

207  
302

KSU TRANSPORTATION PLAN

by

DANIEL WESLEY GIBSON

B. Arch., Kansas State University, 1976

---

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

1979

Approved by:

  
Major Professor

Spec Coll.  
LD  
2668  
.R4  
1779  
G52  
C.2

# TRANSPORTATION PLAN

**KSU**

**KANSAS  
STATE  
UNIVERSITY**

## ACKNOWLEDGMENTS

This study was conducted with the aid of the Spring, 1978 "Civil Engineering Projects" class at Kansas State University. I am grateful for the time, effort, and technical expertise contributed by these Civil Engineering students who participated in the project: Rob Dickinson, Kim Pearse, Robert Robinson, Albert Tharnish, Jim Truesdell, Jean Webb, and Randy West.

A special note of appreciation is due Dr. Bob L. Smith, Professor of Civil Engineering, without whose encouragement and guidance this project would not have its present form and content.

The KSU Department of Civil Engineering is to be thanked for providing the financial support for obtaining the necessary materials and equipment to successfully complete this document.

I am also grateful for the professional input contributed by Mr. Larry Wilson, KSU Campus Landscape Planner, Ray Weisenburger, Professor of Regional and Community Planning, and perhaps most importantly, my major advisor on the academic aspects of the project, C. A. Keithley, Associate Professor of Regional and Community Planning.

CONTENTS

	Page
Acknowledgments	iii
Tables	v
Figures	vi
<b>1 INTRODUCTION</b>	
Problem	2
Local/Regional Context	3
Campus Growth	5
Land Use	8
<b>2 CIRCULATION</b>	
Pedestrians	12
Bicycles	15
Motor Vehicles	22
<b>3 PARKING</b>	
Inventory	28
Surveys And Proposals	30
Parking Structure Design	34
Parking Structure Financial Analysis	38
Surface Lot Financial Analysis	40
Parking Lot Landscape Development	44
Visitor Parking	45
Residence Hall Parking	48
<b>4 PROGRAM</b>	
Concept	51
Policy	52
Alternatives	55
<b>5 PLAN</b>	
Circulation	60
Parking	64
Modal Alternatives	67
Campus Information System	69
Implementation	72
<b>6 REFERENCES</b>	
Appendix A: Campus Transit Systems At U.S. Universities	78
Appendix B: Parking Space Allocation	80
Appendix C: Parking Garage Function, Operation, And Design	86
Appendix D: Parking Lot Landscaping	89
Appendix E: KSU Circulation Plan Summary	104
Notes	105
Bibliography	106
Index	108

TABLES

<u>Number</u>	<u>Title</u>	<u>Page</u>
3-1	Existing Parking Space Allocations By Permitted Use	28
3-2	Parking Structure Construction And Operating Expenses	38
3-3	Parking Garage Break-Even Financial Analysis	39
3-4	Surface Lot Construction And Operating Expenses	40
3-5	Metered Visitors' Parking Daily Revenue	46
5-1	Comparative Evaluation Of Vehicular Circulation Concepts	61
6-1	Parking Space Allocation Summary	80
6-2	Student Only Parking	80
6-3	Faculty/Staff Only Parking	81
6-4	Student/Faculty/Staff Parking	82
6-5	On-Campus Housing Parking	82
6-6	General Parking	82
6-7	Restricted Parking	83
6-8	Visitor Only Parking	84
6-9	Handicapped Only Parking	85