Section 94 of the NSW Environmental Planning and Assessment Act of 1979: Equity and Efficiency

Natalie Barnes and Brian Dollery

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Department of Economics
University of New England
Armidale
New South Wales 2351
Australia

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by

Natalie Barnes and Brian Dollery

Department of Economics
University of New England
ARMIDALE NSW 2351

Tel: (067) 73 2500
Fax: (067) 73 3280

Email: bdollery@metz.une.edu.au

AN ECONOMIC ANALYSIS OF SECTION 94 OF THE NSW ENVIRONMENTAL PLANNING AND ASSESSMENT ACT OF 1979

Abstract

Reduced funding from higher levels of government to local authorities for infrastructure has induced an increased emphasis on user pays financing techniques, such as Section 94 in NSW. However, an analysis of 1993 data on Section 94 contributions demonstrates that some small local authorities cannot use Section 94 to levy developers in an efficient manner. It is argued that alternative methods of raising funds from developers, like *ad valorem* taxes, should be employed instead by these councils. In particular, the analysis shows that councils whose absolute population and value of new residential housing fall below specified threshold levels should be allowed to use *ad valorem* taxes to fund infrastructure development.

Keywords

Section 94, developer contributions, *ad valorem* taxes.

It is now generally recognised that infrastructure plays a key role in the process of wealth creation and is thus a prerequisite for economic growth. The recent decline of infrastructure spending in Australia, measured as a percentage of total government expenditure, is thus cause for concern, since a smaller pool of public funds necessarily reduces the amount of publicly provided infrastructure. Viewed as a proportion of its activities, local government carries the greatest responsibility for providing infrastructure since it allocates about 40 per cent of total outlays to infrastructure, compared to some 20 per cent for State and 5 per cent for Commonwealth governments respectively (Lang, 1991, p.15). With increasing population pressure, urban expansion, and a limited ability to raise funds, local governments are in a dilemma. This is because relative to State and Commonwealth governments, local government has few means of raising revenue.

Whilst local government is being given more responsibility for infrastructure, the concomitant financial resources have not been forthcoming. Indeed, there seems to have been a negative relationship between local governments' responsibility and funding from higher levels of government. With rate pegging and Loan Council controls severely restricting the revenue base of local government, municipal councils are moving towards more user pays forms of financing. Exactly how user pays should be implemented to fund urban infrastructure is controversial. Some commentators, such as Simpson (1989), argue that up-front costs should be used. On the other hand, the Australian Urban and Regional Development Review (1995) is in favour of recurrent funding. However, an area of general consensus is that user pays must be implemented in the most efficient manner, taking equity issues into consideration. This means that the cost of providing services and amenities to different locations should be reflected in different prices.

Developer contributions have set out to achieve this outcome. Introduced in New South Wales under Section 94 of the Environmental Planning and Assessment Act of 1979, local councils are now able to extract contributions from developers for the provision of services and amenities which need to be provided as a consequence of development. Despite the trend towards user pays financing and the increasing use of developer contributions, no one has thus far collected the data to analyse how effectively Section 94 funds urban infrastructure. This forms the subject matter of the present paper. By collecting this data a number of features can be identified including the characteristics of the councils implementing user pays financing methods; the types of infrastructure most frequently levied for; and which sources of infrastructure raise the most revenue and why? Furthermore, the collection of this primary data has meant that for the first time an analysis of the effectiveness of developer contributions can be conducted.

Changes to Section 94 legislation in 1989 resulted in the fact that developer contributions have only been fully utilised in the last five years. This meant that data could not be collected over long time periods, which limits the capacity to determine longer term trends which might have elucidated some of the controversies which surround Section 94. However, it is still possible with a single year's data to distil some interesting information about the extent of the use of this funding technique. The data was required to determine *inter alia* the administrative burden of Section 94, how extensively it has been used, and establish the nature of the infrastructure which it funds. This has been analysed with a view to recommending a threshold level so that councils falling below this threshold can use a less administratively costly policy, such as an *ad valorem* tax. This may bring the administrative costs of implementing developer contributions more into line with their intended benefits.

The paper itself is divided into seven main parts. Following a brief discussion of Section 94 and its attendant contributions plan by way of background, section two outlines the nature of the data employed in the paper. Section three provides an analysis of this data, and the implications of this analysis are discussed in section four. On the basis of this analysis, section five suggests that an *ad valorem* tax might be more appropriate for those councils where Section 94 is not administratively efficient. Econometric exercises are conducted in section six in order to determine which factors could be used as yardsticks for specifying which councils should use *ad valorem* taxes instead of Section 94 to levy developers. The paper ends with some brief concluding remarks in section seven.

Section 94 Contributions Plan

Section 94 of the 1979 Environment and Assessment Act empowers local councils in New South Wales to extract contributions from developers for services and amenities which will need to be provided as a consequence of particular developments (Department of Planning, 1992, p.1). There must thus be a clear nexus between the development and the facilities the developer must, to some degree, fund. The first significant case of a council levying under Section 94 occurred in 1981 when land was released for over 80,000 residents at Rooty Hill in Blacktown. Blacktown City Council levied developers for the full cost of both land and improvements, and for part of the cost of district services (Lang and Edmondson, 1990, p.32).

