THE UNIVERSITY OF MANITOBA

A SURVEY OF PUPIL TRANSPORTATION IN THE PRAIRIE PROVINCES

BY

WILLIAM EDWARD LAVERY

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

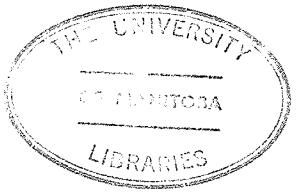
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF MASTER OF EDUCATION

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

WINNIPEG, MANITOBA

OCTOBER 1973



ACKNOWLEDGEMENTS

The writer wishes to express his appreciation for the generous assistance that he received from his advisor, Dr. P. J. Husby. He is further indebted to Professor A. H. Soliman, Dr. J. A. Riffel and Dr. C. Bjarnason who served on his committee. Valuable assistance was also provided by Mr. L. Matthews and Mr. E. Bardock of the Alberta Department of Education, Mr. D. Cook of the Alberta Highway Traffic Board, Mr. R. Wigmore of the Saskatchewan Department of Education, Mr. B. Miller of the Saskatchewan Highway Traffic Board, Mr. C. Bridle of the Manitoba Department of Education and Mr. P. Degala, Registrar of Motor Vehicles for Manitoba. Mr. E. Wilson gave expert assistance in the production of the questionnaire and Mr. R. Webb produced a number of very useful computer programmes. The writer wishes to express special gratitude for the expert help of Mrs. S. Abra who typed both the proposal and the thesis. The writer is also grateful to the Center for Transportation Studies, University of Manitoba, which partially financed the study.

ABSTRACT

The purpose of this study was to examine pupil transportation in the provinces of Alberta, Saskatchewan and Manitoba and to make inter-provincial comparisons. Legislation and regulations, administration at the provincial and local school system levels, financing models, operating practices and policies of local school systems and the revenues and expenditures of such systems were studied. The sample of local school systems consisted of the entire group of publicly supported, public and separate, school systems in the three provinces -- a total of 330 such systems. Ten research questions, involving a number of sub-questions, were proposed for the study.

In order to answer the research questions questionnaires were sent to each of the school systems, responsible officials at the provincial levels were interviewed and the legislation and regulations were reviewed.

Important differences in the administration and supervision of pupil transportation were found among the three provinces in the following areas:

A. the administration practices at the provincial levels.

B. the provincial financing formulae.

C. the importance of pupil transportation costs in the total budgets of school systems.

D. the use of contractor operated vehicles as opposed to school system operated vehicles.

E. the administration and supervision of pupil transportation at the local school system levels.

F. the nature of the seating characteristics and ownership of the respective vehicle fleets.

TABLE OF CONTENTS

	Page
LIST OF TABLES	xvi
Chapter	
I. THE PROBLEM	1
INTRODUCTION	1
SETTING OF THE PROBLEM	1
The Canadian System of Education	1
The Prairie Region	2
Pupil Transportation in the Prairie Region	3
STATEMENT OF THE PROBLEM	4
RESEARCH QUESTIONS	5
Question 1	5
Question 2	6
Question 3	6
Question 4	7
Question 5	7
Question 6	8
Question 7	8
Question 8	8
Question 9	9
Question 10	10
SIGNIFICANCE	10
DELIMITATIONS	10
LIMITATIONS	11
DEFINITION OF TERMS	11
II. REVIEW OF THE LITERATURE	13
INTRODUCTION	13
ARGUMENTS FOR AND AGAINST PUPIL TRANSPORTATION	13
SAFETY STANDARDS	16

Chapter Page

Introduction 16
Existing Standards 17
Voluntary Standards 17
Federal Government Standards 18

SAFETY TRAINING 18

Introduction 18
Driver Training 19
Pupil Training 20

THE MANAGEMENT OF PUPIL TRANSPORTATION 20

Introduction 20
The Oregon Study 20
The Indiana Statistical Summary 21
The Ontario Management Handbook 22

PUBLIC VERSUS PRIVATE OWNERSHIP 23

FINANCING PUPIL TRANSPORTATION 25

Introduction 25
The Development of a Cost Equation 25
The Development of Financing Formulae 26
Criteria For Financing Formulae 27
Costs of School Transportation 28

CONCLUSION 28

III. DATA COLLECTION AND ANALYSIS 30

INTRODUCTION 30

THE QUESTIONNAIRE 30

INTERVIEW SCHEDULE 31

FISCAL FINANCING MODELS 31

Fiscal Models 32

DISTRIBUTION OF THE PRELIMINARY LETTER, QUESTIONNAIRE AND FOLLOW-UP LETTER 32

Mailing Lists 33

RESPONSE TO THE QUESTIONNAIRE 33

PROVINCIAL RESPONSE PATTERNS 34

Chapter Page

Alberta Response Pattern 34
Saskatchewan Response Pattern 36
Manitoba Response Pattern 36
Summary 36

RESPONSE TYPES 36

RURAL/URBAN NATURE OF THE SCHOOL SYSTEMS 38

Alberta 41
Saskatchewan 41
Manitoba 41
Summary 41

POSITIONS OF THE RESPONDENTS 41

ORGANIZATION OF THE FINDINGS 44

SUMMARY 44

IV. THE LEGISLATION AND REGULATIONS AFFECTING PUPIL TRANSPORTATION 46

INTRODUCTION 46

LEGISLATION AND REGULATIONS (ALBERTA) 47

Introduction 47
The School Act 47
Transportation must be provided 47
Boards may charge a fee 48
Provision for regulations 48
Regulations under The School Act 48
Regulations concerning payments in lieu of transportation 48
Foundation program fund regulations, 1972 . . 48
Minister may adjust the amount payable . . . 52
Foundation program fund regulations, 1973 . . 52
The Public Service Vehicles Act 52
Regulations Under The Public Service Vehicles Act 53

LEGISLATION AND REGULATIONS (SASKATCHEWAN) . . . 53

Introduction 53

Chapter Page

The School Act 54
Any board may convey children within the district 54
School districts having areas of thirty-six square miles or more 54
Conveyance of school children from one district to another 55
Transportation for handicapped children . . . 55
Provision for regulations 56
Provision for penalties 56
Regulations related to the operation of school buses 57
The Larger School Units Act 57
Introduction 57
Provisions related to transportation 57
Regulations under The Larger School Units Act 58
The Foundation Grants Act 58
The Vehicles Act 60
Introduction 60
Provision for regulations 60
Regulations under The Vehicles Act 60

LEGISLATION AND REGULATIONS (MANITOBA) 61

Introduction 61
The Public Schools Act 61
Any school district may provide transportation 61
Large school districts 61
Unitary school divisions 62
Regulations under The Public Schools Act 63
Provision for regulations 63
Regulations related to the operation of school buses 63
Transportation grants to unitary divisions . . 64
Operating grants 64
Capital grants 66
The Highway Traffic Act 67
Offences and penalties 67

SUMMARY 68

V. THE ADMINISTRATION AND SUPERVISION OF PUPIL TRANSPORTATION AT THE PROVINCIAL LEVELS 69

INTRODUCTION 69

Sources of Data 69

Chapter | Page

THE ADMINISTRATION OF PUPIL TRANSPORTATION IN ALBERTA 69

Introduction 69
The Field Services Branch 70
The Enforcement Division 70

THE ADMINISTRATION OF PUPIL TRANSPORTATION IN SASKATCHEWAN 71

Introduction 71
The Department of Education 71
The Highway Traffic Board 72

THE ADMINISTRATION OF PUPIL TRANSPORTATION IN MANITOBA 72

Introduction 72
The Department of Highways 72
Motor Vehicles Branch 72
Inspection of new pupil transportation vehicles 73
Safety statistics 73
The Department of Education 73
Supervisor of Transportation 73
The Public Schools Finance Board 74

SUMMARY 75

Alberta 75
Saskatchewan 75
Manitoba 75

VI. FISCAL MODELS FOR THE FINANCING OF PUPIL TRANSPORTATION 76

INTRODUCTION 76

ALBERTA 76

SASKATCHEWAN 77

MANITOBA 78

PURCHASING SCHOOL BUSES 78

SUMMARY 79

VII. THE EXPENDITURES AND REVENUES OF LOCAL SCHOOL SYSTEMS 80

INTRODUCTION 80

Chapter Page

PUPILS TRANSPORTED FOR WHOM PROVINCIAL GRANTS WERE PAYABLE 80

RURAL/URBAN DIFFERENCES IN THE PROPORTION OF PUPILS TRANSPORTED FOR WHOM PROVINCIAL GRANTS WERE PAYABLE 82

PROPORTION OF PUPIL TRANSPORTATION EXPENDITURE FOR WHICH PROVINCIAL GRANTS WERE PAYABLE 84

RURAL/URBAN DIFFERENCES IN THE PROPORTION OF PUPIL TRANSPORTATION EXPENDITURES FOR WHICH PROVINCIAL GRANTS WERE PAYABLE 84

THE IMPORTANCE OF VARIOUS EXPENDITURE AND REVENUE CATEGORIES 86

Introduction 86
Operating Expenditures 86
Capital Expenditures 87
Revenue Sources 91

PUPIL TRANSPORTATION OPERATING COSTS AS A PROPORTION OF TOTAL OPERATING COSTS 94

INTER-DISTRICT TRANSPORTATION OF PUPILS 96

SUMMARY 99

VIII. CHARACTERISTICS OF PRAIRIE SCHOOL BUS FLEETS 101

INTRODUCTION 101

THE SEATING CAPACITY CHARACTERISTICS OF PROVINCIAL SCHOOL BUS FLEETS 101

Introduction 101
Alberta Vehicles 101
Saskatchewan Vehicles 103
Manitoba Vehicles 103

THE OWNERSHIP CHARACTERISTICS OF PROVINCIAL SCHOOL BUS FLEETS 103

Introduction 103
School System Owned Versus Contractor Owned . . . 105
Leased Vehicles 105
Chartered Vehicles 105
Private Cars, Station Wagons 105

Chapter | Page

THE PROPORTIONS OF PUPILS TRANSPORTED BY VEHICLES BELONGING TO VARIOUS OWNERSHIP CATEGORIES 105

Introduction 105
Alberta School Systems 107
Saskatchewan School Systems 107
Manitoba School Systems 107

SUMMARY 107

IX. PERSONNEL, GARAGE FACILITIES AND ACCIDENT EXPERIENCE OF LOCAL SCHOOL SYSTEMS 109

INTRODUCTION 109

THE EMPLOYMENT OF TRANSPORTATION SUPERVISORS . . 109

SALARIES PAID TO TRANSPORTATION SUPERVISORS . . . 111

THE EMPLOYMENT OF ASSISTANT TRANSPORTATION SUPERVISORS 111

THE DUTIES OF TRANSPORTATION SUPERVISORS 111

THE USE OF FULL-TIME DRIVERS 117

THE USE OF FULL-TIME PERSONNEL TO DRIVE AND TO PERFORM OTHER DUTIES 117

METHODS OF DETERMINING THE WAGES OF DRIVERS . . . 120

DRIVER MEMBERSHIP IN TRADE UNIONS 120

RESPONSIBILITY FOR PUPIL TRANSPORTATION WHERE NO TRANSPORTATION SUPERVISOR IS EMPLOYED 125

THE PROVISION OF MAJOR GARAGE FACILITIES 127

ACCIDENTS INVOLVING INJURY OR DEATH 131

SUMMARY 134

X. OPERATING PRACTICES AND POLICIES OF LOCAL SCHOOL SYSTEMS 135

INTRODUCTION 135

THE GREATEST HOME TO PICK-UP POINT WALKING DISTANCES 135

Chapter Page

THE GREATEST PICK-UP POINT TO SCHOOL TRAVELLING DISTANCES 138

THE GREATEST TIME SPENT FROM PICK-UP POINT TO SCHOOL 141

THE GREATEST NUMBER OF MINUTES BEFORE SCHOOL OPENING THAT PUPILS ARE DROPPED OFF 141

THE GREATEST NUMBER OF MINUTES AFTER SCHOOL CLOSING THAT PUPILS ARE PICKED UP 146

THE GREATEST NUMBER OF MINUTES AFTER SCHOOL CLOSING THAT PUPILS ARE DROPPED OFF 146

SCHOOL SYSTEM POLICIES CONCERNING THE NEARNESS TO GATES OF PICK-UP AND DROP-OFF POINTS 150

POLICIES CONCERNING STANDEE PASSENGERS 151

THE USE OF SEAT BELTS 151

PUPIL INSTRUCTION IN SAFE-RIDING PRACTICES . . . 155

THE USE OF MONITORS OR PROCTORS 155

THE TYPES OF PERSONS USED AS MONITORS 157

THE CURRICULAR AND EXTRACURRICULAR USE OF VEHICLES 157

COMMUNITY USE OF VEHICLES 162

THE USE OF STAGGERED OPENING AND CLOSING TIMES . 162

THE NUMBER OF PUPILS TRANSPORTED PER BUS ROUTE . 164

THE DAILY ROUTE MILEAGE PER PUPIL TRANSPORTED . . 167

SUMMARY 169

XI. BENEFITS AND PROBLEMS ASSOCIATED WITH PUPIL TRANSPORTATION 171

INTRODUCTION 171

BENEFITS 171

PROBLEMS 175

Chapter		Page
	SUMMARY	179
XII.	SUMMARY AND CONCLUSIONS	180
	SUMMARY	180
	The Problem	180
	The Design of the Study	180
	MAJOR FINDINGS	181
	Administration and Supervision at the Provincial Levels	181
	Provincial Financing Formulae	182
	Costs of Local School Systems	182
	Administration and Supervision at the Local School System Levels	182
	Operating Practices of Local School Systems	183
	Vehicle Fleets	183
	Benefits and Problems Associated with Pupil Transportation	184
	CONCLUSIONS	184
	AREAS FOR FURTHER STUDY	185
	Introduction	185
	Safety Training for Pupils	185
	Safety Training for Drivers	185
	Factors Related to School Bus Accidents	186
	Safety Legislation and Regulations and Their Enforcement	186
	Financing Formulae	186
	Maintenance of Vehicles	187
	The History of Pupil Transportation	187
APPENDIX A	PRELIMINARY LETTER	188
APPENDIX B	QUESTIONNAIRE	191
APPENDIX C	FOLLOW-UP LETTER	204
APPENDIX D	INTERVIEW SCHEDULE	206
APPENDIX E	AN EXTRACT FROM THE BRITISH NORTH AMERICA ACT, 1867	208
APPENDIX F	EXTRACT FROM THE MANITOBA ACT, 1870	210
APPENDIX G	EXTRACT FROM THE SASKATCHEWAN ACT, 1905 AND THE ALBERTA ACT, 1905	212

Chapter Page

BIBLIOGRAPHY 214

LIST OF TABLES

Table		Page
1.	Responses to the Questionnaire by Province at April 1 and May 31, 1973	35
2.	Response Rates by Various Types of School Systems (Percentages)	37
3.	Type of Response by School System Types	39
4.	Classification of School Systems Into Three Rural/Urban Groups	42
5.	Positions of the Respondent to the Questionnaire	43
6.	Students Transported in Respect of Whom Provincial Grants Were Receivable as a Percentage of Total Students Transported - 1972	81
7.	The Relationship Between the Number of Pupils Transported and the Number of Pupils in Respect of Whom Provincial Transportation Grants Were Payable - 1972	83
8.	Provincial Grants Receivable as a Percentage of Total Pupil Transportation Expenditure - 1972	85
9.	Various Expenditure Categories as a Percentage of Total Pupil Transportation Operating Expenditures - 1972	88
10.	Various Expenditure Categories as a Percentage of Total Pupil Transportation Capital Expenditures - 1972	90
11.	Various Revenue Sources as a Percentage of Total Pupil Transportation Revenue - 1972	92
12.	Pupil Transportation Expenditures as a Percentage of the Total Operating Budget - 1972	95
13.	Pupils Transported Into School Systems Daily Under Transportation and/or Tuition Agreements - 1972	97

Table | Page

14. Pupils Transported Out of School Systems Daily Under Tuition and/or Transportation Agreements - 1972 98

15. Passenger Seating Capacity Characteristics of Pupil Transportation Vehicles - 1973 102

16. Ownership Characteristics of Pupil Transportation Vehicle Fleets - 1973 104

17. Pupils Transported on Vehicles Belonging to Various Ownership Categories - 1973 106

18. The Employment of Transportation Supervisors and Assistant Transportation Supervisors and Related Factors - 1973 110

19. Job Descriptions of Pupil Transportation Supervisors - 1973 112

20. The Terms of Employment of Pupil Transportation Drivers - 1973 118

21. The Methods of Determining Salaries of Pupil Transportation Drivers in School Systems Which Operate Vehicles - 1973 121

22. The Unionization of Pupil Transportation Drivers - 1973 123

23. Officials Responsible for Pupil Transportation Where No Transportation Supervisor is on Staff - 1973 . . . 126

24. The Provision of Maintenance Facilities by School Systems Operating Vehicles - 1973 128

25. The Employment of Vehicle Maintenance Personnel by School Systems Operating Vehicles - 1973 129

26. Contracting of Maintenance by School Systems Operating Vehicles - 1973 130

27. Accidents Involving Personal Injury or Death from 1970 to 1972 132

28. Rate of Accidents Involving Personal Injury or Death . 133

29. The Greatest Home to Pick-up Point Walking Distance Required of any Transported Pupil - 1973 136

Table

Page

30. The Greatest Pick-up Point to School Distance Travelled by Any Transported Pupil - 1973 139

31. The Greatest Time Spent by Any Pupil on a Vehicle from Pick-up Point to School - 1973 142

32. The Greatest Number of Minutes Before School Opening that Any Pupil is Dropped off at His School - 1973 . . 144

33. The Greatest Number of Minutes After School Closing that Any Pupil is Picked Up - 1973 147

34. The Greatest Number of Minutes After School Closing that Any Pupil is Dropped Off by a Transporting Vehicle - 1973 148

35. The Policies of School Systems With Respect to the Type of Pick-Up and Drop-Off Service Provided - 1973 . 152

36. The Policies of School Systems with Respect to Standee Passengers - 1973 153

37. The Use of Seat Belts on Pupil Transportation Vehicles - 1973 154

38. The Frequency of Instruction in Safe-Riding Practices, Including Participation in Emergency Evacuation Drills - 1973 156

39. The Use of Monitors or Proctors to Aid in Loading and Unloading Vehicles and to Free the Driver from Tending the Passengers While Driving - 1973 158

40. The Types of Persons Used as Monitors or Proctors on Pupil Transportation Vehicles - 1973 159

41. The Percentage of Total Operating Costs (Transportation) Expended for Curricular and Extracurricular Purposes - 1972 160

42. The Use of Pupil Transportation Facilities for Community (Non-School) Purposes - 1972 163

43. The Use of Staggered School Opening and Closing Times to Increase the Effectiveness of the Pupil Transportation Programme - 1973 165

44. The Mean Number of Pupils per Transportation Route - 1973 166

Table

Page

45. The Number of Route Miles per Transported Pupil - 1973 168

46. The Number of Times that Various Benefits Deriving from the Use of Pupil Transportation Were Mentioned by Respondents to the Questionnaire 172

47. The Number of Times that Various Problems Related to the Use of Pupil Transportation Were Mentioned by Respondents to the Questionnaire 176

CHAPTER I

THE PROBLEM

INTRODUCTION

The daily transportation of pupils to schools in Canada, at public expense, is an operation involving the movement of close to two million school children at an annual expenditure of nearly two hundred million dollars.[1] The safe and efficient operation of their respective pupil transportation systems is a major concern of educational administrators and elected officials in every province of Canada.

SETTING OF THE PROBLEM

The Canadian System of Education

Under Section 93 of the British North America Act of 1867 and related statutes, the provinces of Canada exercise exclusive responsibility for the education of persons living within their boundaries, with the exception of treaty status native peoples and the dependents of certain federal government employees whose education is the responsibility of the Government of Canada.[2] As a result of provincial independence in the field of education it is inevitable

---

[1] Estimates based on information in the annual reports and other publications of the various provincial departments of education.

[2] W. H. Lucow, The Canadian System of Education, Dominion Bureau of Statistics (Ottawa: Queen's Printer, Revised January 1970), p. 1.

that considerable variation should exist among the various educational programmes.

Inter-provincial exchanges of information concerning educational programmes are neither frequent nor comprehensive. Each provincial government prepares an annual report concerning its activities in the field of education, but the reports vary in format and the information given may or may not be comparable to information given under similar headings in the reports of other provincial governments.

However, in spite of the independence of the provinces, developments in one province are of interest to educators in the other provinces. Statistics Canada, a federal government agency, gathers and publishes educational information but, in the field of pupil transportation, its activities have not been extensive. On the recommendation of the now defunct Ministers Information Systems Committee, Statistics Canada has been gathering certain data on pupil transportation in Canada. To date, no general findings have been published. A small amount of comparative data has been provided to school boards, however.[3]

The Prairie Region

The Provinces of Alberta, Saskatchewan and Manitoba form the Prairie Region. Although the three provinces are now entirely independent in the administration of education, their educational systems were for some time parts of a single jurisdiction. Manitoba

---

[3]Statement by Chief, Facilities Sub-System, Statistics Canada, telephone interview, June 18, 1973.

became a province in 1870 but Saskatchewan and Alberta were not formed until 1905. During the period "before Saskatchewan and Alberta became provinces their schools were administered from Manitoba and their teachers were trained there."[4]

In addition to sharing a common history, the three provinces have many geographical and economic similarities. The dominating geographical feature of the more populated areas of the three provinces is the grain-growing prairies which spread from south-eastern Manitoba through Saskatchewan to western Alberta. Throughout the entire region the price of wheat and the size of the grain crop are considered to be major economic indicators.

The common historical, geographical and economic features linking the Prairie Provinces tend to make them a natural unit well suited to the methods of comparative study. The results of such studies in education are of interest to educators throughout the region.

Pupil Transportation in the Prairie Region

Pupil transportation is an important feature of the respective educational systems in the Prairie Provinces. Large numbers of pupils are transported to schools daily and the expenditures involved are significant portions of the total expenditures for primary and secondary education in each of the provinces.

In 1970 the expenditure for "conveyance and maintenance" of pupils in the Province of Alberta was $20,124,240 out of a total

---

[4] Lucow, op. cit., p. 9.

expenditure of $343,160,112.[5] The Province of Saskatchewan expended $14,665,323 on "conveyance and related services" in 1970 out of a total expenditure of $164,754,282.[6] In the same year, the expenditure for pupil transportation and related expenditures in the Province of Manitoba was $9,783,697 out of a total expenditure of $162,674,770.[7] Thus, in 1970, nearly six per cent of the total expenditures for primary and secondary education in the Province of Alberta, just over six per cent of those in the Province of Manitoba and nearly nine per cent of those in the Province of Saskatchewan were made in respect of pupil transportation.

STATEMENT OF THE PROBLEM

The purpose of this study was to examine pupil transportation in the Provinces of Alberta, Saskatchewan and Manitoba and to make inter-provincial comparisons. The aspects of pupil transportation which were studied were:

A. administration and supervision at the provincial levels, including an examination of the fiscal models employed in financing pupil transportation,

B. administration and supervision at the local school system levels,

---

[5] Province of Alberta, The Sixty-Sixth Annual Report of the Alberta Department of Education 1971, (Edmonton: Queen's Printer, 1972), p. 162.

[6] Province of Saskatchewan, Sixty-Sixth Annual Report, Department of Education 1970/71, (Regina: Printer to the Queen's Most Excellent Majesty, 1971), p. 55.

[7] Province of Manitoba, 1970/71 Annual Report, Department of Youth and Education, (Winnipeg: Queen's Printer, 1971), pp. 119-120.

C. operating statistics, policies and procedures with respect to

1. numbers of pupils involved,
2. number of routes,
3. route mileages,
4. use of alternative methods of providing the service,
5. quality of service,
6. safety,
7. vehicle drivers,
8. maintenance,
9. vehicle fleets,
10. curricular, extracurricular and community use of vehicles,

D. costs and revenues of local school systems.

RESEARCH QUESTIONS

Ten research questions were stated with respect to various features of the pupil transportation systems of the Provinces of Alberta, Saskatchewan and Manitoba. The questions are concerned with inter-provincial comparisons in some cases, and with comparisons among the provinces on the basis of three rural/urban classifications[8] of local school systems within the three provinces in others.

Question 1.

Is there a difference at the provincial level in the supervision and administration of pupil transportation? Specifically, is there a difference:

a) in the legislation and regulations governing provincial support of pupil transportation?

b) in the provincial policies affecting purchasing procedures employed by local school systems in obtaining school buses?

---

[8] Infra, p. 12.

Question 2.

Were there differences among the provinces, in 1972, in the financing of pupil transportation? Specifically, were there differences:

a) in the proportions of pupils transported at the expense of local school systems in respect of whom provincial grants were payable?

b) among the three rural/urban classifications of school systems, in the proportions of pupils transported at the expense of local school systems in respect of whom provincial grants were payable?

c) in the proportions of total pupil transportation expenditures incurred by local school systems in respect of which provincial grants were receivable?

d) among the three rural/urban classifications of school systems, in the proportions of total pupil transportation expenditures incurred by local school systems in respect of which provincial grants were receivable?

e) in the importance of various expenditure and revenue categories in the pupil transportation budgets of local school systems?

f) in the proportions of total operating expenditures incurred by local systems which were in respect of pupil transportation?

g) in the extent of inter-district transportation of pupils?

Question 3.

Are there differences among the provinces with regard to certain characteristics of their respective school bus fleets? Specifically, are there differences:

a) in the seating-capacity characteristics of the vehicles employed?

b) in the ownership of the vehicles?

c) in the proportions of pupils transported by vehicles belonging to each of five ownership categories?

Question 4.

Are there important inter-provincial differences, among the three rural/urban classifications of school systems with respect to the pupil transportation personnel employed? Specifically, are there important differences:

a) in the extent to which local school systems employ transportation supervisors?

b) in the salaries paid by local school systems to transportation supervisors?

c) in the extent to which local school systems employ assistant transportation supervisors?

d) in the proportion of their time spent by transportation supervisors on various duties?

e) in the use of full-time pupil transportation drivers?

f) in the use of full-time personnel to perform pupil transportation driving duties along with other duties?

g) in the methods adopted for the determination of wages for pupil transportation drivers?

h) in the extent to which pupil transportation drivers are members of trade unions?

Question 5.

Are there differences among the provinces in the officials most often responsible for pupil transportation where no transportation

supervisor is employed?

Question 6.

Are there important differences among the provinces in the extent to which local school systems maintain major garage facilities?

Question 7.

Were there important differences in the period from January 1, 1970 to December 31, 1972, among the three rural/urban classifications of school systems in the rate of pupil transportation accidents involving pupil injury or death?

Question 8.

Are there important inter-provincial differences, among the three rural/urban classifications of school systems in pupil transportation operating practices and policies? Specifically, are there important differences:

a) in the greatest home to pick-up point walking distances required of any transported pupils?

b) in the greatest distance travelled by any transported pupils on transportation vehicles in travelling from the pick-up point to school?

c) in the greatest time spent by any transported pupils on transportation vehicles in travelling from the pick-up point to school?

d) in the greatest number of minutes before school opening that any pupils are dropped off at school?

e) in the greatest number of minutes after school closing that any pupils are picked up at school?

f) in the greatest number of minutes after school closing that any pupil is dropped off by a transporting vehicle?

g) in the policies adopted with respect to the nearness to pupils' gates of designated pick-up and drop-off points?

h) in respect of policies concerning standee passengers in pupil transportation vehicles?

i) in the extent of the use of seat belts in pupil transportation vehicles?

j) in the frequency of pupil instruction in safe-riding practices?

k) in the use of monitors or proctors on pupil transportation vehicles?

l) in the type of persons used as monitors or proctors on pupil transportation vehicles?

m) in the extent of use of pupil transportation facilities for curricular and extracurricular purposes?

n) in the extent of use of pupil transportation facilities at the expense of local school systems for, non-school, community purposes?

o) in the use of staggered opening and closing times for schools in order to improve the effectiveness of the pupil transportation programmes?

p) in the number of pupils transported daily per school bus route?

q) in the daily route mileage per pupil transported?

Question 9.

Are there differences, among the provinces, in the

administrative and instructional benefits derived from the use of pupil transportation, as perceived by school system officials?

Question 10.

Are there differences, among the provinces, in the major problems which result from the use of pupil transportation, as perceived by school system officials?

SIGNIFICANCE

Pupil transportation in the Prairie Region involves the transportation of over two hundred thousand children[9] and the expenditure of scores of millions of dollars of public funds.

The exchange of information between provinces is, as previously mentioned, not comprehensive. Thus, those concerned with the administration of pupil transportation are not able to benefit fully from the experience of their colleagues in neighbouring provinces.

The present study is a broad survey. In addition to providing a source of information for policy makers and administrators in the Prairie Region, the study is also meant to identify areas where further investigation is needed.

DELIMITATIONS

The study was limited to the examination of pupil transportation programmes operated in the Provinces of Alberta, Saskatchewan and Manitoba. Practices in the publicly supported, public and separate

---

[9] Estimate based on preliminary data gathered by Dr. P. J. Husby (Appendix A).

school systems and administration at the provincial levels were examined, with emphasis placed on the 1972 calendar year. However, certain safety statistics were sought for the 1970 and 1971 calendar years, as well, and certain current (1973) information was also sought.

LIMITATIONS

The use of a questionnaire to collect data resulted in a degree of incompleteness due to the inevitable failure of certain recipients to reply. However, every effort was made to ensure as complete a return as possible. These efforts are detailed in Chapter III.

Certain questions may have been considered by the recipients of the questionnaire to have requested confidential information or information that may have been considered to reflect badly on the school system which they represented. This may have affected the total response rate or the rate of response to individual items on the questionnaire. To minimize this danger a specific undertaking was given that no individual school system would be identified in the findings of the study.

DEFINITION OF TERMS

For the purpose of this study the following definitions will apply:

Local School System: any publicly supported, public or separate school, or group of such schools, operating within the delimitations of this study, with the exception of schools under the jurisdiction of the Government of Canada.

Rural School System: a local school system serving a population at least two-thirds of which is located in a rural area.

Mixed School System: a local school system serving a population, less than two-thirds, but at least one-third of which is located in a rural area.

Urban School System: a local school system serving a population less than one-third of which is located in a rural area.

Rural Area: an area consisting of a community or communities with populations of less than five thousand persons.

Urban Area: a community with a population greater than five thousand persons.

School Bus: a vehicle used under the authority of, or under a contract made with, a local school system in transporting children and other authorized persons to and from a school, or in connection with any other activity related to a school curriculum or activity.

