EVALUATION OF THE EXISTING MINNA MASTER PLAN TO DETERMINE ITS ADEQUACY WITH REGARD TO OFFICE AND RESIDENTIAL LAND ALLOCATIONS

EVALUATION OF THE EXISTING MINNA MASTER PLAN TO DETERMINE ITS ADEQUACY WITH REGARD TO OFFICE AND RESIDENTIAL LAND ALLOCATION

BY

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DEDICATION

This thesis is dedicated to

(a) The memory of my father Mallam Ndagi Jiya Shaba-Kolo

(b) My mother, Ketura Fatima Jiya, my brother Mr. Jacob N. Jiya and my sisters; for their patience understading and encouragement throughout the whole period of my studies.

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THESIS ABSTRACT

EVALUATION OF THE EXISTING MINNA MASTER PLAN TO DETERMINE ITS ADEQUACY WITH REGARD TO OFFICE AND RESIDENTIAL LAND ALLOCATION

Minna, a town which came into existence in 1914, is located in Niger State. It has under-gone a lot of changes.

Firstly, its initial development was due to its location and a railway junction but later it acquired some administrative importance. about 1950 Minna became headquarters for the former Niger Province, In 1967, under the former North Western State, it became a divisional headquarters which it remained until it became the capital of Niger State in 1976.

In 1973 a firm of planners, Dar-al Handasah was commissioned to draw up a Master-Plan to guide the future growth of the town to the year 2003. This plan appears to be indadequate to cater for the new role of housing the state secretariate and of providing housing and other amenities

required by a larger and far more heterageneous population.

The two most important land consuming activities resulting from this role change for Minna are public administration and residential. Evaluation of the short term and long-term land demands for these activities becomes a pressing concern for those who are interested in the orderly development of the town.

The desire to find out the extent of this unexpected demands by these two elements on the already existing provisions has led to this study.

The objectives of the study are;

a. To review the master plan drawn up for Minna by Dar-al Handasah with particular reference to relevant chapters on offices and residential land allocations.

b. If the land allocated for office and residential use by the master-plan is found to be inadequate, to make recommendations as to what new requirements would be up to the plan period 2003.

Methodology

The following methods were used to collect the data which led to the information from where the conclusions were drawn. Among the methods used were:-

a. Review of the existing literature and master plan
b. Observation of the existing situations
c. Questionnaire surveys
d. Personal interviews and
e. Review of the official documents.

Using the various methods above the following information were released on the present situation of government offices, residential areas and land allocated for to them by the master-plan.

That in 1976 there were eleven government establishments (ministries) in Minna with the existing staff straight of 1945 and vacant posts 1032. The ministries were accommodated in structors made for other purposes and scatteredly located in the town. Offices were also highly congested.

From the information available, certain assumptions were made and the total staff strength (existing and vacant posts) was projected to the year 2003. From the total number of officers and their different space needs, we came out with an office area of 440 hactares (gross) as the new requirements in the year 2003. The master plan on the other hand, made a provision of 75 hactares only up to the year 2003.

Within Minna urban area, it was observed that there are three settled residential areas: Minna, Bosso and Tudun Wada. A major regional road, Zungeru - Minna - Abuja road passing through each of the three settlements. The total population of these settled areas was estimated at 59,000 people in 1976. This was projected and in the year 2003 a population of 632,000 was arrived at for Minna.

In the light of socio-economic and cultural changes that are most likely to take place in Minna, a new density standard of 80 persons per hacter was assumed, thus giving residential area requirement in 2003 to

be 7900 hectares. The master plan made provision for only 2,100 hacters for residential areas in the year 2003.

The proposals of the master plan were compared with our new findings and it was concluded that the existing master plan is grossly inadequate as far as government and residential land allocations are concerned. And that if the master plan is inadequate for these two elements it must also be inadequate in all other respects.

From these conclusions, we recommend that a new master plan be prepared for Minna that will adequately take care to allocate land for office and residential uses as well as other land uses.

The new master plan must not only allocate adequate land for various uses but must consider the need to reshape the existing master plan so that appropriate lands are allocated to appropriate uses.

CHAPTER I

INTRODUCTION

A. Geographical Background of the Study Area

1. National Setting

Minna, is located within the Niger State of Nigeria. Niger State lies between Latitudes 8° and 11.30° North of the Equator and Longitudes 3.25° and 7.40° East (see Map 1).

The state is bounded by Kaduna and Plateau States on the East and South-East respectively and to the North by Sokoto, and the River Niger to the State from Kwara State.

Niger State has the land area of about 73,555,478 sq. kilometres.[1] According to 1963 census it has estimated population of about 1,271,267.[2]

2. Climate

Generally, there are two seasons, the rainy and the dry season. The rainfall is about 100 cm.[3] p.a. There is the maximum temperature of about [4] and minimum temperature of [5].

MAP. 1

NIGERIAN STATE CAPITAL

KEY

F.C.T. FEDERA CAPITAL TERRITORY

● STATE CAPITAL

STATE BOUNDARY

INTERNATIONAL BOUNDARY

RAIL WAY LINE

RIVER

MINNA

NIGER STATE



0 32 64 96 KMS.

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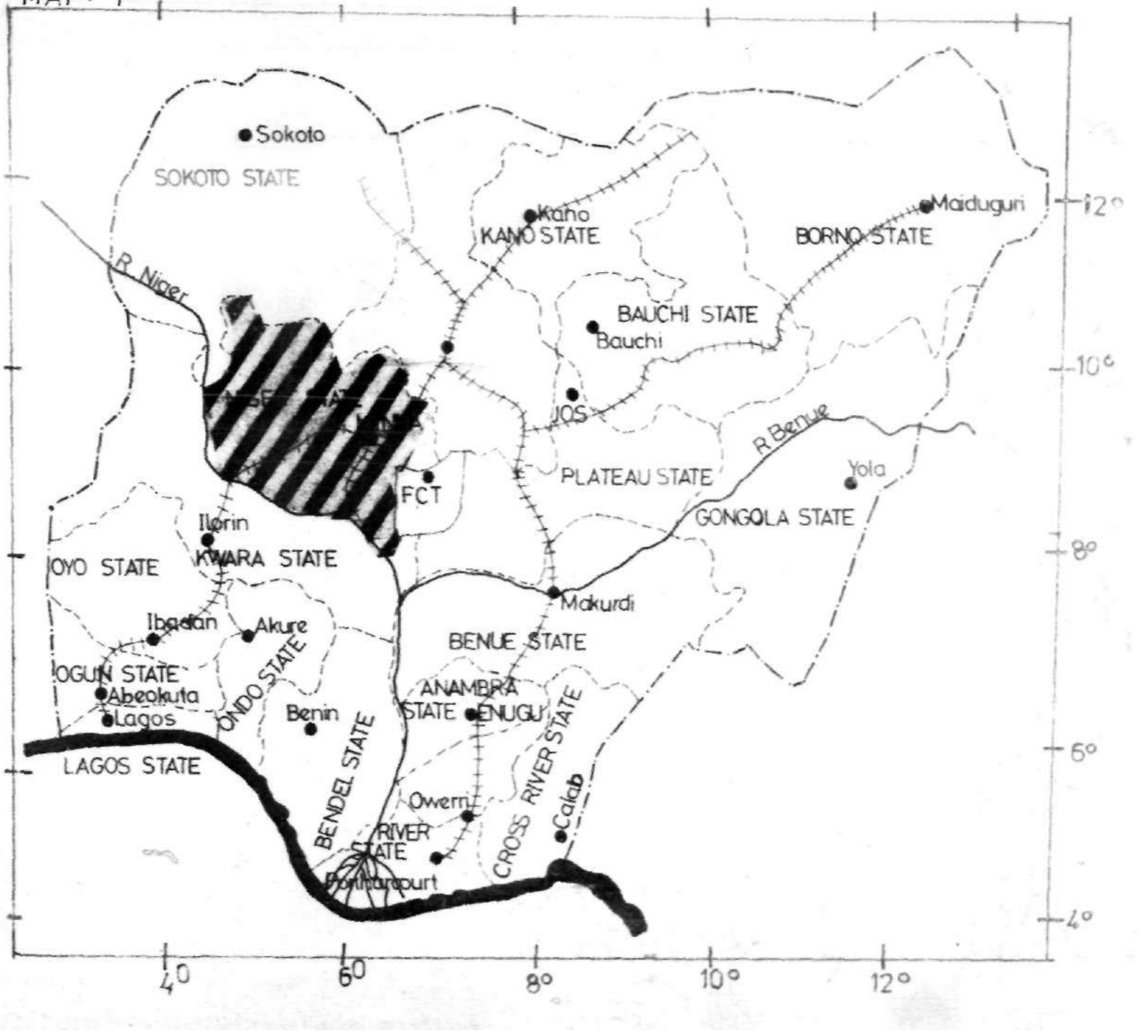
M. SC. (URP) THESIS

1976/77

DEPARTMENT OF PLANNING

A. B. U.

ZARIA.



3. The Major Towns of Niger State

The six major towns in the State are Minna, Bida, Kontagora, Abuja Agaie and Lapai. Minna is the capital of the State since it was created in 1976.

B. Minna

1. Location within the State

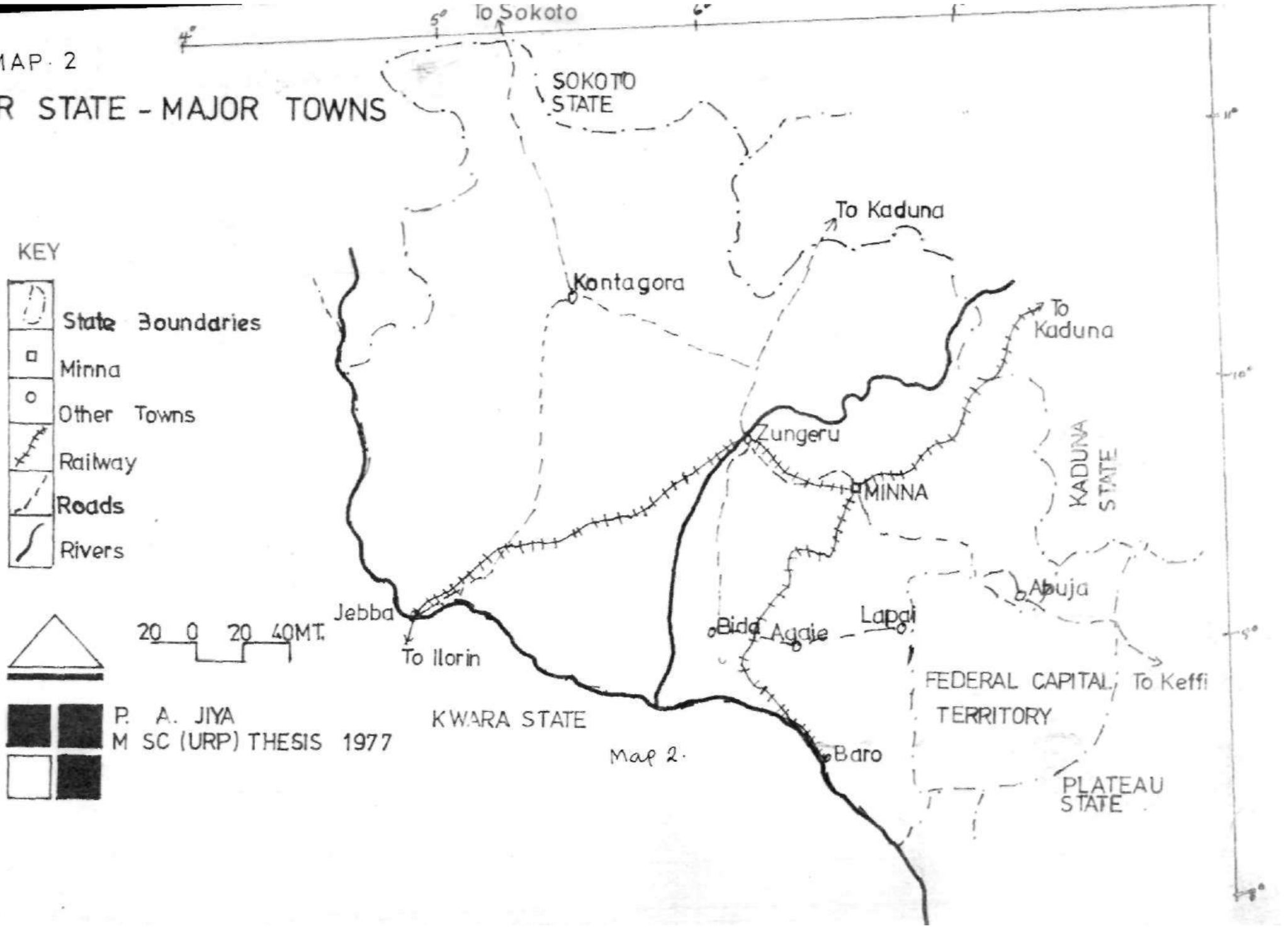
Minna is located midway between Latitude 9° and 10° North of the Equator and between Longitude 6° and 7° East of the Greenwich. It is located towards the Eastern corner of the State (see Map 2).

Minna is a very important railway junction connecting Baro lighter railway with the Kano to Lagos lines. It is not only a junction but also has an important railway workshop and other establishments.

Similarly, a federal road from Zungeru to Abuja 237 kilometres passes through Minna. And there are plans to connect Minna to Bida (155 kms) and Kaduna (190 kms) directly through road net work. The importance of Minna as a potential business and commercial centre is expected to increase by the virtue of its location near the area designated the New Federal Capital.

MAP 2

NIGER STATE - MAJOR TOWNS



2. Physical Characteristics

To the East of Minna, the land is undulating in nature. This undulating nature continues to the North-East of Bosso Road. Generally, the Land falls from 360 cm.[6] to the East of the town and slopes down gently to the West and South-West and as low as 240 cm.[7] along the river valleys.

C. Historical Development

1. The Influence of the Railway

Minna town like Kaduna, Jos and Makurdi owes its origin and expansion to the coming of the Railway. Possibly as an evidence that the town is of recent development, it lacks the traditional wall which are often the features of the older existing cities in the Northern parts of Nigeria, like Bida, Kano, Zaria etc.

Minna was said to have been founded in 1914[8] as a consequent of railway construction to Baro. Prior to this time a village called Bosso (see Map 3) about 4.8 kilometres away from present Minna, was already in existence. These villagers, who were of Gwari tribe, supplied food for the railway workers.

It was these villagers who later on moved closer to their customer's camp, and by so doing founded a new settlement Minna. Thus Minna originated as a transportation centre.

2. Expansion

It is also believed that as need for more food increased, more villagers from the surrounding villages joined the initial settlers. Later, the working population was increased by the arrival of Gold Minners about 1930[9].

3. Road Development

The construction of Zungeru - Minna road in 1911[10] to facilitate Lugard's administration who had his capital at Zungeru about 59 kilometres away from Minna. The road was extended to Kuta in 1933 and to Abuja in 1946. The impact of the roads was that they attracted many people to the town especially those who came to seek employment in the railway construction.

