BTE Road Construction Price Indexes: 1972/73 to 1982/83

Information Paper

This Information Paper presents input-price indexes for national road construction activity for the period 1972-73 to 1982-83. This is part of a series which commenced in 1969-70.

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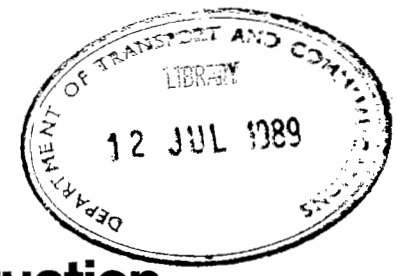

BTE Road Construction Price Indexes: 1972–73 to 1982–83

AUSTRALIAN GOVERNMENT PUBLISHING SERVICE, CANBERRA 1984

ISBN 0644 03105 0

Printed by Canberra Publishing and Printing Co.

FOREWORD

This Information Paper presents input-price indexes for national road construction activity for the period 1972-73 to 1982-83. Earlier values in this time series, which commenced in 1969-70, can be found in BTE Report No 49, Road Construction Price Indexes: 1969-70 to 1980-81.

The BTE has compiled these indexes for use in its current study of the Australian road system, and to assist others interested in road construction activity who require up-to-date information on price movements for inputs to road construction.

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December 1983

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SUMMARY

The Bureau of Transport Economics (BTE) reviewed various road construction price indexes and produced new input-price indexes for the road construction industry for the period 1969-70 to 1980-81 in BTE Report No 49, Road Construction Price Indexes: 1969-70 to 1980-81. The BTE indexes, updated for the financial year 1981-82, were presented in Information Paper No 7. The present Information Paper contains a further update of the BTE input-price indexes for the financial year 1982-83, and also sets out minor revisions to the indexes for 1981-82. Preliminary data which were used in compiling the indexes for 1981-82 have now been updated, and this has resulted in minor amendments to the 1981-82 figures.

The BTE Road Construction Price Indexes are designed for use in the BTE's current study of the Australian road system and, in particular, for the analysis of trends in road expenditure at constant prices. However, they also provide a general guide to trends in road construction costs in Australia. Important considerations in devising the indexes were that they should be statistically robust, timely, readily capable of being updated and easily interpreted.

The BTE Price Index for overall road construction activity registered a 12.8 per cent increase in 1982-83. The rise in 1981-82 was also 12.8 per cent. The rate of growth of the index in these two years showed a substantial fall from the large increases registered in 1979-80 and 1980-81 of 15.9 per cent and 15.5 per cent respectively. There were substantial rises in fuel and bitumen prices in 1979-80 and 1980-81. The large rise in fuel prices in 1982-83 was countered by relatively small increases in the prices of bitumen and plant.

CHAPTER 1—INTRODUCTION

Road construction price indexes are important tools for assessing movements in real road expenditure, and their relationship to changes in the physical level of road infrastructure. Such indexes have been developed in Australia by a number of agencies, and for a variety of purposes.

BTE Report No 49, *Road Construction Price Indexes: 1969-70 to 1980-81* (BTE 1981) sets out details of a number of Australian road construction price indexes:

- national indexes compiled previously by the BTE and by the former Commonwealth Bureau of Roads (CBR);
- State indexes produced by individual State road authorities (SRAs); and
- implicit price indexes derived from the Australian Bureau of Statistics (ABS) National Accounts (which have sometimes been used as a proxy for price changes in the road construction industry).

In addition, new BTE input-price indexes for the road construction segment of the Australian economy were presented for the period 1969-70 to 1980-81 in that Report. The reader is referred to the Report for a full explanation of the indexes, and the reasons for choosing the form of the new indexes. The new BTE indexes have the following features:

- they are input-price indexes, and employ input components closely related to road authorities' actual expenditure items;
- the overall index relates to Australia as a whole, and is composed of three sub-indexes relating to maintenance, SRA construction and local government authority (LGA) construction; and
- each of the sub-indexes contains the following input components: salaried labour, other labour, fuel, bitumen, other materials and plant acquisition and replacement.

The BTE indexes were updated to 1981-82 in Information Paper No 7, *BTE Road Construction Price Indexes: 1971-72 to 1981-82* (BTE 1983). This Information Paper presents the 1982-83 update of the indexes.