School Bus Ownership Categories: five categories of vehicles used to transport pupils at the expense of local school systems are: (1) school system owned or leased, (2) school system chartered, (3) contractor owned and operated, (4) parent owned and operated, (5) public transit system owned and operated.

CHAPTER II

REVIEW OF THE LITERATURE

INTRODUCTION

Due to the survey nature of this study virtually any mention of pupil transportation in the literature would be relevant. The problem, therefore, has been to select a representative sample of the studies, reports and articles that have been published on the topic as they relate to the several facets of the present study.

ARGUMENTS FOR AND AGAINST PUPIL TRANSPORTATION

Over one hundred years ago the Massachusets General Court authorized the transportation of pupils to and from school at public expense.[1] Arguments for and against pupil transportation at that time have been recorded by Latta.

> Nevertheless, the idea of pupil transportation at public expense took some selling. Opposition was strong. Reasons given by some of the critics: Uncertainty about the expense involved, doubt that pupils could be transported safely and comfortably, long absence of children from home (they would have to leave too early and would not get back in time to "do chores")-- and who knew what bad influences lurked across the township line?
>
> In attempting to reason with the opposition, some educational leaders suggested that the public conveyance of pupils might help to equalize the educational opportunities of city and rural children. Wrote one educator: "The health of the children is noticeably better, especially as regards colds, because when conveyed in wagons and landed dry and warm, they are saved from sitting all day with wet

---

[1] Everette Michael Latta, "It's been going for a century", American School Board Journal, CLVII, 5, November, 1969, 30.

> feet and draggled clothing--a result of having to tramp through all kinds of weather." Moreover, with a responsible driver ". . . the girls are protected on the way to and from school and the boys influenced from temptation to quarrels and other misconduct."[2]

Concern over the effects of pupil transportation continues. A recent study by France concluded that the daily journey of pupils to school has no ill effect on the students' achievement while at school.[3]

Arguments have been presented also for and against the instructional or curricular use of pupil transportation. Featherston and Culp have compiled a number of these arguments as they have been presented in the United States. Some of the arguments presented against the curricular use of the vehicles are as follows:

1. School buses were originally provided by the American public to make education available to boys and girls who lived beyond a reasonable walking distance from school.

2. Field trips generally, and school bus trips specifically, are frills and are not legitimately a part of the hard work of education.

3. The limited financial support given most public schools does not permit the use of school buses for instructional purposes.

4. The use of school buses for instructional purposes represents unfair competition for commercial bus lines.

5. The use of school buses for instructional purposes conflicts with their regularly scheduled use for transporting pupils to and from school.

6. School bus trips are actually ineffective as instructional activities.

7. The use of school buses for instruction purposes, even if effective, is limited to relatively few class groups for special projects, and is consequently discriminatory and therefore unworthy of approval.

---

[2]Ibid.

[3]Norman France, The Influence of a Daily Bus Journey on Pupil Achievement (Regina: Saskatchewan School Trustees Association, October, 1970).

8. Other media such as radio, television, and films can and should be used to supplement vicarious learning when necessary, at less cost than school bus operation and with greater coordination with classroom activities.

Opponents of these arguments put their case as follows:

1. The fact that school buses were originally provided to make educational opportunities available to pupils argues not against, but for, the use of school buses for instruction enrichment.

2. The argument that school bus trips are "fads and frills" is part of a general conviction that learning is achieved only through constant, arduous study; that the best learning is least pleasant; that understanding evolves from stoicism; and that strength springs from endurance of adversity.

3. The limitation of funds for public school support is a good reason for seeking effective teaching tools, rather than an argument against instructional use of buses.

4. The argument that instructional use of school buses is unfair competition for commercial bus operators is inapplicable.

5. The argument that instructional use of school buses conflict with their use to transport children to and from school is rejected because the regular schedule for bus service to and from school uses but a small fraction of the day.

6. If school bus trips are ineffective in instruction and result in mere entertainment, the fault lies with the teacher and administrator and not with the principle of the bus use.

7. The argument that there is discrimination in the use of school buses for instructional purposes is invalid because many school activities do not provide participation for all students.

8. The argument that such media as radio, television, and films should be the means to provide concrete experience does not invalidate the use of buses as instructional tools.

The use of school buses for instructional purposes raises a number of legal questions. The utilization of school buses for instructional trips is specifically authorized by law in 20 states and in 2 other states the law is interpreted as granting this authorization. In some instances, the use is confined to certain delineated activities; in some cases, it is restricted by such terms as "school coordinated activities." School transportation systems are used for school activities in all states to some degree but there are no statistics available concerning numbers and kind of trips, miles traveled or number of pupils involved. It can be postulated that transportation for instruction is becoming more common. Some school systems are experimenting with the feasibility of utilizing the time period spent transporting students between home and school for instructional purposes. Recent breakthroughs in educational technology will enhance

the possibility of instruction on bus routes.[4]

SAFETY STANDARDS

Introduction

There has been a continuing controversy in both Canada and the United States over the issue of school bus safety. The National Transportation Safety Board has criticized school buses as being badly built. The industry has denied the charge.[5]

The Consumers Association of Canada has recently become interested in school bus safety as has the Manitoba Motor League. The latter recently published two articles in its journal. The first reported on an investigation carried out by the National Highway Safety Commission respecting a disastrous school bus accident in Colorado.[6] The second was prompted by a rather serious school bus accident in Manitoba and reviewed the administration and supervision of pupil transportation in the province.

The article repeated a 1972 convention resolution of the Manitoba Motor League calling on the Minister of Education to submit the following proposals to the Provincial Legislature:

a) That a clear, concise set of non-conflicting School Bus regulations be set up.

---

[4] E. G. Featherston and D. P. Culp, Pupil Transportation State and Local Programs, (New York: Harper and Row, 1965), pp. 30-32.

[5] "The Clash on School Bus Safety: What the Critics Say--and the Industry's Side as Well," American School Board Journal, January, 1971, pp. 33-34.

[6] "School Buses How Safe Are They?" Manitoba Motorist, XIII (September--October, 1972), pp. 14-16.

b) That a public education program be set up through TV announcements and the news media to inform the public of the laws pertaining to school bus loading, stopping, etc.

c) That the Government Motor Vehicle Branch test all private contract and Division-owned school buses at least once a year.

d) That school bus driver certificates be required by all drivers and renewed every two years.

e) That medical certificates be required each year.[7]

Existing Standards

In addition to the laws and regulations which govern the nature of the vehicles used in pupil transportation and their operation, national standards have been set in Canada and in the United States.

Voluntary Standards

In Canada the Canadian Standards Association Standard D 250 is the recommended minimum standard for the construction of school buses.[8] The standard has been adopted by Alberta for all buses and by Manitoba for buses purchased on behalf of school boards by The Public Schools Finance Board.

Saskatchewan has published a booklet of suggested standards for school buses.[9] The booklet was designed as a guide to trustees and others involved in pupil transportation.

---

[7]"School Bus Safety Part 2, Manitoba Motorist, XIV (January--February, 1973), p. 13.

[8]Canadian Standards Association, CSA Standard D 250 -- 1971 School Buses, (Rexdale, Ontario: Canadian Standards Association, 1971).

[9]Saskatchewan, Department of Education, Suggested Minimum School Bus Standards, (Regina: 1965).

The National Conference On School Transportation has published two booklets of recommendations in the United States. The first is concerned with vehicle standards[10] and the second with standards of school bus operation.[11]

Federal Government Standards

More recently the United States Department of Transportation approved of Highway Safety Program Standard Number 17. Standard 17 ties federal government aid for pupil transportation in the states to their willingness to meet the requirements of the Standard. In fiscal 1973 over eighty million dollars was set aside for state highway safety programs.[12]

No similar federal intervention into the field of pupil transportation has taken place in Canada.

SAFETY TRAINING

Introduction

Two aspects of safety training are of great importance in pupil transportation. These are the training of drivers and the training of pupil passengers.

---

[10] National Conference on School Transportation, Minimum Standards for School Buses, A Report Prepared Pursuant to the 1970 Conference (Tallahassee: Florida, Department of Education, 1970).

[11] National Conference on School Transportation, Minimum Standards for School Bus Operations, A Report Prepared Pursuant to the 1970 Conference (Tallahassee: Florida, Department of Education, 1970).

[12] "A Talk With the Man Behind Standard 17," School Management, November, 1972, p. 17.

Driver Training

Whisman, in Ohio, made a number of recommendations respecting school bus driver education programmes in the United States. The recommendations are:

1. All states should have a mandatory school bus driver education program established by state statute or state board of education regulation.

2. All states should establish formal pre-employment (before transporting pupils) and in-service school bus driver education programs.

3. All states should have training manuals and instructor guides for their school bus driver education courses.

4. All states should have school bus driver instructor certification requirements established by state departments of education.

5. All states should have one person, at the state level, whose primary responsibility is the administration of the school bus driver education program.

6. Each state should have audio-visual materials and a film library for the school bus driver education program.

7. All states should have a uniform instructor salary schedule.

8. There should be a continuous school bus driver education program in the form of school bus driver education courses, refresher courses, and workshops.

9. Each state should establish a policy for paying drivers for the time they are in training.[13]

Several recent programmes have emphasized various aspects of driver training. California[14] has been emphasizing the training of school bus driver trainers. Washington[15] has been emphasizing human relations

---

[13] R. W. Whisman, "History and Current Status of School Bus Driver Education in Ohio and the United States" (unpublished Masters thesis, The Ohio State University, 1971), pp. 43-44 (ERIC ED 052542)

[14] "Two Innovations in Bus Driver Training," School Management, November, 1972, p. 16.

[15] Ibid.

and Iowa has been experimenting with a driving simulator in its programme.[16]

Pupil Training

Featherston and Culp make a number of observations concerning the need to teach pupils safe riding habits. They point out that the training of pupils is absolutely necessary for an effective pupil transportation programme and must not be neglected. Classroom training and on-board training are both necessary.

School systems must do all they can to see that such matters as overcrowded buses, long riding distances and poor equipment do not contribute to behaviour problems and thus, unsafe riding practices.[17]

THE MANAGEMENT OF PUPIL TRANSPORTATION

Introduction

A relatively small amount of literature exists on the management of pupil transportation at the provincial or state levels. Among the material available are a study from Oregon, a statistical summary from Wisconsin and a management handbook from Ontario.

The Oregon Study

A comprehensive study of the business and management functions of elementary and secondary education was carried out in Oregon in 1968--

---

[16]"Iowa Driver Training: Simulated Stress in a 'Wet' Bus," School Management, November, 1972, p. 21.

[17]Fetherston and Culp, op. cit., pp. 79-81.

1969.[18] The recommendations with respect to the operation of pupil transportation in the State were as follows:

1. Establish regional school transportation systems under the State Director of Transportation.

2. Establish centralized school bus maintenance facilities.

3. Establish a state-wide optimum preventive maintenance program and implement it as the regional level.

4. Establish centralized purchasing for all school district vehicles.

5. Perfect standard operating guidelines and an economic valuation procedure for school bus replacement.

6. Purchase school bus supplies on a centralized basis.

7. Assign responsibility for school bus routing to the Regional Field Representative.

8. Regulate official starting and dismissal times to better utilize school buses.

9. Employ collecting points to greater advantage.

10. Utilize bus driver labor hours to better advantage.

11. Reduce secondary responsibilities of drivers.

12. Utilize student labor for routine non-mechanical bus maintenance.

13. Expand the School Bus driver training program at the regional level.

14. Verify reported bus mileage.[19]

The Indiana Statistical Summary

The Indiana publication of pupil transportation statistics contains a number of tables which describe the various operational and financial data related to the transportation of pupils in that state.[20]

---

[18]Business Task Force on Education, Public School Survey and Recommendations, A Report Prepared by the Business Task Force on Education, Incorporated. (Portland: 1969), pp. 72-78.

[19]Ibid.

[20]Wisconsin Department of Public Instruction, Transportation Facts for 1971-72, (Madison: April, 1972).

The data displayed are concerned with the following:

A. Vehicle sizes, ownership, model years and passenger capacities.

B. Pupils transported by grade, distance and vehicle type.

C. Mileage and pupil loads per vehicle.

D. Walking distances to bus routes.

E. Time of first pick-up.

F. Maximum riding time of first student picked up.

G. One-way length of bus route.

H. Cost information by regions.

The Ontario Management Handbook

A recent publication in Ontario is designed to"assist school officials by providing information and guidelines on the management of school transportation systems."[21]

The handbook, which is comprehensive in its scope, is divided into seven sections each one of which deals with an important aspect of pupil transportation management. These are as follows:

A. Transportation Management.
B. Transportation Policies.
C. Information Systems.
D. Route Design and Planning
E. Contracting.
F. Board-owned Operations.
G. Ministry Forms and Procedures.[22]

---

[21]Ontario, Ministry of Education, Managing School Transportation, February, 1973, p. i.

[22]Ibid., pp. i-ii.

The handbook also contains additional information in its appendices.

PUBLIC VERSUS PRIVATE OWNERSHIP

The controversy as to which method of providing pupil transportation is superior, through public ownership of the vehicles or through private ownership, has not been settled.

Fetherston and Culp assembled arguments for both sides of the question. The arguments in favor of public ownership are:

A. Public ownership is cheaper.

B. Public ownership provides better equipment.

C. Public ownership provides better control of buses.

D. Public ownership contributes to safety.

E. Public ownership permits greater use of buses for instruction purposes.

F. Public ownership of buses fits into the general pattern of board ownership of education buildings and equipment.

The arguments in favor of private ownership are:

A. Private ownership of buses is cheaper than public ownership.

B. Private ownership can provide good equipment as easily as public ownership can.

C. Privately owned buses are as easily controlled in service as publicly owned ones.

D. Privately owned buses are as safe or safer than publicly owned ones.

E. Privately owned buses can serve instruction needs as well as publicly owned ones.

F. Privately owned buses do not disrupt any pattern of ownership of education facilities.[23]

Anderson suggests that the size of a school district is an important determiner of whether public or privately owned vehicles would be most suitable. He suggests that perhaps smaller districts would benefit more from the use of contractors and larger districts from the use of school system owned vehicles.[24]

A conceptual approach to the contract purchase decision has been outlined by Elwood. It would seem to offer a rational method of arriving at a decision concerning the amount of school system and/or contractor owned vehicles to be employed.

Elwood asks:

> What makes one alternative more acceptable than another? In examining this question it is helpful to think in terms of four "viability" criteria -- namely, feasibility, utility, economy, and compatibility.
>
> The feasibility of a system is gauged by whether it satisfies operational requirements and constraints and hence is physically realizable.
>
> The utility of a system is measured by the user -- the teacher, the principal, the student. Transportation must be safe, adequate, and convenient.
>
> The economy of a system is determined by whether it provides the specified transportation service at a competitive cost.
>
> Finally, the compatibility of a system is assessed by whether feasibility, utility, and economy are combined in a way that the public, through their elected representatives, the members of the board, can accept. It must be compatible with political reality.
>
> When alternative systems from the contract-purchase mix are tested using these criteria, a rather powerful mechanism for selection operates. For example, if the aggregate privately owned fleet in a county is 70 buses and its expansion capability appears to be nil, then an entire block of possible alternatives is

---

[23] Featherston and Culp, op. cit., pp. 102-4.

[24] B. Robert Anderson, "Merrily We Roll Along," School Management, November, 1972, pp. 13-15, 40.

eliminated -- combinations requiring more than 70 contracted buses are not feasible. Each criterion exerts some influence on the selection process.[25]

FINANCING PUPIL TRANSPORTATION

Introduction

The financing of pupil transportation is an area where a considerable amount of research has been carried out. The development of an equation for accurately predicting the costs to be expected, the development of provincial or state financing formulae and the study of costs have all been popular topics for study. Some of these studies will be mentioned in the following discussion.

The Development of a Cost Equation

Sawatsky, in Manitoba, isolated from research studies and formulae in use four classes of factors which affected pupil transportation costs. These were:

1. the number of pupils transported;
2. the area served;
3. the policies of local school boards;
4. the topography of the region.[26]

Six measures of costs were developed and an equation was derived based on three of them which accurately predicted expected costs. The three measures were:

---

[25]Bryan C. Elwood, Student Transportation: Comparing Alternative Methods of Providing the Service (Toronto: The Ontario Institute for Studies in Education, 1970) p. 2.

[26]Aron Sawatsky, "An Interpretive Study of Factors Related to Transportation Costs in the School Divisions of Manitoba" (unpublished Master's thesis, University of Manitoba, Winnipeg, 1968) p. 52.

A. the number of transported pupils per square mile of organized territory.

B. the assessed valuation per transported pupil.

C. the bus mileage per square mile of organized territory.[27]

The Development of Financing Formulae

An undated paper published by the Alberta Department of Education, traces the changes in that province's pupil transportation formulae from 1950 through to 1968.[28]

The formula for the years 1950 to 1954 was based on route miles and pupil load. From 1955 to 1957 school boards were paid a grant equal to forty per cent of the boards actual expenditure for conveyance service. For 1958 and 1959 the boards obtained a grant of fifty-five per cent of the previous years cost and in 1960 fifty-seven per cent was paid.

In 1961 a complicated formula based on a district distance factor was used. This formula was abandoned after one year.

In 1962 and 1963 support for conveyance costs were based on a sparsity factor.

In 1964 support was based on a three year moving average concept which, with small adjustments, was used until 1968.

---

[27]Ibid., p. 53.

[28](The Alberta Department of Education) Progress Report on a Study of Rural School Transportation (Edmonton: (1969)), pp. 1-2. (Mimeographed)

Criteria For Financing Formulae

The State of New Mexico published criteria for pupil transportation financing formulae. According to the criteria any state (or provincial) plan for financing pupil transportation should:

1. Provide sufficient state funds to enable the local unit, with reasonable local effort, to operate safe, economical, efficient, sound, and practical system of transportation for all pupils who should be transported.

2. Tend to compensate for the additional burden that falls upon school districts which must provide pupil transportation. (Many school districts cannot assume additional costs from local sources)

3. Take into account provisions for capital outlay expenditure, such as purchase of school buses, school bus equipment, and safety equipment.

4. Provide for the amortization of capital outlay expenditures for school buses and equipment that meet state specifications, beyond the current year. (Preferably a four year period.)

5. Tend to stimulate the attainment of desirable standards for school bus equipment, maintenance and operation, and the employment of qualified personnel.

6. Permit at the local level, ready flexibility in making adjustments in the transportation program, such as in cases of emergency increases in number of pupils, reorganization, or consolidation of schools, which require in most instances additional transportation.

7. Require the local school districts or local administrative units to maintain adequate accounting records and reports.

8. Provide for consideration of factors beyond the control of local units, such as population density, road conditions, and geographical barriers.

9. Not tend to discourage desirable reorganization of local units and attendance areas.

10. Provide for distribution of all state monies for transportation on an objective formula:

Capital Outlay
Maintenance and Operation
Driver's Salaries

11. Encourage schools to broaden and extend the school program through the use of school buses, be they school owned or contract buses.

12. Provide for subsistence for pupils in lieu of transportation,

within reasonable limitations.[29]

Costs of School Transportation

A study of the costs of pupil transportation was conducted by France from the budget data of school systems in Saskatchewan. The budget information was for the years 1967-8 and 1968-9.[30]

Five recommendations resulted from the study. These are as follows:

A. Replace contracted service with unit-owned service.

B. Review existing routes to improve their efficiency.

C. Appoint bus supervisors.

D. Running costs should be reviewed and advantage taken of bulk purchases and similar savings.

E. Set up a central consultancy service to advise trustees and others involved in pupil transportation.[31]

CONCLUSION

A reasonably large amount of literature exists in the field of pupil transportation. Certain aspects, however, have received greater attention than others. Among these are the development of cost

---

[29]Dewey H. Stollar, "Pupil Transportation," Planning to Finance Education, Vol. III, Chapter 9 (Gainsville, Florida: National Education Finance Project, 1971), pp. 358-9 (ERIC ED 052515), citing "Proposal for Financing School Transportation in New Mexico," Prepared by Staff of Division of Transportation, Department of Education, State of New Mexico, 1964.

[30]Norman France, Student Transportation in Saskatchewan a Survey of Costs (Regina: Saskatchewan School Trustees Association, October, 1970).

[31]Ibid., pp. 5-6.

equations and finance formulae. Regional or national studies comparing practices in neighbouring jurisdictions are quite rare. Canadian literature of this nature is particularly scarce.

Literature which has not been referred to directly in this chapter but which is relevant to the study has been listed in the Bibliography.

CHAPTER III

DATA COLLECTION AND ANALYSIS

INTRODUCTION

Ten research questions, a number of which are divided into sub-questions, were proposed for the study of the problem. The questions were enumerated in full in Chapter I. The data to answer the research questions were collected by three principle methods. A questionnaire was designed and sent to school systems. An interview schedule was developed for administration to officials at the provincial levels. Finally, legislation and regulations were examined.

THE QUESTIONNAIRE

A questionnaire[1] was developed to gather data on pupil transportation from local school systems operating within the geographical delimitations of the study.

An initial version of the questionnaire was developed following a review of the literature on pupil transportation. In order to test the applicability of the instrument in each of the three provinces a total of twelve officials with pupil transportation responsibilities were consulted. Three of the officials were from Alberta, six from Saskatchewan and three from Manitoba. The senior pupil transportation official in the respective Departments of Education were among those

---

[1] Appendix B.

consulted. The remaining nine officials included three superintendents, five secretary-treasurers and one transportation supervisor. The questionnaire was modified in accordance with the criticisms and suggestions received.

INTERVIEW SCHEDULE

The role of the provincial departments of education and other departments involved in the administration and supervision of pupil transportation was examined. The statutes, regulations and reports of the respective governments were examined and responsible officials were interviewed.

An interview schedule[2] was developed in order to determine the extent to which various officials were involved with the administration and supervision of pupil transportation.

Only one of the provinces included in the study, Manitoba, has an official with a title indicating that he is responsible for pupil transportation. It was anticipated, however, that in all three of the provinces the responsibility would be diffused among two or more officials in two or more government departments. Thus, several officials were interviewed in each province. These officials were located in departments concerned with education and highway safety.

FISCAL FINANCING MODELS

The methods used by the three provinces to assist the local school systems in financing their pupil transportation programmes were

---

[2] Appendix D.

examined. Models similar to those outlined by Stollar were used as a basis for comparing the financing arrangements in current use.[3]

Fiscal Models

Model 1 - No Provincial Aid for Pupil Transportation.

Model 2 - A Flat Provincial Grant per Transported Pupil.

Model 3 - Full Provincial Recognition of the Varying Costs of Pupil Transportation Beyond the Control of Local School Systems.

Model 4 - Provincial Ownership and Operation of the Pupil Transportation System.

Model 5 - Provincial Payment of the Entire Approved Cost of Pupil Transportation.

Model 6 - Provincial Payment of a Fixed Percentage of Pupil Transportation Costs.

In the use of any of the above fiscal models or variations thereof, provincial funds may be provided in either of two ways:

a) through a special earmarked grant,

b) as part of an integrated foundation programme.

DISTRIBUTION OF THE PRELIMINARY LETTER, QUESTIONNAIRE AND FOLLOW-UP LETTER

Prior to the despatch of the questionnaires a preliminary letter[4] was sent to each school system advising it of the existence of the study and asking for its cooperation. The questionnaire and a follow-up letter,[5] where necessary, were both addressed to the

---

[3] Stollar, pp. 354-58.

[4] Appendix A.

[5] Appendix C.

Superintendent. If no superintendent was listed by the Department of Education concerned, the material was then addressed to the Secretary-Treasurer.

Mailing Lists

The Alberta lists[6] of school systems showed 143 public and separate school systems which were operating at least one school. The Saskatchewan lists[7] showed 126 such systems and the Manitoba lists[8] showed sixty-one public school systems.[9] This study, therefore, has been based on a total population of 330 public and separate school systems in the Prairie Provinces.[10]

RESPONSE TO THE QUESTIONNAIRE

The preliminary letter was sent out to the school systems in mid February, 1973, and was followed late in the same month by the questionnaire and covering letter. By the end of March the overall response rate had reached thirty-five per cent; thirty-five per cent

---

[6] Alberta School Division and County List No. 2, September, 1972.

[7] List of School Units, February, 1972.
Non-Unit Operating School Districts 1972-73.

[8] Bulletin, September, 1972, Vol. XI, Number I, pp. 3-6.

[9] Separate school systems in Manitoba do not receive substantial revenues from public funds and are considered to be private schools.

[10] Questionnaires were also sent to private schools in Saskatchewan and Manitoba. However, the data collected from private schools will not be reported in this study.

from Alberta, twenty-nine per cent from Saskatchewan and forty-nine per cent from Manitoba.

The follow-up letter, along with a second copy of the questionnaire, was sent early in April to those school districts which had not yet responded. This was followed by a telephoned reminder which reached most of the larger school systems and some, though not all, of the smaller systems.

The final overall response rate was seventy per cent. The final response rate from Alberta was seventy per cent; from Saskatchewan the rate was over sixty-three per cent and from Manitoba the rate was eighty-five per cent. (See Table 1). The response rate was considered to be adequate for the purposes of the study.

PROVINCIAL RESPONSE PATTERNS

It was important not only that sufficient responses to the questionnaire should have been received from each province, but also that all of the major types of school systems within each province should be sufficiently represented. An examination of the departmental lists shows that Alberta's school systems may be logically classified into four categories, Saskatchewan's school systems into three categories and Manitoba's school systems into two categories.

Alberta Response Pattern

The 143 Alberta school systems included in the study included thirty School Divisions, thirty County School Districts, nineteen City School Districts and sixty-four Town, Village, Consolidated and Regional High School Districts. The response rates for the four groups of school

Table 1

Responses to the Questionnaire by Province
at April 1 and May 31, 1973*

		April 1	May 31
Alberta	(143)	50	101
Saskatchewan	(126)	36	80
Manitoba	(61)	30	51
Total	(330)	116	232
		Percentages	
Alberta		35	71
Saskatchewan		29	63.5
Manitoba		49	84
Total		35	70

*The number of questionnaires distributed is shown in brackets.

were eighty per cent, eighty per cent, sixty-three per cent and sixty-three per cent, respectively.

Saskatchewan Response Pattern

The 126 school systems in Saskatchewan included sixty School Units, thirty-two Rural, Village and Town School Districts and thirty-four City School Districts. The response rates were sixty-seven per cent, forty-one per cent and seventy-nine per cent, respectively.

Manitoba Response Pattern

The sixty-one school systems in Manitoba included forty-seven School Divisions and a group of fourteen other types of school systems. The response rates were eighty-seven per cent and seventy-nine per cent, respectively.

Summary

The response rates for each school system type within the three provinces was at a rate of over sixty per cent, with the exception of the group of thirty-two Rural, Village and Town School Districts in Saskatchewan. The response rate for this group was forty-one per cent. There appeared to be no reason to believe, however, that the respondents represented a biased sample of the total population of the group. It was considered, therefore, that each type of school system within each of the three provinces, with the possible exception of one type of school system in Saskatchewan, was sufficiently represented. These results are shown in Table 2.

RESPONSE TYPES

Questionnaires were sent to a total of 330 school systems in the

Table 2

Response Rates by Various Types of School Systems (Percentages)

Alberta		Saskatchewan		Manitoba	
School Divisions	80	School Units	67	School Divisions	87
Counties	80	Rural, Village and Town School Districts	41	Other School Systems	79
City School Districts	63	City School Districts	79		
Town, Village, Rural Consolidated and Regional High School Districts	63				

Prairie Provinces. Responses were received from 232 school systems. Of these, 161 school systems reported that they were providing transportation service to some or all of their pupils and included data on this service. Forty-two school systems reported that they did not provide transportation for their pupils. Sixteen school systems reported that transportation for their pupils was provided by a second school system. Four school systems provided data in an unusuable form and nine school systems responded stating various reasons that they were unable to provide data. These reasons included a lack of time and the unwillingness of other officials to cooperate in completing the questionnaire. These results are shown in a detailed form in Table 3.

It should be noted that the data from three closely related urban school systems in Saskatchewan were lumped together by the respondent.

RURAL/URBAN NATURE OF THE SCHOOL SYSTEMS

Each respondent to the questionnaire was asked to classify the school system covered by his reply in terms of its rural/urban nature. For this purpose communities having a population of fewer than five thousand residents were to be considered as rural areas and communities with five thousand or more residents were to be considered as urban communities. Three classifications were possible: (a) at least two-thirds rural, (b) from one-third to two-thirds rural, (c) less than one-third rural. For the purposes of this study the three classifications are referred to as rural, mixed and urban.

Table 3

Type of Response by School System Types

	Data provided	Transportation provided by another school system	No pupil transportation provided
Alberta			
School Divisions	23	0	0
Counties	21	0	0
City School Districts .	11	0	1
Town, Village, Rural Consolidated and Regional High School Districts	14	10	14
Total	69	10	15
Saskatchewan			
School Units	39	0	0
Rural, Village and Town School Districts .	6	2	5
City School Districts .	5*	4	16
Total	50	6	21
Manitoba			
School Divisions	36	0	1
Other School Districts .	6	0	5
Total	42	0	6
Grand Total . .	161	16	42

*The data from three closely related City School Districts was lumped together by the respondent.

continued . . .

Table 3 (continued)

	Data Provided in an Unusable Form	No Data Provided	Total
Alberta			
School Divisions	0	1	24
Counties	0	3	24
City School Districts	0	0	12
Town, Village, Rural Consolidated and Regional High School Districts	2	1	41
Total	2	5	101
Saskatchewan			
School Units	0	1	40
Rural, Village and Town School Districts	0	0	13
City School Districts	2	0	27
Total	2	1	80
Manitoba			
School Divisions	0	3	40
Other School Districts	0	0	11
Total	0	3	51
Grand Total	4	9	232

Alberta

Alberta respondents classified sixty-six school systems as rural, seven school systems as mixed and eighteen school systems as urban. Ten respondents failed to classify their school systems.

Saskatchewan

Saskatchewan respondents classified forty-seven school systems as rural, two school systems as mixed and thirty-one school systems as urban.

Manitoba

Manitoba respondents classified thirty-one school systems as rural, five school systems as mixed and fourteen school systems as urban. One respondent failed to classify his school system.

Summary

Respondents classified 144 school systems as rural, fourteen school systems as mixed and sixty-three school systems as urban. Respondents failed to classify eleven school systems.

Data related to the operation of pupil transportation was supplied by 161 school systems. Of these, 121 were classified as rural, eleven as mixed and twenty-nine as urban. These results are displayed in Table 4.