4. Minna as a Provincial Headquarters

The importance of Minna as an administrative centre started in the early 1950[11] when a new system provincial administration was introduced into Nigeria. Minna then became the provincial Headquarters of the former Niger Province.

With the creation of the former North-Western State in 1967, Minna ceased to be a provincial Headquarters. It assumed a new role of a Divisional Headquarters.

It was on this new role of Minna as Divisional Headquarters that a master - plan was prepared by the Dar-al. Handasah Consultant for Minna together with five other towns within the former North-Western State. Excluding Sokoto which was the State Capital and Gusau which was a district headquarters, all the other three towns had the status of Divisional Headquarters.

5. Minna as a State Capital

In April 1, 1976, Niger State was created out of the former North-Western State, and Minna became the Capital of the new State. With this

decision to make Minna a State Capital, its role changed from that of the Divisional Headquarters to that of the State Capital. It became the seat of the Government of Niger State from where the major decisions enfluencing the lives of the entire people within the whole State would be made.

In effect Minna has been transformed from a relatively passive divisional headquarters into a vigorous and dynamic State Capital, which not only has to provide services for the indigenes of Minna and the few immigrants prior to the State Creation, but for a much larger and mixed population in the town.

These new developments would in no doubt have many planning implications. Possible areas of effects on planning as a result of the changing role of Minna would include need for land for government offices and residential uses. Need for housing, community services, medical welfare, recreational facilities and utilities etc. would be affected. But at this stage of Minna's development, the most important elements that would have greater planning implications are the need to allocate

adequate land for government offices and residential uses.

In effect, it is the change in the role of Minna from divisional headquarters to that of the state capital that has necessitated this study. Due to a number of reasons the study has been focused on these two major questions - offices and residential land allocation.

The siting of the secretariate at Minna is what distinguished it from what it used to be and from other towns within the State. For sometimes to come, the importance of Minna would depend on the fact that it is an adminstrative centre of a state. Governments are known to be large employers of labour and therefore the space that would be occupied by the offices that would accommodate all the people employed to serve the government would tell much not only on the size of the total future land requirements for the urban area, but also on how the total land must be allocated to various uses within the adminstrative city.

As an adminstrative centre, Minna has consequently became an important economic centre where people from the different parts of the State would come to seek for employment and earn better living. The

question of the availability of residential land use in appropriate amount would be central for both the existing and the future population since they would all be sheltered in buildings erected on the land.

6. Study Objectives

The study objectives include:-

a. To review the master plan drawn up for Minna by Dar-al. Handasah with particular reference to relevant chapters on offices and residential areas with a view to determine, the adequacy of the office and residential land allocations as provided by the existing master plan.

b. If the land allocated for office and residential use by the master plan is found to be inadequate, to make recommendations as to what new requirements would be.

7. Planning Period

The existing master plan was prepared by Dar-al-Handasah Consultant to cover the period of 30 years, 1973 - 2003. The master plan made available various amount of land for the various activities during the planning period.

For the purpose of comparision the same time period used by the master plan is also going to be used in this work.

References

1. Ministry of Information Minna, Niger State Executive Council 1976 P.1
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7. Ibid 1973 - 20003 P.
8. B.A. Ibe (Ed). The Zaria Geographer Vol.4 May 1975 P.13
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10. Ibid 1975 P. 15
11. Ibid 1975 P. 15.

9. Ibid. 1975 p. 14

10. Ibid. 1975 p. 15

11. Ibid. 1975.p. 15

CHAPTER II

REVIEW OF THE EXISTING MASTER PLAN

A. 1. Minna - Existing Land Use

Cities are said to have three main land area. And according to Lewis Keeble (1969) the three main land areas of a city comprise of the town centre, the industrial area and the residential areas[1]

2. Town Centre

The town centre is that area of the town where commercial and adminstrative activities are dominant. The town centre in Minna, is located to the South-Eastern part of the town. The special elements that can be identified in this area are the presence of the central market, the main garage, Bank of the North, Areal Adult Education Office and the former Divisional Police Office.

3. Industrial Area:

At the time of study, no major manufacting industry existed in Minna. The only industry is the Saw Mill Industry along Kuta road.

4. The Residential Area

Three distinguished residential settlements were observed in Minna

urban area. The settlements included the main part of Minna, Bosso and Tudu Wada villages (see Map 3)

It was also observed that the three main parts located themselves linearly along the major regional road, Zungeru - Minna and Abuja road; which separate each of the settlement into almost two equal parts.

5. Area Coverage

The main part of the town covered a total area of 300 hectare[2] in 1973. And the periphery in which Bosso and Tudun Wada are located covered also about 300 hectares[3]

From my observations during the field work, by June 1976 no visible changes have taken place in the area coverage of the whole town. This, however, does not mean that no new building had been constructed. Many new buildings have been constructed, possibly on the existing open spaces within the residential areas. This was noticed when about 10 - 15 compounds had the same number given to them and were only identified by letters. For instance by the market area, compounds numbering 69A to 69L were identified.

From my observations, two interpretations can be given to the fact that people have not moved and spread outside the existing residential areas. Firstly, the presence of the river valleys almost surrounding the existing settlement and the hills towards the South-East and East would have prevented people from moving out, as they might want to identify themselves with the main settlement. Secondly, it could be that large open spaces which could be developed had existed within the residential area and have been gradually made use off. This second reason seems to be more reasonable than the first one.

Other land use types include public and semi public areas among which are government areas hospitals, civic centre, schools and the railways station etc. These are located at different parts in the towns and much more towards the periphery. Open spaces also exists particularly along river valleys.

6. Population Density

With the estimated population of 32,000[4] in 1973, the population, density of Minna was 53 persons per hectare approximately, From the

result of the census I conducted in December 1976, Minna's population was estimated at about 59,000 people. This population occupied nearly the same area as was the case in 1973. Therefore the average gross density in 1976 was calculated to be approximately 100 persons per hectare. This showed an increase in density of about 100%.

7. Areas of New Growth

By December 1976, new areas of growth had started to emerge. New constructions have started coming out along airport and Abuja road. The new constructions were being undertaken by the government and the new buildings were quite apart from the existing residential areas.

B. REVIEW OF THE MASTER PLAN

1. Terms of Reference of the Master Plan

According to Dar-Al-Handasah Consultants the terms of reference of the master plan was to evaluate the then and future role of Minna and its anticipated needs as an important centre for commercial, industrial and administrative activities and also to evaluate the aspirations of its people. As a result of this evaluation the master plan was aimed at achieving the following:-

- "Supply the basic infrustructural services needed for the future development of the town and the improvement of its existing parts: these will include essential piped services necessary for the improvement of public health, and efficient road net work to meet the needs of economics development and to increase mobility.

- Insure the right balance between the major employment and residential areas, in order to avoid traffic congestions.

- Establish an overall efficiency of the town where travelling distances

are kept at a minimum, land is better exploited and densities are regulated to avoid unnecessary sprawl.

- Insure that the town's expansion will proceed according to well established environmental standards: natural features should be emphasised and possibly incorporated in the design of open spaces in the town; residential areas should be designed to provide the amenities necessary to improve the quality of living, providing for children playgrounds and accommodating cars with a minimum of conflict.

- Insure that the design of the town will maintain the expression of its different activity nodes and will proceed to enhance the character of the town by reinforcing the traditional trends of living and building."[5]

2. The Objectives of the Master Plan

Among the objectives stipulated by the master plan are the following:-

i. "Use land for the purposes to which it is best suited, considering that land for building should be free from drainage and foundation problems.

ii. Separate incompatible land uses.

iii. Develop minimum standards of suitablity for all uses.

iv. Strive for a high quality in the design of public buildings

v. Anticipate the town's needs for all future land and public buildings and acquire or reserve land as soon as possible for such purposes.

vi. Adopt zoning provisions that will aid the implementation of the above.[6]

3. Specific Objectives of the Master Plan Related to the Areas of Study

The master plan has not got any defined objectives for the government offices. But from the general objectives given it could be inferred that objectives for government offices have been implied as to "strive for a high quality in the design of public buildings."[7]

As indicated above, the master plan has no clear objectives on office space for government, this was mainly because the public office space needed was for divisional office only. At the sametime no quantitative

target set out.

In this work, the author hopes to give greater and more detailed attention to office space requirements, since it has been considered to be the major element that would validate or invalidate the existing master plan.

4. Residential development and Housing

Under residential development, the master plan has the following objectives.

i. "Adopt a unit of physical organization derived from the existing ward system.

ii. Improve the condition of the existing residential area without impairing their character or livibility.

iii. Protect all the residential areas, old and new, against incompatible uses

iv. Encourage the development of a variety of residential types, prices and densities within the town, regulating a proper balance, to guard against any adverse social effects.

Time Frame of the Master Plan

The Master plan was meant to last from 1973 - 2003. That is the plan is to be used for 30 years. On the basis of this, the whole time period was divided into five year intervals through which the estimated population of 32,000[9] in 1973 was projected using the growth rate of 6% p.a. Thus the master plan was aimed at serving Minna in the year 2003 as industrial, commercial and administrative centre with a population of 198,000[11] people. (see Table I)

As the author wants to related this work as far as possible to the master plan in order to make them comparable, the same time frame as used by the master would be used, but with slight changes. Thus instead of from 1973, it would be 1776 - 2003.

To project the population over the planning period, the master plan broke the planning period into intervals of 5 years (see page 23) For this work, although using the same time period; due to the changing time and some anticipated economic and social changes as well as different rates

of growth of population that are expected as a result of these other changes, the time intervals that would be used in this work may not necessarily correspond with those used by the master plan.

TABLE I

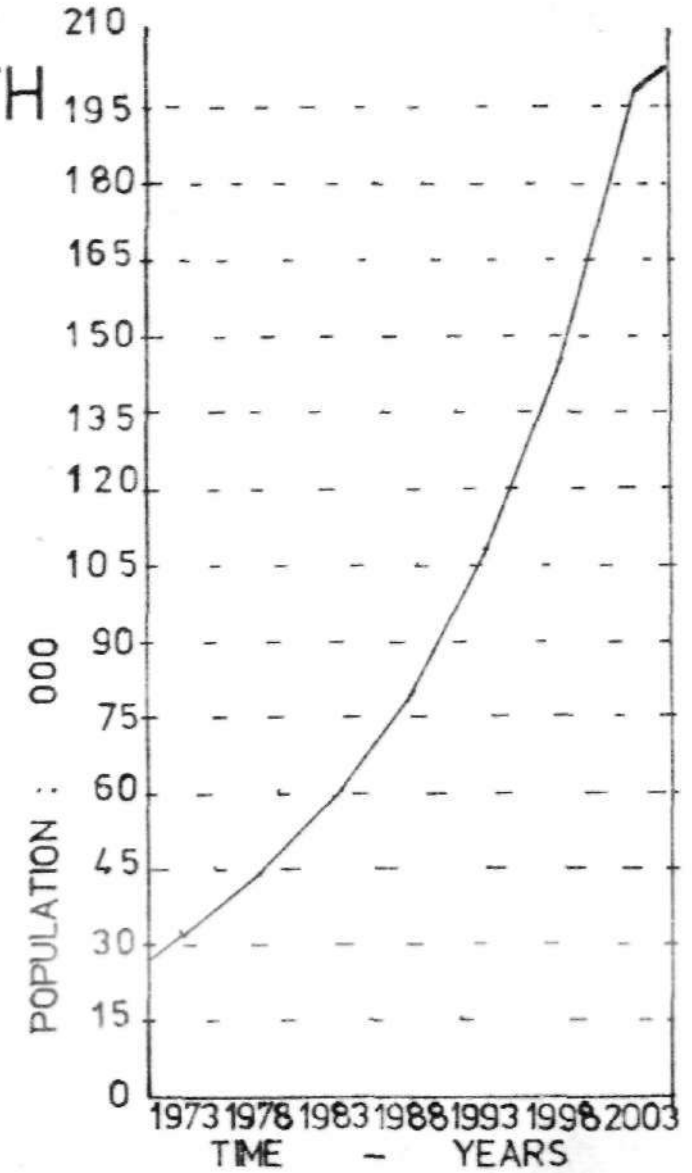
POPULATION GROWTH AS PROJECTED BY DAR AL HANDASAH

Year	1973	1978	1983	1988	1993	1998	2003
Population in 1973	32,000						
Effect of natural increase on population		35,330	47,475	64,037	87,2221	119,241	160,092
Net number of migrants		7,670	10,525	14,963	20,778	25,759	37,908
Total Population	32,000	43,000	58,000	79,000	108,000	1145,000	198,000

This table is adopted from: .. Dar-Al-Handasah Consultants: Mina Preliminary Master Plan 1973 - 2003 . 1975 p. 3.4

POPULATION GROWTH AS PROJECTED BY DAR-AL HANDASAH

FIG.1



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7. Master Plan's Methodology

Generally the consultant conducted a series of surveys. Table 2 below shows some of the surveys it conducted.

TABLE 2

A table showing surveys conducted by the consultant and their purposes

Survey	Reference	Purposes
Survey of the town	P-3.2-	To have the bases of estimating the then existing population of Minna.
Household Survey	P-3.21	To determine housing types.
Transportation Survey		To know the existing flow patterns of traffic. To know land uses which gensate traffic. To know about the mode of transport used by the traders to the market.

Minna central market Survey	-₦.1.10	To know about the accumulation of customers inside Minna market.

C. Land Allocation at Different Time period by the Master Plan for Office use and Residential Areas

1. Standards for Future Development

The report on the master-plan gave a series of tables under the heading "standards for future development." For instance, standards were given for

i. Housing
ii. Industrial Facilities
iii. Schools
iv. Carparking
v. Civic facilities and commercial recreation
vi. Open space, sports and reception
vii. Commercial facilities
viii. Medical and health facilities and
ix. Roads

From the above it can be noted that standards for almost all the other uses have been given to the total neglect of the standards for the allocation of space for the government offices.

Below is a table as given by the report on the master plan as standards for future development on housing.

Table 3

Table showing standards for Future Development

1. HOUSING STANDARD FOR FUTURE DEVELOPMENT

SINGLE STOREY

House-size Category	Plot size square metres	persons per plot	Number 9 dwellingS/plot	Persons Densities** per minimum	Hectare maximum
Small	180	2-5	1	80 Low	200 medium
Medium - small	225	4-7	1	120 medium	220 medium
Medium	270	4-7	1	80 Low	180 medium
Upper-medium	360	6-10	1	100 Low	200 medium
Upper medicine	540	5-10	1	80 Low	120 medium
Large	720	8-16	1	90 Low	140 medium
TWO STOREYS					
Small (row housing)	90	2-5	1	140 medium	250 High
Low medium (row housing)	180	4-7	1	160 medium	300 high
Medium (semidetached)	225-270	4-8	1	120 medium	250 high
THREE STOREYS Standard 4-6 persons	360-720	24-36	6	250 high	350 very high

*Assuming plots will be granted to families according to their need (family size): the government Residential Area is likely to be an exception and relatively greater plots for the same family size may be granted for other socio-economic groups

**Low Density less than 100 p.p.h.
Medium Density 100 to 200 p.p.h
High Density 200 - 300 p.p.h
Very high Density more than 300 p.p.h.