The paper is organised in the following manner. Chapter 2 presents an outline of how the BTE Road Construction Price Indexes are constructed. The indexes, and their component indexes, are set out on an annual basis for the period 1972-73 to 1982-83 in Chapter 3. Some concluding remarks are presented in Chapter 4.

CHAPTER 2—OUTLINE OF BTE INDEXES

TYPE OF INDEX

BTE Road Construction Price Indexes are input-price indexes. That is, they measure changes in the prices of inputs to road construction on the basis of general national price indexes. No adjustment for productivity is made. BTE Report No 49 (BTE 1981) examined the issues involved in measuring productivity changes (and associated changes in the quality and composition of both inputs and outputs), with a view to deriving an output-cost index which reflects changes in input prices and productivity. It was concluded in that Report that further substantial work on obtaining comparable data on unit cost movements in the road construction industry would be necessary to estimate productivity changes and output costs in a robust manner.

The BTE index for overall road construction activity relates to Australia as a whole, and no disaggregation by State was attempted. It is made up of three sub-indexes:

- construction by SRAs
- construction by LGAs
- total maintenance.

INPUT COMPONENT INDEXES

The major input categories to the road construction industry were identified as:

- Labour
  - — Salaried
  - — Other
- Materials
  - — Fuel
  - — Bitumen
  - — Other
- Plant acquisition and replacement.

The component indexes considered appropriate to measure price movements in these input categories are set out in Table 2.1.

A new fuel component index was introduced in 1981-82. It is derived by calculating an average price (over all companies) of automotive distillate for each of the six capital cities based on Petroleum Products Pricing Authority (PPPA) 'Typical Maximum Justified Prices' at 31 December of each year[1]. These prices include Commonwealth excise charges and State franchise fees. The average prices are weighted by the population proportion relating to each city; ABS population estimates for 1979-80 are used so that these weights have the same base as other weights in the indexes.

On the other hand, fuel prices up to 1980-81 were measured by an automotive distillate index which is an unpublished component of the ABS Price Indexes of Articles Produced by Manufacturing Industry. Prices used by the ABS in compiling these indexes are manufacturers' selling prices exclusive of excise and sales tax. However,

1. Prior to 1982-83 the Commonwealth excise duty on automotive distillate was deducted from this price since fuel used in off-road activities was then exempt from the duty; this off-road exemption was terminated in the 1982-83 Commonwealth Budget.

because of a number of changes in excise duty and franchise fees on automotive distillate in recent times (in particular the abolition of the off-road exemption from diesel fuel excise in the 1982-83 Commonwealth Budget (BTE 1983, pp3-4)), it was decided to measure fuel prices (from 1981-82 onwards) by means of the specially-constructed index described above, which measures wholesale prices to dealers inclusive of excise tax and franchise fees.

Prior to 1981-82 'Other Labour' was measured by an ABS Wage Rates index. These Wage Rates indexes have been discontinued and replaced by the new series ABS Award Rates of Pay Indexes, which are used as the basis of the 'Other Labour' component from 1981-82 onwards. The Wage Rates indexes were based on the occupation structure in 1954, and included only those awards relating solely or mainly to 'wage' earners (as opposed to 'salary' earners)[1]. The Award Rates of Pay Indexes

TABLE 2.1—INPUT COMPONENT INDEXES

Component	*Price Indexes*	*Source*
Labour		
Salaried	Average weekly earnings, males, Australia	ABS, Average weekly earnings, Australia (No 6302.0)
Other	Weighted average minimum weekly award rate, wage earners, males, all industry groups, Australia	ABS, Award rates of pay indexes, Australia (No 6312.0)[a]
Materials		
Fuel	Price index of automotive distillate	Petroleum Products Pricing Authority:[b] 'Typical Maximum Justified Price'[c]
Bitumen	Price of bitumen index	The Shell Company of Australia's Melbourne price of road-making grade of bitumen
Other materials and stores items	Price index of materials used in building (other than house building), Australia	ABS, Price index of materials used in building other than house building, six State capital cities (No 6407.0)
Plant acquisition and replacement	Price index of construction and earth moving machinery and equipment	ABS unpublished[d]

a. Prior to 1981-82 'other labour' costs were measured by an ABS Wage Rates index, which has been replaced by the Award Rates of Pay Index.