In February, 1989, the Minister for Planning ordered a commission of inquiry be set up to examine the administration of Section 94 since it was subject to mounting criticism. Commissioner William Simpson, who conducted the inquiry, handed down his report in October, 1989. The Simpson Inquiry concluded that councils had the power to levy developers. Simpson fully endorsed the concept of Section 94 as an equitable means of funding public services and amenities (Department of Planning 1990, p.1). He did criticise the way in which some councils administered Section 94 and proposed that a more consistent, publicly accountable and professional approach be taken. To achieve this, councils were to

prepare a comprehensive plan addressing local needs. This plan was to '... contain an implementation program for contributions and a fiscal strategy to enable efficient, economic and equitable administration of Section 94' (Department of Planning, 1992, p.1). Simpson, in his report *Operation and Practices Associated with Contributions under Section 94 of the Environmental Planning and Assessment Act of 1979*, discussed the economic gains of a 'special user pays tax' such as Section 94. He argued that when users are forced to meet the cost of a particular service or amenity, efficiency will rise because the benefits are now equated with the costs.

In accordance with the Simpson Inquiry three changes were made to the Environment and Assessment Act. One of the most significant of these amendments was that, as of the 17 December, 1992, a council was to have in place a contributions plan before it could levy developers (Geoff Smyth and Associates, 1992, p.4). The contributions plan is distinctly different from the Local Environmental Plan, which is a general plan for the development of a local jurisdiction. The objective of the Section 94 contributions plan is to provide a comprehensive strategy for the assessment, collection and expenditure of developer contributions by making councils publicly and financially accountable for the administration of its contributions plan (Tamworth City Council, 1992, p.3). The contributions plan openly displays council policy for the administration of developer contributions. That is, it will show how monies are to be allocated as well as how they are to be derived. The aim of the contributions plan is to provide councils with a means of extracting funds from developers for new and pre-existing infrastructure, which was constructed in anticipation of development. The Section 94 contribution plan sort to ensure that the increased demand for public amenities is funded on a user pays basis. It was hoped that the existing community need not bear the financial burden of development through rate increases.

Moreover, the plan should be reviewed annually (or at least every two to three years), and altered where necessary, to reflect changing demographic and other features of an area. Any changes to the plan the council deems necessary must be discussed with the public before they are accepted. Finally, as community needs are constantly changing, the plan must be flexible to facilitate these changes.

Collection of Section 94 Data

Several agencies, in particular the Department of Planning, Sydney, have invested a great deal of time and effort into improving the implementation of Section 94. However, no one has collected the data. This means that little is known about the types of infrastructure most frequently levied for, how many councils actually levy developers, or the total funds raised through Section 94. One of the reasons the data may not have been collected before is the

degree of difficulty associated with gathering it. While the Australian Bureau of Statistics collects the data, it does not extract and aggregate it.

There were a number of difficulties involved in finding the actual location of the data in council records. After a prolonged search the data was located in note five of local councils financial statements. It was then extracted for all councils in New South Wales and aggregated. Note four of the financial statements was also collected as it contained interesting information which is not currently available for 1993, such as revenue from rates and user charges (ie. gas sales and waste management charges).

Analysis of the Data

Table 1 provides a summary of the primary data collected. This table displays the total Section 94 contributions for all New South Wales councils for 1993. The councils have been classified into three groups according to their absolute population. Small councils are defined as having a population of less than or equal to 7,000; medium size councils have a population of between 7,000 and 40,000; and large councils have more than 40,000 people inclusive. The number of councils in the group of large councils is smaller than the other two groups. This is because after an absolute population of approximately 40,000 the size of councils began to increase at a much higher rate, with the largest council having an absolute population of 224,750.

Table 1 clearly shows that the mean Section 94 contributions for smaller councils ($99,955) is much lower than for larger council ($2,438,289). Furthermore, contributions per capita are also smaller for small councils ($20) than for medium to large councils ($30). The coefficient of variation (or standard deviation/mean x 100) was calculated in an effort to determine the variability of Section 94 contributions within each category of councils. Overall, Section 94 contributions appear to be applied in a rather *ad hoc* manner. The coefficient of variation for small councils was very high at 458 per cent. The standard deviation fell with respect to mean contribution as the size of the council grew. For medium councils the coefficient of variation was 298 per cent, while for large councils it was only 135 per cent. This would tend to suggest that the smaller the council, the more arbitrarily developers were levied.

The variation in contributions for categories of infrastructure (eg., roadworks) is relatively consistent. All councils experienced the largest variation in roadworks contribution. Contributions for drainage also had a relatively high variation. This would be expected as some developments occur in areas where infrastructure is at full capacity and would require extensive investment in off-site roads and drainage, while in other areas development would require little, if any, augmentation of existing road and drainage capacity. Contributions for parking and traffic tend to have the lowest variation. This may be a consequence of the fact that they tend to involve quite small monetary contributions. Community facilities also have a relatively low

coefficient of variation. This suggests that provision of social infrastructure is quite uniform across councils.

It should be noted however, that while community facilities is one of the least variable categories of infrastructure, for small councils the coefficient of variation is still quite high at 392 per cent. One of the reasons for this would appear to be that small councils may rely, to a large extent, on adjacent councils for the provision of social infrastructure. This could be a consequence of small councils having insufficient demand to warrant the provision of their own social infrastructure. This highlights two problems with Section 94. First and foremost, it illustrates the inefficiency associated with councils not being able to levy across local government boundaries. Second, it shows that some councils appear to have too small a population and they rely heavily on surrounding councils to provide them with much of their infrastructure. This would suggest that some type of amalgamation of councils would be beneficial.

Table 1

Table 1 also shows that total Section 94 contributions for all New South Wales councils in 1993 was $160,027,000. While this may appear to be a relatively large sum of money, as a percentage of total capital outlays for local government in New South Wales, it represents only 16 per cent.[1] If Section 94 is to operate as a user-pays tax this figure should be much higher. Because it is so low it would appear that the funds needed to finance urban infrastructure are primarily derived from general local government revenue rather than out of developer contributions. This means that the government has less funds to spend in other areas.