Adopted from Dar-al Handasah 1975 p.-4.14-

It is important to note that according to the master plan these standards for the allocation of land in the master plan of Minna were "....based on professional judgement according to the criteria provided by the local physical and social environments and according to accepted professional standards concerning all aspects of physical development."[12]

2. Land Allocated for government uses by the master plan

As noted earlier, the master - plan has no specific objectives as regard to allocating land for government offices. However, on the master plan itself a series of areas have been designated government and civic areas. From the master plan all the government areas have been calculated and found about 75 hectares for the whole planning period.

3. Observation

From the master plan areas for government uses are located at different part of the planning area (see the Map 5). Some of the sites are completely new, while a few others are the already existing office areas, but are only to be expanded. In addition it is obscured within the report on the master plan how these areas for government offices were allocated. On the whole the

LAND ALLOCATED FOR OFFICE USE BY MASTER PLAN



75

GROSS AREA REQUIRED
IN HA

P A JIYA

M Sc URP THESIS
1977

Fig 2

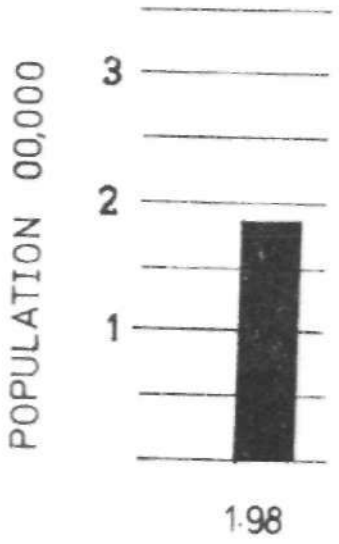
total area allocated for government use is calculated to be 75 hectares.

4. Land Allocated for Residential use by the Master Plan

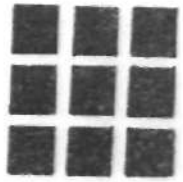
According to the report on the master plan the total land occupied by both the main part (of Minna) and the peripheral developments amounts to 600 hectares approximately and could, under a slight increase in density, accomodate a population of 40,000 to 50,000 people. This means that an additional area of 1,500 hectares will be needed for the expansion of the town up to the year 2003. This figure was calculated on the basis of an additional population of 150,000 people to be accomodated at gross density of 100 persons per hectare."[13] The basis for the allocation of 600 hectares plus 1,500 hectares (2,100 hectares) are that people build in one storey buildings."[14] On the whole the master - plan anticipated Minna to be inhabited by 198,000 people in the year 2003 and at gross density of 90 persons per hectare a total of 2,100[15] hectares would be required.

LAND ALLOCATED FOR RESIDENTIAL USE BY THE MASTER PLAN

P A JIYA
M Sc URP THESIS
1977



POPULATION ESTIMATES
YEAR 2003



90

AREA STANDARDS
No OF PEOPLE/HA·

FIG· 3

References

1. Cf. Lewis Keeble, Principles and practice of Town and country planning 1969. P. 99

2. Dar-al Handasah Consultant: Minna preliminary master-plan 1973 - 2003, p. -5.3-

3. Ibid. 1973 - 2003 P. -5.3-

4. Ibid. 1973 - 2003 P.-3.4

5. Ibid. 1973 - 2003 pp. 4.5 - to - 4.7

6. Ibid. 1973 - 2003

7. Ibid. 1973 - 2003

8. Ibid. 1973 - 2003

9: Ibid. 1973 - 2003 p. -4.8-

10. Ibid. 1973 - 2003 p. -3.4-

11. Ibid. 1973 - 2003 p. -3.3

12. Ibid. 1973 - 2003 p. -4.13-

13. Ibid. 1973 - 2003 p. -5.1

14. Ibid. 1973 - 2003 p. -5.1

15. Ibid. (cf) 1973 - 2003 p-5.1-

CHAPTER III

MENTHODOLOGY

A. It is generally recognized that there is a great scarcity of adequate survey and analysis techniques that are readily applicable for identifying office space requirements (Ratcliffe 1975). Very often one has to work from the first principles and use a number of techniques jointly.

To calculate area required for offices the following data, among others, were needed. The data included the number of the exisiting ministries, total number of the staff strenght including both the filled and vacant posts in Minna; category of the officers the nature of present accommodation, the rate of growth of the total staff over the years etc.

Similarly, to calculate area needed for residential use some of the data needed would include; the total population of the town, socio - cultural and economic characteristics of the population, the various housing types and their related facilities, residential density, population density, occupancy rate etc.

In this thesis the following techniques were used to collect the above data needed for calculating both the office and the residential land

requirements.

1. Review of the existing literature
2. Observation
3. Questionnaire survey
4. Personal interviews
5. Review of the official documents

B. I. Review of the existing literature

Literature review was chosen to help in developing methodology of study of how to allocate land for government office and Residential uses. Literature review was also used to acquainy myself with the historical development of Minna and to develop a guideline for office space allocation.

2. Observation

Systematic observation of the ministries was organised so as to determine the adequacy and the nature of the structure in which they are located. In addition a series of tours to residential areas were arranged so as to acquaint myself with the general state of the main residential areas of the town.

3. Questionnaire Surveys

Formal questionnaires were served on all the ministries with the aim of finding out the ratio of staffs to the existing offices, who is exactly entitled to an office, the criteria to use for allocating land spaces to the officers as well as other related issues like the functional relationships among the ministries (see Appendix 1)

4. Population census of the town

A sampled population census of the town was taken in order to know the existing population which would later on be projected to the year 2003. The census took place during the 21days of christmas holidays. What I intended doing originally was to conduct a house hold survey which will give me information on household size, socio economic characteristics and housing types (see Appendix 2). But due to lack of time, co-operation from the inhabitants and scarcity of labour this was found impossible; hence a 5% sample was taken for the census of the town.

Procedures used and Problems Encountered in Applying the Questionnaires

The questionnaires served to the ministries were first pretested on two ministries. From this pre-test it was found that there would be no

problems with the understanding of what was expected from the ministry officials.

The questionnaires were later on served to the staff officers of the various ministries who filled the questionnaires and returned them. But on many occasions a follow ups was necessary. And in some cases I had to sit down with them to fill the questionnaires while they told me the answers. In all it took over 4 months for the qestionnaires to be returned.

With my original intension of conducting socio-economic and housing survey, which turned later to be population census; I first conducted a flying survey of the whole town to identify how the houses in the town were numbered from the lowest number to the highest . It was found that numbering was based on compounds.

Later the whole town was divided into nine zones. The criteria for the division of the town into nine zones was purely based on geographical locations and administrative divisions (wards) rather than on social and economic basis. Thus with the exception of the special areas like the G.R.A. and the Railway quarters, all other residential areas, it was observed,

had mixed population of various socio-economic classes as there was general "shortage" of housing in the town.

The nine zones included - Keterin Gwari/Kwangila, Sabon Gari, Limawa, Nasarawa, Paida, Tudun Wada, and Bosso wards and G.R.A. and Railway Quarters (see Map 6). The total compounds in each zone was found and a random sampling of 5% was taken from each zone for interviewing. The above exercise took place between September 20th and 28th 1976.

On the whole a total of 1802 compounds existed and the questionnaires were meant to be served on 92 compounds. The compounds taken by the randon sampling were identify by the use of sketch maps and streets descriptions (see Fig. 4).

The questionnaires were meant to be served on the household head, and protesting was done. It was discovered that people never wanted to responds to questions relating to their private lives and their living environment as they felt "they had no alternations and nobody could help them".

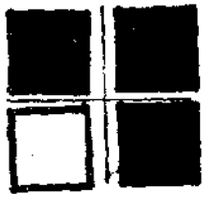
APPROX. NUMBER OF COMPOUNDS IN MINNA AND NUMBER SURVEYED

FIG. 2.

KEY

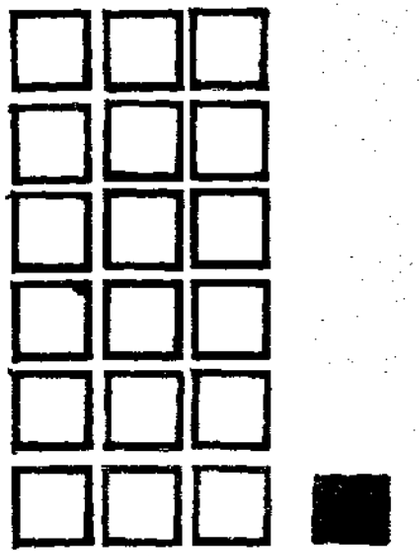
TOTAL NUMBER OF COMPOUNDS

NUMBER OF COMPOUNDS SURVEYED



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NO OF COMPOUNDS

To solve this problem, the author informed the wards heads to let the people know of his activities and their importance, which the wards heads agreed to do. And infact the Ward head of Kwangila/Keteren Gwari volunteered to follow me around his administrative area to explain to his people.

Some members of the Minna Government Secondary School were used as research assistants they were divided into groups of three and were allocated specific numbers of compounds where they will count the house hold heads and their relations. They were to continue going to these compounds until all the household heads were seen. Those household heads that were not around in each compound was put into record. The last two days of the exercise was used to go and ask any house hold head available in any compound about those that were not in and the number of relations that live together with them.

It is important to emphasize that the exercise did not cover the members of the armed forces - the police and the army. The Brigade Commander and the state commissioner of police were willing to co-operate but they

regretted that police and military zones are out of bound for civilians especially when they were looking for imformation.

Review of the Official Documents

Some Official documents were reviewed. Among the official documents reviewed included the following:-

a. Niger State staff disposition lists for the various ministries at September 1976 (see Appendix 3). I chose to review the staff disposition lists of the government of Niger State at Minna so as to give me the idea about the total government staff strength that existed in Minna, including both the filled and the vacant posts. In the process, all those officers residing outside Minna were ticked out. The staff lists would also help me in categorizing the officers according to their salary grade. In addition, to evolve a criteria for office space allocation, Public Service Commission's regulations on Staff and Offices was reviewed.

b. As a guide to knowing the proportion of the unfilled posts that may likely stay at Minna when the posts would be filled a review of the "manpower and staff development," a report issued by the Ministry of Establishments, Enugu, 1972 was undertaken. This also lead to the review of the population of the former East Central State Divisions and that of the Niger State.

c. To help me determine the possibilities of creating new ministries at Minna in future, the number of Ministries of the Government of Lagos State and the former Mid-Western State were reviewed from 1968-69 to 1975-76.

d. Lastly, to determine the rate of growth of the government staff strength in Minna, a study of the Kwara State Government establishments from 1968/69 - 1972-73 was undertaken.

Analysis of the Data

Analysis of the data was done purely by manual operation. Since sampling procedure was employed with regard to the population census, it was necessary to expand the data to represent the actual universe. In the census the expansion factor of 1:20 was applied in order to represent the actual population of the whole town, students population of 5 post primary institutions existing in the town and that of Advanced Teachers' College was added to the result of the census.

Reference

1. Ratcliffe: An introduction to Town and Country Planning, 1975. p. 149.

IV

OFFICE SPACE ALLOCATION.

A. The MINISTRIES.

1. The Existing Ministries

During the period of my field work there were eleven Ministries existing in Minna. The Ministries were:-

i, The Cabinet office which included Local Government and Environment Divisions;

ii, Finance and Economic Development.

iii, Natural Resources, consisting of Agriculture, Animal Health and Forestry Divisions;

iv Education

v Works, Housing, Transport and Water Resources;

vi Health;

vii Internal Affairs, Information and Social Development;

viii Establishments and Service Matters

ix Trade, Industry and Co-operatives,

x Justice and Public Service Commission (c.t):

2. Location of the Ministries

Despite the fact that the Ministries are related in function in one way or the other, they were not located in one contiginous geographical area. Rather, it was observed, they were scattered all over the town, from one extreme end to the other. (See map 4).

From personal interviews it was understood that under such locational arrangements administrative decisions, involving more than one Ministry which were not located in one place, would be delayed. There were also cases where divisions of some ministries were located very far away from the mother ministries. For instance; Water Board Section of the Ministry of Works was located about 3kms. away from the Headquarters. The result of these were that civil servants continued to travel between the ministries and between their divisions and the Headquarters thereby wasting a lot of manhours. This was particularly so when very few ministries have telephones for their permanent secretaries, which could not be available for the use of the junior officers.

3. MINISTRIES Proximity Preferences:

Fig 5 below indicates the degree of relationship that existed between the various ministries.

Ministries of Finance and Public Service Commission come out clearly as having relations with all the ministries.

On the basis of this functional relationship among the ministries, 10 out of the eleven ministries wanted to be located together in an area to allow easy contact.

On the other hand the Public Service Commis ion felt that it was related to all the ministries but wanted to be located separately. This ministry decides the fate of staffs of all the ministries and it would not like her decisions to be influenced by top officials of other ministries.

4. Nature of present Accommodation.

The officers were housed in temporary buildings designed for other category of uses.

Table 2

Nature of present Accommodation of Ministries.

No. of Ministries	Where housed
3	School buildings
1	Residential buildings
1	Divisional offices
6	Former provincial offices.

The buildings in these structures were often extended by the construction of the temporary sheds. This was not with-standing there was a high degree of over-crowding in the various ministries. The high degree of over-crowding is illustrated by the table below.

Table 3

Ratio of Existing Staff to Existing Offices.

Ministry	No. of Officers	No. of Offices
Cabinet Office	132	24
Ministry of Finance	134	41
Ministry of Natural Resources	802	70
Ministry of Education	61	16
Ministry of Works	335	46
Ministry of Health	88	16
Ministry of Internal Affairs	238	32
Ministry of Establishments	50	15
Ministry of Trade	41	12
Ministry of Justice	32	15
Public Service	32	11
Total	1945	298

Source:- Staff Disposition lists of various Ministries 1976

See Fig 6

EXISTING OFFICES AND OFFICERS COMPARED

Fig. 6.