b. The Prices Justification Tribunal prior to the creation of the Petroleum Products Pricing Authority.

c. Prior to 1981-82 fuel prices were measured by an index of automotive distillate prices, which is an unpublished component of ABS Price Indexes of Articles Produced by Manufacturing Industry (No 6412.0).

d. The index for Australian Standard Industrial Classification (ASIC) Class 3332 is an unpublished component of ABS Price Indexes of Articles Produced by Manufacturing Industry (No 6412.0), and is available on request from the ABS.

1. 'Wage' earners are engaged mainly in manual work and/or employed in blue collar occupations. 'Salary' earners are engaged mainly in non-manual work and/or employed in white collar occupations.

are based on the occupation structure existing in May 1976. All full-time adult wage and salary earners whose rates of pay are normally varied in accordance with awards, determinations or registered collective agreements are covered in the new indexes. However, the new index relating only to wage earners is employed in the BTE Road Construction Price Indexes. Salary earners are covered by the 'Salaried Labour' component.

COMPONENT WEIGHTINGS

The BTE index for overall road construction activity is made up of three sub-indexes which have the following weights attributed to them:

- SRA construction, 35 per cent
- LGA construction, 31 per cent
- Maintenance, 34 per cent.

The weights relating to the six input components for each of the sub-indexes and the overall activity index, are set out in Table 2.2. Estimated expenditure on the input components in the base year 1979-80 was used to determine the weights employed. Further details of the derivation of the weights is given in BTE (1981, pp22-25).

TABLE 2.2—COMPONENT WEIGHTS, ESTIMATED FOR BASE YEAR 1979-80

(per cent)

	Sub-indexes			
Component	*SRA construction*	*LGA construction*	*Maintenance*	*Overall activity*
Labour				
Salaried	22.8	20.4	15.9	19.7
Other	32.1	32.1	44.1	36.1
Total	54.9	52.5	60.0	55.8
Materials				
Fuel	9.1	10.3	11.7	10.4
Bitumen	9.3	9.4	6.2	8.3
Other	20.9	18.2	14.6	17.9
Plant acquisition and replacement	5.8	9.6	7.5	7.6
Total	100.0	100.0	100.0	100.0

Source: Table 4.3, BTE (1981).

CHAPTER 3—BTE ROAD CONSTRUCTION PRICE INDEXES

In the first part of this chapter the input component indexes of the BTE Road Construction Price Indexes are tabulated and reviewed for the period 1972-73 to 1982-83. These component indexes are then combined with the component weights to produce the sub-indexes (SRA construction, LGA construction and maintenance) and the index for overall road construction activity for 1972-73 to 1982-83. The chapter concludes with some comparisons of the BTE input-price index for overall activity with SRA road construction indexes, the ABS implicit price deflator for private sector fixed capital expenditure on non-dwelling construction and the ABS Consumer Price Index (CPI).

INPUT COMPONENTS

The six input component indexes are set out from 1972-73 to 1982-83 in Table 3.1 and are presented in diagrammatic form in Figure 3.1. It can be observed that:

- The rate of growth in labour costs was somewhat lower in 1982-83 than in the previous two years due in particular to the 'wages freeze' (there was only a small increase in labour costs in the second half of the financial year). The growth in labour costs was very high in the period 1973-74 to 1975-76, then tapered off and accelerated again in 1980-81 and 1981-82.
- Fuel prices rose substantially in 1982-83 due in particular, to the termination of the exemption from the Commonwealth excise duty on automotive distillate for off-road activitives, and to increases in some State franchise fees. There had been large rises in fuel prices in 1975-76 and again in the years 1977-78 to 1980-81.
- A very small rise in bitumen prices occurred in 1982-83; this component had registered significant increases in 1974-75 and again in 1979-80 and 1980-81.
- Prices of 'other materials' moved much in line with general increases in prices in the economy in 1982-83, as they have done over the past decade.
- The increase in the 'plant acquisition and replacement' index was quite small in 1982-83, indeed the smallest rise since 1978-79; most of the increase was in the first half of the financial year.

