions, authoritative information on the movement of prices of goods and services in the Island, needed to be available.

Statistical information of this nature is normally available in soundly based countries.

Previous guides to movement of prices were principally Australian and New Zealand based. Neither of course reflected the true situation in Norfolk Island.

The Norfolk Island Government recognised this need to provide an authoritative index of retail prices, and in September, 1981 commissioned Mr. H.G. Houstain to provide a Norfolk Island Retail Price Index.

This he has done.

Firstly he designed and conducted a Household Expenditure Survey, which documented all those goods and services on which people in Norfolk Island households spend their money. This was then the basis of his compilation of the Norfolk Island Retail Price Index.

The Australian Bureau of Statistics provided technical assistance when necessary and the Administrator and Offices of both the Norfolk Island Administration and Department of (then) Home Affairs and Environment, provided administrative support.

The index is an ongoing project. Prices are collected regularly and the movement in prices, calculated and published each quarter i.e., each three months. The First publication of movement will be in early October, 1983 reflecting the three monthly quarter ended 30 September, 1983.

The detail of Retail Price Indexing is complex.

This booklet is designed to make simple explanations of what it is all about.

**D.E. BUFFETT
CHIEF MINISTER**

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Contents

	Page
Foreword	2
What is a Retail Price Index	3
What is a Norfolk Island RPI?	3
Is there any connection between the RPI and cost of living	4
To whom does the RPI relate?	5
What items are in the basket?	5
Relative importance of RPI items	6
Collecting the prices	7
Using the RPI	7
The RPI in perspective	8
List of Goods and Services, and the weighting pattern	8

Foreword.

The Retail Price Index for Norfolk Island, prepared for the Government of Norfolk Island, is likely to become an important indicator used in an increasing number of ways on the Island.

It is important that the Index be well understood, and a report which shows in considerable detail all aspects of the Index has been prepared for use by the Government and other interested parties at the Government's discretion.

The purpose of this guide is to present a concise summary of those parts of the report which will enable its contents to be broadly understood quickly and easily.

H.G. Houstein
Consultant Statistician to the Government of Norfolk Island, for the Retail Price Index Study.

What is a Retail Price Index?

A retail price index (RPI) measures the overall effect of changes in retail prices of goods and services commonly used by private households. Such an index is regarded as a good general purpose measure of the effect of price change on the purchasing power of the dollar. It is also used to indicate changes in the 'rate of inflation'.

The easiest way to understand how a retail price index works is to imagine a basket of goods of the kind ordinarily bought by a household. The total price of the goods in this basket will vary when the prices of the individual goods vary. A retail price index measures this change in the total price of the basket at regular intervals. The total price at the time the index is commenced is given a value of 100. At each subsequent measurement, the total price at the time of that measurement is expressed as a percentage of the price in the first (or 'base') period. For example, if the total price of the basket has increased by 15 percent from the base period, the index will be 115.

What is the Norfolk Island RPI?

What, then, is the difference between the Norfolk Island RPI and the Consumer Price Index (CPI) for - say - Australia ?

The significant difference is that the "basket of goods" of the Norfolk Island RPI is a basket specially designed for Norfolk Island. It was designed from the Household Expenditure Survey which was conducted during 1982 for that purpose. This means that the Norfolk Island RPI will show how price movements on Norfolk Island affect the goods and services bought by Norfolk Islanders, and it will no longer be necessary to look at the indexes for Australia and New Zealand and to assume that the price movements on Norfolk Island may have been somewhat similar.

It is worth noting that "Consumer Price Index" is simply the title of the current Australian retail price index.

Is there any connection between the RPI and cost of living?

The connection is minimal. The Australian CPI, for example, is often loosely called a cost-of-living index. This is not correct.

It is important to realise that the RPI measures *price movements*, and not *price levels*. For example, if the Food Group Index-number is 120, and the Alcohol and Tobacco Group Index-number is 110, this does not mean that food is dearer than alcoholic drinks. It means that the average price of food has increased twice as much as the average price of alcohol and tobacco since the base period.

No country has been able to produce a valid cost-of-living index, because it simply cannot be done. A concept of cost of living cannot be considered without also considering standards of living, or taking into account the fact of the freedom of choice of consumers to substitute one item of (say) food for another, if one item becomes relatively expensive as compared with the other. In fact, it is not possible to define a constant standard of living even for one person, let alone a whole population; even for one day, let alone over time.

The fact is that the RPI measures changes in the overall price of a *constant basket* of goods, and will continue to do so until such time as it is deemed necessary to revise the basket of goods to take account of changed spending habits by the Norfolk Island population.

Thus it will be seen that the only aspect of cost-of-living to which the RPI will have any relevance will be to prices, and it is quite easy to see that a person's living costs may be decreasing while the price index is increasing, and vice versa.

To whom does the RPI relate?

