ALASKA LEGISLATURE COMMITTEE FILES 1981-1982 8672
1250 SCRA AML TRANSPORTATION STUDY 1250

Exhibit 5-2

ALASKA MUNICIPAL LEAGUE
TRANSIT OPERATORS WORKSHOP
May 13-14, 1980
Anchorage, Alaska

Tuesday, May 13, 1980 - Holiday Inn, Ketchikan Room

9:00 am - 9:15 am	Introductory Remarks Ginny Chitwood, AML Executive Director Ron Garzini, Chief Administrative Officer/Operations Municipality of Anchorage Peter Eakland, Transit Consultant to AML
9:15 am - 10:45 am	Description of Existing Systems Operators from Anchorage, Barrow, Fairbanks, Juneau
10:45 am - 11:00 am	Coffee Break
11:00 am - 12:15 pm	Marketing, Customer Relations, Organizational Structure Raymond She , Marketing Director METRO Transit, Seattle
12:15 pm - 1:30 pm	Lunch (open)
1:30 pm - 3:00 pm	Bus Scheduling, Driver Scheduling, Route Selection H.B. Picht, Manager METRO Transit Service Control
3:00 pm - 3:15 pm	Summary of Project Peter Eakland
3:15 pm - 3:30 pm	Coffee Break
3:30 pm - 4:30 pm	Where Do We Go From Here? Formation of Alaska Public Transit Operators Association? Format & Agenda of Next Meeting
6:30 pm	No Host Dinner, Holiday Inn

Wednesday, May 14, 1980

8:30 am - 9:30 am	Tour of Anchorage Transit Facilities
9:30 am - 12:00 pm	Discussions with Guest Speakers Holiday Inn, Ketchikan Room

EXHIBIT 5-3

Alaska MUNICIPAL League

TELEPHONES
(907) 586-1325
586-6526

204 N. FRANKLIN ST.
JUNEAU, ALASKA 99801

Public Transit in the 1980's

TRANSIT CONFERENCE

November 12-14,1980
Fairbanks, Alaska

WEDNESDAY, NOVEMBER 12, 1980 - TRAVELERS INN, WEST GOLD ROOM

1:00 pm - 2:15 pm GENERAL SESSION - James O'Sullivan, Moderator

Robert Ward - Commissioner, Alaska Department of Transportation & Public Facilities (DOT/PF)

Frank Francois - Executive Director, American Association of State Highway & Transportation Officials (AASHTO)

Ronald Hartman - Director, Planning & Policy Analysis, American Public Transit Association (APTA)

Ginny Chitwood - Executive Director, Alaska Municipal League

2:15 pm - 2:30 pm COFFEE BREAK

2:30 pm - 4:30 pm PANEL DISCUSSIONS:
FUNDING ALTERNATIVES & INSTITUTIONAL ROLES

Frank Francois and Ronald Hartman

Dennis Dooley - Director, Southeast Planning and Programming, DOT/PF

George Smith - Manager, Public Transportation, Washington Department of Transportation

Dennis Moore - Administrator, Public Transit Division, Oregon Department of Transportation

Kenneth Walker - Alaska Representative, Urban Mass Transportation Administration (UMTA)

MEMBER OF THE NATIONAL LEAGUE OF CITIES AND THE NATIONAL ASSOCIATION OF COUNTIES

THURSDAY, NOVEMBER 13, 1980 - FAIRBANKS NORTH STAR BOROUGH
LOWER CONFERENCE ROOM

9:00 am - 5:00 pm TECHNICAL WORKSHOPS:

David Ewing,
Moderator

Paratransit
Equipment Procurement
Organization & Manpowe
Planning & Coordinatic
Grant Administration
Public Relations
School Bus Use
Private Involvement
Regulatory Issues

Ray She - Supervisor, Market Planning, METRO Seattle

Gordon Kirkemo - Washington Department of Transportation

Dave Rostedt - Transit Manager, Grays Harbor Transportation Authority

George Smith, Dennis Moore, Ronald Hartman

FRIDAY, NOVEMBER 14, 1980 - FAIRBANKS NORTH STAR BOROUGH
LOWER CONFERENCE ROOM

9:00 am - noon CONFERENCE WRAP-UP

Organization of Transit Association

Discussion of AML Transit Project

- - -

MODERATORS James F. O'Sullivan, Transit Director
Fairbanks North Star Borough

David Ewing, Public Transportation Specialist
Transportation Research Board

- - -

The Alaska Municipal League, with funding from the Alaska Department of Transportation and Public Facilities and Urban Mass Transportation Administration, is sponsoring this conference for local government officials, transit personnel, and other persons who are interested in transit operations and management.

There are three main purposes for the conference: (1) providing general information on public transit, including funding alternatives and roles of government and private agencies, (2) providing technical assistance to transit operators for improving their systems, and (3) providing organization information to transit operators about the options for establishing a transit operators association.

Transit

EXHIBIT 5-4

Name	Title	Representing
: Vilcox	Transit Mgr	Fairbanks Borough (Borrow-)
[illegible]	[illegible]	ALASKA TRANSPORTATION CONSULTANTS
[illegible]	CC	City of Wrangell
[illegible]	City Council	City of Wrangell
[illegible]	administrator	Public Transit Division, Oregon DOT
[illegible]	City Mgr.	City of Cordova
[illegible]	City Mgr	City of Ketchikan
[illegible]	CITY PLANNER	CITY COUNCILMAN
[illegible]	Administrator	CITY OF CRAIG
DON KIRKEMO	TRANSPORTATION SPECIALIST	WASH ST. DOT
[illegible]	General Manager	Grays Harbor Transit
[illegible]	Sales Rep (Parts)	Hausman Bus Sales & Parts Co.
[illegible]	[illegible]	[illegible]
[illegible]	REGIONAL MANAGER	STATE OF AK / UMTA-PP
[illegible]	Public Trans. Spec.	Transportation Research Board, Wash. DC
[illegible]	[illegible]	Metro — Seattle
[illegible]	Assoc. Planner	Munic. of Anch. Planning Dept
[illegible]	Councilman	City of Ketchikan
NK MILLER	TRANSIT MANAGER	CITY/BOROUGH OF JUNEAU
[illegible]	CPU Adv Board	KETCHIKAN PUBLIC UTILITIES
[illegible]	TRANS. PLANNER	ADOT/PF FAIRBANKS
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

Transit

Name	Title	Representing
Wilson Burns	Sr. Driver	Mabel T. Causey SE. Center CA
Ed Zenstock	Councilman	City of Kotzebue
Don Hause	Mayor	W Rainwater
Walt Bollinger	Council	Ketchikan
Clint Thomas	Councilman	Wasilla
Bridget Connelly	Special Projects	Soil Conservation Service
Chester Wood	Manager	Juneau
P. Christensen	Public Transp. Adv. Bd	Anchorage
Mike McCampbell	Local Govt. Specialist	Dept. of Comm. & Regional Affairs
Walt Lewison	City Mgr	Nome
Walt R. (illegible)	EIDC	Fairbanks, Alaska
Walt Appelman	Councilman	City of Nome
Phil Anderson	Councilman	Kodiak Island Box 781
Keith Kornelis	Public Works Dir	City of Kenai
Susan J. Regan	Research Asst	Univ. of Alaska / Fairbanks
Wilson Johnson	Vice Pres. Dr. Trans	Palmer, AK
Donald J. Okland	Transit Manager	Municipality of Anchorage
Ken Garzoni	Chief Planning Officer	" " "
Jim Dunn	Dir. of Transportation	" "
Lloyd Brown	Transportation Planner	ADOTPF

EXHIBIT 5-S

Thursday Technical Workshop
13 Nov. 1980

David Ewing, TRB, Moderator

Name	Title/Phone	Address
Stanley A. Green	Assoc. Planner, Munic. of Anchorage (907) 264-4251	Pouch 6-650 Anch. AK 99502
Peter Ballard	transportation consultant 337-6213	3960 Reka Dr. #B Anchorage AK 9950
GORDON KIRKLAND	TRANSPORTATION SPECIALIST (206)754-1229	WASH ST. DOT HIGHWAY ADMIN BLDG Olympia, WA 98504
David Rostedt	General Manager (206) 532-2770	Grays Harbor Transit 3000 Bay Avenue Hoquiam, WA 98550
FRANK MILLER	TRANSIT MANAGER (907) 364-2200	CITY & BOROUGH OF JUNE. 155 SO. SEWARD ST. JUNEAU, AK 99801
DAVID EWING	Public Transportation Specialist (202) 389-6548	Transportation Res. B 2101 Constitution Ave Washington, DC. 2041
Raymond Shea →	Supervisor of Market Planning Metro (206) 442-6958	Metro 821 2nd Ave. Seattle, Wa. 981
JIM O'SULLIVAN	Director, FAIRBANKS TRANSIT	452-6624 1077 ASPEN ST. FBX
W.T. Olson	TRANSIT MNGR. ANCHORAGE (263-8227)	3500 E TUDOR RD 9950
orge L. Smith	Mgr. Public Transportation Office, Wash. State DOT	Olympia, WA 98504
w W. EASTLOW -	CITY COUNCIL/BORO ASSYM - 852-2611 EXT 312	- KETCHIKAN, ALA 99901
n WILCOX	TRANSIT MGR/NORTH SLOPE BOROUGH	BOX 69 BARROW, AK 99723
Hays Johnson	Planner, Alaska DOT/PF	Fairbanks, Juneau 99811

Name	Title / Phone	Address
Mike Campbell	Dept. of Comm & Reg. Affairs	Pouch B Ju
Ron Hartman	Dir, Plg & Pol. Analysis (202) 828-2872	APTA, 1225 Cl Wash DC 20
Howard DeVore	Reg Coord, State AK. OFFICE ON Aging 907-274-4522	338 Denali R. Anchorage AK
Pat Rogers	Director, ACCA 1020 Barnette St. 907-456-4884	1020 Barn Fairbanks AK
Bill Aberle	Planner/Adotff	Fairbanks
Bill O'Connor	Project Director The Salvation Army Sr. Cit. Prog.	135 E 8th Anchora
Bill Bynum	Senior Driver	1111 E. 5th
Mike Miller	Maggie T. Canedy Sr. Center (Park.) 213 566-4101	Anaheim 928 Harbor Blvd Atlantic South Gate, CA
Chris Rink	Trans. Planner / Adot/pf	By 3-1000 Juneau AK 99
Edward H. Camel, Jr.	S.E. Regional Planning Planner	Alaska Dept. P.O. Box 3-1
Jenny Moore	Public Transit Div, Dne. DOT	Alaska Dept. 124 Transportation

EXHIBIT 5-6

ALASKA TRANSIT OPERATORS ASSOCIATION

AGREEMENT OF ASSOCIATION

As adopted upon the formation of the Association on November 14, 1980, during the Alaska Municipal League's 30th Annual Local Government Conference conducted in Fairbanks, Alaska.

AGREEMENT OF ASSOCIATION

ARTICLE I - ASSOCIATION NAME

Section 1. The Association of the State of Alaska shall be known as "Alaska Transit Operators' Association".

ARTICLE II - ASSOCIATION PURPOSE STATEMENT

Section 1. The purpose of this statewide association is to form an organization for the purposes of mutually exchanging information and resources for solving mutual problems in the operation and management of surface passenger transit systems, to promote more effective and economical operation of transit systems, and to further promote the welfare of the public.

ARTICLE III - MEMBE SHIP

Section 1. Eligibility voting membership. Any individual, firm, corporation, Municipal corporation or public entity, lawfully engaged in the ownership and/or operation of a public transit system, public or private, regardless of size, within the State of Alaska, is eligible for voting membership.

Section 2 Eligibility Associate Membership. Provisions shall be made for Associate non-voting memberships.

Section 3. Suspension or expulsion. The membership by a majority vote at any regular meeting, or the Executive Board by a three-fifths vote, shall have the power to suspend or expel for cause any member of this Association, provided that any member expelled by the Executive Board may appeal such expulsion to the membership of the Association.

ARTICLE IV - MEMBERSHIP DUES

Section 1. The members of this Association shall pay such dues for membership as may be fixed annually by the Executive Board at the annual meeting of the membership, which dues shall be approved by a majority vote of the members in attendance at such annual meeting. Such dues so fixed shall be payable on or before January 1, of the year following such annual meeting.

ARTICLE V - VOTE OF MEMBERSHIP

Section 1. One representative of each transit system who is a member hereof, shall be entitled to one vote for all purposes herein.

Section 2. Votes may be cast absentia or in person.

Section 3. At any meeting of the Association, a majority of the membership present shall constitite a quorum.

ARTICLE VI - MEETINGS

Section 1. Annual meeting. The annual meeting of the membership shall be held, unless otherwise designated, in conjunction with the annual meeting of the Alaska Municipal League for the purpose of electing officers and committees for the ensuing year and for the transaction of any other business brought before the Association by the President or members.

Section 2. Special meetings. Special meetings of the membership may be called by the President. The President is required to call a special meeting on receipt of a written request from any three voting members of the Association

Section 3. Notice of meetings. Notice of the annual meeting of the membership or of all special meetings called, stating the time, place and purpose of such meetings, shall be given to each member by letter not less than ten days prior to said meeting. Provided, however, that urgent matters may be attended to by means of expedient verbal communication.

ARTICLE VII - EXECUTIVE BOARD

Section 1. The affairs of the Association shall be managed and controlled by an Executive Board.

Section 2. Membership tenure. The membership of this Board shall be composed of the President of the Association, who shall be the chairman thereof, the Vice-President, and the Secretary-Treasurer of the Association, and two other members elected by the membership of the Association at its annual meeting from the members at large. Each member thereof shall hold office for one year or until the election of his successor. Vacancies shall be filled at annual or special meetings of the membership.

Section 3. Meetings of Executive Board. Immediately after each annual election, the newly elected Executive Board shall forthwith meet at the principal office of the Association, or a place otherwise designated for the purpose of organization and the transaction of business. If a quorum of said members of the Board is present, no prior notice of such meeting shall be necessary. Other regular meetings of the Board may be held at such times and places as the chairman thereof may order. Special meetings may be called by the chairman, and it is mandatory that said meetings be called upon the written request of two other members. Notice of any special meeting shall be given to each member thereof at least five days prior to the holding of said meetings, and may be given by the chairman personally, by telephone, or by written communication. A majority of the membership of said Board shall constitute a quorum at all meetings for the purpose of transacting business.

