PERFORMING THE ANNEXATION STUDY

by

JESSE C. HOUSTON

B. A., Western Maryland College, 1972

A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF REGIONAL AND COMMUNITY PLANNING

Department of Regional and Community Planning

KANSAS STATE UNIVERSITY
Manhattan, Kansas
1975

Approved by:

Major Professor

2668 R4 1975 H68 C. 2 Document

-0.1

TABLE OF CONTENTS

LIST	OF	MA	PS	•	•		•		*	•	٠	٠	•	٠	•	•	•	•	•			•		iv
LIST	OF	TA	BLE	S		•			•	•	: • :	• 2	•	•	•			•		•	•		•	v
Chapt	ter				2																			
I.	I	IT R	ODU	CI	CIC	N	•	•		ě	¥		•	•		•	•	•		•	•	•		1
		Wh	at	is	A	nn	.ex	cat	ii	on'	?		•	•	•	٠	•	•	•		•	•		1
		Wh	у А	nn	ex	?	7	he	·	Pro	os.													1
			. an																					4
II.	CF	RIT	ERI	A	FO	R	AN	INE	X	\T]	101	1				•	•		•	:•:		•	•	7
III.	S	TAT	UTO	RY	G	UI	DE	LI	NE	ES						٠	•	•	•	•	•	•	٠	12
IV.	LI	EGA	LВ	AS	IS	F	OF	R A	INN	IE)	(A)	CIC	N			•		•	•	•	•	•	•	17
v.	TH	IE .	ANN	ΕX	TA.	10	N	SI	'UI	ŊΥ	•					•		•	٠	•	•	ì	•	20
		De	lin	ea	ti	on	C	f	th	ıe	S1	ud	lv	Αı	cea	ı			120			_	_	22
			ga1																					24
			ara		270																			24
			Pop																					24
			Lan																					26
			Lan																					26
			Str																					29
			ter													. 	•	•	•		•	•	•	43
			Ann																	2	-			31
			Inv																					33
			Quar																					
					νi	-																		35
		(Cos																					41
			Pot								_							•	7	~-	ň	T.	ā	76.23 1.20
					as																			44

C	os	t	Вал	an	ce	٠	•	٠	•	٠	•	٠	•	•	•	•	•	٠	•	•	•	4
		•		•		•	•	1	• •			1	•	•	, ,	•	•	•	•			•
APPENDIX A	-	НО	USE	В	ILL	N	10.		162	23	•	٠	٠	•	•	•	٠	•	•	ě	ě	4
APPENDIX B	-	МО	DEL	S'	rud	Υ	IN	T 1	AB:	L	ENE	i	•	•	•	•	•	٠	•	•	•	5
FOOTNOTES	•	•		•	•		ě	į	٠	•	•	•		•	•	•	•		•	•	•	7
BIBLIOGRAPH	Y	325		77 4		=	_		2			=	2	-	120	828		7 2 2	(12)	7/21	2	8

LIST OF MAPS

1.	Delineation of Study Area		•	•	٠	•	•	•	55
2.	Proposed Transportation Plan	•	•	•	•	•	•	•	60
3.	Fire Station Service Area		•	•	•	•	•	•	62
4.	Area Served by Sewerage System	•	•	•	•	•		•	64
5.	Area Served by Water System	•	٠	•	•	•	•	•	65
6.	Elementary School District Boundary	•		•	•	•		•	67

LIST OF TABLES

1.	Existing Conditions: Study Area A	•	•		34
2.	Criteria for Public Sewerage System	•	•		36
3.	Criteria for Public Water Supply	•	•	•	36
4.	Quantity of Water to be Supplied				
	by Public System	٠	٠	•	37
5.	Criteria for Public Refuse Collection	•		•	38
6.	Criteria for Book Stock of Public Library	•	•	•	39
7.	Standards for Recreation Areas		•	•	40
8.	Cost of Installing Various Improvements .		•	•	42
9.	Financial Picture for First Five Years	•	•	•	46
10.	Study Area Characteristics	•			58
11.	Existing Conditions: Study Area	٠		•	69
12.	Cost Balance for Study Area: Immediate			*	
12	Future		•	•	74

CHAPTER I

INTRODUCTION

What is Annexation?

As a point of beginning, it seems appropriate to define the process with which this report will concern itself. Annexation, as defined by Lachlan F. Blair, ". . . is the process by which usually contiguous fringe territory is added to an existing municipality." Another definition states that "annexation is a process, legally defined in state statutes or city charters, by which a city extends its corporate limits." The two definitions include the important aspects of annexation by pointing out that it is a "process", that it is "legally defined in state statutes or city charters", "by which a city extends its corporate limits" by adding "usually contiguous fringe territory" to its existing boundaries. It is important that all of these parts of the definition be included as they are all necessary in understanding and properly employing the annexation process.

Why Annex? The Pros...

Cities are often faced with the dilemma of deciding whether annexation is the proper path to follow in their

road to growth. An examination of the reasons for annexation and arguments against it may help to solve this problem.

A major reason for a city to annex may be the lack of large areas within the city for subdivision and development. When a city is growing and expanding its residential, commercial, and industrial needs, space is needed to accomodate this growth. This situation is occurring in many Midwestern cities at the present time. These cities are one hundred to one hundred and fifty years old and over the years have developed most of the developable land within their corporate boundaries. Since the land within these boundaries is of a fixed amount, the only way to gain more land for development is through annexation.

Following directly from this first reason for annexation is a second: providing a means by which the municipality can order growth and development on the urban fringe area so as to assure coordination between the city and suburbs. ". . . The municipality should recognize that for orderly urban growth and expansion, portions of the developing fringe should be periodically incorporated into the city in a planned manner." 3

As David H. Blau mentions, most fringe areas are deficient in their development and in their provision of services, and most are "... characterized by a sporadic and unplanned development uncoordinated with that of the adjacent city." He goes on to say that "[m]any municipalities are beginning to realize that the problems of substandard

development common to most fringe areas constitute a menace and have a detrimental effect on the entire urban area." In order to minimize this detrimental effect, or even to stop it from occurring altogether, the city and fringe area should plan for annexation and consider it a natural step in the growth of the urban area. 6

A third reason for annexation stems from the proliferation of various agencies and governmental units and the frequent duplication of services which they render. An example of this problem is pointed out in the One Wichita Growth Program for the 1960's in which it is stated that "[t]hese problems [the proliferation of agencies and duplication of services] must be solved to provide the citizens of the metropolitan area with efficient, adequate services at the lowest possible cost. At the present time, inefficiency in local government results from the existence of more than 125 governmental jurisdictions in the metropolitan area."

John C. Bollens and Henry J. Schmandt state that

The idea of a single local government functioning throughout the entire metropolitan area has long had many advocates. Support for the idea is rooted in various convictions. Some proponents maintain that an integrated governmental operation produces greater efficiency and economy. Others point to the ability of such a government to allocate public financial resources on the basis of needs of the different parts of the common area, thus eliminating the great disparities between resources and needs that prevail when there are many local units. Still others emphasize the ability of a single, territorially large government to handle functions of an area-wide nature in a unified and coordinated manner.

Support has grown for the "one government" approach

with the establishment of regional governments, metropolitan governments, councils of governments, city-county governments, and the like throughout the nation and the world. The annexation process is a means of achieving this more efficient type of government.

A final reason for annexation, and one which sums up and solidifies all the others, is that annexation can be and should be employed as a vital tool in the planning process.

The League of Kansas Municipalities, in its publication

Annexation: A Manual for City Officials in Kansas, makes the following statement:

A private business that never planned for growth, acquired additional land for expansion only when required by crisis and acquired land only after it had been developed in a manner unsuitable for its purposes would soon go bankrupt - and rightly so. Yet this is exactly what many Kansas cities have done for years in the field of annexation. . . . They have permitted the entranceway to their cities to develop without planning, without sound construction requirements, without sanitation and adequate protection for public health, without police protection and fire protection, without planned streets - and without protest until the situation becomes intolerable and beyond correction by area residents. Then there may be annexation and massive injections of city funds, attempts to correct conditions which never should have existed, problems in providing utility services and replacing substandard water lines and proving again the adage - 'An once of prevention is worth a pound of cure.'9

This statement is a good summary of the reasons and needs for effective annexation planning by municipal governments as a means of ensuring proper future growth of the city.

...and Cons

With the numerous and logical arguments in support

of annexation by the municipality as a means of planning for and controlling growth, there exist equally as many arguments resisting annexation. The residents and political leaders in the urban fringe are usually the proponents of such arguments.

The first opposition to annexation which is usually heard by the city officials is that the fringe area "may not want to pay city taxes, even though the city tax rate is sometimes lower than the combined rate of special districts operating in the unincorporated section." Other factors, such as higher insurance rates due to inferior fire and police service, also raise the costs to the fringe resident. These facts tend to be overlooked in the argument against paying city taxes.

A second opposition to annexation may be that the fringe residents do not "want to have the city's subdivision and zoning regulations applied to its area." A statement typically made by non-urban residents is that such zoning and subdivision regulations are "an unlawful and outrageous invasion of the right of an owner to do as he pleases with his property." 12

Fringe residents may think that they are already receiving adequate services in sufficient numbers, and feel that annexation would only add unnecessary services and thus unnecessary costs (refer to the first argument above.)

Other arguments by the fringe area opposing annexation are that it may fear that it will not have a

potent voice in local affairs, but instead will be dominated by those officials currently in the city government; it may want to remain "countryfied", to escape being inside the city for as long as possible by trying to remain rural although it may have many urban qualities and needs. 13

Political scientist Thomas R. Dye has studied annexation with regard to the types of communities which tend to and tend not to annex. He has found that annexation is less likely to occur when the urbanized area containing both the municipality and the fringe is an old settlement with strong socio-economic differences between the city and the unincorporated area and where the form of city government is other than the council-manager system. 14

Because of these arguments against annexation, the process has encountered much opposition over the years. However, from the point of view of logical comprehensive planning, it seems that the annexation process definitely has an important place in determining and guiding the future growth patterns of the city.

CHAPTER II

CRITERIA FOR ANNEXATION

One of the most difficult stages for the municipality in the annexation process is deciding when a particular tract of land is "ready" to be annexed. There is no universally agreed upon criterion for determining this "readiness", and so this responsibility rests with the city officials.

The basis for determining the criteria for annexation is the existence of an area-wide, comprehensive annexation plan for the city.

The way to do this, of course, is to make the same kind of studies for the fringe areas as are made for the city proper. Or rather, to include those fringe areas in master plan studies when they are being made for the city. In other words, planning should be undertaken on an urban-wide basis regardless of municipal boundaries. 1

This annexation plan should be treated as an integral part of the comprehensive planning process and, if continously updated, would enable the city staff to be aware of any circumstances in the unincorporated adjacent areas which would warrant annexation consideration.

Assuming that the city has planned for annexation and has remained current regarding circumstances outside the city, the next step should be to develop a set of criteria concerning the advisability and timing of annexation. It is

impossible to set forth such a listing which will apply equally well to any particular city because each municipality has its own growth and development goals which will govern its annexations. However, various sources have developed criteria which they consider before annexation, and it may be useful to present some of them. For example, the city of Wichita, Kansas' planning staff set forth five such criteria for guiding that city's annexing activity:

- 1. Urban level of development Areas which are developed densely enough to create urban problems and to require municipal-type services should be annexed to the city of Wichita.
- 2. Provision of municipal-type services The city should be willing and financially able to provide municipal-type services to annexed areas within a reasonable length of time.
- 3. Costs to residents Costs resulting from annexation should not impose an unreasonable burden of taxation upon the residents of the area annexed.
- 4. Costs to the city The difference between costs for public services and revenues from an annexed area should not be unreasonable.
- 5. Advantages and disadvantages The total of economic, social, and political advantages must outweigh the disadvantages to the city and the people affected in the long run.²

The American Society of Planning Officials has stated that

a city should annex urban land when it is able to do so financially and when, at the same time, it can regulate development advantageously. When that time arrives can be determined only if the city planning agency has kept track of development, and if a course of action has been decided upon.³

More specifically, with regards to annexation criteria, ASPO suggests the following:

1. The area must be contiguous to the city.4

2. It must have a 'unity of interests with the municipality' and be 'really a part of it.'

- 3. It must have enough people at a density sufficient to warrant the extension of services.
- 4. The deficit of income against expense to the city must not be unreasonable.
- 5. The advantages both to the city and to the area must outweigh the disadvantages.
- 6. The city must be willing and able to provide services to the newly annexed area within a reasonable time. 5

The League of Kansas Municipalities states that

". . . each city should develop a basic policy position on annexation that establishes criteria by which annexation requests and proposals can be evaluated on a uniform basis, consistent with sound planning principles and development needs of the city." The League then goes on to suggest some city policies on annexation:

- A. No area should be annexed to or deannexed from the city if such action would tend to hinder, delay or impede the present or future growth and development of the city.
- B. Land adjacent to the city is enhanced in value because of its proximity to the city and to the services, facilities and benefits provided by the city.
 - 1. Therefore, it is the intent of the city that such land shall be considered for annexation when its proximity to the city, the rate of growth of area and other factors indicate that annexation of the land would aid the city's growth and harmonious development of the entire area, or when annexation is deemed necessary to guard against uncontrolled development not consistent with long-range land use needs of the area.
 - 2. Further, it is the intent of the city that requests for deannexation of land will not be considered favorably when based solely on the premise that city taxes should not be paid on vacant land.
- C. The city recognizes the importance of controlling undeveloped land beyond its corporate limits to achieve the following objectives:
 - 1. To insure that adequate land will be available for the continued growth and planned development of the city.
 - 2. To maintain a logical planning unit in accordance

with the provisions of a comprehensive planning program.