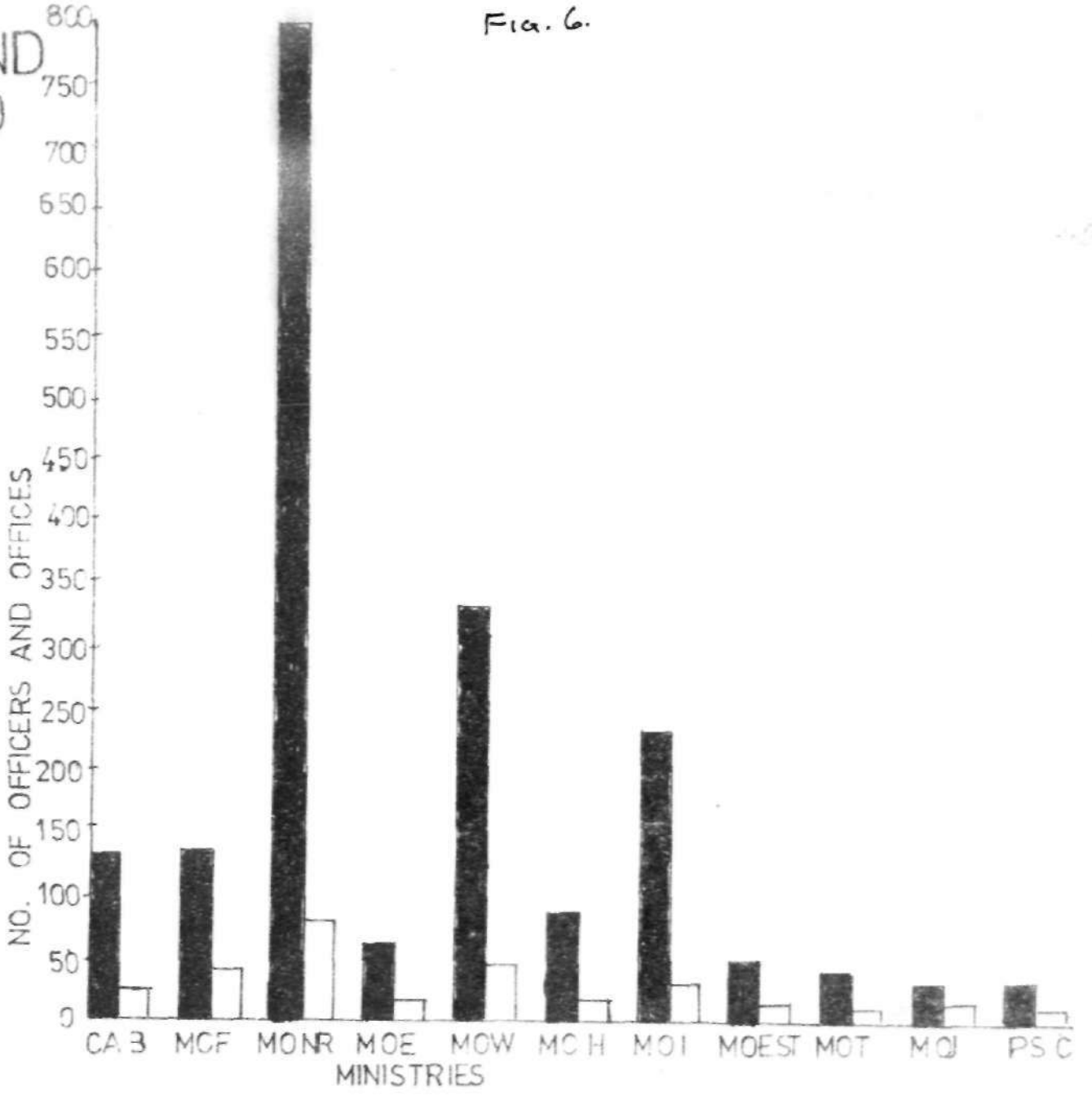
KEY

C.A. B. Cabinet Office
MIO. F. Ministry Of Finance
M O R Ministry Of Natural Resorces
M O E Ministry Of Education
M O W Ministry Of Works
M O H Mhistry Of Health
M O I Ministry Of Infomation
M OEST Ministry Of Estab.
M O T Ministry Of Trade
M O J Ministry Of Justice
P S C Public Service

Officers

Offices

P. A. JIYA
M. SC. URP 1977



B. Present and the future Staff.

1. Introduction

In this section, particular attension will be paid to the total number of existing staffs and vacant posts for the different existing ministries, projection of the staff strength at different time period, possibility of creating new ministries during the planning period and the categorization of the staffs into different groups based on salary grade. In section C attension will be paid to the criteria for office space allocation, calculation of the office space allocation, and finally the comparison of the gross area as provided by the master plan and the new area requirements.

2. Total Number of Existing Staff and Vacant Posts for Different Existing Ministries.

In September 1976, there were a total of 4008 posts in Minna. Out of this total, 1945 posts have been filled. 2063 vacant posts existed.

The filled posts represented the actual number of those officers residing at Minna, while the vacant posts represented those that when employed many be asked to reside at Minna or posted outside Minna.

Table 4

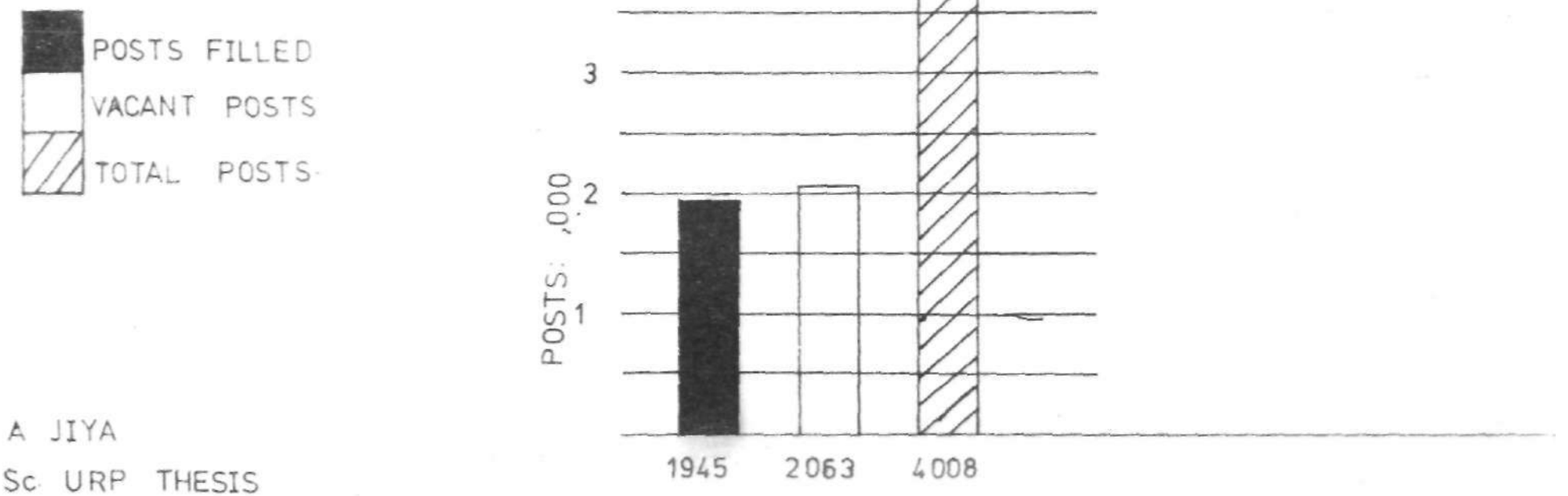
Total number of Existing staff and Vacant Posts for different Existing Ministries.

Salary Grade	Posts filled	Vacant Posts	Total
18	3	0	3
17	9	2	11
16	12	1	13
15	10	19	29
14	11	27	38
13	5	11	16
12	18	56	74
11	0	11	11
10	35	72	107
09	65	89	154
08	113	129	242
07	136	181	317
06	167	423	590
Sub total	584	1,621	1605
05	205	140	345
04	445	322	767
03	423	334	757
02	242	177	419
01	46	69	115
Total	1,945	2,063	4,008

*Vacant posts for the whole state.

Source:- Staff disposition Lists of various Ministries 1976. Also See Fig. 7.

TOTAL NUMBER OF EXISTING STAFF AND VACANT POSTS FOR EXISTING MINISTRIES



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FIG 7

3. Categorization of the Officers.

From table I above, the officers have been categorized according to salary grade and this was used later on for the pr j ction of various categories for different time period.

Generally in any Ministry, an officer can be refered to either as a senior officer or a junior officer. ll those officers from level 08 to level 18* are refered to as senior staff. On the other hand, all the officers from leve 01 - 07 are refered to as the Junior Staff. But in table I, a sub - total has been worked out comprising all the officers from level 06 to level 18. This was in responce to my findings in the field that all the officers from grade level 06 upwards, under normal conditions should each have an office. This will be refered to later.

*There is no mentioning of salary grade level 18 in the list of salary grade. The level 18 here is the purpose of identification, since the "..... ..... state chief justices and other positions in the higher achelous of the judiciary are to be treated as special cases above GL 17 (Grade Level 17); that a few very senior positions, VIZ ..... and secretaries to the military government (all states) be similarly accorded personally designated salaries above GL17".[2]

4. Proportion of the Unfilled posts that May Likely Stay in Minna When the posts are Filled.

As a guide to knowing the proportion of the unfilled posts that may likely stay at Minna when the posts are filled, a study of the report issued by the Ministry of Establishments, Enugu, as Civil Service Manpower and Staff Development was undertaken (1972). The choice of East Central State for this study was entirely dictated by the availability of information on that state. The study revealed that approximately about 45% of the total officers employed by the former East Central State resided in Enugu, the State Capital.

A review of the population of the former East Central State Divisions and that of Niger state revealed the following:

Table 5

Former East Central State Population by Division 1963.

Division	Population 1963
Agwu Division	212,805
Awka Division	694,396
Nsuka Division	689,353
Onitsha Division	797,386
Udi Division	549,543
Aba Division	541,968
Bende Division	427,867
Okigwi Division	743,832

Orlu Division	665,665
Owerri Division	901,016

A Note on the population of Nigeria (1963).

Table 6

Niger - state population by Division 1963.

Division	Population
Abija including Lapai	141,124
Bida Division	437,246
Kontagora Division	458,396
Minna Division	141,594.

Note on the Population of Nigeria (1963)

From the above tables 5 and 6, it is only reasonable to say that former East Central state had more larger towns that could attract government officers to work outside the state capital than the present Niger State. On the ground of this if has been assumed that 50% of the total staff employed by the Niger State government would stay in Minna, the state capital. It is therefore expected that 50% of the total vacant posts (2063) would stay in Minna. That is about 1,032 out of the present vacant posts would stay in Minna.

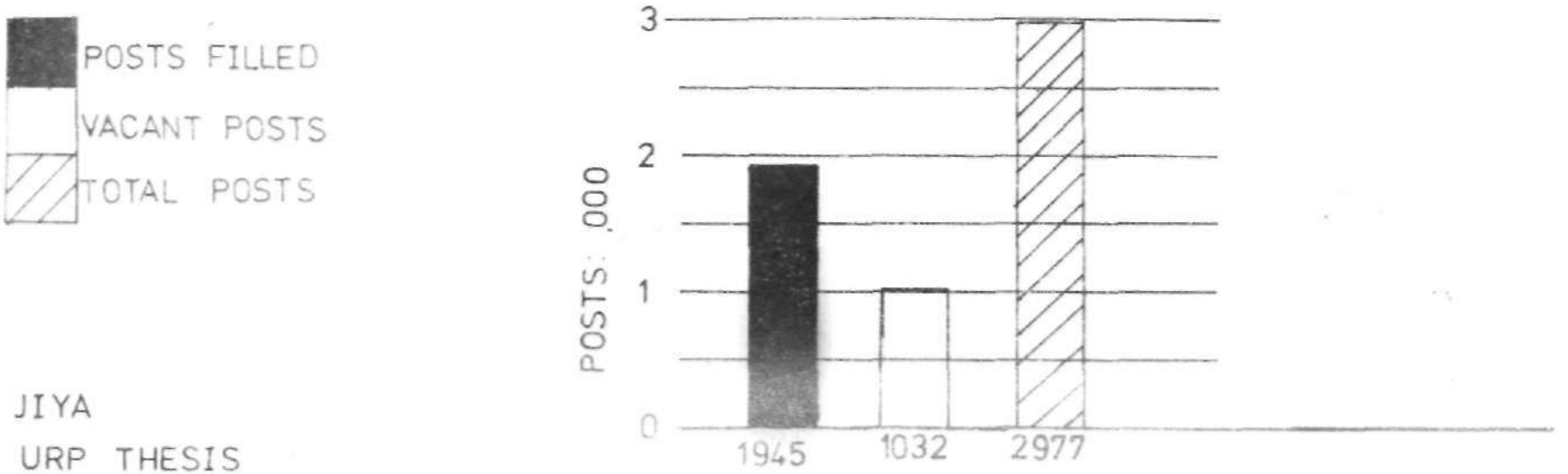
Assuming all the vacant posts were filled, there would be a total of 2,977 staff at Minna in 1976.

Table 7

Categorization of the Existing staff and the new vacant posts 1976.

Salary grade	Posts filled	Vacant posts	Total.
18	3	0	3
17	9	1	10
16	12	1	13
15	10	10	20
14	11	14	25
13	5	6	11
12	18	28	46
11	0	5	5
10	35	36	71
09	65	45	110
08	113	65	178
07	136	90	227
006	167	212	379
05	205	70	275
04	445	161	606
03	423	167	590
02	242	88	331
01	46	34	80
Total	1945	1032	2977

TOTAL NUMBER OF EXISTING FILLED AND VACANT POSTS IN MINNA 1976



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The same proportion is assumed for the old and new vacant posts.

New vacant post for GL 18 = $\frac{TNV}{TOV}$ x N.

Where TNV = Total new vacant posts.

TOV = Total old vacant posts.

N = Number of officers in a given category.

= $\frac{1032}{2063}$ x 0

= 0

Level 17 = $\frac{1032}{2063}$ x 2

= 1

Level 16 = $\frac{1032}{2063}$ x 1

= 1

Level 15 = $\frac{1032}{2063}$ x 19

= 10

Level 14 = $\frac{1032}{2063}$ x 27

= 14

Level 13 = $\frac{1032}{2063}$ x 11

= 5

Level 12 = $\frac{1032}{2063}$ x 56 = 28

Level 11 = $\frac{1032}{2063}$ x 11 = 5

Level 10 = $\frac{1032}{2063}$ x 72 = 36

Level 09 = $\frac{1032}{2063}$ x 89 = 45

Level 08 = $\frac{1032}{2063}$ x 129 = 65

Level 07 = $\frac{1032}{2063}$ x 181 = 90

Level 06 = $\frac{1032}{2063}$ x 423 = 212

Level 05 = $\frac{1032}{2063}$ x 140 = 70

Level 04 = $\frac{1032}{2063}$ x 322 = 161

Level 03 = $\frac{1032}{2063}$ x 334 = 167

Level 02 = $\frac{1032}{2063}$ x 177 = 88

Level 01 = $\frac{1032}{2063}$ x 69 = 34

Fig 8

CATEGORIZATION OF THE EXISTING STAFF AND NEW VACANT POSTS 1976.