POSITIONS OF THE RESPONDENTS

The questionnaires were addressed to superintendents of school systems or to secretary-treasurers where the school systems had no superintendents.

Table 4

Classification of School Systems Into
Three Rural/Urban Groups

	Rural	Mixed	Urban	Unknown	Total
Alberta					
School Divisions	21	1	1	1	24
County Districts	22	2	0	0	24
City Districts	1	0	11	0	12
Towns, Villages, Rurals, Consolidates and Regional High School Districts	22	4	6	9	41
Totals	66	7	18	10	101
Saskatchewan					
School Units	39	1	0	0	40
Rural, Village and Town Districts	8	0	5	0	13
City Districts	0	1	26	0	27
Totals	47	2	31	0	80
Manitoba					
School Divisions	24	5	10	1	40
Other Districts	7	0	4	0	11
Totals	31	5	14	1	51
Grand Totals	144	14	63	11	232
Data Provided	121	11	29	0	161

Table 5

Positions of the Respondent
to the Questionnaire

Position	Alberta School Systems*	Saskatchewan School Systems*	Manitoba School Systems*	Totals*
Superintendent or Assistant	27 (27)	26 (33)	15 (29)	68 (29)
Secretary-Treasurer or Assistant	61 (60)	49 (61)	14 (27)	124 (53)
Transportation Supervisor	5 (5)	1 (1)	14 (27)	20 (9)
Administrative Assistant	2 (2)	0 (0)	2 (4)	4 (2)
Principal or Teacher	0 (0)	0 (0)	4 (8)	4 (2)
School Trustee	1 (1)	0 (0)	0 (0)	1 (0)
Not Given	5 (5)	4 (5)	2 (4)	11 (5)
Totals**	101 (100)	80 (100)	51 (100)	232 (100)

*Percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

The largest number of responses from Alberta and Saskatchewan was from secretary-treasurers. Responses from Manitoba were slightly more often from superintendents than from secretary-treasurers. Other responses were sent by various officials including transportation supervisors, administrative assistants, trustees and one principal. Eleven replies were sent by officials whose positions were unidentified. (See Table 5).

ORGANIZATION OF THE FINDINGS

Data relevant to each of the research questions are discussed in various chapters as follows:

Research Questions	Chapters
1	IV, V and VI
2	VII
3	VIII
4, 5, 6 and 7	IX
8	X
9 and 10	XI

SUMMARY

Data was gathered by the use of a questionnaire sent to all public and publicly supported separate school systems in the Prairie Provinces. Officials at the provincial levels were interviewed and the relevant legislation and regulations were examined.

An adequate response to the questionnaires was received from each province and from particular classifications of school systems within

each province. Of the 232 school systems which responded to the questionnaire 161 stated that they were providing transportation for their pupils and supplied data concerning their pupil transportation programmes.

CHAPTER IV

THE LEGISLATION AND REGULATIONS AFFECTING PUPIL TRANSPORTATION

INTRODUCTION

Under The British North America Act[1] the original members of Confederation were given control of education within their respective boundaries. Later members of Confederation were granted control of education under federal statutes.

Pupil transportation is provided in each of the provinces of Canada under the general authority the provinces have been granted to control education. The Manitoba Act,[2] The Saskatchewan Act[3] and The Alberta Act[4] gave those provinces the right to control education and thus, the right to provide pupil transportation.

The purpose of this chapter is to examine, briefly, the legislation and regulations under which local school systems in the Prairie Provinces are empowered to provide pupil transportation. The sections of the legislation and regulations which refer to provincial financial support of pupil transportation, with emphasis on 1972, will also be examined. A comprehensive study of those sections which refer

---

[1] 30 & 31 Vict. 1867, c. 3, s. 93. (Imp.) (Appendix E.)

[2] S.C. 1870, c. 3, s. 22. (Appendix F.)

[3] S.C. 1905, c. 42, s. 17. (Appendix G.)

[4] S.C. 1906, c. 3, s. 17. (Appendix G.)

to the operation, equipment and construction of the vehicles used in pupil transportation is beyond the scope of this study. However, brief reference will be made to them.

LEGISLATION AND REGULATIONS (ALBERTA)

Introduction

Pupil transportation in Alberta is most affected by two pieces of legislation. These are The School Act[5] and The Public Service Vehicles Act.[6]

The purpose of this section is to examine the principal provisions of the two acts and the regulations made under the acts as they relate to pupil transportation.

The School Act

Transportation must be provided. The School Act applies to all schools operated by school boards or by county education committees in Alberta.[7] The Act provides that a board shall provide transportation[8] or assistance in lieu of transportation[9] for any pupil who is directed by the board to attend a school which is further than three miles from his residence. The transportation route, however, need not pass nearer

---

[5]The School Act, R.S.A. 1970, c. 329.

[6]The Public Service Vehicles Act, R.S.A. 1970, c. 300.

[7]The School Act, R.S.A. 1970, c. 329, s. 2.

[8]Ibid., s. 156(1).

[9]Ibid., s. 158.

than one and one-half miles from the pupil's residence.[10]

Boards may charge a fee. The Act also provides that the board may charge a fee for any transportation service that it provides for pupils.[11]

Provision for regulations. The minister may make regulations concerning payments made by boards in lieu of providing transportation.[12] The Act also provides that the minister shall pay such grants, to boards and counties, from the School Foundation program Fund, as are authorized by regulations made under the Act.[13]

No specific provision is made in The School Act for the minister to make regulations concerning the operation of school buses in Alberta.

Regulations under The School Act

Regulations concerning payments in lieu of transportation. The regulations under The School Act provide that a board may pay such grants in lieu of transportation and such maintenance grants as the board may determine.[14]

Foundation program fund regulations, 1972. For 1972, the

---

[10] Ibid., s. 156(2).

[11] Ibid., s. 156(3).

[12] Ibid., s. 12(1)(k).

[13] Ibid., s. 129(7).

[14] Alta.Regs. 136/70, s. 1. (issued under the authority of The School Act, R.S.A. 1970, c. 329, s. 12(1)(k) and (1).)

School Foundation Program Fund Regulations,[15] Part B, were concerned with amounts payable respecting the transportation and maintenance of pupils. City districts and districts other than city districts were considered separately in the regulations.

1. Districts other than city districts. For districts other than city districts, the regulation defined transported pupils, in respect of whom grants would be paid, as:[16]

A. pupils who were required to be transported under section 156 of The School Act, or

B. pupils who, because of a severe mental or physical handicap, needed to be transported for a distance less than one and one-half miles, or

C. pupils for whom a transportation and/or tuition agreement with another board was in effect, or

D. pupils who resided in unorganized territory.

The regulations provided that transportation to and from school only once per day would be recognized.[17]

Transported pupils could also have included pupils who were transported from one school to another for acceptable instructional purposes.[18]

---

[15] Alta. Regs. 129/72. (issued under the authority of The School Act, R.S.A. 1970, c. 329, s. 129(7).)

[16] Ibid., s. 5(1)(a).

[17] Ibid., (b).

[18] Ibid., (c).

2. Amounts payable to districts other than city districts. The amounts payable, in 1972, in respect of transportation expenditures to school districts other than city school districts was determined by reference to the amounts payable under previous regulations. The amount payable in 1972 was the amount payable in 1971 under Alberta Regulation 101/71,[19] plus a depreciation allowance of $150 for each bus.[20] One spare bus could be counted for each ten buses owned and regularly operated by the board.[21] No allowances were payable in respect of buses more than eight years old.[22]

Under Alberta Regulation 101/71 the amount payable to a district was the greater of,[23]

A. the average of the total approved transportation costs for 1968, 1969 and 1970, or

B. the amount payable in 1969.

Payments in lieu of transportation were set, in 1972, as the lesser of ninety per cent of the cost to the board or ninety per cent of two dollars and fifty cents per day, except in the case of children transported by an organization or agency where the amount was the lesser of the cost to the board or ninety per cent of two dollars per day.[24]

---

[19] Ibid., s. 2(a).

[20] Ibid., (b)(i) and (ii).

[21] Ibid., (b)(iii).

[22] Ibid., s. 3.

[23] Alta.Regs. 101/71, s. 6(3). (issued under the authority of The School Act, R.S.A. 1970, c. 329, s. 129(7).)

[24] Alta.Regs. 129/72 s. 6. (issued under the authority of The School Act, R.S.A. 1970, c. 329, s. 129(7).)

3. City districts. City districts were eligible to receive the lesser of ninety per cent of their transportation expenditures or ninety-five dollars for each eligible pupil.[25]

An eligible pupil was one who,

A. resided at a distance greater than one and one-half miles from the school he attended,[26] or

B. a non-resident pupil conveyed with the written concurrence of the board legally responsible for his transport.

Expenditures were to include an amount of $1000 for each bus having a seating capacity of thirty pupils or greater and $850 for each bus having a seating capacity of twenty-nine pupils or fewer. No expenditures were permitted for buses more than eight years old.[27]

Where city districts provided transportation on regularly operated public carriers the amount payable was the lesser of ninety per cent of the cost to the board or forty-five dollars per eligible pupil.

4. Transportation which enabled boards to forego construction. City boards which transported eligible pupils in order to obtain more efficient utilization of existing facilities or to enable the boards to forego construction of new facilities were entitled to receive payments of additional amounts, in 1972.

---

[25] Ibid., s. 7(1).

[26] Ibid., s. 7(2)(a).

[27] Ibid., s. 7(4).

An extra nine dollars per eligible transported pupil was payable if the board transported the pupil other than on a regularly operated public carrier. An extra four dollars and fifty cents was payable if the pupil were transported on a regularly operated public carrier.[28]

Minister may adjust the amount payable. The minister had authority, under the regulations, to take notice of special conditions and to adjust the amount payable to a school board in respect of pupil transportation.[29]

Foundation program fund regulations, 1973. Provincial financial support to pupil transportation under the 1973 regulations is, for the most part, unchanged from 1972.[30]

City school districts, however, are able to transport, and receive financial support for, pupils in grades one to six who live further than three quarters of a mile from the school attended.[31]

The Public Service Vehicles Act

The Public Service Vehicles Act[32] creates a Highway Traffic Board. Authority is given the Highway Traffic Board, under the Act to make regulations governing the speed and equipment of public service

---

[28] Ibid., s. 9.

[29] Ibid., s. 5(3), s. 6(3), s. 10(a), s. 10(6).

[30] Alta.Regs. 140/73. (issued under the authority of The School Act, R.S.A. 1970, c. 329, s. 129(7).)

[31] Ibid., s. 2(a).

[32] The Public Service Vehicles Act, R.S.A. 1970, c. 300.

vehicles.[33] School buses are not specifically mentioned in the Act but specific reference is made to buses in general.[34] However, regulations specifically applicable to school buses have been issued under the Act.

Regulations Under The Public Service Vehicles Act

Section 6 of Alberta Regulation 69/57,[35] as amended, is concerned with matters relating to the operation of school buses. Operating practices, equipment used and construction standards are referred to in the regulations.

An important provision under this regulation is that no person shall construct or sell a school bus chassis or body in Alberta unless the chassis or body complies with the Canadian Standards Association Standard D 250.[36] This provision applies to chassis manufactured on or after September 1st 1971 and to bodies manufactured on and after January 1st 1972.

LEGISLATION AND REGULATIONS (SASKATCHEWAN)

Introduction

Several pieces of legislation affect pupil transportation in the province of Saskatchewan. The more important of these are The School

---

[33] Ibid., s. 14.

[34] Ibid., s. 73.

[35] Alta.Regs. 69/57, as am. (issued under the authority of The Public Service Vehicles Act, R.S.A. 1970, c. 300, s. 6.)

[36] Ibid., s. 66(22).

School Act,[37] The Larger School Units Act,[38] The Vehicles Act[39] and The Foundation Grants Act.[40]

The purpose of this section is to examine the principal provisions of these acts and of the regulations made under the acts as they relate to pupil transportation.

The School Act

Any board may convey children within the district. Any school board in Saskatchewan has the right to arrange for the conveyance of school children to and from school and to make arrangements for the payment of the costs arising from the provision of any transportation.[41] However, the secretary of the district must notify the minister, in writing, whenever such arrangements are made.[42]

School districts having areas of thirty-six square miles or more. School districts having areas of thirty-six square miles or more, with some exceptions, must provide transportation to and from school each day for children whose residence is more than one and one-half miles from school, as measured by the nearest road allowance.[43] Town districts

---

[37] The School Act, R.S.S. 1965, c. 84.

[38] The Larger School Units Act, R.S.S. 1965, c. 184.

[39] The Vehicles Act, R.S.S. 1965, c. 377.

[40] The Foundation Grants Act, S.S. 1970, c. 22.

[41] The School Act, R.S.S. 1965, c. 184, s. 256(1).

[42] Ibid., (2).

[43] Ibid., s. 257(1).

which are partly or wholly situated within a city are exempted from this provision. Also exempted are school districts which have been included in a school unit, and where satisfactory arrangements for the conveyance of pupils have been made.[44]

Conveyance of school children from one district to another. Upon receipt of a petition signed by at least two-thirds of the resident ratepayers of a school district who are the parents or guardians of school age children, the minister may empower a board to enter into an agreement with another board for the education of the children of its district. The minister may, in such cases, empower the board to make arrangements for the conveyance of the children to and from school and to provide for the costs arising out of the agreement to provide education and of arranging for education.[45]

Transportation for handicapped children. Special provision is made for the transportation of handicapped children and for the payment of grants in respect of such transportation as follows:

> (5) When a Board establishes classes or services for handicapped children at a point or points beyond the home attendance area, it shall be the responsibility of the Board to provide for the transportation of such students, or to provide an allowance at recognized rates in lieu of transportation or to provide room and board where applicable, at recognized rates. At the discretion of the Board, transportation may be provided for children with special handicaps who attend their home school.[46]

---

[44] Ibid., (2).

[45] Ibid., s. 255.

[46] Sask.Regs. 196/71, s. 2(5). (issued under the authority of The School Act, R.S.S. 1965, c. 184, s. 4(5).)

(1) The expenditures to be recognized by the Department of Education for the provision of educational services for handicapped children shall be as prescribed in the Regulations under The Foundation Grants Act, 1970.[47]

The Minister may recognize additional amounts with regard to the provision of services for handicapped students:

(i) Where designated handicapped pupils reside elsewhere than at home and/or receive educational services outside the home school system, and where the home school system makes allowances to parents or guardians for:

1. room and board and/or

2. transportation between home and the place of residence the Minister may recognize the suggested level of expenditure for that function.

(ii) Where designated handicapped students reside in an urban community and where the school system provides special expenditures or allowances for the transportation of such students to and from school to the place of residence, the Minister may recognize the suggested level of expenditure for that function.[48]

Provision for regulations. Provision is made for the minister to make regulations respecting the proper conveyance of school children and respecting the keeping of records relating to the conveyance of school children.[49]

Provision for penalties. A person who fails to comply with the requirements of The School Act or with regulations issued under The School Act is liable, on summary conviction, to a fine not exceeding fifty dollars.[50]

---

[47] Ibid., 6(1).

[48] Sask.Regs. 80/73, s. 2 (5). (issued under the authority of The Foundation Grants Act, S.S. 1970, c. 185, s. 11.)

[49] Ibid., s. 258.

[50] Ibid., s. 262(2).

Regulations related to the operation of school buses.

Regulations concerning the transportation of pupils have been issued under The School Act.[51] The regulation is concerned mainly with rules for the drivers of pupil transportation vehicles.

The Larger School Units Act

Introduction. The Larger School Units Act empowers the minister to order the establishment of school units which shall consist of:

> such number of rural and village public school districts and public school districts in towns with a population of under two thousand, whether or not they or any of them are consolidated school districts or one or more kinds of such districts, as employ approximately eighty teachers.[52]

Provision is made for the taking of a vote before any such unit is formed if the minister so recommends.[53]

Provisions related to transportation. Boards, under provisions of The Larger School Units Act, have the duty and the power to,

A. determine what school any of the children shall attend.[54]

B. make provision for the attendance of pupils at schools in districts other than the districts where their parents reside and to

---

[51] Sask.Regs. 367/68, Part XIX (issued under the authority of The School Act, R.S.S. 1965, c. 184, s. 258 and The Secondary Education Act, R.S.S. 1965, c. 183, s. 4.)

[52] The Larger School Units Act, R.S.S. 1965, c. 185, s. 3(1).

[53] Ibid., (2).

[54] Ibid., s. 81(8).

incur costs on account of, or in lieu of, the pupil's conveyance to such schools.[55]

C. provide for high school instruction inside or outside the school unit.[56]

Regulations under The Larger School Units Act. No regulations related to pupil transportation have been made under The Larger School Units Act.

The Foundation Grants Act, 1970

Provincial financial support to school districts and school units in Saskatchewan is provided under The Foundation Grants Act, 1970.[57]

Financial support for recognized transportation expenditures are provided under the Act.[58] The formula for providing such support in 1972 was:

> (4) For school systems for which the Minister may recognize expenditures in respect of transportation, the Minister shall recognize:
>
> (i) $106 for each recognized pupil for whom regular transportation services are provided;
>
> (ii) $32 for each mile of recognized daily bus mileage on routes within the district or unit as the case may be.

---

[55] Ibid., s. 81(9).

[56] Ibid., s. 81(10).

[57] The Foundation Grants Act, 1970, S.S. 1970, c. 22. s. 2(1)(c).

[58] Ibid., s. 3(2)(e).

(5) The Minister shall recognize additional amounts with regard to the provision of services for handicapped students:

(i) Where designated handicapped pupils reside elsewhere than at home and/or receive educational services outside the home school system, and where the home school system makes allowances to parents or guardians for:

1. room and board and/or

2. transportation between home and the place of residence

the Minister shall recognize a maximum of $75 per month per pupil for a ten-month period each year for any combination of such allowances;

(ii) Where designated handicapped pupils reside in an urban community and where the school system provides special expenditures or allowances for the transportation of such students to and from school to the place of residence, the Minister shall recognize a maximum of $16 per month for each designated handicapped pupil for whom such expenditures or allowances are made.[59]

The formula for providing financial support to pupil transportation in 1973 is:

(4) For school systems for which the Minister may recognize expenditures in respect of transportation, the Minister shall recognize the sum of:

(a) $57 for each recognized pupil for whom regular transportation services are provided;

(b) $49.50 for each mile of recognized daily bus mileage on routes within the school system.

(5) The Minister may recognize additional amounts with regard to the provision of services for handicapped students:

(i) Where designated handicapped pupils reside elsewhere than at home and/or receive educational services outside the home school system, and where the home school system makes allowances to parents or guardians for:

1. room and board and/or

2. transportation between home and the place of residence

the Minister may recognize the suggested level of expenditure for that function.

---

[59] Sask.Regs. 104/72, s. 4 and 5. (issued under the authority of The Foundation Grants Act, 1970, S.S. 1970, c. 11.)

(ii) Where designated handicapped students reside in an urban community and where the school system provides special expenditures or allowances for the transportation of such students to and from school to the place of residence, the Minister may recognize the suggested level of expenditure for that function.[60]

The Vehicles Act

Introduction. The Vehicles Act[61] makes a number of direct references to the equipment that may be used on pupil transportation vehicles and to the operation of such vehicles. In addition, the Act grants the power to the Highway Traffic Board[62] to make regulations concerning the transportation of pupils.

Provision for regulations. Provision is made in The Vehicles Act for the Highway Traffic Board to make regulations concerning pupil transportation. The Act states that the Board may make orders on regulations governing:

> the design, equipment and operation of vehicles used or to be used by the board of a school unit or the board of trustees of a school district, or by a person under a contract with any such board, for the transportation of school children.[63]

Regulations under The Vehicles Act. In addition to the references made to pupil transportation in The Vehicles Act, regulations

---

[60] Sask.Regs. 80/73 s. 4 and 5. (issued under the authority of The Foundation Grants Act, 1970, S.S. 1970, c. 11.)

[61] The Vehicles Act, R.S.S. 1965, c. 377.

[62] Ibid., s. 3.

[63] Ibid., s. 10(1)(o).

pertaining to this subject have been made under the authority of the Act.[64]

LEGISLATION AND REGULATIONS (MANITOBA)

Introduction

Pupil transportation in Manitoba is affected by several pieces of legislation. The more important of these are The Public Schools Act,[65] The Highway Traffic Act,[66] and The Public Schools Finance Board Act.[67] The purpose of this section is to examine the principal provisions of these acts and of the regulations made under the acts as they relate to pupil transportation.

The Public Schools Act

Any school district may provide transportation. The Public Schools Act provides that any school district in Manitoba may provide for the transportation to and from school of any of its resident pupils.[68] Grants for expenses incurred are provided for, though, only under certain conditions.

Large school districts. The Public Schools Act also provides

---

[64] Sask.Regs. 183/65, as am. (issued under the authority of The Vehicles Act, R.S.S. 1965, c. 377, s. 10(1)(o).)

[65] The Public Schools Act, R.S.M. 1970, c. P250.

[66] The Highway Traffic Act, R.S.M. 1970, c. H 60.

[67] The Public Schools Finance Board Act, R.S.M. 1970, c. P260.

[68] The Public Schools Act, R.S.M. 1970, c. P250, s. 284.

that school districts may not be enlarged to include an area greater than twenty-five square miles unless suitable arrangements are made by the board of trustees to arrange for the conveyance of all pupils who would have more than one mile to walk to school.[69] However, transportation need not be provided from a point nearer than one-half mile from the residence of a conveyed pupil.[70]

Where such districts are formed, provision is made for the payment of grants not exceeding seventy-five per cent of the cost of the transportation.[71] Provision is made, also, for the payment of grants for expenses incurred in respect of payments made for living expenses in lieu of the provision of transportation.[72]

Unitary school divisions. Most pupils in Manitoba attend schools which are under the jurisdiction of unitary school divisions. The forty-six such divisions are responsible for all public, elementary and secondary, education within their respective boundaries. The divisions operate in both rural and urban areas.

In common with all other types of school districts in Manitoba, unitary school divisions have the right to transport pupils. Provision for the payment of grants in respect of costs incurred is included in The Public Schools Act.[73] The conditions under which pupil

---

[69] Ibid., s. 8(2).

[70] Ibid., (3).

[71] Ibid., s. 195(1).

[72] Ibid., (3).

[73] Ibid., s. 520(1)(e).

transportation may be provided and under which grants may be payable are stated in regulations under the Act.

Regulations under The Public Schools Act

Provision for regulations. The Public Schools Act provides that the Lieutenant Governor in Council may make regulations respecting the standards of transportation to be provided by school systems. Specifically, regulations may be made:

> (a) respecting the duties, powers and functions of drivers of vehicles used for such transportation, of persons contracting for such transportation, and of school officials, principals and teachers in respect of such transportation;
> (b) respecting the testing of vehicles used for such transportation and the testing of the drivers thereof;
> (c) respecting the use of vehicles used for such transportation, for purposes other than such transportation;
> (d) prescribing standards and specifications to be met and maintained respecting vehicles used for such transportation and the equipment thereon and prescribing procedures for the enforcement of those standards, and the persons who may enforce these standards;
> (e) respecting the powers and duties of school patrols in respect of such transportation, and the vehicles used therefor;
> (f) prescribing rules of safety to be followed in respect of such transportation, and the vehicles used therefor by the drivers thereof, students, and school officials, principals and teachers.[74]

Provision is also made, under The Public Schools Act, for regulations to be made concerning the payment of grants to unitary school divisions in respect of costs incurred for pupil transportation.[75]

Regulations related to the operation of school buses. Regulations have been issued under The Public Schools Act which relate

---

[74] Ibid., s. 286.

[75] Ibid., s. 523

to the operation of school buses.[76] The regulations refer to the uses to which school buses may be put and the duties of boards, school principals and drivers with respect to the operation of pupil transportation vehicles.

Transportation grants to unitary divisions. Grants to unitary divisions in respect of pupil transportation are of two types, operating grants and capital grants.

1. Operating grants. Provision is made in the regulations[77] for operating grants to be made to unitary divisions in respect of:

A. the cost of providing transportation,

B. the cost of paying transportation or living allowances in lieu of transportation,

C. the cost of providing accommodation and board in a pupil residence in lieu of providing transportation.

Grants are payable in respect of transported pupils provided that the transportation costs are incurred under at least one of the following conditions.

A. The arrangements for transportation including the costs incurred have been approved by the minister or an official designated by the minister.[78]

---

[76]Man.Regs. 118/67 as am. (issued under the authority of The Public Schools Act, R.S.M. 1970, c. P250, s. 286.)

[77]Man.Regs. 143/70, s. 16(c). (issued under the authority of The Public Schools Act, R.S.M. 1970, c. P250, s. 523(b)(v).)

[78]Ibid., s. 17(a).

B. The pupils transported were entitled to be transported or to have provisions made for them in lieu of transportation prior to the coming into force of the new regulations.[79]

C. The transportation is in respect of pupils who, as a result of the closing of a school for the purpose of including the pupils in a larger school, have more then one mile to walk to the larger school.[80]

D. The transportation is for the purpose of grouping pupils from two or more schools to ensure that there will be no more than one grade per classroom and where such pupils would be required to walk more than one mile to school.[81]

E. The transportation is in respect of pupils who are mentally retarded, physically handicapped or emotionally disturbed who are enrolled in special classes or if the transportation is in respect of children, whether or not they are enrolled in a special class, who have been certified by a medical doctor to be physically disabled.[82]

F. The transportation is in respect of pupils who attend a school other than the one they would normally attend in order to take a course not offered in the school they would normally attend.[83]

---

[79] Ibid., (b).

[80] Ibid., (c)

[81] Ibid., (d)

[82] Man.Regs. 143/70, s. 17(e), as am. by Man.Regs. 79/71, s. 5. (issued under the authority of The Public Schools Act, R.S.M. 1970, c. P250, s. 523(b)(v).)

[83] Man.Regs. 143/70, s. 17(f). (issued under the authority of The Public Schools Act, R.S.M. 1970, c. P250, s. 523(b)(v).)

Transportation grants are also payable in respect of pupils who do not live in a city, town or village[84] and who have more than one mile to walk to school provided that the schools they attend have no more than two grades per classroom or that the school is entitled to at least three teachers.[85]

The amount of the grant payable to a unitary division each year, in respect of transportation costs, is the lesser of one hundred and seventy-five dollars per transported pupil,[86] or the actual net cost of transportation to the division.[87]

2. Capital grants. Grants in respect of the purchase of vehicles are the lesser of the actual net cost of the vehicle[88] or an amount approved by the Public Schools Finance Board.[89]

The Public Schools Finance Board must first approve, in writing, the necessity of purchasing any vehicle.[90]

Currently, where the Public Schools Finance Board has been satisfied of the need for new school buses, the buses have been procurred

---

[84]The City of Winnipeg and The City of Brandon were recently enlarged. Pupils who were entitled to be transported before the enlargement of the two cities retained this right under Manitoba Regulation 34/72 which is an amendment to Manitoba Regulation 143/70.

[85]Ibid., s. 19(2).

[86]Ibid., s. 20(a).

[87]Ibid., s. 20(b).

[88]Ibid., s. 32(a).

[89]Ibid., s. 32(b).

[90]Ibid., s. 31(a).

and delivered to the division concerned at no cost to the division. The Board is given authority, under The Public Schools Finance Board Act,[91] to purchase or arrange for the purchase and delivery of equipment and to sell, rent or give the equipment to unitary divisions.[92]

The Highway Traffic Act

A number of provisions of The Highway Traffic Act[93] directly refer to school buses. The provisions are concerned with the equipment to be used on pupil transportation vehicles and with their operation on highways.

Offences and penalties. The Highway Traffic Act provides that any person who breaches subsection (1) of section 126 or subsection (2), (4) or (5) of section 128 is guilty of an offence and is liable to be fined, to have his driving licence suspended or to be jailed.[94] Breaches of other sections are punishable by a fine.[95] The more serious penalties provided for breaches of the Act are associated with:

A. the faulty crossing of railway tracks.

B. the failure to use signals when a school bus is stopped.

---

[91] R.S.M. 1970, c. P260, s. 18, as am. S.M. 1970, s. 2.

[92] The buses provided under this policy have been subject to purchasing standards which are based on Canadian Standards Association Standard D 250 and additional requirements.

[93] The Highway Traffic Act, R.S.M. 1970, c. H60.

[94] R.S.M. 1970, c. H60, s. 212.

[95] Ibid., s. 213.

[96] Ibid., s. 292(1)(nn).

C. the passing of stopped school buses by other vehicles.

D. the failure to place the proper markings on a vehicle being used as a school bus.

SUMMARY

Pupil transportation is provided in the Prairie Provinces under the authority they were granted to control education at the time that each of the provinces was created.

Legislation which relates to pupil transportation in Alberta are,

A. The School Act and

B. The Public Service Vehicles Act.

Legislation which governs pupil transportation in Saskatchewan are,

A. The School Act,

B. The Larger School Units Act,

C. The Vehicles Act, and

D. The Foundation Grants Act.

Manitoba legislation concerned with pupil transportation are,

A. The Public Schools Act,

B. The Highway Traffic Act and

C. The Public Schools Finance Board Act.

In addition to legislation, each province has made a number of regulations to control various aspects of pupil transportation.

There is no uniformity in the use of regulations and legislation. Aspects of pupil transportation which are controlled under an act in one province may be controlled under regulations in another.

CHAPTER V

THE ADMINISTRATION AND SUPERVISION OF PUPIL TRANSPORTATION AT THE PROVINCIAL LEVELS

INTRODUCTION

The purpose of this chapter is to identify the governmental departments, boards, committees and officials who are responsible for the administration and supervision of pupil transportation at the provincial levels. Their functions and responsibilities will be briefly outlined for each of the three provinces.

Sources of Data

The information in this chapter was gathered, principally, through interviews with responsible officials in each of the Prairie Provinces. The interview schedule[1] was used for each of the interviews. Two officials in Alberta, four in Saskatchewan and three in Manitoba were interviewed.

THE ADMINISTRATION OF PUPIL TRANSPORTATION IN ALBERTA

Introduction

The administration of pupil transportation in Alberta, at the provincial level, is concentrated in the Field Services Branch of the Department of Education and in the Enforcement Division of the Highway Traffic Board.

---

[1] Appendix D.

The Field Services Branch

One official in the Field Services Branch of the Department of Education, a Field Administration Officer, has duties which are primarily related to pupil transportation.

His duties are:

A. to develop a support base formula for pupil transportation which is just and equitable.

B. to review the budgets and financial statements of school districts.

C. to review the pupil transportation operations of boards who request increases in payments.

D. to act as co-chairman of a Departmental pupil transportation study.

E. to sit as a member of a joint committee on school bus safety and specifications formed by the Departments of Highways and Education.