3. To insure that new development will not take place in a substandard manner and thereby become a detriment to the entire area.

4. To further sound, capital improvement planning and thus protect the city's financial position and its ability to finance and construct capital improvements necessary to the growth and economic welfare of the entire community. 7

As a final example of annexation criteria, a study by the North Carolina General Assembly entitled "Municipal Government Study Commission Supplementary Report" made the following statements:

- which has developed or its developing to such a point that it logically should be part of a city. A specific standard, based on population density or the degree to which land has been subdivided for urban type uses, is a guide to existing development. But it excludes those large tracts of undeveloped land which are 'ripe' for development and whose development for urban purposes should be guided by the city. Our study points up the following factors as important in deciding what land should be annexed:
- 1) The actual distribution of developed and vacant land in the suburban areas contiguous to municipal boundaries.
- 2) The extent to which presently-developed land outside the city limits 'needs' municipal services.

3) The extent to which owners of presently-developed land outside the city desire municipal services.

- 4) The availability inside the present corporate limits of vacant land suitable or desirable for residential, commercial and industrial development.
- 5) The extent to which land contiguous to the city can be provided with those services and facilities which will permit intensive development for residential, commercial and industrial purposes.
- 6) The impact of services and taxation upon land being annexed to the city. 8

Any combination of the numerous criteria presented here could be used by a municipality in setting its own standards for annexation, depending on local goals,

annexation plans, and growth policies. However, deciding when land is "ready" to be annexed is no easy task. Again quoting the North Carolina study, its conclusions are:

- 1. . . . there is no simple way to define the land adjacent to a municipality which is now or soon will become 'urban' in character.
- 2. . . there is no simple way to define the need of land outside the city for municipal services.
- 3. . . . the potential for development in areas now lying outside corporate limits depends upon the economic outlook for the entire urban area, looking at the incorporated and unincorporated areas as a unit.
- 4. . . there are some effective limitations on what areas can be effectively provided with municipal services.
- 5. . . . there is no way to adjust the local tax structure to assure absolute equity to every landowner in the extension of corporate boundaries. 9

CHAPTER III

STATUTORY GUIDELINES

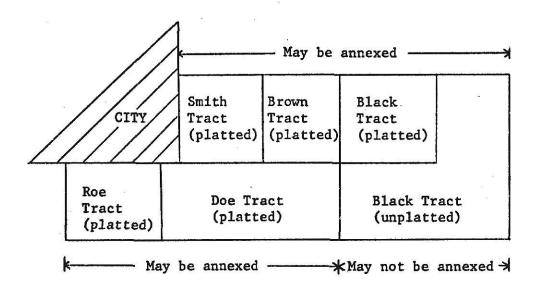
Once the city has formulated criteria regarding the feasibility of annexing unincorporated land -- bearing in mind, of course, those constraints listed previously -- it is ready to apply these criteria to the territory surrounding its corporate limits. If the comprehensive annexation plan, growth policies, and the annexation criteria all point toward incorporating new land, then the next step is to study the state statutes regarding annexation to determine which land may be legally annexed. Annexation is controlled everywhere by state law, ". . . the extension of municipal boundaries being viewed as a purely political matter and entirely within the power of the state legislature to regulate." The statutes will also guide the city in the proper legal procedures for annexation.

In the case of the state of Kansas, annexation is guided by K.S.A. 1973 Supp. 12-519, 12-520, 12-521 as amended by House Bill No. 1623 (Chapter 56, Session Laws of 1974), which took effect on March 28, 1974 and which repealed all other annexation laws. (The text of House Bill No. 1623 is located in Appendix A.)

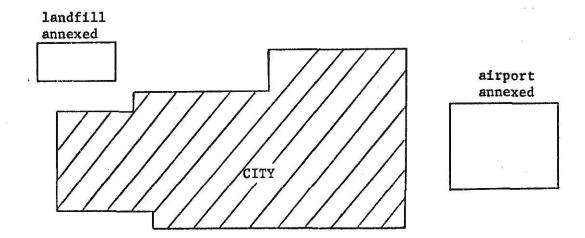
According to Kansas law, annexation is permitted

when any of the following conditions exist:

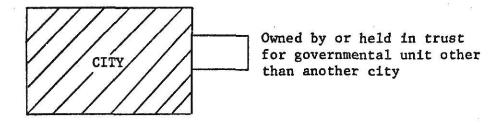
1. The land is platted, and some part of such land adjoins the city.



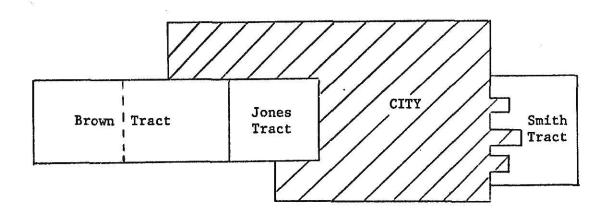
2. The land is owned by or held in trust for the city or any agency thereof.



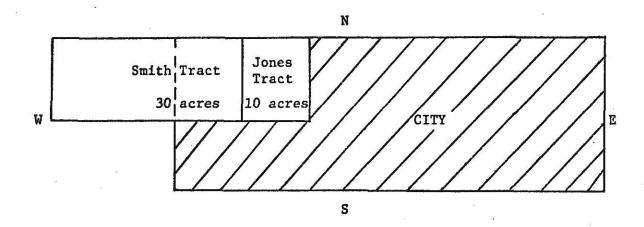
3. The land adjoins the city and is owned by or held in trust for any governmental unit other than another city.



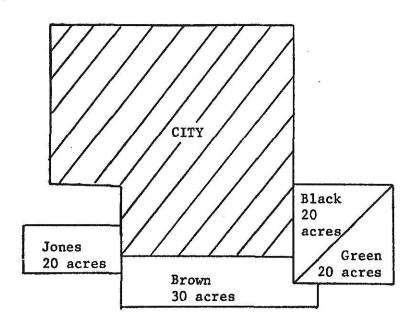
4. The land lies within or mainly within the city and has a common perimeter with the city boundary line of more than fifty percent (50%).



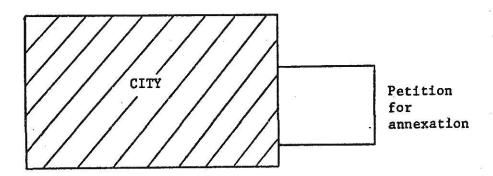
5. The land if annexed will make the city boundary line straight or harmonious and some part thereof adjoins the city, except no land in excess of twenty (20) acres shall be annexed for this purpose.



6. The tract is so situated that two-thirds (2/3) of any boundary line adjoins the city, except no tract in excess of twenty (20) acres shall be annexed under this condition.



7. The land adjoins the city and a written petition for or consent to annexation is filed with the city by the owner.²



Each state has its own statutes regarding annexation, and these should be consulted before continuing with the annexation study.

CHAPTER IV

LEGAL BASIS FOR ANNEXATION

It is not the purpose of this report to analyze the legal basis of annexation as that subject has been dealt with in other studies. However, it may be useful to mention a few of the landmark cases in Kansas concerning annexation.

The power to annex has been established as a legislative function by <u>Callen v. Junction City</u> which said that

the power to create and regulate municipal corporations, define, extend or limit their boundaries, and commit to them certain subjects for local regulation, is the exercise of a purely legislative authority.²

This finding has been upheld time and again. In Ruland v. Augusta, the courts stressed the view that

[t]he general question of the advisability of enlarging the territorial limits of a municipal corporation is a legislative question which under our constitution, cannot be delegated to the courts. R.S. 12-501, 12-502, in so far as they attempt to confer upon the district court, or judge thereof, authority to entertain a petition to increase the corporate limits of a city . . . are void, as an attempt to confer legislative functions upon the judiciary.³

"The power of annexation is vested in the legislature and must be conferred upon the municipality. In other words, municipalities do not possess the inherent right to annex territory." This was demonstrated in State v. Topeka when the court ruled that the

City of Topeka, being a municipal corporation, is a creature of the legislature and as such has no inherent power or authority as is expressly granted by the state. 5

In an important recent case, State ex rel. v. City
of Overland Park, the court ruled that

the wisdom, necessity or advisability of annexing territory to cities is not a matter for consideration by the courts. The basic function and duty of the courts is to determine whether a city has statutory authority and whether it has acted thereunder in passing an annexation ordinance.

This finding was upheld in Sebatini v. Jayhawk

Construction Company when it was found that

[i]t is not a proper judicial function for a court to inquire into the reasonableness, wisdom, necessity or advisability of annexing and platting land. In this area of legislative function the judicial duty of the courts is limited to the determination of whether the city was granted the necessary statutory authority to act and if so, whether it acted within that authority. 7

However, even though Kansas courts have refused to rule on the reasonableness of annexation ordinances, courts in other states have considered the question. For example, in <u>Vestal v. Little Rock</u>, 54 Ark 321, 15 SW 891, the court stated several guidelines for reasonableness:

1. The city limits may reasonably and properly be extended so as to take in contiguous lands, (1) when they are platted and held for sale or use as town lots, (2) whether platted or not, if they are held to be brought on the market and sold as town property when they reach a value corresponding with the views of the owner, (3) when they furnish the abode for a densely-settled community, or represent the actual growth of the town beyond its legal boundary, (4) when they are needed for any proper town purpose, as . . . for the extension of needed police regulation, and (5) when they are valuable by reason of their adaptability for prospective town uses; but the mere fact that their value is enhanced by reason of their nearness to the corporation would not give ground for their annexation, if it did not appear

that such value was enhanced on account of their adaptability to town use.

2. We conclude further that city limits should not be so extended to take in contiguous lands, (1) when they are used only for purposes of agriculture or horticulture, and are valuable on account of such use, (2) when they are vacant and do not derive special value from their adaptability for city users.⁸

Even though this decision has no legal bearing in Kansas, it is interesting and may serve useful to cities in establishing their annexation criteria. (See page 7.)

The final case which will be cited, <u>Town of Magnolia</u>

<u>Park v. Homan</u>, 118 So2d 585, again not from Kansas courts,

provides a realistic guideline for all annexation proceedings:

. . [A] city which is unable to extend municipal services, such as water and sewerage, paved streets and sidewalks, and recreational facilities, to a newly annexed area, or which itself is undeveloped in these respects, may not annex territory.

