Bicycle Theft

RESEARCH PROJECT

A REPORT TO THE
STATE BICYCLE COMMITEE

by Loder & Bayly

BICYCLE THEFT RESEARCH PROJECT

Report to the State Bicycle Committee of Victoria by Loder & Bayly Pty. Ltd., Planning & Design, Engineering and Landscape Consultants, 79 Power St., Hawthorn. 3122.

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HAYES, H. 1984. Preliminary Study of Bicycle Theft, Report to State Bicycle Committee.

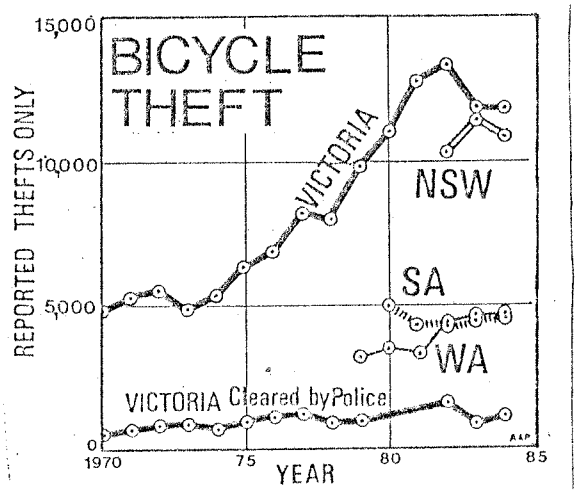
STATE BICYCLE COMMITTEE. 1985. Bicycle Theft Research Project Brief.

SUMMARY

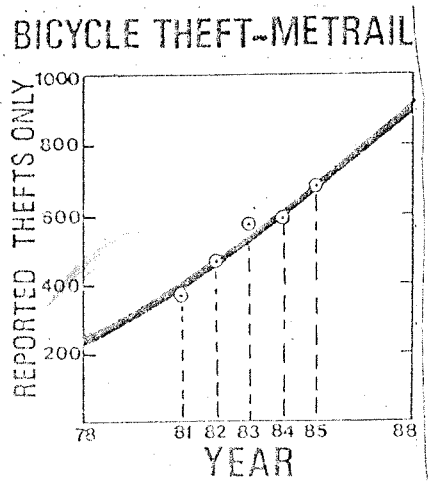
THE NATURE AND EXTENT OF BICYCLE THEFT

Reported bicycle thefts in Victoria have averaged almost 12,000 per annum in recent years. This represents a rate of approximately 300 per 100,000 population. Including an allowance for unreported thefts, over $3,000,000 worth of bikes are stolen annually.

Few bike thefts are cleared by the Police (7.5% in 1984). Few found bikes are returned to their owners because most cyclists cannot give an accurate description of their bike.



Almost half the stolen bicycles are stolen from around houses. Juveniles also commonly steal from outside shops, schools and centres of entertainment. Adult thieves appear to steal primarily from shopping centres and railway stations. Reported theft from stations has increased dramatically in recent years.



Over half the stolen bikes are men's 10 speed racers and 30% are BMX bikes. The median value is about $225, 40% are less than one year old.

Adult thieves steal bikes to sell them for cash, sometimes to buy drugs. Sales are usually made through dealers. Adult thieves use bolt cutters to cut chains.

Juveniles mainly steal bicycles for stripping down (46%) and riding (29%). They wish to have a bike of their own or make improvements to their bike.

The Victorian bike-marking scheme does not deter thieves but some juvenile thieves dump stolen bikes if they find they have been marked. The scheme helps Police to re-unite found bikes with their owners.

RECOMMENDATIONS

The study of the nature and extent of bike theft has revealed where counter-measures can best be directed. Eight measures are recommended to reduce bike theft and improve the rate of return of stolen bikes to their owners. They are briefly described in their recommended order of priority. The following chart illustrates where they would impact on the bicycle theft network.

Highest Priority Actions

A registration scheme which covers all bicycles is recommended. It would involve the licensing of bicycle retailers who would be required to number every bicycle they sold. It would be illegal to own or resell a bike without a legible number. The scheme would enable all found bikes to be returned to their owners, outlets for stolen bicycles to be curtailed and suspicious circumstances to be readily checked.

Programs are recommended to educate the public about:

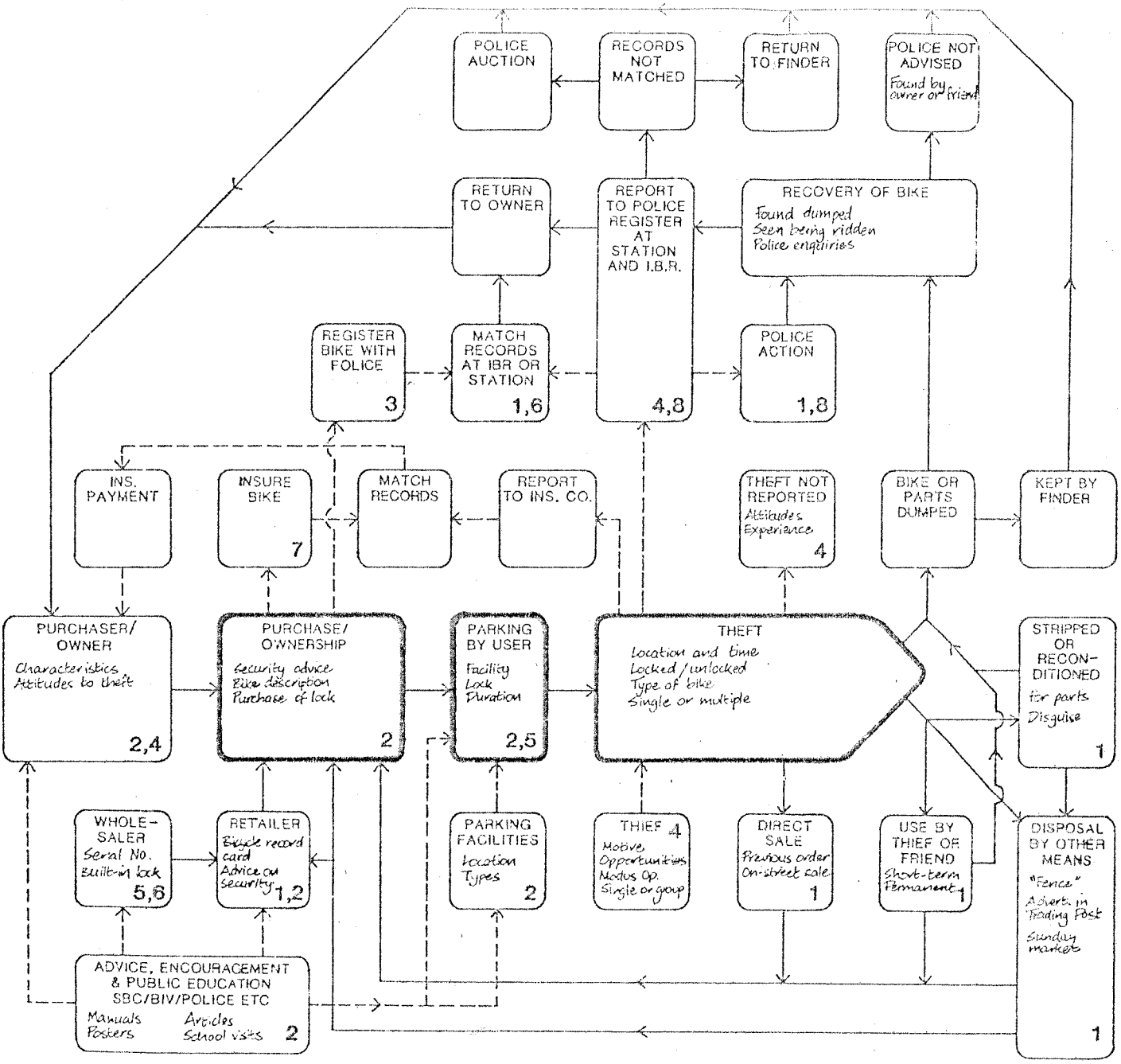
- when a bicycle is most vulnerable to theft
- how best to protect a bicycle when parked
- the need to keep an accurate description of the bike

The education and encouragement of the MTA to provide facilities for secure bike storage at stations is strongly recommended. Stations are a major and growing target of adult bike thieves.

Second Highest Priority Action

20% of stolen bikes are parked for less than fifteen minutes. Built-in locks are a convenient way of providing security for short-term parking. Modification of the SAA Standard to require all new bicycles to have built-in locks and serial numbers is strongly recommended.

1 REGISTRATION SCHEME
2 PUBLIC EDUCATION
3 COMPUTERISED DATA BANK
4 ATTITUDINAL CHANGES
5 BUILT-IN LOCKS
6 SERIAL NUMBERS
7 INSURANCE SCHEMES
8 MONITORING OF RECORDS



PROPOSED BICYCLE THEFT COUNTER-MEASURES

Computerisation of the Police data bank on stolen bicycles is also strongly recommended. It would not only assist with the matching of records but enable efficient monitoring of bike theft.

Adult thieves often appear to carry out multiple thefts from a limited number of locations. Close monitoring of theft records at division level would highlight any sudden increase in bike theft at a location such as a railway station indicating that a particular thief may be active at that location and that special surveillance is warranted.

Third Highest Priority Actions

The high level of bicycle theft and low rate of return of stolen bicycles is causing higher premiums. The report recommends that the State Bicycle Committee or Bicycle Institute of Victoria should liaise with Bicycle Australia about the feasibility of their new insurance scheme providing lower premiums for cyclists who use a U-lok.

An evaluation of the likely value of an advertising program aimed at modifying the attitudes of potential juvenile bike thieves is also recommended.

The following chart shows the recommended counter-measures, their priority for action and an estimate of the man-weeks required to initiate them, either by State Bicycle Committee staff or some alternative agency proposed by the Committee.

Theft Counter-Measure	Priority	Man-weeks to Initiate or Implement
Universal Bicycle Registration Scheme	1	12 - study 30 to 40 setting up
Public Education Programs	1	10 per annum for 2 years
Encouragement of MTA to Provide Secure Facilities	1	3
Modification of SAA Standard	2	6
Support for Computerisation of Police Data Bank	2	2
Encouragement of Police to Closely Monitor Bike Theft	2	1
Liaison with Bicycle Australia about Insurance Scheme	3	1
Evaluation of Programs to Change Attitudes towards Bike Theft	3	10

INTRODUCTION

About 12,000 bicycle thefts are reported in Victoria annually. The median value of these stolen bikes is approximately $225. Taking into account unreported bike thefts too, well over $3,000,000 worth of bicycles are stolen in Victoria each year. Only 10 to 15% of these bikes are recovered and considerably less than half of these are reunited with their owners.

The pattern is similar in other Australian states, with bike theft representing about 4% to 5% of all reported crime. Yet little has been known about who steals bikes, why they steal them, how they steal them and what they do with them. This study was undertaken to investigate the nature and extent of bicycle theft leading to recommendations for short and long term actions to reduce cycle theft and increase the recovery rate of stolen bicycles.

The study was administered and supervised by the State Bicycle Committee of Victoria and funded by the Criminology Research Council.

This report sets out our appraisal of the bike theft scene. The investigations undertaken as the basis for that appraisal, and the resulting recommendations, are set out in the appendices to the report. These investigations included:

- a review of Victoria Police practices with respect to bicycle theft,
- a review of interstate and overseas practices with respect to bicycle theft,
- a survey of bike theft victims,
- a survey of the use of bicycle security devices,
- a survey of bike thieves,

Acknowledgements

In many aspects of the study we have been particularly dependent on the assistance of the Victoria Police. We wish to acknowledge the support of the Victoria Police Research Co-ordinating Committee, the assistance given by a variety of police officers and, in particular, the substantial assistance provided by Dr. McNeil, the Police Statistician.

We also wish to acknowledge the contribution to the study by members of the Research Sub-committee of the State Bicycle Committee and by our sub-consultants. Both sub-consultants have contributed throughout the study but we particularly acknowledge the significant contributions by Dennis Challinger, through his analysis of bicycle theft by juveniles, and by Alan Parker to the bicycle theft victim survey and to the review of interstate and overseas practice.

THE NATURE AND EXTENT OF THE BIKE THEFT PROBLEM

The Extent of Reported Bicycle Theft

Reported bicycle thefts in Victoria have averaged almost 12,000 per annum for the past five years. This represents a rate of approximately 300 bikes per 100,000 people. Comparative figures for other Australian states are approximately:

N.S.W.	1982-84	11,000 p.a.	205 per 100,000
W.A.	1979-83	3,750 p.a.	288 per 100,000
S.A.	1980-84	4,475 p.a.	350 per 100,000

1982 figures for England and Wales give a rate of 252 per 100,000. English figures however exclude reported thefts if the bicycle is recovered and it is shown that there was no intention to permanently deprive the owner. The study by the Transport and Road Research Laboratory previously referred to, estimated that the theft figures should be increased by 15% to cover these cases. On this basis the estimated theft rate would be approximately 290 per 100,000.

The Extent of Unreported Bicycle Theft

We estimated from extensive ABS surveys in South Australia and Western Australia (see discussion under "Review of Interstate Practice").

We have subsequently carried out a door-knock survey of households in a number of Melbourne suburbs to obtain some first-hand information on the ratio of reported to unreported bicycle theft. This has shown, from a sample of 79 households which have had a bicycle stolen in the last five years, that 80% were reported.

Crime surveys provide useful data on the under-reporting of crime. The 1983 Crime Victim Survey of Australia by the ABS surveyed whether the police were notified of offences, but did not isolate bicycle theft. The results showed that 94% of motor vehicle thefts, 69% of break and enters and 26% of sexual assaults were reported.

The 1982 British Crime Survey did specifically cover bicycle theft and showed that 64% of bicycle thefts were reported in England and Wales and 66% in Scotland. It is interesting to note that the levels of reporting for both England and Wales and for Scotland respectively were 95% and 94% for the theft of a motor vehicle, 66% and 58% for burglary and 28% (no figure quoted for Scotland) for sexual offences. These figures are comparable to the Australian figures.

The variation between the 30% figure estimated for W.A. and S.A. and the 80% from our Victorian survey is extreme. It seems improbable that there would be such a major variation from state to state although the Victorian figure is of the same order as the English and Scottish figures so may not be a complete aberration. One possible explanation for the variation is that people are reluctant to admit that they have not reported a theft. Both the British and Victorian surveys asked about unreported thefts whereas the W.A. and S.A. figures are derived from general data. Variations in practice from area to area do not appear to fully explain the low level of non-reporting in Victoria. Our survey covered several areas and the pattern did vary from area to area. However samples in some areas were very small and firm conclusions could not be drawn. This is one area where further research is needed to obtain a more definitive answer.

The Reasons for not Reporting Bicycle Thefts

Responses to our Household Survey show that victims did not report bicycle theft for a wide variety of reasons. Principal reasons appear to be:

- the theft was victim's own fault
- the victim didn't think the police would find it
- the bike was found

Other reasons include:

- the victim had previously falsely reported a bicycle lost and been found out, so didn't think the police would believe him
- the victim forgot about it

The Australian Crime Victims Survey revealed the following main reasons for not notifying police of an offence under the category of "other theft", the category which would include bicycle theft.

Too trivial/unimportant	46%
Police could not/would not do anything about it	22%
Because someone else did	9%
Told someone else instead	6%
Private matter/would take care of it themselves	4%

The Clearance of Bicycle Theft Offences

Only a small proportion of reported bicycle thefts are cleared. Figures vary from around 5% in N.S.W. to 14% in England and Wales. The Victorian figure for 1984 was 7.5% cleared (that is, offenders apprehended) with a further 1.5% being reclassified as "No Offence", for example where it was discovered, after reporting a theft, that the bicycle had been borrowed.

The Matching of Found Bicycles and Owners

One of the starkest figures to emerge from this project has been the very small proportion of found bikes which are returned to their owners. We imagine that most cyclists would believe that, if their bicycle were stolen and subsequently retrieved by the police, they would get their bicycle back. This is very much not the case.

Unless the bicycle has been marked or the owner can quote a serial number or the make plus a detailed description, a matching will probably not be achieved. Accurate bicycle identification is essential for the successful matching of owner and bicycle.

A serial number is a simple way of identification but only a minority of cyclists have and can find a record of the number when they make a report.

The bicycle marking scheme overcomes this problem and allows a quick matching to occur.

Perceptions of Victims about Bicycle Theft

Responses appeared to reflect two main perceptions. One group of over 40% rates it as highly as a car theft or house breaking while another large group (35%) rated it less seriously than the theft of a colour T.V.

The Location of Bicycle Thefts

Most bicycles are stolen from around houses - the front porch, garden, sheds and garage. Juvenile thieves also commonly steal from outside shops, schools and centres of entertainment. Adult thieves appear to steal primarily from railway stations and shopping centres.

A comparison of the police reports and the victim survey reports was made with regard to those initially reported as being stolen from home. It was thought that this factor may have been inflated because of victims falsely stating that theft was from home to be eligible for insurance under a household policy. This comparison showed that there were three cases where bicycles were reported to the police as being stolen from home and reported to Loder & Bayly as being stolen from somewhere else. Only one of these was insured however.

Securing of Bicycles

Almost 80% of the theft victims surveyed had left their bicycles unlocked. Most of those who had locked their bike had used a chain which could be cut by bolt cutters or a cable.

From our small sample it appears that chains do not deter adult thieves unless they are resistant to bolt cutters. However some, if not most, juvenile thieves take unlocked bicycles in most cases.

Period for which Bicycle was Unattended

The survey of victims shows that it is not only bikes which are parked for lengthy periods that are vulnerable. While 60% of the stolen bikes were unattended for more than two hours, 14% were left for less than five minutes and 26.4% for less than half an hour.

The Use of Stolen Bicycles

Adult thieves appear to sell the bikes they steal. Sales are usually made through dealers, not directly to individuals. Juveniles mainly steal bicycles for stripping down (46%) and riding (29%). Only 3% are sold directly. Some stripping down is done to sell parts but the parts appear to be used mainly by the thieves and their friends.

Attitudes of Police to Reported Thefts

24% of victims found the police were not interested and responsive to their theft report. These victims generally experienced a casual attitude reflecting that the theft was a minor matter. 71.2% of victims found the police interested and responsible.

Motivations of Thieves

Our small sample of cases of adult thieves shows a pattern of stealing bicycles to sell them for income. In some cases the earnings are used to purchase drugs.