Finally, Table 1 shows those categories of infrastructure which raise the most revenue. This is illustrated more clearly in Figure 1 below. From the Figure 1 it is evident that contributions from roads and openspace raise the most Section 94 funds. Contributions for community facilities, which raised 14 percent of the Section 94 money, are also an important component. Traffic, parking, drainage and non-monetary contributions (LAOMPB) raised the least Section 94 revenue.[2]

Figure 1

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1 This figure was calculated using total general government outlays plus public trading enterprises for New South Wales Local Government in Australian Bureau of Statistics, 1992-93 *Government Financial Statistics*, p.56. Note that this is for the financial year 1992-93 and the Section 94 data is for the calendar year 1993. In addition, it is worth noting that as a percentage of general revenue alone Section 94 contributions still only represent 23.25 per cent.

2 Where there is insufficient car parking usually as a consequence of commercial development, councils can levy the developer for the cost of purchasing land and for the construction of new parking facilities.

One of the primary reasons for this, as Figure 2 shows, is the frequency with which councils levy for various categories of infrastructure. Figure 1 illustrates that contributions for roadwork and openspace raise the most revenue. Figure 2 indicates that these two categories are also most frequently levied for by council. The categories of traffic, parking, drainage and "land and other material benefits" (LAOMPB) raise the least revenue and are most seldom levied. It is worth noting that traffic contributions, which raise the lowest proportion of section 94 revenue (about 1 per cent), are levied for 20 per cent of the time. LAOMPB, which raised 8 per cent of the revenue, were levied for only 8 per cent of the time. This suggests that those contributions for traffic are small yet frequently levied for, while donations in the form of LAOMPB tend to be relatively large and infrequent.

Figure 2

Figure 2 shows that Section 94 contributions were only collected by 75 per cent of councils. This means that 25 per cent of councils, mostly small, received no Section 94 revenue. Figure 3 shows that only 49 per cent of small councils applied Section 94 compared with 100 per cent of large councils. Councils may not levy developers for several reasons. Firstly, a council may have decided not to compile a Section 94 contributions plan because they did not experience enough development to justify the expense. Secondly, a council may have decided not to levy to encourage development. Thirdly, and only likely in very few, if any, cases, there was no development which placed increased pressure on urban infrastructure and hence could be levied for under Section 94. Figure 3 would tend to support the literature which suggests that Section 94 is not an appropriate form of infrastructure funding for small councils. This

would suggest that if small councils cannot extract developer contributions from developers under Section 94 as it stands, then some alternative, such as an *ad valorem* tax, may need to be implemented by small councils.

Figure 3

Implications of the Analysis

The literature on Section 94 has tended to suggest that Section 94 is administratively inefficient for some councils. Small councils appear to fall into this category. There are other reasons why small councils do not levy Section 94. For example, it may take a long time to collect enough funds for a project. Consequently, the value of councils' money will erode while it is waiting for the balance of funds. Another factor against small councils utilising Section 94 lies in the fact that because development is often spread over such a long period, double dipping is more likely to occur (Housing Industry Association 1994, p.61). These arguments against small councils using Section 94 to levy developers appear to be supported by the data which showed that small councils levied Section 94 less than 50 per cent of the time, their total Section 94 contributions are low at $99,955, and their contributions certainly had a lot more variation than those of large councils.

The question now arises as to those factors which influence Section 94 contributions. It should be made clear that the cost of extracting developer contributions under Section 94 does not consist of determining each developer's contribution; rather it lies in constructing the initial contributions plan. The cost of compiling a Section 94 contributions plan was not easy to determine (particularly for small councils) because the effort expended putting together each contribution plan was largely dependent on the rate of development. For example, if there was either a significant number of developments or a particularly large development, then the cost of

compiling a contributions plan would be much higher than in a council where there was infrequent, low value development. Where the latter was the case, those resources expended putting together a contributions plan would generally provide only a small return, or perhaps in some cases no return at all. Because data on the rate of development were not available, the cost of constructing a contributions plan was classified according to council size. In general, small councils would spend approximately $20,000 if they were to put together a contributions plan as required under Section 94 of the Environmental Planning and Assessment Act.[3] A large council would spend from $100,000 to $150,000 on compiling their contributions plans. For small councils this represents 20 per cent of the mean developer contribution, which could be considered excessive, while for large councils the cost of putting together contributions plan represents only 4 to 6 per cent of the mean contribution. This provides an argument for small councils using an alternative infrastructure funding mechanism, such as an *ad valorem* tax. To establish what factor (whether it be absolute population, population growth, or the value of residential development) should be used to determine which councils can implement an *ad valorem* tax rather than Section 94, econometric techniques have been utilised.

The Ad Valorem Tax

The type of *ad valorem* tax this paper is recommending will reflect locational cost variation. For example, the contribution for openspace will be some function of the value of land (eg. 0.01(value of 1/4 acre block)). This would mean that in an area where land is cheaper the contribution for openspace would be lower than in an area where land was more expensive.

If a council deemed that a particular development was placing an excessive strain on urban infrastructure it would be able to place an additional charge on top of the *ad valorem* tax. However, to extract this additional charge a process similar to that used with Section 94 should be followed. For example, nexus, apportionment and the catchment must be shown. By giving councils the opportunity to use this extra charging system they will be able to extract the appropriate contribution from developers if there is a particularly large one-off development.