CHAPTER V

THE ANNEXATION STUDY

The recently passed Kansas House Bill No. 1623 requires that any municipality considering annexation must prepare a plan for such an act. According to the bill

[t]he governing body of any city proposing to annex land under the provisions of section 4 of this act shall make plans for the extension of services to the area proposed to be annexed and shall . . . prepare a report setting forth such plans. The report shall include:

- (a) A sketch clearly delineating the land proposed to be annexed and the area of the city adjacent thereto to show the following information:
 - (1) The present and proposed boundaries of the city affected by such proposed annexation;
 - (2) The present streets, water mains, sewers and other city utility lines, and the proposed extension thereof;
 - (3) The general land use pattern in the areas to be annexed.
- (b) A statement setting forth the plans of the city for extending to the area to be annexed each major municipal service provided to persons and property located within the city at the time of annexation, setting forth the method by which the city plans to finance the extension of such services to such areas. Such statement shall also include a time-table of the plans for extending each major municipal service to the area annexed. 1

According to the League of Kansas Municipalities, this services extension plan

. . . constitutes a statement of the city's 'case' for annexation. In that it must be presented at the public hearing by a representative of the city, it can be an important tool in explaining the types and levels of services to be provided to an area considered for annexation. Much of the adverse feeling of property owners to

annexation is based on a number of misconceptions about city services and tax rates. The presentation of the service extension plan can be useful in correcting these misconceptions. And it is not unusual for a city to 'discover' service needs in newly annexed areas that impact the city's budget. For these reasons, it is recommended that careful attention be given to the preparation of the plan in each annexation proceeding.²

This service extension plan constitutes the major part of the annexation study, as most of the individual studies which will be described later are used to develop the plan.

These two major requirements of the annexing municipality (preparation of the sketch and service extension plan) as set forth by Kansas law are the basis for the process of performing an annexation study. The remainder of this report will describe in detail the method of carrying out such a study. The description will make use of a model city where necessary to more accurately explain various steps and to provide an example. By finding the average size city in Kansas by population, a representative Kansas city was selected to serve as this model, that city being Abilene. With a 1970 population of 7,943 Abilene comes relatively close to that average size, and its proximity to Manhattan made it possible for visits to be made by the author of this report. So, in the various steps to be employed in the completion of the study, reference will be made to the model when necessary for further explanation. The model annexation study may be found in Appendix B.

A quote from Lachlan F. Blair serves as a good

descriptive introduction to the process of performing the annexation study:

The typical annexation study will contain many of the elements of a comprehensive planning study, but will give special attention to the more limited area under consideration. Particular emphasis should be given to determining present and future population and the services needed to serve them. The annexation study will also include many aspects of a capital improvements program in relating investment and operating costs for providing services to prospective tax revenues of the area to be annexed.³

Thus, the annexation study is a scaled comprehensive plan focusing on a small, specific area. The following pages will identify the process and explain each step in the performance of the annexation study.

Delineation of the Study Area

The first step in the analysis of an annexation proposal is to delineate the area to be studied. According to the American Society of Planning Officials, the study area "... may be of two kinds: the total area under preliminary consideration, and the study area into which it is subdivided."

In the case in which a petition for annexation of a particular area has been presented, the problem of designating the study area is simple - study only the area represented by the petition. On the other hand, if the city has decided that it wants to study the entire fringe area to determine the feasibility of annexing any part of it, the fringe should be divided into several study areas and each one considered separately.

Unless the situation is limited by petition or by a proposed annexation ordinance, it is probably more advantageous to have the planning staff delineate the areas that seem ready for annexation. Regardless of who draws the boundaries, there is a presumption of readiness. Property owners who petition for annexation make a preliminary judgement that they are defacto urban. A planning staff must make the same judgement, but it is or by the time it has completed investigation should be better equipped to base judgement on facts. Furthermore, a study area whose boundaries are reasonably drawn stands a better chance of being admitted than one that contains an unusual amount of land that will neither be developed in the near future nor is within the financial capacity of the city to service.

Determination of the boundaries of these study areas is usually a relatively simple process. The boundaries can be drawn on the basis of geographic location, population characteristics, natural boundaries, street systems, and the extension of various municipal services. After the boundaries have been determined, the study areas can be assigned numbers or names and studied according to the guidelines which will follow.

If desired, the study areas may be assigned priorities as to their order of desired annexation. (This applies, of course, in the instance when the entire fringe area has been divided into study areas.) The city of Wichita, Kansas selects their priorities according to the following criteria:

- 1) Existence of problems involving the provision of municipal-type services to urbanized areas outside the present city limits.
- 2) Need for construction of major capital improvements beyond the present city limits to serve the city.
- 3) Possibility of strengthening the present city tax base. 6

The delineation of the study areas should include both a map and a description of each area, particularly emphasizing

the boundaries.

Using the model city of Abilene, the delineation of study areas could take the form depicted in Appendix B.

Legality of Annexation

Once the study areas have been determined, the next step is to decide whether or not they can be legally annexed. In the state of Kansas, the laws summarized on pages 12 to 16 must be consulted.

Characteristics of Study Areas

Assuming the study areas may be legally annexed, the next step in the completion of the annexation study is to collect and analyze data concerning the physical characteristics of each area. This can be accomplished in much the same manner as would be true of a comprehensive plan. The inventory and analysis of existing physical conditions and some projections for the future will prove to be invaluable in later sections of the study, especially in estimating the need for and cost of public services for the annexed area.

There are several categories of data which should be collected and analyzed, including the following:

A. POPULATION. Both current and future population estimates for the study area should be included in this section. Probably the most efficient and accurate method of determining the present population is by using the U.S. Census Block Data Statistics. If the area under study is sufficiently "urbanized" and adjacent to the city (which will nearly always be

the case), this data should be available. If the census did not include that particular area, other means of estimating the present population will have to be employed. The staff may conduct their own census survey if time allows. In a less densely populated area this may be feasible. A less time-consuming procedure could be to use the housing data (which will be collected in the land use study) and multiply by an accepted constant (persons per dwelling unit) to arrive at an estimate. Such a constant will probably range from 2.5 to 5, depending on local characteristics.

An estimate for future population should also be provided. "The figure for future population may be a 'saturation' figure or it may be the estimated number of persons for the time period within which a reasonable financial return can be expected from the annexed territory." The population projection may be difficult to arrive at in many instances by the usual methods (extrapolation, regression, cohort survival, etc.) because of the possible lack of population data for previous years. This circumstance would arise in cases where census data does not include the study area.

The population data which is used in this section of the annexation study will prove to be extremely important in the ensuing sections and in the overall analysis. "Perhaps the single most important population study for planning purposes is the population forecast." This is especially true when contemplating annexation because of the responsibility of the city to provide adequate public services. This aspect will

be discussed later.

The population data which is gathered and the projections for the future should be organized in a form suitable for public presentation. This will be true of all portions of the study because its findings will be presented in a public hearing regarding the proposed annexation. Because of this, proper use should be made of graphs, charts, maps, and other aids which may facilitate the understanding of the material and findings.

when suitable, other information besides only present and future population should be studied and presented. Such information may include density of population, distribution, and age and sex breakdowns. Data such as this may be valuable in future considerations. For example, estimates of present and future school age children would be useful (or necessary) in planning for educational facilities.

- B. LAND AREA. This section of the study area analysis is simply the measurement of how much land is contained in the annexation request. If the entire fringe is divided into study areas, then each area should be measured separately. The area can be measured in acres, square miles, or square feet, depending on its size.
- C. LAND USE. The land use analysis of the study area can be as detailed or as sketchy as is economically feasible. As a general rule, however, it is usually not as detailed and complete as in a normal general plan. "There is little need or justification for spending money in a detailed analysis at

this stage of the study." Although this is true, the land use study should be sufficiently complete to allow the planners and engineers to make an accurate estimate of the need for services later in the annexation report.

Often, if the city has previously completed a comprehensive, detailed land use study of its metropolitan area, the area under consideration for annexation may be included. In that case, the staff need only to analyze the data and present it in an understandable and meaningful fashion. The information concerning land use, as was true in the population study, should be arranged and presented as simply and clearly as possible, making use of maps, charts, and other such techniques.

In addition to the present land use characteristics, estimations and evaluations of future land use in the study area should also be made. Again, if the city has a good comprehensive plan, this future land use estimation may be available. Obviously, it is quite valuable in planning for the extension of whatever services will be necessary if the annexation is approved.

A related part of the land use study is the evaluation of "the land itself in terms of its suitability for differing types of uses . . . Topography -- contours, slopes, grade and drainage -- will help to determine which sites are easily developable and which sites will require moderate to extensive improvement for safe construction." Information such as this can aid in the prediction of future land uses in the

study area.

The ASPO Planning Advisory Service Report No. 114 cites two annexation studies as examples of how the land use information for a study area may be presented verbally. The particular reports from which they have been taken are not identified, but the examples are useful.

Most of the section has been subdivided and over half the property is developed. The area is generally residential although there is a substantial amount of business and industrial development. Residential construction is brick veneer or frame in the lower medium price range. Future development will likely bring an increase in commercial use with some additional residential development.

The second example reads as follows:

On the western edge of the area is a medium to high value residential district; along the main thoroughfares are several medium value residential districts; the low value residential districts are located in the eastern and south-eastern sections of the area. There are some small farms in the area, a few estate-size residential properties and about 2,000 medium to small residential properties. Some commercial development exists and is expanding along the main highways, particularly along the New Troy Pike. As the population increases, it is anticipated that the area along the highway immediately north of the Great Miami River will become a major commercial and service center with secondary commercial development extending northwardly along the highway. 11

A final example of a land use report for a study area is taken from a Wichita, Kansas annexation study:

Existing land uses in the Study Area were classified as residential, commercial, industrial, agricultural, public and semi-public. [A table is then used to show a detailed breakdown of the amount of each land use category in the study area.]

Locations of the different land uses within the Study Area are generally as follows:

- The predominant amount of agricultural land use lies to the west of Tyler Road and north of the Municipal Airport

- Industrial and commercial land uses are largely confined to the major street and highway frontages within the

Study Area: U.S. 54 and the area immediately to the north of Municipal Airport; Hoover Street frontage, West Street frontage; and K-42 frontage

- Residential land use is scattered throughout the Study Area, the majority of which is located directly north of the Municipal Airport boundary and between the flood control channel and the existing Wichita City Limits
- Public or semi-public land use in the Study Area consists of the Municipal Airport property.

 Land in public ownership accounts for approximately 30% of the entire Study Area. Land within the Study Area affected by aircraft in final approach and take off maneuvers is nearly all in public ownership. Thus, the problem of protecting the multi-million dollar public investment in the Municipal Airport from encroachment by other land uses is not serious in this Study Area. 12

Notice that in this example a special problem which may have affected the area under study was examined separately. This is a good practice to follow, if applicable, in the land use study.

The land use study should also include an examination of the existing residential, commercial, and industrial structures. A study such as this should identify the number of buildings as well as the structural condition of each. The examples of descriptive land use studies on page 28 show how the structural condition can be described generally. If greater specificity is desired, a structural grading system (e.g., a, b, c, d) can be used, and each building judged according to structural standards. The location of any substandard structures should be described, either verbally, by the use of a map, or both.

D. STREETS AND ROADS. Information concerning the existing circulation system in the study area is another essential part of the annexation study. Data which should

be gathered include the location of streets, their classification (local, collector, arterial, freeway), the number of miles of streets in the study area, carrying capacity, condition, surface, width of street and right-of-way, and a general estimate as to the amount of usage. Most of this information will probably be available in the county engineer's office, so extensive field work will not be necessary. In addition, detailed studies such as origin-destination and traffic counts should not be necessary for the purposes of the annexation study.

An analysis of the circulation system in the annexation area will prove to be useful when examining the need for public services since street paving, maintenance, and the installation of street lights will be a cost consideration. The estimations of future population and land use which were discussed earlier will also play a role in determining the need for additional streets or widening of existing ones in the years to come.

The four categories which have been explained above -population, land use, land area, and streets and roads -- are
all necessary studies of the physical characteristics of the
areas under study for annexation. They are interrelated with
each other as well as with the services extension plan which
will follow; thus, the information that is gathered should be
both accurate and complete.

Determine the Feasibility of Annexation

After the physical characteristics of the study areas have been determined and analyzed, the next step in the process of performing the annexation study is to determine the feasibility of the proposal. Naturally, the basis of the decision of feasibility will be costs and benefits, costs referring mainly to furnishing municipal services and benefits referring to revenue received by the city from the annexed areas.

This section of the study is basically what is referred to by House Bill No. 1623 as the services extension plan. Such a plan is recognized as one of the most important, if not the most important, aspect of the annexation study.

If a city makes a determination on land to be annexed without careful consideration, it may include much land which may not receive services in the near future. The basic inequity in annexation arises when land is annexed and is not provided with services.