RESULTANT INDEXES

Combining the component weights (Table 2.2) with the component indexes (Table 3.1) yields the road construction input-price indexes set out in Table 3.2. The indexes were computed for the base year 1979-80, but have been scale-adjusted so that 1969-70 = 100.0 for easier analysis. The major conclusions to be drawn from Table 3.2 are:

- The 1982-83 increase in the overall activity index was 12.8 per cent, which is the same as last year's rise; the significant falls recorded in the rate of growth in the prices of bitumen and plant in 1982-83 were offset by a substantial rise in the price of fuel.
- The increases in the indexes in 1981-82 and 1982-83 were substantially less than the rises in 1979-80 and 1980-81 which reflected abnormally large increases in fuel and bitumen prices.
- Price movements in the three sectors examined (SRA construction, LGA construction and maintenance) were very similar over the period 1972-73 to 1982-

TABLE 3.1—COMPONENT INDEXES OF BTE ROAD CONSTRUCTION PRICE INDEXES[a]

(Base year 1979-80, adjusted so that 1969-70 = 100.0)

Year ended 30 June	Labour				Fuel[d]		Bitumen		Other materials		Plant acquisition and replacement	
	Salaried[b]		Other[c]									
	Index	Percentage change	Index	Percentage change	Index	Percentage change	Index	Percentage change	Index	Percentage change	Index	Percentage change
1973	133.4	9.0	133.2	10.6	110.5	0.0	109.8	0.0	116.7	4.9	114.2	2.7
1974	155.0	16.2	157.6	18.3	110.2	-0.3	109.8	0.0	131.9	13.0	120.1	5.2
1975	194.4	25.4	205.7	30.5	125.9	14.2	189.3	72.4	162.2	23.0	144.4	20.2
1976	222.3	14.4	236.0	14.7	169.3	34.5	212.6	12.3	186.6	15.0	169.4	17.3
1977	249.9	12.4	266.2	12.8	192.4	13.6	254.5	19.7	208.4	11.7	198.2	17.0
1978	274.6	9.9	290.6	9.1	232.9	21.0	272.8	7.2	226.0	8.4	215.8	8.9
1979	295.7	7.7	309.7	6.6	308.7	32.5	274.7	0.7	242.6	7.3	228.1	5.7
1980	324.9	9.9	336.9	8.8	497.4	61.1	380.8	38.6	274.2	13.0	252.1	10.5
1981	369.1	13.6	373.9	11.0	631.8	27.0	512.4	34.6	309.7	12.9	281.5	11.7
1982	422.7r	14.5r	420.3r	12.4r	697.8	10.4	606.9	18.4	344.0	11.1	311.1	10.5
1983	470.7p	11.4p	466.1p	10.9p	962.5	37.9	615.6	1.4	385.2p	12.0p	328.6p	5.6p

a The data series used to compute the component indexes are set out in Table 2.1.

b The ABS Average Weekly Earnings series is used to measure 'Salaried Labour'. From the September quarter 1981, this series was based on a new survey of employers which replaced the previous series based principally on information from payroll tax returns. The new series was linked to the old in order to provide an index on a comparable basis over the whole period.

c The new ABS Average Weekly Award Rates Index is used to measure 'Other Labour' from 1981-82 onwards. This series replaced the Wage Rates indexes which were used in the BTE indexes prior to 1981-82 (see Chapter 2 for details). The new index was linked to the old in order to provide an index on a comparable basis over the whole period.

d An automotive distillate index (which is an unpublished component of ABS Price Indexes of Articles Produced by Manufacturing Industry) was used as the fuel component index until 1980-81; a new series based on the Petroleum Products Pricing Authority's 'Typical Maximum Justified Price' of automotive distillate is used from 1981-82 on (see Chapter 2 for details).

p provisional estimates.

r revisions to the index values presented in Information Paper 7 (BTE 1983) resulting from updated information.

83, although in 1982-83 maintenance costs rose somewhat more (13.4 per cent) than SRA and LGA construction costs (12.5 and 12.6 per cent respectively).