For some councils an *ad valorem* tax is a much more administratively efficient way to levy developers. This is because the council will not have to sink a vast number of resources into compiling a contributions plan which is currently needed before it can levy developers. This will make it more cost effective for councils to levy developers for the increase demand on infrastructure generated from the development in question. In an effort to gauge which councils should implement an *ad valorem* tax rather than Section 94 we engaged in an elementary econometric analysis.

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[3] These figures include both direct and indirect costs.

Relationship Between Total Section 94 Contributions and Other Variables

The primary limitation of this econometric analysis is the general lack of data with respect to local government finance. This means that important variables were either not available or prohibitively costly to obtain. Two key variables which would have benefited this exercise are the rate of growth of development and the number of developments by local government area. This data is important because the rate of growth of development is expected to have a strong relationship with Section 94 contributions. If these statistics were available, then we could have explored the relationship between developer contributions and the rate of development. Consequently, a policy which recommends an *ad valorem* tax for councils below a certain rate of development could have been analysed. However, because the data was not available, this relationship could not be analysed. Instead the relationships between Section 94 and other variables, such as absolute population, population change and the value of residential building, were examined. This was done in an effort to determine which councils do not utilise Section 94 and to give some indication of which councils should use an alternative, such as an *ad valorem* tax.

Other variables which may have been influential but were not collected either due to financial or time constraints include mean income per capita by local government area, population density, geographic location, climate, demographic characteristics and some qualitative measure of political factors. While these variables are likely to influence the total Section 94 contributions their effect is likely to be relatively insignificant. Moreover, due to their very nature they would also not be able to be used as a yard-stick for determining which councils should use an *ad valorem* tax instead of Section 94. Another limitation of the study is that only one year of data was collected. Consequently any long term trends cannot be discerned.

$$\begin{aligned} STOT = {} & \alpha + \beta_1 WAT + \beta_2 SEW + \beta_3 JOI + \beta_4 PAV + \beta_5 KER + \beta_6 OTH + \beta_7 GWAT \\ & + \beta_8 GSEW + \beta_9 GCOM + \beta_{10} GROA + \beta_{11} GOTH + \beta_{12} GOP + \beta_{13} RATE + \\ & \beta_{14} USER + \beta_{15} POP + \beta_{16} PCH + \beta_{17} RHOUS + \beta_{18} ROTH + \beta_{19} NONRE + \\ & \beta_{20} TOUR + u \end{aligned}$$

Where:

α _ Constant,

β_n _ Coefficient for each variable (n = 1- 20),

STOT _ Total Section 94 contributions and donations (000's),

WAT _ Contributions and donations for water in (000's),

SEW _ Contributions and donations for sewarage in (000's),

JOI _ Contributions and donations for joint works (works with other councils) in (000's),

PAV _ Contributions and donations for paving in (000's),

KER _ Contributions and donations for kerb and gutter (000's),

OTH _ Contributions and donations for areas other than the aformentioned (000's),

GWAT _ Grants provided for the aquisition of the asset- water suppilies (000's),

GSEW _ Grants provided for the aquisition of the asset- sewerage services (000's),

GCOM _ Grants provided for the aquisition of the asset- community centre (000's),

GROA _ Grants provided for the aquisition of the asset- roads and bridges (000's),

GOTH _ Grants provided for the aquisition of the asset- other than the aformentioned (000's),

GOP _ Total of grants provided for operating purposes (000's),

RATE _ Total revenue from rates and extra charges (000's),

USER _ Total revenue from user charges (000's),

POP _ Estimated residential population at 30 June 1993,

PCH _ Estimated residential population change 1992-93,

RHOUS_ The value of new residential buildings- housing (000's),

ROTH _ The value of new-residential buildings- other than housing (000's),

NONRE_ The value of non residential buildings (000's),

TOUR _ Takings from tourist accommodation for the year 1993 (000's),

To establish how well this model had captured the variation in total Section 94 contributions, given its limitations, R^2 was calculated. The R^2 value was approximately 0.65. This means that the model only accounted for 65 percent of the variation in total Section 94 contributions. Since the model contains 21 variables, and since as the number of variables increases so too does the R^2, this is disappointingly low.

To reduce the upward bias in the R^2 value, due to the large number of variables, a second regression was run. This model included only five key variables: RATE, POP, PCH, RHOUS, and NONRE. The R^2 value then fell to 0.52. The key variables thus explained only 52 per cent of the variation on total Section 94 contributions. Because the model explained only a small amount of the variation in Section 94 contributions, regression analysis was not pursued any further. Rather a correlation matrix was generated. The results are displayed in Table 2 below.

Table 2

The coefficient of correlation (p) was calculated to determine how strong a linear relationship existed between total Section 94 contributions and other variables (ie. Section 94 contributions and absolute population). The resultant matrix was based on 177 observations (ie. all New South Wales councils) and 31 variables. The components of Section 94, as well as the total, were included in this matrix to see if any sub-component in particular was responsible for those relationships which did exist.

The strongest correlation (p) with respect to total Section 94 contributions was with the value of new residential housing (RHOUS). The strength of the association between these two variables was 0.67. This relationship can be largely attributed to sub-components of openspace, community facilities and drainage, whose correlation with the value of new residential housing is 0.74, 0.69 and 0.53 respectively. Section 94 and absolute population (POP) also exhibited a relatively strong positive correlation with p= 0.53. Two components openspace (p=0.710) and community facilities (p= 0.56) are the primary cause for this relationship. The revenue for rates and user charges are also fairly strongly positively correlated with p=0.49 and 0.45 respectively. It was anticipated that population growth would capture to some extent the rate of development which is likely to have a relatively high correlation with the total Section 94 contribution. For this reason population growth was expected to be highly correlated with total Section 94 contributions. However, its correlation coefficient was only 0.31. This might suggest that population growth does not necessarily imply a high rate of development.