But, if a city is required to make assurances prior to annexation that newly-annexed land will be provided services on the effective date of annexation or soon thereafter, we believe that the basic inequity will have been eliminated. That is, if assurance can be given to landowners in territory to be annexed that they will receive the services that are the hallmark of city government from the time they are annexed, then there can be little argument that taxes are being levied unfairly. 13

Robert Warren, in an article for the American

Institute of Planners concerning municipal services, has said that "[a] refusal to allow annexation can be expected if the anticipated service needs in the proposed area will exceed its fiscal contribution, unless other benefits can be realized." (Those "other benefits" to which he refers

include ". . . access to more desirable territory for annexation, control over unfavorable spillovers resulting from low levels of law enforcement or incompatible zoning policies, or protection of the area against competitive annexation efforts by other units . . ."15)

The American Society of Planning Officials has summarized the process of determining the feasibility of annexation thusly:

The basic method of determining annexation feasibility is simple enough, but because so many variables must be taken into account, the actual process sometimes becomes quite complex. Boiled down to essentials, it consists of the following steps:

- Inventory of extent and quality of urban services and facilities already existing in annexation areas.
- Quantity to be supplied after annexation. Costs of furnishing needed services. 2.
- Amount of potential revenue from annexation areas and other sources.
- Cost balance (excess of costs of excess of revenue). 16 5.

Considering these essential steps in order, this report will proceed to explain each in detail. (Refer to the example of Abilene in Appendix B.) Perhaps first, however, it would be useful to list those services which are usually considered as "municipal" in nature. These include:

Fire protection Police protection Sewage disposal Water supply Storm drainage Refuse and garbage collection and disposal Health protection Street paving and maintenance Schools Street lights Libraries Parks and recreation Traffic lights, signs, and markings Planning, zoning, and building regulations 17 Each case of annexation must consider these services as they apply to the individual area under study. Each study area is different, and must be treated as such. In addition, in some regions all of these services may not be considered as municipal. Again, each area must be considered separately.

Now, the steps of the feasibility test and their implications will be considered. Again, refer to the example of Abilene in Appendix B.

1. Inventory of the extent and quality of urban services and facilities already existing in annexation areas

The information needed to complete this study of existing conditions should be available in the city engineering, public works, and planning departments. The section concerning existing conditions or community facilities in the city's comprehensive plan may also contain this data.

Information concerning the existing services can be presented in a variety of ways. The two most common methods are: a) by general statements which are descriptive of the conditions existing in the study area, and b) by itemizing the services and facilities in the area. "These two methods of presentation are not alternatives, and most annexation reports contain both." 18

Probably the most efficient method of gathering this data is to have the various city departments (e.g., water department, fire department, police department, sanitation department) prepare individual reports and submit them to the planning department. These reports should, in this section

of the feasibility study, include as much detailed information concerning existing conditions as possible. As was noted previously, this data will probably already be available within the individual departments.

A suggestion which may help the planning staff to summarize the findings of the various reports is the completion of a rating list which would take the following form:

TABLE 1
EXISTING CONDITIONS: STUDY AREA A

	Rating		
	Adequate	Inadequate	
Fire protection			
Police protection Sewage disposal			
Water supply Storm drainage		**	
Refuse and garbage collection and disposal		*	
Health protection			
Street paving and maintenance Schools			
Street lights			
Libraries			
Parks and recreation			
Traffic lights, signs, and markings			
Planning, zoning, and building regulations			

The ratings made on this summary sheet should reflect only conditions within each study area as it presently exists.

Recommendations for additions to the services provided will be made in the next section.

2. Quantity of services to be supplied after annexation

In order to arrive at a meaningful amount of services in this section, the population projections and future land uses for the study area must be complete. Then, by using various acceptable standards for services, it will be readily apparent whether or not additional services will be required. Such standards may be found in <u>Planning Design Criteria</u> by de Chiara and Koppelman. A few pertinent ones are as follows:

Fire protection: $G = 1,020\sqrt{P}$ (1-0.01 \sqrt{P}), where G is the required fire flow in gallons per minute and P is the population in thousands. This flow may be increased or decreased according to structural conditions and degree of congestion. ¹⁹

<u>Police protection</u>: On the basis of a study conducted by the FBI²⁰, the ratio of 1.5 policemen per 1,000 persons is suggested.

Sewerage system: A "rule of thumb" chart for planning purposes contains criteria for public sewerage systems and is presented in Table 2. Local characteristics such as topography and subsoil conditions may alter these criteria. 21

<u>Water supply</u>: A "rule of thumb" chart for planning purposes is presented in Table 3. Table 4 gives some criteria for quantity of water to be supplied by a public water system.

TABLE 2
CRITERIA FOR PUBLIC SEWERAGE SYSTEM

Population Density	Equivalent Lot Size	Service Economic Justification
	less than 1/2 acre	justified
2,500-5,000/sq.mi.	1/2 to 1 acre	<pre>public sewerage is normally justifie</pre>
1,000-2,500/sq.mi.	1 to 2 acres	public sewerage is rarely justified
less than 1,000/ sq.mi.	over 4 acres	public sewerage is rarely justified

SOURCE: Joseph de Chiara and Lee Koppleman, <u>Planning</u> Design Criteria (New York: Van Nostrand Reinhold Company, 1969), p. 299.

TABLE 3
CRITERIA FOR PUBLIC WATER SUPPLY

Population Density	Equivalent Lot Size	Service Economic Justification
over 2,500/sq.mi.	less than 1 acre	service is justified
1,000-2,500/sq.mi.	1 to 2 acres	service is normally justified
500-1,000/sq.mi.	2 to 4 acres	service is not nor- mally justified
less than 500/ sq.mi.	over 4 acres	service is rarely justified

SOURCE: Joseph de Chiara and Lee Koppleman, <u>Planning</u> Design Criteria (New York: Van Nostrand Reinhold Company, 1969), p. 305.

Refuse collection and disposal: A "rule of thumb" chart for planning purposes is presented in Table 5.

THIS BOOK CONTAINS NUMEROUS PAGES WITH DIAGRAMS THAT ARE CROOKED COMPARED TO THE REST OF THE INFORMATION ON THE PAGE. THIS IS AS RECEIVED FROM

CUSTOMER.

TABLE 4
QUANTITY OF WATER TO BE SUPPLIED BY PUBLIC SYSTEM

SOURCE: George Nez, "Standards for New Urban Development - The Denver Background," Urban Land Institute, Vol. 20, no. 5; and Joseph de Chiara and Lee Koppleman, Planning Design Criteria (New York: Van Nostrand Reinhold Company, 1969), p. 306.

 $^{1}_{2} Assumes$ 3.8 persons per dwelling unit $^{2}_{2} One$ acre-foot equals 325,830 gallons $^{3}_{3} Maximum$ daily consumption equals 3 times average daily consumption

TABLE 5

CRITERIA FOR PUBLIC REFUSE COLLECTION

AND DISPOSAL SERVICE

Population Density	Equivalent Lot Size	Service Economic Justification
over 2,500/sq.mi.	less than 1 acre	service is justified
1,000-2,500/sq.mi.	1 to 2 acres	service is normally justified
500-1,000/sq.mi.	2 to 4 acres	service is not nor- mally justified
less than 500/ sq.mi.	over 4 acres	service is rarely justified

SOURCE: Joseph de Chiara and Lee Koppleman, <u>Planning</u> Design Criteria (New York: Van Nostrand Reinhold Company, 1969), p. 319.

If municipal refuse disposal service is to be provided, there are three major types of systems -- a dump, a sanitary landfill, and an incinerator.

In a dump, refuse is simply dumped in a designated area. The refuse is periodically burned, separated, and plowed under. This type of facility is generally utilized by small communities with ample open land. It is an inexpensive operation which is simple to supervise and maintain. The amount of land needed for a dump is approximately two acres per 10,000 population served.

The sanitary landfill is a process similar to a dump, except that refuse is covered with earth. The refuse then decomposes and fills. This type of facility is normally used by medium or high density urban areas. Again, this

is a relatively inexpensive operation which is simple to maintain. Approximately four acres of land are needed for every 10,000 population served.

Finally, the incinerator is a process which burns all refuse in a furnace. The refuse is delivered to the incinerator plant and burned. Incinerators are usually restricted to large, densely populated urban areas.

Approximately ten to twenty acres are needed for an incinerator plant.

<u>Libraries</u>: The book stock of a public library should meet the standards listed in Table 6.

TABLE 6
CRITERIA FOR BOOK STOCK OF PUBLIC LIBRARY

Population of Library Area		Volumes per	Up to	
Minimum	Maximum	Capita	Volumes	
6,000	10,000	3.0	25,000	
10,000	35,000	2.5	70,000	
35,000	100,000	2.0	175,000	
100,000	200,000	1.75	300,000	
200,000	1,000,000	1.5	1,000,000	
Over 1	,000,000	1.0	. W	

SOURCE: Joseph de Chiara and Lee Kippleman, Planning Design Criteria (New York: Van Nostrand Reinhold Company, 1969), p. 192.

There are five basic rules for the location of a public library:

1. It should be easily accessible.

- It should preferably be on a main thoroughfare.
- It should be located in a subshopping area.
- It should be located near a neighborhood center.

 A minimum of 20 years expansion of service and community growth should be possible.22

Parks and recreation: Table 7 contains standards for recreation areas.

TABLE 7 STANDARDS FOR RECREATION AREAS

Type of Area	Acres per 1,000 pop.	Size of Site (acres)		Radius of Area	
	_, p.p.	Ideal	Min.	Served (mi	
Playgrounds	1.5	4	2	0.5	
Neighborhood Parks	2.0	10	5	0.5	
Playfields	1.5	15	10	1.5	
Community Parks	3.5	100	40	2.0	
District Parks	2.0	200	100	3.0	
Regional Parks and Reservations	15.0	500- 1,000	varies	10.0	

SOURCE: Joseph de Chiara and Lee Koppleman, Planning Design Criteria (New York: Van Nostrand Reinhold Company, 1969), p. 203.

By applying the existing and projected population and land use in the study area to the rules of thumb and criteria listed, the adequacy or need for public services can be determined. This will aid in the latter portions of the feasibility study. Refer to Appendix B for the evaluation of services for the model area in Abilene.

3. Costs of furnishing needed services

Determining the cost of supplying additional services to an area to be annexed can be a simple or very difficult task, depending on the service which is being considered. The method which is normally used to estimate the cost is to figure the cost of each type of service separately and then add them together to arrive at the total study area cost. Where possible, unit costs are used and then multiplied by a factor such as distance, area, population, number, or persons per dwelling unit, as appropriate.

Thus facilities such as fire hydrants and alarm boxes, street lights, sewer pipes, and pavement, for instance, offer relatively little trouble. Others are difficult if not impossible to determine in advance. For example, the number and type of traffic signals and traffic signs at an intersection can only be determined after an engineering study is made of each intersection requiring them.²³

Approximate cost of extending certain services are presented in Table 8.

The American Society of Planning Officials points out

One of the most important things to consider is that the city assumes a dual cost responsibility when it takes on new territory. In the first place, it must pay immediate costs for services and public works needed as the area is developed at the time of annexation; in the second place, it takes on an obligation to pay costs as the area develops in the years ahead.²⁴

The scheduling of improvements is an important consideration in determining the cost and feasibility of annexation.

As in the Capital Improvements Program for the city, the distinction must be made between capital improvements or

TABLE 8

COST OF INSTALLING VARIOUS IMPROVEMENTS

Improvement	Cost
Paving roads (31 foot width) 8" sewer pipe Water pipe Street signs ("no parking", etc.) Stop signs Installation of 2" gas mains	\$40 per linear foot \$5 per foot ¹ \$4 per foot ¹ \$5 \$10 \$2.50-\$3.00 per foot ¹
Installation of overhead electric lines	\$600 per 200 feet ²

SOURCE: Interview with Mr. Dwayne McKinney, City of Manhattan Planning Office, March, 1975.

expenditures and annual operating expenses. A capital improvement is defined as "any major nonrecurring expenditure or any expenditure for physical facilities of government." Examples of capital expenditures include "... costs for acquisition of land or interests in land; construction of buildings or other structures, including additions or major alterations; construction of highways or utility lines; fixed equipment; landscaping and similar expenditures." Examples of capital expenditures one which is not a one-time investment, but rather one which occurs regularly (or at least often).