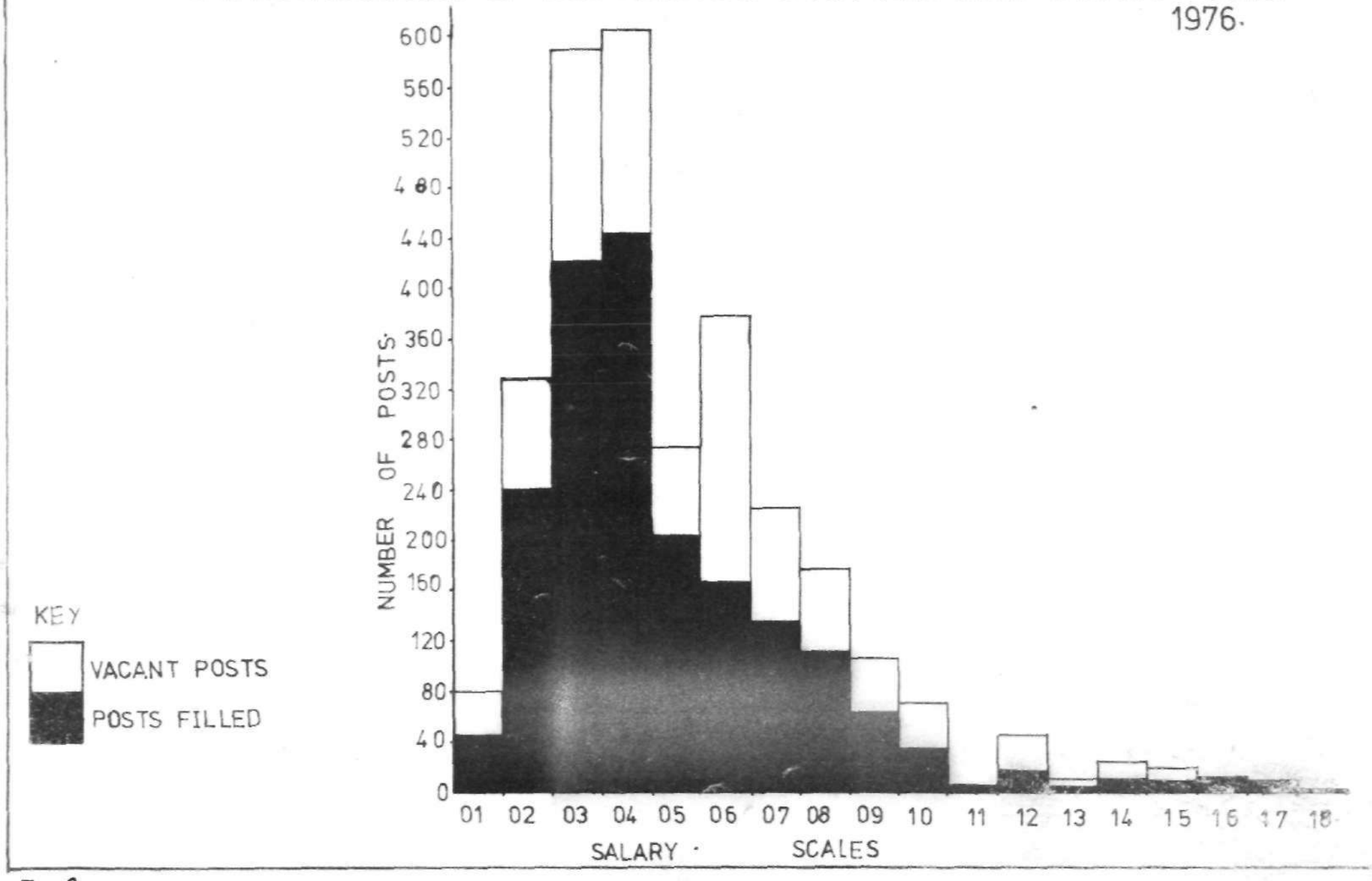


Fig 8

5 Projections

The rate of increase in the staff strength of the government of Niger State at Minna will depend on the following major factors-

i. The possibilities of creating new Ministries between now and the year 2003.

ii. The employement rate into the service

iii. The government's manpower policy in general.

C1. Creation of Four New Ministries During the Planning Period.

As a guide to determine the possible number of Ministries that may emerge during the planning period, studies on related documents on the Ministries of Lagos state and the former midwestern state were undertaken the basis for selecting the two states were that they had been among the older existing states and the differences between their populations and that of the Niger - state were not so great. According to the 1963 census, Lagos, former mid-western and Niger states had 1.4 million, 2.4 million and 1.2 million peoples respectively.[4]

The result of the studies revealed that Ministries could increase in number over the years. The study which covered 1968 to 1976, showed that in Lagos state "four"[5] new ministries were created in 1972-73; that was five years of the existance of Lagos state.

Similar discovery was made in the former Mid-Western state. In 1971-72 "four"[6] new Ministries were created. Up to the time of this report the conditions were still the same. On the ground of these two studies it is anticipated that four new Ministries would emerge in Niger state during the planning period. The new Ministries based on "necessity" have been introduced later on at different time periods.

2 Fission & Fussion of Ministries

It is worth mentioning here briefly that Ministries can be merged together either became of their strong functional relationship, or for each administration or due to shortage of manpower. Departments within a ministry could become ministries of their own.

3 Projection of the Staff Strength at Different time Periods.

For the purpose of projecting the staff strength at different time periods throughout the planning period, a study of the Kwara state government establishments was undertaken.

Kwara state was selected for this analysis for the very reason that the author wanted to select a state within the former Northern Nigeria in order to minirize the differences.

In additions, Kwara state was not only part of former Northern Nigeria, but also out of the older existing states in the North, it has the nearest population to that of the present Niger state. In 1963 Kwara state had the estimated population of about 2.3[7]million and Niger state 1.2 million.[8] In addition the availability of information on Kwara state government staff strength for four conxecutive years also served as motivation.

Two different time intervals were chosen for the study, 1968-69 when Kwara was created just like the Niger state to 1970-71. The next interval started from 1970-71 to 1972-73. The selection of these time intervals were arbitrary, but at least they allowed for comparison of the staff strength at the two time intervals.

The study revealed that in 1968/69 there was a total of 2,667[9] posts within the Kwara state government Ministries. In 1970-71, it was 3046[10] posts, while in 1972-73 there was 5549[11] posts. The figures ..... ?

Percentage Increase in the First Time Interval 1968-69 to 1970-71.

$$\text{Formular} = \frac{(P_2 - P_1)}{P_1} \times 100$$

Where P_1 = Total staff strength in the base year 1968-69

P_2 = Total staff strength in the future 1970-71.

$$= \frac{(3046 - 2667)}{2667} \times 100$$

$$= \underline{14.2\%}$$

Within two years, Kwara state staff strength grew by about 14.2%. This showed an average increase of 7.1 % p.a.

Percentage Increase in the Second Time Interval 1970-71 to 1972-73.

$$\text{Formular} = \frac{(P_2 - P_1)}{P_1} \times 100$$

P_1 = Total Staff Strength in the new base year 1970-71

P_2 = Total staff strength in the future 1972-73.

$$= \frac{(5549 - 3046)}{3046} \times 100$$

$$= \underline{82.2\%}$$

This revealed a high rate of increase in the staff strength of Kwara state between 1970-71 and 1972-73. On the average a total growth rate of 41.1% p.a was achieved.

4. Average Annual Rate of Growth for Four Years

From the result of the studies above a single annual rate of growth was computed.

$$\frac{(7.1 + 41.1)}{2}$$

$$= 24.1\% \text{ p.a.}$$

5. Assumption and Application

It has been assumed that 50% of any given staff strength would reside in the stage Capital. (see page ...49...) With this assumption, it would be 50% of 24.1% (staff) that would reside in Minna. That is the staff strength within the state capital - Minna - would be increasing at the rate of 12.05% p.a.

From the limited information available on Kwara state, experience has shown that growth rates in staff strength fluctuates over the years. For instance in the first time interval, the total growth rate for the whole state was as low as 7.1% p.a. while in the second time interval it was as high as 41.1% p.a. Taking that 50% of the growth rate for each time interval would stay in the state capital, the growth rate would be 3.6 and 20.6 respectively.

6. Projection of the Estimated Staff Strength at Different Time Periods.

The planning period has been divided into three parts so that new appropriate Ministries could be introduced at different times and also allows us to introduce changes in the growth rates at appropriate periods

Time periods	Assumed Rate of Growth.
1976	-
1976 - 1986	8%
1986 - 1996	12%
1996 - 2003	14%

7. Time Period (1976 - 1986)

The experience of Kwara State during its first five years is being used as a guide in the selection of growth rate for Minna. The low rate of growth and the fluctuation in the staff strength of the government of Kwara State were possibly the result of the poor state of the national economy at the time when Kwara State was created. The national economy was badly affected by the civil war and infact, the growth rates of - 19.5[12] per cent for 1967-68 was recorded, although it excluded the Estern states. This poor state of the national economy would have affected adversely not only Kwara state government economic activities but also all the then other states of the federation. The amount of capital available for the government to invest and expand her economic activities as well as the total amount of labour to be employed would be affected. It was not surprising that in her first two financial years, the Kwara State government spent only ₦10.7[13] and ₦11.6[14] respectively. While in its first financial year Niger - state spent ₦131.1 million[15] and in the current financial year it is expected to spend ₦191.6 million.[16]

From the above, was expect Niger state's capital expenditure to be greater than that of the Kwara state but nonetheless if is expected to pass through the "same" stages. Niger - state being a new state would try to catch up with the already existing states in the field of economic and social development and therefore would need more manpower than had Kwara state. This not withstanding we have taken into consideration the fluctuation noticed in Kwara State staff strength and felt that the average rate of growth of 12.05% p.a. cannot be achieved through out the planning period in Minna. And for the first 10 years a growth rate of 8% was accepted for Minna.

8 Projection

In projecting the staff strenth the following formular is used:-

$$\text{Log } (I + r) = \text{Log } \frac{P_2}{\frac{P_1}{N}}$$

source (T. Gihring, statistics lecture on rate (1975.)

Where P_1 =(2977) staff strength in the base year

P_2 = Total staff strength in the future.

r = (8%) Rate of growth

n = (10years) number of years.

$\text{Log } (I + r) = \log \frac{P_2}{\frac{2977}{10}}$

$10 \log (I + 8\%) = \log \frac{P_2}{2977}$

$10 \log (I + 0.08) = \frac{P_2}{2977}$

let $\frac{P_2}{2977}$ be y

Hence $\log \frac{P_2}{2977} = \log y$

$10 \log (1.08) = \log y$

$10 (0.0334) = \log y$

$0.334 = \log y$

Antilog $2.158 = y$

But $\frac{P_2}{2977} = 2.158$

i: $P_2 = (2.158)(2977)$

$= 6,424$

9. Time Period (1986 - 1996)

By this period it is hoped that out of the four ministries proposed (see page 53) two of them would emerge. The ministries would likely include -

i. Ministry for Local government;

ii. Ministry of Land and Housing

The recent nation wide local government reforms is most likely going to necessitate the creation of an autonomous ministry to take care and co-ordinate the activities of all the local government bodies in the state.

Similarly, there has been an increasing government concern on how to provide housing for the citizens, and the desire to make the best use of the state Capital's land law, would also make it desirable to creating a ministry of land and housing.

10 The Staff Strength of the New Ministries Existing and Vanant Posts Combined.

It is assumed that the two new ministries, at the initial stage would take off with the same proportion of the staff strength (2977) of the already existing eleven ministries (1976) existing and vacant posts combined. (see page ..50.....)

The total staff strength of the new ministries was therefore worked as:-

$$P_2 = \frac{N_2}{N_1} \times P_1$$ (sources) The author's idea.

Where N_1 = (11) Number of existing ministries

N_2 = (2) Number of the new ministries

P_1 = (2977) Total staff strength in the base year

P_2 = Total staff strength of the new ministries

$$P_2 = \frac{2}{11} \times 2977$$

$$P_2 = \underline{541}$$

With the expected increase in the total number of staff as the result of the creation of the new ministries, by this period, there would be a total of (6,424 + 541) 6965 government staff in Minna in 1986.*

In determining the growth rate at this period we expect rise in general economic activities of the government and also a higher increase in trained manpower; this would possibly be the effect of the U.P.E. and the new Universities in the nation. In addition we expect a more rapid increase in the new ministries which would lead to higher rate of growth.

Taking all these factors into account, a growth rate of 12% was accepted for the next decade.

11 Projection

In projecting the staff strength, the formular below is used.

$$\text{Log } (I * r) = \text{Log } \frac{P_2}{\frac{P_1}{n}}$$

Where P1 = (6965) staff strength in the base year.

P_2 = Staff strength in the future

r = (12%) rate of growth

n = (10years) Number of years.

$$\text{Log } (I + r) = \text{Log } \frac{P_2}{\frac{6965}{10}}$$

$$10 \log (I+12\%) = \log \frac{P_2}{6965}$$

$$10 \log (I+0.12) = \log \frac{P_2}{6965}$$

Let $\frac{P_2}{6965}$ be y

Hence $\frac{P_2}{6965}$ = logy

$$10 \log (1.12) = \log y$$

$$10 (0.0492) = y$$

$$0.492 = y$$

Antilog 3.105 = y Cont

But $\frac{P_2}{6965} = 3.105$

ii $P2 = (3.105)\ (6965)$

$P_2 = 21626$

12 Time Period 3: 1999 - 2003.

By this period, it is anticipated that the remaining two ministries out of the four proposed would come or would have come into existance. The two ministries would include:-

i. Ministry of Co-operatives and Community Development.

ii. Ministry of Cultural and Social Development and Sports.

Among the recent activities of the Nigerian governments was on attempt to lessen the burden of inflation on their citizens and to achieve the development of the rural areas so that their economy could be integrated with the over all national economy. The very fact that Co-operatives and Community Development are given a chapter[17] in the Third National Development plan (1975-80) is an indication of their importance. It is therefore anticipated that to suplement the work of the price control board of the Niger state and the need to achieve general economic development of the state, the government might find it necessary to create an autonomous ministry to sup ly goods in large quantities and at cheap prices and to take care of the development of the rural areas.

Events have also shown that there has been general cultural awareness. This was expressed in Nigeria hosting 2nd World Black and African Festival of Art and Culture (FESTAC) 1977.

13. The Staff Strength of the New Ministries - Existing and Vacant Posts Combined.

The working of the staff strength below is based on the same assumption that at the initial stage the new ministries, would take off with the same proportion of staff strength (2977) of the already existing eleven ministries (see page)

The total staff strength of the two new ministries was therefore worked as -

$$P_2 = \frac{N_2}{N_1} \times P_1$$

Where N_1 = (11) Number of existing Ministries

N_2 = (2) Number of new ministries

P_1 = (2977) Total staff strength in the base year

P_2 = Total staff strength of the new ministries

$$P_2 = \frac{2}{11} \times 2977$$

$$P_2 = 541$$

The total number of staff by this period is therefore worked to be (21, 626+541) 22,167.

Niger state, it would be recalled had been part of the less developed region of Nigeria commonly refered to as the Middle Belt. And therefore by this period increase in the government economic activities to develop the state as a whole is expected. Since it would have got itself firmly established and solved most of the hinder that would linder the taking off of economic activities. And with the expected greater impact of the U.P.E. and the new Universities in the supply of manpower a still more higher rate of growth is expected for the period under consideration. On the basis of the above a growth rate of 14% was accepted for Minna.