It is worth noting that as a general rule of thumb multicolinearity is a problem if the simple correlation coefficient (p) between any two variables is greater than 0.8 (Gujarati, 1988, pp.298-302). This is the case with both non-residential housing and absolute population where p = 0.84, as well as with development where p =0.86. The problem with such rules of thumb is that high simple correlation coefficients are a sufficient but not necessary condition for the existence of multicolinearity. Multicolinearity can exist even though the simple correlation coefficient between pairs of variables may be quite low. This is because a non-linear association will not be detected using simple correlation coefficients. Finally, a simple correlation coefficient between pairs of variables may not pick up linear associations between three or more variables (Judge *et al.*, 1988, pp.859-886; Grujarati, 1988, pp.298-302).

Having established those factors which are relatively strongly correlated to Section 94, we can now say that two variables which appear to be an appropriate yardstick for determining which councils should implement Section 94, and which should use an *ad valorem* tax instead are absolute population and the value of new residential housing. In short, either of these two variables may be used a yardstick. For example, councils experiencing less than a certain value of new residential housing (ie. $1,000,000) do not have to use Section 94 to levy developers.

Instead they could use a less administratively costly method, such as an *ad valorem* tax on the value of new development.

Concluding Remarks

This paper has sought to show that Section 94 does not appear to be a viable financing policy for certain councils. It was suggested that for some councils an *ad valorem* tax appears to be a better means of levying developers for urban infrastructure. To determine which councils should use an *ad valorem* tax the relationship between Section 94 and other variables was examined. It was shown that Section 94 had a strong relationship with absolute population and the value of new residential housing. It was then suggested that either of these two variables act as a gauge for establishing a threshold so that those councils which fell below that threshold would not have to levy Section 94. They could instead levy an *ad valorem* tax.

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TABLE 1: TOTAL SECTION 94 CONTRIBUTIONS FOR ALL NSW COUNCILS

COUNCIL SIZE	LAOMPB	ROADWORKS	DRAINAGE	TRAFFIC	PARKING	OPENSPACE	COMMUNITY	OTHER	TOTAL
SMALL COUNCILS (Population≤7,000) NUMBER OF COUNCILS (67)									
TOTAL	11 000.00	4 154 000.00	924 000.00	16 000.00	70 000.00	948 000.00	352 000.00	222 000.00	6 697 000.00
MEAN CONTRIBUTION	164.18	62 000.00	13 791.04	238.81	1 044.78	14 149.25	5 253.73	3 313.43	99 955.22
STANDARD DEVIATION	971.18	274 721.24	100 935.55	1 222.79	5 320.85	71 817.19	20 615.41	12 154.73	457 544.60
COEFFICIENT OF VARIATION(%)	591.54	443.10	731.89	512.04	509.28	507.57	392.40	366.83	457.75
PER CAPITA CONTRIBUTION	0.04	14.93	3.32	0.06	0.25	3.41	1.27	0.80	24.07
MEDIUM SIZE COUNCILS (population >7,000 and <40,000) NUMBER OF COUNCILS (65)									
TOTAL	370 000.00	18 924 000.00	5 045 000.00	320 000.00	1 680 000.00	6 429 000.00	3 209 000.00	4 166 000.00	40 143 000.00
MEAN CONTRIBUTION	5 692.31	291 138.46	77 615.38	4 923.08	25 846.15	98 907.69	49 369.23	64 092.31	617 584.62
STANDARD DEVIATION	28 168.68	1 142 012.27	361 973.93	12 593.41	71 559.60	313 489.18	118 407.71	220 109.04	1 843 447.68
COEFFICIENT OF VARIATION(%)	494.86	392.26	466.37	255.80	276.87	316.95	239.84	343.43	298.49
PER CAPITA CONTRIBUTION	0.30	15.31	4.08	0.26	1.36	5.20	2.60	3.37	32.47
LARGE COUNCILS NUMBER OF COUNCILS (45) (population ≥40,000)									
TOTAL	12 697 000.00	20 579 000.00	8 539 000.00	1 540 000.00	6 092 000.00	36 211 000.00	18 472 000.00	5 593 000.00	109 723 000.00
MEAN CONTRIBUTION	282 155.56	457 311.11	189 755.56	34 222.22	135 377.78	804 688.89	410 488.89	124 288.89	2 438 288.89
STANDARD DEVIATION	1 112 114.42	1 389 693.71	493 473.55	66 090.81	366 161.61	924 995.78	623 520.81	334 623.68	3 289 112.14
COEFFICIENT OF VARIATION(%)	394.15	303.88	260.06	193.12	270.47	114.95	151.90	269.23	134.89
PER CAPITA CONTRIBUTION	2.96	4.80	1.99	0.36	1.42	8.45	4.31	1.31	25.60
			0.00						
ALL 177 NSW COUNCILS									
TOTAL	13 078 000.00	45 733 000.00	15 340 000.00	1 878 000.00	7 853 000.00	43 984 000.00	22 186 000.00	9 977 000.00	160 027 000.00
AVERAGE	73 887.01	258 378.53	86 666.67	10 598.87	44 367.23	248 497.18	125 344.63	56 367.23	904 107.34
STANARD DEVIATION	574 042.63	1 020 708.42	348 887.23	36 927.67	197 269.68	602 495.01	363 754.42	220 404.14	2 232 376.36
COEFFICIENT OF VARIATION(%)	776.92	395.04	402.56	348.41	444.63	242.46	290.20	391.01	246.91
PER CAPITA CONTRIBUTION	2.25	7.89	2.64	0.32	1.35	7.58	3.83	1.72	27.59