F. to generally be aware of all matters relating to pupil transportation.

Records and statistics kept by the Branch are those related to costs and grants as revealed by budgets and estimates. Operating and safety statistics are not kept by the branch.

The Enforcement Division

The Enforcement Division of the Highway Traffic Board is responsible for the administration of Alberta Regulation 69/57, as amended.

Section 6 of the Regulation is concerned with the operation of school buses. In connection with the requirements of the regulation,

officers of the Division inspect all buses with a capacity greater than twenty-four passengers and issue approval certificates. Certificates are required for the registration of the vehicles.

In addition to inspecting vehicles prior to registration the Division makes spot checks on pupil transportation vehicles.

The Division keeps its own pupil transportation safety statistics and makes recommendations for changes in the regulations as the need for such changes become apparent.

Members of the Division are represented on the joint Highways-Education committee on school bus safety and specifications.

THE ADMINISTRATION OF PUPIL TRANSPORTATION IN SASKATCHEWAN

Introduction

The administration of pupil transportation in Saskatchewan involves the Department of Education and the Highway Traffic Board.

The Department of Education

Two officials in the Department of Education have a major interest in pupil transportation. The first, the Supervisor of School Administration, is a consultant in legislative and administrative matters and the second, the Chief, Grants Administration, is a financial officer concerned with the examination of the budgets of school systems.

In addition to the consideration of legislative, administrative and financial matters, the officials keep themselves informed, in an informal way, of all school bus accidents.

The Department is represented on the Canadian Standards Association committee on school bus safety.

The Highway Traffic Board

The Highway Traffic Board is responsible for the enforcement of the regulations concerning school buses issued under The Vehicles Act.

School buses in every school unit are checked every year, either by a full-time Traffic Officer, who is a journeyman mechanic, or by driver testers and weigh scale operators.

In addition to checking school buses the Board administers a special written examination for school bus drivers every three years. School bus drivers are also required to undergo a medical examination every three years.

THE ADMINISTRATION OF PUPIL TRANSPORTATION IN MANITOBA

Introduction

Two government departments have a major interest in pupil transportation in Manitoba. These are, the Department of Highways and the Department of Education. The Public Schools Finance Board is also involved with pupil transportation at the provincial level.

The Department of Highways

Motor Vehicles Branch. The Motor Vehicles Branch of the Department of Highways is responsible for the licensing of all drivers in Manitoba, including pupil transportation drivers. The chauffeur's licence is the basic requirement for a driver who is employed to drive a vehicle for remuneration. Special written and road tests are available for pupil transportation drivers. The tests are not required under The Highway Traffic Act or under the regulations but are administered at the request of employing school systems. The Registrar

of Motor Vehicles, however, has the authority to call in a driver for the special test where there have been complaints.

A mechanical inspection of the vehicle used is carried out at the time the road test is conducted.

Inspection of new pupil transportation vehicles. Pupil transportation vehicles which are purchased by the Public Schools Finance Board are subject to purchasing standards. The vehicles are inspected, prior to delivery, by the Mechanical Superintendent of the Department of Highways in order to ensure that the purchasing standards have been met.

Safety statistics. Statistics regarding the number of accidents involving pupil transportation vehicles are not kept separately from accidents involving other types of vehicles.

The Department of Education

Supervisor of Transportation. One of the officers of the Manitoba Department of Education is designated as the Supervisor of Transportation. Among his duties are,

A. to act as an advisor to school systems in matters such as the interpretation of The Public Schools Act and of the Regulations.

B. to act as a convenor of the purchasing specifications review committee which sets standards for pupil transportation vehicles which are purchased by the Public Schools Finance Board.

C. to assist the Public Schools Finance Board in the evaluation of school system requests for new vehicles.

D. to inform the Purchasing Department of the Ministry of

Finance of vehicle requirements and specifications.

E. to arrange for the pre-delivery mechanical inspection of vehicles by the Mechanical Superintendent of the Department of Highways.

F. to arrange for the delivery of new vehicles to school systems.

G. to represent Manitoba on the Canadian Standards Association School Bus Standards Committee.

In addition to the above duties the Supervisor of Transportation publishes a monthly newsletter on pupil transportation and convenes a yearly conference of pupil transportation officials. Although the Supervisor of Transportation is not required to keep safety statistics he is, at times, called to prepare special reports on accidents and has recently requested that school systems report to him the details of any accidents involving their vehicles.[2]

The Supervisor of Transportation advises school systems, in writing, whenever he becomes aware of violations of the regulations or of The Public Schools Act.

The Public Schools Finance Board

The Public Schools Finance Board, in addition to providing general financial support to school systems, arranges for the purchase and delivery of vehicles to school systems for use in pupil transportation. The Supervisor of Transportation of the Department of Education investigates requests for vehicles and arranges for mechanical

---

[2]Manitoba, Department of Education, Transportation Bulletin, Number 13, (February, 1973), p. 4.

inspection and delivery of vehicles on behalf of the Board.

SUMMARY

Alberta. The Field Services Branch of the Department of Education and the Enforcement Division of the Highway Traffic Board are the two arms of the Alberta Government which are most concerned with pupil transportation. A joint committee has been formed to coordinate the activities of the two bodies.

Saskatchewan. The Department of Education and the Highway Traffic Board are concerned with pupil transportation in Saskatchewan. The latter attempts to carry out a mechanical inspection of vehicles in every school system in the province each year.

Manitoba. The Motor Vehicles Branch of the Department of Highways, the Department of Education and the Public Schools Finance Board are involved in the administration, at the provincial level, of pupil transportation in Manitoba. The department of Education has appointed a Supervisor of Transportation with responsibilities for pupil transportation. The Supervisor of Transportation, in addition to other duties, assists the Public Schools Finance Board in the procurement of pupil transportation vehicles for school systems.

CHAPTER VI

FISCAL MODELS FOR THE FINANCING OF PUPIL TRANSPORTATION

INTRODUCTION

Fiscal models for the financing of pupil transportation were discussed in Chapter III.[1] Similarly, the legislation and regulations relative to the financing of pupil transportation were discussed in detail in Chapter V. The purpose of this chapter is to propose a model to describe the financing of pupil transportation in each of the Prairie Provinces. The models will be concerned with the financing schemes employed in 1972.

ALBERTA

None of the six models described earlier are completely adequate to describe the financing scheme used for districts other than city districts in Alberta. The 1972 pupil transportation financing scheme as outlined in Section 5 of Alberta Regulation 129/72 is nearest to that described by Model 6.[2] The Foundation Program Fund Regulations provided that a fixed percentage (ninety per cent) of recognized expenditures in a previous year would be provided. The purpose of the scheme was to hold down increases in pupil transportation costs.

A further amount was payable, in 1972, in respect of vehicles

---

[1] Supra, p. 32.

[2] Ibid.

owned and operated by school districts. Capital costs were included as recognized expenditures in preceeding years and the additional amount payable in 1972 had the effect of increasing the support available in respect of capital costs.

A model which could be used to describe the provincial pupil transportation financing scheme in use in 1972 in Alberta is:

> Provincial Payment of a Fixed Percentage of a Previous Years Approved Costs, Payment being Integrated with Foundation Program Fund Payments.

SASKATCHEWAN

The financing of pupil transportation in Saskatchewan in 1972 was based on the application of a mathematical formula which, presumably, was closely rated to the costs which could be expected to be incurred by a school system in operating its pupil transportation programme. The formula as stated in Saskatchewan Regulation 104/72 is somewhat similar to Model 2^3 in that it included a flat grant per transported pupil. The formula also included a flat grant per mile of the total route mileage operated by the school system. Provision was made for the modification of the amount payable under the formula in cases where the formula determined amount was obviously unsuitable.

The Saskatchewan pupil transportation financing scheme for 1972 could be described by the following model,

> Provincial Payment of an Amount Determined by a Mathematical Formula Containing the Variables Pupils Transported and Total Route Mileage, Payment being Integrated with Foundation Program Fund Payments.

---

[3] Ibid.

MANITOBA

The pupil transportation financing scheme used in Manitoba in 1972 very closely resembles Model 5.[4] Payment was provided for the entire approved operating cost of pupil transportation with a ceiling amount being stated. The entire amount of approved capital costs were payable by the provincial government.

A model which could be used to describe the Manitoba pupil transportation support scheme used in Manitoba in 1972 is,

> Provincial Payment of the Entire Operating Cost of Pupil Transportation, Subject to a Ceiling Amount per Transported Pupil, Plus the Entire Capital Cost of Pupil Transportation, Payment Being in the Form of Earmarked Grants.

PURCHASING SCHOOL BUSES

The Alberta and Saskatchewan pupil transportation financing schemes in 1972 provided for recognition of the capital costs involved in the operation of pupil transportation programmes by school districts. Purchasing of school buses, however, was a matter left entirely up to the local districts.

The Manitoba scheme provided for the entire approved cost of bus purchases. The purchase and delivery of the vehicles to school districts was carried out by the Public Schools Finance Board.

Thus the purchasing of school buses in Alberta and Saskatchewan is carried out by local school districts. In Manitoba such purchases are carried out at the provincial level.

---

[4] Ibid.

SUMMARY

Fiscal models for the financing of pupil transportation in each of the Prairie Provinces in 1972 were quite different from one another. The Alberta scheme was based on expenditures in a previous year; the Saskatchewan scheme was based on a mathematical formula involving numbers of pupils transported and total route mileage and the Manitoba scheme essentially covered the entire approved cost of pupil transportation subject to a ceiling amount per transported pupil.

The capital costs of pupil transportation were recognized in different ways in each of the provinces.

Bus purchasing in Alberta and Saskatchewan was carried out at the local school system level while, in Manitoba, it was carried out at the provincial level.

CHAPTER VII

THE EXPENDITURES AND REVENUES OF LOCAL SCHOOL SYSTEMS

INTRODUCTION

The expenditures and revenues of local school systems, in 1972, which related to pupil transportation is the subject of Research Question 2.[1] Responses to Section A and Section E of the questionnaire[2] supplied the data relevant to the several parts of the Question.

The purpose of this chapter is to display the data which relates to each part of Question 2 and to discuss the implications of the data as they indicate differences between the three Prairie Provinces.

PUPILS TRANSPORTED FOR WHOM PROVINCIAL GRANTS WERE PAYABLE[3]

The proportion of pupils transported at the expense of responding school systems in respect of whom provincial grants were payable was calculated by dividing questionnaire item 2(c) by item 2(b) for each school system.

The results have been summarized in Table 6, from which it is seen that ninety per cent of the school systems in Saskatchewan which provided data reported that provincial grants were payable in respect of over ninety per cent of the pupils transported by them in 1972.

---

[1] Supra, p. 6.

[2] Appendix B

[3] See Question 2(a), p. 6.

Table 6

Students Transported in Respect of Whom Provincial Grants Were Receivable as a Percentage of Total Students Transported - 1972

Number of School Systems
(Percentages in Brackets)

Percentage of Grant Students	Alberta			Saskatchewan		
	Rural	Mixed	Urban	Rural	Mixed	Urban
0 - 9.9	1 (2)	2 (40)	2 (14)	2 (5)	0 (0)	0 (0)
10 - 19.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
20 - 29.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (33)
30 - 39.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
40 - 49.9	0 (0)	0 (0)	1 (7)	0 (0)	0 (0)	0 (0)
50 - 59.9	1 (2)	0 (0)	1 (7)	0 (0)	0 (0)	0 (0)
60 - 69.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
70 - 79.9	2 (5)	0 (0)	2 (14)	1 (2)	0 (0)	0 (0)
80 - 89.9	4 (8)	0 (0)	2 (14)	1 (2)	0 (0)	0 (0)
90 or higher	43 (84)	3 (60)	6 (43)	40 (91)	1(100)	2 (67)
Totals*	51(100)	5(100)	14(100)	44(100)	1(100)	3(100)

Percentage of Grant Students	Manitoba			Totals		
	Rural	Mixed	Urban	Alta.	Sask.	Man.
0 - 9.9	0 (0)	0 (0)	1 (10)	5 (7)	2 (4)	1 (2.5)
10 - 19.9	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	1 (2.5)
20 - 29.9	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)
30 - 39.9	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	2 (5)
40 - 49.9	1 (4)	0 (0)	0 (0)	1 (1)	0 (0)	1 (2.5)
50 - 59.9	0 (0)	0 (0)	0 (0)	2 (3)	0 (0)	0 (0)
60 - 69.9	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	1 (2.5)
70 - 79.9	0 (0)	1 (20)	0 (0)	4 (6)	1 (2)	1 (2.5)
80 - 89.9	1 (4)	0 (0)	1 (10)	6 (9)	1 (2)	2 (5)
90 or higher	23 (92)	4 (80)	4 (40)	52 (74)	43 (90)	31(77.5)
Totals*	25(100)	5(100)	10(100)	70(100)	48(100)	40 (100)

*The percentages may not total 100 due to rounding.

Seventy-seven and one-half per cent of Manitoba school systems and seventy-four per cent of Alberta school systems reported that provincial grants were payable on behalf of over ninety per cent of the pupils transported by them.

Seven per cent of the reporting Alberta school systems indicated that provincial grants were payable on behalf of ten per cent or less of the pupils transported by them. Four per cent of the school systems in Saskatchewan and two and one-half per cent of the Manitoba school systems were in the same category.

From Table 7 it is seen that, on the basis of overall enrolments reported, provincial grants were payable on behalf of nearly ninety-nine per cent of the pupils transported by Saskatchewan school systems in 1972. Grants were payable on behalf of ninety-one per cent of the transported pupils in Manitoba and nearly ninety-one per cent of those in Alberta.

RURAL/URBAN DIFFERENCES IN THE PROPORTION OF PUPILS TRANSPORTED FOR WHOM PROVINCIAL GRANTS WERE PAYABLE[4]

The data displayed in Table 6 indicates a definite tendency in each of the three provinces for the proportion of pupils transported in respect of whom provincial grants were payable to be higher in rural school systems and lower in urban school systems. The trend seems to hold for mixed school systems, as well, where support tended to be less than that for rural systems and greater than that for urban school systems.

---

[4] See Question 2(b), p. 6.

Table 7

The Relationship Between the Number of Pupils Transported and the Number of Pupils in Respect of Whom Provincial Transportation Grants Were Payable - 1972 (Percentages in Brackets)

Province	Enrolments Reported by Responding School Systems	Number of Pupils Transported Daily	Number of Pupils For Whom Provincial Grants Were Payable
Alberta	325,762	105,587 (32.4)	95,770 (90.7)
Saskatchewan	141,723	55,080 (38.8)	54,449 (98.9)
Manitoba	166,355	51,750 (31.1)	47,109 (91.0)
Totals	633,840	212,417 (33.5)	197,328 (92.9)

PROPORTION OF PUPIL TRANSPORTATION EXPENDITURE FOR WHICH PROVINCIAL GRANTS WERE PAYABLE[5]

Total pupil transportation expenditures were calculated as the sum of questionnaire item 13, Total Operating Costs (Transportation) and questionnaire item 14, Total Capital Costs (Transportation). Total provincial grants receivable were calculated as the sum of questionnaire items 15(a) and 15(b). The results are summarized in Table 8.

Part (c) of Research Question 2 is concerned with the totals shown in Table 8. From these totals it is evident that in 1972, on the whole, school systems in Alberta received grants to cover a greater portion of their pupil transportation expenditures than did school systems in Saskatchewan. Further, Manitoba school systems, on the whole, received grants to cover a greater portion of their pupil transportation expenditures than did those in both Alberta and Saskatchewan.

RURAL/URBAN DIFFERENCES IN THE PROPORTION OF PUPIL TRANSPORTATION EXPENDITURES FOR WHICH PROVINCIAL GRANTS WERE PAYABLE[6]

The data relevant to part (d) of Research Question 2 is also displayed in Table 8. The method of calculating the data from the raw questionnaire data was explained in the previous discussion of Table 8.

The data in Table 8 indicate that, in Manitoba, rural school systems tended to have a greater portion of their total pupil transportation expenditures covered by provincial grants than do urban school systems. A similar pattern, while not so clear as for Manitoba school

---

[5] See Question 2(c), p. 6.

[6] See Question 2(d), p. 6.

Table 8

Provincial Grants Receivable as a Percentage of Total Pupil Transportation Expenditure - 1972

Percentage of Total Expenditure	Number of School Systems (Percentages in Brackets)					
	Rural			Mixed		
	Alta.	Sask.	Man.	Alta.	Sask.	Man.
0 - 9.9	0 (0)	3 (9)	0 (0)	0 (0)	0 (0)	0 (0)
10 - 19.9	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)
20 - 29.9	0 (0)	1 (2)	1 (4)	0 (0)	0 (0)	0 (0)
30 - 39.9	1 (2)	0 (0)	0 (0)	1 (25)	0 (0)	0 (0)
40 - 49.9	0 (0)	6 (17)	0 (0)	0 (0)	0 (0)	0 (0)
50 - 59.9	0 (0)	2 (6)	0 (0)	1 (25)	0 (0)	0 (0)
60 - 69.9	1 (2)	4 (11)	1 (4)	0 (0)	0 (0)	0 (0)
70 - 79.9	9 (20)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)
80 - 89.9	18 (39)	3 (9)	2 (8)	0 (0)	0 (0)	0 (0)
90 or higher	17 (37)	15 (43)	21 (81)	2 (50)	1(100)	5(100)
Totals *	46(100)	35(100)	26(100)	4(100)	1(100)	5(100)

Percentage of Total Expenditure	Urban			Totals		
	Alta.	Sask.	Man.	Alta.	Sask.	Man.
0 - 9.9	1 (10)	0 (0)	0 (0)	1 (2)	3 (8)	0 (0)
10 - 19.9	0 (0)	0 (0)	1 (11)	0 (0)	0 (0)	2 (5)
20 - 29.9	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	1(2.5)
30 - 39.9	0 (0)	0 (0)	1 (11)	2 (3)	0 (0)	1(2.5)
40 - 49.9	0 (0)	1 (50)	1 (11)	0 (0)	7 (18)	1(2.5)
50 - 59.9	0 (0)	0 (0)	1 (11)	1 (2)	2 (5)	1(2.5)
60 - 69.9	2 (20)	0 (0)	0 (0)	3 (5)	4 (11)	1(2.5)
70 - 79.9	3 (30)	1 (50)	1 (11)	12 (20)	2 (5)	1(2.5)
80 - 89.9	3 (30)	0 (0)	0 (0)	21 (35)	3 (8)	2 (5)
90 or higher	1 (10)	0 (0)	4 (44)	20 (33)	16 (42)	30 (75)
Totals*	10(100)	2(100)	9(100)	60(100)	38(100)	40(100)

*The percentages may not total 100 due to rounding.

systems, was evident for Alberta school systems.

Because of the small number of mixed and urban school systems in Saskatchewan which provided the relevant data it is not possible to identify any definite rural/urban differences in provincial financial support to pupil transportation in that province.

THE IMPORTANCE OF VARIOUS EXPENDITURE AND REVENUE CATEGORIES[7]

Introduction

Three tables have been prepared for the discussion of the importance of various expenditure and revenue categories. Table 9 is concerned with operating expenditures, Table 10 with capital expenditures and Table 11 with revenue sources.

Operating Expenditures

Five operating expenditure categories have been established. The first is "Cost of School System Operated Buses." The quotient obtained by dividing the total of the five subsections of questionnaire item 13(a) by the unnumbered questionnaire item "Total Operating Costs (Transportation)" has been used as an index of the importance of this expenditure category in each school system in 1972. Similarly, indices have been obtained using questionnaire items 13(b), 13(c), 13(d) and 13(e). The related expenditure categories are, respectively, "Contract Costs," "Cost of Assistance in Lieu of Transportation," "Payments to Other School Systems" and"Interest and Other Costs." The indices multiplied by one hundred, therefore, represent percentages of "Total

---

[7] See Question 2(e), p. 6.

Operating Costs (Transportation)."

The results, as summarized in Table 9, indicate the relatively greater importance of the expenditure category "Contract Costs" for Alberta school systems, the importance of the expenditure category "Cost of School System Operated Buses" for Manitoba school systems and the relative equality of importance of the two expenditure categories for Saskatchewan school systems.

By comparison, the final three expenditure categories, "Cost of Assistance in Lieu of Transportation," "Payments to Other School Systems" and "Interest and Other Costs" were relatively unimportant to school systems in all three provinces.

Capital Expenditures

Three capital expenditure categories have been established. These are "Cost of New Vehicles Acquired," "Repayments of Previous Borrowing" and "Other Capital Expenditures." The quotients obtained by dividing questionnaire items 14(a), 14(b) and 14(c) respectively, by the unnumbered questionnaire item "Total Capital Costs" have been used as indicators of the relative importance to school systems, in 1972, of the three expenditure categories. The indices multiplied by one hundred, therefore, represent percentages of "Total Capital Costs (Transportation)."

The data, summarized in Table 10, show that the category "Cost of New Vehicles Acquired" was the more important capital expenditure category for school systems in each of the three provinces. The latter two capital expenditure categories were important in only very few school systems.

Table 9

Various Expenditure Categories as a Percentage of Total Pupil Transportation Operating Expenditures - 1972

Number of School Systems*
(Percentages in Brackets)

Percentage of Total Operating Expenditure	Cost of School System Operated Buses			Contract Costs			Cost of Assistance in Lieu of Transportation		
	Alta.	Sask.	Man.	Alta.	Sask.	Man.	Alta.	Sask.	Man.
0 - 9.9	37 (57)	19 (44)	9 (22)	21 (33)	19 (44)	13 (32)	55 (86)	41 (95)	35 (85)
10 - 19.9	0 (0)	2 (5)	1 (2)	3 (5)	2 (5)	2 (5)	6 (9)	0 (0)	3 (7)
20 - 29.9	1 (2)	0 (0)	2 (5)	1 (2)	0 (0)	3 (7)	1 (2)	0 (0)	1 (2)
30 - 39.9	2 (3)	0 (0)	7 (17)	0 (0)	1 (2)	2 (5)	1 (2)	2 (5)	1 (2)
40 - 49.9	1 (2)	0 (0)	3 (7)	1 (2)	0 (0)	3 (7)	0 (0)	0 (0)	1 (2)
50 - 59.9	0 (0)	0 (0)	2 (5)	3 (5)	0 (0)	4 (10)	0 (0)	0 (0)	0 (0)
60 - 69.9	0 (0)	2 (5)	4 (10)	2 (3)	2 (5)	5 (12)	1 (2)	0 (0)	0 (0)
70 - 79.9	3 (5)	1 (2)	1 (2)	2 (3)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)
80 - 89.9	9 (14)	4 (9)	6 (15)	4 (6)	2 (5)	1 (2)	0 (0)	0 (0)	0 (0)
90 or higher	12 (18)	15 (35)	6 (15)	27 (42)	17 (40)	6 (15)	0 (0)	0 (0)	0 (0)
Totals**	65(100)	43(100)	41(100)	64(100)	43(100)	41(100)	64(100)	43(100)	41(100)

*The number of school systems shown for each item may vary due to incompleteness of certain data provided.

**The percentages may not total 100 due to rounding.

Continued . . .

Table 9 (continued)

Percentage of Total Operating Expenditure	Number of School Systems* (Percentages in Brackets)					
	Payments to Other School Systems			Interest and Other Costs		
	Alta.	Sask.	Man.	Alta.	Sask.	Man.
0 - 9.9	62 (97)	43(100)	41(100)	61 (97)	43(100)	41(100)
10 - 19.9	1 (2)	0 (0)	0 (0)	2 (3)	0 (0)	0 (0)
20 - 29.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
30 - 39.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
40 - 49.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
50 - 59.9	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
60 - 69.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
70 - 79.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
80 - 89.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
90 or higher	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Totals**	64(100)	43(100)	41(100)	63(100)	43(100)	41(100)

*The number of school systems shown for each item may vary due to incompleteness of certain data provided.

**The percentages may not total 100 due to rounding.

Table 10

Various Expenditure Categories as a Percentage of Total Pupil Transportation Capital Expenditures - 1972

Number of School Systems (Percentages in Brackets)

Percentage of Total Capital Expenditures	Cost of New Vehicles Acquired			Repayments of Previous Borrowing		
	Alta.	Sask.	Man.	Alta.	Sask.	Man.
0 - 9.99	2 (7)	1 (5)	0 (0)	25 (93)	20 (91)	25(100)
10 - 19.9	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)
20 - 29.9	0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)
30 - 39.9	0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)
40 - 49.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
50 - 59.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
60 - 69.9	1 (4)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)
70 - 79.9	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)
80 - 89.9	1 (4)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)
90 or higher	23 (85)	19 (86)	25(100)	0 (0)	0 (0)	0 (0)
Totals*	27(100)	22(100)	25(100)	27(100)	22(100)	25(100)

Percentage of Total Capital Expenditures	Other Capital Expenditures		
	Alta.	Sask.	Man.
0 - 9.9	24 (89)	21 (95)	25(100)
10 - 19.9	0 (0)	1 (5)	0 (0)
20 - 29.9	0 (0)	0 (0)	0 (0)
30 - 39.9	2 (7)	0 (0)	0 (0)
40 - 49.9	0 (0)	0 (0)	0 (0)
50 - 59.9	0 (0)	0 (0)	0 (0)
60 - 69.9	0 (0)	0 (0)	0 (0)
70 - 79.9	0 (0)	0 (0)	0 (0)
80 - 89.9	0 (0)	0 (0)	0 (0)
90 or higher	1 (4)	0 (0)	0 (0)
Totals*	27(100)	22(100)	25(100)

*The percentages may not total 100 due to rounding.

Revenue Sources

Seven revenue source categories have been established. These are "Operating Grants from the Provincial Government," "Capital Grants from the Provincial Government," "Amounts Received from other School Systems," "Capital Borrowing in Respect of Pupil Transportation," "Revenues from Taxation," "Payments by Pupils, Teachers and Others" and "Other Revenues." The quotients obtained by dividing questionnaire items 15(a), 15(b), 15(c), 15(d), 15(e), 15(f) and 15(g), respectively, by the unnumbered questionnaire item "Total Revenue (Transportation)" have been used as indicators of the relative importance, in 1972, of the seven revenue source categories to the various school systems. The indices multiplied by one hundred, therefore, represent percentages of "Total Revenue (Transportation)."

The results are summarized in Table 11 and show that, for school systems in all three provinces, the category "Operating Grants from the Provincial Government" was the most important transportation revenue source category. There are differences among the three provinces, however, in its importance. The category was more important in Alberta school systems than in Manitoba school systems and more important in Manitoba school systems than in Saskatchewan school systems. To balance this relationship, it is also evident that the transportation revenue source category "Revenues from Taxation," which includes revenues from locally levied taxation, was a more important revenue source category for Saskatchewan school systems than for school systems in Manitoba and a more important revenue source category for school systems in Manitoba than for those in Alberta.

The transportation revenue source category next most important

Table 11

Various Revenue Sources as a Percentage of Total Pupil Transportation Revenue - 1972

Number of School Systems*
(Percentages in Brackets)

Percentage of Total Revenue	Operating Grants from the Provincial Government			Capital Grants from the Provincial Government		
	Alta.	Sask.	Man.	Alta.	Sask.	Man.
0 - 9.9	1 (2)	2 (6)	1 (3)	51 (84)	34 (92)	27 (68)
10 - 19.9	0 (0)	0 (0)	1 (3)	10 (16)	3 (8)	9 (23)
20 - 29.9	0 (0)	1 (3)	1 (3)	0 (0)	0 (0)	2 (5)
30 - 39.9	2 (3)	1 (3)	1 (3)	0 (0)	0 (0)	1 (3)
40 - 49.9	0 (0)	3 (8)	1 (3)	0 (0)	0 (0)	0 (0)
50 - 59.9	0 (0)	6 (17)	2 (5)	0 (0)	0 (0)	0 (0)
60 - 69.9	1 (2)	4 (11)	2 (5)	0 (0)	0 (0)	0 (0)
70 - 79.9	10 (16)	2 (6)	3 (8)	0 (0)	0 (0)	0 (0)
80 - 89.9	13 (21)	2 (6)	11 (28)	0 (0)	0 (0)	0 (0)
90 or higher	35 (56)	15 (42)	17 (43)	0 (0)	0 (0)	1 (3)
Totals**	62(100)	36(100)	40(100)	61(100)	37(100)	40(100)

Percentage of Total Revenue	Amounts Received from other School Systems			Capital Borrowing in Respect of Pupil Transportation		
	Alta.	Sask.	Man.	Alta.	Sask.	Man.
0 - 9.9	62(100)	36 (97)	39(100)	61(100)	37(100)	40(100)
10 - 19.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
20 - 29.9	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)
30 - 39.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
40 - 49.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
50 - 59.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
60 - 69.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
70 - 79.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
80 - 89.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
90 or higher	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Totals**	62(100)	37(100)	39(100)	61(100)	37(100)	40(100)

*The number of school systems shown for each item may vary due to incompleteness of certain data provided.

**The percentages may not total 100 due to rounding.

Continued . . .

Table 11 (continued)

Number of School Systems*
(Percentages in Brackets)

Percentage of Total Revenue	Revenues from Taxation			Payments by Pupils, Teachers and Others		
	Alta.	Sask.	Man.	Alta.	Sask.	Man.
0 - 9.9	47 (77)	18 (49)	34 (85)	60 (98)	37(100)	40(100)
10 - 19.9	9 (15)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)
20 - 29.9	3 (5)	3 (8)	2 (5)	1 (2)	0 (0)	0 (0)
30 - 39.9	0 (0)	3 (8)	0 (0)	0 (0)	0 (0)	0 (0)
40 - 49.9	0 (0)	4 (11)	1 (3)	0 (0)	0 (0)	0 (0)
50 - 59.9	0 (0)	5 (14)	1 (3)	0 (0)	0 (0)	0 (0)
60 - 69.9	1 (2)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
70 - 79.9	0 (0)	1 (3)	1 (3)	0 (0)	0 (0)	0 (0)
80 - 89.9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
90 or higher	1 (2)	2 (5)	0 (0)	0 (0)	0 (0)	0 (0)
Totals**	61(100)	37(100)	40(100)	61(100)	37(100)	40(100)

Percentage of Total Revenue	Other Revenues		
	Alta.	Sask.	Man.
0 - 9.9	59 (97)	37(100)	38 (95)
10 - 19.9	1 (2)	0 (0)	0 (0)
20 - 29.9	0 (0)	0 (0)	2 (5)
30 - 39.9	0 (0)	0 (0)	0 (0)
40 - 49.9	0 (0)	0 (0)	0 (0)
50 - 59.9	0 (0)	0 (0)	0 (0)
60 - 69.9	1 (2)	0 (0)	0 (0)
70 - 79.9	0 (0)	0 (0)	0 (0)
80 - 89.9	0 (0)	0 (0)	0 (0)
90 or higher	0 (0)	0 (0)	0 (0)
Totals**	61(100)	37(100)	40(100)

*The number of school systems shown for each item may vary due to incompleteness of certain data provided.