Juveniles appear to steal primarily to have a bike of their own or to make improvements to their bike. We do not have quantitative data but it appears that much of the stripping down of bicycles may be done to obtain a part (sometimes quite minor) which can be used to enhance their bicycle. On the other hand there are known cases of selling parts. In one case about ten youths were storing bicycles in two houses, stripping them down and reassembling them for sale to other youths.

Challinger in his survey of bicycle theft by juveniles concludes that "... the solitary offender it seems, may not view the misappropriation of another's bicycle as all that serious, especially if that form of behaviour is common in his community. And the prevalence of bicycle abuse appears to be considerable in some areas. That in turn may be traced back to the social necessity amongst young people to have one's own wheels".

THE EFFECTIVENESS OF BIKE MARKING SCHEMES

Most found bikes are not re-united with their owners. They are either returned to the finder or auctioned. If they could be accurately identified and the owners could give an accurate description when reporting their loss, the return rate would be greatly improved.

Our victim survey shows that most owners do not keep records of the details of their bike. With certain encouragement measures more owners could be influenced to keep records but there would always be a proportion who would not keep a record or be able to find any record that they might have kept.

The bike marking scheme overcomes this problem by creating a unique identification for each bike and providing a record of that identification which can be readily located at any time. Thus, if a marked bike is found, its owner can be quickly identified.

A marked number to enable a positive identification can help more than the Police. Victims have told us how they have seen their stolen bike being ridden in the street. Another reported going to a bicycle shop to buy a new bike and seeing their stolen bike there for sale. Identification would be straight-forward in such cases if the bikes were registered.

Being able to match a found bike with its owner helps not only the owner. It can reduce the time of police officers spent on investigations and paper work, it reduces the problem of found bikes cluttering up police stations and avoids an insurance settlement where bikes have been insured.

The members of Victoria Police whom we have interviewed both at the Information Bureau and in the Police Stations are all supportive of the current scheme as they see the difficulty of re-uniting a bike with its owner as a major problem.

The operation of the scheme appears to be very dependent on whether there is a particular commitment from one or more officers or whether a local service club takes the initiative to foster the scheme. The typical pattern is for the Lions Club and McDonald's Restaurants to organise and promote one or two days per year when bikes are marked. Some stations will also mark bicycles when they are brought to the station, (some of these nominate specific times for bike-marking) and police will visit a school or other location, when requested, to mark bikes. Other service clubs, for example Apex and Rotary, sometimes take the organising role. In some areas no service clubs participate.

Opinions vary amongst police officers on the value of the system in preventing theft. Some consider that thieves are in too much of a hurry to inspect a bike for a number and that, in any case, this could be ground off later. Others claim that very few marked bikes had been reported stolen and that therefore it must be a deterrent.

Opinions also vary within our small sample of thieves. One juvenile - the organised bicycle thief - said that he didn't have time to check if a bike was marked. If he subsequently found that it was marked he would dump it immediately. Of the other five juveniles two did not know of the scheme. The others felt that they would not take a marked bike.

The police officers who gave us information on cases of bicycle theft by adults commented in relation to the marking scheme in two cases. In both they considered that the marking would not be a deterrent as the thief moves quickly to free the bike and ride it away.

It was expected that the victim survey would give some indication of the effectiveness of the bike marking scheme. However the survey produced a sample of only two bikes found by the police and returned to the owners. One had been marked by the scheme and one had not.

The strengths of the scheme are that:

- it enables a matching without any dependence on the owner to provide accurate information; in fact bikes are sometimes returned to owners by the Police prior to the theft being reported. In these cases the theft and the recovery are not recorded. Thus the statistics understate the proportion of stolen bicycles which are returned to their owners;

- it can be operated without appointing any additional manpower or creating any new organisation;

- as a by-product it creates the opportunity for safety checks and public education on matters associated with cycling e.g. road safety, bicycle security;

- it also creates an opportunity for the public and particularly children to have positive contact with the police.

Weaknesses of the scheme are that:

- thieves cannot quickly see if a bike has been marked so are not deterred by it being marked;

- the number marked on the bike can be removed and, even the evidence that a number has been removed, can be hidden by repainting the frame; if stamps or dies are used, extensive filing is required to remove the number and a flat spot may be evident however;

- the marking or engraving damages the paint creating a potential rust spot;

- marking tends to take place on certain planned occasions. If an individual wants to go and get his bike marked one day it may not be possible. For example the dies may not be at the station. They are sometimes held by the service club which purchased them;

- only the frame is marked so that other parts of a stolen bicycle can still be readily sold or used;

- the records are not always treated with sufficient care. In contacting police stations to get information about the number of bicycles that had been marked, it was found that some stations could not find their register.

Improvements to the scheme should include:

- provision of a transfer which can be prominently displayed on the bike to indicate that it has been marked;

- the availability at all police stations of the dies so that the bike can be marked readily when a cyclist calls at the station;

- the use of dies in preference to engravers which do not make a deep enough impression;

- some central co-ordination of the scheme. This would show where few or no bikes were being marked and enable the relevant stations and their local service clubs to be urged to be more active. This co-ordination would also be necessary if any future monitoring scheme required data from the scheme.

Sample copy of a transfer issued when a bicycle is registered with a marked number in Minnesota.

A survey was carried out to investigate whether there was evidence that bike marking reduced bike theft. The ten police districts with the highest 1984 theft rates and the ten with the lowest 1984 theft rates were surveyed to gain information on the level of bike marking achieved. The data is set out in the following table.

The information cannot support an hypothesis that bike marking reduces bike theft. With the notable exceptions of Bentleigh East and Altona North, marking rates are relatively high (3,750 to 8,350/100,000) in the Divisions with high theft rates and relatively low (1,500 to 2,450/100,000) in the Divisions with low theft rates. The figures tend to point to a situation where cyclists are keen to have their bike marked and/or the scheme is more vigorously pursued in areas where bike theft is more prevalent.

BIKE MARKING IN SELECTED DIVISIONS

Police Divisions	Bike Thefts per 1000,000 pop. in 1984	Thefts reported in 1984	Thefts cleared in 1984	Total no.of bikes marked	Markings per 100,000
Mordialloc	499	315	20	4,000	6,405
Hampton	477	272	8	N/A	N/A
Frankston	466	442	21	7,940	8,343
Springvale	462	370	7	4,000	5,091
Bentleigh East	460	280	11	555	921
South Melbourne	460	154	18	(Up to 400 this year	
Williamstown	444	110	7	1,443	5,593
Brighton	442	231	6	2,059	3,959
Altona North	421	309	31	420	523
Oakleigh	383	236	13	2,193	3,768

* *

Police Divisions	Bike Thefts per 1000,000 pop. in 1984	Thefts reported in 1984	Thefts cleared in 1984	Total no.of bikes marked	Markings per 100,000
Heidelberg	181	170	4	1,502	1,606
Brunswick	177	79	0	N/A	N/A
Richmond	167	41	0	(Very few bikes marked)	
Greensborough	143	140	5	1,400	1,523
Cranbourne	139	87	6	1,086	1,675
Northcote	132	68	2	(No marking system)	
Coburg	125	70	2	(About 100 p.a.)	
Camberwell	107	75	2	1,580	2,261
Flemington	99	44	4	(About 20 this year)	
Lilydale	88	47	5	1,321	2,448

* *

SCOPE AND FORMAT OF STRATEGIC MODEL

The study sought to develop a 'model' for the systematic strategic analysis of bike theft. Such a model should highlight the characteristics of bicycle theft which are of strategic significance. It can be best presented as a network diagram, showing those key characteristics and the inter-relationships between them.

The key characteristics of bicycle theft include:

- type of thief (adult or juvenile)
- type of bicycle
- nature of theft (single or multiple)
- use of the stolen bicycle (for parts, for own use, for sale)
- volume of theft (monthly figures)
- distribution of theft (by District, Division or other category)
- how the bicycle was secured (unlocked, U-lok, etc.)
- return of the bicycle to the owner
- location of theft

A listing of some of the likely key elements of the model immediately highlights the daunting nature of establishing a functional strategic model. Whilst Victoria produces one of the most, if not the most, complete statistics on bike theft in Australia, additional data would need to be collated to firm up some components of the model, for example where the bicycles are stolen from. (Computerisation of the records would greatly assist here.) In addition there are other aspects which could only be quantified through complex special surveys, for example the assessment of the real nature of the bicycle thief as compared to the picture gained from analysing the thieves apprehended, which in itself is a difficult task.

The model could be used to assist in:

1. identifying where counter-measures are most appropriate,

2. monitoring how the nature of bike theft is changing, and

3. monitoring how counter-measures have influenced the nature of bike thefts.

Given that counter-measures will sometimes be introduced on a regional basis before going statewide, the model should desirably be capable of application to a region, e.g. a Police District, as well as to the whole of Victoria.

The diagrammatic form of a network diagram is the most suitable format for the model. Not only can it clearly indicate the elements and their interactions, it can also cope with the deficiencies of the data base by the use of various graphic treatments. For example, where the dividing line between sub-categories of an element is not known, dotted lines or overlapping tones can demonstrate that. Such a graphical treatment can even be tuned to readily indicate the degree of uncertainty.

A model which can be illustrated in graphical form is also amenable to the use of overlays to highlight variations from region to region if, for example, the elements of the network are drawn to scale and the strength of the link between two elements is represented by the thickness of line linking the elements in the diagram.

Two diagrammatic models were developed and are described in the following pages. The first is a network diagram showing all the actors and actions in the bicycle theft scene. (This diagram has been developed from an initial network prepared by Ron Shepherd, a Melbourne bicycle activist).

The second is a diagram of the key characteristics of bicycle theft which are fundamental to the introduction of counter-measures and the monitoring of the effects of those counter-measures.

MODEL 1: THE BICYCLE THEFT NETWORK

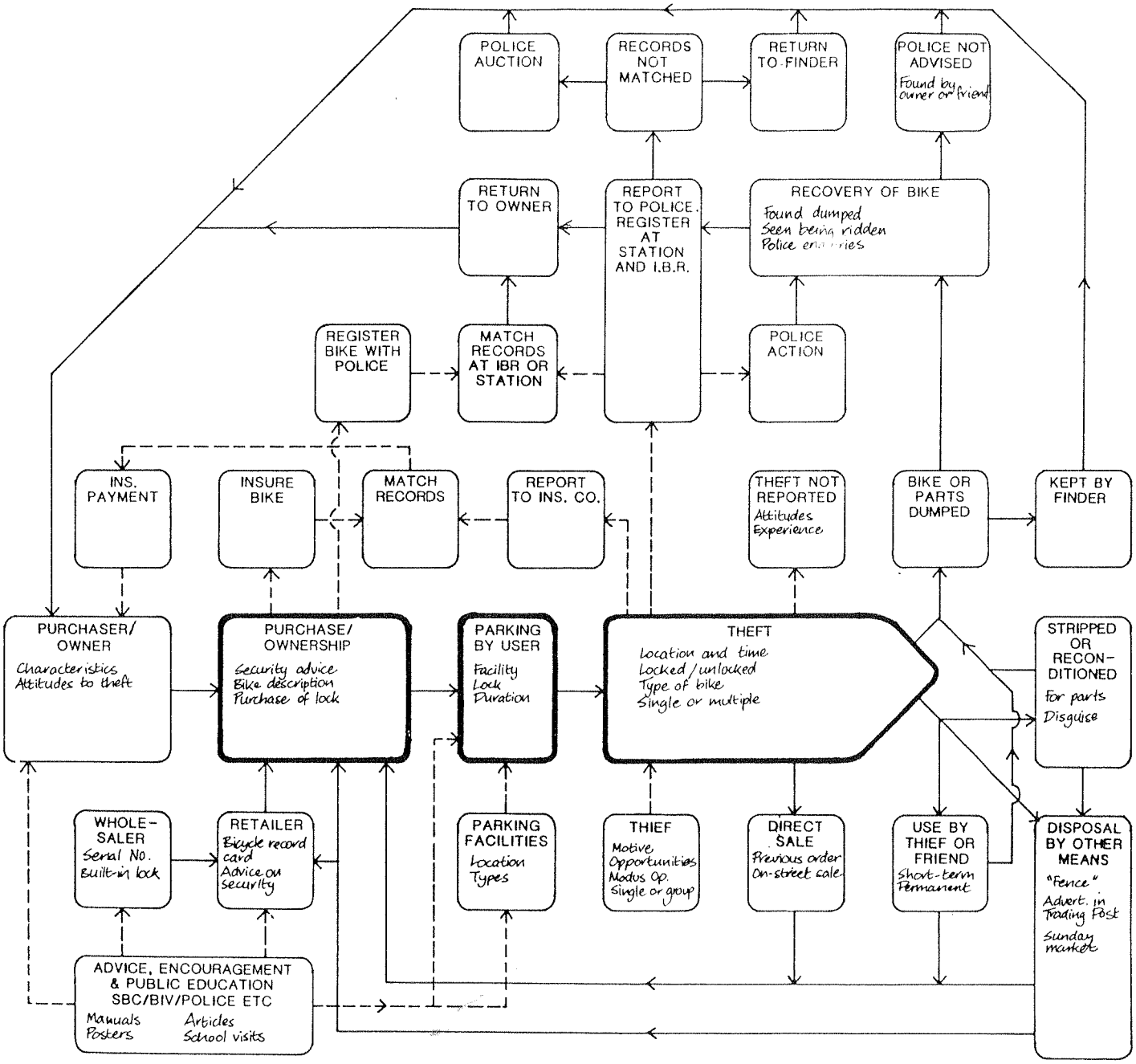
The following network diagram illustrates the significant factors that comprise the bicycle theft scene and the interactions between those factors.

The diagrammatic format highlights the large number of activities and bodies involved. It illustrates the large number of points at which intervention could occur to reduce theft or achieve other benefits. It helps to show which factors could be influenced by intervention at any particular point.

The diagram illustrates the current bicycle theft scene. The points at which it was intended to apply counter-measures could be highlighted by using colour or other notations. Different versions of the diagram could be produced to describe specific facets of bicycle theft. For example a version for adult bicycle theft and another for juvenile bicycle theft could be assembled. The basic network would be the same or very similar but the supporting comment in some of the boxes would vary to elaborate relevant characteristics.

The diagram shown uses a solid line between boxes where the movement of a bicycle is involved. A broken line is used where information, money or advice is transferred.

The applicability of the network is shown later in this report where it is used to illustrate the recommended short and long-term measures.



MODEL 1:
The Bicycle Theft Network

MODEL 2: QUANTITATIVE CHARACTERISTICS

The previous model shows all the facets of major significance to bicycle theft and how they interact. A second model has been developed to readily allow the diagrammatic representation of the quantitative characteristics of bicycle theft.

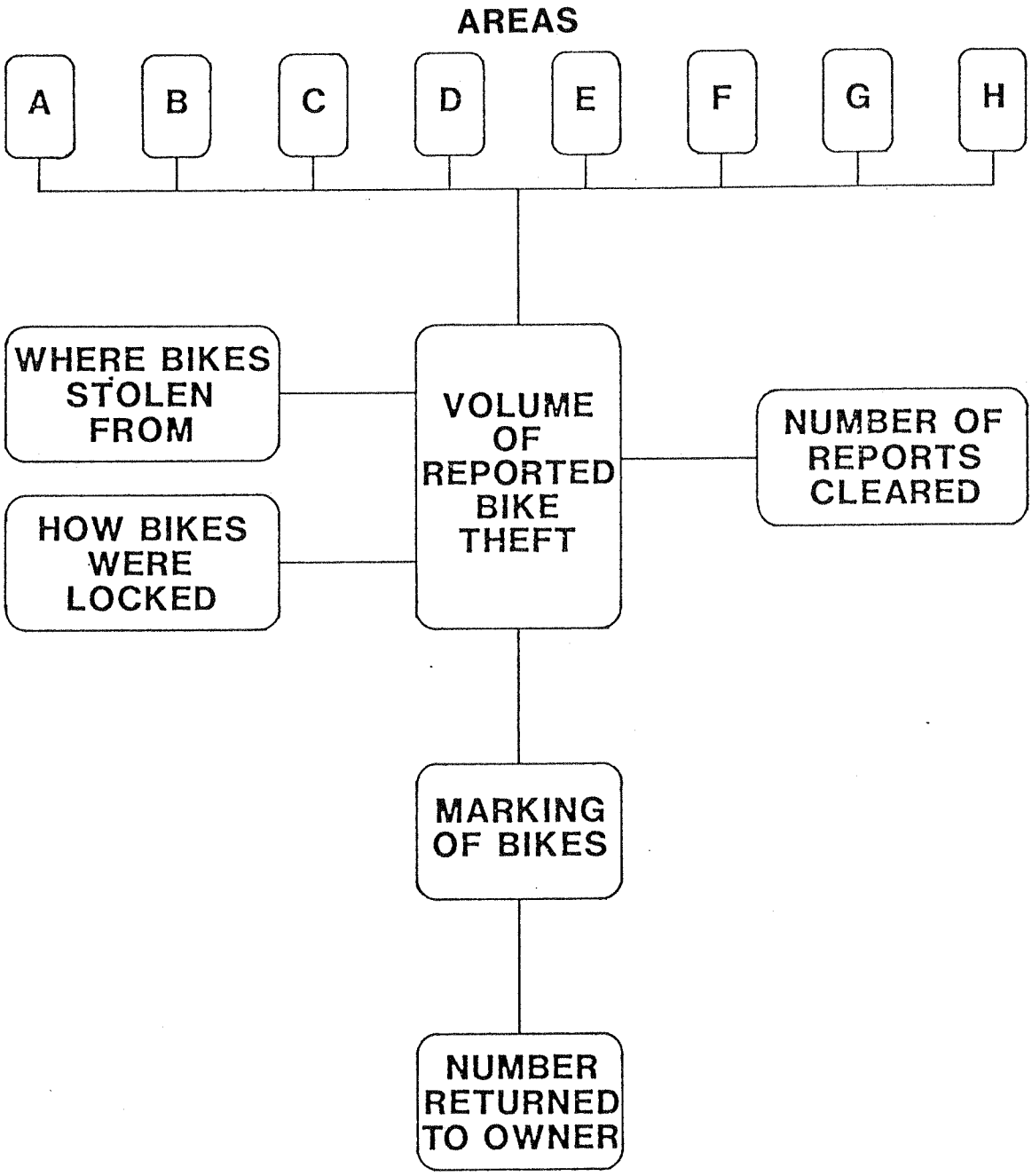
It can be used for comparative studies, either between one area and another or, for the same area, between the situations for two or more different periods. This latter application is particularly pertinent to the monitoring of any counter-measure.

The following chart shows the structure of the model. A to H are sub-areas which contribute to the total volume of reported theft being modelled. Thus, if the model were illustrating Melbourne, they could be Police Districts. If the model were illustrating a Police District, they could be Divisions within that Police District.