In interpreting these BTE Road Construction Price Indexes, it must be remembered that the indexes are based on input prices, and therefore they do not reflect productivity gains. To the extent that such gains occur, the indexes will tend to overstate increases in output costs and output prices for the road construction industry.

COMPARISON WITH OTHER INDEXES

In Table 3.3, the BTE input-price index for overall road construction activity is compared with the ABS implicit price deflator for private sector gross fixed capital expenditure on non-dwelling construction (which has been used as a proxy for price changes in road construction), the Queensland Main Roads Department (MRD) input-price index and the input-cost indexes[1] of the New South Wales Department of Main Roads (DMR), the Road Construction Authority (RCA) in Victoria (previously the Country Roads Board (CRB)) and the South Australian Highways Department (HD).

On the basis of these comparisons the following points can be made:

- There was considerable variation in the road construction indexes produced by the various authorities in 1982-83, with increases for the year ranging from 8.6 per cent to 16.2 per cent. The BTE index was at about the middle of the range.
- The RCA (Vic) and HD (SA) indexes which measure costs at 30 June of each year rather than reflecting 'average' costs over the financial year showed relatively smaller rises in 1982-83 than the other indexes (except MRD (Qld)). This result is consistent with a slowing down in the growth of prices of inputs to road construction in the second half of the 1982-83 financial year, and the input data to the BTE index confirms that this easing in input price rises (particularly labour and plant) did occur.
- The MRD (Qld) input-price index displayed a slightly smaller increase in 1982-83 than the BTE input-price index for overall activity, as it generally has done since 1975-76.
- The DMR (NSW) input-cost index has shown the largest increase of the indexes listed for each of the past two years. Prior to 1981-82, the DMR index had moved in a similar fashion to the BTE input-price index.
- In 1982-83, the ABS implicit price deflator for private sector fixed capital expenditure on non-dwelling construction showed a slightly larger rise than the BTE input-price index. Over the period 1972-73 to 1982-83 the two indexes have increased at about the same rate except for the two years 1979-80 and 1980-81, when there were very substantial rises in fuel and bitumen prices.

Price movements in the road construction industry are compared with general price movements in the economy in Figure 3.2. This figure presents, for the period 1972-73 to 1982-83, the BTE input-price index for overall road construction activity, the ABS implicit price deflator for private sector fixed capital expenditure on non-dwelling construction and the ABS Consumer Price Index (CPI), which measures changes in the retail price of a 'basket' of goods and services which are considered representative of metropolitan household spending habits. The major reason for the faster growth in road construction prices over the past decade, as illustrated in Figure 3.2, has been the impact of rapid increases in fuel and bitumen prices. Another important factor is the relatively labour intensive nature of the road construction industry.

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1. Input-cost indexes measure the costs of representative units of inputs to the road construction industry, as indicated by actual costs incurred by road authorities.

TABLE 3.2—BTE ROAD CONSTRUCTION INPUT-PRICE INDEXES[a]

(Base year 1979-80, adjusted so that 1969-70 = 100.0)[b]

Year ended 30 June	SRA construction		LGA construction		Maintenance		Overall activity	
	Index	Percentage change	Index	Percentage change	Index	Percentage change	Index	Percentage change
1973	124.4	6.9	123.9	6.7	125.3	7.3	124.5	7.0
1974	141.1	13.4	139.8	12.8	142.6	13.8	141.2	13.4
1975	181.6	28.7	179.7	28.5	183.1	28.4	181.5	28.5
1976	209.7	15.5	207.9	15.7	212.1	15.8	209.9	15.6
1977	237.4	13.2	235.9	13.5	240.2	13.2	237.9	13.3
1978	260.3	9.6	258.7	9.7	263.7	9.8	260.9	9.7
1979	280.7	7.8	279.2	7.9	285.5	8.3	281.8	8.0
1980	325.1	15.8	324.6	16.3	330.3	15.7	326.7	15.9
1981	376.1	15.7	375.9	15.8	380.1	15.1	377.4	15.5
1982	424.8r	12.9r	424.2r	12.8r	428.0r	12.6r	425.8r	12.8r
1983	478.0p	12.5p	477.7p	12.6p	485.5p	13.4p	480.5p	12.8p

a. The indexes are derived by combining the component weights (Table 2.2) with the component indexes (Table 3.1).