**The percentages may not total 100 due to rounding.

was "Capital Grants from the Provincial Government." This category was of approximately equal importance to school systems in Alberta and Saskatchewan but of more importance to school systems in Manitoba than to those in the other two provinces.[8]

The four remaining transportation revenue source categories were relatively less important to school systems in all three provinces.

PUPIL TRANSPORTATION OPERATING COSTS AS A PROPORTION OF TOTAL OPERATING COSTS[9]

the quotient obtained by dividing the questionnaire item "Total Operating Costs (Transportation)" by questionnaire item 16, "The Total Operating Budget of the School System" has been used as an index of the importance of transportation costs in the budgets of the various school systems in 1972. The index has been multiplied by one hundred and represents a percentage of the total operating budget of each school system. The results have been summarized in Table 12.

In general, transportation expenditures represent a noticeably more important portion of the operating budgets of school systems in Saskatchewan than of school systems in Alberta and Manitoba. Transportation expenditures are of relatively equal importance in the operating budgets of Alberta and Manitoba school systems.

---

[8]This difference may be due to the differences in procedures adopted by the three provinces in granting support for capital expenditures for transportation purposes. This topic is discussed in Chapter V.

[9]See Question 2(f), p. 6.

Table 12

Pupil Transportation Expenditures as a Percentage of the Total Operating Budget - 1972

Percentage of the Operating Budget	Alberta School Systems*	Saskatchewan School Systems*	Manitoba School Systems*
0 - 9.9	20 (34)	4 (10)	15 (38)
10 - 19.9	35 (59)	30 (71)	23 (58)
20 - 29.9	4 (7)	8 (19)	0 (0)
30 - 39.9	0 (0)	0 (0)	0 (0)
40 - 49.9	0 (0)	0 (0)	1 (3)
50 - 59.9	0 (0)	0 (0)	1 (3)
60 - 69.9	0 (0)	0 (0)	0 (0)
70 - 79.9	0 (0)	0 (0)	0 (0)
80 - 89.9	0 (0)	0 (0)	0 (0)
90 or higher	0 (0)	0 (0)	0 (0)
Totals**	59(100)	42(100)	40(100)

*The percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

INTER-DISTRICT TRANSPORTATION OF PUPILS[10]

Questionnaire items 4(a), (1) and (2), 4(b), 4(c), (1) and (2) and 4(d) were designed to collect information relevant to Research Question 2(g). Items (a) and (b) were used in the construction of Table 13 and items (c) and (d) were used in the construction of Table 14.[11] Ideally, with a 100 per cent response rate the totals for each table would be equal, assuming that no pupils were transported into or out of the provinces. Pupils transported out of one school system are transported into another, thus the table totals should balance. Since there was not a 100 per cent response rate the largest total in each category may be considered as the figure most accurately reflecting the amount of inter-district transportation of pupils, regardless of whether the relevant total reflects the number of pupils which was transported into or out of a school system in 1972.

From the tables it is evident that inter-district transportation of pupils was carried out principally under tuition and/or transportation agreements. Saskatchewan school systems transported a greater portion of their pupils between districts than did school systems in Alberta -- at a rate approximately twice as great. Similarly, Alberta school systems transported a greater portion of their pupils between school systems than did school systems in Manitoba -- at a rate greater than twice the rate in Manitoba.

---

[10] See Question 2(g), p. 6.

[11] Sub-items (1) and (2) of item 4(a) and also of item 4(b) were combined.

Table 13

Pupils Transported Into School Systems Daily
Under Transportation and/or
Tuition Agreements - 1972

Number of pupils transported	Alberta School Systems		Saskatchewan School Systems		Manitoba School Systems	
	Under Agreements	No Agreements	Under Agreements	No Agreements	Under Agreements	No Agreements
1 - 50	26	8	20	3	11	5
51 - 100	8	3	0	0	3	0
101 - 150	2	0	1	0	2	0
151 - 200	1	1	2	0	0	0
201 - 250	0	0	4	0	0	0
251 - 300	1	0	3	0	0	0
301 - 350	2	0	0	0	0	0
401 - 450	0	0	1	0	0	0
451 - 500	0	0	1	0	0	0
651 - 700	1	0	0	0	0	0
701 - 750	1	0	0	0	0	0
1151 - 1200	0	0	1	0	0	0
Total School Systems	42	12	33	3	16	5
Total Number of Pupils Involved*	3992 (3.8)	720 (0.7)	4449 (8.1)	22 (0.0)	613 (1.2)	140 (0.3)

*The numbers in brackets represent the percentage that the preceeding figure represents of the total number of pupils transported in the province as shown in Table 7.

Table 14

Pupils Transported Out of School Systems Daily
Under Tuition and/or Transportation
Agreements - 1972

Number of Pupils Transported	Alberta School Systems		Saskatchewan School Systems		Manitoba School Systems	
	Under Agreement	No Agreements	Under Agreements	No Agreements	Under Agreement	No Agreements
1 - 50	16	2	17	0	13	4
51 - 100	3	2	2	0	1	1
101 - 150	2	0	0	0	1	0
151 - 200	0	2	1	0	0	0
201 - 250	1	0	1	0	0	0
251 - 300	2	0	1	0	0	0
301 - 350	0	1	1	0	0	0
351 - 400	1	0	1	0	1	0
451 - 500	0	0	2	0	0	0
551 - 600	0	0	1	0	0	0
601 - 650	2	0	0	0	0	0
Total School Systems	27	7	27	0	16	5
Total Number of Pupils Involved*	3318 (3.1)	885 (0.8)	3307 (6.0)	0 (0.0)	833 (1.6)	76 (0.1)

*The numbers in brackets represent the percentage that the preceeding figure represents of the total number of pupils transported in the province as shown in Table 7.

Inter-district transportation of pupils without agreements was a less important phenomenon than transportation under agreements.

However, a considerable number of students were transported between Alberta school systems in the absence of agreements.[12] A much smaller number of students was involved in Manitoba and almost no students were involved in Saskatchewan.

SUMMARY

Grants were payable, in 1972, in respect of a greater proportion of transported pupils in Saskatchewan than in either Alberta or Manitoba. In all three provinces, grants were payable in respect of a greater proportion of pupils in rural school systems than in urban school systems.

Grants covered a greater portion of total pupil transportation expenditures of Manitoba school systems than of Alberta school systems and a greater portion of the expenditures of Alberta school systems than of those in Saskatchewan. Rural school systems in Alberta and in Manitoba tended to have a greater portion of their total pupil transportation expenditure covered by grants than did urban school systems while no clear pattern was evident for Saskatchewan school systems.

The more important pupil transportation expenditure item for Alberta school systems, in 1972, was "Contract Costs" while the more important item for Manitoba school systems was "Cost of School System

---

[12] A pupil transportation official mentioned to the author in October, 1972, that "raiding" was not uncommon in Alberta.

Operated Buses." The two items were of relatively equal importance to Saskatchewan school systems.

The principal revenue source in respect of pupil transportation was grants from the provincial governments in all three provinces. Local taxes were more important to Saskatchewan school systems than to school systems in Manitoba or Alberta.

Pupil transportation operating expenditures were more important to the total operating budgets of school systems in Saskatchewan than to those in Alberta and Manitoba.

Inter-district transportation of pupils under tuition and/or transportation agreements was more important in Saskatchewan than in either of the other provinces. Inter-district transportation of pupils in the absence of such agreements was more important in Alberta than in Manitoba or Saskatchewan.

CHAPTER VIII

CHARACTERISTICS OF PRAIRIE SCHOOL BUS FLEETS

INTRODUCTION

Research Question 3 is concerned with the seating capacity and ownership characteristics of provincial school bus fleets.[1] The purpose of this Chapter is to examine those characteristics and to make inter-provincial comparisons.

Responses to Section D of the Questionnaire[2] provided the necessary data. These have been displayed in tables.

THE SEATING CAPACITY CHARACTERISTICS OF PROVINCIAL SCHOOL BUS FLEETS[3]

Introduction

The data gathered from the responses to questionnaire item 12(c) was used in the construction of Table 15. Seating capacity data was provided for 5,655 vehicles.

Alberta Vehicles

From the table it is evident that Alberta school systems tend to favour vehicles with seating capacities in the range from thirty-one to

---

[1] Supra, pp. 6-7.

[2] Appendix B.

[3] See Question 3(a), p. 6.

Passenger Seating Capacity Characteristics of
Pupil Transportation Vehicles - 1973

Number of Vehicles

Seating Capacity	Alberta	Saskatchewan	Manitoba	Totals
2 - 5	5	53	120	178
6 - 10	25	90	123	238
11 - 20	68	385	226	679
21 - 24	23	71	108	202
25 - 30	74	101	92	267
31 - 36	353	489	181	1023
37 - 42	178	222	79	479
43 - 48	589	390	173	1152
49 - 54	570	173	203	946
55 - 60	74	13	83	170
61 - 66	82	23	195	300
67 or more	11	1	9	21
Totals	2052	2011	1592	5655

Percentages*

Seating Capacity	Alberta	Saskatchewan	Manitoba	Totals
2 - 5	0.24	2.64	7.54	3.15
6 - 10	1.22	4.48	7.73	4.21
11 - 20	3.31	19.14	14.20	12.01
21 - 24	1.12	3.53	6.78	3.57
25 - 30	3.61	5.02	5.78	4.72
31 - 36	17.20	24.32	11.37	18.09
37 - 42	8.67	11.04	4.96	8.47
43 - 48	28.70	19.39	10.87	20.37
49 - 54	27.78	8.60	12.75	16.73
55 - 60	3.61	0.65	5.21	3.01
61 - 66	4.00	1.14	12.25	5.31
67 or more	0.54	0.05	0.57	0.37
Totals	100	100	100	100

*The percentages may not total 100 due to rounding.

fifty-four seats. This group accounts for more than eighty-two per cent of the vehicles for which data was provided in that province.

Saskatchewan Vehicles

Saskatchewan school systems tend to favour vehicles from two seating capacity groups. The first group is of vehicles with seating capacities of eleven to twenty seats. The second group is of vehicles with seating capacities of from thirty-one to forty-eight seats. The vehicles in these two seating capacity groups account for nearly seventy-four per cent of the vehicles for which data was provided in that province.

Manitoba Vehicles

Manitoba school systems tend to use a great variety of vehicles with differing seating capacities. Small seating capacity vehicles (ten seats or less) tend to be more important in Manitoba school systems than in school systems in Saskatchewan and, particularly, than those in Alberta. This group accounts for over fifteen per cent of the vehicles for which data was provided in Manitoba versus just over seven per cent in Saskatchewan and nearly one and one-half per cent in Alberta.

THE OWNERSHIP CHARACTERISTICS OF PROVINCIAL SCHOOL BUS FLEETS[4]

Introduction

The data gathered from the responses to questionnaire item 13(b) was used to construct Table 16. Ownership data was provided for 6,250 vehicles.

---

[4] See Question 3(b), p. 7.

Table 16

Ownership Characteristics of Pupil Transportation Vehicle Fleets - 1973

Ownership Categories	Number of Vehicles			
	Alberta	Saskatchewan	Manitoba	Totals
School System Owned	1047	1205	949	3201
Contractor Operated	1228	901	673	2802
School System Leased	2	0	6	8
School System Chartered	59	10	0	69
Private Cars, Station Wagons, etc.	39	29	102	170
Totals	2375	2145	1730	6250

Percentages*

Ownership Categories	Alberta	Saskatchewan	Manitoba	Totals
School System Owned	44.1	56.2	54.9	51.2
Contractor Operated	51.7	42.0	38.9	44.8
School System Leased	0.1	0.0	0.3	0.1
School System Chartered	2.5	0.5	0.0	1.1
Private Cars, Station Wagons, etc.	1.6	1.4	5.9	2.7
Totals	100	100	100	100

*The percentages may not total 100 due to rounding.

School System Owned Versus Contractor Owned

Over one-half of the pupil transportation vehicles in Saskatchewan and Manitoba are school system owned. Slightly more than one-half of the pupil transportation vehicles in Alberta were contractor operated. Forty-two per cent of those in Saskatchewan are contractor operated versus nearly thirty-nine per cent of those in Manitoba.

Leased Vehicles

School system leased vehicles are used very little for pupil transportation in the Prairie Provinces.

Chartered Vehicles

The data in Table 16 indicate that school system chartered vehicles are used to some extent in Alberta, slightly in Saskatchewan and not at all in Manitoba.

Private Cars, Station Wagons

Private cars, station wagons, etc., comprise nearly six per cent of the pupil transportation vehicles in Manitoba but only approximately one and one-half per cent of the vehicles in Saskatchewan and Alberta.

THE PROPORTIONS OF PUPILS TRANSPORTED BY VEHICLES BELONGING TO VARIOUS OWNERSHIP CATEGORIES[5]

Introduction

Data collected in response to questionnaire item 1 were used to construct Table 17.[6] The data displayed in the table clearly show unique

---

[5] See Question 3(c), p. 8.

[6] The totals in Table 17 differ slightly from those given in Table 7 which was constructed from data supplied from questionnaire item 2(b).

Table 17

Pupils Transported on Vehicles Belonging to Various Ownership Categories - 1973

Ownership Categories	Pupils Transported			
	Alberta	Saskatchewan	Manitoba	Totals
School System Owned or Leased	31,277	31,385	35,797	98,459
Contractor Operated	56,327	22,619	14,871	93,817
Parent Owned and Operated*	145	218	52	415
School System Chartered	1,464	241	0	1,705
Public Transit System*	16,045	488	2,063	18,596
Totals	105,258	54,951	52,783	212,992

Percentages**

Ownership Categories	Alberta	Saskatchewan	Manitoba	Totals
School System Owned or Leased	29.7	57.1	67.8	46.2
Contractor Operated	53.5	41.1	28.2	44.0
Parent Owned and Operated*	0.1	0.4	0.1	0.2
School System Chartered	1.4	0.4	0.0	0.8
Public Transit System*	15.2	0.9	3.9	8.7
Totals	100	100	100	100

*Does not include pupils transported at the expense of the parents, only those transported at the expense of the school system.

**The percentage may not total 100 due to rounding.

patterns for each of the provinces in the extent to which vehicles belonging to the five ownership categories are used to carry pupils.

Alberta School Systems

Alberta school systems use contractor operated vehicles to carry over fifty-three per cent of the pupils transported. Nearly thirty per cent of the pupils are transported on school system operated vehicles and over fifteen per cent are carried on transit system vehicles. Small numbers of pupils are transported on chartered vehicles and by parents.

Saskatchewan School Systems

Saskatchewan school systems use school system operated vehicles to carry over fifty-seven per cent of their transported pupils and over forty-one per cent of their pupils are transported on contractor operated vehicles. Smaller numbers of children are transported on public transit vehicles, chartered vehicles and by parents.

Manitoba School Systems

Manitoba school systems transport almost sixty-eight per cent of their pupils on school system operated vehicles. Twenty-eight per cent of the pupils are carried by contractor operated vehicles and nearly four per cent by public transit system vehicles. Small numbers of pupils are transported by parents but none are transported on chartered vehicles.

SUMMARY

Manitoba school systems tend to use pupil transportation vehicles with a great variety of seating capacities, Saskatchewan school systems less so and Alberta school systems do so even less.

School systems in Saskatchewan and Manitoba own over fifty per cent of the pupil transportation vehicles in use in those provinces, while over fifty per cent of the pupil transportation vehicles in use in Alberta are contractor owned. Other ownership categories are relatively unimportant in all three provinces.

Over two-thirds of the pupils transported in Manitoba, over one-half of those in Saskatchewan but less than one-third of those in Alberta are transported on school system owned vehicles. Conversely, over one-half of the pupils in Alberta, over forty per cent of those in Saskatchewan and less than thirty per cent of those in Manitoba are transported on contractor operated vehicles.

CHAPTER IX

PERSONNEL, GARAGE FACILITIES AND ACCIDENT EXPERIENCE OF LOCAL SCHOOL SYSTEMS

INTRODUCTION

Research Questions 4, 5, 6 and 7[1] are concerned with pupil transportation personnel employed by local school systems, the provision of major garage facilities by such systems and the accident experience of such systems.

The purpose of this Chapter is to display the data collected which is relevant to each part of the research questions and to make inter-provincial comparisons.

THE EMPLOYMENT OF TRANSPORTATION SUPERVISORS[2]

Table 18 was constructed from data obtained in response to Section D of the questionnaire. It is clear from the table that transportation supervisors have been appointed at a greater rate by school systems in Manitoba than by school systems in both Alberta and Saskatchewan.

Rural/urban differences are not clearly indicated. The data indicate that there are no supervisors in mixed or urban school systems

---

[1] Supra, pp. 7-8.

[2] See Question 4(a), p. 7.

Table 18

The Employment of Transportation Supervisors and Assistant Transportation Supervisors and Related Factors - 1973

	Alberta School Systems			Saskatchewan School Systems			Manitoba School Systems		
	Rural	Mixed	Urban	Rural	Mixed	Urban	Rural	Mixed	Urban
Number of Supervisors*	16(24)	0(0)	4(22)	8(17)	0(0)	0(0)	12(39)	2(40)	5(36)
Number of Full-Time	13	0	4	6	0	0	10	2	5
Number Part-Time	3	0	0	2	0	0	2	0	0
Average Annual Salaries	8,258	-	10,657	7,514	-	-	7,167	8,410	9,468
Highest Annual Salaries	10,930	-	15,000	11,000	-	-	9,500	9,500	10,872
Lowest Annual Salaries**	2,681	-	6,315	1,500	-	-	700	7,320	7,500
Number of Assistant Supervisors	0	0	1	0	0	0	1	0	0

*The number in brackets represents the number of transportation supervisors appointed by school systems as a percentage of the responding school systems in each rural/urban class shown in Table 4.

**Includes salaries of part-time transportation supervisors.

in Saskatchewan. The rate of appointment in Alberta and in Manitoba rural school systems is slightly greater than that in urban systems.

SALARIES PAID TO TRANSPORTATION SUPERVISORS[3]

Average annual salaries paid to transportation supervisors in rural Manitoba school systems are less than those paid in rural Saskatchewan school systems which are, in turn, less than those paid by rural Alberta school systems.

Average annual salaries paid to transportation supervisors in urban school systems in Manitoba are less than those paid in similar systems in Alberta.

In both Alberta and Manitoba average annual salaries are higher for transportation supervisors in urban school systems than in rural school systems. See Table 18.

THE EMPLOYMENT OF ASSISTANT TRANSPORTATION SUPERVISORS[4]

Only one school system, an urban Alberta system, reported that it employed an assistant transportation supervisor.

THE DUTIES OF TRANSPORTATION SUPERVISORS[5]

Table 19 was constructed from data provided in response to

---

[3] See Question 4(b), p. 7.

[4] See Question 4(c), p. 7.

[5] See Question 4(d), p. 7.

Table 19

Job Descriptions of Pupil Transportation
Supervisors - 1973

	Percentage of Working Time Spent on Various Duties*								
	Driving a School Bus			Mechanical Inspection and Repair of Vehicles			Scheduling and Routing		
	Rural	Mixed	Urban	Rural	Mixed	Urban	Rural	Mixed	Urban
Alberta School Systems	1.9 (10)	- -	0 (10)	30.1 (1)	- -	0 (10)	14.1 (2)	- -	10.3 (2)
Saskatchewan School Systems	5.8 (6)	- -	- -	35.2 (1)	- -	- -	8.4 (4)	- -	- -
Manitoba School Systems	0.3 (10)	0 (10)	3.2 (10)	11.0 (3)	34.9 (1)	5.6 (3)	15.5 (1)	24.1 (2)	5.6 (3)
Rank Totals**	26 (10)	10 (10)	20 (10)	5 (1)	1 (1)	13 (6)	7 (2)	2 (2)	5 (2)

*The percentage of time spent on various pupil transportation related duties is shown as a percentage of total working time. The times have been ranked by province and rural/urban classification. The rankings are indicated in brackets.

**The ranks themselves have been totalled and ranked by rural/urban classification. The ranking resulting from this operation is shown in brackets.

Continued . . .

Table 19 (continued)

	Percentage of Working Time Spent on Various Duties*								
	Arranging for Contract Service			Hiring, Training and Supervising Drivers			Enforcing Safety Standards		
	Rural	Mixed	Urban	Rural	Mixed	Urban	Rural	Mixed	Urban
Alberta School Systems	6.3 (5)	- -	12.8 (1)	11.2 (4)	- -	0 (10)	5.5 (7)	- -	7.7 (4)
Saskatchewan School Systems	0.7 (10)	- -	- -	7.6 (5)	- -	- -	2.9 (7)	- -	- -
Manitoba School Systems	5.8 (7)	0 (10)	8.0 (1)	12.3 (2)	14.5 (3)	5.6 (3)	7.4 (5)	2.4 (6)	6.4 (2)
Rank Totals**	22 (7)	10 (10)	2 (1)	11 (4)	3 (3)	13 (6)	19 (6)	6 (6)	6 (3)

*The percentage of time spent on various pupil transportation related duties is shown as a percentage of total working time. The times have been ranked by province and rural/urban classification. The rankings are indicated in brackets.

**The ranks themselves have been totalled and ranked by rural/urban classification. The ranking resulting from this operation is shown in brackets.

Continued . . .

Table 19 (continued)

	Percentage of Working Time Spent on Various Duties*								
	Handling Disciplinary Problems			Handling Parental Complaints			Purchasing Supplies and Parts		
	Rural	Mixed	Urban	Rural	Mixed	Urban	Rural	Mixed	Urban
Alberta School Systems	4.6 (8)	- -	9.0 (3)	3.8 (9)	- -	7.7 (4)	12.8 (3)	- -	0 (10)
Saskatchewan School Systems	2.2 (9)	- -	- -	2.5 (8)	- -	- -	17.1 (2)	- -	- -
Manitoba School Systems	3.9 (9)	4.8 (4)	4.8 (6)	5.2 (8)	1.2 (8)	4.8 (6)	9.4 (4)	2.4 (6)	4.8 (6)
Rank Totals**	26 (10)	4 (4)	9 (4)	25 (8)	8 (8)	10 (5)	9 (3)	6 (6)	16 (8)

*The percentage of time spent on various pupil transportation related duties is shown as a percentage of total working time. The times have been ranked by province and rural/urban classification. The rankings are indicated in brackets.

**The ranks themselves have been totalled and ranked by rural/urban classification. The ranking resulting from this operation is shown in brackets.

Continued . . .

Table 19 (continued)

Percentage of Working Time Spent on Various Duties*

	Setting Up Maintenance Guidelines			Other Duties Unrelated to Pupil Transportation			Total Weekly Hours Reported		
	Rural	Mixed	Urban	Rural	Mixed	Urban	Rural	Mixed	Urban
Alberta School Systems	5.7 (6)	- -	0 (10)	4.0	-	52.6	525	0	78
Saskatchewan School Systems	10.2 (3)	- -	- -	7.3	-	-	275	0	0
Manitoba School Systems	6.8 (6)	3.6 (5)	3.2 (10)	22.3	12.0	48.0	309	83	125
Rank Totals**	15 (5)	5 (5)	20 (10)						

*The percentage of time spent on various pupil transportation related duties is shown as a percentage of total working time. The times have been ranked by province and rural/urban classification. The rankings are indicated in brackets.

**The ranks themselves have been totalled and ranked by rural/urban classification. The ranking resulting from this operation is shown in brackets.

questionnaire item 7(e). The following results are based on the data in the table.

A. Driving a school bus is a duty which is more important to transportation supervisors in rural school systems in Saskatchewan than elsewhere. Transportation supervisors in mixed or urban school systems spend no time at all on this duty.

B. Mechanical inspection and repair of vehicles is one of the principal duties of transportation supervisors in all types of school systems except in urban Alberta school systems where no time is spent on this duty.

C. Scheduling and routing is an important duty for transportation supervisors in all categories of school systems.

D. Arranging for contract service is a duty on which transportation supervisors in urban school systems spend a major portion of their time, but on which supervisors in rural areas spend relatively little time. Supervisors in rural Alberta school systems tend to spend more time on this duty than do those in rural Saskatchewan and Manitoba school systems.

E. Hiring, training and supervising drivers are duties which are relatively important to transportation supervisors except for those in urban Alberta school systems.

F. Enforcing safety standard is a duty on which transportation supervisors in urban school systems spend a considerable amount of their time and on which supervisors in rural areas tend to spend relatively little time.

G. Handling disciplinary problems is a duty on which little time is spent by rural transportation supervisors but on which more

time is spent by urban transportation supervisors, particularly those in Alberta school systems.

H. Handling parental complaints consumes a considerable portion of the time of transportation supervisors in urban Alberta school systems but relatively little of supervisors' time elsewhere.

I. Purchasing supplies and parts is a duty on which supervisors in rural school systems spend a considerable portion of their time.

J. Setting up maintenance guidelines consumes a fair portion of the time of transportation supervisors in rural Saskatchewan school systems but little of supervisors' time in other school systems.

THE USE OF FULL-TIME DRIVERS[6]

School systems in Manitoba employ a higher proportion of full-time pupil transportation drivers whose duties are restricted to driving than do school systems in Saskatchewan, which in turn employ a higher proportion of such drivers than do school systems in Alberta. Very few such drivers are employed by mixed or urban school systems in any of the three provinces. The data on which this discussion is based are displayed in Table 20 which was prepared from the responses to questionnaire item 8.

THE USE OF FULL-TIME PERSONNEL TO DRIVE AND TO PERFORM OTHER DUTIES[7]

The employment of full-time personnel for driving and other

---

[6] See Question 4(e), p. 7.

[7] See Question 4(f), p. 7.

Table 20

The Terms of Employment of Pupil Transportation Drivers - 1973

	Number of Full-Time Drivers Whose Duties are Restricted to Driving				Number of Drivers Who Perform Additional Duties for the School System			
	Rural	Mixed	Urban	Total	Rural	Mixed	Urban	Total
Alberta School Systems	135 (15.6)	9 (1.0)	1 (0.1)	145 (16.7)	61 (7.0)	0 (0)	1 (0.1)	62 (7.1)
Saskatchewan School Systems	186 (19.1)	0 (0)	0 (0)	186 (19.1)	28 (2.9)	0 (0)	0 (0)	28 (2.9)
Manitoba School Systems	202 (20.4)	0 (0)	35 (3.5)	237 (23.9)	60 (6.1)	19 (1.9)	20 (2.0)	99 (10.0)
Totals*	523 (18.5)	9 (0.3)	36 (1.3)	568 (20.1)	149 (5.3)	19 (0.7)	21 (0.7)	189 (6.7)

*Percentages are shown in brackets.

*The percentages may not total 100 due to rounding.

Continued . . .

Table 20 (continued)

	Number of Part-Time Drivers				
	Rural	Mixed	Urban	Total	Grand Totals
Alberta School Systems	653 (75.2)	2 (0.2)	6 (0.7)	661 (76.1)	868 (100)
Saskatchewan School Systems	757 (77.8)	2 (0.2)	0 (0)	759 (78.0)	973 (100)
Manitoba School Systems	524 (52.9)	79 (8.0)	51 (5.2)	654 (66.1)	990 (100)
Totals*	1934 (68.3)	83 (2.9)	57 (2.0)	2074 (73.3)	2831 (100)

*Percentages are shown in brackets.

*The percentages may not total 100 due to rounding.

duties is an important characteristic of Manitoba school systems, especially of rural systems, and of rural Alberta systems. The practice does exist on a small scale in rural Saskatchewan school systems.

The greatest number of school system employed drivers, however, are part-time employees of the school systems. Over three-quarters of all school system employed drivers in Alberta and Saskatchewan school systems and approximately two-thirds of those in Manitoba are part-time employees. See Table 20.

METHODS OF DETERMINING THE WAGES OF DRIVERS[8]

Questionnaire item 8(f) asked how the salaries of school system employed drivers are determined. The results are displayed in Table 21.

Salaries are set out by the school board in most school systems in all three provinces. However, collective agreements are in force in over one-fifth of the reporting systems in Saskatchewan and in Alberta, but only in eleven per cent of the reporting school systems in Manitoba.

DRIVER MEMBERSHIP IN TRADE UNIONS[9]

Questionnaire item 8(c) asks whether school system employed drivers are members of a trade union. The results are summarized in Table 22. Questionnaire item 9(b) asks whether contractor employed

---

[8] See Question 4(g), p. 7.

[9] See Question 4(h), p. 7.

Table 21

The Methods of Determining Salaries of Pupil Transportation Drivers in School Systems Which Operate Vehicles - 1973

	School Systems Where Salaries are Set Out by School Board				School Systems Where Salaries are Set Out in a Collective Agreement			
	Rural	Mixed	Urban	Total	Rural	Mixed	Urban	Total
Alberta*	23 (59.0)	3 (7.7)	1 (2.6)	27 (69.2)	7 (17.9)	- -	1 (2.6)	8 (20.5)
Saskatchewan*	19 (61.3)	1 (3.2)	2 (6.5)	22 (71.0)	7 (22.6)	- -	- -	7 (22.6)
Manitoba*	21 (77.8)	2 (7.4)	- -	23 (85.2)	2 (7.4)	1 (3.7)	- -	3 (11.1)
Totals**	63 (64.9)	6 (6.2)	3 (3.1)	72 (100)	16 (16.5)	1 (1.0)	1 (1.0)	18 (100)

*Percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

Continued . . .

Table 21 (continued)

	School Systems Where Salaries are Determined by Other Methods				
	Rural	Mixed	Urban	Total	Grand Totals
Alberta*	1 (2.6)	- -	3 (7.7)	4 (10.3)	39 (100)
Saskatchewan*	2 (6.5)	- -	- -	2 (6.5)	31 (100)
Manitoba*	- -	- -	1 (3.7)	1 (3.7)	27 (100)
Totals**	3 (3.1)	- -	4 (4.1)	7 (100)	97 (100)

*Percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

Table 22

The Unionization of Pupil Transportation Drivers - 1973

1. School System Operated Vehicles

	School Systems Where Drivers are Members of a Trade Union				School Systems Where Drivers are not Members of a Trade Union			
	Rural	Mixed	Urban	Total	Rural	Mixed	Urban	Total
Alberta	2	0	1	3	28	3	2	33
Saskatchewan	2	0	0	2	21	1	0	22
Manitoba	0	1	3	4	22	3	4	29
Totals	4	1	4	9	71	7	6	84

Continued . . .