The RPI measures price changes as they relate to the resident population of Norfolk Island including those T.E.P. holders who live in normal household situations. It excludes tourists and T.E.P. holders who do not live in normal households, such as live-in hotel staff.

What items are in the basket?

As mentioned before, the composition of the basket of goods and services is based on the 1982 Household Expenditure Survey. Obviously the basket cannot include every item bought by householders, nor does it need to. But it does include all the key items representative of a much wider range of goods and services than is actually included.

An abbreviated list of the classes of expenditure covered by the RPI is shown on pages 8 - 12. There are 247 such classes of expenditure in the RPI. Descriptions of the actual items are not shown. The items selected to be priced are those appearing in the Household Expenditure Survey, and are carefully specified so that the same exact types of items can be priced each quarter. There are 726 such individual items in the RPI.

Some items of expenditure appearing in the Household Expenditure Survey which can not be exactly identified and therefore priced, are not included in the RPI. Examples of such items are expenditure on gambling and import duty paid directly.

Particular examples of expenditure items which are excluded from the Norfolk Island RPI are House Purchase and House Rentals. In the case of Norfolk Island, so few of these items are available for regular pricing that it is not possible to set out constant standards and qualities of houses for rental or purchase. Consequently, it is better to exclude them than to include them on an unsatisfactory basis.

as well as producing an index-number for the total of all the items included in the RPI, index-numbers are also calculated for several important groups of items. These are:-

- All Food
- Tobacco and Alcoholic Beverages
- Clothing and Footwear
- House Maintenance and Repair
- Household Equipment and Operation
- Health and Personal Care
- Vehicle Ownership and Operation
- Recreation and Education
- Holidays and Travel

All Groups.

Relative importance of RPI items

The Household Expenditure Survey provided the information needed to select the items for inclusion in the RPI. It also pointed out the relative importance of each item in the total spending on all items. The design of the RPI is such that each item to be priced is given its relative importance, which is called its "weight". When combining the price movements for individual items, each is given its weight so that its relative importance will be properly reflected in the total index. For example, because the weight allotted to bread is greater than that allotted to butter, a 10 percent rise in the price of bread will have a greater effect on the RPI than a 45 percent rise in the price of butter, which reflects the fact that most households in Norfolk Island spend around 4½ times as much on bread as they do on butter.

Within each expenditure class, weights have been calculated for each individual item. For instance within the 'bread' expenditure class, different sizes and types of bread are priced. Prices are also obtained from different retail outlets. These various prices are combined using the weights reflecting the relative importance of each category.

The weights for expenditure classes are shown on pages 8 - 12. They indicate the relative importance of each expenditure class as at the June quarter of 1983. These weights are *fixed* until it is necessary to review them as the result of changes in spending habits. These weights also represent the percentage contributions of each expenditure class to the total index as at the June quarter 1983. Whilst the weights remain fixed the percentage contributions will vary from quarter to quarter because price changes for expenditure classes move at different rates.

Collecting the prices

Since the RPI is designed to measure the effect of price changes on Norfolk Island residents, information about prices is collected in the kinds of retail outlets where Norfolk Island residents normally do their shopping. Retail outlets, or sections of such establishments, which are aimed at the tourist market are not used for the RPI.

This involves collecting prices from many sources - some 45 sources all told. The total number of individual price quotations obtained from these sources is more than 900. Prices are collected every three months.

The prices used in the RPI are those that any member of the public would have to pay on the day on which the prices are collected. To ensure that the price movements reflect the buying experience of most of the Norfolk Island population, the brands and varieties, as well as the size of the packages, are generally those which sell in greatest volume.

Using the RPI.

The RPI can be a useful statistical yardstick for a variety of purposes, but users are encouraged to consider its suitability for a particular use. There is some room for choice, since, besides the "All Groups" RPI, index-numbers are produced for several groups of items as mentioned earlier. In addition, should a need be demonstrated, an index-number could be produced for any combination of Groups.

The RPI in perspective

The RPI is designed to provide a *broad measure* of changes in retail price levels as they affect the resident population of Norfolk Island as a whole, and should not be expected to reflect exactly the experience of any individual household. For instance, particular households may not purchase every item in the list of goods and services priced for the RPI, and individual households may have quite different spending patterns from the average for the Island as a whole. Nevertheless, the RPI may be regarded as a good general measure of the effect of price change on the purchasing power of the dollar for Norfolk Island residents overall.

List of Goods and Services, and the Weighting Pattern of the Norfolk Island Retail Price Index June Quarter 1983

Whilst more than 900 price quotations are collected each quarter, it is not practical to reproduce a complete list of the hundreds of goods and services priced. The following abbreviated list gives an indication, under 100 headings, of the 247 expenditure classes used in the RPI, together with their value-weights, or percentage contributions to the All Groups RPI in the June quarter of 1983 - the base period.