The improvements which are to be extended to the

¹May vary according to subsoil conditions ²Includes wire and poles

annexed area may be paid for in any of a number of ways, including general obligation bonds, special assessments, and revenue bonds. The type of bonding used and the assessment to the study area depend on municipal policy. For example, if the city extends sewers to a new area with no special charge to that area, general obligation bonds would be used. On the other hand, if it is the city's policy to assess the residents of the area for half the cost of the improvement, then half the cost would be financed by special assessment bonding and half by general obligation or revenue bonds.

George H. Esser, Jr., in his articles entitled "The Economic Aspects of Annexation" in <u>Public Management</u>, explains a distinction between costs of services to land and costs to people and calls this distinction the key to determining the feasibility of annexation. Services to land include water supply and sewers, high quality police and fire protection, garbage and refuse collection, paved streets, and adequate drainage. The costs of these services to land will ultimately pay for themselves if the concept of the property tax is realistically and soundly administered, according to Esser.

Services to people include welfare, education, public health, recreation, roads, libraries, and courts. Esser says that the funds to provide these services will come from sources of revenue other than the property tax. These services to people are the ones that really determine the feasibility of annexation, because, unlike the services to land, they do not eventually pay for themselves. 27

4. Amount of potential revenue from annexed areas

Estimating expected revenue from study areas is a somewhat easier task then estimating the costs of providing services. Since the property tax is the most important source of revenue to the municipality, the first step is to determine the assessed value of the land in question. (This should include both the assessed value of the land and improvements.) In Kansas, the assessed value is usually about 30% of the market value. The assessed value is then multiplied by the city's tax rate (which is approximately 20-30 mils in Kansas cities) to arrive at a figure for expected revenue from the property tax on the land.

Other sources of revenue should also be estimated and included in this section of the study. Such other sources may include sales taxes, fines and violations, licenses, intergovernmental revenue (from federal and state programs, revenue sharing, community development funds, etc.), special assessments, interest earnings, and any other charges which may be levied.

Care should be taken to account for any decrease in revenue which may occur because of annexation. (This could be included in the previous section on costs.) "A number of cities charge more for utilities outside the city than in. Particular note of utility revenue losses due to annexation should be taken." This circumstance would be applicable, for instance, when water is already being supplied to a fringe area by the city. Often the residents of this area

are charged a higher rate than residents of the city. Upon annexation, then, the rate for the same service would have to be lowered to coincide with the municipal rate, thus reducing the revenue to the city.

5. Cost balance

The ultimate financial consideration of the feasibility of annexation is the cost balance, or the difference between the costs of providing municipal services to the annexed area and the revenues that can be expected from the new territory. Ideally, of course, city officials would like to see a balance between the two, or even an excess of revenues. However, the decision to annex should not be based upon this desire, because "almost invariably the balance will show an excess of costs, though an excess of revenues is an occasional possibility." 29

Assuming that there is an excess of costs over revenues, the allowable extent of this difference should be established in large part through examination of the city's criteria for annexation which were established at the beginning of the study. In the case of Wichita, Kansas, its planning staff has stated its views on the cost balance problem as follows:

Costs of providing public services in newly annexed areas should not be substantially greater than expected revenues from the same area. Newly annexed areas should not be subsidized by present Wichita residents for an extended length of time; eventually the area should pay its own way or at least come close to breaking even. 30

The cost balance study should be presented in table form so as to be easily readable and understandable. Such a table could cover yearly costs and revenues, or it could

include a number of years. An example of such a table is from an annexation study by the Denver Planning Office and is depicted in Table 9. This clearly denotes the results of the cost balance study and includes the necessary basic information which was used.

TABLE 9
FINANCIAL PICTURE FOR FIRST FIVE YEARS

	Area Number			
	1	2	3	4
Capital Outlay	\$5,328,000	9,294,500	330,600	2,560,800
Total Operating Expenses	\$4,502,000	7,324,800	277,500	2,126,600
Total Expenses	\$9,830,000	16,619,300	558,100	4,687,400
Total Revenue (all sources)	\$1,658,000	3,656,800	161,700	989,300
Net Deficit	\$8,171,800	12,962,500	396,400	3,698,100

SOURCE: American Society of Planning Officials, Planning Advisory Service; Information Report #114, Sept., 1958, p. 9.

The overall financial picture of the city will usually change with the addition of new territory. If the annexed area is primarily residential in nature, the revenue collected from the property taxes will probably be insufficient to carry the load. If the city annexes this territory, it may have to raise the property tax throughout the city in order to provide necessary funds for the extension of services. Needless to say, this move is usually unpopular with the citizens in the

rest of the city. If the annexed land is commercial or industrial, revenues from property taxes may be sufficient. These are problems that must be faced by city officials in their eventual decision of whether or not to annex.

APPENDIX A

ILLEGIBLE

THE FOLLOWING DOCUMENT (S) IS ILLEGIBLE DUE TO THE PRINTING ON THE ORIGINAL BEING CUT OFF

ILLEGIBLE

An Act relating to the annexation of territory by cities; amending K. S. A. 1973 Supp. 12-519, 12-520 and 12-521 and repealing the existing sections and also repealing K. S. A. 12-501, 12-502, 12-502a, 12-502b, 12-502c, 13-202, 13-1602a, 14-447, 15-11a01, 15-11a02 and 15-11a03 and K. S. A. 1973 Supp. 12-525.

Be it enacted by the Legislature of the State of Kansas:

Section 1. K. S. A. 1978 Supp. 12-519 is hereby amended to read as follows: 12-519. As used in this act: (a) "Tract" means a single unit of real property under one ownership, outside the corporate limits of a city, platted and/or unplatted, title to which is publicly or privately held by an owner as defined by subsection (c) herein.

(b) "Land" means a part of a tract or one or more tracts.

(c) "Owner" means the one who has record title to a tract. In the event two (2) or more have record title to a tract, "owner"

shall be defined as follows:

(1) If joint tenants, "owner" means a majority of the number of joint tenants; (2) if tenants in common, "owner" means both a majority of the number of tenants in common and the holders of a majority of the undivided interests in the tract; (3) if the tract is held by a life tenant and a remainderman, "owner" means the life tenant; (4) if the tract is held by a tenant under a recorded lease providing for a lease term of ten (10) years or longer and a remainderman, "owner" means both such tenant and remainderman; (5) if one holds title to the surface and another holds title to the minerals, "owner" means the surface title holder.

minerals, "owner" means the surface title holder.

(d) "Adjoins" means to lie upon or touch (1) the city boundary line; or (2) a highway, railway or watercourse which lies upon the city boundary line and separates such city and the land sought to be annexed by only the width of such highway, railway or water-

course.

(3) (e) "Platted" means a tract mapped or drawn to scale, showing a division or divisions thereof, which map or drawing is filed in the office of the register of deeds by the owner of such tract.

(f) "Agricultural purposes" as applied to the use of land means the planting, cultivation and harvesting of crops and/or raising

and feeding of livestock for profit.

New Sec. 2. (a) The governing body of any city desiring to annex land under the authority of section 4 of this act shall first adopt a resolution stating that the city is considering the annexation of such land. Such resolution shall:

(1) Give notice that a public hearing will be held to consider the annexation of such land and fix the date, hour and place of

such public hearing;

(2) Describe the boundaries of the land proposed to be annexed;

and

(3) State that the plan of the city for the extension of services to the area proposed to be annexed, which is required under the provisions of section 3 of this act, is available for inspection during regular office hours in the office of the city clerk.

(b) The date fixed for such public hearing shall be not less than sixty (60) nor more than seventy (70) days following the date of the adoption of the resolution fixing the date of such hearing.

(c) A copy of the resolution providing for the public hearing shall be mailed by certified mail to each owner of land proposed to be annexed not more than ten (10) days following the date of the adeption of such resolution. Such resolution shall be published in the official newspaper of such city not less than one week and not more than two weeks preceding the date fixed for such public hearing. A sketch clearly delineating the area in such detail as may be necessary to advise the reader of the particular land proposed to be annexed shall be published with such resolution and a copy thereof mailed to the owner of the property with such resolution.

(d) At the public hearing, a representative of the city shall present the city's proposal for annexation, including the plan of the city for the extension of services to the area proposed to be annexed. Following such explanation, all interested persons shall be given an opportunity to be heard. The governing body may for good cause shown recess such hearing to a time and date certain, which shall be fixed in the presence of persons in attendance at the hearing.

(e) No resolution, notice and public hearing required under the provisions of this section shall be required as a prerequisite to the annexation of land owned by or held in trust for the city or

any agency thereof or land all of the owners of which petition for or consent thereto in writing.

New Sec. 3. The governing body of any city proposing to annex land under the provisions of section 4 of this act shall make plans for the extension of services to the area proposed to be annexed and shall, prior to the adoption of the resolution provided for in section 2 of this act, prepare a report setting forth such plans. The report shall include:

(a) A sketch clearly delineating the land proposed to be annexed and the area of the city adjacent thereto to show the following

information:

(1) The present and proposed boundaries of the city affected by **such** proposed annexation;

(2) The present streets, water mains, sewers and other city utility lines, and the proposed extension thereof;

(3) The general land use pattern in the areas to be annexed.

(b) A statement setting forth the plans of the city for extending to the area to be annexed each major municipal service provided to persons and property located within the city at the time of annexation, setting forth the method by which the city plans to finance the extension of such services to such area. Such statement shall also include a timetable of the plans for extending each major municipal service to the area annexed.

The preparation of a plan for the extension of services as hereinbefore required shall not be required for or as a prerequisite to the annexation of land all of the owners of which petition for or consent

to such annexation in writing.

Sec. 4. K. S. A. 1973 Supp. 12-520 is hereby amended to read as follows: 12-520. Except as otherwise hereinafter provided, the governing body of any city may by ordinance annex land to such city if any one or more of the following conditions exist:

(a) The land is platted, and some part of such land adjoins

the city.

(b) The land is owned by or held in trust for the city or any

agency thereof.

(c) The land adjoins the city and is owned by or held in trust for any governmental unit other than another city.

(d) The land has a common perimeter with the city boundary line of more than fifty percent (50%).

(d) The land lies within or mainly within the city and has a common perimeter with the city boundary line of more than fifty percent (50%).

(e) The land if annexed will make the city boundary line straight or harmonious and some part thereof adjoins the city, except no land in excess of twenty (20) acres shall be annexed for this purpose.

(f) The tract is so situated that two-thirds (3) of any boundary line adjoins the city, except no tract in excess of twenty (20) acres

shall be annexed under this condition.

(g) The land adjoins the city and a written petition for or

consent to annexation is filed with the city by the owner.

No unplatted tract of land of fifty-five (55) acres or more which is used only for agricultural purposes shall be annexed by any city under the authority of this section without the written consent of the owner thereof.

Whenever any city shall annex any land under the authority of subsection (b) of this section which does not adjoin the city, tracts of land adjoining the land so annexed shall not be deemed to be adjoining the city for the purpose of annexation under the authority of this section until such adjoining land or the land so annexed adjoins the remainder of the city by reason of the annexation of the intervening territory.

No city shall be authorized to annex the right-of-way of any highway under the authority of this section unless at the time of such annexation the abutting property upon one or both sides thereof is already within the city or is annexed to the city in the same

proceeding.

The governing body of any city may by one ordinance annex one or more separate tracts or lands each of which conforms to any one or more of the foregoing conditions. The invalidity of the annexation of any tract or land in one ordinance shall not affect the validity of the remaining tracts of lands which are annexed by such ordinance and which conform to any one or more of the foregoing conditions.

Any owner of land annexed by n city under the authority of this section may within thirty (30) days next following the publication of the ordinance annexing such land maintain an action in the district court of the county in which such land is located challenging the authority of the city to annex such lands and the regularity of the proceedings had in connection therewith.

New Sec. 5. (a) The governing body of any city may by ordinance annex land not adjoining the city if the following conditions

exist:

The land is located within the same county as such city;
 The owner or owners of the land petition for or consent in

writing to the annexation of such land; and

(3) The board of county commissioners of the county find and determine that the annexation of such land will not hinder or prevent the proper growth and development of the area or that of any

other incorporated city located within such county.

(b) No land adjoining any land annexed by any city under the provisions of this section shall be deemed to be adjoining the city for the purpose of annexation under any other act or section of this act until such adjoining land or the land annexed under this section shall adjoin the remainder of the city by reason of the annexation

of the intervening territory.