Section 4. Executive Board powers. The Executive Board shall have the full power to transact any and all business of the Association, and may by resolution adopted by a majority of said Board, designate any one or more of its members to carry on or perform any act or business of said Association.

ARTICLE VIII - EXECUTIVE OFFICERS

Section 1. Executive Officers of this Association shall be President, Vice-President, and a Secretary-Treasurer.

Section 2. Executive Officers shall be elected by the voting members at the annual meeting of the Association, and Executive Officers shall hold office until the next annual meeting or until their successors have been elected and qualified.

Section 3. Any Executive Officer may be removed at any time by a two-thirds vote of the voting members.

Section 4. Vacancies shall be filled by the Executive Board hereinafter provided for.

Section 5. Subordinate officers. The membership may elect or appoint such other offices and agents of the Association and delegate such powers and duties thereto as the membership shall deem necessary and proper.

ARTICLE IX - DUTIES OF EXECUTIVE OFFICERS.

Section 1. President: The President shall preside at all meetings of the membership and shall be the chief executive officer of the Association. He shall have the general management and control of the affairs of the Association and shall have the authority, on behalf and in the name of the Association, to execute with the Secretary-Treasurer all contracts and other instruments and obligations authorized to be executed by the Executive Board.

Section 2. Vice-President: The Vice-President, in the absence or disability of the President, shall have and exercise all powers and perform the duties as granted to the President, and shall assist the President and exercise such other powers and perform such other duties as may be prescribed by the Executive Board.

Section 3. Secretary-Treasurer: The Secretary-Treasurer, as treasurer, shall have the custody of all funds, securities, evidence of indebtedness, and other properties of the Association, and shall deposit all funds of the Association in such bank or banks as shall be designated by the Executive Board. He shall receive and give receipts and acquittances for all funds paid in or on account of the Association, and shall pay out of the Association funds on hand, all bills and other just debts of the Association of whatever nature upon the maturity of the same, and shall enter regularly in the books of the Association to be kept by him for that purpose full and accurate accounts of all receipts and disbursements, and shall perform all other duties not specifically herein set forth incident to the office of treasurer.

Section 3.1 The Secretary-Treasurer as secretary, shall keep the minutes of all proceedings of the Executive Board and of the membership, and shall serve all notices required by law or by this Agreement of Association. He shall perform all other duties incident to the office of secretary not specifically enumerated herein.

ARTICLE X - STANDING COMMITTEES

ection 1. Audit Committee. The membership at the annual meeting of the As: ciation shall elect an Audit Committee, the membership of wh..h shall be composed of three members elected at large from the membership of the Association.

ection 2. Paratransit Committee. The Executive Board shall appoint a Paratransit Committee.

ection 3. Other Committees. The Executive Board may appoint such other committees as deemed necessary.

ARTICLE XI - COMPENSATION

ection 1. No elected officer or member of any board or committee may receive any compensation or remuneration for services as such officer or member, but shall be entitled to be reimbursed for any expenditures authorized by the Executive Board and incurred or expended for and on behalf of the Association.

ARTICLE XI' - OFFICERS--BONDS

ection 1. Officers or members of boards and committees shall be bonded as may be required by the Executive Board.

ection 2. The amounts of such bonds shall be fixed by the Executive Board.

ection 3. All premiums payable for such bonds shall be paid by the Association.

ARTICLE XIII - SIGNATURE ON DISBURSEMENTS

ection 1. The funds of the Association shall be deposited in a bank or banks as may be designated by the Executive Board.

Section 2. Checks drawn on Association funds shall be signed by two (2) of the three (3) Executive Officers of the Association.

ARTICLE XIV - RULES OF PROCEDURE

Section 1. The membership may adopt rules and regulations of procedure for the transacting of the Associations' business. Where such rules of procedure are not adopted or are silent on any matter, Roberts' Rule of Order shall be the parliamentary authority.

ARTICLE XV - NOTICE

Section 1. Any notice required to be given by this agreement and not specifically provided for, may be given by mailing or telegraphing the same to the person(s) entitled thereto at their addresses as shown on the Association's books.

Section 2. Notice shall be deemed to be given at the time of such mailing or telegraphing.

Section 3. Any notice required by this agreement may be waived in writing by

ARTICLE XVI - AMENDMENTS

Section 1. This agreement may be amended only by vote of a majority of the membership of this Association at any regular meeting, or at any special meeting called for that purpose.

Section 2. This Agreement of Association is a consolidation and incorporation of all oral or written understanding or agreements between the parties and is binding on the successors in interest and assigns of all parties.

ARTICLE XVII - EXECUTIVE DIRECTOR

Section 1. The Executive Board may appoint an Executive Director and set a salary for the office of Executive Director. The Executive Director may retain such staff as is required to fulfill the powers and duties of the office and to carry on the day-to-day activities of the Association.

_____

President

_____

Vice-President

_____

Secretary-Treasurer

_____

Executive Board Officer

_____

Executive Board Officer

CHAPTER 6. RECOMMENDATIONS FOR TRANSIT ASSISTANCE PROGRAM

6.1 Purpose

The purpose of this chapter is to document and describe the recommendations for implementing a State of Alaska comprehensive public transit assistance program. The recommendations reflect comments received to date by community officials and transit operators. A recommendation for an operating assistance program to be one-third of gross costs was approved unanimously by the transit managers of the four largest publicly-operated bus transit systems at the initial meeting of the Alaska Transit Operators' meeting. The attempt has been to develop a balanced approach to transit funding which will provide assistance in all phases of system development to a broad range of municipalities and services.

This chapter contains a description of short-range capital and operating costs for public transit, and they are compared to available funding sources. Next, justification is provided for a comprehensive, categorical public transit program. Alternative strategies for capital, technical, and operating assistance programs are analyzed and recommendations described. Finally, proposed legislation is presented to implement the recommendations.

6.2 Public Transit Assistance Needs

The fiscal needs for public transit in Alaska are forecast for operations and capital improvements.

The four existing publicly operated transit systems are treated separately from other transportation services considered public transit, principally because of differences in the availability of data. Transit improvement programs were approved by local elected officials during 1980 for Anchorage, Fairbanks and Juneau. They provide five-year forecasts for both operating and capital expenses. Estimates were generated for the North Slope Borough's transit system on the basis of telephone discussions with its transit staff.

6.2.1 CAPITAL ASSISTANCE

Table 6-1 summarizes forecast costs of rolling stock and facilities by transit system for the period FY 80-86. Average figures have been computed for the first two years and the last five years to compensate for yearly fluctuations. The two-year average represents immediate needs and is consistently higher than the five-year average for three reasons. First, it reflects projects that are in progress as well as those being programmed in current budgets. Second, FY 80-81 projects will significantly upgrade facilities and rolling stock, and the need for similar

levels of capital funding will diminish for at least the following five years. Finally, the communities have examined future needs in less detail than present needs. Figures for the later years may have to be increased. In summary, the two-year average figures represent an optimistic scenario and the five-year figures are probably too conservative.

Juneau and Fairbanks are in need of new maintenance facilities, and for these communities short-term facility needs are greatly in excess of needs for rolling stock. For Anchorage, rolling stock needs for FY 80-81 are greater than facility needs, but the reverse is true for the FY '82-86 period.

Anchorage's capital improvement program for transit is 66% of the total for the four systems in FY 80 and 81, and the percentage increases to 86% for the following five year period. For FY 80-81, Fairbanks and Juneau follow, respectively, with 21% and 13% of the total. These percentages fall to 11% and 2% respectively, for the FY '82-86 period.

Table 6-2 shows estimated FY 81 funding requirements for public transit operations other than the four systems already discussed. Included are the Ketchikan airport ferry, the Mat-Su Borough commuter service, the dial-a-ride service operated for the elderly and handicapped by the Municipality of Anchorage, four new systems, private systems and transportation services for the elderly and handicapped offered by non-profit corporations. Total FY 81 capital needs for these miscellaneous operations are forecast to be $3.6 million, or approximately 40% of the total figure for the other systems.

A figure for improvements to the Ketchikan airport ferry has not been included. A final location decision on which alternative proposals should be implemented has not been made. Federal Aviation Administration and Federal Highway Administration funds are potential funding sources.

Private systems can be expected to participate in any statewide capital improvement program for public transit, but the extent of participation will depend upon selection of funding criteria and conditions that might be imposed on the equipment purchased. Given a broad interpretation of what constitutes public transit, even some taxi cab operators might be able to participate. Total forecast needs for FY 81 are $12.8 million, which would be split evenly between rolling stock and facilities.

Table 6-3 contains a listing of maximum and minimum scenarios for non-local funding sources. The two largest sources of funds are the 1980 statewide transportation bond issue and UMTA Section 3 funds. The minimum scenario assumes that the bond funds will be equally divided between FY 81 and FY 82, and the maximum assumes that all funds will be utilized during FY 81. Section 3 forecasts are somewhat speculative, since UMTA has discretionary power over regional and local allocations. The funding levels shown for the maximum and minimum scenarios, respectively, assume that 10% of the Northwest funds will come to Alaska. It should be remembered that for Section 3, allocations are not made to the states but to

individual communities. The state has primary administration responsibility for three of the five funding sources. They are transportation bonds, Section 16(b)(2) funds, and Section 18. Additional potential funding sources are state general revenues, local taxes, and FHWA Federal-Aid Urban System (FAUS) funds.

The available funds for FY 81 closely approximate the forecast needs, although recent re-evaluations, of transit improvement programs indicate original projections may be low. Even for the low scenario, a shortfall of only $2.9 million is forecast. Local funds required would be 23% of total costs, which is slightly more than the 20% match required by UMTA. Maximum scenario funding exceeds forecast needs by $3.6 million and would allow one-half of the bond funds to be distributed the following year. Given a history in Alaska of delays in implementing transit improvement projects, existing funds may be adequate for the next two years, unless needs are substantially increased by revised transit improvement programs and by inclusion of Ketchikan airport ferry improvements.

62.2 OPERATING COSTS

Table 6-4 shows for the four major transit systems in Alaska actual operating costs for FY 79 and current forecasts for the period FY 81-84. FY 81 estimates for the remaining services are shown on Table 6-2. As shown in Table 6-4, fares covered only 13-18% of costs incurred by the four transit systems in FY 79. The Barrow system had the highest level of federal support, which is estimated at 22% of operating costs. This figure will fall substantially to 10% after the two-year demonstration period is over.

Cost and revenue forecasts indicate a steady rise in local subsidy requirements for all the systems. The percentage of costs that must be met by local subsidy will increase by at least 10% in Anchorage, Barrow and Juneau. The transit improvement program for Fairbanks has assumed that fare increases will be high enough to keep the local subsidy at a constant percentage of costs.

The major increases in operating costs for all systems are due to a combination of inflation and plans for providing higher levels of service. For Anchorage, forecast FY 81 costs of $15.1 million are over 3-1/2 times those that occurred in FY 79. Costs in Juneau for the same period are forecast to increase by a factor of almost three and those in Fairbanks by a factor above 2-1/2. The factor for the North Slope Borough should remain less than two, since the low population limits the system's growth potential. The overall costs for the four systems in FY 84 will be 3.3 over those in FY 79, and the total local subsidy will increase by a factor of 3.7.

For the other public transit services, a wide variation exists in the relationship between costs and fares, as shown in Table 6-2. Fares for the Ketchikan airport ferry cover 82% of operating costs while for the

Anchorage elderly and handicapped system no fares are collected. The Mat-Su Borough has signed a fixed-price contract which allows the private operator to keep all fares collected. Fare revenue has been forecast which, when added to the local subsidy, gives an estimate of total operating costs. Similar operating costs and fare revenues have been assumed for each of the new systems. Galena, which recieved a line-item appropriation of $110,000 from the last legislative session for transit purposes, is listed as one of the new systems. Based on expressions of interest by local elected officials, new systems could start during the next year in Bethel, Nome and Kodiak. Finally, $100,000 has been included for both private systems and Section 16(b)(2) operators. The total local subsidy required for all systems is estimated at $6.25 million, 85% of which is derived from the four existing public transit systems.

6.3 Recommended General Structure of a State Public Transit Program

Justification for the State to develop categorical funding programs for capital, operating, and technical assistance to public transit is provided in this section through the use of three arguments that build on each other. First, general arguments are presented justifying state involvements in public transit. Second, arguments are presented for the State to develop a comprehensive program. Finally, there are arguments for the comprehensive program to consist of categorical program elements.

6.3.1 JUSTIFICATION FOR STATE INVOLVEMENT IN PUBLIC TRANSIT

Public transit addresses the goals of local, state, and federal governments and is supported by the general public throughout the State. The Governor's policy themes for FY 82, which are used by departments as guidelines in preparing their budgets, are as follows:

1. To achieve a stable level of government expenditures which in the long term can be supported by Alaska's citizens.
2. To enhance and protect the Alaska quality of life.
3. To establish and maintain a tax system which equitably distributes the responsibility for funding government services.
4. To select those public services which are genuinely needed by Alaskans and which cannot be provided by the private sector, and provide them in an efficient and effective manner.
5. To provide a secure environment for Alaskans through fair, efficient and effective administration of justice.
6. To encourage economic development which offers long-term net benefits to Alaskans.
7. To foster the growth of a self sustaining private economic base in rural communities, wherever practical.
8. To improve the ability of the private market system to provide needed goods and services.
9. To perpetuate and to distribute equitably to all Alaskans the benefits from Alaska's publicly owned resource wealth.

10. To promote the rational development and maintenance of fish and wildlife for the long-term economic and social benefits of all citizens of Alaska.
11. To achieve long-term energy self sufficiency.
12. To develop and support viable local government units.

The development of a comprehensive transit assistance program is supported by several of these goals. Experience to date has shown that public transit is a service genuinely needed by Alaskans in many communities that for the most part cannot be provided by the private sector (goal 4), although there is opportunity for private sector involvement (goal 8).