b. The overall activity index and the sub-indexes were derived for the base year 1979-80, and then scale-adjusted to give 1969-70 = 100.0, to facilitate analysis. Note that the adjusted scale (1969-70 = 100.0) version of the overall activity index cannot be derived simply from the three sub-indexes (SRA construction, LGA construction and maintenance) by using the weights given in the text. Similarly, in the adjusted scale, the three sub-indexes cannot be derived simply from the component indexes in Table 3.1. Each of the required indexes must be constructed from the component indexes at their base year (1979-80 = 100.0).

p. provisional estimates.

r. revisions to the index values presented in Information Paper 7 (BTE 1983) resulting from updated information.

TABLE 3.3—COMPARISONS WITH BTE ROAD CONSTRUCTION PRICE INDEX

(1969-70 = 100.0)

Year ended 30 June	BTE input-price index (overall activity)		SRA input-price index		SRA input-cost indexes						ABS implicit price deflator; gross fixed capital expenditure non-dwelling construction Private sector	
			MRD (Qld)		DMR (NSW)		RCA (Vic)[ab]		HD (SA)[b]			
	Index	Percentage change	Index	Percentage change	Index	Percentage change	Index	Percentage change	Index	Percentage change	Index	Percentage change
1973	124.5	7.0	127.4	8.4	128.4	9.6	134.3	12.4	136.3	13.3	123.3	7.7
1974	141.2	13.4	149.2	17.1	146.2	13.9	165.1	22.9	166.5	22.2	141.2	14.5
1975	181.5	28.5	192.6	29.1	187.5	28.2	193.7	17.3	196.9	18.3	180.6	27.9
1976	209.0	15.6	222.2	15.4	217.0	15.7	222.2	14.7	231.5	17.6	209.4	15.9
1977	237.9	13.3	248.5	11.8	244.4	12.6	241.4	8.6	260.0	12.3	234.5	12.0
1978	260.9	9.7	270.1	8.7	264.6	8.3	257.9	6.8	278.2	7.0	254.8	8.6
1979	281.8	8.0	287.0	6.3	281.4	6.3	273.5	6.0	302.9	8.9	274.2	7.6
1980	326.7	15.9	314.9	9.7	323.3	14.9	324.4	18.7	337.7	11.5	303.0	10.5
1981	377.4	15.5	353.9	12.4	373.5	15.5	367.5	13.3	377.6	11.8	340.0	12.2
1982	425.8r	12.8	396.1r	11.9r	426.9	14.3	414.9	12.9	429.7	13.8	383.9r	12.9r
1983	480.5p	12.8p	441.4p	11.4p	495.9p	16.2p	450.7	8.6	479.5p	11.6p	436.4p	13.7p