(c) Whenever the governing body of any city deems it advisable to annex land under the provisions of this section such governing body shall by resolution request the board of county commissioners of the county to make a finding as required under subsection (a) (3) of this section. The city clerk shall file a certified copy of such resolution with the board of county commissioners who shall, within thirty (30) days following the receipt thereof, make findings and notify the governing body of the city thereof. Such findings shall be spread at length upon the journal of proceedings of said board. The failure of such board to spread such findings upon the journal shall not invalidate the same.

Any owner or city aggrieved by the decision of the board of county commissioners may appeal from the decision of such board to the district court of the same county in the manner and method set forth in K. S. A. 19-223. Any city so appealing shall not be

required to execute the bond prescribed therein.

Sec. 6. K. S. A. 1973 Supp. 12-521 is hereby amended to read as follows: 12-521. Whenever the governing body of any city deems it advisable to annex land which does not conform to any of the conditions specified in section 2 such city is not permitted to annex under the authority of K. S. A. 1973 Supp. 12-520 and amendments thereto, the coverning body in the name of the city may present a petition to the board of county commissioners of the county in which the land sought to be annexed is located: Provided, No unplatted tract of over twenty (20) acres shall be annexed under this section if the owner thereof files a written protest thereto with both the clerks of such city and county at least five (5) clear days before the hearing date published as hereinafter provided in this section. The petition shall set forth a legal description of the hand sought to be annexed and request a public hearing on the advisability of such annexation. The governing body of such city shall make plans for the extension of services to land proposed to be annexed and shall file a copy thereof with the board of county commissioners at the time of presentation of the petition. Such report shall include:

(a) A sketch clearly delineating the land proposed to be annexed and the area of the city adjacent thereto to show the following in-

formation:

(1) The present and proposed boundaries of the city affected by

such proposed annexation;

(2) The present streets, water mains, sewers and other city utility lines, and the proposed extension thereto:

(3) The general land use pattern in the areas to be annexed.

(b) A statement setting forth the plans of the city for extending to the area to be annexed each major municipal service provided to persons and property located within the city at the time of annexation, setting forth the method by which the city plans to finance the extension of such services to such area.

The date fixed for such public hearing shall be not less than sixty (60) nor more than seventy (70) days following the date of the presentation of the petition requesting such hearing. Notice of the time and place of said hearing, to a there with a local description of the

land sought to be annexed and the names of the owners thereof, shall be published once a week for three (3) consecutive weeks in some newspaper of general circulation in the city not less than one week and not more than two weeks preceding the date fixed for such hearing.

A copy of the notice providing for the public hearing shall be mailed by certified mail to each owner of land proposed to be annexed not more than ten (10) days following the date of the presenta-

tion of the petition requesting such hearing.

A sketch clearly delineating the area in such detail as may be necessary to advise the reader of the particular land proposed to be annexed shall be published with such notice and a copy thereof mailed to the owner of the property with such notice.

The board may for good cause shown continue said hearing beyoud the time specified in the notice without further publication.

On the day set for hearing, the board of county commissioners shall hear testimony as to the advisability of such annexation, and a representative of the city shall present the city's proposal for annexation, including the plan of the city for the extension of services to

the area proposed to be annexed.

If said board shall be satisfied that such annexation or the annexation of a lesser amount of such land will cause no manifest injury to such owners, they shall so find and grant the annexation by order; and thereupon the city may annex the land by ordinance. All orders of the board of county commissioners granting or denying petitions for annexation shall be spread at length upon the journal of proceedings of said board. The failure of such board to spread an order granting annexation upon the journal shall not invalidate such order.

The Any owner or the city aggrieved by the decision of the board of county commissioners may appeal from the decision of such board to the district court of the same county in the manner and method set forth in K. S. A. 19-223. Any city so appealing shall not be re-

quired to execute the bond prescribed therein.

Sec. 7. K. S. A. 12-501, 12-502, 12-502a, 12-502b, 12-502c, 13-202, 13-1602a, 14-447, 15-11a01, 15-11a02 and 15-11a03 and K. S. A. 1973 Supp. 12-519, 12-520, 12-521 and 12-525 are hereby repealed.

Sec. 8. This act shall take effect and be in force from and after its publication in the official state paper.

APPENDIX B

ANNEXATION STUDY FOR ABILENE

Delineation of Study Area

In accordance with the Abilene Sketch Plan and through extensive study of existing conditions and trends, it is projected that the future growth of the city is likely to occur to the east and north of the existing city limits. Therefore, in preparation for this anticipated expansion, this annexation study has been prepared for that area.

As depicted on Map 1, the area under study is located to the east of the city limits. It is bounded by the Union Pacific Railroad tracks on the south; on the west by the city limits; on the north by Old Highway 40 (or 14th Street); and on the east by a line extending north-south from the railroad tracks to Highway 40 approximately 1/4 mile from the city limit. This area is the eastern portion of Neighborhood IV as designated in the Sketch Plan.

Legality of Annexation

For the purposes of this study, it will be assumed that the residents of the study area have petitioned for annexation. Since this is the case, annexation is legal (by Sec. 4 (g) of House Bill No. 1623). For the sake of argument, if a petition requesting annexation had not been filed, this tract of land would not have been eligible for annexation.

MAP 1: Delineation of Study Area

An analysis of the rules in Sec. 4 of House Bill No. 1623 will explain why this is true.

Condition (a) -- which states that annexation is possible if the land is platted and some part of such land adjoins the city -- does not apply in this example because the land is not platted.

Conditions (b) and (c) do not apply because the land is not owned by or held in trust for a governmental unit.

Condition (d) does not apply because the land is not located within or mainly within the city.

Condition (e) does not apply because annexation would not make the city boundary line straight, and the study area is larger than 20 acres.

Condition (f) does not apply because the study area is larger than 20 acres.

Study Area Characteristics

A. POPULATION. The present population of the study area is approximately 76 persons. This figure was obtained by counting the occupied residential units (20) and multiplying by an accepted standard figure for persons per dwelling unit (3.8). The present density, then, is approximately 1.9 persons per acre, which is very low. (The density figure was obtained by dividing the total population, 76, by the acreage in the study area, 40.)

Projecting future population for this area is a difficult task because of the lack of population figures for

previous years in this area. A very rough estimate can be obtained by, first of all, assuming that the primary land use in this area will be single family residential. This assumption is based upon the Sketch Plan. Approximately 42.7% of Neighborhood IV is used for single family residential purposes. Therefore, assuming that the same rough percentage will hold true in the study area when it is developed to its potential, a population projection of 349 persons is obtained. (42.7% of the land, or 17 acres, multiplied by 5.4 dwelling units/acre, the average in Neighborhood IV, times 3.8 persons/dwelling unit.)

- B. LAND AREA. The study area consists of approximately 40 acres.
- C. LAND USE. At the present time, the land use pattern in the study area consists mainly of agricultural and vacant land with some low density residential and scattered commercial and industrial-transportation uses. (See Table 10.)
- 1. Residential: As was noted earlier, only 20 residential units presently exist, all of the single family detached variety. These can be classified for the most part as being in standard condition, with two being slightly substandard. Most of the new residential construction has occurred in Neighborhood IV and it appears that this construction will continue into the study area.
- 2. Commercial: The little commercial development that exists in the study area is located along Highway 40. This

TABLE 10
STUDY AREA CHARACTERISTICS

			1
Land Use	Acres		8
Residential	6		15.0
Commercial	2		5.0
Industrial	2		5.0
Agriculture	16		40.0
Roads and streets	4		10.0
Vacant	10	9	25.0
Tota1	40		100.0
Population			*
Number of existing	residences	20	9
Present population		76	
Future capacity	8 8 5	349	25 25

development is very sparse and does not afford adequate, convenient shopping facilities to the study area.

- 3. Industrial: The industrial activity in the study area is actually the Union Pacific Railroad activity located on the southern border of the area. This consists only of the tracks themselves, since no freight loading or docking of any kind takes place within the study area.
- 4. Agricultural: Agricultural land comprises about 40% of the study area at the present time. The agricultural tracts are located throughout the area with the residential development scattered within the agricultural.
 - 5. Public and Semi-Public: There is no public land in

the study area.

- 6. Vacant: Approximately 25% of the land is presently not used for any purpose. Most of this is good agricultural land and also easily buildable, since it is flat and void of rock.
- D. STREETS AND ROADS. At the present time, there are only five local streets in the study area. These are not paved but are in good condition. The proposed transportation plan in the Sketch Plan designates four collector streets in the area by the year 2000 (Map 2).

Feasibility Study

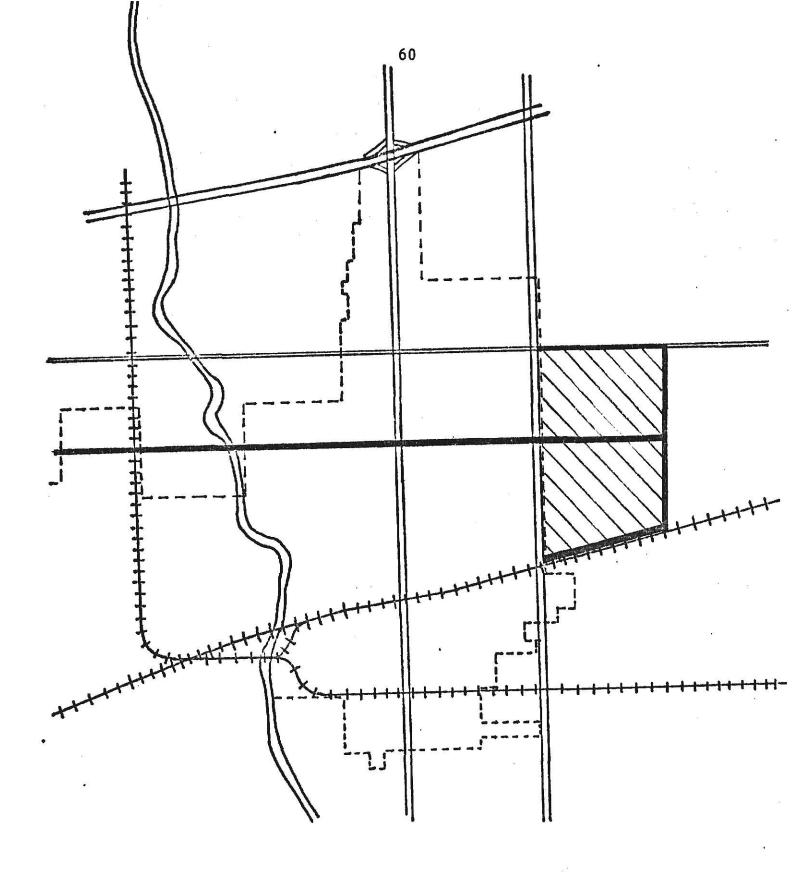
1. Existing services

This study area is already quite adequately serviced in a number of categories. An examination of the major municipal services as they presently exist will point out the strengths and weaknesses.

<u>Fire protection</u>: The Abilene Fire Department is presently located in the City Building at 419 Broadway. The department has eight full-time and nine part-time firemen, and is a volunteer operation. There are two men on duty at all times.

At the present time, the department serves only the city, but provides a rescue truck on a contract basis within a three mile radius in the county.

The required fire flow for proper protection is found by the formula $G = 1,020\sqrt{P}$ (1-0.01 \sqrt{P}), where G is the



MAP 2: Proposed Transportation Plan

required fire flow in gallons per minute and P is the population in thousands. The present fire equipment, consisting of a 500 g.p.m. pumper, two 750 g.p.m. pumpers, and a 1,000 g.p.m. pumper, can pump a total of 3,000 gallons per minute, which is in excess of the 2,850 gallons which would be needed with the addition of the maximum population which the annexed area could hold in the future (349 persons).

In addition, the optimum service radius of 1.5 miles for residential districts extends well beyond the study area (Map 3). Thus, from all available information, it seems that the city's fire service is more than adequate to serve the study area.

Police protection: The headquarters for the police department is located in the City Building at 419 Broadway. At present, there are ten men on the force including the police chief. The force has four patrol cars, and at least two men are on duty at all times. As the adequate number of policemen is determined by the ratio of 1.5 per 1,000 population, the city is already short-staffed. With the annexation of the study area, the city should have thirteen policemen. (Actually, the study area, with its small population, places no undue demand on the force. The shortage already exists.)