14. Projection

Using the formular below the staff strength was projected thus:-

$$\log (I + r) = \log \frac{P_2}{\frac{P_1}{n}}$$

Where P_1 = (22167) staff strength in the base year

P_2 = Total staff strength in the future

r = (14%) rate of growth

n = (7 years) Number of years.

$$\log (I + r) = \log \frac{P2}{\frac{22,167}{7}}$$

$7 \log (I + 14\%) = \log \frac{P_2}{22167}$

$7 \log (I + 0.14) = \log \frac{P_2}{22167}$

Let $\frac{P_2}{22167}$ be y

Hence $\log \frac{P_2}{22167} = \log y$

$7 \log (1.14) = \log y$

$7 (0.0569) = y$

$0.3983 = y$

Antilog 2.502 y

But $\frac{P_2}{22167} = 2.502$

ii $P_2 = (2.502)\ (22167)$

$= \underline{55,461}$

The achievements of these various rates of growth in the staff strength in Minna over the planning period would depend on a number of factors.

Among these factors are:-

a. The general policy of the state government on employment.

b. The degree of competition from other employment bodies in the state for example, local government bodies, prospective industries, the rate at which people would like to join the federal service or othe state services.

c. How the trained people would like to establish their own enterprise

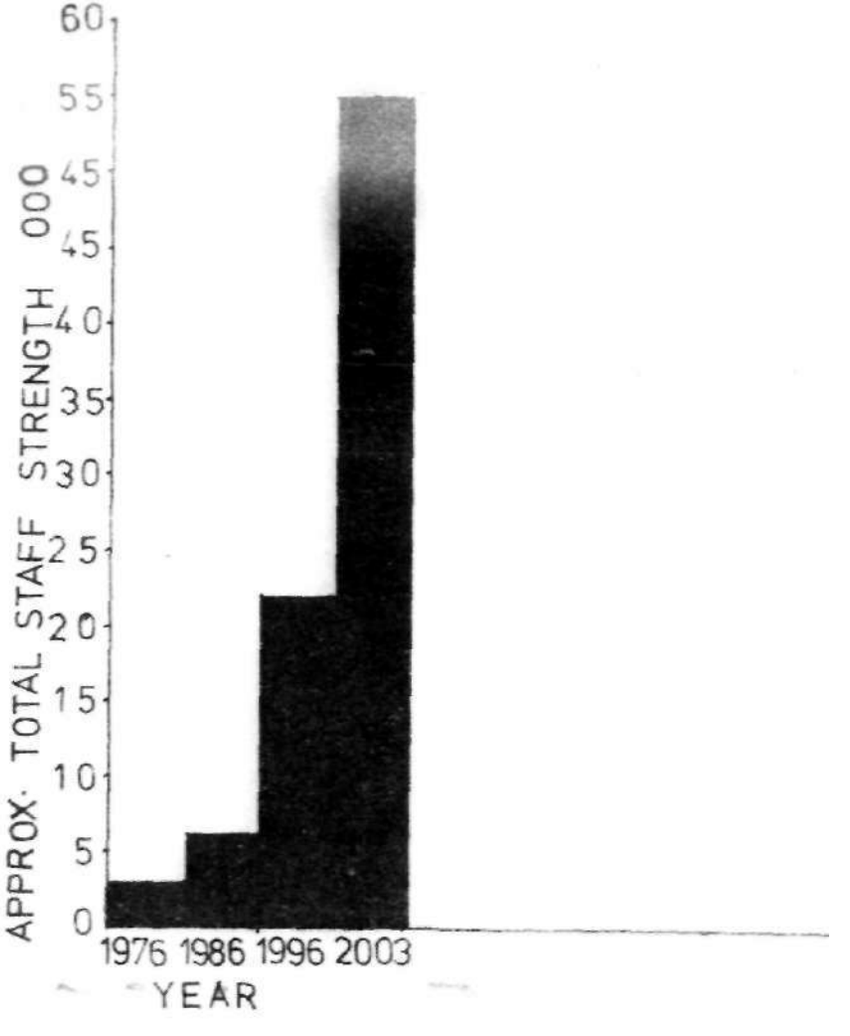
Table 8

Government Staff Growth 1976 - 2003.

Year	Assumed rate of growth	Approximate Total staff strength
1976	-	3,000
1986	8%	6400
1986	12%	22,000
2003	14%	55,000

The various figures above have been numbered up to the nearest hundredth. (Also see figure 9) below).

GOVERNMENT STAFF GROWTH 1976 2003



P A JIYA

M Sc (URP) THESIS

1977

FIG. 9

E 1. OFFICE SPACE ALLOCATION.

Before going to the field, the author had assumed that once a person is a government worker he is entitled to an office for himself. But the result of the field work proved this to be wrong.

Eight of the eleven ministries agreed that any officer from level 06 is entitled to an office; that is from chief clerical officer and above. Other responses varied; one suggested only officers on Grade level 07 and another saids evel G.L. 03 could have an office.

An attempt to find out from Ministries of Works and Agriculture on the total number of officers who were field workers in the two ministries, I was informed that there were no definite number of field workers as they vary with the number of projects outside.

From the field investigations it was decided that having an office will depend on the nature of work an officer does. It wasn't surprising that drivers, labourers etc. were often observed to be hanging around under the trees. "Similarly, not more than two schedule officers should be housed in one office with a typist, but it is preferable to provide each schedule officer with a separate office and a typist. The idea is that schedule officers require complete isolation which will enable them concentrate fully on their jobs ....."[18]

From this review, it appears reasonable that certain category of government officers could share offices. This idea was used later to group those on level 01 - 03 together in fives, and certain se nior officers should have larger offices than their juniors.

2. Standard for Office Land Allocation.

At·empts have been made to give standards for allocation of land for adminstrative use. Some authorities have suggested that the size of land to be designated for office use should depend on the town and its importance in the hierachy of towns. For instance, that land allocated for adminstrative use should vary from 2 to 8 or 10%[19] of the total developed area, this depending whether the town is a divisional headquarters, state headquarters or a national capital.

Another alternative is based as the number of working population per unit area. A density varying from 22[20] persons per hacter (gross) or more depending on the intensity of land use.

In this work, we do not intend to adopt the suggested standards, but to work from the first principles and use the suggested standards as guides where necessary.

The first principles calculations involved categorising officers according to their space needs and then using the British Architects Journal (1968) standards as a guide office spaces were allocated to them.

The calculation is as follows-

CRITERIA FOR OFFICE SPACE ALLOCATION.

Group	SALARY GRADE	HA/persons	Remarks
A	15-18	0.004	Most Senior Officers who receive official visitors
B	12-14	0.0035	Rank of Senior Officers that could act for @roup A.
C	08-11	0.002	Rank of Senior Officers with less equipments in their offices.
D	04-07	0.0035	Junior staff most equipments kept with them. They could also share office.
E	01-03	0.004	Most junior staff could share offices

Table II

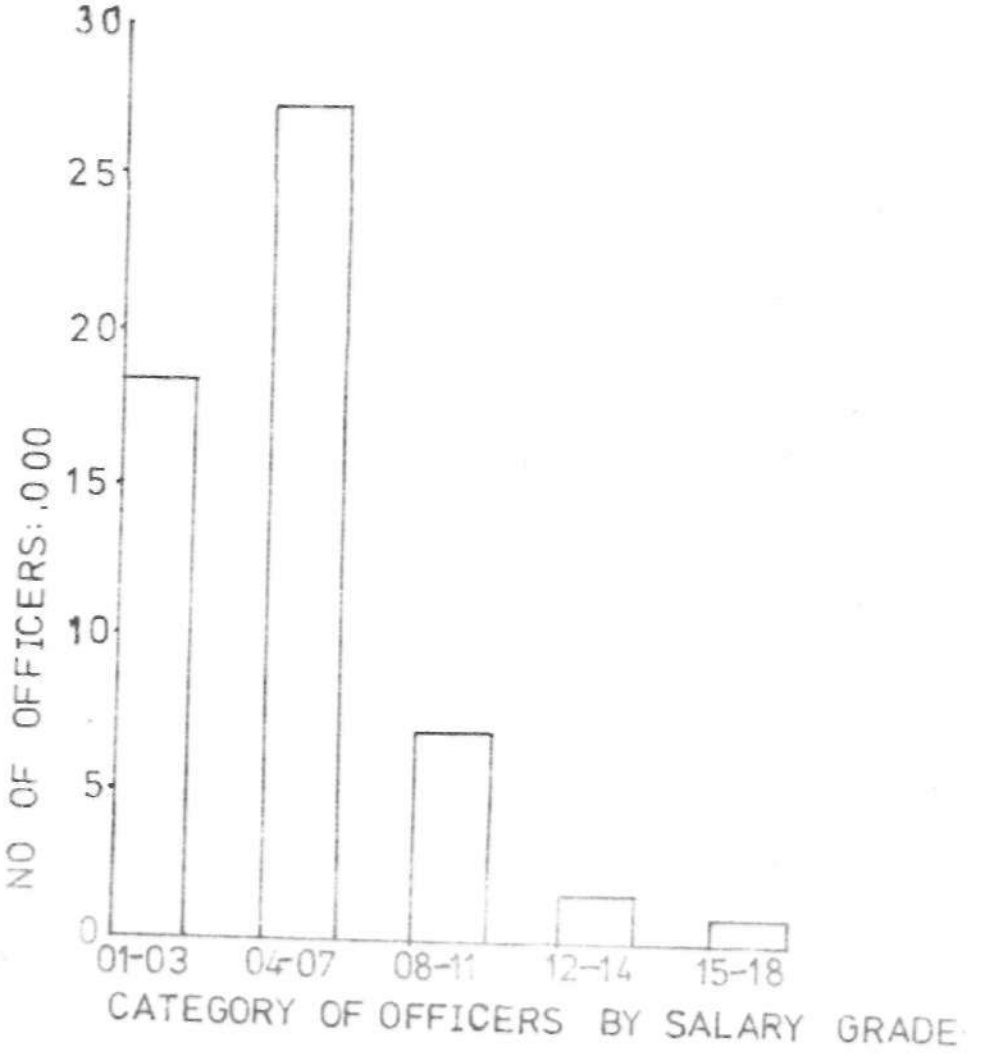
Office Space Requirements - 2003.

Category of officers by Salary grade	No. of officers	Area/Head including normal furniture in Hacters	Type	Total Area in Hacters
15-18	842	0.004	Individual	3.4
12-14	1502	0.0035	Individual	5.3
08-11	6692	0.002	Individual	13.4
04-07	27262	0.0035	Individual/open	95.4
01-03	18370	0.004	Shared/5	14.7
Total				132.2

Table 12.

By office space requirements, is meant the exact area (net) covered by the office buildings. But our main concern is to know the total gross area requirements in the year 2003 in the light of present development in Minna. To calculate the gross area needed for office use we have considered the suggestions given by the Ibadan Polytechnic (1972) that actual site coverage of office buildings could vary from 30% to 33⅓%.[21] We have accepted that the office space at Minna should cover 30% of the total area

GROUPING OF OFFICERS BY SALARY GRADE 2003.



P A JIYA
M Sc. URP THESIS
1977

Fig. 10

and the remaining 70% should be left to allow flexibility easy circulation and for expansion in future.

Thus the Gross land area for Government Offices is calculated as follows approximately. The total net government is 132ha.

$\therefore$ The gross area $= \frac{100}{30} \times 132$ hact

$= 440$ approx. Hacters.

4 Comparison of the New Gross Area Required and the Area made Available on the Master Plan for Government office use .

The total area madd available by the master plan for government use in the year 2003 is 75 hacters. This area, might be adequate for Minna as a divisional headquarters.

With the present status of Minna as a State Capital, the result of my field work has shown that the areas made available by the master plan are no longer adequate. Infact a total area of about 440 hacters would now be required in the year 2003 for government offices.

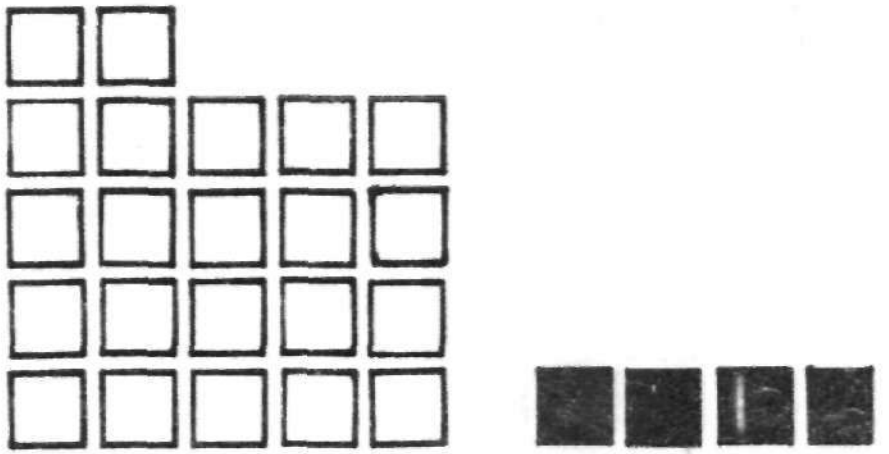
See Fig II

MASTER PLAN'S AND AUTHOR'S PROPOSALS COMPARED

KEY

AUTHORS PROPOSAL

MASTER PLANS PROPOSAL



ESTIMATED GROSS AREA REQUIRED IN HACTERS YEAR 2003.

P. A. JIYA
M. SC. URP THESIS 1976/77
DEPT OF PLANNING
A. B. U. ZARIA.

FIG. 11

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ii

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CHAPTER V

RESIDENTIAL AREA ALLOCATION

A. 1 Estimation of the Existing Population

Census was conducted on 5% of the total compounds. That is the total number of compounds was determined by house to house counting and than 92 compound were randomly selected.

The result indicated that there are on the average 5.1 persons per household. On further investigations, it was understood that under normal conditions the average household size would have been more than 5.1. As at the time of the census a number of government workers were yet to bring with them some members of their families.

Intensive investigations of the selected compounds shows that about 568 households resided in 92 compounds and on the average about 6 households in each compound.

The total population of Minna can be determinated thus:

2. (i) Calculations

	A household had	=	5.1 members
	Therefore 568 household	=	(568) (5.1) members
		=	2896 members
(ii)	92 compounds had	=	2896 members
	Therefore 1802 compounds	=	$\frac{1802}{92}$ x 2896 persons
		=	56724 persons

3. Addition of the Estimated population of Boarding Post Primary Institutions

In addition, there were five boarding post primary schools in the town each with an average student population of 360.[1] The total population of these schools was estimated at 1,800 plus 250 students from the Advanced Teachers' College, making a total of 2050 persons.

The population of Minna was therefore estimated in 1976 to be - (56724 + 2050) 58774 people.

B. Projection of the Estimated Population at Different Time Periods

1. Time Periods

For the purpose of projecting the estimated population, the total time period has been divided into three because of the anticipated changes in the rate of growth of the population during the various time periods.

2.	Time		Periods	Assumed rate of growth
To	--		1976	1
1	1976	-	1986	12%
2	1986	-	1996	8%
3	1996	-	2003	7%

2. Time Period 1 (1976 - 86)

(a) In 1973, it was estimated by the Dar-al Handasah Consultant to be 32,000.[2] And at the growth rate of 6%,[3] as used by the consultant, Minna's population would be 36,416 persons in 1975 ([redacted]).