The four publicly owned transit systems in the state during the 1970's have not only survived, but each has developed plans for expansion. Public transit enhances the quality of life for Alaskans (goal 2), particularly those who for reasons of age, health, economic status and even choice, would otherwise lack adequate mobility. Transit programs can be designed to improve the ability of the private sector to provide needed goods and services (goal 8). Local governments in Juneau and the Mat-Su Borough contract with the private sector to meet peak hour demand for transit services, and the state, with funds from a federal transit program, has assisted a private carrier in obtaining a vehicle for operating passenger service between Minto and Fairbanks. Transit programs, however, do usually require tax support, but Alaska residents, through local elections and numerous public opinion surveys, have shown a willingness to financially support public transit services (goal 1). Significantly, those in favor have always outnumbered those who regularly use the system. Public transit, thus, is perceived as a service that provides communitywide benefits.

In December, 1979, the Future Frontiers Conference was sponsored by the Legislative Council. Delegates were asked to develop short-term priorities and long-range goals in the fields of resources and economic development, education, health and social services, government and law, and transportation and communications. Five separate study groups prepared policy statements and resolutions. Four of the groups submitted specific resolutions dealing with public transit, as follows:

Beta Group - The State of Alaska shall assist in the immediate improvement and development of mass transit systems in urban Alaska (Transportation Recommendation).

Gamma Group - When feasible, the State should shift transportation funding from projects which promote automobile dependence to mass transportation (Community Development Recommendation).

Delta Group - The State shall develop incentives for industry and consumers for energy conservation, especially in the areas of waste heat utilization, mass transit, insulation, and car pooling (Energy Recommendation).

Epsilon Group The State should research and encourage alternative transportation systems, including mass transportation in the urban areas.

Significantly, support of public transit occurred in three separate topics -- transportation, community development and energy. The conference summary included five concensus statements for transportation, one of which stated "alternative forms of transportation should be considered, including a shift to mass transit systems where feasible."

Public transit received strong support during the town meetings held by the Public Forum in early 1980, both in the questionnaires and television segments of the project. Public transit received the highest rating in a recent survey by the Municipality of Anchorage to help it establish budget priorities. A similar survey in Juneau has also indicated strong support for transit. Interest in public transit does not now and will never exist in all Alaskan communities, but the high level of local support of existing systems and the unexpected high interest by local officials in most communities visited indicates widespread support for state involvement in public transit.

Public transit has long been considered suitable only for larger cities, but the benefits of public transit are now occurring in every region of Alaska and in municipalities of all sizes. Public transit systems exist from Ketchikan to Barrow and from Unalaska to Fairbanks and in municipalities of 500 to 185,000 residents.

The numerous benefits of public transit to users, non-users, and the general public clearly outweighs the costs for all systems initiated in Alaska to date, although no detailed cost-benefit studies have been performed. In Juneau the cost savings to users alone are adequate to justify the system. Benefits besides user savings include additional sales volume at stores, the creation of permanent local jobs, the increased value of apartments and office buildings on transit routes, and emergency transportation for persons whose cars are not working. Many of its benefits are nonquantifiable but still important to a municipality's residents. A value cannot easily be placed on enabling an elderly person to have convenient, low-priced transportation to a doctor's office or on reduced congestion and air pollution.

An argument occasionally raised against involvement of the State in public transit is that it is primarily a local rather than a state concern. A corollary argument is that the State should not create programs to try to influence local decision-making. Ownership of a transportation facility or service does not indicate to what extent its operation is of state importance. Public transit, for example, carries a significant portion of its passengers on federal-aid highway routes administered by the State. Also, its existence in Anchorage, Fairbanks, and Juneau has saved the State considerable money by reducing parking requirements for its employees.

The fact that public transit requires local decision-making on transit matters does not create conflicts with state policies but in virtually all cases addresses them.

6.3.2 SUMMARY OF TRANSIT PROGRAMS IN OTHER STATES

A listing of capital and operating programs that have been initiated by other states is shown in Table 6-5. At the time that the listing was prepared several years ago, 28 states made available capital and/or operating assistance to public transit systems. Currently, 22 states offer operating assistance to public transit.

For capital assistance, the most prevalent program is to provide a percentage of the non-federal (local match) funds required to obtain federal public transit grants. Percentages range from 50% to 100%. Some states also provide a percentage of costs where no federal funds are involved. A smaller number of states purchase vehicles and then either operate them or provide them to public transit systems at a nominal cost. Two states have set up separate programs for providing capital assistance to demonstration projects.

The most common method of distributing operating assistance is for states to pay a percentage of the deficit. Percentages vary from 50% to 100%. One state, Montana, allocates funds on the basis of two levels of service measures, passenger and bus miles. Michigan in its allocation formula uses bus miles but also population. Another approach is to target operating assistance to specified projects and user groups. Delaware pays 100% of the deficit for specialized elderly and handicapped services and only 80% for line-haul services. Connecticut funds 100% of the deficit for basic services, but only 50% of the deficit for additional services. Florida and Michigan give priority to providing operating cost for demonstration projects.

Several states, instead of developing programs for capital and operating assistance, distribute tax funds in a lump sum that can be used for transit related purposes or permit the collection of dedicated taxes for transit within a transit service district. Such approaches are unlikely in Alaska where taxes cannot be placed in dedicated accounts.

6.3.3 JUSTIFICATION FOR A COMPREHENSIVE STATE PROGRAM

Possible levels of involvement by DOT/PF in public transit range from no state programs to a comprehensive statewide operating and capital program, including technical assistance. The lowest level of transit involvement assumes only continuation of the department's administration of the ongoing federal transit programs and the current level of technical assistance. If federal funding remains constant, the creation of any new systems and continued inflation will diminish the percentage of support to existing systems that will be available from the federal government. This strategy would lead to the creation of few new transit systems and would hinder the timely implementation of the capital improvement programs of existing operators. The practice of legislators using line-item appropriations to promote financial assistance could be expected to continue.

A state transit program would provide a more rational distribution of funds than the line item appropriation approach, insure that state funds complement other sources of funding, give communities some assurance that ongoing support may be available, and enable the State to target funds for specified goals or user groups.

A comprehensive program would consist of three separate components -- capital assistance, operating assistance, and technical assistance.

The most far-reaching alternative would be state operation of local transit systems. This strategy, suggested at the Kodiak meetings, has some national examples, notably New Jersey and Connecticut, which took over ailing private systems and now operate them. Numerous factors weigh against this approach, including the potential loss of local decision-making and no known support either in the legislature or the administration.

State financial assistance for capital projects will enable both public and private systems to update and expand vehicle fleets and to acquire adequate maintenance facilities. Public transit appears to have become an integral part of the department's capital improvements planning and programming process.

The transporation bond issue passed by the voters in 1980 contained $8.8 million for public transit. Regulations are being developed describing how the funding is to be distributed and for what it can be used.

An expanded technical assistance program is needed for public transit that covers all aspects of planning, operations, and management. Although there is a limited amount of UMTA money available for operational planning, most federal and state programs provide funding that emphasizes planning for capital acquisitions and do not adequately address critical needs in operational planning and management assistance. An expanded technical assistance program not only would make needed expertise available to operators but would promote exchanges of information between operators. Transit operators responded positively to the two technical workshops that were held as part of the Municipal League project.

Only the system in Anchorage has anyone besides a transit manager whose job is not concerned primarily with day-to-day operations. Even in Anchorage, staffing is inadequate to address the full-range of tasks needed for effective short and long-range planning. Hiring full-time persons for transit planning, route scheduling, marketing and other tasks is a luxury only the largest systems in the nation can justify.

Dennis Moore and George Smith, who manage transit programs for the states of Oregon and Washington, respectively, have called their technical assistance activities the "guts" of their programs. This activity could also provide general information about public transit to local officials.

Staff members of the Florida and Iowa Departments of Transportation have persuasively advanced the importance of technical assistance programs: "Florida DOT's role in the development of transit service will continue to be meaningful only through direct participation in the areas of management, operations and maintenance." "The state of Iowa's transit agencies and departments of transportation have a vital role in the areas of management and technical assistance ... Most important is that individual transit properties and managers can be spared from reinventing the wheel when it comes to targeted subject areas of the management and technical assistance program."

DOT/PF recognizes that federal capital assistance, federal planning assistance and federal operating assistance are all inadequate at the present time. During 1980 the Department focused its efforts in Washington, D.C. on attempting to increase the state's share of Section 3, 5 and 18. For the Section 3 program the Department lobbied for increased authorizations and for increased allocations to rural states. In the Section 5 program the Department lobbied for a service-based formula (revenue miles) which would have increased the Anchorage apportionment from the current $800,000 to about $1.5 million, almost doubles the amount of federal operating assistance available to that community. In the Section 18 program the Department lobbied for a minimum 1% apportionment per state. This minimum would have increased the size of the state's share from about $180,000 annually to about $1 million, with these funds available for operating assistance. Since no transit bill passed the Congress in 1980, however, these amendments were not adopted. Efforts in these same areas are expected to continue in 1981.

The State has taken a major step in initiating significant capital assistance for transit but should also consider the need for operating assistance. Since public transit is a labor-intensive activity, public transit can only be placed on an equal footing with other modes by the state participating in operating assistance. Local governments are now expected to provide most of the operating expenses through a combination of fares, taxes, and unrestricted revenue sharing funds. Federal transportation funds for FY 82 are expected to provide only 13% of the total costs of operating the five existing public transit systems, and fares will provide only an additional 12%.

State revenue sharing funds distributed to municipalities is another source of non-local funds. Additional flexibility in the use of these funds is permitted because of legislative changes in 1980, but the level of funding directly related to the existence of a transit system has been dramatically reduced.

Through FY 80, a municipality was entitled to receive $5 per capita if it operated one or more of the following transportation facilities or services: an airport, port, harbor, or public transit system. The program had two major inequities related to the support of public transit. It based funding solely on population which is not a measure of the level of service being offered. A community would have received the same amount of money whether it had a system of one or 100 buses. Also, funding was the same

no matter how many transportation facilities and services a municipality offered. Of the first four municipally-operated public transit systems, Fairbanks, Anchorage, and North Slope Borough received additional revenue sharing funds once they began to operate a system. Anchorage benefitted by a law that enabled governments after unification to receive at least as much revenue sharing funds as before. The City and Borough of Juneau did not receive any additional funds since it already operated an airport, small boat harbor, and port.

The actual FY 79 revenue sharing funds for the transportation category received by the four municipalities are listed in Table 6-6. Assuming that these funds were used exclusively to support public transit, they represent the following percentages of the net deficit (local subsidy): Anchorage 28%, Fairbanks 26%, North Slope Borough 25%, and Juneau 22%. If the program were to have continued, these percentages would have become lower in coming years. Given stable population figures, the income would be fixed but costs of operating transit systems would have increased significantly.

The revenue sharing program passed by the 1980 legislature provides funds based on the relationship between local effort and the municipality's property valuation. Categorical entitlements exist only for roads, health, and some fire protection services. As the local effort, which includes transit fares and the local subsidy required to support transit, increases so does its entitlement for revenue sharing purposes. Based on the new legislation, the amount of revenue sharing money received by the four communities that is transit-related has been reduced substantially. The decrease has been most pronounced for Barrow (2% of the earlier figure) and least pronounced for Juneau (47% of the earlier figure).

Two caveats concerning the use of these figures should not only be mentioned but emphasized. First, it is not implied that the earlier program was superior from the point of view of transit funding. In fact, the new program at least will bring in additional revenue sharing money with increases in fare revenue and the local subsidy required. The earlier program did not reflect the level of service being offered. Second, it is recognized that the new program does not require that revenue sharing funds be used in a specified manner. In fact, flexibility in the use of the funds is one of the program's goals. The fact remains, however, that the level of transit-related funds received by local governments has been reduced substantially.

To summarize the current status of operating assistance to public transit in the State, the federal government has a limited categorical program, the State has no categorical program and has reduced transit-related funding in its revenue sharing program with the burden of funding public increasingly falling to locally-generated funds.

Without any additional state support for operating costs, three scenarios are possible. One, the capital funds might not all be used since adequate operating funds might not exist in communities. This scenario occured at the federal level from 1973 to 1978. Congress in 1973 passed an appropriation of $500 million for non-urbanized public transportation,

but only a small percentage of the funds were obligated since they could only be used for capital costs and no separate programs for operating assistance existed.

Two, the capital funds might all be used but line-item appropriations by legislators to obtain operating expenses would dramatically increase. A trend towards this scenario already has developed. Galena received funding from line-item appropriations in the state's FY 81 operating budget. Anchorage was to receive funding for a separate elderly and handicapped transportation system, but it was vetoed by the Governor. Matanuska-Susitna Borough officials have indicated a desire to use this method in the future to help support its new commuter service. Bethel likely will follow this route in converting an existing private system to public operation. The line-item process has several major disadvantages. It must be repeated year-after-year and, thus, creates uncertainties at the local level. Also, it lacks equity, since the funding is not based on any formula related to needs but only on what amount a legislator feels he can justify.

Third, existence of a program for capital but not operating expenses might reduce the incentive for properly maintaining vehicles once they are obtained.

6.3.4 JUSTIFICATION FOR A CATEGORICAL STATE TRANSIT PROGRAM

Arguments have been presented for state involvement in public transit and for this involvement to include comprehensive assistance in capital, operating, and technical assistance. The remaining question is whether assistance should be categorical or implicitly included in unrestricted funds distributed to municipalities. There may be increases in unrestricted funds to municipalities due to increased revenues received by the State from the oil industry. Lt. Governor Terry Miller announced at the 1980 Municipal League convention that the administration would recommend full funding of the Municipal Assistance program. If passed by the legislature, funding would increase to over $90 million. The funds could be used by communities at their option for either capital improvements, operating expenses, tax reduction, or a combination of all three.

Should such a program preclude development of a categorical program for public transit? An examination of the issues of local decision-making, equity, and the promotion of federal and state transportation goals supports the development of a categorical program.