Sewerage: With the exception of the extreme easterly portion, the entire study area is already serviced by the

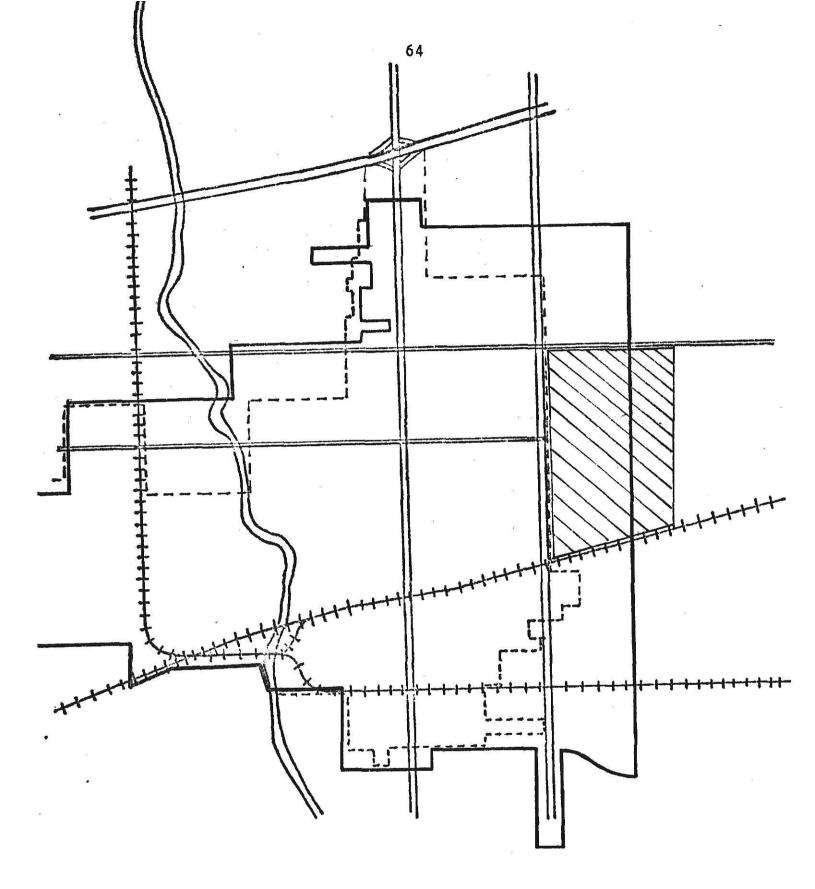
city sewerage system. The system is relatively new and has a present capacity of serving 12,000 persons with an ultimate capacity of 16,800. Thus, the annexation of the study area will present no strain on the existing system, and in fact has been planned for (Map 4).

<u>Water supply</u>: A portion of the study area is already being served by the city water system (Map 5). Abilene's major water supply comes from a system of nine wells located throughout the city. These wells are currently more than capable of supplying enough water for the city's needs. The existing lines will have to be extended to serve the study area upon annexation.

Refuse collection: The city currently pays \$100 for each additional dwelling unit served by its refuse collection contractor, and at present only residences within the city limits are served.

Health protection: The Abilene Memorial Hospital, located at 10th and Brady, has 69 beds and 9 bassinets. Its service district includes nine townships and 15,000 people in Dickinson County. Additional facilities include two nursing homes in Abilene and a third near the city.

The criteria for hospital service established in the Plan for the Development of Health Resources, State of Kansas recommends 3.5 short-term beds per 1,000 population and 48.71 long-term beds and nursing homes per 1,000 persons age 64 and over. The city's hospital and nursing



MAP 4: Area Served by Sewerage System

MAP 5: Area Served by Water System

homes are already in excess of these requirements, and annexation of the study area would cause no problem.

Street paving and maintenance: The 1.8 miles of road already in the study area are not paved. These would have to be paved upon annexation.

Schools: The city's schools presently number six: three elementary, one junior high, one high school, and one parochial school. The enrollment of all of these schools is presently well below the capacity of each. As far as the radius served by the schools is concerned, the study area lies within the suggested 1/2 mile from an elementary school. Both the junior high and high schools are within the suggested radii of 3/4 mile and 1 mile, respectively. Thus, no problems are encountered concerning either school capacity of walking distance (Map 6).

<u>Libraries</u>: The Abilene Public Library is located on 4th Street between Broadway and Spruce, in the same block as the City Building. It serves both the city of Abilene and Dickinson County. The library has a stock of 43,900 volumes.

<u>Street lights</u>: There are no street lights existing on the streets in the study area.

<u>Parks and recreation</u>: At the present time, Neighborhood IV (which is adjacent to the study area) has no park facilities, with the exception of the playfields at the elementary schools which provide limited space. Eisenhower

MAP 6: Elementary School District Boundary

Park, which serves as the community park, is very well equipped and the study area is within the suggested two mile radius. There will be a need for neighborhood park space if the study area is annexed.

<u>Traffic control</u>: There are no existing traffic lights, stop signs, or other means of control in the study area.

Planning, zoning, and building regulations: The city of Abilene's Planning Commission has jurisdiction only within the city limits. Presently the study area is under the jurisdiction of the Dickinson County Planning Commission and is subject to the county ordinances and codes.

A summary showing the adequacy of existing facilities is depicted in Table 11.

2. Services to be provided upon annexation

Continuing with the analysis of municipal services and their relation to the study area, each of the services discussed above will be analyzed with regard to the city's responsibility to extend them to the study area upon annexation.

<u>Fire protection</u>: City fire protection service will be extended to the study area if it is annexed. There is adequate water supply and equipment to service the new area properly. Six fire hydrants would have to be installed.

<u>Police protection</u>: The police force in the city is inadequate at the present time, and will be even more so upon

TABLE 11
EXISTING CONDITIONS: STUDY AREA

C	Rating	
Service	Adequate	Inadequate ¹
Fire protection	х	
Police protection		x
Sewage disposal	x	
Water supply	х	
Storm drainage	х	
Refuse collection and disposal		x
Health protection	x	
Street paving and maintenance		x
Schools	X	
Street lights		X
Libraries	х	
Parks and recreation		X
Traffic control		х
Planning, zoning, and building regulations		х

¹Inadequate indicates that improvement will be needed if study area is annexed.

annexation of new territory. Three additional policemen are needed. A staff of thirteen would sufficiently serve the community with the addition of new land.

Sewerage: The sewerage system would have to be extended to the extreme eastern part of the study area. This would mean the installation of approximately 500 feet of 10" pipe to serve as a collector for future residential

development in the area. Future connections to individual residences would be installed when needed.

<u>Water supply</u>: Extension of water lines would be necessary upon annexation. Again, the main trunks would be extended first and then smaller pipes later as they are needed.

Approximately 900 feet of pipe would be required.

Refuse collection: Service would be extended to new areas upon annexation.

<u>Health protection</u>: Present city facilities are adequate for service to the study area.

Street paving and maintenance: The existing 1.8 miles of road would be paved upon annexation. In addition, the transportation section of the Sketch Plan suggests the need for approximately 3.4 miles of new streets in the area by the year 2000. These would be installed when deemed necessary. Normal street maintenance would also be necessary if the area is annexed (Map 2).

Schools: The existing city schools of all grades are sufficient to service the study area. No additions would be necessary.

<u>Libraries</u>: When compared to the accepted standard of 3.0 volumes per capita, which would indicate a need for 24,100 volumes in Abilene, the existing stock of 43,900 volumes is more than adequate. No additions would be needed upon annexation. Also, the present location (1 block north of

the City Building) meets location requirements.

Street lights: This service would have to be installed to meet city standards in the existing streets in the study area. This would call for the installation of a light every 120 feet, or five lights.

<u>Parks</u> and <u>recreation</u>: The study area would need a neighborhood park. As is the custom, the city would require the developer to dedicate parkland to the city upon platting the land. A park of five acres would be needed. A study would be necessary to plan the park and decide what equipment and landscaping would be needed.

Traffic control: It does not appear that any traffic control measures would need to be installed immediately. The city would provide these as they are needed. Six street name signs would be installed.

Planning, zoning and building regulations: Upon annexation, the study area would be under the jurisdiction of the City Planning Commission. This would subject the area to all city ordinances and codes.

3. Cost of furnishing services

The cost estimates presented here are rough estimates based on the current level of municipal services. Only short range estimates are made because of the lack of information needed to make long term projections.

Fire protection: Installation of six fire hydrants @\$500

for a total cost of \$3,000.

<u>Police protection</u>: The need for additional police staff is not dependent upon the annexation of this relatively small area. No cost.

Sewerage: The installation of 500 feet of 10" pipe into soil which is void of rock would cost the city about \$2,500. This would be financed by special assessment bonds.

<u>Water supply</u>: The installation of 900 feet of water mains would cost the city approximately \$3,600. This would be financed by general obligation bonds.

Refuse collection: Immediately upon annexation, this service would be extended to existing residences. The cost would be \$2,000 and would be financed by special assessment. Future development (to approximately 108 dwelling units) would be serviced when needed at a cost of approximately \$10,800.

Health protection: No cost.

Street paving and maintenance: The cost of paving the existing 1.8 miles of road would be approximately \$380,160. The 3.4 miles of future streets would cost approximately \$717,720. Paving would be financed by general obligation and special assessment bonding. The exact breakdowns would be explained in the Capital Improvement Program.

Maintenance costs to the city would be approximately \$330

for the existing streets.

Schools: No cost.

Street lights: Installing five aluminum street light fixtures would cost the city approximately \$2,500.

<u>Parks and recreation</u>: The need for a park in the area has been cited. Until a study has been made, it is practically impossible to project an accurate cost. For the purposes of this study, a figure of \$70,000 will be used. This would be financed by general obligation bonding.

<u>Traffic control</u>: The cost of installing six street name signs would cost approximately \$60.

<u>Planning</u>, <u>zoning</u>, <u>and building regulations</u>: Because of the small size of this area, there would be no additional cost for studies and daily regulation.

4. Potential revenue from study area

The total assessed value of the land in the area is roughly \$42,300. The city could expect property taxes of approximately \$15,232 and revenues from other sources of about \$2,000. Thus, the total expected revenue which the city would initially derive from the study area would be roughly \$17,232. As more development occurs, that figure would increase.

5. Cost balance

The comparison between costs and revenues of the proposed annexation is as depicted in Table 12.

TABLE 12

COST BALANCE FOR STUDY AREA:

IMMEDIATE FUTURE

Cost Consideration	Amount
Total Expenses	\$801,380
Total Revenue (all sources)	17,232
Cost Balance	-784,148

Annexation Decision

When the annexation study had been completed, the city officials must then decide the fate of the annexation proposal. In order for this decision to be made, the information that was compiled in the study must be reviewed with reference to the city's annexation criteria. (See Chapter II for sample criteria.)

In the case of the sample annexation study which has been presented in this Appendix, it appears that by applying the criteria suggested by the American Society of Planning Officials (see pages 8-9), the city would probably decide not to annex the territory in question. This decision is based on a number of circumstances. First, the area does not contain enough people at a sufficient density to warrant the extension of services. Secondly, the deficit of income against expense to the city is quite large, thereby indicating that the residents of the city would be paying an unreasonable amount

toward the extension of services to the annexed area. Thirdly, at the present time it does not appear that the overall advantages outweigh the disadvantages. Therefore, the decision will probably be to deny the annexation proposal.

FOOTNOTES

CHAPTER I

- 1 Lachlan F. Blair, "Programming Community Development," in <u>Principles and Practice of Urban Planning</u>, William I. Goodman, ed. (Washington, D.C.: International City Managers' Association, 1968), p. 398.
- 2 Wichita-Sedgwick County Metropolitan Area Planning Department, One Wichita Growth Program for the 1960's (Wichita, Kansas, 1960), p. 2.
- 3 David H. Blau, "Solving the Urban Fringe Problem," Kansas Government Journal (April 1970): 163.
 - 4 Ibid., p. 164.
 - 5 Ibid.
- 6 For a detailed study of the fringe area problem see Blair or John C. Bollens, Urban Fringe Areas: Zoning, Subdivision Regulations, and Municipal Services (Chicago: International City Managers' Association, Management Information Service, September, 1960.)
 - 7 One Wichita, p. 9.
- 8 John C. Bollens and Henry J. Schmandt, The Metropolis: Its People, Politics, and Economic Life, 2nd ed. (New York: Harper and Row Publishers, 1970), p. 279.
- 9 League of Kansas Municipalities, Annexation: A Manual for City Officials in Kansas (Topeka, Kansas: League of Kansas Municipalities, 1974), p. 1.
 - 10 Bollens and Schmandt, p. 292.
 - 11 Ibid.
- 12 Clan Crawford, Jr., Strategy and Tactics in Municipal Zoning (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1969), p. 37.
 - 13 Bollens and Schmandt, p. 292.
- 14 Thomas R. Dye, "Urban Political Integration: Conditions Associated with Annexation in American Cities," Mid-West Journal of Political Science, VIII (November 1964): 446.