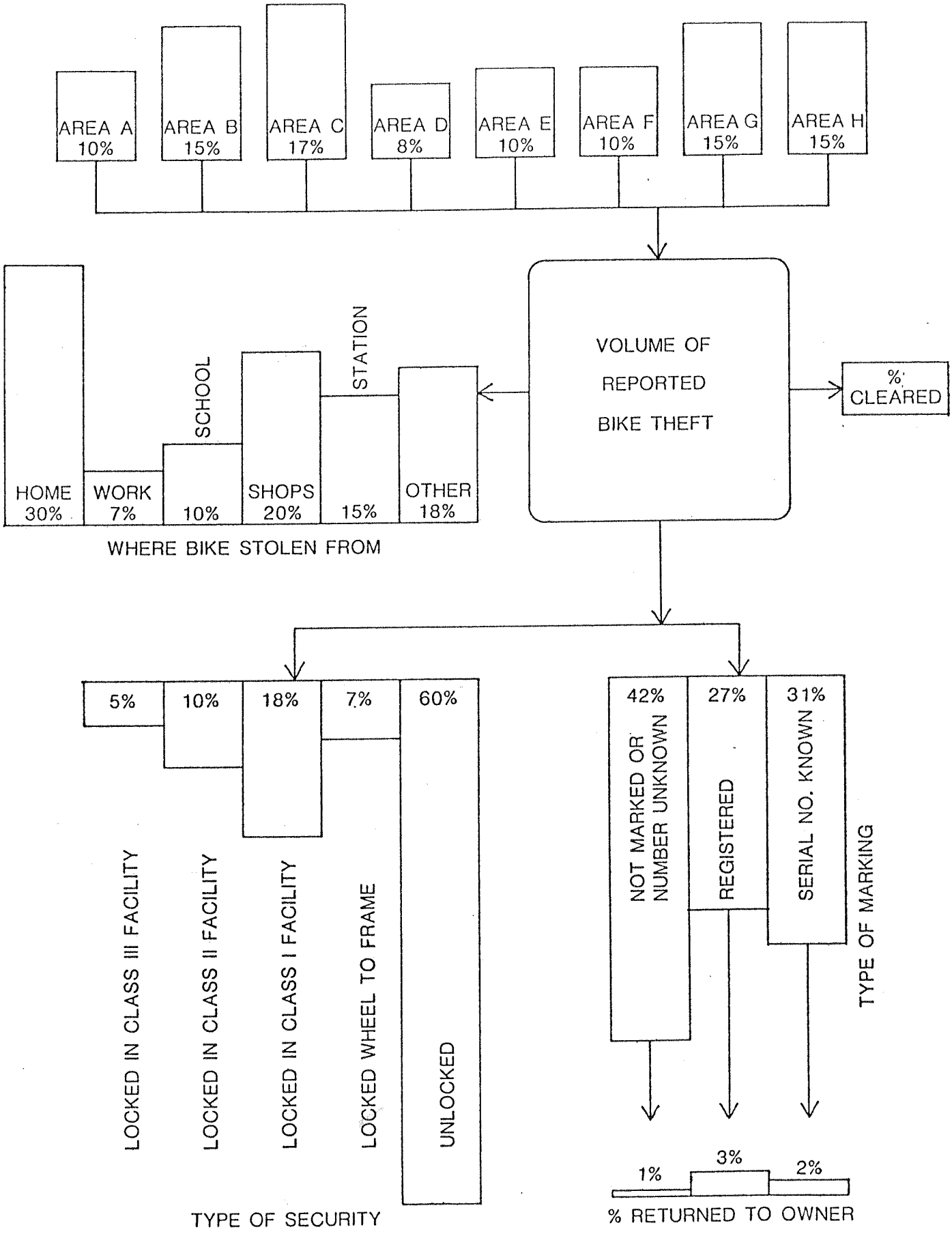
This preceding structure is applied to a hypothetical area in the second chart. This elaboration of the model illustrates one package of characteristics which could be modelled. The model can only usefully include characteristics for which information is or can be collected and collated.

Additional factors could be built into the model if the information were collected; for example, the type of locking device used by the cyclist.

Additional information about the factors already in the model could be shown. For example, by using tones, an element could be subdivided, say, to show the split between adults' bikes and children's bikes. Or, for example, the correlations between elements in two sets of factors could be shown by using proportionally weighted lines. For example the 30% of bicycles stolen from home could be linked to each of the categories under "Type of Security", likewise for the 7% stolen from work, etc.



MODEL 2: The Structure of the Model



N.B. PERCENTAGES ARE NOTIONAL ONLY.

MODEL 2: Quantitative Characteristics

RECOMMENDATIONS

This study has underlined the large number of bicycles, mostly relatively new, which are stolen in Victoria each year. It has highlighted the following notable factors:

- the very low proportion (less than 10%) of reported bicycle thefts which are cleared
- the very low proportion of found bicycles which are re-united with their owners; this stems in large part from -
- the large proportion of cyclists who cannot give an accurate description of their bicycle
- the use of locks and chains which are not resistant to bolt cutters and other forms of attack
- the failure of many cyclists to secure their bicycles when parked at home (over 90%) or when parked briefly in a public area
- the ease of disposal of stolen bicycles through a variety of avenues.

We recommend a range of measures to address all these factors. The fundamental proposal is for a universal marking registration system.

A Universal Bicycle Registration System

Universal bicycle registration schemes have been introduced in a number of United States cities and Australian states over the years. Many appear to have lapsed because of the administrative costs and the widespread non-compliance. Success is dependent on the degree of community acceptance, support and enforcement.

In recent years the priority has been for voluntary schemes such as the Victorian bike-marking scheme and the similar English cycle-coding scheme. These are of some value particularly in helping to trace the owners of found bicycles, but do not cover the large majority of bicycles.

Other recent registration schemes include the National Bike Registry, a privately run U.S. Scheme and the two Dutch Schemes previously described which combine registration with insurance and secure locking of the bike. These are excellent schemes but leave the majority of cyclists unregistered.

We see the need for a universal scheme so that all cyclists are covered. An effective universal scheme means that all found bikes should be easily reunited with their owners, that outlets for stolen bicycles such as Sunday markets, bicycle dealers and Trading Post advertisements can be curtailed and that suspicious circumstances can be readily checked. The challenge is to devise a system which will not create a major administrative burden and which will not be undermined by non-compliance.

We recommend a registration scheme which:

- involves the licensing of all bicycle retailers and requires the licensee to number every bike when it is sold, to fill out a record card giving a detailed description of the bike and its allocated number, to provide the purchaser with a copy of the record and to send each month a copy of all the records for that month to the IBR, and to give purchasers information (supplied by others) on bicycle security and safety;

- sets up a licensing board to oversee the administration of the scheme and consider cases for non-renewal of a licence;

- involves a nominal licence fee similar to that for a licence to sell fireworks ($6) rather than a tobacconist's licence ($50);

- makes it illegal to own a bike without a legible number;

- requires the purchaser of a used bicycle to notify the IBR of the change of ownership;

- makes it illegal to resell a bike without a legible number;

- allows for each licensed bicycle retailer to be issued with a supply of uniquely numbered transfers to be used for marking new bikes when sold.

This scheme would minimise non-compliance by placing the onus for registration on licensed bicycle retailers. The work involved would not be onerous. There would be a loss of sales of replacement bikes to the extent that theft would be reduced. Conversely some on-going trade would be retained which would otherwise be lost as bike theft has been shown to discourage some people from further cycling. Furthermore the distribution of officially endorsed information on security and safety would generate sales of helmets, lights, locks, etc. The licence fee should not be seen as a revenue raising medium for the government, but be a nominal amount.

The scheme would greatly assist the Victoria Police. Theft would be reduced. Matching of found bikes would usually be straight-forward. Few bikes would therefore have to be stored for three months and then disposed of. The checking of the ownership of a bicycle where the police were suspicious about circumstances would be very easy.

Such a scheme would help address all the "notable factors" listed at the start of this chapter. It could be usefully complemented by a range of other measures which are described below.

The present bike marking scheme should be continued until the universal scheme is introduced. While this scheme continues it should include the issue of a transfer to each cyclist having his bike marked so that it can be evident that the bike has been marked. This is necessary to cover not only this intervening period but also because the new scheme would only cover bikes sold from its inception so all existing bikes would not be covered.

We recommend a study be undertaken to develop the details of such a scheme including:

- the composition of the licensing board
- whether registration should only be possible for people over a certain age, e.g. seventeen, so that parents have the responsibility for registration and the condition and use of a child's bicycle
- the best system for providing replacement transfers when the numbers become illegible
- the most appropriate administrative procedure for registering changes in ownership and changes in the description of a bicycle
- the most durable types of transfers and most effective adhesives
- the anticipated costs and benefits.

Public Education

There needs to be increased education of the public about:

- when a bicycle is most vulnerable to theft
- how best to protect a bicycle when parked
- the need to keep an accurate description of the bike

Material on vulnerability should stress that the bike should be:

- locked even when only parked for a few minutes
- locked with a U-lok or hardened chain when parked for more than fifteen minutes
- locked when it is parked at home
- regarded as particularly vulnerable when it is new or a quality bike.

Material on secure parking should be geared to:

- cyclists to encourage them to secure their bikes effectively
- bicycle retailers to encourage them to stock suitable equipment and advise cyclists appropriately.

The kit produced by The State Bicycle Committee on parking facilities provides suitable information for developers and authorities about the selection and siting of parking facilities.

Both the victim survey and our survey of thieves highlight the significant proportion of bicycles stolen from stations - the second highest proportion outside the home in the victim survey. The SBC should press the MTA to take up a program to provide Class 1 & 2 facilities at stations.

Until the universal registration scheme has been in operation for at least four years, cyclists need to be educated to keep an accurate description of their bike and serial numbers, together with a colour photograph, and to store the record where it can be found readily. The material for the public on this subject should include diagrams showing where the serial number is marked for different makes of bicycle.

Posters, brochures, book-marks and articles should all be used to disseminate the relevant information. The State Bicycle Committee or B.I.V. should also negotiate with Hands Off Publishing about the publication of an Australian version of their U.S. handbook on bicycle security.

The information to be distributed to bicycle purchasers under the proposed registration scheme should be published by the State Bicycle Committee with funding sought from insurance companies.

Various existing bodies and programs should be involved in furthering public knowledge about bike theft and security. For example, when the Crime Prevention Bureau carries out its standard inspection of premises it should stress to the occupants that bicycles are particularly vulnerable to theft and should be effectively secured and an accurate description kept. Publications by the Crime Prevention Bureau about protecting the home should include this information about bicycle security.

The Neighbourhood Watch program should include in its brochures, newsletters and Home Security meetings, information about marking and securing bicycles and maintaining an accurate description.

Neighbourhood Watch is the most effective crime prevention program of the Police and provides a direct and continuing avenue to thousands of households. It does, however, base its identification of objects on the use of engravers. Participants should be advised that stamping by dies is far preferable.

Bike marking days and police visits to schools are other avenues for educating cyclists about marking, securing bicycles and maintaining an accurate description.

Computerised Data Bank

The State Bicycle Committee should lend its support to the continuing efforts of the IBR to obtain funding and approval for the purchase and use of computers for a data bank in relation to bike theft. This would not only greatly assist with the matching of records of stolen and found bicycles but allow the efficient extraction of data to monitor characteristics of bike theft in Victoria. When that is established the Property Report should be modified to provide for information on where the bike was parked and how it was secured.

Attitudinal Changes

It is understandable that the attitudes of police when a bicycle is reported stolen reflect a view that it is a relatively minor matter. Nevertheless the theft usually matters a good deal to the owner and police should be urged to be responsive to reports and be non-judgmental, for example when the bike was not locked.

Cyclists need to be encouraged to report all bicycle thefts. Whilst only a few thefts are cleared up quite a few bikes are recovered and cyclists may retrieve their bike if they can give a serial number or accurate description. Furthermore the reporting is necessary for the keeping of accurate records.

There needs to be research to see whether programs could be introduced to change the attitudes of juvenile thieves towards the property of others so that the pressure for them to be mobile does not dictate their actions.

Offender-oriented advertising campaigns do not always appear to produce positive results. For example Clarke, R.V.G. and Mayhew, P. in Designing Out Crime published by the Home Office Research Unit, 1980, evaluated two such advertising campaigns. The first sought to reduce car thefts by television, press and poster advertisements. The evaluation concluded that the campaign met with little success in reducing the number of recorded car thefts. The second campaign sought to reduce vandalism by television advertisements. Clarke and Mayhew concluded that "... the largely negative results in changing behaviour are consistent with the findings of other offender-oriented advertising campaigns ... which have relied on persuasion to deter potential wrongdoers, unaccompanied by changes in legislation or law enforcement".

So the prospect of positive results and best type of program to implement should be investigated before any decision were made on whether to proceed or not. However, as there is ample evidence that youngsters engage in a fair amount of bicycle theft it is attractive to suggest some sort of educational activity geared at dissuading the young from theft.

Such programs seem to have been developed specifically for shoplifting, and that is the single most frequent offence for which local youngsters are formally dealt with by the police. On the face of it, such programs could be modified to accommodate bike theft.

As an example, an anti-shoplifting program developed in Washington covers the following areas which seem appropriate for bicycle theft too.

(A) distinguishing between personal and other kinds of property, and borrowing and stealing.

(B) distinguishing family property from other kinds of property, and using rules to resolve conflict.

(C) distinguishing school property from other kinds of property and introducing the consequences of theft to the victim, observer and thief.

(D) defining the consequences of the offence within the community.

(E) helping students develop skills to cope with peer pressure which might lead to theft.

This program was directed at 4th, 5th and 6th grade children when, the Americans discovered, children start to shoplift in groups. It may therefore be pitched too low for bike thieves but its fundamental concentration on property ownership and consequences of theft are the vital components of the program which are every bit as important in a bike theft prevention program.

Built-in Locks

As a long-term measure the State Bicycle Committee should begin a campaign to have all new bikes sold with a built-in lock. This campaign should seek the support of other state committees and of the state police forces (on the basis that it will reduce theft and reduce their work-load) to press the S.A.A. to modify its Standard to require all bikes to have a built-in lock. Such locks would assist in getting cyclists to lock their bicycles even when parked for only a few minutes, because they are so quick and convenient to use.

A large range of such locks is now manufactured in Europe, Japan and Taiwan and a suitable model(s) could be defined which would add only a modest amount to the price of a new bicycle.

Serial Numbers

The SAA should be similarly pressed to include a provision in its Standard for all new bicycles to be stamped with a serial number. We see this as most desirable even if a universal registration scheme is introduced. It will help to confirm the identification and ownership of a bicycle where a transfer has become illegible and a new one is sought or where the colour and other characteristics of a bike have been changed and the owner wishes to register those changes in the official records.

If the universal registration scheme does not come into force, then the serial number provides the key means of identifying a bike. If all bikes have a serial number it removes the possibility of simply erasing a number and repainting the frame to disguise a bicycle.

Insurance Schemes

The high level of bicycle theft and low rate of return of stolen bicycles is causing higher premiums, and some companies are no longer offering bicycle insurance at all. A new scheme being co-ordinated by Bicycle Australia will provide insurance cover, help to improve the return rate of found bikes by requiring that anyone insuring a bike lists the serial number and other descriptive details on a prescribed form, and reduce theft by

providing cyclists with information about how to reduce the likelihood of theft and how to effectively lock a bicycle.

The State Bicycle Committee and/or B.I.V. should explore with Bicycle Australia ways in which the premiums could be reduced for cyclists who purchase and use a U-lok.

Monitoring of Theft Records

Our investigations of the characteristics and modus operandi of thieves have revealed a number of cases where thieves were apprehended following a special effort by police because a collator had identified a significant increase in bike theft in a particular locality. All police collators should be advised and encouraged to analyse the theft statistics for their division(s) in sufficient detail to identify any localities where bike theft has suddenly increased dramatically. These will often reflect the operation of a single thief or group of thieves involved in multiple thefts and so indicate situations where police resources could be productively allocated and the theft rate reduced.

Additional Research

We recommend that the work of the present study be built upon to provide:

1. detailed planning of the proposed universal registration scheme with respect to the management of the scheme, its operation and the legislative context.

2. investigation of suitable types of built-in locks and liaison with other state bicycle committees and police forces and the SAA to modify the SAA Standard to include requirements for all new bicycles to have built-in locks and carry a serial number.

3. the evaluation of the likely value of a program aimed at modifying the attitudes of potential juvenile bike thieves, and the development of such a program if judged to be productive.

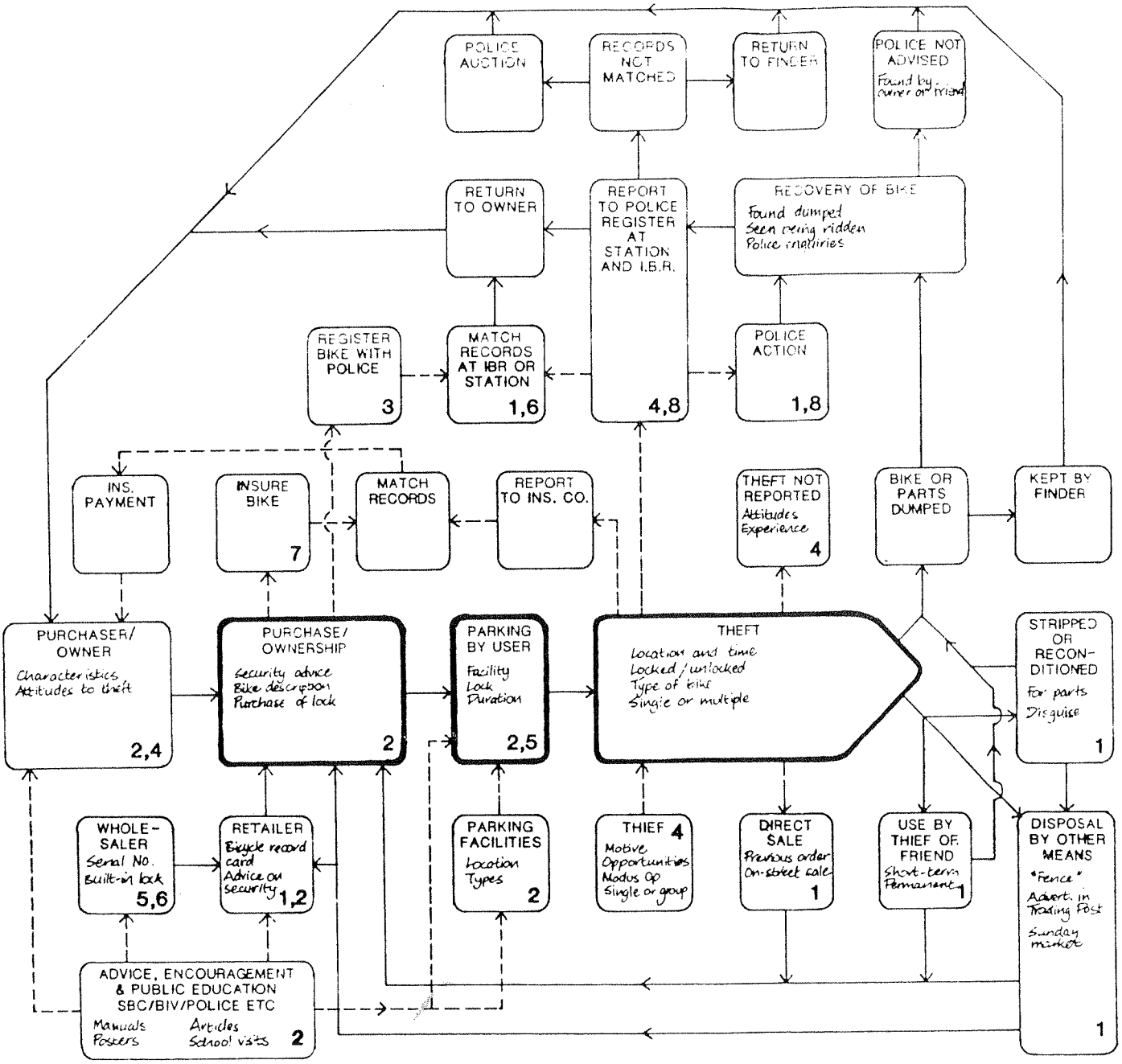
Summary

The measures recommended would make a significant impact on the four main aspects of the bike theft problem:

- bring home to cyclists the need to protect their bikes
- increase the provision of effective and secure parking facilities
- discourage theft and increase the number of thieves apprehended
- increase the number of stolen bicycles re-united with their owners.