Group and Expenditure Class	Value-Weights and Percentage Contribution to the All Groups RPI	
	Sub-Group Total	Expenditure Class Total
FOOD	21.938	
Cereal Products	2.678	
Bread		1.145
Cakes and Biscuits		.896
Breakfast Cereals		.392
Other Cereal Products		.445

Group and Expenditure Class	Sub-Group Total	Expenditure Class
Meat and Fish	6.468	
Pork		.349
Beef and Veal		2.611
Mutton and Lamb		1.059
Poultry		.813
Bacon and Ham		.594
Processed Meat		.706
Fish (fresh, frozen, canned)		.336
Dairy Produce	1.745	
Milk		1.029
Butter		.253
Cheese		.428
Other Dairy Products		.035
Fresh Fruit and Vegetables	1.506	
Fresh Fruit		.238
Potatoes		.529
Tomatoes		.219
Other Fresh Vegetables		.520
Processed Fruit and Vegetables	1.162	
Frozen and other processed Vegetables		.589
Processed Fruit		.350
Fruit Juices		.223
Soft Drinks, Ice-cream and Confectionery	1.282	
Soft Drinks and Cordials		.645
Ice-cream		.265
Confectionery		.372
Other Food	2.781	
Eggs		.487
Margarine		.364
Cooking Oils		.117
Sugar		.273
Jams and Honey		.164
Tea, Coffee and Food Drinks		.704
Condiments		.224
Other Foodstuffs		.448

Group and Expenditure Class	Group Total	Sub-Group Total	Expenditure Class
Meals Out and Take-away Food		4.316	
Meals Out			2.900
Snacks and Take-aways			1.416
TOBACCO AND ALCOHOL	6.012		
Alcoholic Beverages		4.667	
Beer			2.636
Wine			.803
Spirits			1.228
Cigarettes and Tobacco		1.345	1.345
CLOTHING AND FOOTWEAR	5.891		
Clothing		4.666	
Men's clothing			1.044
Boy's clothing			.498
Women's clothing			1.662
Girl's clothing			.675
Piecegoods and other Clothing			.787
Footwear		1.225	
Men's Footwear			.396
Women's Footwear			.582
Children's Footwear			.247
HOUSE MAINTENANCE AND REPAIR	7.002	7.002	
House Insurance			.446
Water Supply Maintenance			.418
Other Maintenance and Repair			6.138
HOUSEHOLD EQUIPMENT AND OPERATION	18.343		
Fuel and Light		3.665	
Electricity			2.622
Gas			.925
Other			.118

Group and Expenditure Class	Group Total	Sub-Group Total	Expenditure Class
Furniture and Floorcoverings		3.954	
Furniture			1.595
Floor Coverings			2.359
Drapery		1.338	
Bedding			.783
Linen and Soft Furnishings			.555
Appliances		2.835	2.835
Household Utensils and Tools		1.196	
Tableware, Glassware and Cutlery			.428
Kitchen and Cooking Utensils			.479
Tools			.289
Household Supplies and Services		3.601	
Household Cleaning Agents			.926
Insecticide			.340
Other Household Non-durables			.726
Insurance of House Contents			.277
Domestic Services and Child Minding			1.332
Postal and Telegram Services		1.754	
Postal Charges			.662
Telephone Charges			1.003
Telegram Charges			.089
HEALTH AND PERSONAL CARE	6.124		
Health Services		3.485	
Hospital, Doctor and Optical Services			1.019
Dental Services			.348
Health Insurance			2.118
Personal Care		2.639	
Pharmaceuticals			.954
Hair Services			.494
Toiletries and Other Personal Products			.624
Cosmetics			.567

Group and Expenditure Class	Group Total	Sub-Group Total	Expenditure Class
VEHICLE OWNERSHIP AND OPERATION	14.041	14.041	
Motor Vehicle Purchase			5.229
Automotive Fuel			4.494
Motoring Charges			.400
Vehicle Insurance	338.5280000		.197
Tyres and Tubes			2.006
Other Parts and Service			1.510
Pedal Cycle Purchase			.205
RECREATION AND EDUCATION	13.795		
Recreational Goods		9.595	
T.V. and V.C.R. Equipment			3.292
Radio and Sound Equipment			2.151
Hire of Video Tapes and Equipment			1.197
Photographic Equipment			.627
Records and Cassettes			.224
Toys and Games			.487
Sports Equipment			.746
Other			.871
Recreational Services		1.419	
Photographic Services			.453
Club and Association Charges			.778
Other Entertainment			.188
Newspapers, Books and Magazines		1.165	1.165
Education Fees		1.290	1.290
Writing Materials		.326	.326
HOLIDAYS AND TRAVEL	6.854	6.854	
Air Fares			4.754
Package Tours			1.835
Travel Goods			.265
Total: "All Groups"	100.000	100.000	100.000