CHAPTER II

- 1 American Society of Planning Officials, "Annexation Studies," Planning Advisory Service Report #114, September 1958, p. 13.
- 2 Wichita-Sedgwick County Metropolitan Area Planning Department, One Wichita Growth Program for the 1960's (Wichita, Kansas, 1960), p. C-1.
 - 3 American Society of Planning Officials, p. 13.
- 4 This criterion is usually stipulated in state statutes.
 - 5 American Society of Planning Officials, p. 14.
- 6 League of Kansas Municipalities, Annexation: A Manual for City Officials in Kansas (Topeka, Kansas: League of Kansas Municipalities, 1974), p. 3.
 - 7 Ibid., pp. 3-4.
- 8 Frank I. Michelman and Terrance Sandalow, Materials on Government in Urban Areas: Cases, Comments, Questions (St. Paul, Minnesota: West Publishing Co., 1970), p. 635.
 - 9 Ibid., pp. 635-636.
 - 10 American Society of Planning Officials, p. 2.
- 11 House Bill No. 1623, Chapter 56, Session Laws of 1974.

CHAPTER III

- 1 Callen v. Junction City, 43 Kan 627.
- 2 League of Kansas Municipalities, Annexation: A Manual for City Officials in Kansas (Topeka, Kansas: League of Kansas Municipalities, 1974), pp. 18-21.

CHAPTER IV

- 1 Stephen L. Stamey, "Annexation Guidelines for the Kansas Municipality" (Non-Thesis Report, Kansas State University, 1974), p. 12.
 - 2 Callen v. Junction City, 43 Kan 627.
 - 3 Ruland v. Augusta, 120 Kan 42.
 - 4 Stamey, p. 12.
 - 5 State v. Topeka, 173 Kan 387.
 - 6 State ex rel.v. City of Overland Park, 192 Kan 654.
 - 7 Sabatini v. Jayhawk Construction Co., 214 Kan 408.
- 8 Frank S. Sengstock, Annexation: A Solution to the Metropolitan Area Problem (The University of Michigan, 1960), p. 70.
- 9 Eugene McQuillin, The Law of Municipal Corporations, Third Edition, Vol. 2 (Mundelein, Illinois: Callaghon and Co., 1966), p. 309.

CHAPTER V

- 1 House Bill No. 1623, Chapter 56, Session Laws of 1974.
- 2 League of Kansas Municipalities, Annexation: A Manual for City Officials in Kansas (Topeka, Kansas: League of Kansas Municipalities, 1974), p. 45.
- 3 Lachlan F. Blair, "Programming Community Development," in Principles and Practice of Urban Planning, William I. Goodman, ed. (Washington, D.C.: International City Managers' Association, 1968), p. 399.
- 4 American Society of Planning Officials, "Annexation Studies," Planning Advisory Service Report #114, September 1958, p. 3.
 - 5 Ibid.
- 6 Wichita-Sedgwick County Metropolitan Area Planning Department, One Wichita Growth Program for the 1960's (Wichita, Kansas, 1960), p. 2.
 - 7 American Society of Planning Officials, p. 4.
- 8 F. Stuart Chapin, Jr., <u>Urban Land Use Planning</u>, 2nd ed. (Urbana, Illinois: University of Illinois Press, 1965), p. 196.
 - 9 American Society of Planning Officials, p. 4.
 - 10 Ibid., pp. 4-5.
 - 11 One Wichita, Appendix D, p. 2.
- 12 John Keller, Ron Dorf, and Lee C. Henderson, Miniplan Manual: Scaled Plans for Small Communities, 1974, p. 69.
- 13 Frank I. Michelman and Terrance Sandalow, <u>Materials</u> on Government in Urban Areas: Cases, Comments, Questions (St. Paul, Minnesota: West Publishing Co., 1970), pp. 636-637.

- 14 Robert Warren, "A Municipal Services Market Model of Metropolitan Organization," <u>Journal of the American Institute of Planners</u> Vol. XXX, Number 3 (August 1964): 197.
 - 15 Ibid.
 - 16 American Society of Planning Officials, pp. 5-6.
 - 17 Ibid., p. 6.
 - 18 Ibid.
- of American Water Works Association, Vol. 47, No. 10 (1955) quoted in Joseph de Chiara and Lee Koppleman, Planning Design Criteria (New York: Van Nostrand Reinhold Co., 1969), p. 199.
- 20 "Crime in the United States," Federal Bureau of Investigation, Superintendent of Documents, Washington, D.C., August 1966.
- 21 Environmental Health Planning Guide, Public Health Service, U.S. Department of Health, Education, and Welfare (1962), quoted in de Chiara and Koppleman, p. 299.
 - 22 Ibid., p. 192.
 - 23 American Society of Planning Officials, p. 7.
 - 24 Ibid., pp. 7-8.
 - 25 Blair, p. 389.
 - 26 Ibid.
- 27 George H. Esser, Jr., "The Economic Aspects of Annexation," Public Management (August and September 1957).
 - 28 American Society of Planning Officials, p. 9.
 - 29 Ibid.
 - 30 One Wichita, p. 30.

BIBLIOGRAPHY

- "Abilene Sketch Plan." Kansas State University, 1973.
- American Society of Planning Officials. "Annexation Studies."

 Planning Advisory Service Report #114, September, 1958.
- Anderson, Robert M. American Law of Zoning, Vol. 1. The Lawyers Cooperative Publishing Co., Rochester, N.Y., 1968.
- "Annexation and Tax Rates." National Tax Journal (June, 1952).
- Bain, Chester W. Annexation in Virginia. University of Virginia, 1966.
- Blair, Lachlan F. "Programming Community Development."

 Principles and Practice of Urban Planning. William
 I. Goodman, ed. Washington, D.C.: International
 City Managers' Association, 1968.
- Blau, David H. "Solving the Urban Fringe Problem." Kansas Government Journal, April, 1970.
- Bollens, John C. "Metropolitan and Fringe Area Development."
 Municipal Yearbook, 1968.
- Bollens, John C. and Schmandt, Henry J. The Metropolis: Its People, Politics, and Economic Life. New York: Harper and Row Publishers, 1970.
- Chapin, F. Stuart, Jr. Urban Land Use Planning, 2nd ed. Urbana, Illinois: University of Illinois Press, 1965.
- Crawford, Clan, Jr. Strategy and Tactics in Municipal Zoning. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1969.
- de Chiara, Joseph and Koppleman, Lee. <u>Planning Design Crite-ria</u>. New York: Van Nostrand Reinhold Co., 1969.
- Dixon, Robert G. Jr., and Kerstetter, John R. Adjusting
 Municipal Boundaries: The Law and Practice in 48
 States. Washington, D.C.: American Municipal
 Association, 1959.
- Dye, Thomas. "Urban Political Integration: Conditions Associated with Annexation in American Cities." Midwest Journal of Political Science VIII (November 1964).
- Esser, George H., Jr. "The Economic Aspects of Annexation."

 <u>Public Management</u>, August and September, 1957.
- Federal Bureau of Investigation. "Crime in the United States." Washington, D.C., August, 1966.

- Goodall, Leonard. The American Metropolis. Columbus, Ohio: Charles E. Merrill Publishing Co., 1968.
- Iverson, John E. "Annexation by Municipal Corporations."
 Washington Law Review. University of Washington, 1962.
- Kansas. House Bill No. 1623. Chapter 56, Session Laws of 1974.
- Keller, John; Dorf, Ron; Henderson, Lee C. Miniplan Manual: Scaled Plans for Small Communities. Kansas State University, 1974.
- League of Kansas Municipalities. Annexation: A Manual for City Officials in Kansas. 1974.
- Mandelker, Daniel R. Managing Our Urban Environment. Indianapolis: The Bobbs-Merrill Co., Inc., 1963.
- McCandless, Carl A. Urban Government and Politics. New York: McGraw-Hill Book Co., 1970.
- McQuillan, Eugene. The Law of Municipal Corporations, 3rd ed. Mundelein, Illinois: Callaghon and Co., 1966.
- Michelman, Frank I. and Sandalow, Terrance. Materials on Government in Urban Areas: Cases, Comments, Questions. St. Paul, Minnesota: West Publishing Co., 1970.
- Nez, George. "Standards for New Urban Development The Denver Background." Urban Land Institute, Vol. 20, No. 5.
- Sengstock, Frank S. Annexation: A Solution to the Metropolitan Area Problem. The University of Michigan, 1960
- Scott, Stanley. Annexation? Incorporation? A Guide for Community Action. California University, 1954.
- Stamey, Stephen L. "Annexation Guidelines for the Kansas Municipality." Non-Thesis Report, Kansas State University, 1974.
- Urban Information Report #26. "Policy Considerations in Annexing Fringe Areas." League of Kansas Municipalities, 1966.
- Warren, Robert. "A Municipal Service Market Model of Metropolitan Organization." Journal of the American Institute of Planners XXX (August 1964).
- Wichita-Sedgwick County Metropolitan Area Planning Department.

 One Wichita Growth Program for the 1960's. Wichita,

 Kansas, 1960.

PERFORMING THE ANNEXATION STUDY

by

JESSE C. HOUSTON

B. A., Western Maryland College, 1972

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF REGIONAL AND COMMUNITY PLANNING

Department of Regional and Community Planning

KANSAS STATE UNIVERSITY Manhattan, Kansas

1975

PERFORMING THE ANNEXATION STUDY

The process of annexation is one of the important comprehensive planning techniques for public officials.

When considering an annexation proposal, a comprehensive, detailed study is necessary and a decision made on the basis of such a study. This Master's Report describes the process of performing such a study as well as background material which may be necessary in understanding annexation in general.

Annexation can be defined as the process by which a municipality extends its boundaries to include usually contiguous fringe territory. It is a means by which the city may gain new land for development; it is a method of planning orderly growth and development of the fringe area; it is a method of consolidating governments and providing more efficient services; and finally, annexation is a vital tool in the planning process.

Before any rational thought can be given to annexation, a city should have established criteria stating basic policies which will guide future decisions concerning annexation. When annexation is proposed, it should be considered in light of these criteria. The state statutes should also be consulted to see if the proposed annexation

would be legal if approved.

If the annexation proposal meets the city's criteria and is legal under state statutes, the city should then perform an annexation study. The purpose of such a study is two-fold: first, to find out if the annexation would be profitable to the city; and secondly, to be sure the city would be able to extend necessary municipal services to the annexed area.

According to the new Kansas annexation law, House Bill No. 1623, the annexation study must contain two sections: a sketch of the area and a services extension plan. These two requirements form the basis of the annexation study. Building on the base, the process of performing the study consists of the following steps:

- I. Delineate the study area. This delineation may be either the area represented in the annexation petition (if a petition is presented) or it may divide the entire fringe area into several study areas.
- II. Study several characteristics of the study area.

 Such characteristics include: a) current and future population; b) land area; c) current and projected land use; d) number and condition of buildings in the area; and e) a study of the streets and roads. Any other characteristics which are deemed important may also be studied.
- III. Determine the feasibility of annexation. Feasibility is measured by: a) an inventory of existing urban services and facilities in the study area; b) the quantity of services

to be provided upon annexation; c) the cost of furnishing needed services; d) the amount of potential revenue from the study area; and e) the cost balance, or the difference between costs and revenues. This feasibility study is basically what is referred to by House Bill No. 1623 as the services extension plan.

By following the preceding steps, a municipality can move toward a more rational decision of the question of annexation. A viable annexation program is an important aspect of a city's comprehensive planning process, and as such, deserves such rationality.