One of the consensus recommendations from the Future Frontiers Conference called for "increasing local governments' autonomy, flexibility and participation in decision-making and revenue sharing processes." Distribution of unrestricted funds through the revenue sharing and Municipal Assistance programs certainly is one way of addressing the issue of local decision-making. However, local governments asking the State to establish a categorical program that not only reflects local needs and desires but local and regional differences is an equally valid exercise of local decision-making. A categorical program, depending upon how it is structured, can have the added advantage of being able to address the other two

issues equity and promotion of goals. An equitable program reflects differences in local conditions and desires, is able to address different phases of transit implementation and the level of service provided, and is able to reach all intercity, regional, and local public transit systems. Only a categorical program can meet these criteria.

A categorical transit program can enable the State to target funds to special users, such as the elderly and the handicapped, and to provide start-up costs in communities without public transit. Demonstration programs have been shown to be important, if not vital, to the implementation of public transit concepts in Alaska. Significantly, no unrestricted state funds have been used to fund demonstration of the first four public transit systems in Alaska. The existence of federal programs for operating assistance perhaps ironically reinforces the need for a categorical state program to fill gaps created by existing criteria which favor certain systems. Forecasts for FY 82 indicate that allocations of Section 18 funds will fund 9% of the total costs for the North Slope Borough and Matanuska-Susitna Borough systems, but only 4% of the total costs for the Fairbanks system. Anticipated Section 5 funding will provide 14% of the total costs of operating Anchorage's system.

A comprehensive categorical program for funding public transit should be considered by the legislature on its own merits. The administration has not suggested that enactment of the increased funding of the Municipal Assistance program would require a cutback in existing categorical problems and, likewise, it should not prevent the emergence of worthy new programs. A comprehensive categorical program would also more effectively reduce line-item appropriation than unrestricted funding. Finally, it would reinforce the concept that public transit has statewide significance although it depends upon local decision-making.

6.4 Transit Program Recommendations

6.4.1 PLANNING

6.4.1.1 Activities

Table 6-7 lists the potential activities that fall into the planning category. Included are not only those activities that are traditionally in transit improvement programs but also a variety of operational planning tasks, e.g., management assistance, data collection and marketing.

6.4.1.2 Available Funding Sources

The UMTA Section 8 program provides funds to the State and Anchorage for the development of local transit improvement programs. A small percentage of funds distributed go to the State for Section 18 (non-urbanized area public transit) and Section 16(b)(2) programs and can be used for planning purposes. A portion of the transportation bond issue will also

be used for planning programs that are related directly to development or implementation of capital improvement projects. Together, these funding sources may be adequate for short and long range planning, but not for operational planning and management assistance activities.

6.4.1.3 Recommendations

It is recommended that $150,000 from general state revenues be budgeted annually for technical and management assistance activities. This funding would be in addition to those funds now available for planning. A portion of the funds could be distributed to the various transit properties for specified tasks, but most of the funding should fund statewide projects which would promote effective utilization of funds and eliminate duplication of effort. Typical projects might be development of a data management system for ridership, fares and operating costs; research projects having application to several systems, such as the drafting of model bus and shelter specifications, development of guidelines for the selection of park-and-ride lots, and preparation of a manual for writing driver and bus schedules; the funding of seminars, training sessions and workshops on topics useful to transit operators; and the use of "circuit riders" with specialized skills who would provide over-the-shoulder, on-site assistance to transit systems throughout the State.

Priorities for the use of these funds could be developed in large part by the transit operators themselves. The newly created Alaska Transit Operators Association provides an ideal forum for soliciting this input.

Communities would be asked to provide 20% of state and federal planning and technical assistance funds. The breakdown between state, federal and local funds is shown in Table 6-8. The federal figure includes planning funds made available to both the State and Anchorage.

6.4.2 CAPITAL IMPROVEMENTS

6.4.2.1 Activities

Table 6-9 contains a listing of the most likely capital improvement projects to be programmed by Alaskan public transit systems and also lists potential funding sources. Projects for systems not using wheeled motor vehicles, such as ferries and air cushion vehicles, have not been included. Capital improvements for transit break down into facilities and rolling stock. Facilities further break down into three types: (1) maintenance and garage facilities; (2) streetside passenger aids, such as bus signs, shelters, and accommodation centers, and (3) road-related projects, such as bus turnouts and park-and-ride lots. Federal-aid funds can be used to fund the road-related projects and even many of the passenger aids, but only UMTA funds can be used to fund maintenance facilities.

Rolling stock categories are buses, vanpools, and vehicles for the elderly and the handicapped. For the latter two categories, specific funding programs exist, which are respectively Federal Highway and UMTA Section 16(b)(2) funds. Buses can be purchased with either UMTA Section 3 or Federal-Aid to Urban System (FAUS) funds. Opportunities should be provided for properly maintaining existing equipment and making them accessible to as many persons as possible. A system might wish to retrofit existing buses with wheelchair lifts, which would provide accessibility to the elderly and the handicapped without purchasing new buses. The purchase of spare parts and used buses should be encouraged when it is cost-effective to local systems. In some instances, systems have made purchases entirely with their own money but now they meet the current criteria for federal or state assistance. The potential use of retroactive funding should be explored.

Optional uses exist for rolling stock to be purchased, and given a limited amount of funding perhaps the use of vehicles should be considered in establishing priorities. Buses can be used by existing systems to replace old equipment or to initiate new service and where no service currently exists to demonstrate the feasibility of transit. The availability of adequate back-up equipment enables public transit systems to provide reliable service. It has been suggested that back-up vehicles for the use of Section 16(b)(2) operators be purchased by the state and located in strategic locations. Such a program would eliminate the need for each of the numerous services that require only one vehicle to also have back-up vehicles on site. Should an accident or equipment failure disable a vehicle, the state would then loan one of the back-up vehicles until the original vehicle could be fixed or another vehicle procured.

6.4.2.2 Funding sources

The list of potential non-local funding sources, as shown in Table 6-9 contains four federal programs, each of which requires a local match. It is uniformly 20% for UMTA programs and approximately 5% for federal highway programs. Use of Department of Education funds depends upon the operating strategy to be used, and programs using state bonds or general revenues require action by the State legislature.

6.4.2.3 Distribution Strategies

The basic choice is between a formula distribution of available funds or a discretionary program that considers needs on a regional or statewide basis. Population is used for the distribution of Section 18 funds to the various states. The State of Alaska Local Service Roads and Trails program weights population and area equally in its distribution formula. A discretionary program could establish a single list of statewide priorities, separate regional lists, or lists for different categories of transit service. Priorities could be based on locally-approved transit development programs.

6.4.2.4 Recommendations

It is suggested that the distribution of capital assistance funds reflect the following goals, which reflect administration priorities, legislative directives, federal requirements, and local objectives:

1. promote the maximum use of UMTA funds.

2. promote coordination with other state and federal transportation programs.

3. facilitate development of new public transit systems.

4. allow for participation by private transportation carriers.

5. recognize regional and local differences in transit characteristics due to population size, geography, economic resources, climate, demographics, and cost of living.

6. promote the development of transportation services for those without adequate mobility, especially the poor, the elderly, and the handicapped.

7. reduce the number of separate acquisitions that must be made by a transit system or the State.

A discussion of each of the goals is provided below:

#1. promote the maximum use of UMTA funds

Three of the four existing public transit systems have relied on federal funding for a large part of their capital improvements. Only Fairbanks has used non-federal money solely to date in purchasing its bus fleet; but it, too, intends to rely heavily on UMTA Section 3 funds in future years. If a state program does not promote maximum use of UMTA funds, communities will favor the use of state funds. For a given level of capital investment, state costs would be signigicantly higher than would otherwise be necessary. Certainly, emphasizing the use of federal funds adds a paperwork burden to local officials, but the burden is not so great that federal funds should no longer be pursued.

UMTA currently provides 80% of capital costs. The goal of promoting use of these funds could be achieved if the State were to provide 100% of the local match, i.e. 20% of total costs, and, for example, 80% of the cost of non-federal purchases. Providing the local match for UMTA grants has an additional advantage to the State. Urban governments in Alaska currently have an incentive to use federal-aid highway rather than UMTA funds because the local match is 5% rather than 20%. This strategy however, reduces the amount of Federal highway funds available to the state for road projects.

#2. promote coordination with other state and federal transportation programs

Funds should be made available to assist in the funding of capital projects that increase the mobility of citizens but are administered by non-transportation agencies. A state program should be flexible enough that local matching funds could provide the Office of Aging with matching funds when capital expenses are necessary and to assist in the purchase of school buses where they are being used for public transit purposes. For the latter example, a possible strategy would be for the state transit program to pay for 20% of the cost of buses and the Department of Education the remaining 80%.

#3. facilitate development of new public transit systems

The transit systems in Anchorage, Juneau, Fairbanks, and Barrow all began with "seed" money to demonstrate the concept of public transit. In addition, a demonstration of air cushion vehicle technology for regional transit services is now underway in the Bethel area. The source of demonstration funds for the four conventional systems was different in each case. Juneau started its system using Model City funds. Anchorage benefited from a two-year Section 6 UMTA demonstration grant, while FHWA Section 147 funds were made available to Barrow for its two-year demonstration. Fairbanks received its funding from a line-item in the state budget.

Demonstrations enable local elected officials and the general public to find out first-hand whether or not the benefits of public transit are worth the costs. Demonstration periods of at least one year and in many cases two years enable transit ridership to grow and stabilize. If decisions about the feasibility of transit systems are made too early after a system begins, their worth cannot be accurately measured. Even those systems which ultimately could be successful can fail to meet expectations overnight.

#4 allow for participation by private transportation carriers

Local governments can initiate transit services by contracting with the private sector rather than undertaking operations themselves. Given the reluctance of local governments, especially in small communities, to increase the number of direct employees, this strategy may be preferred by many of the new transit systems initiated in the State. Capital assistance can be provided to the local governments, who would then lease the equipment to the private operator at a nominal rate. Capital assistance is possible to private carriers whether or not they are receiving financial support from the local government. UMTA requires that title to vehicles purchased with its funds reside with a public agency for their useful life, but a state program would not have to have this restriction. The state, however, should insure that vehicles during their useful lives are used

for transit purposes. Sightseeing, limousine, or taxi services would not be eligible unless they operate at least for part of the time in a transit mode, i.e. provide regular transportation on a shared-ride basis for trips needed by local residents. Many existing services could become transit-type services with only slight changes in operations.

#5. recognize differences in transit characteristics

Local development patterns, the cost of obtaining and operating a private automobile, and population are among the factors that influence the level of transit service for a given community. The importance of regional and local differences should be considered in the development of a strategy to equitably distribute funds. Should a project compete for funds with other projects within a region or with projects in communities of a similar size statewide? The allocation process to the extent possible should be able to consider differences from both a statewide and regional context. As important as local and regional differences are in Alaska, the other considerations should not be ignored. For example, a formula that distributes capital assistance funds solely on the basis of regional or local population would not likely have a relationship to actual needs in a given year.

#6. promote transit services for the transportation disadvantaged

As already mentioned, the state program perhaps should provide the required local match for federal capital assistance programs (DOT and HEW) that are oriented towards transportation of the elderly and handicapped. Funds could also be used to provide transportation for those living in Pioneer Homes.

#7. reduce the number of capital assistance actions

Capital improvements projects are "lumpy" in nature, i.e., they vary dramatically from one year to the next. One cannot buy one-half a bus or a third of a bus garage. Funds distributed to a system should not only be sufficient to purchase a bus, but in many cases they should be sufficient to purchase several buses. Systems requiring three buses, for example, will benefit substantially if all buses are of the same make and purchased at the same time. The required inventory of spare parts is reduced by a commonality of equipment, and the productivity of the maintenance staff is improved. The smaller number of purchases reduces paperwork at all levels of government. A system needing a major influx of funds one year might not require any additional capital assistance for the following five years or more.

Based on the discussions of the seven proposed goals for a capital assistance program, a discretionary program is favored over distribution by formula. It is recommended that the state solicit projects from local governments, governmental agencies, and private providers and then prioritize them statewide in three categories, as follows: existing public transit systems, new system demonstrations, and paratransit. The burden of justifying projects is placed on those proposing them. State funds should be used first to match funds from other sources and to fund minor improvements that would not be cost-effective to procure using federal funds. Included in this latter category are major spare parts, wheelchair retrofits, bus signs and bus shelters, and rolling stock for small systems (one to three buses). Several vans should be purchased with state funds to provide back-up vehicles for elderly and handicapped programs. They should be located in strategic locations and loaned to programs on an as-needed basis.

In the purchase of rolling stock, priority should be given to acquisition of replacement vehicles and demonstration projects. Secondary emphasis should be given to service improvement for existing systems. Maintenance and garage facilities are the single most costly capital improvement projects for transit systems. Although adequate maintenance facilities are a prerequisite to establishment of a transit system, the State should be cautious of using funds for these projects, particularly before a system has been able to firmly establish itself. Rolling stock can always be moved to another location but not a building. Communities should be encouraged to use UMTA Section 3 funds for maintenance facilities.

The state should provide up to 100% of the non-federal share for federal grants. For non-federal projects, the state should provide 80% of the total costs, with a local match requirement of 20%. Demonstrations should be an exception, funded with up to 100% of state funds. Funding, whether in the form of an annual appropriation by the legislature or a biennial bond issue, should be a lump sum and not include a specified list of projects. UMTA Section 3 funds most likely will continue to be a majority of the transit capital funds spent in Alaska. Since these funds are distributed on a discretionary basis, it is difficult to determine two years in advance the amount of funds that will be made available to communities. So that coordination of all available funding sources can be improved, it is recommended that the state investigate the possibility of preparing a statewide Section 3 application, which will show how both state and federal funds will be utilized.

Whatever procedures are adopted, they should be described in written form, and copies of the information sent to all potential applicants.

Table 6-10 lists the state, federal, and local funds for each program element. It is assumed that all federal funds will go to existing public systems. State funds are assumed to pay all costs for vehicles needed in demonstrations and for a reserve fleet of six vans for paratransit systems.