The recommended measures and their potential impacts on the bicycle theft scene are illustrated in the following version of the Bicycle Theft Network.

1 REGISTRATION SCHEME
2 PUBLIC EDUCATION
3 COMPUTERISED DATA BANK
4 ATTITUDINAL CHANGES
5 BUILT-IN LOCKS
6 SERIAL NUMBERS
7 INSURANCE SCHEMES
8 MONITORING OF RECORDS



PROPOSED BICYCLE THEFT COUNTER-MEASURES

The following chart shows the recommended counter-measures, their priority for action and an estimate of the man-weeks required to initiate them, either by State Bicycle Committee staff or some alternative agency proposed by the Committee.

Theft Counter-Measure	Priority	Man-weeks to Initiate or Implement
Universal Bicycle Registration Scheme	1	12 - study 30 to 40 setting up
Public Education Programs	1	10 per annum for 2 years
Encouragement of MTA to Provide Secure Facilities	1	3
Modification of SAA Standard	2	6
Support for Computerisation of Police Data Bank	2	2
Encouragement of Police to Closely Monitor Bike Theft	2	1
Liaison with Bicycle Australia about Insurance Scheme	3	1
Evaluation of Programs to Change Attitudes towards Bike Theft	3	10

APPENDICES

REVIEW OF PRACTICES WITHIN VICTORIAN POLICE

PROCEDURES IN THE POLICE DIVISIONS

Recording of Bicycle Thefts and Finds

When a bike theft is reported a standard Crime Report (Non-Arrest) is completed. This describes the location and nature of the crime, details of the victim and the nature of the property involved. The Property Report part of the report includes a section specifically for recording details of stolen bikes - see the following page. Copies of the Crime Report are distributed to:

- the victim
- the police station's records
- the Divisional C.I.B.
- the Information Bureau and Records (IBR) Section at Russell St. Police Complex
- the collator of crime reports for the Division
- and a spare copy is made which in some Districts is sent to the District Superintendent or Chief Inspector of the District.

Police were interviewed at three police stations to gain an appreciation of current practices within the Divisions with regard to bike theft. The Police appear to carry out the recording of the thefts conscientiously and in some Divisions carry out supplementary reporting procedures, for example compiling a form monthly which lists a description of all bicycles reported stolen which is circulated to about fifty police stations in the surrounding area. The value of the recording procedure is seriously diminished by two factors:

1. the failure of many bike owners to be able to give a useful description of their stolen bike (and the absence on some bikes of any serial number or registration number which could be used should the owner wish to keep a useful description of their bike), and

2. the fact that, although bicycle theft is a major problem, it is a minor crime. It is viewed as petty crime compared to much other crime so receives a low priority in the allocation of time and manpower to solve it. The C.I.B. tends to only follow-up a report where the property is worth more than $500 or there is a suspect and a likelihood of a charge being laid. Where a theft is solved by uniformed police it appears to follow from the investigation of someone acting suspiciously rather than from embarking on investigations to solve a specific case of reported bicycle theft. The practice of police collators highlighting any significant increase in bicycle theft in a particular area has led on a number of occasions to the identification of a thief or group of thieves responsible for multiple thefts.

V.P. Form 220D

PROPERTY REPORT

I.B.R.

Victim Index	Checked by	Property Tracing	Crime Code

Property described is/was (tick ONE box only) — LOST ☐ STOLEN ☐

NOTE: If 'stolen' box is ticked this report is to be securely attached to a 'Crime Report'.

..... District ...../...../19.....

..... Station

Victim Family or Trade name: ..... Given names: .....

Address ..... *Phone (pr.)* ..... *(bus.)* .....

Reported by: ..... Address .....

If property lost state where, when and short particulars of loss:— .....

.....

Checked by ..... (initials & no. of station sub-officer)

GENERAL PROP. ONLY

FULL DESCRIPTION OF STOLEN/LOST PROPERTY

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Identifiable: Yes/No *Insured:* Yes/No *Total Value:* $.....

Report compiled by (name) ..... (rank) ..... (no.) .....

MOTOR CARS AND MOTOR CYCLES ONLY (STOLEN)

MOTOR VEHICLES

CAR SQUAD SERIAL NO. .....

Vehicle recovered: Yes ☐ No ☐ *Stolen from:* Melway's Map no. ..... Grid .....

Registered to: (surname) ..... (given names) .....

Address ..... *Phone (pr.)* ..... *(bus.)* .....

Make of vehicle ..... *Model* ..... *Body type* ..... *Year* .....

Registered number ☐☐☐☐☐☐ *State of registration* .....

Colour (body) ..... (top) ..... (upholstery) .....

Transmission: Manual ☐ Automatic ☐

Engine No. (if known) ..... *Chassis No.* (if known) .....

Identifying features .....

Where stolen from (driveway, garage, etc.) .....

Car locked: Yes ☐ No ☐ *Steering locked:* Yes ☐ No ☐ *Radio fitted:* Yes ☐ No ☐

Insured: Yes ☐ No ☐ *Name of Insurance Co.* .....

Value of Vehicle: $.....

Property in Vehicle at time: .....

Property insured: Yes ☐ No ☐ *Value of property:* $.....

If recovered, give details of recovery: Time ..... Date .....

Location ..... Melway's ref...../...../.....

Damage .....

Property stolen .....

BICYCLES (STOLEN) ONLY

BICYCLES

Description: Type (lady's, gent's, boy's, racing, standard, dragstar, BMX, etc.) .....

Make ..... *Number and location* .....

Frame: Size ..... Colour .....

Wheels: Type ..... Colour .....

Transmission: Free wheel/fixed wheel

Gears: Yes ☐ No ☐ Number of gears ..... Make .....

Tyres: Make ..... Type ..... Colour .....

Mudguards: Front: Yes ☐ No ☐ Colour ..... Rear: Yes ☐ No ☐ Colour .....

Brakes: Hand — front fitted: Yes ☐ No ☐ Side pull ☐ or centre pull ☐

rear fitted: Yes ☐ No ☐ Side pull ☐ or centre pull ☐

Foot brake fitted: Yes ☐ No ☐

Handlebars: High rise ☐ Ram's horn ☐ Standard ☐ Other .....

Handgrips: Yes ☐ No ☐ Colour ..... *Saddle:* Material ..... Colour .....

Accessories (include make of lamps, tools, etc.) .....

Identifying marks .....

Insured: Yes ☐ No ☐ *Value of bicycle:* $.....

The Crime Prevention Bureau operates a voluntary bike marking scheme as one measure to reduce the first problem above. Local police in conjunction with service clubs engrave or stamp a number on each bike brought for marking. Well over 100,000 bikes have been marked in Victoria. The scheme is described and assessed in a later chapter.

Where a bicycle is found, the police station to which the bicycle is brought fills out an "Owner Required" form - see following page. If the bicycle cannot be matched at the station with a bicycle reported stolen, copies are circulated to the other Divisions within the District and to the IBR at the Russell Street Police complex, where the card index is searched for a matching report. Because of the two factors listed above many found bikes are not matched up with their owner.

Charging and Cautioning

Juvenile bicycle thieves can be charged or, if guilt is admitted, can be cautioned. The application of a caution can differ from District to District. Police Standing Orders require that first offenders receive a caution unless particularly aggravating circumstances apply. Some Districts give a caution for a first offence, and the thief is charged if caught again. In other Districts a juvenile thief might be cautioned on more than one occasion.

PROCEDURES AT THE IBR

The copy of the crime report received at the IBR is given a number serially, coded for the type of crime and counted for the crime statistics. The victim's name and address are recorded in a victims' index, the report is also filed under the code number for the type of offence and thirdly under the serial number for the report.

Where the crime involves the theft of a bicycle the description on the Crime Report is recorded in the card index of stolen bicycles. If there is a serial number it is filed under the serial number. Otherwise it is filed under the brand name. If the owner cannot provide either the make or serial number it is virtually impossible to return his bike to him should it be found. If there is neither a serial number nor make recorded on the Crime Report a card cannot be added to the IBR's card index.

When the IBR receives an "Owner Required" form it searches its card index for a matching description. Where a serial number has been given by the owner when reporting the theft, a matching can often be quickly achieved. The Officer-in-Charge of the IBR considers that the Police bike marking scheme is a big help. A central register of registration numbers and owners would improve the system further. Nevertheless most found bikes are not matched with their owners because an adequate description of the stolen bike has not been given when the theft was reported.

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BICYCLES ONLY

VICTORIA POLICE

OWNER REQUIRED

FOR UNCLAIMED BICYCLES IN POSSESSION OF THE POLICE

Form No. 228

For use by I.B.R. Section only

SER. No. OR

District ....

Station ....

Date ....../....../19......

Date Received ....../....../19......

Station Property Book No. ....

FOUND :—

Where ....

Date and Time ....

Name and Address of Finder or Person from whom received. ....

DESCRIPTION :—

Type (Lady's; Gent's; Boy's—Racing or Standard) ....

Make and Number (Situation of number) ....

Frame (Size and Colour) ....

Wheels (Colour and Type) ....

Fixed or Free Wheel
Clutch Free Wheel or Speed Gears ....

Tyres (Make-type and Colour) ....

Mudguards (Type and Colour, Front or rear) ....

Brakes (Hand-front or rear wheel) ....

Handlebars (Type hand-grips type and Colour) ....

Saddle (Make, type and Colour) ....

Accessories (Including make) (Lamps, tools, etc.) ....

Identification marks to assist in identifying bicycle ....

INFORMATION FORWARDED TO:—

Modifications to the bicycle, for example a new frame colour, by the thief can also thwart a successful matching of bicycle and owner.

Bicycles are held for three months. If not matched they are returned to the finder or auctioned. Most found bikes are not re-united with their owner. About 450 to 500 are auctioned by the IBR each year and at least 750 are returned to the finder.

REVIEW OF INTERSTATE PRACTICE

All interstate police forces were contacted seeking information on their activities with respect to bicycle theft generally and registration, licensing and bike theft counter-measures, in particular.

NEW SOUTH WALES

The Police have a computerised system of recording crimes. This enables the Property Tracing Section to quickly search the records of reported bike thefts to see if a found bicycle can be matched with one of the bicycles reported as stolen.

The computerised data system also provides the potential for the Planning and Research Branch to assemble statistics about a particular type of crime.

Only a few bicycle marking programs exist.

They operate in a manner similar to the Victorian voluntary marking systems but there appears to be no move to introduce a state-wide system. Instead of allocating numbers to be engraved from a central registry, telephone numbers or licence numbers are used.

QUEENSLAND

Theft data is manually stored and statistics on the incidence of bicycle thefts are not ordinarily collated.

Regular bike marking compaigns are conducted when children can take their bicycles to their local shopping centre or police station where police officers engrave the bicycles with owner's initials and date of birth. In addition all police stations have Vibro-Engraver marking pens which can be borrowed free of charge. An identification card is completed with these details and filed at the Information Bureau.

SOUTH AUSTRALIA

The Police operate both manual and computerised systems for storing crime reports. Where a bicycle is found, the description is forwarded to the Property Section who can do a computer search to see if the description can be matched to a bicycle reported as stolen. The Statistics Department can extract crime data from the computer records.

The Crime Prevention Bureau conducts a bicycle registration system in conjunction with the Kiwanis Club and McDonald Family Restaurants. Each bicycle is given a registered number which is engraved onto the bicycle. The number is also filed with the Police Property Section on a card which contains a description of the bike and the owner's name, address and telephone number. About 8,000 bicycles have been marked.

WESTERN AUSTRALIA

Each crime report is recorded on computer. Retrieval of data about a particular crime or the checking of reported crimes to seek a match between a found item and stolen item can be readily achieved.

There is currently no statistical package in operation to allow the compilation of data from the computer data base. The Police Department is investigating the establishment of a complete data information and retrieval system over the next eighteen months.

There is no Police registration of bicycles in Western Australia. Western Australia and Queensland once ran compulsory bicycle registration systems. The W.A. system required bicycls to have a number plate. It was discontinued in 1961. The Commissioner's office has advised that the limited information available suggests that the major reasons for abandoning the scheme were that

- administration costs exceeded the perceived benefits
- there was widespread non-compliance and
- there was a lack of a similar requirement in other States

A voluntary registration scheme was established in W.A. in 1984. The Bicycle Registration Centre of W.A. will record bicycle details for $2.00 a year or less depending on the period of registration and the number of bicycles per person. 156 bicycles were on the register in August 1985.

TASMANIA

Theft data is manually recorded. Statistics are not normally analysed for bike theft. A voluntary registration scheme is run by Hobart Lions Clubs and the Police. The owner's name or "other means of identification" is engraved on the bicycles.

INTERSTATE BICYCLE THEFT STATISTICS

In contacting the interstate Police Departments, statistics on the following were also sought:

1. Number of bicycle thefts per annum for the last five years.

2. Bicycle thefts as a percentage of all reported crime.

3. Recovery rate for reported bicycle thefts.

4. Ratio of reported to unreported bicycle thefts.

5. The extent of bicycle theft by professional thieves.

Data for items 3 (except for NSW) and 4 were not readily available from any interstate departments and none of the departments had any information on the level of activity of professional thieves. The information provided on annual bicycle theft and on bicycle theft as a percentage of all reported crime is tabulated on the following page. Victorian data is included to complete the data set.

Unreported Bike Theft

None of the Police Forces had any data available on the ratio of reported to unreported bike theft. Two surveys by the Australian Bureau of Census and Statistics give a valuable estimate of this ratio in S.A. and W.A.

Bicycle Usage and Safety Survey, Adelaide Statistical Division October 1984

This survey was based on a sample of about 5,000 dwellings. It shows that 8,100 bicycles were stolen between 1/1/84 and the day of interview in October 1984 (approx. mid-October). Factoring up this figure for twelve months gives a total of 1.26 x 8,100 = 10,200 bicycles stolen in 1984 within the Adelaide Statistical Division. The population of the Division in 1984 was 950,000 and the population of S.A. was 1,285,000. An approximation of the total number of bicycles stolen in S.A. in 1984 is 1.35 x 10,200 = 13,770. The number of reported thefts of bicycles in 1983/84 was 4,393. This gives a ratio of reported to unreported bicycle thefts of the order of 4400:9400 which is approximately 1:2.15. The above assumptions suggest an actual bicycle theft rate per annum of 1,070/100,000 population in S.A.

Bicycle Usage and Safety Survey, Western Australia, November 1982

This survey was based on a sample covering about 1% of the population of Western Australia. 6,877 bicycles were stolen between 1/6/82 and the date of the interview (approximately mid-November). Factoring up this figure for twelve months gives a total of 15,000 stolen bicycles in W.A. in 1982. The 1982 population of W.A. was about 1,300,000. Reported bicycle thefts in 1982 were 4,253. This gives a ratio of reported to unreported bicycle thefts of 4,250:10,750 which is approximately 1:2.5. These figures suggest an actual bicycle theft rate of 1,150/100,000 in W.A.

These S.A. and W.A. figures indicate that only about 30% of bicycle thefts are reported and that the reported bicycle theft figures should be multiplied by 3.0 to 3.5 to give an indication of the actual bike theft figures.

BICYCLE THEFT DATA FOR AUSTRALIAN STATES

State	Number of Bicycles Reported Stolen						Bike Theft as a % of all Reported Crime	% of Reported Bike Theft Cleared		
	1979	1980	1981	1982	1983	1984		1982	1983	1984
N.S.W. (1)		Not supplied		10,398	11,588	10,922	1982 3.5%	7.4%	5.3%	4.2%
Queensland	Not	readily	available				N/A	N/A	N/A	N/A
S.A. (2)	-	79/80 4,994	80/81 4,281	81/82 4,323	82/83 4,322	84/84 4,459	1981/82 3.4%	Not readily available		
W.A.	3,169	3,472	3,262	4,253	4,562	N/A	N/A	N/A	N/A	N/A
Tasmania	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Victoria	9,855	12,367	12,864	13,261	11,837	11,947	1982 5.3% 1984 4.2%	8.3%	7.0%	9.1%

Notes:

1. Annual bicycle theft figures include stolen bicycles classified under "Property Breaking". These represent approximately 10% of the total reported thefts of bicycles.
2. The annual figures of bicycles reported stolen include the reported theft of bicycles and bicycle parts.
3. Where a bicycle is handed in to Police or recovered by Police and has been marked under the bike marking scheme it may be returned to the owner before a theft has been reported. In these cases neither the theft or the recovery is recorded.

REVIEW OF OVERSEAS PRACTICE

U.S. PRACTICE

BICYCLE REGISTRATION SCHEMES IN UNITED STATES

During the seventies a large number of bicycle registration schemes were set up in the U.S. because of their potential to decrease bicycle thefts and improve the recovery of stolen bicycles.