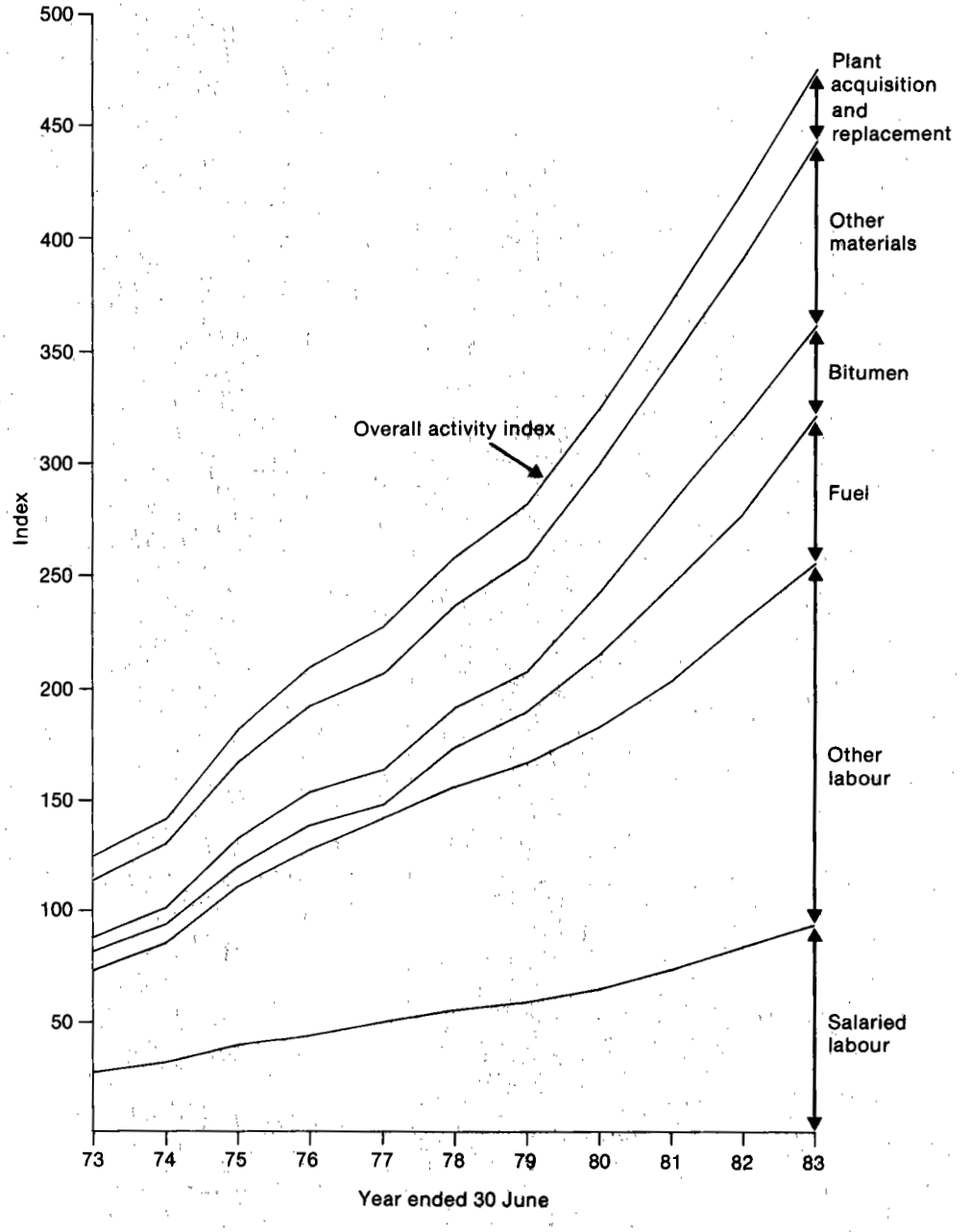
a Previously the Country Roads Board (CRB (Vic)).

b The RCA (Vic) and HD (SA) input-cost indexes relate to costs at 30 June of the designated year (not average costs over the year)

p provisional estimates.

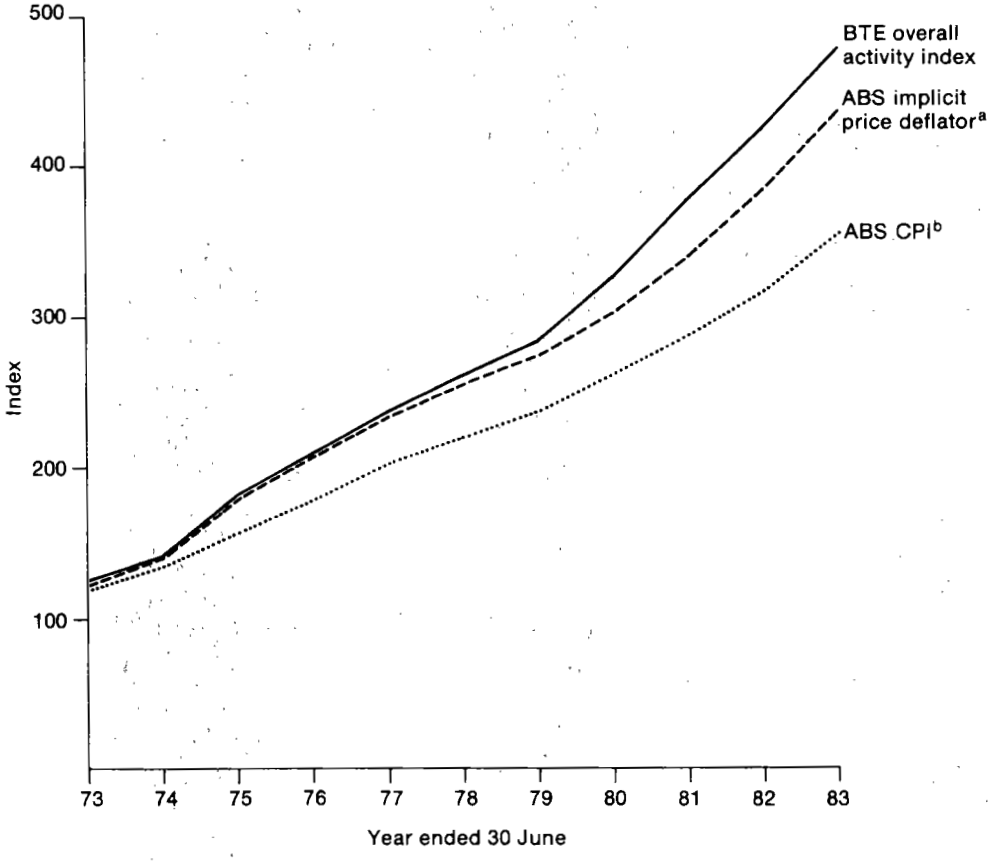
r revisions to the index values presented in Information Paper 7 (BTE 1983) resulting from updated information.