State funds would pay the entire local match for vehicles acquired through Section 3, Section 5, and Section 16(b)(2). Bond funds are assumed to be $4.3 million, or one-half of the funds remaining after funds for planning are subtracted. The combination of bond funds and anticipated federal funds is large enough that local costs will amount to only 5% of the total costs. No general fund requirements in FY 1982 are needed to supplement bond funds. Providing 42% of the total $10.2 million program, the State will have become almost an equal partner with the federal government in promoting public transit in the State of Alaska.

6.4.3 OPERATING ASSISTANCE

6.4.3.1 Activities

Table 6-11 contains a listing of the likely activities to be included as operating costs. These activities differ from those previously listed for capital improvements principally in that they are ongoing. Capital expenses generally are either for one-time acquisitions, such as a garage, or for vehicles with useful lives ranging from three to 15 years or more.

6.4.3.2 Non-local Funding Sources

Also shown on Table 6-11 are seven potential non-local funding sources for operating assistance to public transit systems. Section 5 and 18 funds can be used for both operating and capital assistance, but local communities and the state tend to program these funds for operating assistance only to the extent necessary and rely on Section 3 funds for capital assistance. These tendencies are expected to continue. State general revenues would be the source of an operating assistance program separate from revenue sharing. Department of Education funds are not currently available for support of public transit but the potential exists. Specialized health and social service programs especially those for the elderly are used to operate many vehicles purchased under the Section 16(b)(2) program, and vehicle recipients are encouraged to investigate coordination opportunities with other programs.

6.4.3.3 Distribution Strategies

Distribution strategies for operating assistance fall into three categories: (1) costs of providing service; (2) level of service and performance measures; and (3) miscellaneous items, including population and area. Numerous combinations of the three categories or of items within a category can be generated. Table 6-12 shows for each of the four public transit systems the estimated FY 81 dollar figures and associated percentages of the total subsidy for a variety of strategies. For the net and gross cost strategies, the figures are derived directly from estimated costs, and then the percentage breakdowns are calculated. For the other options, however, the percentage breakdowns are first computed and then multiplied by available funds. A constant amount of $3 million is assumed which facilitates comparisons between the strategies. Except for the options based on area, the percentages are surprisingly similar. Anchorage would receive the largest percentage (81%) using operating

hours and the lowest percentage (65%) using operating miles. Fairbanks' largest percentage (24%) is based on population and its lowest (10%) on operating hours. Ridership gives Juneau its highest percentage (14%) and operating hours its lowest (7%). For Barrow, an operating hours formula yields only 2% of the total funds, and several strategies give 4%. Figures for Fairbanks and Barrow, except for those involving costs, should most likely be multiplied by cost of living factors as in the revenue sharing program.

The distribution formula for Section 18 funds developed by the State employs a mix of the three alternative strategies, but emphasizes performance measures. Three-fourths of the funds currently made available to the State each year ($150,000) are allocated to existing systems. Three other program categories have also been established and include special services ($20,000), elderly and handicapped services ($20,000), and discretionary capital grants ($28,000). Existing public transit operators compete for a total of 100 rating points, which are divided among four criteria, as follows:

Net Costs - 20 points
Total Ridership - 40 points
Elderly and Handicapped Ridership - 15 points
Coordination - 25 points

The points for each of the first three criteria are allocated on the basis of data submitted by each system. The 25 points for coordination are allocated by a qualitative judgment of a system's efforts to coordinate services with existing private operators and paratransit services.

Systems in five communities were awarded operating assistance with FY 80 funds: Fairbanks, Juneau, Barrow, Mat-Su Borough (proposed commuter service to Anchorage), and Ketchikan (airport shuttle ferry). As with virtually all performance measures, each of the ones used in this rating scheme favors certain systems because of circumstances beyond the control of communities or transit management. The Mat-Su Borough, for example, operates a commuter service on which passengers travel a one-way distance of 40 miles, and it cannot compete on ridership with systems having average passenger trips of five miles or less. However, it would score well if certain productivity measures, such as passenger-miles per bus-mile were used, since the system operates only in the peak hours and has a high load factor.

Land use patterns favor Juneau over Fairbanks. Juneau has a linear development which enables transit to easily serve a high percentage of the population. Ketchikan has a decided advantage in elderly and handicapped ridership, since many tourists to Alaska are elderly, and all of them traveling by plane will use the ferry at least twice. The Matanuska-Susitna Borough's system is once again at a large disadvantage since many elderly no longer are working.

Although coordination certainly is worth encouraging, the 25 point weighting factor appears too high in relation to its impact on the performance of a system or its level of service.

Coordination is also a factor over which an individual does not always have, because it cannot be achieved without the cooperation of others.

Formulas based on such factors as population and area are rejected since they do not relate even indirectly to the level of service or th. performance of transit systems. The choice then is between cost and performance measures. The natural inclination is to favor performance measures since they create accountability for those who receive funds. They provide a incentive for efficient and effective operations. However, as the review of the criteria used by the State in distributing Section 18 funds for operating assistance showed, major difficulties exist in developing a rating system that is based on meaningful measures over which all systems have control. Equitable rating systems are difficult enough to establish for communities of similar size and layout and the difficulties are compounded when dealing with systems having vastly different operating characteristics and serving areas of vastly different layouts and land use densities. Alaska's regional differences in cost-of-living, climate, and population characteristics further compound the difficulties of developing a simple yet equitable distribution formula based on performance criteria.

James Miller, Assistant Professor of Business Logistics and Director of the Public Transportation Program of the Pennsylvania Transportation Institute of Penn Stat. University in a recent review of performance-based allocation methodologies, describes the problems that have been encountered in putting them into practice.

> "In addition to a lack of agreement on appropriate measures, there has been a failure to successfully implement a performance-based allocation methodology. It is concluded that previous efforts have prescribed measures for which reliable data is not available or that have questionable meanings. Furthermore, most efforts have prescribed measures that are more appropriately monitored at the local level. Lack of agreement on the goals of transit and of funding programs is also an impediment to implementation."

Distribution formulas based on net or gross costs overcome many of the problems associated with performance-based allocation systems but still relate to the level of service provided. First, they are simple to understand and to apply, which is an asset in explaining the program and in preparing budgets at the state and local levels. No clearcut guidelines exist for establishing the level of a statewide operating assistance program when performance based measures are used, since the ratings and funding are unrelated. The ratings only establish for each system a percentage of available funds. The State's commitment to operating assistance would remain an open-ended question.

Second, cost formulas are more equitable. Communities are not penalized for conditions, such as geography and cost-of-living, over which they have little control. The cost-of-living in Fairbanks and Barrow is 16% and 39%, respectively, above those for Juneau and Anchorage. Cost formulas take these differences into account while performance-based formulas could penalize systems in isolated areas of the State.

Third, cost formulas respect local decision-making regarding the level of service being provided at different times of the day and to different areas of a municipality. Since all existing publicly-operated transit systems are funded as area-wide services, it can be argued that all residents should have access to at least a minimal level of service. The issue of local service equity is taken seriously by municipalities and may cause certain routes to be established which are considerably less productive than others. Performance based formulas might provide disincentives for addressing this issue. Fairbanks has made the political decision to provide transit service to the outlying areas, North Pole and Chena Hot Springs.

Fourth, cost formulas do not make funds received contingent on the nature of transit services in other communities. Many but not all performance rating systems, including the one used by the State for Section 18 funding, are based on the allocation of a given number of points between systems. Expansion of service by one system or the start-up of new systems will cause other systems to lose points, and the result will be less funding for a given system unless the overall funding level is increased.

Gross cost and net cost formulas have slightly different implications. A net cost formula tends to favor a low fare structure and discourages systems from aggressively pursuing additional sources of income. Net costs generally would be defined as total operating costs less all revenue raised by the system (fares, advertising revenue, charter operations) and federal categorical funds.

The gross cost formula does not distinguish between sources of funding. It permits local governments to make a trade-off between fares and tax support and provides an incentive to pursue other sources of income. Municipalities are not penalized if they decide to have system users bear a major share of operating costs. A gross cost formula encourages coordination with other transportation services where a pooling of funds would result.

Cost formulas are not without their critics. The two most frequently heard concerns are that a cost-based program will soon grow out of control and that systems will lack the incentive to operate efficiently or effectively. The concern about the recommended program mushrooming in cost is not borne out by forecasts. As shown in Table 6-4, forecasted gross costs for the major systems are $20.2 million for FY 84, which includes inflation and substantial service improvements. Total gross public transit operating costs, assuming that 80% come from these four

systems, are forecast at $25.3 million and the state operating assistance program would be $8.4 million. The desire and the need for public transit systems statewide will cause increases in costs, but the benefits to Alaska's residents also will increase.

Local officials who have strongly supported the enactment of a state program for operating assistance also have insisted that local governments should continue to play a major role in providing financial support for public transit. No options, with a continuing level of state support greater than the local effort, have been examined in this report. The continuing requirement for the ongoing major financial commitments by local governments and users will provide an adequate "brake" to prevent unwarranted service expansions.

The concern about efficiency and effectiveness essentially is the question, "How can the State be sure that a system is providing a dollar's worth of transit for every dollar spent?" Initially, it should be emphasized that a gross cost formula does respond to the level of service being provided. As the level of service increases, so will the gross costs.

The question is still legitimate and can be addressed through a combination of state reviews of transit budgets and operational data, technical assistance to operators, and the local accountability of transit managers. All applications for operating assistance should be subject to review by the State. Costs that are clearly out of line can be discussed with local officials. Comparing a proposed budget to that of the previous year will provide a good check on reasonableness.

The implementation of a comprehensive technical assistance program by the State would be of considerable help to communities in improving performance measures within the limitations of local conditions and local mobility decisions. In this way, a system can concentrate on problem areas over which it has some control.

Because of the considerable local funds that most likely will be required to operate public transit, residents and local officials have a strong vested interest in insuring that public transit services are well managed. Noticeable improvements in transit management within Alaska have occurred within recent years as systems have grown and come under closer public scrutiny.

The State of Pennsylvania is considered to be a leader in the use of performance measures to evaluate transit systems, yet its present operating assistance system does not differ markedly from what is being recommended for Alaska. Pennsylvania provides transit systems with up to 67% of net operating costs. In past years, the emphasis has been on review of transit budgets and providing technical assistance to improve low performance measures. Now, approximately 10% of the funds are allocated on the basis of performance measures. Such a system provides fiscal incentive for improving system performance but recognizes that changes cannot

occur suddenly and that many of the system's operating characteristics are beyond the control of system managers. Coincidentally, Section 18 allocations to Alaska now provide approximately 10% of the operating costs for non-urbanized transit systems.

Since the gross cost formula does not consider federal funds, Section 18 funds could be used to reward systems with high performance measures. The existing allocation process should be refined to include more meaningful performance measures. Net costs should probably be eliminated if a true performance based allocation process is the goal.

6.4.3.4 Recommendations

Of the goals suggested for the analysis of distribution strategies for capital assistance, the first six apply equally to operating assistance. The seventh goal is replaced by two additional goals for operating assistance as follows:

7. Promote local financial support for public transit.

8. Provide different levels of support for different levels of service.

The eight goals are discussed below:

#1. promote maximum use of UMTA and FHWA funds

The amount of federal operating assistance coming into the State will not be influenced one way or the other by the existence of a state operating assistance program because the ongoing U.S. Department of Transportation funds basically are distributed on a formula basis, not a discretionary one. The only discretionary funding is for demonstration projects, of which Alaska has had three - Anchorage, Bethel, and the North Slope Borough system in Barrow. Because of the limited number of demonstration projects funded each year by the federal government, the impact on the availability of demonstration funding should not be a factor when considering state distribution strategies.

#2. promote coordination with other state and federal transportation programs

One strategy to promote this goal is to consider all funds used to support operating costs other than those from the federal DOT as local subsidy.

This strategy would encourage communities to seek out other sources of income and to coordinate services. For example, funds received from the Office on Aging would not reduce the amount of state operating assistance received if either the net cost or gross cost options were used.

#3. facilitate development of new public transit systems

Special consideration should be given to demonstration projects, which require considerable start-up and a minimum of several months for ridership to reach projected levels. A higher percentage of operating costs should be available for at least the first year of operation for a new system than for an established operation.

#4. allow for participation by private transportation carriers

Local governments, at their option, can initiate or expand transit systems by contracting out operations to the private sector. This situation, from the point of view of distributing operating assistance, does not differ from a system that is operated directly by a local government. In both cases, the local government has financial responsibilities for the system's operation. Providing operating assistance to services that currently exist without any such assistance must be handled differently. For necessary local or intercity services that are in danger of being discontinued, assistance could meet unavoidable losses and a reasonable profit. User subsidies are a second strategy. They can be used for the general public but usually are used on a limited basis for specific user groups, such as the elderly, or for specific trips, such as going to and from a medical clinic. User subsidies have the disadvantage of not promoting efficient services. Generally, the use of contracts between local governments and private carriers is preferred, but flexibility should exist in the possible dealings of the State and local governments with these carriers.

#5. recognize regional and local differences in transit characteristics

A distribution strategy should recognize differences in transit demands between communities and in operating costs. The latter tends to be regional in nature while the former relates to a variety of factors.

#6. promote transit services for the transportation disadvantaged

Operating assistance could help expand or develop separate services for the elderly and the handicapped if regular transit services do not exist or are inadequate. Support could be used to expand the hours of operation or the service area for services operated by 16(b)(2) organizations. The supplementary system in Anchorage could be considered as part of the transit system for purposes of providing operating assistance. Besides the elderly and the handicapped, other groups who might require special consideration in the distribution of operating assistance are the young and the poor.

#7. promote local financial support of public transit

A few states operate local transit systems and, thus, pay 100% of operating deficits. This level of involvement in transit is not considered wise for Alaska. Local governments should contribute substantially to the support of public transit and in so doing should have primary responsibility for establishing levels of service. The requirement for major financial commitments by a community's residents will act as a brake on system expansion.

Many small communities lack the tax base to raise adequate funds to provide new services such as public transit. In such situations, the community should not be denied the opportunity to improve local mobility. The State can recognize a trade-off between fares and tax support. Fares would provide a greater percentage of local support and, in some cases, perhaps all of it.