An investigation[1] of U.S. bicycle registration schemes conducted in 1977 by the North Carolina Bicycle Registration Study found that only two of the 48 continental states (California and Minnesota) had enacted legislation at the state level for registration.

The Californian scheme allowed each municipality to decide if it wished to adopt a bicycle registration ordinance. If so it must conform to the state scheme. Authorities estimated an 85% participation by cities and counties. The Minnesota scheme has a similar basis but, whereas in California each community maintains its own registration records, the Minnesota scheme has a central computerized file structure within the Minnesota Crime Information System. The scheme is described later in this chapter.

The North Carolina Bicycle Registration Study also reviewed a range of city-wide schemes. Of fifty schemes reviewed:

20 were voluntary,
14 were mandatory but not enforced, and
16 were mandatory and enforced.

The success of the schemes varied considerably. The study concluded that the degree of success was dependent on the degree of community acceptance, support and enforcement. Problems arose where the police and public officials lacked enthusiasm for the program.

Minnesota Bicycle Registration Program.

This is a statewide computerised system which was introduced in 1977 under the Minnesota Bicycle Registration Law. This law does not make registration mandatory throughout the state but all bicycle registration systems in Minnesota must use the state system. A number of Minnesota communities have adopted city ordinances requiring registration of all bicycles.

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[1] Research Triangle Institute North Carolina Bicycle Registration Study, Nov. 1978.

These communities which enforce mandatory registration report increases in the recovery and return of stolen bicycles.

The system is administered by the Minnesota Department of Public Safety using their Motor Vehicle Deputy Registrars throughout the state plus Deputy Registrars of Bicycles. These Deputy Registrars of Bicycles are appointed by the Commissioner of Public Safety and can be bicycle dealers, employees of a municipality or public departments that sell bicycles at public auction.

Registration costs $5.00 plus a $1.00 service charge. A 1&1/2 inch by 2&1/2 inch pressure sensitive reflective sticker is provided which is placed on the frame of the bicycle below the seat. This is valid for three calendar years. The owners of a registered bicycle are required to notify any sale or transfer of ownership and any charge of address.

Applicants for registration are required to supply the following information:

> Bicycle brand name, serial number, number and size of wheels, frame type and number of speeds; the owner's name, date of birth and complete address.

If a serial number cannot be supplied, due to the bicycle not having one, a number is assigned at the time of application and the owner instructed to have the number stamped into the frame of the bicycles.

All bicycles registered under the state system are entered into the state computer system and the information is available to all law enforcement agencies. The registration of a bicycle may be checked by:

1). the registration number issued to the bicycle,
2). the serial number and brand name of the bicycle, or
3). the owner's name and date of birth.

Having the bicycle registration information in the central computer files makes it a simple procedure for a law enforcement agency to check for ownership on a recovered bicycle, to aid in identifying the bicycle riders involved in accidents and to be able to quickly determine the ownership of a bicycle regardless of where in the state the bicycle may have been registered.

The scheme commenced in March 1977 and by October 1978 had 78,000 bicycles on file and had reached the point where fees were paying the full operating cost of the program. After three years of operation it had repaid the initial investment of U.S. $410,000 and produced a $60,000 surplus.

white copy—City
yellow copy—Dealer
hard copy—Owner

Bicycle License Form — Missoula, Montana
Please print clearly!

Date: ________

owner/head of family:

first name ________ middle initial ________ last name ________ phone number ________

type of license: (circle one)
Normal
Child
Family
Personalized

address ________ city ________

See instructions on back

signature ________

---

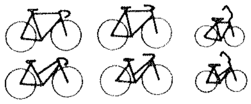
name of rider ________ bike's serial number ________ license number ________

brand of bike ________ model (if known) ________ main color/trim color ________

wheel size:
☐ less than 20"
☐ 20"
☐ 22"
☐ 24"
☐ 26"
☐ 700C
☐ 27"
☐ 28"

frame size:
☐ kid's
☐ small adult
☐ medium adult
☐ large adult

style (circle one):



other ________

number of gears: ________

other identifying features: ________

---

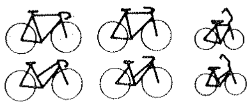
name of rider ________ bike's serial number ________ license number ________

brand of bike ________ model (if known) ________ main color/trim color ________

wheel size:
☐ less than 20"
☐ 20"
☐ 22"
☐ 24"
☐ 26"
☐ 700C
☐ 27"
☐ 28"

frame size:
☐ kid's
☐ small adult
☐ medium adult
☐ large adult

style (circle one):



other ________

number of gears: ________

other identifying features: ________

---

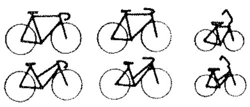
name of rider ________ bike's serial number ________ license number ________

brand of bike ________ model (if known) ________ main color/trim color ________

wheel size:
☐ less than 20"
☐ 20"
☐ 22"
☐ 24"
☐ 26"
☐ 700C
☐ 27"
☐ 28"

frame size:
☐ kid's
☐ small adult
☐ medium adult
☐ large adult

style (circle one):



other ________

number of gears: ________

other identifying features: ________

REGISTRATION FORM FOR
MISSOULA BICYCLE REGISTRATION SCHEME

Missoula Bicycle Registration Program

Missoula is a city of Montana which has an active bicycle program including a computerised bicycle registration scheme. The scheme is not mandatory.

The brand name, model, color, number of gears, serial number and the allocated registration number are recorded under the scheme. A transfer is supplied to indicate that the bicycle is registered. Registration is for four years and costs $5 for an adult's bicycle, $2 for a child's bicycle and $8 for a family licence.

Two innovative elements of the scheme are that:

- registration can be done through any bicycle dealer in the City as well as at the City hall and at "licensing clinics" when bikes can be registered and undergo a safety inspection;

- the registration fee goes towards improving the City's Bicycle Program.

It is estimated about 5,000 of the city's 18,000 bicycles are now registered. Between 1980 and 1984 annual reported bicycle thefts have reduced by 55% (760 to 344). The city's Bike Co-ordinator attributes that reduction to the registration program, the information campaigns about bike theft, the trend towards high security locks and the growing sophistication of Missoula cyclists.

Almost all the recovered bikes that were registered were returned to their owners. The Bike Co-ordinator can recall only one registered bicycle being sold at auction in the past four years.

A copy of the users manual and program has been received. It runs on a Burroughs B800 computer and is written in COBOL.

National Bike Registery, Inc.

This is a private enterprise registration scheme based in California. It is computerised, nation-wide service which has been operating since October, 1984.

Registration is accomplished via a postage-paid registration form supplied to police departments and bicycle shops at no charge. Registration costs ($U.S.) per bike are $4 for one year, $7 for two years and $9 for three years.

The operators of the Registry have advised us that, since the Registry's inception, bikes have been registered from ".... all across America, and to date only one bike registered with NBR has been stolen". We have written asking how many bikes have been registered. The response has been that ".... it is our company policy not to give out any information about the clients files. Suffice it to say that we have, in one year, developed a rather large computer database".

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

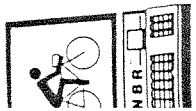
BUSINESS REPLY ENVELOPE

FIRST CLASS PERMIT NO. 8 NORTH HIGHLANDS, CA 95660

POSTAGE WILL BE PAID BY ADDRESSEE

NATIONAL BIKE REGISTRY™

3608 Kodiak Way
North Highlands, CA
95660-2304



NBR™ is a member of:

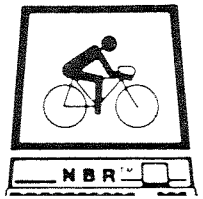
The Sacramento, California Chamber of Commerce

Associate Member of:
The National Bicycle Dealers Association (NBDA)

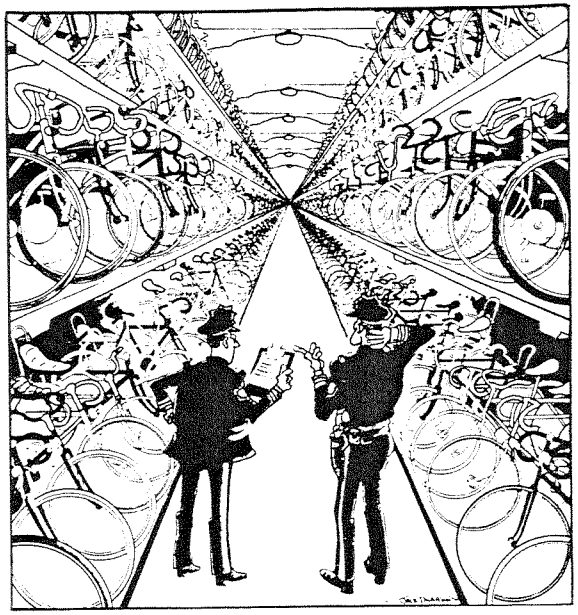
Supporting Member of:
The International Association of Campus Law Enforcement Administrators (IACLEA)

According to figures compiled by the Bicycle Federation, there are 25 million adult cyclists in America, making bicycling the second most popular sport in the United States. **NBR**™ hopes that you have years of safe and pleasurable enjoyment from your bicycle.

Be sure to <u>always</u> lock your bike, even if you are only leaving it for a moment. And be sure to register your bike, so that if it should be stolen you will have a fighting chance of getting it back.



FOR YOUR PROTECTION REGISTER YOUR BIKE



"Too bad these bikes weren't registered with the **National Bike Registry**!"™

More than 700,000 bikes are stolen each year. Let's hope that your bike isn't stolen, but if it is, will it end up in the endless warehouse of lost bicycles?

If your bike is recovered by law enforcement agencies anywhere in America, they will be able to get it back to you — if it's registered with the **National Bike Registry.**™

Protect your bicycle investment by registering it today with the only nationwide, computerized bicycle registration service: **NBR.**™ Use this handy registration form. See inside for details.

National Bike Registry, law enforcement agencies anywhere in America will be able to find you. **NBR**™ is a bicycle registration service operated on a nationwide scale. When your bike is registered with **NBR**,™ key data about you and the bike is entered into **NBR**'s™ computer. The **NBR**™ decal, shown on inside flap, is provided for easy identification of registered bicycles.

Law enforcement agencies know about **NBR**,™ and if they find your bike with it's bright **NBR**™ decal (or even if the decal has been removed but the police suspect the bike might be registered with **NBR**),™ they will call us. The computer data base is searched immediately, and the police told over the phone how to contact you.

NBR™ was established for the sole purpose of operating a nationwide bicycle registration service. A comprehensive bicycle registration program is long overdue, and **NBR**,™ is dedicated to running the best quality program possible.

DETACH HERE BEFORE MAILING

MOISTEN AND FOLD OVER TO SEAL

FOR YOUR RECORDS

Bike purchased on: _____

Purchased from: _____

Serial number: _____

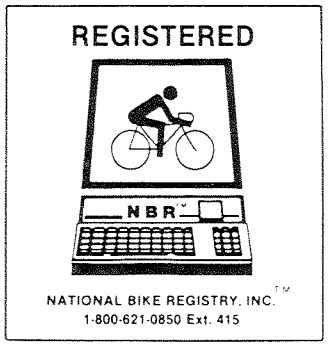
Make: _____ Model: _____

Size: _____ Color: _____

Registered with **NBR**™ on: _____

NBR™ Hot Line
1-800-621-0850 Ext. 415

THE NATIONAL BIKE REGISTRY, INC.



Shown actual size, decal is gold on a clear backing.

Why you should register your bike with **NBR**.™

- Because **NBR**™ is computerized - and we can tell police officers in seconds who the registered owner of a recovered bicycle is.
- Because **NBR**™ operates nationwide - and the owner of a bicycle that is registered in New York and recovered by police in Los Angeles can be found.
- Because **NBR**™ is a private sector corporation - and operates at no cost to the taxpayers.
- Because registering bicycles is important to both the bike owner and law enforcement agencies.
- Because young people don't usually carry identification while riding their bikes, and the **NBR**™ database can facilitate timely identification of a lost or injured youngster by tracing the ownership of the registered bicycle.

These are five excellent reasons for registering your bicycle with the premier bicycle registration service: the **National Bike Registry.**™

DEALER USE ONLY

NO: _____

INSERT CHECK OR MONEY ORDER HERE
PLEASE PRINT OR TYPE

Please make check or money order payable to: **NATIONAL BIKE REGISTRY, INC.**

FIRST BICYCLE: Serial Number _____ Make _____ Model _____ Size _____ Color _____

SECOND BICYCLE: Serial Number _____ Make _____ Model _____ Size _____ Color _____

Name _____ Address _____ City _____ State _____ Zip _____

I authorize **NBR** to use and disclose the information on this form: _____ Signature _____ Date _____ ( ) _____ Phone Number

☐ $4.00 per bicycle annual registration fee enclosed.

SAVE $$ ▲ ☐ $7.00 per bicycle for a two year registration.

SUPER SAVER▲ ☐ $9.00 per bicycle for a three year registration.

When a registration form is sent in, a computer file is opened which lists the bicycle's serial number, make, model, size, colour and information about the owner. A gold transfer is supplied for every bike. If the bike is stolen and then recovered by the police anywhere in America, the police officer can call the Registry on a toll-free phone line and a computer search is carried out. If the bike is registered the police officer is told who owns the bike and how to contact the owner.

The President of the company claims that the Registry has been widely accepted by the law enforcement agencies. All services to them are provided free.

He believes that the bright gold transfer has some deterrent effect but that the more important reason why so few registered bicycles have been stolen is that people who care enough to register their bikes also care enough to lock their bikes securely and park them in relatively safe location. This means ironically that the scheme is serving those who least need it.

Publications on How to Avoid Bicycle Theft

Increasing concern about bicycle theft means that general guides about cycling are increasingly including a section on bicycle security. The Montana Bicyclist's Guide is a typical example which incorporates a section on how to protect a bicycle from theft along with sections on purchasing a bicycle, maintenance of a bicycle and safe riding. With regard to security, general advice is given on the need for a good lock, how to lock the bicycle securely and the need to keep an accurate description of the bike and its serial number for identification purposes.

The publication in America of a complete handbook on bicycle security makes a far greater level of detail readily available. "How to Avoid Bicycle Theft" is a 60 page handbook published by Hands Off Publishing, Tacoma, Washington. The scope of the book is indicated by the following Contents page.

DUTCH PRACTICE

ANWB Bicycle Insurance Scheme, Holland

Another example of a nation-wide scheme run by a non-government body is a scheme run by ANWB, the Dutch equivalent of the RACV. This is primarily an insurance scheme and provides low premiums on the basis that:

1. an approved bicycle lock is used, and

2. the owner registers his bike with ANWB using the serial number marked on the bike by the manufacturer.

Thus a nationwide registration scheme is a by-product of the insurance scheme. The scheme is available to both members and non-members of ANWB.

HOW TO AVOID BICYCLE THEFT

COMPLETE HANDBOOK FOR PARENTS AND OWNERS

By Heber J. Andrews

Preface by Gary MacFadden

Second Edition

HANDS OFF!™ Publishing
Tacoma, Washington

CONTENTS

The insurance cover is provided for 3 years and covers theft, loss or damage (fire/accident) and vandalism. Only bikes less than one year old are eligible. Examples of premiums for the 3 year cover in $A are:

Bike Value	Tariff 1	Tariff 2
$120-160	$24	$20
$360-400	$80	$64

The higher tariff applies in a number of cities including Amsterdam and Rotterdam. Payments for theft or complete loss of the bike are:

100% in the first year of insurance
80% in the second year
60% in the third year

This scheme focuses on bicycles that are new and therefore most valuable and attractive to the thief. However, as with the U.S. National Bike Registry, it tends to cover the bikes which are best secured against theft anyway.

Bike-Marking and Insurance/Registration Scheme in Limburg

The police in the province of Limburg carried out an intensive bike-marking program and marked 50% of the bicycles in the province with the postcode and house numbers of the owner. A prominent and permanent sticker was placed above the number to show that it had been marked. The bike-marking program was also accompanied by campaigns to encourage cyclists to lock their bikes with secure locks. The number of bicycle thefts in the province in 1984 showed a 15% reduction compared with a 12% increase nationally. A computerised data system is operated by the police to record the registration marks and other details and is used for matching stolen and recovered bicycles. Half the bikes recovered in 1984 were engraved and could be returned to their owners.

Another co-ordinated scheme is now being implemented in the county of Zuid-Limburg. The insurance number, key number and lock number are identical for a particular bike and this number is registered with the name and address of the owner. It is operated by the police in co-operation with an insurance company (Unigarant). The insurance company covers the costs of the bike marking which is done by bicycle dealers. A bike can only be insured when it has been marked. The use of a safety lock is another condition for insurance. The scheme will be self-financing in the near future.

BRITISH PRACTICES

British practices by the police in relation to bike theft appear to focus on improving the recovery rate of stolen bicycles. Bike identification schemes are operated by some county police. In addition publicity material is used to educate cyclists to:

- lock their bicycle securely when parked,
- keep an accurate description of their bicycle,
- get their bicycle coded by stamping the frame with their postcode and house number'
- display a "coded cycle" stocker to deter a thief

The Home Office

The Public Relations Branch of the Home Office publishes posters and bookmarks with advice and messages aimed at reducing bicycle theft and increasing recovery - see the following page.

Crime prevention initiatives supported by the Home Office Crime Prevention Centre are mostly related to bicycle marking. Bicycles are marked with the owner's post code and house number or the first two letters of the house name.

Essex Police

The Essex Police initially tackled the problem of bicycle security by the use of posters and leaflet distribution to encourage cyclists to secure their bicycles.

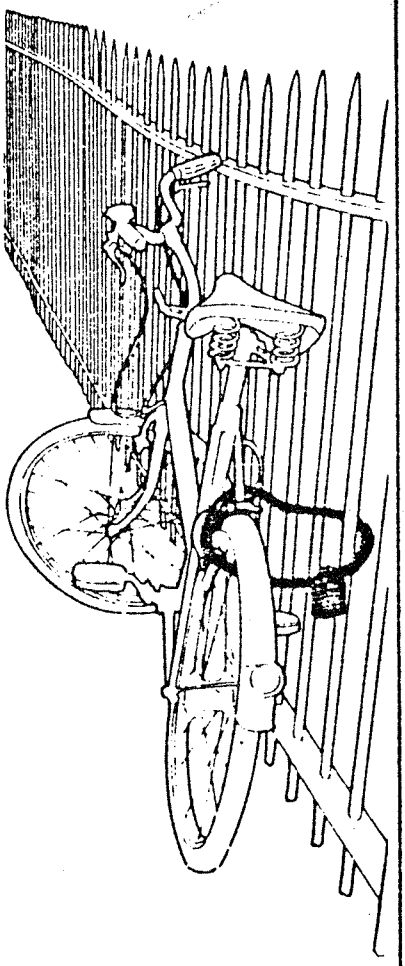
More recently a Cycle Registration Scheme was set up using a registration form on which cyclists could record all their cycle's details. The form was identical to that used by the police for their stolen cycle reports. Experience has shown, however, that the form was often lost or mislaid before the bicycle was lost.