LAOMPB -Land and other material public benefit

COEFFICIENT OF VARIATION =[standard deviation/mean](100)

For a full explanation of the catagories of infrastructure see appendix two

TABLE 2: CORRELATION MATRIX

177 OBSERVATIONS
31 VARIABLES

KEY (see also the key on the previous two pages)
SLAO- Section 94 contributions for land and other material public benefits (000's)
SROA- Section 94 contributions for roadwork (000's)
SDRA- Section 94 contributions for Drainage (000's)
STRA- Section 94 contributions for traffic facilities (000's)
SPAR- Section 94 contributions for parking (000's)
SOPE- Section 94 contributions for openspace (000's)
SCOM- Section 94 contributions for community facilities (000's)
SOTH- Section 94 contributions for other infrastructure (000's)

	SLAO	SROA	SDRA	STRA	SPAR	SOPE	SCOM	SOTH	STOT	WAT	SEW	JOI	PAV	KER	OTH	TOT
SLAO	1															
SROA	9.07E-02	1														
SDRA	0.14756	0.6547	1													
STRA	8.07E-02	0.14277	4.55E-02	1												
SPAR	0.83746	0.10584	0.17282	0.10271	1											
SOPE	0.30695	0.38672	0.679	0.1824	0.28793	1										
SCOM	0.47786	0.16763	0.38311	4.28E-02	0.56457	0.62853	1									
SOTH	6.86E-02	7.73E-02	0.18973	-3.99E-02	4.71E-02	0.21636	0.2592	1								
STOT	0.56578	0.73099	0.77197	0.17092	0.55629	0.78377	0.66903	0.28576	1							
WAT	-2.76E-02	0.22422	0.12226	-5.09E-02	1.76E-02	0.25205	0.32436	7.56E-02	0.24326	1						
SEW	-3.30E-02	0.41502	0.24109	-6.28E-02	5.23E-02	0.38171	0.50671	9.13E-02	0.4164	0.58692	1					
JOI	-1.56E-02	4.17E-02	0.55438	-3.55E-02	-2.17E-02	0.38339	0.23804	0.16193	0.25702	-2.87E-02	8.59E-04	1				
PAV	0.11036	6.58E-03	-9.72E-03	3.09E-02	-9.57E-03	6.38E-02	8.80E-02	-2.10E-02	5.92E-02	6.58E-02	8.22E-02	-9.00E-03	1			
KER	-4.28E-03	1.02E-02	-1.93E-02	-2.69E-02	7.63E-04	1.84E-03	8.18E-02	-1.58E-03	1.39E-02	0.25103	0.1606	-1.88E-02	0.23358	1		
OTH	7.91E-02	3.42E-02	0.11294	5.78E-02	4.51E-02	0.23438	0.23617	5.49E-02	0.16596	0.18753	0.26661	6.14E-02	0.17671	0.20021	1	
TOT	3.30E-02	0.22501	0.18231	-6.29E-03	4.63E-02	0.34975	0.42547	8.71E-02	0.31597	0.71565	0.69071	3.16E-02	0.2594	0.42152	0.7668	1
GWAT	-4.00E-02	2.93E-02	-5.62E-04	-8.91E-02	-2.15E-02	9.41E-02	0.162	1.73E-02	5.32E-02	0.51038	0.37171	-1.58E-02	3.38E-02	0.26275	0.19314	0.45989
GSEW	-3.56E-02	0.14277	0.11227	-6.46E-02	-3.09E-02	0.18564	0.27666	7.64E-03	0.16559	0.43232	0.64929	-3.84E-02	7.57E-02	0.40198	0.42332	0.65741
GCOM	2.25E-02	9.71E-02	0.11061	-1.24E-02	6.99E-02	0.21527	0.23582	3.03E-02	0.17291	7.00E-02	9.21E-02	-3.38E-02	7.61E-04	1.20E-02	0.17963	0.15822
GROA	6.38E-02	0.13868	0.44033	8.50E-02	0.12331	0.4905	0.51374	0.15054	0.3918	0.13743	0.24884	0.56036	0.10419	1.32E-02	0.40145	0.3701
GOTH	4.60E-02	8.34E-02	0.30079	0.17902	0.12347	0.34364	0.34107	6.38E-02	0.26543	0.13423	0.20057	0.25147	0.19959	0.19151	0.39762	0.38291
GTOT	4.16E-02	0.1588	0.40173	9.70E-02	0.12045	0.49529	0.5407	0.11217	0.39109	0.32489	0.44024	0.37674	0.17097	0.23764	0.54395	0.61529
GOP	0.26274	7.21E-02	0.30153	0.19428	0.31461	0.51233	0.56363	0.11802	0.421	0.20428	0.27317	0.24385	0.24144	0.18892	0.44427	0.46062
RATE	0.2327	0.11627	0.28474	0.24	0.24482	0.5825	0.49019	0.34631	***0.45491***	0.18664	0.27284	0.20449	0.28397	0.25667	0.45441	0.47159
USER	0.157	0.22354	0.26556	0.14412	0.28004	0.52229	0.68007	0.28466	***0.49135***	0.44187	0.69555	0.10553	0.17041	0.22986	0.40273	0.64598
POP	0.31695	0.11943	0.35792	0.34915	0.35065	***0.71049***	***0.55838***	0.19338	***0.53128***	9.07E-02	0.16725	0.27957	0.20491	0.12232	0.45438	0.37966
PCH	5.94E-02	0.36267	0.26997	-1.57E-02	7.22E-02	0.16483	0.19001	9.84E-02	***0.3136***	0.17319	0.30971	6.75E-02	7.52E-03	0.12332	0.16708	0.26899
RHOUS	0.2974	0.32297	***0.52628***	0.28171	0.30108	***0.74297***	***0.68607***	0.18713	***0.66838***	0.285	0.4235	0.32504	0.23522	0.28233	0.51434	0.58805
ROTH	0.13645	5.94E-02	0.10114	0.17926	0.23985	0.27708	0.33921	0.31356	0.26369	3.45E-02	7.70E-02	4.06E-02	2.43E-02	2.35E-02	0.16913	0.13777
NONRE	0.23087	7.98E-02	0.19919	0.10055	0.21684	0.27418	0.37391	0.53614	0.33609	2.73E-02	6.02E-02	0.13842	6.41E-02	3.34E-02	0.18808	0.14675
TOUR	6.91E-02	6.96E-04	-8.54E-03	-2.40E-02	1.75E-02	4.40E-03	0.12531	0.44405	8.37E-02	1.95E-02	3.88E-02	-1.65E-02	0.19949	3.51E-02	9.58E-02	9.34E-02