#8. provide different levels of support for different levels of service

Any distribution strategy, it is argued, should reflect the level of service being provided. Strategies based wholly on area or population would not lead to changes in funding with changes in the level of service. Strategies based on net or gross operating costs indirectly are affected by the level of service since any increases in service will cause gross costs to rise and most likely net costs.

After reviewing the preliminary draft of this report and local policies, the transit managers of the four major publicly-operated transit systems in Alaska voted unanimously in November, 1980 to support enactment of a State operating assistance program that would provide communities with one-third of gross operating costs. Figure 6-13 shows how a proposed total operating assistance funding of approximately $4.8 million would be distributed among five separate programs. Funding to existing systems would represent 87% of the total funds. To place the level of funding for the proposed operating assistance program in perspective, total funding would be only one-fourth of the state subsidy of the Marine Highway System and less than one-fourth of state costs to provide pupil transportation services.

A net cost formula is recommended for demonstrations. Participation by the State would be significantly higher than for existing systems so that the concept of public transit in a community would be adequately tested. The demonstration period would last up to two years, and afterwards the system would receive operating assistance on the basis of the regular gross costs formula.

A trial program to fund student fares for pupils riding public transit buses is recommended. Funding would be channeled through local school districts. The outcome of the trial could result in policy changes that would reduce costs to the State for pupil transportation.

Funding requirements for providers of elderly and handicapped transportation services and for private carriers operating without local government involvement are unknown at this time, but separate funds of $100,000 are being recommended. Funds for elderly and handicapped services could be used to provide the local match for Office on Aging programs or for expanding existing services. It should be noted that elderly and handicapped services operated by municipalities, such as the one in Anchorage, are considered to be part of the existing public transit funding program.

Table 6-14 shows the breakdown of various funding sources for the five existing publicly-operated bus transit systems. State operating assistance is a uniform 33% for each system. The level of funding and allocation criteria for Section 18 program are assumed to continue unchanged, and the level of funding for Section 5 funding is the figure shown in Anchorage's FY 81 transportation improvement program. The other non-local funding source shown is transit-related revenue sharing, although it is recognized that state revenue sharing is now non-categorical. The remaining funds, which must come from local revenue sources or unrestricted state and federal funds, range from 50 to 60 percent. The State would become a major partner in funding transit operations; but even so, local revenues would still remain the major source of funding.

6.5 Proposed Legislation

A bill to establish a comprehensive statewide public transit assistance program.

Section 1. PURPOSE AND INTENT. The State of Alaska shall encourage the development of adequate local and regional mobility throughout the State, taking into consideration local desires and needs, local geographic and cost-of-living differences, and the potential for coordination with or between existing public and private transportation providers. Public transportation is and will continue to be an essential service enabling many Alaskans to gain convenient access to needed health and social services and to participate in educational, employment, and recreational opportunities. Public transportation also can play a significant role in reducing congestion, conserving energy, reducing air pollution, and promoting urban development goals. Communities require technical and financial assistance to choose appropriate strategies, implement them, and operate them efficiently.

Section 2. CAPITAL EXPENSES. The Department of Transportation and Public Facilities annually shall develop a statewide public transportation capital assistance program for existing private and public operators, demonstrations of new systems, and paratransit. The programs shall consider the availability of federal, state, and local funding resources. Applicants for funds shall present a budget for the use of funds, describe how the facilities or vehicles to be acquired will be utilized, and demonstrate that adequate funds to operate and maintain the capital acquisitions exist.

(a) The State shall provide up to 100% of the match for federal capital assistance programs related to public transit, vanpools, and transportation of the elderly and handicapped.

(b) The State shall provide up to 80% of the total cost of public transportation capital projects that are not funded by U.S. Department of Transportation programs. The match may come from one or more of the following sources: non-Department of Transportation federal funds, locally generated funds; funds from departments other than DOT/PF, and unrestricted State of Alaska assistance programs, including state aid to governments and municipal assistance.

(c) The State shall provide up to 100% of the capital assistance costs to demonstrate new public transportation systems. No single project shall be greater than $250,000 in any one year.

(d) The State shall have the authority to procure reserve fleets of transit and paratransit vehicles with up to 100% of state funds. The vehicles may be used by operators through the provisions of paragraphs (a), (b), or (c), or loaned on a temporary basis.

(e) Provisions of paragraphs (a) through (d) may be used to purchase buses operating on school bus routes if the following conditions are met:

(1) An application is submitted to the Department of Education by either a municipality or a school district.

(2) The general public shall have access to the bus either while it is operating on a school route and/or during routes operated during other parts of the day. Operating hours during which the operator is engaged in public transportation must at least equal those for which pupil transportation is provided.

(3) The application must be approved by the Commissioners of Education, Public Safety, and Transportation and Public Facilities or their designees.

(4) Title of the vehicle must remain with a public entity until the end of its useful life. Should public transportation services no longer be offered once the vehicle is procured, the State may transfer the vehicle to a community where it would be used to provide public transportation.

(5) Approval of the application cannot reduce net revenue to a private school bus operator during the life of an existing service contract.

(f) Should school buses operating pupil transportation routes be used for public transportation, the State shall pay up to 100% of the incremental cost of providing larger buses. Provisions (1), (3), and (5) of the previous paragraph shall apply.

Section 3. OPERATING EXPENSES. The Department shall annually submit to the legislature a request for operating assistance to local, regional, and intercity public transportation systems, taking into consideration the availability of local, state, and federal resources. The program shall be divided into six program elements: existing public transportation systems, new system demonstrations, pupil fares, private operators, user subsidies, and elderly and handicapped transportation.

(a) Existing Public Transportation Systems Operated By Municipalities. The State shall pay up to one-third of gross costs based on a budget approved by the appropriate local government and subject to review by the Department. Payments by the State shall not exceed 90% of a system's net operation of cost which is defined as total operating costs minus system revenue and categorical state and federal funds.

(b) New System Demonstrations. The state shall provide municipalities undertaking new system demonstrations up to 90% of net operating costs for the first year and up to 80% of net operating costs for the second year. Provisions of paragraph (a) shall apply to the following years of operation. Net operating costs are defined as total direct operating costs minus fares and receipts from state and federal categorical programs. The total annual cost under this program for any single project shall be limited to $150,000.

(c) Pupil Fares. For the period September, 1981 to June, 1982, the Department of Education shall make payments to school districts for the purchase of fares on public transportation systems for the purpose of traveling to and from school. The Departments of Education and Transportation and Public Facilities shall submit an interim report to the Legislature by February 1, 1982 and a final report by October 1, 1982. This program shall not reduce the net revenue of any private pupil transportation operator during the life of an existing service contract.

(d) Private Operators. Municipalities are encouraged to contract services to private operators using provisions of paragraphs (a) and (b). In addition, the department may pay private operators for unavoidable losses and a reasonable profit to continue services that would otherwise be curtailed or eliminated. Payments shall be based on an audit of the private operator's financial statu

(e) User Subsidies. The department may pay to municipalities fare discounts up to one-third for travel on existing private transportation services by target groups such as the elderly and for target trips such as those to a clinic or hospital. Applicants must submit a document describing the need, persons who will benefit, and the transportation services that will be used. Municipalities shall be responsible for administrative costs.

(f) Elderly and Handicapped Transportation. The department may pay to municipalities, public agencies, or non-profit corporations up to one-third of the gross cost of supplemental transportation services available to all elderly and/or handicapped citizens. Public transportation systems receiving funds through paragraphs (a), (b), or (d) must establish off-peak fares for the elderly and handicapped that are no more than one-half of the fare for other passengers. Applications for assistance to supplemental transportation services shall be approved by the Commissioners of Transportation and Public Facilities and Health and Social Services, or their designees.

(g) The Department Shall Provide Funding Through Municipalities Where Practical. Where a need for public transportation services exists and there is no local government, the department shall have the option of providing funds through public or private non-profit entities or accepting responsibility for operations itself.

Section 4. TECHNICAL AND PLANNING ASSISTANCE. The department shall use the combined resources of in-house personnel, staff of public transportation operators both within and outside Alaska, and consultants to guarantee the availability or adequate planning and technical assistance, as needed by municipalities, to effectively plan to operate and manage public transit systems.

Section 5. DEFINITIONS.

(a) "Public transportation systems" include local, regional, and intercity surface passenger systems available to the general public with the exception of intercity rail and water services. Taxicabs must be operated on a shared-ride basis.

(b) "Department" refers to the Alaska Department of Transportation and Public Facilities.

TABLE 6-1

Forecast Capital Expenditures for Existing Public Transit Systems (1) & (2) (in thousands of dollars)

TRANSIT OPERATOR	FY 80-FY 81	2-YEAR AVERAGE	FY 82-FY 86	5-YEAR AVERAGE
ANCHORAGE				
Rolling Stock	6,422-81%	3,211-81%	10,964-79%	2,193-79%
Facilities	5,734-54%	2,867-54%	12,666-94%	2,533-94%
Total	12,156-66%	6,078-66%	23,630-86%	4,726-86%
FAIRBANKS				
Rolling Stock	1,009-13%	505-13%	2,128-15%	426-15%
Facilities	2,796-27%	1,398-27%	838- 6%	168-6%
Total	3,805-21%	1,904-21%	2,966-11%	594-11%
JUNEAU				
Rolling Stock	372-5%	186-5%	450-3%	90-3%
Facilities	1,983-19%	992-19%	0-0%	0-0%
Total	2,355-13%	1,178-13%	450-2%	90-3%
NORTH SLOPE BOROUGH				
Rolling Stock	100-1%	50-1%	390-3%	78-3%
Total	100-0.5%	50	390-1%	78-1%
FOUR-SYSTEM TOTAL				
Rolling Stock	7,903-100%	3,952-100%	13,932-100%	2,787-100%
Facilities	10,513-100%	5,257-100%	13,504-100%	2,701-100%
Total	18,416-100%	9,209-100%	27,436-100%	5,488-100%

Notes: (1) Rolling stock includes all fixed route buses owned by public transit systems and vehicles for Municipality of Anchorage's public elderly and handicapped program. Vehicles for UMTA 16(b)(2) recipients not included.

(2) Figures obtained for Anchorage from FY '81 Transportation Improvement Program, for Fairbanks and Juneau from 1980 Transit Development Programs, for North Slope Borough replacement of existing vehicles assumed except for recently purchased 30-passenger vehicle.

FY 81 Costs, Revenues, and Capital Program for New and Miscellaneous Public Transit Services

	COSTS	FARE	FEDERAL FUNDS	LOCAL SUBSIDY	ROLLING STOCK	FACILITIES	TOTAL
Ketchikan Airport Ferry[1]	531-100%	438-82%	30-6%	63-12%	cost uncertain[2]		
Mat-Su Borough Commuter Service	165-100%[3]	45-27%[3]	15-9%	105-64%	230	500	730
Anchorage Elderly & Handicapped Service	330-100%	-	110-33%	220-67%	54	-	54
4 NEW SYSTEMS[5]							
Galena	120-100%	36-30%	-	84-70%	230	500	730
System 2	120-100%	36-30%	-	84-70%	230	-	230
System 3	120-100%	36-30%	-	84-70%	230	500	730
System 4	120-100%	36-30%	-	84-70%	230	-	230
Private Systems[6]	na	na	-	100	500	-	-
16(b)(2) Operators	na	-	-	100	400	-	-
New & Misc. Subtotal				924-15%	2,104-35%	1,500-22%	3,604-28%
Existing System Subtotal				5,330-85%	3,952-65%	5,257-78%	9,209-72%
Total				6,254-100%	6,056-100%	6,757-100%	12,813-100%

Notes: (1) The airport ferry carries buses and walk-on passengers and is consided a public transit system.

(2) Alternatives have been developing for improving shuttle ferry service, but a decision has not as yet been made concerning which ones should be implemented.

(3) Existing net cost to Mat-Su Borough is fixed at $90,000 for nine months as a result of contract terms with private operator providing service.

(4) Federal funds for this service come from Title 3 Elderly Transportation Program, administered by Office on Aging.

(5) It is estimated that four new systems will start next year. Costs are forecasted as follows: 300 days per year, 16 man hours per day, $25 per hour = $120,000 per year. Fares: 16 hours per day, 75¢ per fare, 10 rides per hour, 300 days per year = $36,000 per year.

(6) Existing private systems are in Ketchikan, Unalaska & Bethel. Subsidy would be based on an audit that identifies losses. No such subsidy program exists at present but is likely in the future.

(7) Operating figures are based on $5,000 per operator for 20 operators. Capital costs assume that 1/3 of state-wide fleet of 60 vehicles will be replaced each year. 20 vehicles X $20,000 = $400,000.

TABLE 5-3

Maximum and Minimum Scenarios for the availability of Non-Local Capital Funds for FY '81

	Millions of Dollars MINIMUM	MAXIMUM
State Transportation Bond Issue[1]	4.3	8.6
UMTA Section 3[2]	5.0	7.0
UMTA Section 16(b)(2)[3]	0.2	0.2
UMTA Section 5 (Title IV)[4]	0.4	0.4
FHWA/UMTA Section 18[5]	0.0	0.2
Available Non-Local Funds	9.9	16.4
Forecast Capital Needs	12.8	12.8
Net Availability of Non-Local Funds	-2.9	+3.6

Notes:

(1) The 2-year bond figure is $8.8 million, but approximately $200,000 will be used for planning. The minimum scenarios assumes the money will be available equally over the 2-year period. The maximum scenario assumes all funds will be distributed during the first year. General fund revenues would have to supply funds for the second year.

(2) Section 3 funds are discretionary and fixed amounts do not exist either for regions of the country or for invididual states. In recent years, the Northwest region has received approximately 10% of the annual funds available nation-wide. The minimum scenario assumes a 10% distribution to Region X and that Alaska would receive 9% of these funds. The maximum scenario assumes a 10% regional distribution but a 12% Alaska share of these funds.

(3) Section 16(b)(2) allocations are distributed to states annually and can be used only for capital purchases.

(4) Title IV funds must be used for capital purchases. Although additional Section 5 funds can be used for capital purchases, it is assumed that they will be used instead for operating assistance.

(5) As with Section 5 funds, Section 18 funds can be used either for operating or capital assistance, however, no minimum allocation for capital expenses exists. The minimum scenario assumes the funds will be used solely for operating assistance, and the maximum scenario assumes that they will be used for capital assistance.