A further problem in trying to identify the owners of found bicycles is that, in recent years, manufacturers have been duplicating serial numbers and, in some cases, not using them at all.

The introduction of the Postcode in Britain provided a unique identification number which was traceable without any accompanying description. The Postcode identifies a number of houses in a particular street or road. By the addition of the house number or part of the house name a unique reference number is achieved which is immediately traceable at any time of the day.

Essex is now getting the application of this registration system under way using the Special Constabulary. Postcoding is done with a set of die stamps except for light weight cycles which have to be engraved or invisibly marked. As a back-up to this marking, each Neighbourhood Watch group is provided with a marking kit so many cycles are marked by the owners themselves. "Coded cycle" stickers are displayed on the marked cycles as a deterrent.

LOCK AND CHAIN



FIND AGAIN

KEEP THIS CARD IN A SAFE PLACE

Make a note of your bicycle's details; this will help the police to find it should it ever be lost or stolen.

Make

Model

Frame number

Colour of frame

Accessories

Special Marks

Issued by the Home Office from an idea by the Greater Manchester Police

Printed in England for Her Majesty's Stationery Office by Donbro(Printers) Ltd. Dd 596557 Pro 10937

Description of Cycle

1. Owner's Name .....
   Address .....
2. Make .....
3. Type .....
4. Frame Colour .....
5. Frame lines (colour) .....
6. Frame Size .....
7. Frame Number .....
8. College Number .....
9. Position of Number .....
10. Transfers .....
11. Handlebars (type) .....
12. Grips (type and colour) .....
13. Brakes (type) .....
14. Rims (type) .....
15. Tyres (make) .....
16. Tyres (size) .....
17. Tyres (colour) .....
18. Gears (type) .....
19. Mudguards (type) .....
20. Mudguards (make) .....
21. Mudguards (colour) .....
22. Gearcase .....
23. Pedals (type) .....
24. Toeclips .....
25. Saddle (type) .....
26. Saddle (make) .....
27. Saddle (colour) .....
28. Lights .....
29. Accessories – Pump, Toolbag, Bell .....
30. Peculiarities – scratches, dents .....

CAMBRIDGESHIRE CONSTABULARY

ADVICE TO CYCLISTS

Throughout the country thousands of cycles are lost and stolen every year. If you have been unfortunate enough to have lost your cycle or had it stolen, the Police will do their best to find it for you. But their success will largely depend on the description you are able to give them.

Do you know your frame number? If not, examine your cycle now and make a written note of it. Should your cycle have been stolen and you do not know the frame number, contact your cycle dealer or insurance company; they may know it.

Without a frame number it is more difficult to make description comparisons of cycles found and those reported lost or stolen. However, automatic data machines are now being used in this task, but they can only help if they are provided with the description in the form they recognise. For instance they can only recognise certain colours, i.e. white, red (pink) black, blue, green, yellow (or gold) aluminium (or silver or grey) orange, purple (or violet) and brown.

Sometimes accessories such as a basket, toolbag, bell, mascot, mudflaps, might help to identify a cycle; unusual features such as dents, scratches, parts broken or missing may also help.

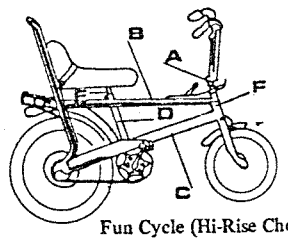
To help the Police recover your cycle in the event of it being lost or stolen, with the aid of the illustrations on the centre pages, fill in the particulars of your cycle against the items shown on the back page, then keep this leaflet for reference.

Always Remember to secure your cycle with a cycle lock whenever you leave it unattended.

CRIME PREVENTION PAYS

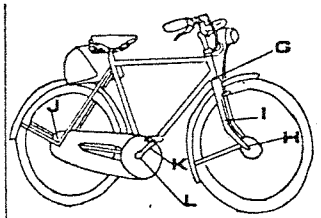
FORM NO. 440N (REVISED 9/80)

BICYCLE CLASSIFICATION



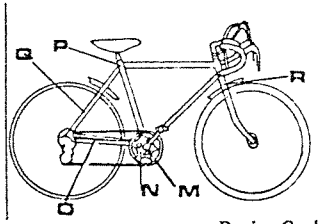
A - Handlebar Stem
B - Top Tube
C - Bottom Tube
D - Seat Tube
E - Seat Pillar
F - Head Tube.

Fun Cycle (Hi-Rise Chopper style)



G - Crown
H - Fork End
I - Fork Blade
J - Seat Stay End
K - Crank /Plate
L - Bracket Shell.

Touring Cycle



M - Bottom Bracket
N - Chain Wheel
O - Chain Stay
P - Seat Lug
Q - Seat Stay
R - Bottom Lug.

Racing Cycle

LOCATION OF BICYCLE FRAME NUMBERS

A pedal cycle has one frame number only, and is metalled stamped in one of the following locations:

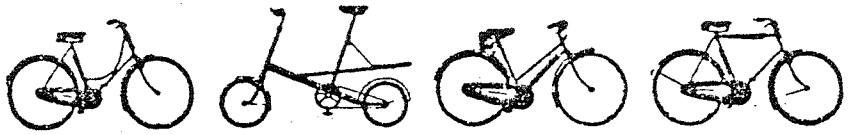
(Please refer to Bicycle Sketch)

As Indicated by Box Letters:

- (D) SEAT TUBE (close to E seat pillar)
- (F) HEAD TUBE
- (J) SEAT STAY END PLATE
- (M) BOTTOM BRACKET (underneath)
- (P) SEAT LUG

It may be necessary to scrape away the paint to locate and discern the number.

TYPES OF BICYCLES



Lady's Loop Tube | Unisex | Lady's Twin Tube | Gent's Standard

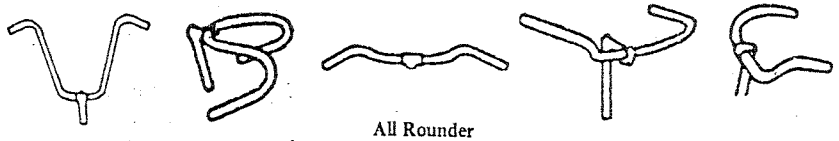
SADDLES

Racing | Loop or extended front spring | Three coil spring | Multi spring Terry type | Four Wire | Hi-Rise Chopper Saddle

CHAIN COVERS

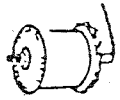
Chain Guard | Gear Case

HANDLEBARS



Hi-Rise Bars | Racing Dropped | All Rounder or "W" | North Road | Ordinary Raised

GEARS



Three or Four Speed Hub

Derailleur

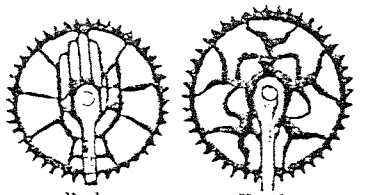
WHEELS

Westwood Rim | Endrick Rim

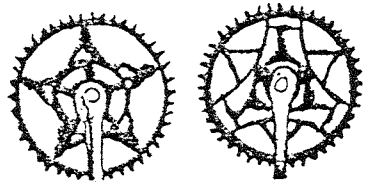
BRAKE LEVERS

Roller | Pull-up | Cable

CHAINWHEELS AND CRANKS

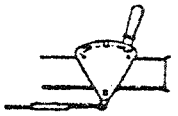


Rudge | Humber

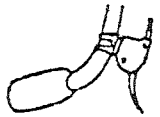


Norman | Raleigh

GEAR CONTROL

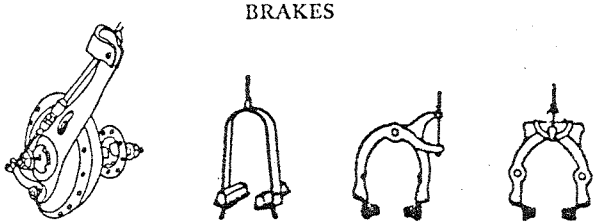


Quadrant



Trigger

BRAKES



Front Internal Hub Brake | Rim | Side Pull Caliper | Centre Pull Caliper | Derailleur

Norfolk Constabulary

The Norfolk Police also operate a registration system and have coded 18,000 cycles at Police Stations up to mid-1985. Coding can also be done through cycle dealers for a small fee, in Norfolk.

Cambridgeshire Constabulary

The Cambridgeshire Police also operate a voluntary bicycle identification scheme. They also encourage cyclists to retain details of their bicycle. The preceding page is a copy of the form provided to assist cyclists to record the appropriate details.

Statistics on Bicycle Theft

As with the interstate police forces, information was also sought from a number of county forces in England. The information from those which responded is shown in the following table. These cannot be closely compared with Australian figures because the basis of classification of some factors can be significantly different between Australia and Britain. For example, in Lincolnshire only about 70% of the cycles reported as stolen are actually recorded as stolen. The procedure is as follows. In the first instance the loser of a cycle complains of theft. A record is made of this fact but if the bicycle is subsequently recovered in the same condition as it was when it was removed, the view is taken that there was no intention to permanently deprive the owner, and there can be no theft therefore. The incident is then reclassified as a "No Crime".

None of the counties which responded were able to give any information on the ratio of reported to unreported crime. This is one of the issues investigated by the 1982 British Crime Survey. The Survey showed that bicycle theft was a relatively highly reported type of theft.

PERCENTAGE OF BRITISH CRIME SURVEY OFFENDERS REPORTED TO THE POLICE*

	England & Wales	Scotland
Theft from motor vehicles	30	43
Burglary	66	58
Theft of motor vehicles	95	94
Bicycle theft	64	66
Theft in a dwelling	18	33
Other household theft	25	21

*Source: MAYHEW, P. and SMITH, L.J.F. (1985). "Crime in England and Wales and Scotland: A BCS Comparison". British Journal of Criminology, 6, 148-159.

BICYCLE THEFT DATA FOR SOME ENGLISH COUNTIES

County Name and Population	Reported Bicycle Theft[1] 1980	1981	1982	1983	1984	Bicycle Theft as % of of all Reported Crime	Recovery Rate[2] 1980	1981	1982	1983	1984
Essex 1.5 million	2,954	2,712	2,857	3,123	2,809	5%	11.2%	14.8%	13.1%	13.0%	11.3%
Norfolk 700,000	1,812	2,097	2,605	2,792	2,578	7.5%	26.9%	25.6%	20.4%	20.0%	18.5%
Cambridgeshire 600,000	2,313	2,597	3,332	3,293	3,483	10%	20%	17%	11%	14%	13%
Lincolnshire 550,000	1,221	1,350	1,602	1,622	1,952	5%	15%	9%	10%	8%	8%
England and Wales	99,910	109,843	124,392	124,648	122,158	3.75%	-	-	-	-	14%

(1). Excludes theft of bicycle from within premises which is recorded as a burglary.

(2). Recovery rate based on cycle thefts made 'No Crime'.

The Mayhew and Smith article also gives information on theft rates gained from the survey. Theft rates per 10,000 bicycle owners for 1981 were 287 for England and Wales and 278 for Scotland, that is about 1 in 35. On the basis of the whole population the rate of bicycle theft in Scotland was 96/10,000 and in England and Wales 118/10,000, that is 1 in 104 and 1 in 82 respectively.

JAPANESE PRACTICE

The Tokyo Metropolitan Police have been operating a scheme for registering bicycles for the last three or four years. A sticker with a number is issued by the bike shop when a bike is sold. Details of the bike, the number and the owner are entered into a computerised data bank. With this system most found bikes are returned to their owner.

VALUE OF VICTORIAN,INTERSTATE AND OVERSEAS PRACTICE

Australian and overseas practice is pre-occupied with;

1. theft reduction, and

2. improved recovery of stolen bicycles.

Theft Reduction Practices

The practices centre on education programs using posters, leaflets, bookmarks etc. to alert cyclists to the danger of theft and to advise them on how to reduce the risk of theft by locking the bike securely when left and to park it in suitable locations.

Publications such as "How to Avoid bicycle Theft" provide a wealth of relevant information. Such a comprehensive publication will tend to serve the converted, providing those who already acknowledge the threat of theft and are motivated to try to avoid it with extensive information to assist them.

The practices aimed at educating the general body of cyclists to the risk of theft and how to avoid it are the valuable ones to reduce bike theft across the whole spectrum of cyclists. The complementary area for action is in the provision of suitable parking facilities so that aware cyclists are all able to park with security.

Practices to Achieve an Improved Recovery Rate

The theft information collection and collation processes are geared to returning found bicycles to their owners. There are three principle ways in which those processes can be more productive. The overseas examples illustrate how these improved processes can be implemented by either private sector scheme or by the authorities.

1. Accurate Descriptions of Bicycles.

Without a detailed accurate description of a stolen bicycle, matching with an owner is usually difficult. A rather general description may sometimes be sufficient to achieve a match at a police station if the bicycle is stolen and found in the same locality. In Victoria, once the search for the owner is transferred to the Property Tracing Section, it cannot be matched unless there is a recorded serial or registration number, or a detailed description including the make of bicycle.

Measures which get cyclists to keep an accurate description of their bike can assist in improving the recovery rate. That potential gain is diminished to the extent that cyclists cannot find the description when their bicycle is stolen. Thus schemes where a copy of the description is held at some central point are preferable.

2. Registration of Bicycles.

The marking of a bicycle with a unique number is by far the most effective way of matching a bicycle with a reported theft. Many bicycles are stamped with a serial number but this is only useful if the owner keeps a record of the number and can find that record when he needs it.

Bicycle marking schemes can overcome the difficulty of the lost records where a copy of the number marked on the bike is kept at the police station where it is marked or in some registry. Similarly the difficulty is overcome if the number used will always be known. The use of the Postcode plus house number in England is one example. In Victoria, the Neighbourhood Watch Program suggests that items be marked with the licence number of the owner or someone close to the owner. This means not only that the owner can be quickly traced at any time but that the number cannot be lost.

With a registration number or serial number recorded, there is much less need for a detailed description. It would only be if the number had been obliterated by the thief, or the owner could not remember the number, that a detailed description would be valuable. It is interesting to compare the limited amount of detail required on the Missoula Registration Form with the greater detail required on the Victoria Police Crime Report.

3. Efficient Searching of the Theft Reports.

Manually manipulated theft records such as those kept by the Victorian IBR are cumbersome to use, expensive and limit the scope of the search for an owner. Where a registration number is known the search should be straightforward. Without such a number it is much more time-consuming.

Computers are ideally suited to matching sets of data. A simple program and a modest machine costing less than $5,000 can perform searches in very little time. Not only is this cost-effective but, if a match cannot be made by registration number or by make, size, colour etc., additional searches can readily be made. Should a found bike have, for example, some distinctive feature, any recorded bikes with that feature can be checked immediately.

Schemes which Integrate Theft Reduction Practices and Recovery Rate Improvement Practices

There is some evidence from the statements of bicycle thieves that bike marking schemes have some deterrent effect when it is made clear by a sticker or transfer that the bike has been marked. The primary aim of such schemes however is to improve the recovery rate. There is certainly enough evidence to suggest that transfers should be issued with the bike marking scheme.

It is the Dutch schemes previously described, which introduce practices which closely integrate theft reduction and recovery rate improvement measures. In linking the registration and insurance with the use of a secure lock, the likelihood of theft is reduced. Premiums can therefore be kept relatively low, thus making the scheme attractive to a larger proportion of cyclists.

SURVEY OF BICYCLE THEFT VICTIMS

The Victoria Police advised a sample of Melbourne people who had reported the theft of a bicycle in July and August, 1985 that a copy of their theft report would be given to Loder & Bayly if they did not object to being included in a survey of theft victims. From a total of 150 forms passed on, 125 victims were contactable by phone and willing to participate in the survey.

A copy of the questionnaire used by the phone interviewers is included as an Appendix. The key results from the survey show that:

- almost half the bikes were stolen from around houses
- almost 80% of the bicycles were unsecured
- over 60% of the bikes were parked in a regular place
- 14% of the stolen bikes were left for less than five minutes
- 8% of the bicycles were "found"
- of the ten bikes found two were found by the police and seven by the victim or his friends or family
- almost 30% of the victims gave up cycling as a result of the theft (as measured approximately six weeks after the theft)
- 40% of the stolen bikes were less than one year old
- only 26% of victims had any details of the bicycle recorded
- 60% knew that the bicycle might have a serial number
- only 15% could tell the Police the serial number
- more than 30% were not aware of the bicycle marking scheme
- 14% of the bicycles were marked under the marking scheme
- 26% of the bicycles were insured
- over 90% of the victims would be willing to pay for a relatively low cost insurance scheme that required the cyclist to own and use a U-lock
- over 30% of the victims had had more than one bike stolen in the last five years
- about one-third of the victims regarded the theft of their bike as being as serious as a car theft while another third regarded it as less serious than the theft of a colour T.V.

Specific Responses to Victim Survey

The responses to each question are shown below in terms of the percentage of respondents in each category.

1. Was the theft of the bicycle:

part of a general household burglary	1.6%
a sole theft?	97.6%
no response	0.8%

2. Can you tell me where the bicycle was stolen from?

Work	2.4%	Inside House	0.8%
School	7.2%	Locked shed/garage	1.6%
Shops	24.0%	Unlocked shed/garage	9.6%
Station	8.8%	Backyard	13.6%
Sports Facilities	2.4%	Front Porch	20.0%
Park	1.6%	Other	8.0%

3. Was the stolen bicycle locked?

Unlocked	77.6%	Locked in Class 1 Facility	NIL
Locked wheel to frame	6.4%	Locked in Class 2 Facility	4.0%
No response/ Don't know	1.6%	Locked in Class 3 Facility	10.4%

A Class 1 facility is a bicycle locker or locked enclosure. A class 2 facility is a rack or stand equipped with a chain or cable so that the cyclist can lock the bicycle frame and at least one wheel by supplying only a lock. A Class 3 facility is a rack, stand or post to which the cyclist can lock his bike with a chain or cable.