From the figures above, between 1975 to 1976 the population grew by about (58774 - 36416) 22,358 persons.([redacted]). That is a growth rate of

61% was achieved within a year. This is obviously very high. There are many factors which might contribute to this and the most important are mentioned here: (a) the result of mass exodus of civil servants from the former North-Western State's to the newly created Niger States' headquarters, this would have been coupled with (b) the attraction of more people to the capital from elsewhere to take up jobs in the state headquarters. (c) It is also possible that Dar-al Handasah underestimated, the population in 1973, although there are evidences to show that such a growth rate was possible.

However, a more useful guide in determining growth rate for Minna is Ilorin which became a state capital from the position of provincial capital in 1967.

According to Doxiadis Associates (1975), the annual growth rate of Ilorin after the initial exodus of workers into the town in the first two years was at 6.9%[4] This annual growth rate seems small because of the out migration of some group of people especially traders, to Lagos, and other towns to the South. If not because of the out-migration, the

annual growth rate of Ilorin would have been 7.3% according to Doxiadix.[5]

In determining the growth rate of Minna in the period under review we have decided to strike a balance between its one year experience (high growth rate) and the experience of Ilorin over one decade (relatively low growth rate). We have also considered the position of Minna in Nigeria's overall pattern of urbanisation. It is in a region that may be called "lagging region" of the middle Belt. Due to the number of important projects being planned in that region e.g. the New Federal Capital and the Steel Works, it is anticipated that this region will at least retain its population.

After considering all these facts, an annual growth rate of 12% during this period is accepted.

C. Projection

In projecting the population, this following formular is used,

$$\text{Log } (1 + r) = \text{Log } \frac{P2}{P1}^{\frac{1}{n}}$$

Source (T. Gihring 1975)
Statistic Lecture on rate

where P1 = Population in the base year

P2 = Population in the future

r = Rate of growth

n = Number of years

The estimate shows that P_1 = 58774 people

$$\text{Log } (1+r) = \frac{\text{Log } \frac{P2}{58774}}{10}$$

$$10 \log (1 + 12\%) = \text{Log } \frac{P2}{58774}$$

$$10 \text{ Log } (1 + 0.12) = \text{Log } \frac{P2}{58774}$$

Let $\frac{P2}{58774}$ be y

$$\text{Hence } \log \frac{P2}{58774} = \log y$$

$$10 \log (1.12) = \log y$$

$$10 (0.0492) = y$$

0.492 = y

Antilog

Antilog 3.105 =

But $\frac{P2}{58774}$ = 3.105

" P2 = (3.105) (58774)

P2 = 182,493

3. Time Period 2: (1986 - 1996)

a. By this time, the government at Minna would have got itself firmly established to embark on wider economic activities. Gradually, industries would have been introduced and expected improvement in percapita income and living conditions and better health services are likely to invite more people to Minna.

For this second part the new Federal Capital would have started taking shape and because of the position of Minna near to it, more people would likely be attracted to Minna. Similarly other organizations with state structure will open their headquarters at Minna. If the above

conditions hold, the rate of growth of Minna's population is still expected to be high though not like the first time period.

Taking the above into consideration the rate of growth of 8% has been assumed for this second period.

b. Projection

Population in the new base year = 182,493

Formula

$$\text{Log } (1 + r) = \text{Log } \frac{P2}{P1}^{n}$$

Where P1 = Population in the base year

P2 = Population in the future

r = Rate of growth

n = Number of years

$$\text{Log } (1 + 8\%) = \frac{P2}{182,493}^{10}$$

$10 \log (1 + 0.08) = \log \frac{P2}{182,493}$

Let $\frac{P2}{182,493}$ be $= y$

Hence $\log \frac{P2}{182,493} = \log y$

$10 \log (1.08) = \log y$

$10 (0.0334) = y$

$0.334 = y$

Antilog $2.158 = y$

But $\frac{P2}{182,493} = 2.158$

But $P2 = (2.158) (182,493)$

$P2 = 393,820$

4. Time Period 3: (1996 - 2003)

a. Before Minna became a state capital it was experiencing the growth rate of 6%[6] p.a. With its new role as an important administrative centre in addition to being important transportation and commercial centre It is expected that the growth rate at this time though would be low, it will still be more than 6% that it used to be. For this last lap of the planning period then a growth rate of 7% has been assumed.

b. Projection

Population in the new base year = 393820.

Formula

$$\text{Log } (1 + r) = \frac{\log \frac{P2}{P1}}{n}$$

Where P1 = Population in the base year

P2 = Population in the future

r = Rate of growth

n = Number of years.

$$\log (1 + 7\%) = \frac{\frac{P2}{393820}}{7}$$

$$7 \log (1 + 0.07) = \log \frac{P2}{393820}$$

Let $\frac{P2}{393820}$ be y

Hence $\log \frac{P2}{393820} = \log y$

$7 \log (1.07) = \log y$

$7 (0.0294) = y$

$0.2058 = y$

Antilog $1.606 = y$

But $\frac{P2}{393820} = 1.606$

But $P2 = (1.606)\ (393820)$

$P2 = 632,475$

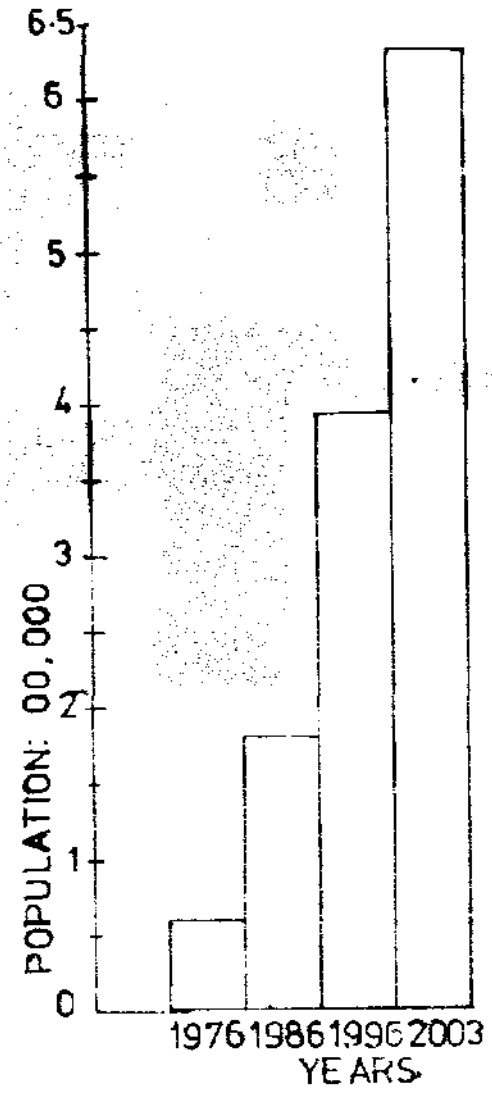
It is important to note that the achievement of the assumed rates of growth for the different time periods would depend on how fast the public and private sectors would be ready to invest in the various economic sectors that could create an adequate volume of employment in the city. The achievements of the assumed rates would also depend on how great the people are attracted by the proposed New Federal Capital and other towns within the state like Bida and Kontagora etc.

Below is a table showing the projected population at different time period. Also see fig. 12.

POPULATION GROWTH

Year	Assumed Rate of Growth	Population
1970	-	59,000
1986	12%	182,000
1996	8%	394,000
2003	7%	632,000

POPULATION GROTH 1976 - 2003



P A JIYA
M. SC.(URP)THESIS 1976-77

Fig.12

Calculation of the Gross Residential Area Requirements in Relation to the Projected Population

It should be emphasized that due to lack of time, detailed analysis of the social economic and cultural changes that have been introduced into Minna as a result of it being made a state capital and which would have planning implications as far as residential area requirements is concerned are not available. But it obvious that socio[1]-cultural, economic changes have taken place and are now quite different from what they used to be when Minna was a Divisional Headquarters. At least the results of my survey on government Ministries revealed that there were about 1945 government workers in Minna. These category of workers are different in themselves and from the other population of the town engaged in other works, both socially, economically and educationally. The lowest of them earns about "₦720[7] p.a. while the highest earns about ₦13,968"[8] p.a.

If adequate land is to be allocated for future residential need, provision must be made for a wide range of dwelling types and densities

to suit the taste of the various economic, social and cultural groups. Consideration must also be taken of the existing pattern of development which will affect any future need for residential land.

It will be recalled that the Dar-al Handasah consultant (1974) has based its standard for allocation of land in the master plan of Minna "On professional judgement according to the criteria provided by the local physical and social environments and according to accepted professional standards concerning all aspects of physical development,[9] On the basis of the above the Consultant assumed that if people built in "one-storey buildings"[10] Minna will require a gross residential area of 2,100[11] hectares to accomodate 198,000[12] people in the year 2003. This gives approximately the population density of 90 persons per hectare.

6. Rejection of the Residential Space Standards As Given by the Master Plan

It is the author's believe that the residential space standards used by the Consultant was much more of theoritical system and "professional standards"[13] rather than what actually obtained in Minna, since about

76%[14] of the household lived in compound type accommodation and 17%[15] lived in houses accommodating more than one household. On the ground that, "it would be foolish to determine space standards for a particular town according to some theoretical system if the local topography, the nearness of other towns or the social habits prevelent in that town made it clear that some departure from the theoretical norms would be desirable,"[16] the standards used by the master plan has been rejected in this work.

7. Alternative Residential Space Standards

The better alternative suggested by Lewis (1969) would be to control total population, range of densities and distribution of different densities so that they conform with the desired objectives of the town's community. The calculations briefly would therefore provide for -

i. "Accommodation for future increase of population

ii. Accommodation for buildings displaced on redevelopment of areas built up too densely.

iii. Accommodation for persons living at an excessive occupancy rate

iv. Total area required for new housing and other new uses and

v. Calculation of long term requirements."[17]

8. Standards used in this Work

However, due to lack of time to do detailed analysis from the first principles above, it was decided to adopt an average density figure for Minna taking the guide from Ilorin, the Kwara State Capital.

Ilorin was chosen for this purpose since it had been a state capital within Nigeria and fortunately from the former Northern Region just like Minna. In addition, Ilorin is a capital of a state which shares the same boundary with Niger State (see Map 1) and geographically they both lie in the same region. Information was also available on Ilorin. It therefore assumed that Minna's population would share similar social and cultural characteristic with Ilorin though physical environment may differ.

From the studies of the "traditional urban patterns, social customs and climate, the Doxiadis Associates (1975) projected that Ilorin would

achieve an overall density of 60[18] persons per hecate by the year 2,000. But when planning in detail, Doxiadis Associates, gave ranges of densities lower in the outskirts and higher towards the central areas. The ranges were in order of "60, 80 and 100 persons per hectare.[19]

The overall density of 60 persons per hectare given seems to be reasonable and only need slight increase as the author is of the opinion that the adoption of an average figure may not necessarily mean that all development would be built at that density, nor all the redevelopment. In fact a wide range of densities are expected particularly with the presence of the civil servants in Minna to whom it is a practice to allocate large areas of land.[20] There could also be significant number of new arrivals in the town who may demand low density housing and vice versa. It is also possible to have very high density housing existing which cannot be expected to be removed.

With all the above in mind, the average of the three ranges given for Ilorin, 60, 80, and 100 persons per hectare has been assumed for Minna in the year 2003. That is Minna is expected to achieve the overall density

of 80 persons per hectare in the year 2003.

From this new density, it also adopted here that the density adopted by the master plan is quite high which may not allowed for human comfort and welfare in a residential are "in terms of freedom from noice, privacy and absence of congestion on roads and footways....."[21] With this 80 persons per hectare it is hoped that adequate provisions could be made for places of employment, schools, shops and open spaces in appropriate amount.

9. Gross Residential Area Requirements for Minna in the year 2003 in Relation to the Projected Population

This has been calculated below by simply dividing the total number of people expected to live in Minna by the 2003 by the average number of persons per hectare.

Total number of projected population = 632,000

Average number of persons per hectare = 80

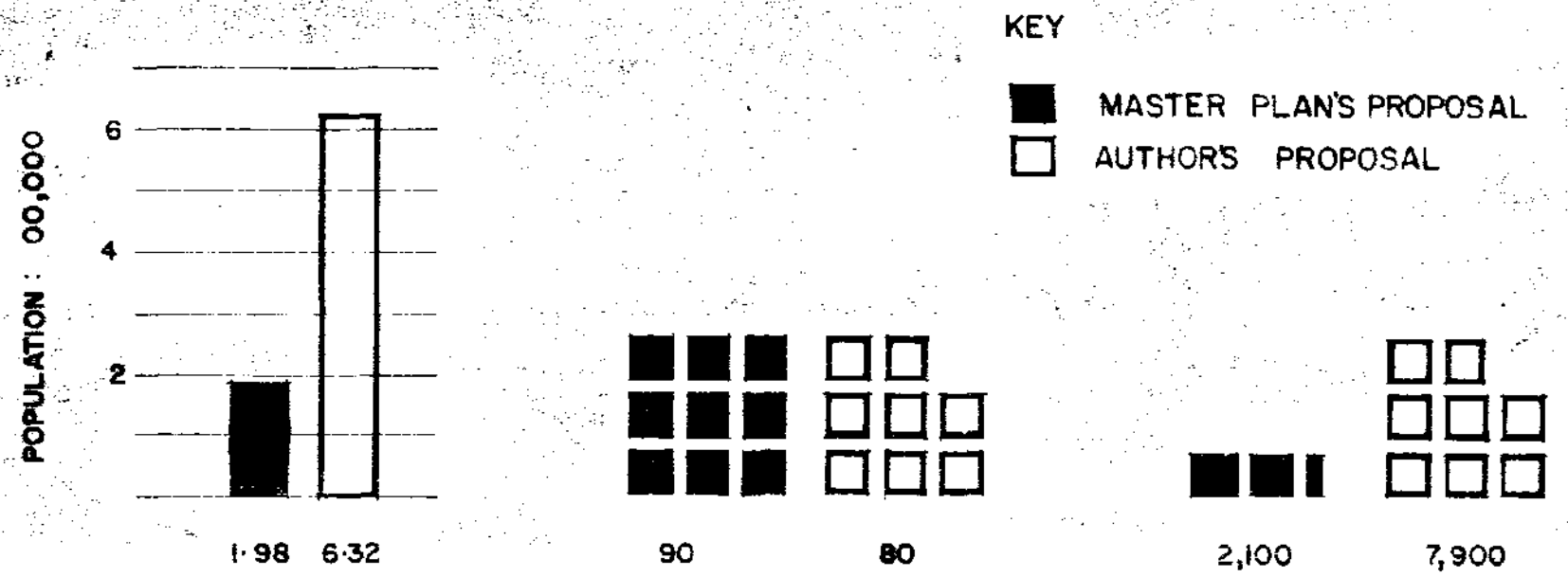
Gross future area requirements 7,900 hectares

10. Comparison of the Gross Area as Made Available on the Master Plan and the New Requirements

No.	Year	Population	Density Person/Hectare	Total Area Requirements in Hectares
1	2003	198,000	90	2,100
2	2003	632,000	80	7,900

see fig 13.