TABLE 6-4

Forecasts of Costs and Revenue Sources for Public Transit Systems (in thousands of dollars)

	FY 79	FY 81	FY 82	FY 83	FY 84
MUNICIPALITY OF ANCHORAGE (1)					
Costs	$4,146	$6,690	$8,770	$11,510	$15,100
Revenues: Fares	547-13%	723-10%	949-11%	1,245-11%	1,623-11%
Federal - Section 5	662-16%	637-10%	1,200-14%	1,200-10%	1,200-8%
Local Subsidy	2,937-71%	5,330-80%	6,621-75%	9,065-79%	12,267-81%
FAIRBANKS NORTH STAR BOROUGH (1)					
Costs	$1,072	$1,571	$1,708	$2,232	$2,837
Revenue: Fares	190-18%	257-16%	330-21%	410-18%	500-18%
Federal - Section 18 (2)	31-3%	60-4%	60-4%	60-3%	60-2%
Local Subsidy	851-79%	1,254-80%	1,318-85%	1,762-79%	2,277-80%
NORTH SLOPE BOROUGH (3)					
Costs	$324	$417	$458	$505	$555
Revenue: Fares	59-18%	65-16%	71-15%	79-16%	86-16%
Federal - Section 18 (2)	70-22%	40-10%	40-9%	40-8%	40-7%
Local Subsidy	195-60%	312-74%	347-76%	386-76%	429-77%
CITY AND BOROUGH OF JUNEAU (1)					
Costs	$584	$974	$1,120	$1,494	$1,718
Revenue: Fares	95-16%	132-14%	139-13%	146-10%	153-9%
Federal - Section 18 (2)	40-7%	70-7%	70-6%	70-5%	70-4%
Local Subsidy	449-77%	772-79%	911-81%	1,278-85%	1,495-87%
FOUR SYSTEM TOTAL					
Costs	$6,126	$9,652	$12,056	$15,741	$20,210
Revenue: Fares	891-15%	1,177-12%	1,489-13%	1,880-12%	2,362-12%
Federal - Section 5/18	[illegible]-13%	802-08%	1,370-11%	1,370-9%	1,370-7%
Local Subsidy	4,43[illegible]-72%	7,668-80%	9,197-76%	12,491-79%	16,468-81%

Notes: (1) Figures for FY 79 have been supplied directly from transit operators. Figures for FY 80 - FY 84 for Anchorage, Fairbanks and Juneau have been taken directly from approved transit improvement program documents.

(2) Section 18 (Urban Mass Transportation Act) funds are administered by the State. For future years, money available to the state for this program and the distribution process are uncertain. Existing allocations to individual communities have been carried forward.

(3) FY 79 has been supplied by the borough. FY 81 figure assumes 10% annual inflation since FY 79, and $40,000 for operation of Pt. Hope service. FY 82-84 assume 10% annual increases in costs and fare revenue.

TABLE 6-5

Summary of State Programs for Capital and Operating Assistance

California: Operating costs, simgle allocation to counties based on population A minimum of 15% of funds must be used for capital expenditures.

Connecticut: Operating costs, 100% of deficit to maintain basic service. 50% of local dificit above basic service. Capital costs, 100% of local match for UMTA grants.

Delaware: Operating costs, 80% of deficit for line-haul service. 100% of deficit for specialized elderly and handicapped.

Florida: Capital costs, 50% of local match for UMTA grants. Service development fund provides 50% of capital and operating costs for demonstrations.

Georgia: 50% of local match for federal grants and non-federal projects.

Illinois: 67% of local match for federal grants and non-federal projects.

Indiana: 50% of local share of federal grants.

Maryland: Operating costs, up to 70% of deficit. Capital costs, 75% of local match for UMTA grants.

Mass: Operating costs, 50% of non-federal funds. Capital costs, 50% of non-federal funds.

Michigan: Operating costs, for existing systems formula based equally on transit miles and population. 100% of demonstration costs. Capital costs, 100% for local match of UMTA grants.

Minnesota: Operating costs, 67% of deficit. Capital costs, 75% for local match of UMTA grants. Separate funding for new bus systems in small cities.

Missouri: Local option of ½¢ sales tax for transportation.

Montana: Operating costs, formula based on passenger and bus miles provides up to 50% of deficit.

Nebraska: Operating costs, 50% of deficit or of local match for UMTA grant.

New Jersey: Operating costs, subsidy previously to private operators. Now, many systems operated directly by state. Capital costs, state purchases vehicles and leases to private operators at $1 per year.

New York: Operating costs, allocation based on unit monetary figures established for passengers and vehicle and vehicle miles on different types of systems. Capital costs, 50% of local match for UMTA grants.

N Carolina:	Capital costs, local match of UMTA grants.
Ohio:	Capital costs, 50% of local match for UMTA grants.
Oregon:	Capital costs, up to 100% of local match for UMTA grants. Separate non-urbanized area fund for capital and operating assistance.
Pennsylvania:	Operating costs, 67% of non-federal funds. Capital costs, 50% of non-federal share.
Rhode Island:	State operated state-wide transit system.
Tennesee:	Capital costs, 50% of local share for UMTA grants.
Texas:	Capital costs, 65% of local match for UMTA grants, 50% of non-federal projects.
Utah:	Local option of 1/4¢ sales tax dedicated to transit, can be used for capital and operating assistance.
Virginia:	Capital costs, 85% of local share for UMTA grants. Aid available also for non-federal projects.
Washington:	Share of auto excise tax, also local options for household, employees, business, sales tax options.
West Virginia:	Capital costs, 100% of non-federal funds. State purchases all buses.
Wisconsin:	Operating costs, 67% of deficit. Capital costs, 100% of capital costs for demonstrations.

Source of non-federal support for public transportation programs in non-urbanized areas by Alice Kidder, Transportation Institute, North Carolina A/T State University, June, 1980.

TABLE 6-6

Effects of Change in Revenue Sharing Legislation on Support to Public Transit

Municipality	Per Capita Prop. Valuation	1979 Population	1979 State Revenue Sharing	LOCAL EFFORT Transit Fares	LOCAL EFFORT Local Subsidy	Transit Entitlement	Transit Funding	TRANSIT RELATED REVENUE SHARING New/Old
Anchorage	$31,946	184,775	$819,588	$547,000	$2,937,000	$109,059	$239,930	0.29%
Fairbanks North Star Borough	34,804	60,227 5,995	$322,505	$190,000	$851,000	$29,911	$65,804	0.20%
North Slope Borough	$634,541	7,971	$48,570	$59,000	$195,000	$400	$880	1.02%
City and Borough Of Juneau	$26,170	22,105	$98,049	$95,000	$449,000	$20,787	$45,731	0.47%

Notes: (1) The actual revenue sharing figures for the transportation category are shown, which include the 1979 proration factor (0.88712) and the cost-of-living differentials for Fairbanks (1.15) and Barrow (1.3375).

(2) The Municipality of Anchorage was the only municipality entitled to more than $5 per capita. Legislation passed at the time of unification allowed transportation revenue sharing for both the city and the borough to be carried forward, i.e. population within the boundaries of the old city of Anchorage was double counted Only the figure for $5 per capita is shown.

(3) Local subsidy is defined as total operating costs minus fares and receipts from federal transportation agencies applied to operations.

(4) Transit entitlement = population X millage rate equivalent for transit

$$= (\text{population}) \frac{\text{Transit fares + local subsidy}}{0.001 \times \text{per capita property valuation} \times \text{population}}$$

$$= \frac{\text{Transit fares + local subsidy}}{0.001 \times \text{per capita property valuation}}$$

(5) Transit related revenue sharing based on 1980 legislation
= (proration factor) (transit entitlement) = 2.20 (transit entitlement)

TABLE 6-7

Planning Activities & Potential Funding Sources

PLANNING ACTIVITIES

- Development and Evaluation of Short-Range Alternatives
- Development and Evaluation of Long-Range Alternatives
- Preparation of Annual Budgets and Transit Improvements Program
- Grant Writing
- Preparation of Bus Specifications
- Planning for Elderly and Handicapped: Including Preparation of Transition Plan, Where Applicable
- Energy Contingency Planning
- Coordination and "Brokerage"
- Data Collection and service Monitoring
- Service Evaluation
- Marketing
- Technical Assistance
- Management Assistance
- Research Projects
- Ridership Program

AVAILABLE FUNDING SOURCES

- UMTA Section 8
- Section 18 (jointly administered by FHWA & UMTA)
- UMTA Section 16(b)(2)
- State Bond Issue
- State General Revenue
- Local Funding
- FHWA Carpooling/Vanpooling Program

TABLE 6-8

Recommended Planning and Technical Assistance Program

	STATE	FEDERAL	LOCAL
Planning	$200,000 (59%)	$ 70,000 (21%)	$ 67,500 (20%)
Technical and Management Assistance	150,000 (80%)	--	37,500 (20%)
	$350,000 (67%)	$ 70,000 (13%)	$105,000 (20%)

TABLE 6-9

Capital Improvement Projects

FACILITIES DESIGN AND CONSTRUCTION

- Maintenance and bus storage facilities
- Park-and ride lots
- Bus shelters and bus signs
- Bus turnouts on heavily traveled roadways
- Passenger accomodation centers

ROLLING STOCK

- Buses
- Vanpools
- Vans for specialized services, especially elderly and handicapped

FUNDING OPTIONS

- Retroactive purchases
- Demonstration/service development projects: public & private services
- Bus replacement: public & private systems
- New service for existing services
- Spare parts and retrofits for wheelchair lifts
- Centralized backup fleet

NON-LOCAL FUNDING SOURCES

- Section 3, UMTA
- Section 5, UMTA
- Section 18, FHWA & UMTA
- Section 16(b)(2), UMTA
- State Bonds
- State General Revenues
- Federal-Aid Urban Systems (FAUS) Highway Funds
- Department of Education

TABLE 6-10

Proposed State Public Transit Capital Assistance - FY 82

Program	Program Element	Estimated Cost (Thousands of Dollars) Federal	State	Local
1. Existing Public Transit Systems	UMTA Section 3	5,000 (80%)	1,250 (20%)	0
	Section 5 (Anchorage only)	200 (80%)	50 (20%)	0
	State Bond Funds		1,860 (80%)	465 (20%)
	General Funds		0	
2. New System Demonstrations	4 communities		1,000 (100%)	
3. Paratransit	New Vehicles (Section 16(b)(2)	200 (80%)	50(20%)	0
	Reserve fleet (6 vehicles)		90 (100%)	0
		5,400 (53%)	4,300 (42%)	465 (5%)

TOTAL CAPITAL FUNDS = $10,165,000.00

SOURCE: Peter Eakland and Associates, 1980.

TABLE 6-11

TRANSIT OPERATIONS

Activities

- Bus maintenance
- Driver costs
- Administration
- Fuel and oil

Potential Funding Sources

- Section 5, UMTA
- Section 18, FHWA/UMTA
- State Revenue Sharing
- Title III and Title VII, Office of Aging
- Department of Education
- Miscellaneous State and Federal Social Services
- State General Revenues

TABLE 6-12

Alternative Funding Distribution Forecasts For FY 81 (in thousands of dollars)

DISTRIBUTION FORMULA	ANCHORAGE	FAIRBANKS	JUNEAU	BARROW	TOTAL
NET COSTS[1]					
One-Third	1,777-70%	418-16%	257-10%	104-4%	2,556-100%
One-Half	2,665-70%	627-16%	386-10%	156-4%	3,834-100%
Total	5,330-70%	1,254-16%	772-10%	312-4%	7,668-100%
GROSS COSTS					
One-Third	2,230-70%	524-16%	225-10%	139-4%	3,218-100%
POPULATION[2-3]					
	1,980-66%	720-24%	240-8%	90-3%	3,000-100%
LEVEL OF SERVICE[3]					
Ridership	2,130-71%	330-11%	420-14%	120-4%	3,000-100%
Operating Hours	2,430-81%	300-10%	210-7%	60-2%	3,000-100%
Operating Miles	1,950-65%	630-21%	330-11%	90-3%	3,000-100%
1/2 Operating Mi. 1/2 Operating Hours	2,190-73%	465-15,5%	270-9%	75-2,5%	3,000-100%
1/3 Ridership 1/3 Operating Mi. 1/3 Operating Hours	2,169-72,3%	420-14%	321-10,7%	90-3%	3,000-100%

Notes: (1) Net costs are defined as operating costs minus fares and estimated revenues from Federal Department of Transportation Sources.

(2) Percentages based on population figures for municipality operating the transit system were submitted to Community and Regional Affairs for FY 79.

(3) Assumes total available funds of $3 million.

TABLE 6-13

Proposed State Public Transit Operating Assistance Program FY 1982

Program	Community/Program Element	Estimated Cost (Thousands of Dollars)
1. Existing Public Transit Systems (33% of gross costs)	Anchorage[1]	2,923
	Fairbanks	569
	Juneau	373
	Barrow	153
	Mat-Su Borough	46
	Ketchikan airport ferry[2]	84
2. New Demonstration Systems (90% of net c sts first year, 80% of net cost second year)	Galena[3]	50
	3 other new systems	228
3. Student Fares		150
4. Private Operators		100
5. Elderly Transportation		100
	TOTAL	4,776

Notes: (1) The Anchorage figure includes the regular People Mover system and the supplementary system for elderly and handicapped.

(2) Using 33% of gross costs, the state subsidy would be greater than net costs. The estimated cost shown is 90% of the total forecast net cost.

(3) Galena received $110,000 from the 1980 legislature to initiate a transit system. The FY 82 needs are assumed to be 50% of this figure.