Table 22 (continued)

2. Contractor or Transit System Operated Vehicles

	School Systems Where Drivers are Members of a Trade Union				School Systems Where Drivers are not members of a trade union			
	Rural	Mixed	Urban	Total	Rural	Mixed	Urban	Total
Alberta	0	0	4	4	24	2	2	28
Saskatchewan	4	0	0	4	19	1	1	21
Manitoba	0	0	1	1	13	2	7	22
Totals	4	0	5	9	56	5	10	71

drivers are members of a trade union. The results are also summarized in Table 22.

Membership in trade unions by pupil transportation drivers whether school system employed or contractor or transit system employed affects drivers in approximately ten per cent of the school systems in each province. The number of school systems where collective agreements are in force, as shown in Table 21, is considerably higher. As collective agreements are usually connected with trade union activity, there would appear to be a discrepancy. Perhaps this may be explained by the existence of "drivers associations" which have concluded collective agreements with school systems but which were not considered to be "trade unions" by some of the respondents to the questionnaire. This is a matter which requires further study.

RESPONSIBILITY FOR PUPIL TRANSPORTATION WHERE NO TRANSPORTATION SUPERVISOR IS EMPLOYED[10]

Responses to questionnaire item 7(g) provided data for the construction of Table 23 which shows the officials who are responsible for pupil transportation where the school system does not employ a transportation supervisor.

The secretary-treasurer is most often the official responsible for pupil transportation in Manitoba school systems where there is no transportation supervisor. The duty is sometimes carried out by school trustees as well. However, in Alberta and Saskatchewan school systems,

---

[10] See Question 5, pp. 7-8.

Table 23

Officials Responsible for Pupil Transportation
Where No Transportation Supervisor
is on Staff - 1973

Position	Alberta School Systems	Saskatchewan School Systems	Manitoba School Systems	Totals
Superintendent of Assistant	4	2	1	7
Secretary-Treasurer or Assistant	9	3	8	20
Trustee or School Committee Member	20	17	5	42
Contractor or Driver	2	5	1	8
Other	0	2	2	4
Totals	35	29	17	81

school trustees or school committee members[11] are more often responsible for pupil transportation than are secretary-treasurers.

Superintendents or their assistants were the officials who are responsible for pupil transportation in several school systems as were contractors or drivers.

THE PROVISION OF MAJOR GARAGE FACILITIES[12]

Responses to questionnaire item 11 provided data which has been summarized in Tables 24, 25 and 26.

Twenty-one school systems in Alberta maintain garage facilities, twenty of which use their garage facilities for major repairs. The school systems employ, typically, three maintenance personnel in their garage facilities.

Thirteen school systems in Saskatchewan maintain garage facilities all of which are used for major repairs. Two, three or four maintenance personnel are employed in the largest number of garages.

Sixteen Manitoba school systems maintain garage facilities but only eight of these use their facilities to carry out major repairs. The largest number of school systems which maintain garage facilities employ three maintenance personnel but several employ fewer.

Contracting of vehicle maintenance is a common practice with a number of school systems in each province contracting for all or some of the work.

---

[11] School committee members in Alberta Counties are approximately equivalent to school trustees in other school systems.

[12] See Question 6, p. 8.

Table 24

The Provision of Maintenance Facilities by School Systems Operating Vehicles - 1973

	School Systems Which Maintain Garage Facilities	School Systems Not Maintaining Garage Facilities	School Systems Which Use Their Garage Facilities for Major Repairs
Alberta	21	17	20
Saskatchewan	13	20	13
Manitoba	16	22	8
Totals	50	59	41

Table 25

The Employment of Vehicle Maintenance Personnel
by School Systems Operating Vehicles - 1973

Number of Maintenance Personnel* Employed	Alberta School Systems	Saskatchewan School Systems	Manitoba School Systems	Totals
1	4	1	3	8
2	6	5	5	16
3	7	4	6	17
4	1	3	1	5
5	2	0	0	2
6	2	1	0	3
Totals	22	14	15	51
Means	2.9	2.9	2.3	2.7

*Includes part-time personnel.

Table 26

Contracting of Maintenance by School Systems
Operating Vehicles - 1973

Extent to Which Maintenance is Contracted Out	Alberta School Systems*	Saskatchewan School Systems*	Manitoba School Systems*	Totals*
Regularly	10 (28)	13 (48)	9 (30)	32 (34)
Occasionally	10 (28)	2 (7)	13 (43)	25 (27)
Not At All	16 (44)	12 (44)	8 (27)	36 (39)
Totals**	36(100)	27(100)	30(100)	93(100)

*Percentages are in brackets.

**The percentages may not total 100 due to rounding.

ACCIDENTS INVOLVING INJURY OR DEATH[13]

Data relevant to this question were provided in response to questionnaire items 10(c) to 10(f), inclusive. The results have been summarized in Table 27.

The results indicate that school systems in Alberta have experienced a larger number of accidents involving pupil injury or death in comparison to school systems in Saskatchewan and Manitoba. The rate of accidents, per pupil transported, however, as shown in Table 28, was higher for Saskatchewan school systems and the rate of pupil deaths per pupil transported was higher in Manitoba school systems.

The small number of occurences, however, causes doubt as to the value of generalizations made from the data collected. There may have been a tendency for questions concerned with safety practices or statistics to be left unanswered. There is also a possibility that the inclusion of such questions in the questionnaire may even have influenced the overall return rate.

Certain data provided by the Saskatchewan Government Insurance Office[14] and from the Enforcement Division of the Alberta Highway Traffic Board,[15] however, do tend to indicate that the data supplied on the questionnaire from those two provinces may be representative.

In any case, it is felt that further study would be required in order to present an adequate description of school bus accident experience

---

[13] See Question 7, p. 8.

[14] Letter from W. G. McInnis, Chief A.A.I.A. Underwriter, Regina, March 7, 1973.

[15] Alberta School Bus Accidents, 70-71 and 71-72.

Table 27

Accidents Involving Personal Injury
or Death from 1970 to 1972

	Alberta School Systems	Saskatchewan School Systems	Manitoba School Systems	Totals
The Number of School Systems Reporting Accidents . . .	6	3	4	13
The Number* of Accidents Reported . . .	11	7	4	22
The Number of Pupils** Injured	46	6	1	53
The Number of Pupils who Lost Their Lives . .	1	0	2	3

*All accidents reported were on regular home/school/home trips.

**One respondent reported the death of a driver in a school bus accident.

Table 28

Rate of Accidents Involving Personal Injury or Death

	Alberta School Systems	Saskatchewan School Systems	Manitoba School Systems
Number of Accidents per Pupil Transported*	.000104	.000127	.000072
Number of Pupils Injured per Pupil Transported*	.000436	.000108	.000019
Number of Pupils Who Lost Their Lives per Pupil Transported*	.000009	-	.000039

*The number of pupils transported is the figure shown in Table 7.

in the three provinces.

SUMMARY

A. Pupil transportation supervisors have been appointed more often in Manitoba than in Saskatchewan and Alberta. No clear rural/urban differences are indicated.

B. Salaries paid to transportation supervisors in Alberta are higher than those paid in Manitoba. Urban school systems pay higher salaries than do rural school systems in both provinces.

C. Assistant transportation supervisors are not commonly employed in any of the three Prairie Provinces.

D. The most important duties of transportation supervisors are scheduling and routing. Mechanical inspection of vehicles is an important duty to transportation supervisors except to those in urban Alberta school systems.

E. The largest group of pupil transportation drivers are employed as part-time personnel in all three provinces.

F. Drivers in approximately ten per cent of the school systems in each province are members of trade unions.

G. School trustees or committee members are most often responsible for pupil transportation in Alberta and Saskatchewan school systems where no transportation supervisors have been appointed. In Manitoba the secretary-treasurer is the official most often responsible.

H. A number of school systems in each of the three provinces maintain major garage facilities.

I. The accident statistics obtained by this survey may not be adequate.

CHAPTER X

OPERATING PRACTICES AND POLICIES OF LOCAL SCHOOL SYSTEMS

INTRODUCTION

Research Question 8[1] is concerned with the practices and policies of local school systems as they relate to the type of pupil transportation service they provide. Also considered are safe-riding policies and practices and curricular, extracurricular and community use of vehicles.

The purpose of this Chapter is to describe the data relevant to each of the parts of the research question and to take notice of important inter-provincial and rural/urban differences.

THE GREATEST HOME TO PICK-UP POINT WALKING DISTANCES[2]

Data collected in response to questionnaire item 6(a) were used to construct Table 29. Only a relatively small number of the responding school systems require any pupil to walk a distance greater than one-half of a mile before boarding a transportation vehicle. In Saskatchewan, most school systems do not require any student to walk over one-quarter of a mile. However, a significant number of school systems in Alberta do require some pupils to walk up to one and one-half miles.

---

[1] Supra, pp. 8-9.

[2] See Question 8(a), p. 8.

Table 29

The Greatest Home to Pick-up Point Walking Distance Required of any Transported Pupil - 1973

Walking Distance	Alberta School Systems*			Saskatchewan School Systems*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Less than 1/4 mile	5 (10)	0 (0)	0 (0)	11 (27)	0 (0)	0 (0)
1/4 mile	14 (29)	1 (20)	6 (55)	16 (39)	1 (100)	1 (50)
1/2 mile	15 (31)	3 (60)	1 (9)	11 (27)	0 (0)	0 (0)
3/4 mile	3 (6)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)
1 mile	6 (12)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)
1 1/2 miles	5 (10)	1 (20)	4 (36)	0 (0)	0 (0)	0 (0)
Over 1 1/2 miles	1 (2)	0 (0)	0 (0)	1 (2)	0 (0)	1 (50)
Totals**	49 (100)	5 (100)	11 (100)	41 (100)	1 (100)	2 (100)

*Percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

Continued . . .

Table 29 (continued)

Walking Distance	Manitoba School Systems*			Totals*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Less than 1/4 mile	5 (19)	0 (0)	0 (0)	21 (18)	0 (0)	0 (0)
1/4 mile	4 (15)	2 (40)	2 (22)	34 (29)	4 (36)	9 (41)
1/2 mile	16 (62)	3 (60)	4 (44)	42 (36)	6 (55)	5 (23)
3/4 mile	0 (0)	0 (0)	0 (0)	4 (3)	0 (0)	0 (0)
1 mile	1 (4)	0 (0)	3 (33)	8 (7)	0 (0)	3 (14)
1 1/2 miles	0 (0)	0 (0)	0 (0)	5 (4)	1 (9)	4 (18)
Over 1 1/2 miles	0 (0)	0 (0)	0 (0)	2 (2)	0 (0)	1 (5)
Totals**	26 (100)	5 (100)	9 (100)	116 (100)	11 (100)	22 (100)

*Percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

A rural/urban difference is noticeable, as well. There is a tendency for urban school systems to require pupils to walk a greater distance before boarding a vehicle than do mixed or rural systems.

THE GREATEST PICK-UP POINT TO SCHOOL TRAVELLING DISTANCES[3]

Table 30 displays the data provided by respondents to questionnaire item 7(b). The largest group of rural school systems in each province reported that the greatest distances travelled by any of their pupils was from thirty-one to forty miles. The largest group of mixed school systems reported distances of twenty-one to thirty miles. The one mixed system in Saskatchewan reported a distance of forty miles. Urban school systems in all provinces reported, in the majority of cases, that the greatest distances travelled by their pupils was from one to ten miles. The greatest distance travelled by any pupil in each rural/urban classification of school systems in the three provinces is shown below.

Greatest Distances Travelled by any Transported Pupil on His Way to School (Miles)

	Rural	Mixed	Urban
Alberta School Systems	74	40	15
Saskatchewan School Systems	98	40	12
Manitoba School Systems	87	55	56

[3] See Question 8(b), p. 8.

Table 30

The Greatest Pick-up Point to School Distance Travelled by Any Transported Pupil - 1973

Distance Travelled (Miles)	Alberta School Systems*			Saskatchewan School Systems*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
0 - 10	2 (4)	2 (40)	8 (67)	1 (2)	0 (0)	1 (50)
11 - 20	4 (9)	0 (0)	4 (33)	3 (7)	0 (0)	1 (50)
21 - 30	4 (9)	2 (40)	0 (0)	4 (10)	0 (0)	0 (0)
31 - 40	11 (23)	1 (20)	0 (0)	16 (39)	1 (100)	0 (0)
41 - 50	12 (26)	0 (0)	0 (0)	8 (20)	0 (0)	0 (0)
51 - 60	8 (17)	0 (0)	0 (0)	8 (20)	0 (0)	0 (0)
61 - 70	4 (9)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
71 or over	2 (4)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)
Totals**	47 (100)	5 (100)	12 (100)	41 (100)	1 (100)	2 (100)

*Percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

Continued . . .

Table 30 (continued)

Distance Travelled (Miles)	Manitoba School Systems*			Totals*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
0 - 10	1 (4)	0 (0)	4 (40)	4 (4)	2 (18)	13 (54)
11 - 20	2 (8)	1 (20)	2 (20)	9 (8)	1 (9)	7 (29)
21 - 30	5 (21)	2 (40)	1 (10)	13 (12)	4 (36)	1 (4)
31 - 40	9 (37)	1 (20)	2 (20)	36 (32)	3 (27)	2 (8)
41 - 50	3 (12)	0 (0)	0 (0)	23 (21)	0 (0)	0 (0)
51 - 60	3 (12)	1 (20)	1 (10)	19 (17)	1 (9)	1 (4)
61 - 70	0 (0)	0 (0)	0 (0)	4 (4)	0 (0)	0 (0)
71 or over	1 (4)	0 (0)	0 (0)	4 (4)	0 (0)	0 (0)
Totals**	24 (100)	5 (100)	10 (100)	112 (100)	11 (100)	24 (100)

*Percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

THE GREATEST TIME SPENT FROM PICK-UP POINT TO SCHOOL[4]

The data provided in response to questionnaire item 6(c) is summarized in Table 31. The largest group of rural school systems, a total of forty-two, reported that the greatest time spent by any transported pupil in travelling from the pick-up point to his school was from seventy-six to ninety minutes. The largest numbers of rural Alberta and Saskatchewan school systems were among this group. The largest group of rural Manitoba school systems, however, reported that the greatest time spent by any of their pupils was from sixty-one to seventy-five minutes.

The largest number of mixed school systems reported that the greatest time spent by any of their pupils was, also, from sixty-one to seventy-five minutes.

THE GREATEST NUMBER OF MINUTES BEFORE SCHOOL OPENING THAT PUPILS ARE DROPPED OFF[5]

Table 32 was constructed from data provided in response to questionnaire item 6(d). The earliest time that pupils are dropped off at their schools in most school systems in all rural/urban classifications is thirty minutes, or less, before school opening. However, some pupils are dropped off at their schools considerably earlier. The earliest times for each of the rural/urban classifications of school systems in each province have been displayed in the

---

[4] See Question 8(c), p. 8.

[5] See Question 8(d), p. 8.

Table 31

The Greatest Time Spent by Any Pupil on a Vehicle from Pick-up Point to School - 1973

Time Spent	Alberta School Systems*			Saskatchewan School Systems*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
15 minutes or less	1 (2)	0 (0)	1 (8)	0 (0)	0 (0)	0 (0)
16 to 30 minutes	2 (4)	2 (40)	6 (50)	0 (0)	0 (0)	0 (0)
31 to 45 minutes	4 (8)	0 (0)	2 (17)	3 (7)	0 (0)	1 (50)
46 to 60 minutes	9 (18)	0 (0)	1 (8)	3 (7)	0 (0)	1 (50)
61 to 75 minutes	14 (28)	1 (20)	1 (8)	9 (21)	1 (100)	0 (0)
76 to 90 minutes	16 (32)	2 (40)	0 (0)	22 (52)	0 (0)	0 (0)
91 to 115 minutes	2 (4)	0 (0)	0 (0)	3 (7)	0 (0)	0 (0)
116 or more minutes	2 (4)	0 (0)	1 (8)	2 (5)	0 (0)	0 (0)
Totals**	50 (100)	5 (100)	12 (100)	42 (100)	1 (100)	2 (100)

*Percentages are shown in brackets.

** The percentages may not total 100 due to rounding.

Continued . . .

Table 31 (continued)

Time Spent	Manitoba School Systems*			Totals*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
15 minutes or less	1 (4)	0 (0)	1 (10)	2 (2)	0 (0)	2 (8)
16 to 30 minutes	3 (12)	0 (0)	1 (10)	5 (4)	2 (18)	7 (29)
31 to 45 minutes	1 (4)	1 (20)	3 (30)	8 (7)	1 (9)	6 (25)
46 to 60 minutes	5 (19)	1 (20)	1 (10)	17 (14)	1 (9)	3 (12)
61 to 75 minutes	10 (38)	3 (60)	1 (10)	33 (28)	5 (45)	2 (8)
76 to 90 minutes	4 (15)	0 (0)	1 (10)	42 (36)	2 (18)	1 (4)
91 to 115 minutes	0 (0)	0 (0)	1 (10)	5 (4)	0 (0)	1 (4)
116 or more minutes	2 (8)	0 (0)	1 (10)	6 (5)	0 (0)	2 (8)
Totals**	26 (100)	5 (100)	10 (100)	118 (100)	11 (100)	24 (100)

*Percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

Table 32

The Greatest Number of Minutes Before School Opening that Any Pupil is Dropped off at His School - 1973

Minutes Before Opening	Alberta School Systems*			Saskatchewan School Systems*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
1 - 10	2 (4)	0 (0)	1 (9)	1 (2)	0 (0)	2 (100)
11 - 20	24 (48)	1 (20)	2 (18)	20 (48)	0 (0)	0 (0)
21 - 30	17 (34)	2 (40)	4 (36)	17 (40)	0 (0)	0 (0)
31 - 40	3 (6)	2 (20)	3 (27)	2 (5)	0 (0)	0 (0)
41 - 50	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
51 - 60	1 (2)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)
61 or more	1 (2)	0 (0)	1 (9)	1 (2)	1 (100)	0 (0)
Totals**	50 (100)	5 (100)	11 (100)	42 (100)	1 (100)	2 (100)

*Percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

Continued . . .

Table 32 (continued)

Minutes Before Opening	Manitoba School Systems*			Totals*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
1 - 10	2 (8)	0 (0)	0 (0)	5 (4)	0 (0)	3 (13)
11 - 20	12 (46)	3 (60)	7 (70)	56 (47)	4 (36)	9 (39)
21 - 30	9 (35)	2 (40)	2 (20)	43 (36)	4 (36)	6 (26)
31 - 40	2 (8)	0 (0)	1 (10)	7 (6)	2 (18)	4 (17)
41 - 50	1 (4)	0 (0)	0 (0)	3 (3)	0 (0)	0 (0)
51 - 60	0 (0)	0 (0)	0 (0)	2 (2)	0 (0)	0 (0)
61 or more	0 (0)	0 (0)	0 (0)	2 (2)	1 (9)	1 (4)
Totals**	26 (100)	5 (100)	10 (100)	118 (100)	11 (100)	23 (100)

*Percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

table below.

	Rural	Mixed	Urban
Alberta School Systems	75 min.	40 min.	70 min.
Saskatchewan School Systems	90 min.	85 min.	10 min.
Manitoba School Systems	50 min.	30 min.	35 min.

THE GREATEST NUMBER OF MINUTES AFTER SCHOOL CLOSING THAT PUPILS ARE PICKED UP[6]

Responses to questionnaire item 6(e) are summarized in Table 33. Most school systems reported that their pupils were picked up within twenty minutes of school closing, a good number within ten minutes of closing. No school system reported that any pupil was picked up at his school later than forty minutes after school closing. There is evidence of a tendency for pupils of rural school systems to be picked up earlier than pupils in urban school systems.

THE GREATEST NUMBER OF MINUTES AFTER SCHOOL CLOSING THAT PUPILS ARE DROPPED OFF[7]

Table 34 summarizes the data collected in response to questionnaire item 6(f). The greatest number of rural school systems in Alberta and Saskatchewan reported that the latest time that any of their pupils were dropped off by transportation vehicles was from eighty-one

---

[6] See Question 8(e), p. 8.

[7] See Question 8(f), p. 9.

Table 33

The Greatest Number of Minutes After School Closing that Any Pupil is Picked Up - 1973

Minutes After Closing	Alberta School Systems*			Saskatchewan School Systems*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
0 - 10	31 (63)	2 (40)	3 (27)	30 (71)	0 (0)	1 (50)
11 - 20	15 (31)	1 (20)	7 (64)	8 (19)	0 (0)	1 (50)
21 - 30	2 (4)	1 (20)	1 (9)	4 (10)	1 (100)	0 (0)
31 - 40	1 (2)	1 (20)	0 (0)	0 (0)	0 (0)	0 (0)
Total**	49 (100)	5 (100)	11 (100)	42 (100)	1 (100)	2 (100)

Minutes After Closing	Manitoba School Systems*			Totals*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
0 - 10	22 (85)	2 (40)	5 (50)	83 (71)	4 (36)	9 (39)
11 - 20	3 (12)	2 (40)	4 (40)	26 (22)	3 (27)	12 (52)
21 - 30	1 (4)	1 (20)	1 (10)	7 (6)	3 (27)	2 (9)
31 - 40	0 (0)	0 (0)	0 (0)	1 (1)	1 (9)	0 (0)
Totals**	26 (100)	5 (100)	10 (100)	117 (100)	11 (100)	23 (100)

*Percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

Table 34

The Greatest Number of Minutes After School Closing that Any Pupil is Dropped Off by a Transporting Vehicle - 1973

Number of Minutes	Alberta School Systems*			Saskatchewan School Systems*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
1 - 10	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
11 - 20	0 (0)	0 (0)	1 (9)	0 (0)	0 (0)	0 (0)
21 - 30	3 (6)	0 (0)	2 (18)	0 (0)	0 (0)	1 (50)
31 - 40	2 (4)	1 (20)	2 (18)	0 (0)	0 (0)	0 (0)
41 - 50	0 (0)	1 (20)	2 (18)	5 (12)	0 (0)	0 (0)
51 - 60	8 (17)	0 (0)	3 (27)	4 (10)	0 (0)	1 (50)
61 - 70	5 (10)	1 (20)	0 (0)	3 (7)	1 (100)	0 (0)
71 - 80	8 (17)	0 (0)	1 (9)	9 (22)	0 (0)	0 (0)
81 - 90	14 (29)	2 (40)	0 (0)	16 (39)	0 (0)	0 (0)
91 - 100	1 (2)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)
101 - 110	6 (12)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)
111 - 120	1 (2)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)
121 - 130	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Totals**	48 (100)	5 (100)	11 (100)	41 (100)	1 (100)	2 (100)

*Percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

Continued . . .

Table 34 (continued)

Number of Minutes	Manitoba School Systems*			Totals*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
1 - 10	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
11 - 20	1 (4)	0 (0)	1 (10)	1 (1)	0 (0)	2 (9)
21 - 30	3 (12)	0 (0)	1 (10)	6 (5)	0 (0)	4 (17)
31 - 40	0 (0)	0 (0)	1 (10)	2 (2)	1 (10)	3 (13)
41 - 50	2 (8)	1 (25)	2 (20)	7 (6)	2 (20)	4 (17)
51 - 60	8 (31)	0 (0)	1 (10)	20 (17)	0 (0)	5 (22)
61 - 70	2 (8)	3 (75)	0 (0)	10 (9)	5 (50)	0 (0)
71 - 80	5 (19)	0 (0)	1 (10)	22 (19)	0 (0)	2 (9)
81 - 90	2 (8)	0 (0)	1 (10)	32 (28)	2 (20)	1 (4)
91 - 100	0 (0)	0 (0)	1 (10)	2 (2)	0 (0)	1 (4)
101 - 110	0 (0)	0 (0)	0 (0)	7 (6)	0 (0)	0 (0)
111 - 120	2 (8)	0 (0)	1 (10)	5 (4)	0 (0)	1 (4)
121 - 130	1 (4)	0 (0)	0 (0)	1 (1)	0 (0)	0 (0)
Totals**	26 (100)	4 (100)	10 (100)	115 (100)	10 (100)	23 (100)

*Percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

to ninety minutes after school closing. The greatest number of rural Manitoba school systems reported a time of from fifty-one to sixty minutes.

Overall, mixed and urban school systems most often reported times of from forty-one to sixty minutes, but the data does not indicate any strong pattern in a particular province.

The latest times after school closing that any pupils are dropped off by transporting vehicles in each rural/urban classification of school systems in each province is summarized below.

Greatest Number of Minutes After School Closing that Any Pupil is Dropped Off

	Rural	Mixed	Urban
Alberta School Systems	120	90	75
Saskatchewan School Systems	120	70	60
Manitoba School Systems	125	70	120

SCHOOL SYSTEM POLICIES CONCERNING THE NEARNESS TO GATES OF PICK-UP AND DROP-OFF POINTS[8]

A difficulty with this research question is the existence of special rural and urban meanings to the word "gate." A gate in a rural area may be several hundreds of yards from the home of the pupil whereas it is unlikely to be more than fifty yards from the home of any pupil in an urban area. Thus, rural/urban comparisons, in this case, may not be meaningful.

---

[8] See Question 8(g), p. 9.

The data collected in response to questionnaire item 6(g) has been summarized in Table 35.

The majority of rural school systems in Alberta and Saskatchewan have adopted "gate-service" policies. School systems in Manitoba are divided equally between "gate-service" and "within-a-half-mile-of-the-gate-service" policies. A large number of urban school systems in Alberta answered that their policy was other than the possibilities suggested. Further research would be required to determine the nature of these policies.

POLICIES CONCERNING STANDEE PASSENGERS[9]

Only ten of one hundred and fifty-seven responding school systems require that any of their pupils stand while being transported. The practice is concentrated mainly in urban school systems but is not entirely absent in rural and mixed school systems. Table 36 displays data relevant to this question which was provided in response to questionnaire item 6(i).

THE USE OF SEAT BELTS[10]

Seat belts are in general use in only one school system in the Prairie Provinces. One urban Saskatchewan school system replied in the affirmative to questionnaire item 6(j). The results are displayed in Table 37.

---

[9] See Question 8(h), p. 9.

[10] See Question 8(i), p. 9.

Table 35

The Policies of School Systems With Respect to the Type of Pick-Up and Drop-Off Service Provided - 1973

Type of Service Provided*	Alberta School Systems**			Saskatchewan School Systems**		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Gate service or better	33 (66)	4 (80)	1 (9)	28 (65)	1 (100)	3 (100)
Within 1/2 mile of the gate	11 (22)	0 (0)	1 (9)	4 (9)	0 (0)	0 (0)
Within 1 mile of the gate	2 (4)	0 (0)	2 (18)	1 (2)	0 (0)	0 (0)
Other	4 (8)	1 (20)	7 (64)	10 (23)	0 (0)	0 (0)
Totals***	50 (100)	5 (100)	11 (100)	43 (100)	1 (100)	3 (100)

Type of Service Provided*	Manitoba School Systems**			Total**		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Gate service or better	12 (44)	3 (60)	4 (40)	73 (61)	8 (73)	8 (33)
Within 1/2 mile of the gate	12 (44)	2 (40)	4 (40)	27 (22)	2 (18)	5 (21)
Within 1 mile of the gate	2 (7)	0 (0)	0 (0)	5 (4)	0 (0)	2 (8)
Other	1 (4)	0 (0)	2 (20)	15 (12)	1 (9)	9 (38)
Totals***	27 (100)	5 (100)	10 (100)	120 (100)	11 (100)	24 (100)

*Some respondents stated that the service depended on the season. The best service offered was recorded.

** Percentages are shown in brackets.

***The percentages may not total 100 due to rounding.

Table 36

The Policies of School Systems with Respect to Standee Passengers - 1973

Are Any Pupils Required to Stand?	Alberta School Systems*			Saskatchewan School Systems*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Yes	0 (0)	0 (0)	3 (23)	1 (2)	0 (0)	1 (33)
No	50 (100)	5 (100)	10 (77)	42 (98)	1 (100)	2 (67)
Totals	50 (100)	5 (100)	13 (100)	43 (100)	1 (100)	3 (100)

Are Any Pupils Required to Stand?	Manitoba School Systems*			Totals*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Yes	1 (4)	1 (20)	3 (30)	2 (2)	1 (9)	7 (37)
No	26 (96)	4 (80)	7 (70)	118 (98)	10 (91)	19 (63)
Totals	27 (100)	5 (100)	10 (100)	120 (100)	11 (100)	26 (100)

*Percentages are shown in brackets.

Table 37

The Use of Seat Belts on Pupil Transportation Vehicles - 1973

Are Seat Belts in General Use?	Alberta School Systems			Saskatchewan School Systems		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Yes	0	0	0	0	0	1
No	50	5	13	43	1	2
Totals	50	5	13	43	1	3

Are Seat Belts in General Use?	Manitoba School Systems			Totals		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Yes	0	0	0	0	0	1
No	26	5	10	119	11	25
Totals	26	5	10	119	11	26

PUPIL INSTRUCTION IN SAFE-RIDING PRACTICES[11]

Sixty school systems in the Prairie Provinces reported that their pupils never are instructed in safe-riding practices. No important provincial or rural/urban differences are evident.

Where instruction is given it is most often given on a yearly basis. Very few school systems give safety instructions twice yearly.

A number of school systems give safety instruction at a frequency other than those suggested in questionnaire item 6(k). There is some evidence that the frequency of instruction is generally less than yearly in these school systems. The data relevant to part (k) is summarized in Table 38.

THE USE OF MONITORS OR PROCTORS[12]

Monitors are more often used on vehicles in Alberta where thirty-one per cent of the respondents replied that monitors were used in their school systems. Eleven per cent of the school systems in Saskatchewan and twenty-six per cent of those in Manitoba replied that monitors were used on their vehicles.

Mixed and urban school systems in Manitoba use monitors more often than do rural systems. No clear rural/urban pattern is discernible for Alberta and Saskatchewan school systems in the use of monitors on their vehicles.

---

[11] See Question 8(j), p. 9.

[12] See Question 8(k), p. 9.