Sources: Table 3.2. BTE (1983) Table 3.3 and personal communication. ABS (1981). ABS (1983a).



Note: The curve for each component index reflects its relative weight in the total activity index, as well as the growth in the price of that component.

Figure 3.1 — Component indexes of BTE Road Construction Price Indexes



a. ABS implicit price deflator for gross fixed capital expenditure on non-dwelling construction in the private sector.

b. ABS Consumer Price Index (No 6401.0).

Figure 3.2 — Comparisons with BTE input-price index (overall activity)

CHAPTER 4—CONCLUDING REMARKS

The rate of growth of the BTE input-price index for overall road construction activity remained the same in 1982-83 as it was in 1981-82 at 12.8 per cent. The increases in these two years were significantly less than the rises of 15.9 per cent and 15.5 per cent in 1979-80 and 1980-81, which occurred principally because of substantial rises in fuel and bitumen prices. There were significant falls in 1982-83 in the rate of growth in the prices of bitumen and plant and a smaller fall in the rate of growth in labour costs. These decreases were offset by a substantial rise in the price of fuel (mainly due to taxation changes) and a small increase in the rate of growth of the other materials index. Although not reflected in the annual index figures, there is evidence that the growth in road construction costs eased somewhat in the latter half of 1982-83.

Recent increases in the BTE Road Construction Price Index for overall activity of 12.8 per cent (1982-83 and 1981-82), 15.6 per cent (1980-81) and 15.9 per cent (1979-80) can be compared with corresponding increases for these four years:

- in the CPI of 11.5 per cent, 10.4 per cent, 9.4 per cent and 10.1 per cent; and
- in the implicit price deflator for fixed capital expenditure on non-dwelling construction of 13.7 per cent, 12.9 per cent, 12.2 per cent and 10.5 per cent.

Road construction prices have tended to rise more rapidly than other indexes such as the CPI and the implicit price deflator when there have been rapid increases in fuel and bitumen prices. Road construction prices are also sensitive to changes in labour costs as the road construction industry is relatively labour intensive.

Finally, it should be remembered that the BTE Road Construction Price Indexes are based on input, and not output, prices. Therefore they do not reflect productivity gains.

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ABBREVIATIONS

ABS	Australian Bureau of Statistics
AGPS	Australian Government Publishing Service
ASIC	Australian Standard Industrial Classification
BTE	Bureau of Transport Economics
CBR	Commonwealth Bureau of Roads
CPI	Consumer Price Index
CRB	Country Roads Board (Vic)
DMR	Department of Main Roads (NSW)
HD	Highways Department (SA)
LGA	Local Government Authority
MRD	Main Roads Department (Qld)
PPPA	Petroleum Products Pricing Authority
RCA	Road Construction Authority (Vic)
SRA	State Road Authority