MASTER PLAN'S AND AUTHOR'S PROPOSALS COMPARED



POPULATION ESTIMATES
YEAR 2003

AREA STANDARDS
No OF PEOPLE/HA·

GROSS AREA REQUIRED
IN HA·

Fig 13

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7. Printed by the Government Printer, Kaduna, Nigeria: Estimates of the Government of Niger State of Nigeria, 1976 - 1977 p. 187.
8. Ibid., 1976, p. 187
9. Opcit., 1973 - 2003 p- 4.13
10. Ibid., 1973 - 2003 p- 5.1
11. Ibid., 1973 - 2003 p- 5.1
12. Ibid., 1973 - 2003 p-3.4-

13. Ibid., 1973 - 2003 p. -4.13-

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17. Ibid., 1969 p. 171

18. Opcit., 1975 p. -A74 5.5

19. Ibid., 1975 p. -A74 5.6

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Chapter VI

CONCLUSIONS AND RECOMMENDATIONS

A 1. After comparing the findings of the field work and that of the master plan it was found that the existing master plan is inadequate with regard to office and residential land allocations. Since the master plan is inadequate with these dominant elements it must also be inadequate in other respects.

2. Offices - Land Allocation

As indicated in chapter 2 the existing master plan has no clear objectives in office space for government mainly because the public office space needed was for divisional administration only, However, on the master plan a series of areas have been allocated for the government use. On the whole, as calculated on the master plan the total area designated for government use amounted to 75 hectarers.

The result of the field work has shown that with the present number of government workers in Minna and the future expected growth of the government staff, at the end of the planning period a total of 440 hectares would be required.

In addition, the land area allocated by the master plan for government use has been characterised by sporadic distribution

(see map 4 chapter 2). This scattered distribution of land areas for government use could fit Minna as a divisional headquarters with its type of governmental organization. With the present type of administ-ive organization in which all the branches of the government are functionally related in one way or the other, (see chapter 4 Fig 5) the land areas allocated for the government use by the master plan, even if they were enough; they would not serve the purpose of the present system. This statement has been proved by the present situation in which due to lack of office accommodation, the ministries have been accommodated in temporary structures meant for other purposes and scattered throughout the town. And the result of this, was that officers used valuable working hours to travel between ministries that were related.

3. Residential land Allocation

Though lacking quantitative targets, the master-plan had a number of objectives for residential land allocation. (see chapter 2). With the then (1973) population of 32,000, which was projected to 198,000 (see chapter 2) a total gross area of 2100 hectares (see chapter 2) was allocated for residential use by the master plan.

As indicated in chapter 5) there was every evidence that the existing master plan did not take into consideration the then existing local situations before adopting the standards for residential land allocations.

With the creation of Niger state, and Minna as its state capital, the population growth of Minna has sky - rocketed. In 1976, the population was estimated at 59,000. This was projected to 632,000 in the year 2003. For this population, at the density of 80 persons per hectare a gross area of 7900 hectare would be required for residential use.

So far, the master plan has proved inadequate as far as office and and residential land allocations are concerned. And it is only reasonable to say that the master plan must also be inadequate in respect to commercial, industrial, transportation, recreational and open spaces as well as other public and semi-public land allocations.

Recommendation

B 1. From the above, the need to prepare a new master - plan to provide adequate land for government offices and for residential use as well as land for commercial,

industrial, transportation, recreational, open spaces, public and s semi-public lands cannot be over - emphasized.

2 Offices

i. The present and future importance of government offices to the development of Minna, cannot be over emphasized. With the expected magnitude of the land area required for government offices any future master plan must give government offices a prominent position when allocating land among different competing uses. Therefore the new master plan must have clear objectives for government offices land allocation.

ii. The new master plan must set standard for office area allocation and state the number of officers that the space has been planned for at the end of the planning period. This would make it possible for the government to acquire the appropriate land area for office building and their auxilary structures for the present and future expansion so as to avoid conflict between different land uses.

iii. Unless where necessary, land for governments offices must be located within a single geographical area to allow easy contact between all the functionally related ministies.

3. Residential Areas.

i. The new master plan must not only make available adequate land for residential use but also land for commercial, industrial, transportation, open spaces and for public aid semi - public uses; etc.

ii. The new master plan must evolve standards for residential land allocation which has its origin from the existing development in Minna rather than being based on theoretical and professional standards which may apply to one town and fail in the other. The standards for residential land allocation which has its origin from the existing development in Minna could be evolved by conducting survey into the population of Minna, its sociocultutal and economic conditions, housing types and related facilities. The information from this survey could give idea on total population, range of densitis and distribution of different densities that will conform with the goals of the people.

iii. New density standard which takes into consideration the present and the future social, economic and cultural changes must be adopted.

iv. Finally, a new master - plan need not only to be prepared for Minna but consideration must also be given to the need to change the shape of the existing master plan. With the changing role of Minna, there are possibilities of having other land uses that need to be given prominent locations within the new master plan. There might also be some already existing land uses, which might be barrier to development towards certain directions and might need relocation, for example the army barracks located along Abuja road.

Ministry of Works & Housing
Town Planning Division,
Minna.

Apendix I

Government Offices Accommodation Survey.,

The Permanent Secretary
Head of Department
Staff Officer

Sir (s),

I am an employee of the Ministry of Works, Town Planning Division, Minna, and also a post graduate student at A. B. U., Zaria I am presently Conducting research on "Impact of the Federal Government Decision to Raise the Status of Minna as a State Capital on the existing Masterplan".

I shall be grateful if you can please answer the following questions below. The aim of the exercise is to find out the extent of the need for government offices in Minna which has come about as a result of the present role which Minna now plays.

The information supplied would be used for academic purposes only. No name of any respondent would be mentioned unless where the respondent himself wants it.

Thank you in advance.

(P.A. JIYA).

Date .....

1. Name of the Ministry .....

2. Part of the town located .....

3. Is the present area meant to be ....

   Permanent Site for your Ministry .....

4. Offices now occupied by my Ministry were meant for-

	Residential	Schooling	Others specify

5. Total number of officers employed by your Ministry/Dept.

6. Total number of Officers entitled to offices -

7. How many of them now actually have it/them ?

8. On what scale of salary s an officer suppose to be before he gets an office to himself.

9. For a standard office what equipments do you think should be provided?

   (1) .....

   (2) .....

   (3) .....

   (4) .....

10. What do you think should be the size of an office ? .....

....

11. Which other Ministry (ies) is your Ministry strongly attached that in case of future relocation of Ministries you would like them to be located in the same area ?.

(1) .....

(2) .....

(3) .....

(4) .....

12. How many of your officers have telephones .....

13. Any other suggestions with regard to any improvement you would like to see in planning and building of government offices in Minna ?.

.....

.....

.....

.....

Thank you in advance.

APPENDIX 2

TOTAL NUMBER OF EXISTING STAFF AND VACANT POSTS FOR THE DIFFERENT EXISTING MINISTRIES IN MINNA, NIGER STATE

Ministries																				Total
1. Cabinet Office Local Government and Pilgrims	Salary Grade GL	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	Posts filled	1	0	2	1	0	2	1	0	1	4	6	6	5	5	25	38	28	7	132
	Posts Vacant	0	0	1	0	0	1	2	0	2	3	2	3	5	7	11	4	12	3	56
	Total	1	0	3	1	0	3	3	0	3	7	8	9	10	12	36	42	40	10	188
2. Finance	Salary Grades GL	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	Posts filled	0	1	1	0	1	0	0	0	7	12	12	8	14	3	27	32	15	1	134
	Posts Vacant	0	0	0	3	2	0	7	0	4	11	27	25	32	17	50	44	12	2	236
	Total	0	1	1	3	3	0	7	0	11	23	39	33	46	20	77	76	27	3	370

Ministries																				Total
3. Natural Resources	Salary Grades GL	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	Posts Filled	0	1	1	0	1	0	4	0	6	15	30	42	55	77	272	193	100	6	802
	Posts vacant	0	0	0	5	3	0	8	0	10	10	33	28	227	0	0	0	0	0	324
	Total	0	1	1	5	4	0	12	0	16	25	63	70	282	77	272	193	100	6	
4: Education	Salary Grades GL	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	Posts Filled	0	1	1	1	2	0	3	0	8	2	9	11	15	2	8	1	5	2	61
	Posts Vacant	0	0	0	2	8	6	4	10	4	12	15	28	6	12	41	95	66	36	345
	Total	0	1	1	3	10	6	7	10	12	14	24	39	11	14	49	96	71	38	406
5. Works and Housing	Salary Grades GL	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	Post Filled	0	1	2	3	2	2	3	0	4	13	23	45	59	64	46	30	29	9	335
	Post Vacant	0	0	0	4	2	0	19	0	28	18	27	39	89	50	99	18	5	4	402
	Total	0	1	2	7	4	2	22	0	32	31	50	84	148	114	145	48	34	13	

Ministries																				Total
6. Health	Salary Grades GL	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	Posts Filled	0	1	1	1	3	0	2	0	4	4	2	5	7	3	11	23	19	2	88
	Posts Vacant	0	0	0	3	2	0	2	0	4	2	2	0	2	4	27	44	21	3	116
	Total	0	1	1	4	5	0	4	0	8	6	4	5	9	7	38	67	40	5	204
7. Internal Affairs, Community Development & Information	Salary Grades GL	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	Post Filled	0	1	1	0	0	0	2	0	2	9	18	6	12	43	48	59	30	6	238
	Post Vacant	0	0	0	7	0	5	1	10	12	12	41	34	36	46	56	46	24	19	303
	Total	0	1	1	1	7	0	7	1	12	21	30	47	46	79	104	105	54	25	541
8. Establishment & Service matters	Salary Grades GL	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	Posts Filled	0	1	1	0	0	0	2	0	0	0	1	5	3	3	1	20	4	9	50
	Post Vacant	0	0	0	0	0	0	4	0	2	4	0	0	3	9	2	3	0	0	27
	Total	0	1	1	0	0	0	6	0	2	4	1	5	6	12	3	23	4	9	77

inistries																				Total
Trade, Industry & Cooperatives	Salary Grade GL	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	Posts Filled	0	1	1	0	0	0	1	0	2	2	7	2	1	1	0	19	4	0	41
	Posts Vacant	0	0	0	2	2	0	3	0	5	12	3	6	6	0	10	19	4	0	72
	Total	0	1	1	2	2	0	4	0	7	14	10	8	7	11	10	38	8	0	113
O. Justice	Salary Grade GL	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	Posts Filled	2	1	0	1	1	1	0	0	0	2	5	4	4	2	2	2	2	3	32
	Posts Vacant	0	2	0	0	1	4	1	0	3	4	8	10	19	5	24	57	31	2	172
	Total	2	3	0	1	2	5	1	0	3	6	13	14	23	7	26	59	33	5	204
t. Public Service	Salary Grades GL	18	17	16	15	14	13	12	11	10	9	8	7	6	,5	4	3	2	1	
	Posts Filled	0	0	1	2	1	0	0	0	1	2	1	2	2	2	5	6	6	1	32
	Posts Vacant	0	0	0	0	0	0	1	0	0	1	0	1	0	0	2	4	2	0	11
	Total	0	0	1	2	1	0	1	0	1	3	1	3	2	12	7	10	8	1	43

Apendix 3.

Ministry of Works & Housing,
Town Planning Division,
Niger State,
Minna.

29th December, 1976

SOCIO - ECONOMIC AN. HOUSING SURVEY IN MINNA:

Sir,

I'm an employee of the Ministry of Works, Town Planning Division Minna, and also a post graduate student of A.B.U., Zaria. I am presently conducting research on "Impact of the Federal Government Decision to Raise the status of Minna as a state Capital on the existing master plan".

I shall be grateful if you can please answer the following questions below. The information is requested of the household head. The aim of the exercise in to find out the extent of overcrowding (housing reed) and other related things which have come about as a result of the present role which Minna now plays.

The information supplied would be used for academic purposes only. No name of any respondent would be mentioned unless where the respondent himself wants it.

Thank you in advance.

P.A. JIYA.

1. Zone No. _____ 2. House No. _____ Date _____

Name of _____ Interviewer _____

Households characteristics.

Tick any answer(s) that applies(y).

NO Particulars (2) Answer

		H. Head	Household members											
1.	Household head	0	0	1	2	3	4	5	6	7	8	9	10	11	12
2.	Relations														
3.	Sex - Male/Female														
4.	Age														
5.	Tribe														
6.	Marital Status/married														
	/single/widow.														
7.	Occupation/Government/														
	Trader/farmer/transporter														
	/craftman/student/Not														
	employeed														
8.	Monthly income														
	Less than ₦10 . 00														
	B/W ₦50 - ₦49 . 00														
	B/W ₦100- ₦149. 00														
	B/W ₦150- ₦199. 00														
	B/W ₦200- ₦249. 00														
	B/W ₦250- ₦299. 00														
	B/W ₦300- and above														

Continued

NO Particulars	Answers	
	H.Head	Household members
9. Vehicle ownership/car motorcycle/lorry/bus bicycle.		
10. Place of parking and distance from residence/ within premises/outside/ distance.		
11. How many rooms do you occupy?		
12. For how long have you been in Minna?		
13. From where did you come?		

14. How Many times have you changed house since you came to Minna? [ ]

15. What were your reasons for changing house

.....

.....

.....

16. Are you satisfied with your present house area ? [YES / NO]

17. If no, why ? .....

.....

HOUSING CHARACTERISTICS:

18. Type of the house (to be determined by interviewer [Detached/Semidetached/Row]

19. Who built your house ? [Government/Private-landlord/self]

20. State the no. of floors if more than are. [ ]

21. If the respondent lives in a multistorey state which floor his room or flat is (interviewer)

22. State floor finishes of the house.

Cement floor/Earth floor/Tiled/Others

23. Occupied by -

Owner / Tenants

24. Condition of occupancy

Whole house / Sharing

25. If sharing, what is your relation with the people you are sharing ?

26. Monthly rent

₦

27. How much do you pay for water

₦

28. Electric bill per month

₦

29. Total number of rooms in the whole house

30. Actual number of habitable rooms

31. Utilities, facilities and services available

Drainage/Latrine/Bath/Kitchen

Telephone/ T.V.

32. If separate kitchen

YES / No

33. Type of laterine

Shared manual Private/Community W.C

34. Water supply

Private tap | Public tap | Well water on premise | Outside

Tanks + other sources

35. What sourt of fuel do you use for cooking?

36. Type of structure

	mudwall	mudwall	concrete	
Mudwall x thatched roof	mudroof	tin roof	Brock wall tironsheet roof	other specify

37 age of the house

Less than 5 years	6 - 10 years	11 - 20 years	21 - 50 years	over 50 years

38 Maintenance and interior finishes

Bad / Moderate / Fair / Good

39. Habitability of the structure.

Poor Ventilation / Fair / Good

40. What activities do you use the spaces available in the house for?

(Use mostly, often, sometimes)

A

Activity	Rooms	Verandahs	Kitchen	Housing	frontage
Sleeping					
Sitting					
Cooking					
Bathing					
Warshing					
Drying					
Storing					
Children?					
Play					
Others					

(thank you)