(CONT)

	GWAT	GSEW	GCOM	GROA	GOTH	GTOT	GOP	RATE	USER	POP	PCH	RHOUS	ROTH	NONRE	TOUR
GWAT	1														
GSEW	0.35685	1													
GCOM	2.09E-02	5.03E-02	1												
GROA	5.82E-02	0.14535	0.13665	1											
GOTH	0.10264	0.32765	9.16E-02	0.47601	1										
GTOT	0.3294	0.52375	0.27789	0.77768	0.82778	1									
GOP	0.10479	0.20226	0.17277	0.60037	0.65344	0.69981	1								
RATE	9.24E-02	0.29853	0.24737	0.48086	0.63319	0.66324	0.67341	1							
USER	0.2598	0.46809	0.18511	0.41145	0.43531	0.58829	0.59132	0.66465	1						
POP	-5.26E-03	0.13813	0.31283	0.59428	0.63234	0.67504	0.74037	***0.83756***	0.59626	1					
PCH	0.15724	0.27021	7.83E-02	0.13901	0.11804	0.22454	0.13701	9.61E-02	0.19391	6.09E-02	1				
RHOUS	0.18333	0.34176	0.32364	0.62025	0.51231	0.7065	0.68626	0.70942	0.64052	0.78383	0.33932	1			
ROTH	-3.70E-02	3.73E-02	0.48553	0.21544	0.36472	0.3596	0.30985	0.6047	0.40224	0.51643	1.94E-02	0.3408	1		
NONRE	8.75E-03	6.24E-02	0.10293	0.21291	0.23827	0.25032	0.24641	0.64143	0.35766	0.34416	7.28E-02	0.28559	0.57569	1	
TOUR	1.49E-02	5.22E-02	9.77E-03	-1.07E-02	6.30E-02	4.13E-02	3.09E-02	0.46944	0.24241	5.36E-02	5.68E-02	4.46E-02	0.41669	***0.85835***	1

Figure One

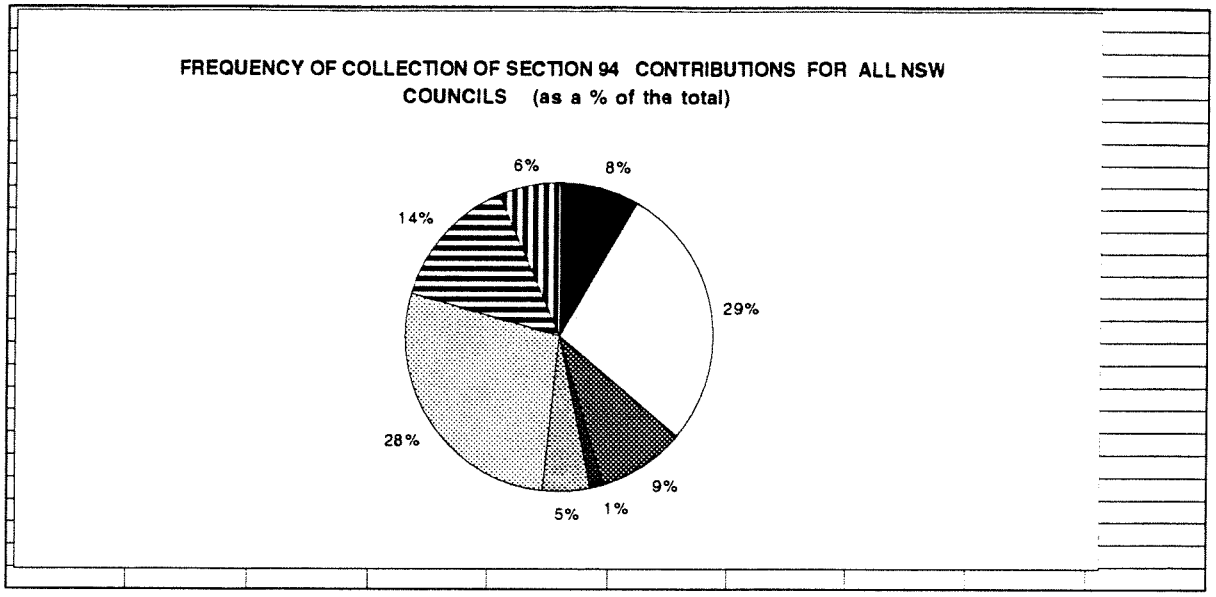

FREQUENCY OF COLLECTION OF SECTION 94 CONTRIBUTIONS FOR ALL NSW COUNCILS (as a % of the total)
6%
8%
14%
29%
28%
9%
5%
1%