Table 38

The Frequency of Instruction in Safe-Riding Practices, Including Participation in Emergency Evacuation Drills - 1973

Frequency of Instruction:	Alberta School Systems*			Saskatchewan School Systems*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Never	22 (47)	1 (25)	6 (50)	16 (40)	0 (0)	0 (0)
Yearly	16 (34)	2 (50)	3 (25)	12 (30)	1 (100)	0 (0)
Twice Yearly	5 (11)	0 (0)	1 (8)	1 (3)	0 (0)	0 (0)
Other	4 (9)	1 (25)	2 (17)	11 (28)	0 (0)	2 (100)
Totals**	47 (100)	4 (100)	12 (100)	40 (100)	1 (100)	2 (100)

Frequency of Instruction:	Manitoba School Systems*			Totals*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Never	9 (35)	2 (40)	4 (40)	47 (42)	3 (30)	10 (42)
Yearly	7 (27)	2 (40)	2 (20)	35 (31)	5 (50)	5 (21)
Twice Yearly	1 (4)	1 (20)	1 (10)	7 (6)	1 (10)	2 (8)
Other	9 (35)	0 (0)	3 (30)	24 (21)	1 (10)	7 (29)
Totals**	26 (100)	5 (100)	10 (100)	113 (100)	10 (100)	24 (100)

*Percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

Data relevant to this discussion are displayed in Table 39 which was prepared from the information given in response to questionnaire item 6(l).

THE TYPES OF PERSONS USED AS MONITORS[13]

Where monitors are used on vehicles they are generally students and unpaid. Teachers are used by Manitoba school systems more extensively than are students but the reverse is true in Alberta school systems. Only two school systems reported that they use paid monitors.

Data provided in response to questionnaire items 6(m) and 6(n) are summarized in Table 40.

THE CURRICULAR AND EXTRACURRICULAR USE OF VEHICLES[14]

The sum of the data supplied by school systems in response to questionnaire items 5(a), (1) to (4), inclusive, and 5(b) was divided by the data supplied in response to the questionnaire item "Total Operating Costs (Transportation)." The quotient obtained was multiplied by one hundred and the final figure represents a percentage of the total budgeted transportation operating costs expended by school systems in 1972 for curricular and extracurricular purposes. The percentages are displayed in Table 41.

The greatest number of rural and mixed school systems in all three provinces reported expenditures of four per cent or less of their

---

[13] See Question 8(l), p. 9.

[14] See Question 8(m), p. 9.

Table 39

The Use of Monitors or Proctors to Aid in Loading and Unloading Vehicles and to Free the Driver from Tending the Passengers While Driving - 1973

	Alberta School Systems*			Saskatchewan School Systems*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Monitors Used	18 (34)	2 (40)	2 (15)	3 (8)	1 (100)	1 (50)
Monitors Not Used	35 (66)	3 (60)	11 (85)	39 (92)	0 (0)	1 (50)
Totals	53 (100)	5 (100)	13 (100)	42 (100)	1 (100)	2 (100)

	Manitoba School Systems*			Totals*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Monitors Used	2 (7)	4 (80)	5 (45)	23 (19)	7 (64)	8 (31)
Monitors Not Used	25 (93)	1 (20)	6 (55)	99 (81)	4 (36)	18 (69)
Totals	27 (100)	5 (100)	11 (100)	122 (100)	11 (100)	26 (100)

*Percentages are shown in brackets.

Table 40

The Types of Persons Used as Monitors or Proctors on Pupil Transportation Vehicles - 1973

Types of Persons Used on Vehicles	Alberta School Systems			Saskatchewan School Systems		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Students	16 (89)	2 (100)	1 (50)	2 (100)	0 (0)	0 (0)
Teachers	2 (11)	0 (0)	1 (50)	0 (0)	1 (100)	0 (0)
Others	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (100)
Totals	18 (100)	2 (100)	2 (100)	2 (100)	1 (100)	1 (100)
School Systems Where Monitors are Paid for Their Services	0	0	1	0	1	0

Types of Persons Used on Vehicles	Manitoba School Systems			Total		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Students	0 (0)	3 (75)	2 (40)	18 (82)	5 (63)	3 (43)
Teachers	2 (100)	1 (25)	3 (60)	4 (18)	2 (25)	4 (57)
Others	0 (0)	0 (0)	0 (0)	0 (0)	1 (13)	0 (0)
Totals	2 (100)	4 (100)	5 (100)	22 (100)	8 (100)	7 (100)
School Systems Where Monitors are Paid for Their Service	0	0	0	0	1	1

Table 41

The Percentage of Total Operating Costs (Transportation) Expended for Curricular and Extracurricular Purposes - 1972

Percentage of Total Operating Costs	Alberta School Systems*			Saskatchewan School Systems*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Less than 1	2 (6)	0 (0)	0 (0)	7 (26)	0 (0)	0 (0)
1	6 (17)	1 (33)	0 (0)	10 (37)	1(100)	0 (0)
2	7 (19)	1 (33)	0 (0)	4 (15)	0 (0)	0 (0)
3	4 (11)	0 (0)	0 (0)	2 (7)	0 (0)	0 (0)
4	7 (19)	0 (0)	0 (0)	3 (11)	0 (0)	0 (0)
5	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
6	2 (6)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)
7	2 (6)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)
8	1 (3)	0 (0)	4 (40)	0 (0)	0 (0)	0 (0)
9	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
10	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
11	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
12	0 (0)	1 (33)	0 (0)	0 (0)	0 (0)	0 (0)
13	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	1 (50)
14	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
15	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Greater than 15	2 (6)	0 (0)	3 (30)	1 (4)	0 (0)	1 (50)
Totals**	36(100)	3(100)	10(100)	27(100)	1(100)	2(100)

*Percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

Continued . . .

Table 41 (continued)

Percentage of Total Operating Costs	Manitoba School Systems*			Totals*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Less than 1	1 (5)	0 (0)	0 (0)	10 (12)	0 (0)	0 (0)
1	5 (24)	2(100)	1 (17)	21 (25)	4 (67)	1 (6)
2	6 (29)	0 (0)	0 (0)	17 (20)	1 (17)	0 (0)
3	2 (10)	0 (0)	1 (17)	8 (10)	0 (0)	1 (6)
4	6 (29)	0 (0)	1 (17)	16 (19)	0 (0)	1 (6)
5	0 (0)	0 (0)	0 (0)	1 (1)	0 (0)	0 (0)
6	1 (5)	0 (0)	0 (0)	3 (4)	0 (0)	1 (6)
7	0 (0)	0 (0)	1 (17)	2 (2)	0 (0)	2 (11)
8	0 (0)	0 (0)	0 (0)	1 (1)	0 (0)	4 (22)
9	0 (0)	0 (0)	1 (17)	0 (0)	0 (0)	1 (6)
10	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
11	0 (0)	0 (0)	0 (0)	1 (1)	0 (0)	0 (0)
12	0 (0)	0 (0)	0 (0)	0 (0)	1 (17)	0 (0)
13	0 (0)	0 (0)	1 (17)	0 (0)	0 (0)	3 (17)
14	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
15	0 (0)	0 (0)	0 (0)	1 (1)	0 (0)	0 (0)
Greater than 15	0 (0)	0 (0)	0 (0)	3 (4)	0 (0)	4 (22)
Totals**	21(100)	2(100)	6(100)	84(100)	6(100)	18(100)

*Percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

total transportation operating costs for curricular and extracurricular purposes. Expenditures in urban Alberta and Manitoba school systems were more often nearer to eight per cent of the budget figure.

COMMUNITY USE OF VEHICLES[15]

The use of the transportation facilities of school systems for community purposes was reported by only thirteen school systems. Six of these were in Alberta, two in Saskatchewan and five in Manitoba. Five school systems reported that, in 1972, they expended one per cent or more of their total budgeted operating costs for pupil transportation on community use of their transportation facilities.

The data displayed in Table 42 was compiled by dividing the data supplied in response to question item 5(a) (5) by the data supplied in response to the questionnaire item "Total Operating Costs (Transportation)." The quotient was multiplied by one hundred and the final figure represents a percentage of the total budgeted operating costs expended on community use of a school systems transportation facilities in 1972.

THE USE OF STAGGERED OPENING AND CLOSING TIMES[16]

Few school systems reported using staggered opening and closing times extensively in order to improve the effectiveness of pupil transportation programmes. With the exception of rural Manitoba and

---

[15] See Question 8(n), p. 9.

[16] See Question 8(o), p. 9.

Table 42

The Use of Pupil Transportation Facilities for Community (Non-School) Purposes - 1972

Percentage of Total Operating Budget (Transportation)	Alberta School Systems			Saskatchewan School Systems		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Less than 1	3	0	0	1	0	0
1	1	0	0	1	0	0
More than 1	1	0	1	0	0	0
Totals	5	0	1	2	0	0

Percentage of Total Operating Budget (Transportation)	Manitoba School Systems			Totals		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Less than 1	3	1	0	7	1	0
1	1	0	0	3	0	0
More than 1	0	0	0	1	0	1
Totals	4	1	0	11	1	1

mixed Saskatchewan school systems, the majority of which reported using this device moderately, most rural/urban groupings of school systems reported that they did not use this device at all.

The responses to questionnaire item 6(h) are summarized in Table 43.

THE NUMBER OF PUPILS TRANSPORTED PER BUS ROUTE[17]

The number of pupils transported daily, with the exception of those transported on transit vehicles was summed from the data provided in response to questionnaire item 7. The quotient obtained by dividing this figure by the sum of the number of routes, also provided in response to questionnaire item 7, represents the mean number of pupils transported per route for each school system. This information has been summarized in Table 44.

The greatest number of school systems operate transportation routes with an average of between twenty-four and thirty-five and nine-tenths pupils per route.

The greatest number of school systems in rural Alberta operate transportation routes with an average of from thirty-six to forty-seven and nine-tenths pupils per route. Most rural Saskatchewan school systems, however, transport an average of from twenty-four to thirty-five and nine-tenths pupils per route, while more rural Manitoba school systems operate routes with an average of from ten to twenty-three and nine-tenths pupils per route than routes with any other average numbers

---

[17] See Question 8(p), p. 9.

Table 43

The Use of Staggered School Opening and Closing Times to Increase the Effectiveness of the Pupil Transportation Programme - 1973

School Systems Using Staggered Opening and Closing Times:	Alberta School Systems*			Saskatchewan School Systems*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Extensively	4 (8)	0 (0)	1 (8)	1 (2)	0 (0)	0 (0)
Moderately	21 (44)	2 (40)	6 (46)	15 (35)	1 (100)	1 (25)
Not at all	23 (48)	3 (60)	6 (46)	27 (63)	0 (0)	3 (75)
Totals**	48 (100)	5 (100)	13 (100)	43 (100)	1 (100)	4 (100)

School Systems Using Staggered Opening and Closing Times:	Manitoba School Systems*			Totals*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
Extensively	3 (12)	0 (0)	0 (0)	8 (7)	0 (0)	1 (4)
Moderately	13 (50)	2 (40)	2 (20)	49 (42)	5 (45)	9 (33)
Not at all	10 (38)	3 (60)	8 (80)	60 (51)	6 (55)	17 (63)
Totals**	26 (100)	5 (100)	10 (100)	117 (100)	11 (100)	27 (100)

*Percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

Table 44

The Mean Number of Pupils per Transportation Route - 1973

Mean Number of Pupils per Route	Alberta School Systems*			Saskatchewan School Systems*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
1 - 9.9	1 (2)	0 (0)	1 (10)	1 (2)	0 (0)	0 (0)
10 - 23.9	8 (17)	0 (0)	0 (0)	9 (20)	0 (0)	1 (50)
24 - 35.9	11 (23)	2 (40)	2 (20)	31 (70)	1(100)	0 (0)
36 - 47.9	23 (48)	2 (40)	1 (10)	3 (7)	0 (0)	1 (50)
48 - 59.9	3 (6)	0 (0)	3 (30)	0 (0)	0 (0)	0 (0)
60 or over	2 (4)	1 (20)	3 (30)			
Totals**	48(100)	5(100)	10(100)	44(100)	1(100)	2(100)

Mean Number of Pupils per Route	Manitoba School Systems*			Totals*		
	Rural	Mixed	Urban	Rural	Mixed	Urban
1 - 9.9	2 (8)	0 (0)	0 (0)	4 (3)	0 (0)	1 (5)
10 - 23.9	10 (40)	1 (20)	1 (10)	27 (23)	1 (9)	2 (9)
24 - 35.9	8 (32)	2 (40)	2 (20)	50 (43)	5 (45)	4 (18)
36 - 47.9	4 (16)	0 (0)	0 (0)	30 (26)	2 (18)	2 (9)
48 - 59.9	0 (0)	1 (20)	5 (50)	3 (3)	1 (9)	8 (36)
60 or over	1 (4)	1 (20)	2 (20)	3 (3)	2 (18)	5 (22)
Totals**	25(100)	5(100)	10(100)	117(100)	11(100)	22(100)

*Percentages are shown in brackets.

**The percentages may not total 100 due to rounding.

of pupils.

Mixed and urban school systems tend to operate routes with larger numbers of pupils per route than do rural school systems. Seventy per cent of Manitoba urban school systems operate routes averaging greater than forty-eight or more pupils per route. The tendency to operate routes with larger numbers of pupils is also clear for Alberta school systems where sixty per cent of such systems operate routes with an average of forty-eight or more pupils per route.

THE DAILY ROUTE MILEAGE PER PUPIL TRANSPORTED[18]

The route mileage per transported pupil is higher in rural school systems than in urban school systems and higher in rural Saskatchewan school systems than in rural school systems in Alberta and in Manitoba.

The data in Table 45 show that only thirty-eight per cent of the rural school systems in Alberta and forty-two per cent of those in Manitoba but seventy-two per cent of those in Saskatchewan operate transportation routes which are one mile or longer per pupil transported.

Urban school systems operate transportation routes in each of the three provinces which are, in every reported case, less than one mile in length per transported pupil. Mixed school systems operate routes which, on the whole, are shorter per pupil transported than those of rural school systems but longer than those of urban school systems.

Table 45 was constructed from data supplied in response to questionnaire item 1. The total route mileages were calculated for each school system and divided by the total of the pupils transported,

---

[18] See Question 8(q), p. 9.

Table 45

The Number of Route Miles* per Transported Pupil - 1973

Route Miles per Transported Pupil	Alberta School Systems**			Saskatchewan School Systems**		
	Rural	Mixed	Urban	Rural	Mixed	Urban
0.02 - 0.49	12 (26)	1 (25)	9 (90)	1 (2)	0 (0)	2(100)
0.50 - 0.99	16 (35)	1 (25)	1 (10)	11 (27)	0 (0)	0 (0)
1.00 - 1.49	8 (17)	1 (25)	0 (0)	15 (37)	1(100)	0 (0)
1.50 - 1.99	2 (4)	1 (25)	0 (0)	4 (10)	0 (0)	0 (0)
2.00 - 2.49	3 (7)	0 (0)	0 (0)	7 (17)	0 (0)	0 (0)
2.50 - 2.99	1 (2)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)
3.00 - 3.49	1 (2)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)
3.50 - 3.99	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
4.00 or more	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Totals***	46(100)	4(100)	10(100)	41(100)	1(100)	2(100)

Route Miles per Transported Pupil	Manitoba School Systems**			Totals**		
	Rural	Mixed	Urban	Rural	Mixed	Urban
0.02 - 0.49	3 (13)	1 (20)	5 (71)	16 (15)	2 (20)	16 (84)
0.50 - 0.99	10 (43)	2 (40)	2 (29)	37 (34)	3 (30)	3 (16)
1.00 - 1.49	7 (30)	2 (40)	0 (0)	30 (27)	4 (40)	0 (0)
1.50 - 1.99	1 (4)	0 (0)	0 (0)	7 (6)	1 (10)	0 (0)
2.00 - 2.49	1 (4)	0 (0)	0 (0)	11 (10)	0 (0)	0 (0)
2.50 - 2.99	0 (0)	0 (0)	0 (0)	2 (2)	0 (0)	0 (0)
3.00 - 3.49	0 (0)	0 (0)	0 (0)	3 (3)	0 (0)	0 (0)
3.50 - 3.99	0 (0)	0 (0)	0 (0)	2 (2)	0 (0)	0 (0)
4.00 or more	1 (4)	0 (0)	0 (0)	2 (2)	0 (0)	0 (0)
Totals***	23(100)	5(100)	7(100)	110(100)	10(100)	19(100)

*Daily one-way, loaded mileage.

**Percentages are shown in brackets.

***The percentages may not total 100 due to rounding.

excluding those transported by transit system vehicles. The quotient resulting equalled the route mileage per pupil transported.

SUMMARY

A. In all three provinces pupils are being transported for quite considerable distances and are spending large amounts of their time on pupil transportation vehicles each day.

B. Relatively few school systems require any of their pupils to stand while being transported.

C. Seat belts are very rarely used on pupil transportation vehicles.

D. Instruction in safe-riding practices is not given in a large number of school systems and is given only infrequently in a number of others.

E. Monitors are not used to assist drivers in most school systems. They are more frequently used by Alberta and Manitoba school systems than by those in Saskatchewan.

F. School systems in the three provinces tend to spend four per cent or less of their pupil transportation budgets on curricular and extracurricular purposes with the exception of urban systems in Alberta and Manitoba which tend to spend up to eight per cent of their budget on such purposes.

G. The use of pupil transportation vehicles by school systems for community purposes is relatively rare, particularly in Saskatchewan.

H. School systems in the three provinces use staggered opening and closing times to improve the efficiency of their pupil transportation programmes only moderately.

I. Urban school systems, in all three provinces, tend to operate pupil transportation routes with a larger number of pupils per route than do rural school systems. Rural Alberta school systems tend to operate routes with larger numbers of pupils than do such systems in Saskatchewan and Manitoba.

J. Transportation routes operated by rural Saskatchewan school systems tend to be longer per pupil transported than do such routes operated by Alberta and Manitoba school systems. Urban routes are shorter per pupil transported than are mixed or rural routes.

CHAPTER XI

BENEFITS AND PROBLEMS ASSOCIATED WITH PUPIL TRANSPORTATION

INTRODUCTION

The pupil transportation officials with which this discussion is concerned are those who answered the open-ended questions, number 18 and number 19, at the end of the questionnaire. The responses of those officials have been grouped according to common themes and the frequency of the responses for each have been recorded in Table 46 and Table 47. The themes as recorded in the tables have been coded and keys have been provided.

BENEFITS[1]

The benefits of pupil transportation most frequently mentioned by officials in all three provinces may be placed into two groups. The first group (G, H, I and L) consists of benefits which are related to the programme and administrative benefits of the large schools which are made possible by pupil transportation. The second group of benefits (A and B) reflect the opinion that pupil transportation is an effective device for the spread of equal educational opportunity. Between them, these six benefits account for seventy-seven per cent of the responses to this

---

[1] See Question 9, p. 9-10.

Table 46

The Number of Times that Various Benefits Deriving from the Use of Pupil Transportation Were Mentioned by Respondents to the Questionnaire

		Benefits Mentioned*							
		A	B	C	D	E	F	G	H
Number of Times Mentioned**	Alberta Respondents	1 (2)	4 (6)	2 (3)	4 (6)	0 (0)	0 (0)	13(20)	8(12)
	Saskatchewan Respondents	9(11)	10(12)	2 (2)	1 (1)	0 (0)	3 (4)	23(28)	15(19)
	Manitoba Respondents	2 (3)	7(12)	1 (2)	2 (3)	2 (3)	2 (3)	11(18)	8(13)
	Totals***	12 (6)	21(10)	5 (2)	7 (3)	2 (1)	5 (2)	47(23)	31(15)

*See the key.

**Percentages are shown in brackets.

***The percentages may not total 100 due to rounding.

Continued . . .

Table 46 (continued)

		Benefits Mentioned*						
		I	J	K	L	M	N	Totals
Number of Times Mentioned**	Alberta Respondents	8(12)	3 (5)	3 (5)	16(24)	2 (3)	2 (3)	66(100)
	Saskatchewan Respondents	1 (1)	3 (4)	1 (1)	10(12)	2 (2)	1 (1)	81(100)
	Manitoba Respondents	5 (8)	3 (5)	5 (8)	7(12)	3 (5)	2 (3)	60(100)
	Totals***	14 (7)	9 (4)	9 (4)	33(16)	7 (3)	5 (2)	207(100)

*See the key.

**Percentages are shown in brackets.

***The percentages may not total 100 due to rounding.

Continued . . .

Table 46 - Key

A. Pupil transportation makes possible the provision of a high quality education for residents of sparsely populated areas.

B. Pupil transportation is a useful tool in the provision of equal educational opportunity.

C. Pupil transportation has helped to increase enrolments.

D. Pupil transportation has helped to increase attendance.

E. Pupil transportation makes it possible for students to live at home while receiving their educations.

F. Pupil transportation gives students the opportunity for a broader range of social contacts.

G. Pupil transportation permits the building of large schools which are able to provide a large variety of educational programmes.

H. Pupil transportation permits the building of large schools which permit teacher specialization.

I. Pupil transportation permits greater opportunity for curricular use of community resources.

J. Pupil transportation permits the development of an extensive sports programme.

K. Pupil transportation helps make possible an extensive programme of extracurricular activities.

L. Pupil transportation permits the building of centralized schools which are financially more efficient to operate than a number of smaller schools.

M. Pupil transportation permits the efficient use of school facilities and equipment.

N. Other benefits which were mentioned but were not categorized due to the small number of times each was mentioned.

questionnaire item. However, benefits B, I and L, respectively, were not considered to be as important to officials in Alberta, Saskatchewan and Manitoba, respectively, as to officials in the other provinces.

PROBLEMS[2]

A problem frequently mentioned by Alberta and Saskatchewan officials and also by Manitoba officials (along with a number of problems mentioned with equal frequency) is the necessity of having pupils travel for long periods of time and for great distances on pupil transportation vehicles. Specific aspects of this problem often mentioned were the fatigue that was caused, the long periods of absence from home and the loss of help at home.

Other problems frequently mentioned by officials from all provinces were:

A. the problem of cost control,

B. the problem of dealing with dissatisfied parents,

C. the heavy administrative duties related to pupil transportation (not mentioned as often by Saskatchewan officials as by those in Alberta and Manitoba).

D. the fear of the consequences of traffic accidents and bad weather (not mentioned as often by Alberta officials as by those in Manitoba and Saskatchewan).

Between them, these five problems account for nearly fifty-four per cent of the responses to this questionnaire item.

---

[2]See Question 10, p. 10.

Table 47

The Number of Times that Various Problems Related to the Use of Pupil Transportation Were Mentioned by Respondents to the Questionnaire

		Problems Mentioned*								
		A	B	C	D	E	F	G	H	I
Number of Times Mentioned**	Alberta Respondents	0 (0)	0 (0)	14(22)	2 (3)	0 (0)	3 (5)	3 (5)	7(11)	1 (2)
	Saskatchewan Respondents	2 (3)	1 (2)	17(28)	6(10)	2 (3)	2 (3)	2 (3)	2 (3)	3 (5)
	Manitoba Respondents	1 (2)	3 (6)	5 (9)	5 (9)	2 (4)	1 (2)	3 (6)	5 (9)	3 (6)
	Totals***	3 (2)	4 (2)	36(20)	13 (7)	4 (2)	6 (3)	8 (5)	14 (8)	7 (4)

*See the key.

**Percentages are shown in brackets.

***The percentages may not total 100 due to rounding.

Continued . . .

Table 47 (continued)

		Problems Mentioned*								
		J	K	L	M	N	O	P	Q	Totals
Number of Times Mentioned**	Alberta Respondents	1 (2)	6 (9)	6 (9)	4 (6)	4 (6)	0 (0)	3 (5)	10(16)	64(100)
	Saskatchewan Respondents	0 (0)	6(10)	5 (8)	1 (2)	3 (5)	0 (0)	1 (2)	7(12)	60(100)
	Manitoba Respondents	4 (8)	4 (8)	5 (9)	3 (6)	2 (4)	2 (4)	5 (9)	0 (0)	53(100)
	Totals**	5 (3)	16 (9)	16 (9)	8 (5)	9 (5)	2 (1)	9 (5)	17(10)	177(100)

*See the key.

**Percentages are shown in brackets

***The percentages may not total 100 due to rounding.

Continued . . .

Table 47 - Key

A. Rural life is weakened by the removal of schools from some towns.

B. The distance of the schools from student's homes results in home/school alienation.

C. Long periods of time and great distances on the buses cause a number of problems such as fatigue and the loss of help at home.

D. Pupil transportation causes fear of the consequences of traffic accidents and of the danger of bad weather.

E. Programmes in schools suffer from a certain amount of inflexibility due to the arrival and departure schedules for transportation vehicles.

F. The late arrival of vehicles interferes with instruction.

G. Extracurricular activities are difficult to arrange for transported pupils.

H. Pupil transportation places a heavy administrative load on the school system.

I. Qualified drivers are difficult to obtain.

J. The supervision of drivers is difficult.

K. Cost control is a problem.

L. Relations with dissatisfied parents are not always easy.

M. Discipline on the vehicles and while loading or unloading presents difficulties.

N. Some roads are poor.

O. Provincial regulations do not provide for stand-by vehicles.

P. The provincial grant structures for transportation is unfair or inadequate.

Q. Other problems which were mentioned but were not categorized due to the small number of times each was mentioned.

SUMMARY

The benefits and problems perceived by responding officials as relating to and deriving from their pupil transportation programmes are quite similar in all three provinces. Some difference of emphasis does appear but these are outweighed by the general agreement on most matters.

In all three provinces pupil transportation was perceived as an effective tool for helping to provide high quality educational programmes and for equalizing educational opportunities.

The problem associated with pupil transportation which was most frequently mentioned was the necessity of having transported pupils travel great distances and spending long periods of time on pupil transportation vehicles.

CHAPTER XII

SUMMARY AND CONCLUSIONS

SUMMARY

The need for comparative studies in education among the provinces in Canada arises from the exclusive control of education which each of the provinces exerts.

The Problem

The general purpose of this study was to examine pupil transportation in the Provinces of Alberta, Saskatchewan and Manitoba and to make inter-provincial comparisons in the following areas:

A. administration and supervision at the provincial levels including the fiscal models employed in financing pupil transportation.

B. administration and supervision at the local school system levels.

C. costs and revenues of local school systems.

The Design of the Study

Ten research questions were proposed in order to study the problem. The questions were concerned with inter-provincial comparisons. Certain aspects of the problem were concerned with rural/urban comparisons as well. Following a review of the literature and following preliminary interviews with officials in each of the three provinces a questionnaire and an interview schedule were developed.

The questionnaire was distributed to all publicly supported school systems in each of the three provinces and a satisfactory response was received. Final interviews were then held with officials at the provincial levels.

A review of the relevant legislation and regulations was carried out and fiscal financing models were proposed to describe the methods used by each province, in 1972, for providing support to pupil transportation.

MAJOR FINDINGS

Administration and Supervision at the Provincial Levels

The administration and supervision of pupil transportation at the provincial level is organized differently in each of the three provinces. The areas where these differences are most noticeable are as follows:

A. Manitoba has appointed an official with the title "Supervisor of Transportation," while no such officer has been appointed in Alberta or Saskatchewan.

B. Officers of the respective Highway Traffic Boards of Alberta and Saskatchewan actively enforce the regulations concerning the operation and equipment of pupil transportation vehicles. No such noticeable enforcement takes place in Manitoba.

C. Reasonably comprehensive school bus accident statistics are kept by the Alberta Highway Traffic Board.

D. Alberta has regulations in force affecting construction standards for new school buses.

E. The purchasing of school buses is carried out at the local

school system level in Alberta and Saskatchewan and at the provincial level in Manitoba.

F. Regular conferences of local school system pupil transportation personnel are sponsored by the Manitoba Department of Education.

G. The Manitoba Department of Education publishes a monthly newsletter on pupil transportation.

Provincial Financing Formulae

The financing of pupil transportation is carried out under quite different formulae in each of the three provinces. The level of provincial support, in 1972, was higher in Manitoba than in Alberta and Saskatchewan and tended to be higher in rural school systems than in urban school systems. Local taxation bore more of the cost of pupil transportation in Saskatchewan than in either of the other two provinces.

Costs of Local School Systems

In general, pupil transportation accounted for a greater portion of the operating costs of school systems in Saskatchewan than in Alberta or Manitoba, in 1972. Contract costs were more important to Alberta school systems and costs of school system operated buses were more important to Manitoba school systems. The two items were of roughly equal importance in Saskatchewan.

Administration and Supervision at the Local School System Levels

Transportation supervisors have been more commonly appointed in Manitoba than in Saskatchewan and Alberta. Their principal duties are scheduling and routing with mechanical inspection of vehicles being an important duty of rural supervisors.

Where no transportation supervisor is employed by a school system, trustees are most often responsible for the transportation programme in Alberta and Saskatchewan school systems and the secretary-treasurer is most often responsible in Manitoba school systems.

A number of school systems in each of the three provinces maintain major garage facilities.

Operating Practices of Local School Systems

A typical transported pupil in each of the three provinces is:

A. being transported quite a considerable distance.

B. seated while being transported.

C. not supplied with a seat belt.

D. not frequently (or at all) instructed in safe-riding practices.

E. not supervised by on-vehicle monitors.

Considerable portions of local school system transporting budgets are allocated to curricular and extracurricular activities. The amounts tend to be larger in urban school systems.

Urban school systems operate transportation routes with larger numbers of pupils than do rural school systems. Rural Alberta routes tend to have more pupil passengers than do such routes in either Manitoba or Saskatchewan.

Vehicle Fleets

Vehicles used for pupil transportation in Alberta tend to be of a restricted range of seating capacities, vehicles in Saskatchewan less so and vehicles in Manitoba much less so. Private ownership of vehicles in Alberta accounts for over half of the vehicles used while school system owned vehicles account for over half of the vehicles used in

Saskatchewan and Manitoba.

Most pupils are transported by school system owned vehicles in Manitoba and Saskatchewan while most are transported on privately owned vehicles in Alberta. A significant number are transported on public transit vehicles in Alberta.

Benefits and Problems Associated with Pupil Transportation

In all three provinces pupil transportation is perceived as a device while helps to efficiently provide effective educational programmes and which assists in providing equal educational opportunity. Concern is felt, however, for the necessity of having pupils transported for long distances and over long periods of time each day.

CONCLUSIONS

A number of conclusions have been reached by the researcher as a result of this study.

A. Pupil transportation officials at the provincial and local levels in all three of the Prairie Provinces are vitally interested in the safe and efficient operation of their transportation programmes.

B. While some moves have been made in this direction, benefits would result from the greater coordination of the efforts of the two governmental bodies which are involved in pupil transportation in each of the three provinces.