Source: Peter Eakland and Associates, 1980

TABLE 6-14

Breakdown of FY 82 Operational Funding Sources Based on State Funding of 1/3 Gross Costs (in thousands of dollars)

	ANCHORAGE	FAIRBANKS	JUNEAU	BARROW	MAT-SU
Fares	949 (11%)	330 (19%)	139 (13%)	71 (16%)	45 (27.5%)
Federal DOT Section 18 (FHWA) Section 5 (UMTA)	-- 1,200 (14%)	60 (4%)	70 (6%)	40 (9%)	15 (9%)
State Transit Assistance (1/3 Gross Costs)	2,923 (33%)	569 (33%)	373 (33%)	153 (33%)	55 (33%)
State Revenue Sharing[1]	255 (3%)	47 (3%)	45 (4%)	1 (0%)	3 (2%)
Local Taxes[2]	3,443 (39%)	702 (41%)	493 (44%)	193 (42%)	47 (28.5%)
Total Costs	8,770 (100%)	1,708 (100%)	1,120 (100%)	458 (100%)	165 (100%)

Notes: (1) State Revenue Sharing = estimated proportionate amount of current non-categorical program

(2) Local Taxes = total costs minus all other categories.

Chapter 6

BIBLIOGRAPHY

Alaska Department of Transportation and Public Facilities, Southeast Region Planning and Programming. 1980. FY80 section 18 application, public transportation:"moving Alaskans to build a better Alaska."

Alaska Transportation Consultants, Inc. 1980. transit improvement plan for metropolitan area commuter service. Prepared for the Fairbanks North Star Borough.

Anchorage Metropolitan Area Transportation Study. 1980. Transportation improvement program FY81-FY86.

Legislative Council, State of Alaska. 1980. A conference on Alaska's future frontiers held in Anchorage, Alaska December, 1979.

Miller, J.M. 1980. The use of performance-based methodologies for the allocation of transit operating funds. Traffic Quarterly. XXXIV: 555-574.

Miller, W. and B. Vinson. 1980. Florida's approach to transit management. Proceddings of the fourth national conference on rural public transportation held in June, 1979 at Vail, Colorado by the Transportation Research Board and sponsored by the Urban Mass Transportation Administration. pp. 32-33.

Office of the Governor, Division of Budget & Management, State of Alaska. 1980. FY82 policy budget forms and instructions. 73 p.

Peat, Marwick, Mitchell & Co. 1978. Analyzing transit options for small urban communities. Volume three: summary of management and operations experience. Prepared for the Urban Mass Transportation Administration, U.S. Department of Transportation.

Peter Eakland and Associates. 1980. Capital transit development program 1980-1984. Prepared for the City and Borough of Juneau. 107 p and appendices.

Robinson, L. 1980. The role of the state in transit funding, the Alaska experience. Prepared by southeast region planning and programming, Alaska department of transportation and public facilities. Paper read at conference in Monterrey, California in April, 1980.

Sherkow, F. 1980. Public transit management and technical assistance in Iowa. Proceedings of the fourth national conference on rural public transportation held in June, 1979 at Vail, Colorado by the Transportation Research Board and sponsored by the Urban Mass Transportation Administration. pp. 25-28.

7.0 Sketch Transit Plan

7.1 Purpose

The purpose of this chapter is to present a general forecast of the statewide public transit requirements for the next six years. Each of the various elements of the transit project has provided insights into the transit needs of Alaska's communities. Perhaps the most important lesson learned was that the institutional and political issues are at least as important as planning issues. Institutional factors include the perception of transit needs by local decision-makers, the extent of the desire of local governments to become directly involved in transit funding and operations, the impact of local and state regulation of taxicabs and bus common carriers, and the availability of an acceptable mix of local, state and federal funding sources for both capital and operating costs.

Detailed five-year development plans exist for the three largest public transportation systems in the State. Site-specific capital and operating needs for systems in other cities must await deliberations of the above issues. Nevertheless, candidate areas and communities can be identified, providing a realistic scenario of public transit development in Alaska. The result of this sketch-planning effort can be used to help establish long-range policies and priorities for more detailed planning.

Sketch plans will be developed for intercity, regional, and local public transportation systems, although the emphasis will be on local systems. Sketch planning at the intercity and regional level will only be done qualitatively, but it is important that public transportation planning at these levels begin to be developed. In the same way that the State considers the relationships between local, regional, and statewide road systems, it can examine the relationships between these levels of public transportation services.

7.2 Intercity Public Transportation

Intercity public transportation, it is proposed, includes all land transportation services with routes longer than 100 miles, all air passenger services, and the Marine Highway System.

Alaska has four modes of intercity public transportation -- air, bus, rail and ferry. The State of Alaska operates the Marine Highway System, which is Alaska's only intercity ferry operation. It also subsidizes operation of the Portage-to-Whittier railroad shuttle operated by the Alaska Railroad, but it is being considered a regional service. State funds are not currently provided for the operating costs of any other intercity services.

The Civil Aeronautics Board (CAB), the Federal Aviation Administration (FAA), and the Alaska Transportation Commission (ATC) jointly regulate the air carrier industry in Alaska. Subsidies are provided by the CAB and the U.S. Postal Service to insure adequate air service to isolated Alaskan communities.

Intercity bus routes operate between the major road-connected cities in southcentral Alaska (Anchorage, Valdez, & Seward) and provide a transportation connection from them to the southeastern communities of Skagway and Haines. The Alaska Transportation Commission requires that bus carriers have adequate insurance, but otherwise they have been deregulated. Railroad passenger service in addition to that provided, between Anchorage and Whittier is offered by the Alaskan Railroad between Anchorage and Fairbanks and by the Yukon and White Pass Railroad between Skagway and Whitehorse.

An increasing number of states are providing financial support to certain intercity bus and rail routes so that services losing money can be retained. The long-range status of rail passenger services in Alaska particularly is in doubt. A special problem for Alaska is insuring adequate off-peak (winter) service. The State should monitor the activities of intercity common carriers to be able to anticipate and resolve problems as they develop. Future funding of intercity operations most likely would come from State rather than local sources.

7.3 Regional Public Transportation

Regional public transportation services are assumed to be land services that operate on routes from 10 to 100 miles in length. This definition suggests three regional service areas as follows: the Kenai Peninsula, Anchorage/Matanuska-Susitna Borough/Whittier, and the Fairbanks North Star Borough.

Regional systems have operating characteristics different from both local and intercity services. Their service is less frequent than local service, but schedules should always permit passengers to ride both directions on the same day. The emphasis is on providing service to rural residents for trip-making to and from urban areas.

Public transportation services of a regional nature include the Portage-Whittier railroad shuttle, the Anchorage-Eagle River route operated by the Municipality of Anchorage, routes to Fairbanks from North Pole and Chena Hot Springs operated by the Fairbanks North Star Borough, a Minto to Fairbanks route soon to be started by a private operator, and potential routes to Fairbanks from Anderson and Delta Junction.

Regional services can occur within a single municipality but also can cross municipal boundaries. Coordination between municipalities might be required for joint funding or insuring coordination of services. No services have emerged which have required operating agreements between municipalities or between the State and municipalities, but the need for such agreements is likely to develop within the next few years.

7.4 Local Public Transportation Services

Local public transportation systems, which have been the emphasis of this report, generally provide trips less than 10-15 miles long. The basis for sketch-planning of local systems is how many of six transit factors a community possesses. The six factors are as follows: (1) an existin transit system; (2) an existing Section 16(b)(2) elderly and handicap ed operator; (3) an existing taxicab operator; (4) an existing school bus operator; (5) an existing major employment center, and (6) designation as a major or minor regional hub by the Federal Aviation Administration.

There are eight public transit systems currently operating in Alaska and two more with funding assured. As shown on Table 7-1, they are in communities of all sizes. In order of decreasing population, communities with public transit systems are Anchorage, Fairbanks, Mat-Su Borough, Juneau, Ketchikan (private), Bethel (private), Barrow, and Unalaska (private). Galena and Point Hope have funding assured.

The elderly and handicapped face severe transportation mobility problems throughout the country but particularly in Alaska due to the severe climate and the absence of adequate pedestrian amenities. The percentage of elderly in the total population is less in Alaska than in other states, but the construction of elderly housing units and the availability of financial assistance programs enable many to remain in the State. Development of an elderly transportation program in a community oftentimes suggests the existence of other mobility problems. Some states have seen regular transit systems grow out of 16(b)(2) operations.

Taxicabs provide a surprising percentage of local transportation trips in Alaskan communities. The high cost of obtaining and operating private vehicles, relatively short trip distances, harsh weather conditions, and a large number of seasonal workers and tourists contribute to the feasibility of taxicab services in communities throughout the State, particularly those that are isolated. Public transit in many instances could evolve from existing taxicab systems.

The existence of a pupil transportation system indicates a development pattern conducive to some form or public transportation. The State pays for the transportation of pupils who live at least 1-1/2 miles from a school. The expertise of pupil transportation operators in operating and maintaining a bus system oftentimes can be utilized in implementing public transit in a community.

The feasibility of public transit increases if a community has large concentrations of trip generators, such as military bases, groupings of high-rise office or residential buildings, cannery complexes, and pulp mills. Finally communities, serving as aviation hubs, collect passengers from and distribute them to smaller neighboring communities. Hub communities also contain concentrations of health and social services intended for use by residents throughout a region.

Communities were first divided into six population ranges so that it could be determined whether the feasibility of public transit is related solely to population. Then the number of existing transit factors was totaled for each community. Table 7-1 shows for each population range the total number of communities by total transit factors. Finally, percentages were assigned to each number of total transit factors to forecast the number of public transit systems that might be in existence by 1986. These percentages are as follows: 100% of communities with 5 or 6 factors, 50% of communities with 3 or 4 factors, 10% of communities with 1 or 2 factors, and 0% of communities with 0 factors. Based on these assumptions, in 1986 there will be 23 systems statewide.

A total of 187 vehicles will be required, assuming one vehicle for every 2,000 persons in a community and a minimum of two vehicles for any system. Operating expenses, estimated at $100,000 per vehicle per year, will be $18.7 million in 1986. Average capital costs are estimated at $6.3 million per year based on an average vehicle cost of $100,000, vehicle costs being one-half of total capital requirements, and costs distributed evenly over six years.

The following is a listing of all communities by population range which have at least three transit factors:

20,000 to 200,000:	Anchorage (6), Fairbanks (6), Juneau (6)
10,000 to 20,000:	Ketchikan (6)
3,000 to 10,000:	Bethel (5), Kodiak (5), Sitka (4), Petersburg (4), Wrangell (4), Kenai-Soldotna (4), Valdez (3)
1,000 to 5,000:	Barrow (5), Dillingham (4), Homer (4), Kotzebue (4), Palmer (3), Cordova (3), Homer (3)
500 to 1,000:	Unalaska (4) Galena (4), Fort Yukon (3)
less than 500:	St. Mary's (3), Point Hope (3), Aniak (3), McGrath (3), Yakutat (3)

Exhibit 7-1 is a collection of questionnaires on local mobility returned to the Municipal League by municipalities. It represents the beginning of a data base for more detailed planning.

Table 7-1. Results of Sketch Planning for Local Public Transit Systems to FY 86

	Population of Communities						
	20,000 to 200,000	10,000 to 20,000	3,000 to 10,000	1,000 to 3,000	500 to 1,000	less than 500	unincorporated communities
Number of Municipalities	3	1	7	12	21	98	--
Transit Factors							
1. Number with Existing Transit Systems	3	1	1	1	2	1	0
2. Number with 16(b)(2) Operators	3	1	6	5	0	1	0
3. Number with Taxicabs Operators	3	1	6(est.)	12(est.)	18(est.)	15(est.)	--
4. Number with School Bus Operators	3	1	7(est.)	11(est.)	15(est.)	25(est.)	--
5. Number with Major Employment Centers[1]	3	1	3	1	1	0	--
6. Federal Aviation Admin. Regional Hub	3	1	3	5	2	3	3
Number of Communities by Total Transit Factors							
0	0	0	0	0	3	58	
1	0	0	0	0	3	15	
2	0	0	0	5	12	20	
3	0	0	1	3	1	5	
4	0	0	4	3	2	0	
5	0	0	2	1	0	0	
6	3	1	0	0	0	0	
Number of Transit Forecast Systems by 1986[2] (Est. total - 23 systems)	3	1	5	5	3	6	
% of communities to have systems	100%	100%	71%	47%	14%	6%	
Vehicle Requirements[3] (Est. total - 187 vehicles)	132	7	20	10	6	12	

Table 7.7 continued

Notes:

(1) Major employment centers include military bases; major resource processing facilities such as canneries and pulp mills; and government employment centers.

(2) It is assumed that by 1986 100% of communities having 5 or 6 transit factors will have a public transit system, 50% of communities with 3 or 4 factors, and 10% of communities 1 or 2 factors.

(3) Vehicle requirements are based on an estimate of 1 vehicle for every 2,000 people with a minimum of two vehicles for any syste.

Source: Peter Eakland and Associates, 1980

EXHIBIT 7-1

COLLECTION OF QUESTIONNAIRES ON LOCAL MOBILITY

QUESTIONNAIRE ON COMMUNITY BASED TRANSPORTATION SERVICES

Please return questionnaire by October 31, 1980 to the following address:

Ginny Chitwood
Executive Director
Alaska Municipal League
204 North Franklin
Juneau, Alaska 99801

Name of Municipality Municipality of Anchorage Population 204,328

Name of Person Filling Out Questionnaire Stanley A. Green

Title Associate Planner Office Phone 264-4251

A. AVAILABILITY OF TRANSPORTATION SERVICES

1. Taxicabs

2 — Number of taxicab companies operating in the community.

146 — Estimated number of taxicabs operating in the community.

no — Does the cost of a cab depend on the number of persons making a trip.

Rates: $1.40 for the first 1/6 mile or 40 seconds, whichever comes first, then $1.20 per mile or $18. per hour, whichever is greatest.

_____ — If yes, what is the cost of a 5 mile trip for one person.

Same — What is the cost of the same trip for three persons.

24 — What are the hours of operation.

2. Limousine Services

Yes — Is scheduled service available to the airport and ferry terminal.

9 Passenger — If yes, what is the seating capacity of the vehicles used.

3. School Buses

Yes — Does a pupil transportation system exist in your community.

196 — If yes, how many buses are required to provide the service.

Both — Is the service operated by the school district or by private contractor.

Contractors: 107 buses. School District: 89 buses.

_____ _____ — If by contractor, give his/her name.

Transportation Services, Inc.
K & E Bus Lines
Far North Transportation