Figure Two

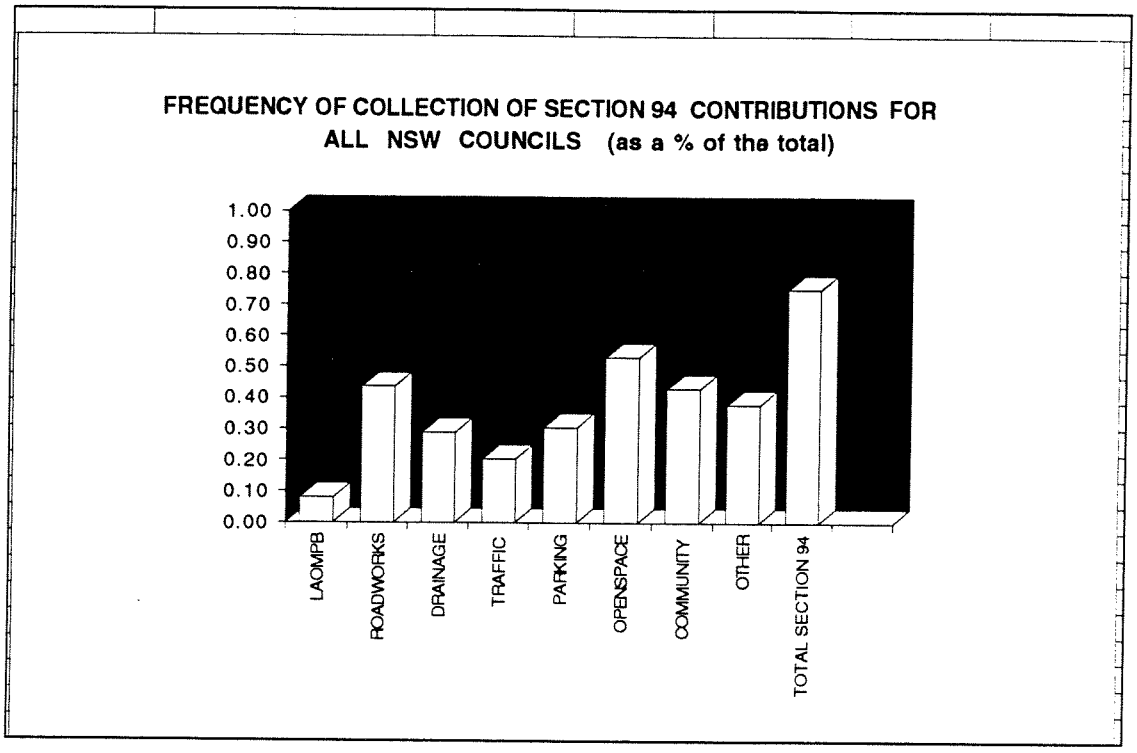
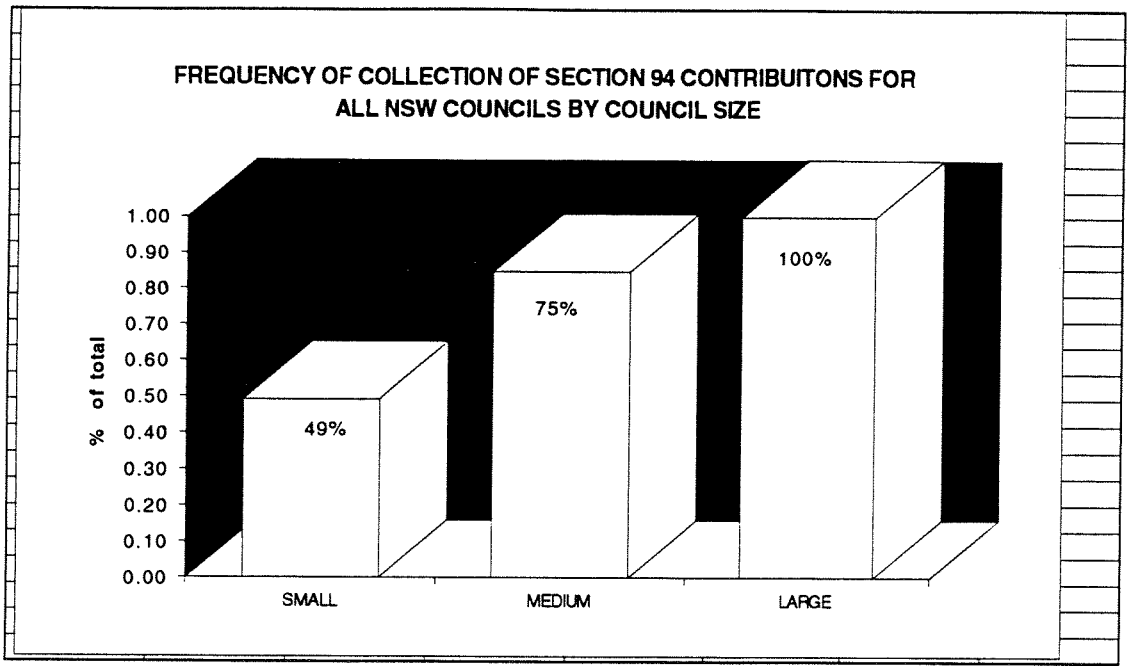

FREQUENCY OF COLLECTION OF SECTION 94 CONTRIBUTIONS FOR ALL NSW COUNCILS (as a % of the total)
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
LAOMPB
ROADWORKS
DRAINAGE
TRAFFIC
PARKING
OPENSPACE
COMMUNITY
OTHER
TOTAL SECTION 94

Figure Three



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