C. Greater emphasis should be placed on the training, testing and supervision of pupil transportation drivers.

D. Greater emphasis should be placed on the training of pupils in safe-riding practices.

E. More complete statistics should be kept relating to school bus accidents and the resulting injuries and deaths.

F. Standards for all new school buses should be made obligatory in the two provinces which have not yet adopted compulsory standards.

G. Inter-provincial conferences of pupil transportation officials should be held on a regular basis in order to share experience and expertise.

AREAS FOR FURTHER STUDY

Introduction

This study has attempted to give a broad overview of a number of aspects of pupil transportation programmes as they are operated in the Prairie Region. During the course of the study the writer has become aware of a number of areas of the topic which he feels would benefit from further study. A number of these areas are outlined below.

Safety Training for Pupils

The present study has shown that in many school systems pupils are not given frequent instruction in safe riding practices. The author is aware that a number of pupils lose their lives each year while disembarking from vehicles. The behaviour of pupils while on board vehicles may have some effect on the effectiveness of the driver. Studies in the areas of safe loading, unloading and riding practices would seem to be of an immediate value and could conceivably result in the saving of young lives.

Safety Training for Drivers

While some special training and testing of pupil transportation

drivers is carried out in the Prairie Region much more has been done in various parts of the United States.

Research leading to driver training curricula and improved methods of training and testing would also prove to be useful.

Factors Related to School Bus Accidents

Each year in the Prairie Region a number of school bus accidents result in injuries and the loss of life. The writer is not aware of any attempt to systematically study the various accidents and to isolate causes. Awareness of such causes would be of value to those concerned with the safe operation of pupil transportation programmes.

Safety Legislation and Regulations and Their Enforcement

Safety legislation and regulations and their enforcement vary considerably among the three Prairie Provinces. The effects of these differences on the pupil transportation programmes operated by local school systems is worthy of study.

Financing Formulae

The financing of pupil transportation has a considerable effect on all aspects of its operation. The three provinces differ in the amount of support offered to local school systems and particularly in the amount of support offered to urban school systems. The various effects of pupil transportation financing formulae on maintenance methods, quality of service, quality of supervision and on safety are worthy of study. The extent to which the formulae are equitable and to which they promote efficiency is also worthy of study.

Maintenance of Vehicles

The standards required of new vehicles in each of the Prairie Provinces differ significantly. This has been shown by the present study. The study has also shown that a number of school systems operate major garage facilities while others contract the maintenance of vehicles. The maintenance of vehicles by contractors has not been touched upon by this study. The relationship between the types of maintenance procedures operated by school systems for their vehicles and their safe operation, operational efficiency and the quality of service offered should be explored.

The History of Pupil Transportation

As has been noted by this study, pupil transportation has been used as an instrument for the advancement of equal educational opportunity. The school bus is seen everywhere on the Prairies and must be considered an important educational and sociological phenomenom. Many of the original persons who were involved in the growth of pupil transportation are still available and would likely be willing to assist in the preparation of a history of this important topic.

APPENDIX A

PRELIMINARY LETTER

The University of Manitoba

Faculty of Education

Winnipeg, Manitoba R3T 2N2

January 15, 1973

The Superintendent of Schools
Prairie School System
123 Main Street
Anytown, Mansasta

Dear Sir:

Prairie Provinces Pupil Transportation Study

In June of last year Dr. Philip J. Husby of the Educational Administration Department sent out a questionnaire to gather preliminary data in connection with a study on student busing services. It was sent to a large number of School Divisions, Counties and School Units in the provinces of Alberta, Saskatchewan and Manitoba. Over eighty per cent were promptly returned. This is evidence, I believe, of the great interest that school administrators have in the topic. On behalf of Dr. Husby and myself I wish to thank those who were able to find time to assist in this matter. Attached is a brief resume of the findings of the preliminary study.

In order to complete the study a second questionnaire will be mailed to you in the near future. Once again, a resume of the findings will be made available to those who wish a copy. May I, in advance, ask for your cooperation in this matter?

Yours sincerely

W. E. Lavery
Graduate Student
Department of Educational Administration

RESUME OF PRELIMINARY DATA TAKEN FROM QUESTIONNAIRES SENT OUT IN JUNE 1972 TO PRIMARILY RURAL SCHOOL SYSTEMS IN THE PRAIRIE PROVINCES

	Manitoba School Divisions	Sask. School Units	Alberta School Divisions	Alberta Counties	Alberta Total	Grand Total
Number of Replies	26	43	25	25	50	119
Percentage of Enrolment Transported Daily	53	69	63	68	66	64
Percentage of Transported Students on Contracted Vehicles*	25	48	49	53	51	44
Percentage of Transported Students on School System Vehicles*	78	53	51	48	49	57
Average Number of Routes	56	49	48	53	50	51
Average (one-way) Route Lengths	22 mi.	23 mi.	32 mi.	36 mi.	34 mi.	33 mi.
School Systems Which Employ Transportation Supervisors	17	7	13	10	23	47
Average Salaries of Transportation Supervisors	$7,500	$7,800	$7,200	$8,700	$8,000	$7,800
School Systems Which Operate Garages	12	14	13	16	29	55
Average Transportation Budgets (Operating)	$245,000	$241,000	$257,000	$320,000	$288,000	$262,000
Yearly Operating Cost Per Transported Pupil	$155	$172	$185	$159	$169	$167

*Some pupils change buses and are counted twice.

Compiled by
W. E. Lavery
September 1972.

APPENDIX B

QUESTIONNAIRE

The University of Manitoba

Faculty of Education
Department of
Educational Administration

Winnipeg, Canada

Prairie Provinces Pupil Transportation Survey

Recently I wrote to you with respect to the survey of pupil transportation that I am conducting. The survey is being carried out in connection with my studies toward a Masters Degree in Educational Administration. I mentioned, in my earlier letter, that the preliminary questionnaire sent out in June, 1972 was well received and I included a resume of the findings.

Attached you will find the final questionnaire which is being used to survey the broad range of practices, procedures and policies prevailing in the administration of pupil transportation in the Prairie Provinces. All public and separate school systems operating in the region will be surveyed. The results will be compiled and made available to you at the earliest possible date. May I ask for your cooperation in the completion and return of the questionnaire. The results, I believe, will be of great interest to school administrators throughout Alberta, Saskatchewan and Manitoba. The receipt of the completed questionnaire by March 8, 1973 would be greatly appreciated.

At this time it is not planned to identify any school system in the findings of the study. In any case, should identification of any school system seem to be of value, this would only be done with the prior consent of the school system concerned.

Once again, I wish to thank you for your interest in the study.

Yours sincerely

W. E. Lavery

PRAIRIE PROVINCES PUPIL TRANSPORTATION SURVEY

NAME OF THE SCHOOL SYSTEM: _____

NAME OF THE PERSON REPLYING: _____

POSITION HELD: _____

RESUME REQUESTED: YES ☐ NO ☐

NOTES REGARDING THE QUESTIONNAIRE

(a) Please complete all sections of the questionnaire. If an item does not apply to your school system indicate this by writing N/A (not applicable) in the space provided.

(b) You will notice that the questionnaire is concerned with various time periods:

(1) Section A: November 1972
(2) Section B: Calendar Year 1972
(3) Sections C, D and G: Current (1973) information
(4) Sections E and F: Financial year 1972.

RURAL/URBAN NATURE OF THE SCHOOL SYSTEM

For the purposes of this survey, communities with fewer than five thousand residents will be considered to be rural areas. Communities with five thousand or more residents will be considered to be urban areas. Using these criteria, please check the item which best describes the area served by your school system.

(a) at least two-thirds rural ☐

(b) from one-third to two-thirds rural ☐

(c) less than one-third rural ☐

SECTION A In this section please supply information for a typical school day in November, 1972.

1. Please complete the following table giving statistics concerning the transportation of pupils to and from school at the expense of your school system.

Vehicle Classifications	Number of Pupils Transported Daily	Number of Routes	Daily Route Mileage (One-way, loaded)
School System Owned or Leased			
School System Chartered			
Contractor Owned and Operated			
Parent Owned[1] and Operated[1]			
Public Transit System Owned[1] and Operated[1]			

[1]Do not include pupils transported in parents' cars or on public transit vehicles at the expense of the parents.

2. (a) The total K-12 enrolment of the school system was: _____

(b) The total number of pupils transported was: _____

(c) The number of transported pupils in respect of whom provincial transportation grants were received was: _____

(d) The number of transported pupils in respect of whom transportation grants were received from other bodies was: _____

(e) The number of transported pupils in respect of whom no transportation grants were received was: _____

3. (a) The number of days that schools were open in the 1972 calendar year, with pupils in attendance was: _____

(b) The area of the school system's jurisdiction is: _____

4. (a) The number of pupils transported into your school system daily from other school systems:

(1) on your vehicles was: _____

(2) on another school system's vehicles was: _____

(b) Were the pupils mentioned in (a) above covered by tuition and/or transportation agreements?

YES ☐ NO ☐

(c) The number of pupils transported out of your school system daily into other school systems:

(1) on your vehicles was: _____

(2) on another school system's vehicles was: _____

(d) Were the pupils mentioned in (c) above covered by tuition and/or transportation agreements?

YES ☐ NO ☐

SECTION B

5. (a) The estimated cost to the school system, in the 1972 calendar year, for:

(1) educational excursions, field trips, etc., was: _____

(2) trips in connection with school sports was: _____

(3) trips to other schools, on a regular basis, to make use of existing specialized facilities (i.e. laboratories, shops, gymnasiums, etc.) was: _____

(4) trips to non-school, community facilities, on a regular basis, to make use of specialized facilities (i.e. swimming pools, etc.) was: _____

b) Where bus tickets were issued in connection with (1)-(5) above please estimate the cost of such tickets issued in the 1972 school year. _____

SECTION C

In this section please supply current (1973) information.

6. (a) The greatest walking distance (i.e. home to pick-up point) required of any transported pupil is: _____

(b) The greatest distance travelled by any pupil on a transportation vehicle (i.e. pick-up point to school) is: _____

(c) The greatest time spent by any pupil on a transportation vehicle (i.e. minutes from pick-up point to school) is: _____

(d) The earliest time (i.e. minutes before school opening) that any pupil is dropped off at his school is: _____

(e) The latest time (i.e. minutes after closing) that any pupil is picked up at his school is: _____

(f) The latest time (i.e. minutes after closing) that any pupil is dropped off by a transporting vehicle is: _____

(g) The school system employs staggered opening and closing times for schools in order to increase the effectiveness of the transportation program (check one):

(1) extensively. ☐ (2) moderately. ☐

(3) not at all. ☐

(h) It is the policy of the district to provide transported pupils with (check one):

(1) gate service. ☐

(2) within-a-half-mile-of-the-gate service. ☐

(3) within-a-mile-of-the-gate service. ☐

(4) other. (Please specify) _____ ☐

(i) Are any pupils required to stand while being transported (other than those provided with tickets or passes for use in an urban transit system)?

YES ☐ NO ☐

(j) Are seat belts in general use in your transportation vehicles?

YES ☐ NO ☐

(k) How often are pupils instructed in safe-riding practices including their participation in emergency evacuation drills (check one)?

(1) never ☐ (2) yearly ☐

(3) twice yearly ☐ (4) other ☐

(l) Are monitors or proctors present on vehicles to aid in loading and unloading and to free the driver from tending the passengers while driving?

YES ☐ NO ☐

(m) If proctors or monitors are used, please select the category which best describes the type of persons involved (check one).

(1) students ☐ (2) teachers ☐

(3) parents ☐ (4) other ☐

(n) Are these persons paid for their services?

YES ☐ NO ☐

SECTION D

In this section please supply current (1973) information.

7. (a) Does the school system employ a transportation supervisor? (If no, please go on to subsection g.)

YES ☐ NO ☐

(b) If yes, what is his title? _____

(c) What is his annual salary? _____

(d) Is he a full-time employee of the school system? _____

(e) Please estimate the number of hours per week that he spends on the following duties:

(1) driving a school bus _____

(2) mechanical inspection and repair of vehicles _____

(3) scheduling and routing _____

(4) planning and arranging for contract service _____

(5) hiring school bus drivers _____

(6) training and supervision of school bus drivers _____

(7) enforcing safety standards _____

(8) handling disciplinary problems _____

(9) handling complaints from parents _____

(10) purchasing of school bus supplies and parts _____

(11) setting up bus maintenance and replacement guidelines _____

(12) other duties not directly related to pupil transportation _____

TOTAL HOURS PER WEEK _____

(f) Does the school system employ assistant transportation supervisors?

YES ☐ NO ☐

If yes, how many are employed? _____

(g) If the school system does not employ a transportation supervisor, who then is responsible for the pupil conveyance program? _____

8. (For school systems which operate vehicles)

(a) The number of drivers employed is _____

(b) The number of drivers who are full-time employees of the school system and whose duties are restricted to driving is _____

(c) The number of drivers who are full-time employees of the school system and who perform duties other than driving is _____

(d) The number of part-time drivers is _____

(e) Are the drivers members of a trade union?

YES ☐ NO ☐

If so, which union? _____

(f) How are driver's salaries determined (check one)?

(1) Set out by the school board ☐

(2) Set out in a collective agreement ☐

(3) Other ☐

9. (For school systems using contractor-operated or transit system operated transportation services)

   (a) How many drivers does the contractor employ for pupil transportation purposes? _____

   (b) Are the drivers members of a trade union? YES ☐ NO ☐

10. (a) Are the drivers in your school system's transportation programme required to participate in a system-sponsored driver training/education programme:

   (1) on initial appointment? YES ☐ NO ☐

   (2) on a regular basis after initial appointment? YES ☐ NO ☐

   (b) Does your system sponsor a safe-driving awards scheme? YES ☐ NO ☐

   (c) Have there been any accidents in your school system involving pupil transportation vehicles or their passengers which resulted in personal injury or death in the period from January 1, 1970 to December 31, 1972? YES ☐ NO ☐

	Type of Trip	
	Home/School and School/Home	Other
(d) The number of such accidents was:		
(e) The number of pupils injured was:		
(f) The number of pupils who lost their lives was:		

11. (For school systems which operate vehicles)

   (a) Does the school system maintain garage facilities? YES ☐ NO ☐

If yes, are major repairs carried out in the school system's facilities?

YES ☐ NO ☐

(b) The number of vehicle maintenance men employed is: _____

(c) To what extent does the school system contract out vehicle maintenance (check one)?

(1) regularly. ☐ (2) occasionally. ☐

(3) not at all. ☐

12. (a) How many vehicles, including buses, vans, station wagons, cars, etc., are involved in student transportation in the school system? _____

(b) How many spare vehicles are included in (a)? _____

(c) Please classify the vehicles by seating capacity. Thirteen inches per student is the usual criterion for school bus seating capacity:

(1) 2- 5 seats	_____	(7) 37-42 seats	_____
(2) 6-10 seats	_____	(8) 43-48 seats	_____
(3) 11-20 seats	_____	(9) 49-54 seats	_____
(4) 21-24 seats	_____	(10) 55-60 seats	_____
(5) 25-30 seats	_____	(11) 61-66 seats	_____
(6) 31-36 seats	_____	(12) 67 or more seats	_____

TOTAL _____ (Same as for 12,a)

(d) Please classify the vehicles used by ownership.

(1) the number of school system owned vehicles is _____

(2) the number of contractor operated vehicles is _____

(3) the number of school system leased vehicles is _____

(4) the number of chartered vehicles is _____

(5) the number of private cars, station wagons, etc. is _____

TOTAL _____ (Same as for 12,a)

SECTION E

In this section please supply the budget figures for the 1972 financial year.

13. Operating Costs (Transportation)

(a) Costs of bus operation (school system operated).

(1) Salaries: (a) of drivers _____

(b) of vehicle maintenance personnel _____

(c) of transportation supervisor(s) _____

(2) Gasoline, oil, parts, repairs, etc. _____

(3) Maintenance of garage facilities _____

(4) Leasing costs _____

(5) Charter costs _____

(b) Contract costs for pupil transportation _____

(c) Assistance in lieu of transportation

(1) Boarding allowances _____

(2) Mileage allowances _____

(3) Bus tickets or passes _____

(4) Other _____

(d) Payments to other school systems for transportation services _____

(e) Interest, etc., chargeable to transportation _____

TOTAL OPERATING COSTS (Transportation) [ ]

14. Capital Costs (Transportation)

(a) Number of new vehicles acquired in 1972 _____

(b) Total value of the new vehicles acquired in 1972 _____

(c) Capital repayments in respect of previous borrowing for transportation purposes _____

(d) Other capital expenditure for pupil transportation: (Please comment)

_____

_____

TOTAL CAPITAL COSTS (Transportation) [ ]

15. Revenue (Transportation)

(a) Operating grants from the provincial government in respect of pupil transportation _____

(b) Capital grants from the provincial government in respect of pupil transportation _____

(c) Amounts received from other school systems in respect of transportation services provided _____

(d) Capital borrowing in respect of the transportation programme _____

(e) Amounts raised within the school system by taxation for transportation services (e.g. local levy, special levy, supplementary requisition, etc.) _____

(f) Amounts received from pupils, parents, teachers and others in respect of transportation services provided _____

(g) Other sources of revenue in respect of transportation services (Please specify) _____ _____

TOTAL REVENUE (Transportation) [ ]

SECTION F

This section is concerned with the total budget figures for the entire school system, including teachers' salaries, maintenance, etc.

16. The total 1972 operating budget of the school system was _____

17. The total 1972 capital budget of the school system was _____

SECTION G

18. What are the principal benefits, both administrative and instructional, which result from the use of pupil transportation in your school system?

19. What are the major problems, if any, which result from the use of pupil transportation in your district?

APPENDIX C

FOLLOW-UP LETTER

The University of Manitoba

Faculty of Education

Winnipeg, Manitoba R3T 2N2

February 10, 1973

The Superintendent of Schools
Prairie School System
123 Main Street
Anytown, Mansasta

Dear Sir:

Prairie Provinces Pupil Transportation Survey

On January 22, 1973 I wrote to you in connection with the above study. A great deal of interest has been indicated by educators throughout the Prairie Region. The value of the results are related to the completeness of the data received. I would be very grateful to receive a completed questionnaire from your school system in order to increase the usefulness of the study.

Should you not have received my earlier letter, I enclose a second copy along with a second copy of the questionnaire.

Your cooperation in this matter will be very much appreciated. Thank you.

Yours sincerely

W. E. Lavery
Department of Educational Administration

APPENDIX D

INTERVIEW SCHEDULE

INTERVIEW SCHEDULE

1. What is your official title?

2. What are your responsibilities with respect to the pupil transportation programme in the Province of Mansasta?

3. a) What other officials in the Government of Mansasta have major responsibilities with respect to the pupil transportation programme?

   b) What are their responsibilities?

4. What are your responsibilities with respect to the financing of pupil transportation?

5. What reporting does your Department require of school systems in the province with respect to their pupil transportation programmes?

6. What are your responsibilities with respect to the purchase of pupil transportation vehicles?

7. What are your responsibilities with respect to the nature of the vehicles used for pupil transportation?

8. What are your responsibilities with respect to the establishment and supervision of safety standards in pupil transportation?

9. What is the nature of the safety data collected by the Government of Mansasta, with respect to pupil transportation?

10. Do you foresee any changes that are likely to take place in pupil transportation in Mansasta?

APPENDIX E

AN EXTRACT FROM THE BRITISH NORTH AMERICA ACT, 1867

AN EXTRACT FROM THE BRITISH NORTH AMERICA ACT, 1867

93: In and for each Province the Legislature may exclusively make Laws in relation to Education, subject and according to the following provisions:--

1. Nothing in any such law shall prejudicially affect any Right or Privilege with respect to Denominational Schools which any Class of Persons have by Law in the Province at the Union:

2. All the Powers and Privileges, and Duties at the Union by Law conferred and imposed in Upper Canada on the Separate Schools and School Trustees of the Queen's Roman Catholic Subjects shall be and the same are hereby extended to the Dissentient Schools of the Queen's Protestant and Roman Catholic Subjects in Quebec:

3. Where in any Province a System of Separate or Dissentient Schools exists by Law at the Union or is established by the Legislature of the Province, an Appeal shall lie to the Governor-General-in-Council from any Act or Decision of any Provincial Authority affecting any Right or Privilege of the Protestant or Roman Catholic Minority of the Queen's Subjects in relation to Education:

4. In case any such Provincial Law as from Time to Time seems to the Governor-General-in-Council requisite for the due Execution of the Provisions of this Section is not made, or in case any Decision of the Governor-General-in-Council on any Appeal under this Section is not duly executed by the proper Provincial Authority in that Behalf, then and in every such case, and as far only as the Circumstances of each Case require, the Parliament of Canada may make remedial Laws for the due Execution of the Provisions of this Section and of any Decision of the Governor-General-in-Council under this section.

APPENDIX F

EXTRACT FROM THE MANITOBA ACT, 1870

EXTRACT FROM THE MANITOBA ACT, 1870

22. In and for the Province, the said Legislature may exclusively make Laws in relation to Education, subject and according to the following provisions:

(1) Nothing in any such law shall prejudically affect any right or privilege with respect to Denominational Schools which any class of persons have by Law or practice in the Province at the Union:

(2) An appeal shall lie to the Governor General in Council from any Act or decision of the Legislature of the Province, or of any Provincial Authority, affecting any right or privilege of the Protestant or Roman Catholic minority of the Queen's subjects in relation to Education:

(3) In case any such Provincial Law, as from time to time seems to the Governor General in Council requisite for the due execution of the provisions of this section, is not made, or in case any decision of the Governor General in Council or any appeal under this section is not duly executed by the proper Provincial Authority in that behalf, then and in every such case, and as far only as the circumstances of each case require, the Parliament of Canada may make remedial Laws for the due execution of the provisions of this section, and of any decision of the Governor General in Council under this section.

APPENDIX G

EXTRACT FROM THE SASKATCHEWAN ACT, 1905 AND THE ALBERTA ACT, 1905

EXTRACT FROM THE SASKATCHEWAN ACT, 1905 AND THE ALBERTA ACT, 1905

Section 17 (Identical in both acts)

Section 93 of the British North America Act, 1867, shall apply to the said province, with the substitution for paragraph (1) of the said Section 93, of the following paragraph:

1. Nothing in any such law shall prejudically affect any right or privilege with respect to separate schools which any class of persons have at the date of the passing of this Act, under the terms of chapters 29 and 30 of the Ordinances of the Northwest Territories, passed in the year 1901, or with respect to religious instruction in any public or separate school as provided for in the said ordinances.

2. In the appropriation by the Legislature or distribution by the Government of the province of any moneys for the support of schools organized and carried on in accordance with the said Chapter 29 or any act passed in amendment thereof, or in substitution therefor, there shall be no discrimination against schools of any class described in the said Chapter 29.

3. Where the expression "by law" is employed in paragraph 3 of the said Section 93, it shall be held to mean the law as set out in the said Chapters 29 and 30, and where the expression "at the Union" is employed in the said paragraph 3, it shall be held to mean the date at which the Act comes into force.

BIBLIOGRAPHY

BIBLIOGRAPHY

A. Books

Campbell, W. G. Form and Style in Thesis Writing. 3d ed. New York: Houghton Mifflin Company, 1969.

Canadian Standards Association. CSA Standard D 250 -- 1971 School Buses. Rexdale, Ontario: Canadian Standards Association, 1971.

Elwood, Bryan C. Student Transportation: Comparing Alternative Methods of Providing the Service. Toronto: The Ontario Institute for Studies in Education, 1970.

Featherston, E. G., and Culp, D. P. Pupil Transportation State and Local Programs. New York: Harper and Row, 1965.

France, Norman. The Influence of a Daily Bus Journey on Pupil Achievement. Regina: Saskatchewan School Trustees Association, 1970.

_____. Student Transportation in Saskatchewan a Survey of Costs. Regina: Saskatchewan School Trustees Association, 1970.

National Conference on School Transportation. Minimum Standards for School Buses. Tallahassee: Florida, Department of Education, 1970.

_____. Minimum Standards for School Bus Operations. Tallahassee: Florida, Department of Education, 1970.

Parsons, John M. Ohio's System of Regional Coordinators for Pupil Transportation. Washington: National Education Association, June, 1967. (ERIC 016555)

Stollar, Dewey H. "Pupil Transportation," Planning to Finance Education, Vol. III, Chapter IX. Gainsville, Florida: National Education Finance Project, 1971, pp. 329-360.

B. Documents

(Alberta, Department of Education) Progress Report on a Study of Rural School Transportation. Edmonton: (1969), (Mimeographed.)

Province of Alberta. The Sixty-Sixth Annual Report of the Alberta Department of Education. Edmonton: Queen's Printer, 1972.

Lucow, W. H. The Canadian System of Education. Ottawa: Queen's Printer, 1970.

Province of Manitoba. 1970/71 Annual Report, Department of Youth and Education. Winnipeg: Queen's Printer, 1971.

Manitoba, Department of Education, Transportation Bulletin, Number 13, February, 1973. (Mimeographed.)

Ontario, Ministry of Education. Managing School Transportation. Toronto: February, 1973.

Province of Saskatchewan. Sixty-Sixth Annual Report, Department of Education 1970/71. Regina: Printer to the Queen's Most Excellent Majesty, 1971.

Saskatchewan, Department of Education. Suggested Minimum School Bus Standards. Regina: 1965.

Wisconsin, Department of Public Instruction. Transportation Facts for 1971-72. Madison: 1972

C. Legislation and Regulations

Alberta. The Public Service Vehicles Act, R.S.A. 1970, c. 300.

Alberta. The School Act, R.S.A. 1970, c. 329.

Alberta. Regulation 69/57, as amended. Issued under the authority of The Public Service Vehicles Act, R.S.A. 1970, c. 300.

Alberta. Regulation 136/70. Issued under the authority of The School Act, R.S.A. 1970, c. 329.

Alberta. Regulation 101/71. Issued under the authority of The School Act, R.S.A. 1970, c. 329.

Alberta. Regulation 129/72. Issued under the authority of The School Act, R.S.A. 1970, c. 329.

Alberta. Regulation 140/73. Issued under the authority of The School Act, R.S.A. 1970, c. 329.

Canada. The Alberta Act, S.C. 1906, c. 3.

Canada. The Manitoba Act, S.C. 1870, c. 3.

Canada. The Saskatchewan Act, S.C. 1905, c. 42.

Great Britain. 30 & 31 Vict. 1867, c. 3, s. 93.

Manitoba. The Highway Traffic Act, R.S.M. 1970, c. H70.

Manitoba. The Public Schools Act, R.S.M. 1970, c. P250.

Manitoba. The Public Schools Finance Board Act, R.S.M. 1970, c. P260.

Manitoba. Regulation 118/67, as amended. Issued under the authority of The Public Schools Act, R.S.M. 1970, c. P250.

Manitoba. Regulation 143/70, as amended. Issued under the authority of The Public Schools Act, R.S.M. 1970, c. P250.

Saskatchewan. The Foundation Grants Act, S.S. 1970, c. 22.

Saskatchewan. The Larger School Units Act, R.S.S. 1965, c. 184.

Saskatchewan. The School Act, R.S.S. 1965, c. 84.

Saskatchewan. The Vehicles Act, R.S.S. 1965, c. 377.

Saskatchewan. Regulation 183/65, as amended. Issued under the authority of The Vehicles Act, R.S.S. 1965, c. 377.

Saskatchewan. Regulation 367/68. Issued under the authority of The School Act, R.S.S. 1965, c. 84.

Saskatchewan. Regulation 196/71. Issued under the authority of The School Act, R.S.S. 1965, c. 84.

Saskatchewan. Regulation 104/72. Issued under the authority of The Foundation Grants Act, 1970, S.S. 1970, c. 22.

Saskatchewan. Regulation 80/73. Issued under the authority of The Foundation Grants Act, 1970, S.S. 1970, c. 22.

D. Periodicals

Anderson, Robert B. "Merrily We Roll Along," School Management, November, 1972, pp. 13-15, 40.

"The Clash on School Bus Safety: What the Critics Say -- and the Industry's Side as Well," American School Board Journal, January, 1971, pp. 33-34.

Featherston, Glen. "School Transportation The Things a Board Should Know," American School Board Journal, November, 1969, 15-19, 29, 31, 32.

"Iowa Driver Training: Simulated Stress in a 'Wet' Bus," School Management, November, 1972, p. 21.

Latta, Everette Michael. "It's been going for a century," American School Board Journal, CLVII (November, 1969), p. 30.

"School Buses How Safe Are They?" Manitoba Motorist, XIII (September-October, 1972), pp. 14-16.

"School Bus Safety Part 2," Manitoba Motorist, XIV (January-February, 1973), pp. 10, 11, 13.

"A Talk With the Man Behind Standard 17," School Management, November, 1972, pp. 17, 20.

"Transportation Problems and Prospects for 1973," School Management, November, 1972, p. 12.

"Two Innovations in Bus Driver Training," School Management, November, 1972, p. 16.

"What do you think of Standard 17?" School Management, November, 1972, pp. 18, 19.

E. Reports

Bardock, E. F. and Matthews, L. W. Pupil Transportation. A preliminary report on pupil transportation. (Edmonton:) Department of Education, 1973.

Business Task Force on Education. Public School Survey and Recommendations. A Report Prepared by the Business Task Force on Education, Incorporated. (Portland: 1969)

Canadian Education Association. The Transportation of Pupils to Schools in Canada. Report Number 9, 1962-1963. Toronto: 1963.

Kates, Peat, Marwick & Co. A Study of School Bus Transportation in Calgary and Edmonton, Edmonton: Department of Education, August, 1969. (Mimeographed.)

F. Theses

Sawatsky, Aron. "An Interpretive Study of Factors Related to Transportation Costs in the School Divisions of Manitoba." Unpublished Master's thesis, University of Manitoba, 1968.

Whisman, R. W. "History and Current Status of School Bus Driver Education in Ohio and the United States." Unpublished Master's thesis, The Ohio State University, 1971 (ERIC ED 052542)

G. Unpublished Works

Underwood McLellan & Associates. "Pupil Transportation Study," Report prepared for the Department of Indian Affairs and Northern

Development, November, 1972, Winnipeg, Manitoba.

"MISC Report" A report of the Ministers Information Systems Committee, September 26, 1967.

"M.I.S.C. 5th Report," Presented to the Council of Ministers of Education, Canada, by the Chairman of M.I.S.C., Dr. R. W. B. Jackson, September 17, 1968, Toronto.

"Ministers Information Systems Committee Position Paper," Prepared by A. R. Empringham and H. G. Porteous of DCR Systems, October 18, 1968, Toronto.