4. Can you tell me/describe the type of lock that was used? (Sample of 26 only.)

U-bar/U-lock	NIL	Mild steel chain & padlock	30.8%
Coiled cable & padlock	11.5%	Hardened steel chain & padlock	15.4%
Coiled cable with combination lock	38.5%	No response/ Don't know	3.8%

5. Was it parked in a regular place (used 3 or more times/wk.)?

Regular	62.4%	Irregular	37.6%

6. How long was it parked there?

< 5 mins. 13.6%	5-15 mins. 6.5%	15-30 min. 6.4%
1/2 - 1hr. 4.0%	1-2 hrs. 10.4%	> 2 hrs. 59.2%

7. Were the police interested and responsive to your theft report?

Yes	71.2%	No	24%	No response/ Don't know	4.8%

If "No", how did they react?
Most responses were to the effect that bicycle theft was 'just routine'; their attitude was very casual. Some felt that the police were not interested because the bicycle had not been locked.

8. What type of bicycle was stolen?

Women's Upright	3.2%	Men's Upright	7.2%
Women's Racer	4.8%	Men's Racer	54.4%
BMX	30.4%	Dragster	NIL

9. Can you tell me the approximate value of the stolen bicycle?

Less than $100	7.2%	$100-$149	16.0%	$150-$199	18.4%
$200-$249	28.0%	$250-$300	16%	$300-$499	11.2%
$500 or more	2.4%	No response/Don't know			0.8%

The responses to this question were checked against the values quoted to the police when the theft was initially reported. It was thought that victims might overstate the value to Police for insurance purposes.

Higher price quoted to police	30.4%
The same price quoted both times	36.8%
Lower price quoted to police	32.8%

10. Was the bicycle found?

Yes	8%	No.	90.4%	No resp./Don't know	1.6%

11. If found by other than the Police, did you inform the Police that it had been found?

Of the sample of seven, three informed the Police, three did not and one did not respond to the question.

12. How was it found?

Of the sample of ten, five were "left somewhere", two were "identified in the street", one had been borrowed by a brother, one didn't know where it was found - he "just got the frame back", and one did not respond to this question.

13. Following the theft will you/did you:

Give up cycling?	28.8%	Get another bike?	57.6%
Buy a better locking system ?	6.4%	Other/No response	13.6%

14. Approximately how old was the stolen bicycle?

Less than 1 year	40.8%	4-7 years	10.4%
1-4 years	45.6%	Older	3.2%

15. Did you have recorded information on such things as frame size, brand, colour, etc.?

receipt with information on it	9.6%
form/notes with relevant information	16.8%
no information recorded	74.4%

16. Did you know that your bicycle may have a manufacturer's serial number?

Yes 60.8% No. 39.2%

17. Were you able to tell the police the number?

Yes 15.2% No. 84.8%
i.e. 25% of the 60% who knew the bike may have a serial number.

18. Are you aware of the existence of the Police bicycle marking system?

Yes 58.4% No. 32.4% Am now but wasn't at the time. 8.8%

19. Was your bicycle marked with this Police system?

Yes 14.4% No. 85.6%

20. Was your bicycle insured?

Yes 25.6% No. 73.6% No response/ Don't know 0.8%

21. What premium would you be willing to pay for a relatively low cost insurance scheme that required the cyclist to own and use a U-lock? (Cost $20+.)

$5 20.8% $10 41.6% $15 31.2%
Not willing to pay 3.2% No response 3.2%

22. Was the bicycle that you reported stolen the only bike that you have had stolen in the last five years?

Yes 54.4% No. 31.2% No response/ Don't know 14.4%

23. How many other bikes have you had stolen in the last five years?

One	56.4%	Two	33.3%	Three	5.1%
Four or more	2.6%	No response/Don't know			2.6%

24. Did you report these other thefts to the police? (Sample of 39 cases.)

Yes	84.6%	No.	5.1%	No response/ Don't know	10.3%

25. Why didn't you report the other thefts?

The sample for this question was only two cases.

26. How seriously do you regard the theft of your bike(s)? Do you regard this sort of crime as being as serious as:-

A house breaking	8.8%	The theft of a video recorder	9.6%
A car theft	36.0%	The theft of a colour T.V.	8.0%
Less serious than theft of colour T.V.	34.4%	No response/ Don't know	4.0%

DOOR-KNOCK SURVEY

We carried out a second survey of victims to explore the level of unreported bicycle theft. All households in selected areas of Brighton, Springvale, Preston and Carlton were door knocked to seek out households which had experienced the theft of one or more bikes in the past five years. These households were interviewed about whether the theft(s) had been reported to the Police and, if not, why not.

79 households where a bicycle had been stolen in the past five years were interviewed giving the following results: Reported 80%. Not Reported 20%.

These figures are dramatically different to those estimated from the S.A. and W.A. ABS surveys described in the earlier chapter on "Review of Interstate Practice". These estimates show that only about 30% of bicycle thefts are reported.

SURVEY OF THE USE OF SECURITY DEVICES

Most bicycles parked in public areas in Melbourne are locked, generally with a light chain or cable which can be cut with relatively small bolt cutters. The proportion of locked bicycles varies considerably with the location and generally appears to reflect the length of stay. At stations almost all bicycles are locked whereas in shopping centres about two-thirds are locked. Few bikes appear to be locked when parked at home.

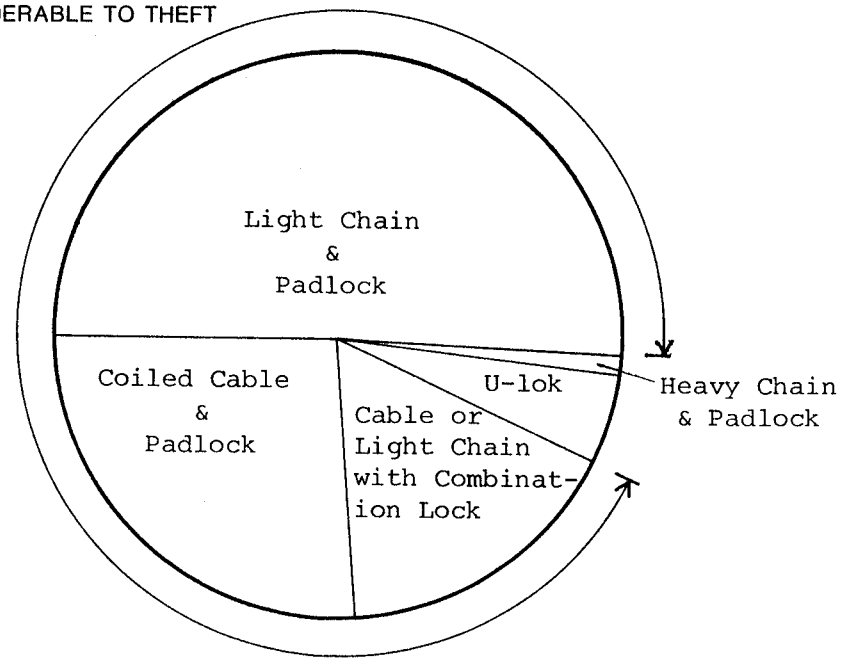
The information collected shows that leaving a bicycle unlocked increases its chance of being stolen. Almost 80% of the bicycles stolen in the survey of victims were unlocked whereas over 80% of parked bicycles in public areas in Melbourne are locked.

Since a large proportion of the stolen bicycles were taken from a house and bicycles are usually not locked when at home, we have separated out those bicycles. This shows that over 90% of these bicycles were unlocked. For the balance of the stolen bicycles the proportion of unlocked bicycles was 68%.

Unlocked bicycles observed in the survey were mostly in shopping centres (18) with only one at a station, one at a recreation centre and one (possibly a messenger's bike) outside an office building.

About half the locked bicycles were secured by a light chain and padlock and a quarter with a coiled cable and padlock. 5% used a U-lok, 1% used a heavy chain and padlock and the balance (17%) used a combination lock either with a cable or a light chain.

LOCKED BIKES VULNERABLE TO THEFT



MEANS OF LOCKING BICYCLES

ADULT THIEVES

Adults form a small proportion of the thieves charged or cautioned in Victoria. In 1984, 107 adults (all but three were males) went to court for bike theft and 335 juveniles were cautioned or went to court. No one knows the relative proportions for thieves who are not apprehended but it is widely assumed that the large majority of bicycle thieves are juveniles.

Surveying of Adult Thieves

It was agreed with the Victoria Police Research Co-ordinating Committee that a sample of adult thieves would be assembled by the Police sending a message to all Districts asking for details of all forthcoming court hearings in Melbourne of bicycle thieves. Loder & Bayly were to attend the relevant court on the day of a hearing and approach the offender after the hearing to see if he would be willing to discuss his stealing of bicycles.

This procedure has not been successful. Very few forthcoming cases have been notified. Attendance at the court is very time consuming as no time of day can be given for the hearing. The accused plead not guilty and the case is adjourned to a later date and the thieves are not willing to talk until the case has been heard. Information has only been directly obtained from one adult thief.

To obtain more information on adult thieves we have contacted some police stations seeking recent cases concerning adult bike thieves. The police have a policy of not releasing the names of previous offenders and are not willing to write to them seeking their permission for Loder & Bayly to contact them. They have been willing to discuss the details of relevant cases without naming the thieves. The following material summarises several cases that have been discussed with the police.

The general picture obtained of the adult bicycle thief is different from that of the juvenile. It would appear that the adult thief is more organized and steals bikes on a larger scale, essentially for immediate sale as a complete bicycle and goes for high quality bicycles. One police station told of a group of three adult males who were stealing bikes to support a drug habit. Each had stolen 50 to 80 bicycles. They operated along the bay-beach railway line and although they were known to each other they worked individually. They sold the complete bicycles to secondhand and pawn-shop dealers. Although one dealer has been charged with receiving stolen goods the police have not identified any network among secondhand dealers.

The bicycles were invariably high quality 10 speed racers. Bolt cutters were used to cut the chains on locked bicycles. Bicycles were stolen mainly from railway stations and shopping centres. The bicycle was ridden away, loaded into a car, taken to the dealer and disposed of, usually within the same day. In this case the marking system was not seen as a deterrent.

Another station advised us of two individuals, both males in their 40's, who were charged with bicycle theft. The one individual apparently stole bicycles just to have them, and hides them in various places. He steals from numerous venues and includes both locked and unlocked bikes. The second individual, who has also stolen a large number of bicycles, resells the stolen bicycles complete - to dealers or individuals. There is apparently a ready market for secondhand bicycles. Once again locked bicycles do not represent a deterrent.

A further reported instance of adult bicycle thieves involved two individuals operating around Melbourne University and the city generally. They were in their 20's and stealing to support a drug habit. The one individual had accounted for up to $20,000 worth of bicycles. Bicycles in the $500 to $1,000 range were sold for $50 or $60 to secondhand dealers or anyone who was interested in a high quality bike at a bargain basement price. Bolt cutters were used to cut the chains from bicycles chained up at the University - if the chain was too strong the thief would simply move to the next bike. In these sorts of cases the marking system is not a deterrent as the thief moves quickly to unlock the bike and ride it away.

A further case involved another person, 45 years old described as a cleptomaniac or "bowerbird". His room was piled high with stolen bikes and cardboard boxes of accessories. It would appear that he seldom sold what he stole. He operated alone, stealing bikes from railway stations and outside shops and hotels. He would break the lesser quality chains. This report may refer to the same thief as the one mentioned previously who hides bikes in various places.

Another case involves a group of three adults who were stealing unlocked bicycles from backyards and porches at night. They were then stripping them and reassembling them for resale when caught by the police.

One case involved an adult who left a hotel, took a bike for a ride and then dumped it in a creek.

In a City case about twelve bikes were stolen by two men. One would steal the bike while the other would wait in the van. The bikes were sold to a dealer in Prahran. Both men stole to get money, one of them using it for drugs.

The motives and procedures of the adult thief from whom we had information generally matched the pattern of these other cases. He stole to support a drug habit, stole 10 speed bikes mainly from stations but also from universities, colleges and shopping centres, used bolt cutters, usually stole them between 9 a.m. and 1 p.m., rode the bikes to a nearby car, sold them to bicycle shops, second-hand dealers and pawn brokers. He was aware of the bike marking scheme but did not have time to check if they were marked. He worked alone and has no knowledge of any organisations working in the field.

A number of cases were mentioned where only limited information was provided and it was not possible to determine whether the theft described was a single theft or one of a number by that thief. The details provided were:

- Woman stole a bicycle from outside a milk bar and put in the boot of her car.
- Bicycle stolen from outside City Baths, using bolt cutters and sold to a bicycle dealer in Northcote.
- Two drunks took an unlocked bicycle from outside Flinders Street Station at 1.30 a.m. in order to get home.
- Thief entered the grounds of a hospital, selected a woman's bike and rode off.
- Thief stole a bike from outside an Elizabeth Street hotel.

One inner suburban police division reported that twelve people had been charged with 22 bike theft offences in the last twelve months. Nine of these people were adults. All were drug offenders and all of them sold the bikes to pawn shops or bike dealers. Almost all of these thieves used bolt-cutters.

JUVENILE THIEVES

A system was set up, with the permission of the Attorney General, to interview juveniles at the Children's Court who had been charged with bicycle theft. An initial decision was made to concentrate on the Central Melbourne Court. Subsequently, because no interviews were being obtained at the Melbourne Court it was decided to try to interview at the Regional Courts. However no interviews were completed at these courts because no bicycle theft cases were being heard.

Six interviews were completed, all with boys aged between 12 and 16 years. All the boys, bar one, had been involved in other types of theft previously, including housebreaking, shop stealing and stealing from cars. Only one admitted to previous bicycle theft although this was the first occasion he was being charged for bicycle theft. He was the only one of the six who could be classified as a "hardened" and organized bicycle thief, and was the only one who felt that appearing at the Children's Court would <u>not</u> deter him from future bicycle stealing. He operated alone, usually at railway stations, stealing locked bikes during the day. The theft for which he was charged involved two BMX bikes and one men's racer. Bolt cutters had been used to cut the chains. One bike was stolen for his own use, the others to be sold for parts. He claimed that there was a ready black market for all types of stolen goods and that he would, as a general guide, sell bikes complete, or if the individual parts were worth anything (e.g. alloy wheels) he would break the bike down and sell the parts. He claimed that there were "tons of kids" stealing bikes - "they need the money". He also stated that, at the time of the theft, there was no time to check a bike for marking - but if he found it was marked he would dump it immediately.

Of the remaining five interviews, only one respondent had operated on his own, the others being with one, two or three other people. In all cases, bar one, the bicycles were unlocked

although one was stolen from inside a house. They were primarily stolen from houses - either from inside, from the driveway, the front lawn or round the back. In some cases the thief wanted the bike to ride for himself, in other cases he wanted to break it up and sell the parts, and in one case parts were wanted for the respondent's own bike. BMX bikes were the prime target. In two cases, where the bikes were stolen from the front lawn or driveway, it was a spur of the moment act where the boy had seen the opportunity to take the bike. In the other cases it was a planned act. Two of the boys charged had actually operated together and had broken into a house to steal a bike they had seen there previously (when they had gone to buy something advertised in the Trading Post). They had stolen the bike for "something to ride around on - other boys had a bike so I wanted one too". These boys had also stolen a locked bike from a station with the intention of selling the parts and had, on another occasion "stolen" a bike from a boy in a park by asking for a ride and then riding off. The bike was subsequently returned to its owner. These boys claimed to know of groups of boys who stole bikes for their own use and then stole other bikes with good parts which they then added to the original bike to make it more flashy and use as a "show bike". Another of the boys charged had gone with a friend to steal a bike from outside a house. The friend, (who did not appear in court) had wanted this particular bike and the boy accused had helped him with the "theft". The stolen bike was marked by the police and this led to the boy's ultimate apprehension. This boy claimed to know of groups of boys operating near Ministry of Housing flats, stealing bikes, respraying them and then either retaining them for their own use or selling them to other children.

Two of these boys were not aware of the bicycle marking system. The others felt they would not take a marked bike.

One case of juvenile thieves was reported to us by a police collator. A group of about six boys from 10 to 15 years old were stealing bikes from houses, school, etc. and filing off the serial numbers, changing parts and repainting the bikes. In the five to six months before they were caught there were 20 to 40 bikes stolen in the area per month; since then there have been 2 to 6 per month.

Survey of Reported Bicycle Thefts by Juveniles

The most extensive picture of juvenile bicycle theft and the motives of the thieves comes from an analysis of 475 official contacts between juveniles and members of the Victoria Police involving thefts of bicycles or parts in 1982. This analysis by Dennis Challinger is reported in full in an Appendix of this report. The principal findings are stated below.

Comparison with Other Types of Theft.

The analysis shows that, amongst juveniles, bicycle theft shows similar characteristics to theft from cars and other property theft and marked differences with shop theft, with respect to the percentage of male offenders, the average age of offenders and the percentage with no previous contact with the police.

	Percentage Male	Average Age of Juveniles	% with no Previous Contact
Shop theft	49	14	89
Bicycle theft	96	14	67
Theft from cars	97	15	65
Other property theft	90	14	58

Table 2 of Challinger's report further compares the characteristics of juveniles formally dealt with for theft of bicycles, theft from a car, and other property theft. This further underlines the similarities. The differences that do emerge include the younger age of those dealt with for bicycle theft (26% aged under 13) compared with 16% and 19% and the tendency for more bicycle thieves to commit their offences alone (35% compared with 23% and 29%).

Location of Bicycle When Stolen.

Information was available in 419 cases.

Location of Theft	No. Stolen	Percentage
House	109	26
Outside shop	92	22
School	62	15
Centres of Entertainment	75	18
Other	81	19
	419	100%

Use to Which Stolen Bicycle Put.

This shows that the largest proportion were stripped and that very few were sold which is in direct contrast to the tentative picture built up of disposal by adult thieves.

Use	Number	Percentage
Stripped	164	46
Ridden	104	29
Re-painted, changed identity	34	10
Dumped	28	8
Gave away	16	4
Sold	10	3
	356	100%

Bicycle Theft Type.

The number of bicycles involved in each offence was not always noted. Assuming only one bicycle was involved when not otherwise stated the following information has been assembled.

Dividing the number of bicycles stolen in an event by the number of offenders involved in it, gives some measure of the impact and nature of the event. This calculation shows that there were 247 group offences, 180 simple offences and 40 multiple offences.

Comparison of these types of bicycle theft with the use to which the stolen bike was put shows that simple offences, where one offender steals one bicycle are more likely to have occurred because the thief wanted a bicycle to ride. Conversely, bicycles stolen by groups of offenders, or those stolen by repeat offenders, appear more likely to have been stolen for re-building and stripping of parts.

How the Thieves Came to Police Attention.

Comments were available in only 82 cases. In half of them, the victim, a member of his family or a friend identified the bicycle in the offender's possession. In 14 cases parents discovered stolen bicycles in their child's possession and called the police. In another 14 cases the police came across offenders as part of their duties.

Motives for Bicycle Theft.

This section of the appended report by Mr. Challinger is quoted in full here because it gives valuable insights into an area where so little is documented.

"An attempt was made to glean from police comments some motive for the bike theft. In only 39 cases did this prove possible and in summary fourteen cases involved offenders tired of walking who were looking for a faster mode of transport; another fourteen had a simple want (or need) for a bike but allegedly didn't have the resources to buy one. Three offenders admitted stealing "for fun" and a further eight stole following the theft of their own bicycles.

This last group form an interesting sub-group and the police summaries of what they said are interesting.

- "Offender regrets committing the offence which he states is a common practice of borrowing bikes from the school at lunch time without permission."

- "Child found what he thought was his stolen bicycle in the grounds of the High School. He then conveyed the bicycle to his home address where he checked the serial number of the bicycle against the record he kept of his own. He then discovered that it was not his bicycle but decided to keep the bicycle nevertheless. He informed the Police that he had recovered his own bicycle".

- "Co-offender had had a similar bike stolen and was scared to tell parents. Decided to steal this bike so parents wouldn't know ... rode to shops with the sole purpose of stealing a bike ... looked around until a suitable bike was found".

These extracts not only indicate a prevalence of stealing amongst young people, but also a fairly high level of moral indignation. This last sentiment is also evident in the following police commentary about an offender who "purchased a bike from youth and this bike fell apart after a short time ... returned bike to the youth who refused a refund ... observed a BMX in a private garage as they left the youth's house and took same".

This extract also underlines the apparent importance of a youth having a bike of their own. A particularly stark instance of this is provided in the case of a juvenile described by the police as ..."previously injured as a result of riding a pushbike which was involved in an accident and since that occasion parents have banned all bikes from the house" who nevertheless was found riding a stolen bike.

Summary.

Basically the characteristics of those juveniles who steal bicycles are not far removed from those who steal other sorts of property in the public arena. But with each case in this study involving bicycles valued at an average of $217, bicycle theft is a considerable offence especially when compared with thefts of money from a slot machine or a pair of sunglasses from a motor car.

It does not seem possible to develop much of a typology of young bicycle thieves over and above the identification of the solitary individual who steals just one bike for his or her immediate use, compared with groups who steal bikes to cannibalise them and share the spoils, and those who steal numbers of bicycles for the same purpose.

But the solitary offender it seems, may not view the misappropriation of another's bicycle as all that serious, especially if that form of behaviour is common in his community. And the prevalence of bicycle abuse appears to be considerable in some areas. That in turn may be traced back to the social necessity amongst young people to have one's own wheels. If that pressure is greater than that to appreciate and respect the property of others, then perhaps attempts should be made to redress that imbalance."

KNOWN VICTIM SURVEY

Appendix

NAME . . . . . Phone No. . . . . .

Thank you for agreeing to be interviewed by us. As the police have probably told you, Loder & Bayly is a firm of private consultants working for the State Bicycle Committee. We are looking into the extent of bicycle theft, subsequent reporting to the police and identification of stolen bicycles.

As somebody who has had a bicycle stolen fairly recently, and reported the theft to the police, your answers will help us to determine how effective current methods of police reporting are and learn more about the nature of bicycle theft.

1. Was the theft of the bicycle:

   part of a general household burglary? [1]

   a sole theft? [2]

2. Can you tell me where the bicycle was stolen from?

Work	1.	Inside House	7.
School	2.	Locked shed/garage	8.
Shops	3.	Unlocked shed/garage	9
Station	4.	Backyard	10
Sports Facilities	5.	Front Porch	11
Park	6.	Other	12

3. Was the stolen bicycle locked?

Unlocked (go to Q.5)	1.	Locked in Class 1 facility	3.
Locked wheel to frame	2.	Locked in Class 2 facility	4.
		Locked in Class 3 facility	5.

4. Can you tell me/describe the type of lock that was used?

U-bar/U-lock	1.	Mild steel chain & padlock	4.
Coiled cable & padlock	2.	Hardened steel chain & padlock	5.
Coiled cable with combination lock	3.	Other	6.
		. . . . .	

   Ask for some idea of price of chain $. . . . and lock $ . . . . .

5. Was it parked in a regular place (used 3 or more times/wk.)?

   Regular [1] Irregular [2]

6. How long was it parked there?

< 5 mins.	1.	5-15 mins.	2.	15-30 mins.	3.
½ to 1 hour	4.	1-2 hrs.	5.	> 2 hrs.	6.

7. Were the police interested and responsive to your theft report?

Yes [1.] No [2.]

If not how did they react? . . . . . [ ]

8. What type of bicycle was stolen?

Was it a:

Women's Upright [1.] Men's Upright [2.]
Other . . . . . [ ] Women's Racer [3.] Men's Racer [4.]
BMX [5.] Dragster [6.]

9. Can you tell me the approximate value of the stolen bicycle? . . . . . [ ]

10. Was the bicycle found?

Yes [1.] No [2.]

Go to Q.13.

11. Was it found by Police? [1.] Other . . . . . [ ]
Yourself/friends/family? [2.]

11 a). If found by other than the police, did you inform the police that it had been found?

Yes [ ] No [ ]

12. How was it found?

Was it: left somewhere [1.] identified at the police station [3.]
lent to someone [2.] identified in the street [4.]
Other . . . . . [ ]

13. Following the theft will you/did you

Give up cycling [1.] Get another bike [2.]
Buy a better quality locking system [3.]
Other . . . . . [ ]

14. Approximately how old was the stolen bicycle?

Was it Less than 1 year [1.] 4-7 years [3.]
1-4 years [2.] Older [4.]

15. Did you have recorded information on such things as frame size, brand, colour, etc.

receipt with information on it [1.]
form/notes with relevant information [2.]
other . . . . . [ ]

16. Did you know that your bicycle may have a manufacturer's serial number?

Yes [1.] No [2.]

17. Were you able to tell the police the number? Yes [1.] No. [2.]

18. Are you aware of the existence of the Police bicycle marking system?

Yes [1.] No [2.] Is now but wasn't at the time. [3.]

19. Was your bicycle marked with this Police system? Yes [1.] No [2.]

20. Was your bicycle insured? Yes [1.] No [2.]

21. What premium would you be willing to pay for a relatively low cost insurance scheme that required the cyclist to own and use a U-lock? (Cost $20+).

$5 [1.] $10 [2.] $15 [3.]

22. Was the bicycle that you reported stolen on . . . . . the only bike that you have had stolen in the last five years?

Yes [1.] No [2.]

23. How many other bikes have you had stolen in the last five years?

1 [1.] 2 [2.] 3 [3.]

24. Did you report these other thefts to the police?

Yes [1.] No [2.]

25. Why didn't you report the other thefts?

. . . . . .

. . . . . [ ]

26. How seriously do you regard the theft of your bike(s)?
Do you regard this sort of crime as being as serious as:-

A house breaking [1.]
A car theft [2.]
The theft of a video recorder [3.]
The theft of a colour T.V. [4.]
Less serious [5.]

27. Do you wish to make any other comments?

. . . . . .

. . . . . .

Thank you very much for your time.

Appendix

YOUNG BICYCLE THIEVES

Dennis Challinger

The University of Melbourne

Juvenile Theft

Theft is the single most common offence for which formal police action is taken against young people. From an analysis of 15,294 official contacts between juveniles and members of the Victoria Police in 1982, 6,978 (or 46 per cent) resulted from detection of a juvenile stealing. Of that number 5,047 (or 78 per cent) resulted from thefts from shops, 475 from thefts of bicycles (or parts) and a further 511 from thefts from motor cars. Table 1 indicates the full breakdown of these juvenile thefts.

Table 1

Thefts by Juveniles

Theft Type	Number of Contacts	Percentage Male	Average Age	Percentage With No Previous Contact
Shop theft	5047	48.74	14.08	89.02
Bicycle theft	475	95.58	14.10	66.53
Theft from cars	511	96.67	14.65	64.77
Other property theft	266	89.85	14.12	57.52
Thefts through false pretences etc.	99	69.70	15.29	67.68
Thefts by employees	72	68.06	15.67	63.89
Unspecified thefts	505	85.54	14.54	64.95
Attempted thefts	3	33.33	15.25	100.0
Total	**6978**	**60.16**	**14.21**	**82.22**

It is plain from Table 1 that the dominant group of shop thefts is quite exceptional in two ways when compared with the other types of theft committed by juveniles. First and most notably, over half of all shop thefts are committed by females compared with only 4 per cent of the bicycle thefts; and secondly, only 11 per cent of juveniles dealt with for shop theft have prior records of offending compared with 33 per cent of those dealt with for bike thefts.

The offences of theft through false pretences and theft from employers are also different from what might be called straight property theft both qualitatively and by way of the characteristics itemised on Table 1. It therefore makes little sense to compare bicycle thieves with them, but good sense to compare bicycle thieves with those who steal from cars, and those who steal property from other places including slot machines, private property, schools, handbags etc. This comparison appears in Table 2 where characteristics of those dealt with for these three groups of offences are extracted from documentation completed by police personnel when formally processing the young offender. As police do not always note the characteristics listed on Table 2, the percentages appearing in the Table are the percentages of those for whom a comment has been made, rather than percentages of all thieves in the sample.

What Table 2 illustrates is the similarity between the three types of property thefts although there are some differences. Chief among these are, the younger age of those dealt with for bicycle theft; the slightly higher percentage of bicycle thieves living at home with both natural parents; and the tendency for more bicycle thieves to commit their offences alone.

Table 2

Comparison of Characteristics of Juveniles Formally Dealt with for Theft of Bicycles, Theft of Property or Other Property Theft

Characteristic	Type of Property Theft				
Percentage of Offenders -	Theft of Bicycle (N = 475)	Theft From Car (N = 511)	Other Property Theft (N = 266)	Total (N = 1252)	Vic. Popn.*
Female	4	3	10	5	50%
Aged Under 13	26	16	19	21	11%
Australian Born	89	89	85	89	71%
Living At Home With Both Parents	60	55	53	57	
Technical School Educated	44	46	40	44	
With Primary Education Only	18	11	16	15	6%
With Year 9 Level Education	26	32	29	29	
Left School	16	23	23	20	
With Prior Police Record	67	65	58	64	
With Both Parents of Good Character	90	92	93	91	
From Family With One or Two Children	30	28	29	29	
With No Co-offenders	35	23	29	29	
From Family With No Marital Breakdown	68	68	70	69	
Deemed Inadequately Supervised	44	51	45	47	
With Some Evidence of Financial Strain in Family	16	17	20	17	
With Some Evidence of Criminality in Family	10	8	8	9	
Rated As "Truthful in Interview"	16	13	11	14	
Officially Cautioned by the Police	66	62	55	62	

* This column added by Loder & Bayly to report.

Bicycle Thieves

The above data are collected from documents the police complete when they formally deal with a juvenile offender. Those documents regarding bike theft sometimes also include comments about the location of the theft, the use to which the stolen bicycle was put, the apparent reason for the theft, the way in which the thief was brought to police notice, whether the bicycle was a BMX bike and whether it was locked before the theft. Unfortunately these facts were not recorded as a matter of course by the police and in some instances very little data was collected. For instance the use of locks was only mentioned in 19 cases.

The best recorded fact was that relating to the location of the bicycle prior to its being stolen. Table 3 provides this data and it will be seen that only in 55 cases was that information not available in the police documentation. The Table also includes details relating to the highest (or current) educational level reached by the juvenile involved in each of the 475 cases.

It will be seen that 55 percent of the bicycle theives had not progressed beyond Year 8 level at school, and that offenders from all levels were active at all locations listed on the Table.

Information about the way the stolen bicycle was used was available in 357 cases, and as can be seen on Table 4, stripping the bicycle down by removing parts was the most frequent activity in 46 percent of cases where this information was available, and simply riding the bicycle was the second most frequent activity in 29 percent of known cases. Unsurprisingly the vast majority of thieves were still attending school and they were more likely to steal bicycles to ride them than were the unemployed thieves (of whom there were only a small number).

These two factors, location of theft and use of stolen bicycle are combined in Table 5. It shows that stripping and personal usage by the thief account for over three quarters of all thefts, but also that the majority of

Table 3

Location of Bicycle Thefts According to Offender's School Level

Location of Theft	School Level of Offender: Primary	Year 7 & Year 8	Higher Secondary	Total
House				
Unspecified	5	20	10	35
front yard	6	11	17	34
back yard	6	4	9	19[1]
garage	1	10	10	21
Outside Shop				
take away food shop	1	8	3	12
other shop	16	26	38	80
School	11	23	28	62
Centres of Entertainment				
amusement parlour	1	7	4	12
leisure centre	8	6	11	25
swimming pool	3	4	11	18
oval or park	6	9	5	20
Other				
"on the street"	6	11	13	30
outside offices	1	4	10	15
railway station	3	5	4	12
"borrowed"	3	2	2	7
"found"	4	3	10	17
Unspecified	6	22	27	55
Total	**87**	**175**	**212**	**474**[1]

Note 1. School level unknown in one case where bike stolen from back yard.

bikes stolen from the public domain, most notably from outside shops and centres of entertainment, appear to be likely to be stripped down.

Data relating to the actual number of bicycles involved in the 475 offences was not always noted on the police documentation. Assuming only one bicycle was involved when no data was given, there were 378 bicycles involved in 467 cases, eight cases in the sample involving more than one, but an unknown number. One case involved five separate juveniles all charged with the theft of the one bicycle, while at the other end of the spectrum one solitary

Table 4

Use To Which Stolen Bicycles Put According to Occupation of Offender

Use	Occupation of Offender: Student	In Work	Unemployed	Total
Ridden	93	5	6	104[1]
Re-painted, changed ID	24	2	8	34
Sold	9	1	-	10
Gave away	15	-	1	16
Dumped	26	1	1	28
Stripped	134	10	20	164
Not stated	98	8	12	118
Total	**399**	**27**	**48**	**474**[1]

Note 1. Occupation unknown for one person who stole a bike to ride.

Table 5

Use to Which Stolen Bikes Put According to Site of Theft

Site of Theft	Usage of Stolen Bike: Ridden (N = 97)	Stripped (N = 142)	Other* (N = 82)
House (N = 79)	32%	38%	30%
Outside Shop (N = 80)	25%	58%	17%
School (N = 46)	39%	41%	20%
Centres of Entertainment (N = 53)	26%	51%	23%
Other Places (N = 60)	32%	33%	35%
Not Known (N = 36)	22%	61%	17%
Total (N = 354)	**29%**	**46%**	**25%**

* Other usage includes re-painted, sold gave away or dumped.

offender was charged with stealing five bicycles. Dividing the number of bicycles stolen in an event by the number of offenders involved in it, gives some measure of the seriousness or impact of that event.

Undertaking this calculation allows the identification of: 247 group offences (where the calculation produces a figure between 0.20 and 0.80), 180 simple offences (where one individual stole one bicycle giving a result of 1.00) and 40 multiple offences (where a number of individuals stole a greater number of bikes and the result is between 1.25 and 5.00).

These different types of bicycle theft can be considered with respect to both location of the theft and the use to which the stolen bike was put.

Table 6

Bicycle Theft Type According to Use To Which Stolen Bicycle Put

Use	Bicycle Theft Type: Group Offence (N = 194)	Simple Offence (N = 134)	Multiple Offence (N = 24)	Total (N = 352)
Ridden	19%	46%	17%	29%
Re-painted/Changed ID	8%	11%	17%	10%
Sold	1%	5%	4%	3%
Gave Away	5%	3%	8%	4%
Dumped	8%	7%	12%	8%
Stripped	59%	28%	42%	46%
Total	100%	100%	100%	100%

It is clear from Table 6 that simple offences, where one offender steals one bicycle, are significantly more likely to have occurred for the simple reason that the thief wanted a bicycle to ride. Conversely, bicycles stolen by groups of offenders, or those stolen by repeat offenders, appear more likely to have been stolen for re-building and stripping of parts. Repeat offenders also appear more likely to steal from houses or on the street than

do the other groups. (See Table 7).

Table 7

Bicycle Theft Type According to Location of Theft

Location of Bicycle Before Theft	Bicycle Theft Type: Group Offence (N = 228)	Simple Offence (N = 159)	Multiple Offence (N = 29)	Total (N = 416)
Private House	24%	26%	38%	26%
Outside Shop	26%	20%	10%	22%
At School	12%	17%	17%	14%
At Recreation-Leisure Site	20%	16%	14%	18%
Outside Public Buildings	6%	8%	4%	7%
On Street	6%	7%	17%	7%
Borrowed or Found	6%	6%	0%	6%
Total	**100%**	**100%**	**100%**	**100%**

Available data relating to the remaining features of bike thefts were somewhat modest and do not merit tabulation. Comments about the way in which the bicycle thieves came to police attention appeared in only 82 cases. In exactly half of them, the victim of the offence, a member of the victim's family, or a friend have identified the stolen bicycle in the offender's possession. In some cases the offender has been pursued and detained by the victim. In fourteen cases parents have discovered stolen bicycles in their child's possession and called the police. And in another fourteen cases the police as part of their normal duties have come across offenders. Three persons were apprehended while trying to sell the stolen bike, one was disturbed stripping a stolen bike in public toilets, three were detained by private security personnel and six were referred to the police following their returning bikes to their rightful owners.

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cases involved offenders tired of walking who were looking for a faster mode of transport. Another fourteen had a simple want (or need) for a bike but allegedly didn't have the resources to buy one. Three offenders admitted stealing "for fun" and a further eight stole following the theft of their own bicycles.

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found riding a stolen bike.

BMX Bikes

Sixty five of the stolen bicycles in this sample were noted by the police as being BMX bicycles, but this does not mean that the remainder of the stolen bicycles were not BMX bikes. Accordingly it is not possible to compare BMX thefts with the thefts of other bicycles. All that can be done is to make some comments about the BMX thefts in this sample.

The BMX bikes were stolen by offenders with an average age of 13.6 years from centres of entertainment (29%), outside shops (28%), from private houses (25%) and from schools (14%). In only 8 per cent of cases were the bikes locked before being stolen.

Of the 59 BMX bikes for which usage of the stolen bike was identified, 33 (or 56%) of the stolen BMX's were stripped and 17 (or 29%) were simply used by the thief. Of the 17 BMX thefts for which some detail relating to apprehension was available, 7 thieves (or 41%) were detected by the bicycle's owner, family member or friend, 6 thieves (or 35%) were discovered by their parents in possession of the bike, and 4 (or 24%) were detected by the police in the course of their normal duties.

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