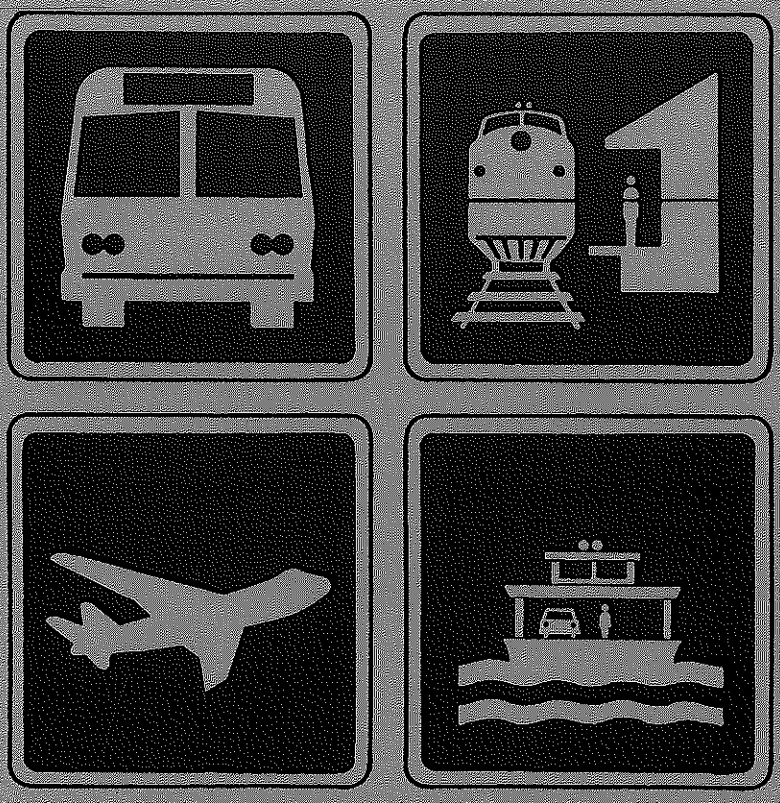
INTERCITY PASSENGER TRANSPORTATION
IN MICHIGAN

MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY

MARCH 1987



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16. Abstract

The purpose of this study is four fold.

1. Determine Michigan terminal/station characteristics such as location, accommodations, condition, use, and security.
2. Determine ownership and/or leasing arrangements regarding terminals.
3. Determine order-of-magnitude operating costs including terminal depreciation or rent, utilities, and agent's income.
4. Determine source and amount of revenue.

This study was needed to provide a better information base regarding terminals that could lead to improved availability and condition of terminals in Michigan.

Some 44 of the 243 terminals/stations in the State of Michigan were surveyed representing an 18 percent sample.

A questionnaire was designed to obtain sufficient data to address the study objectives. Two methods were then used to distribute and collect questionnaires: (1) mail-out/field interview (2) Greyhound mail-out/mail-back.

A total of 14 Findings and 6 Perceptions were generated by the data collected.

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MICHIGAN DEPARTMENT

OF

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Report 12

MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY

March, 1987

Bureau of Transportation Planning
Intercity Transportation Planning Division
Passenger Transportation Planning Section

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This document was prepared by the staff of the Bureau of Transportation Planning, Passenger Transportation Planning Section. Major staff contributors were Robert L. Kuehne and Janis K. Becker of the Surface Systems Unit. Jeaniva Baker, MaryAnn Barrett, and Douglas C. Hollandsworth made major contributions in data collection. Kathy A. Hundt assisted in the preparation of this document.

Computer interpretation of the survey data and cross tabulation development was done by Homer Sprague of the Computer Services Division, Scientific Systems Development Section.

The Bureau of Urban and Public Transportation, Intercity Division assisted in the development of the survey form, provided background information and reviewed report contents throughout its development. Special recognition is extended to Steve Cook and Jerome J. Rudnick.

The cooperation and assistance of all bus companies operating in the state of Michigan during the survey period and all surveyed terminal/station managers made this study possible and is gratefully appreciated.

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EXECUTIVE SUMMARY

Terminals are the gateways to intercity bus service and its market in Michigan and throughout the nation. They provide the user access to regular-route service offered by some 16 carriers in Michigan. At the same time, terminals are the intercity bus carriers primary means of reaching their customers.

These facilities will be inviting or repulsive to the user, an economic incentive or liability to the community, and economical or costly to the carrier. Terminals create an impression on the intercity bus passenger, community residents, and visitors. Community vitality is influenced in part by the quality of its intercity bus terminal. Adequate terminals at a reasonable cost are essential to the carriers intending to provide the intercity bus service.

In most cases, both in Michigan and the nation, terminals are owned or controlled by the large carriers with the smaller carriers using them through interline/tenant arrangements. These carrier-owned terminals, as well as those carrier-controlled through lease arrangements, are operated either with their own personnel or commission agents. In addition a commission agency, which is called a station rather than a terminal in this study, may be established. This agency is established in a private business or leased by a private individual operating under a commission agent arrangement. The primary business of this commission agency may be a gas station, drug store, restaurant,

or other enterprise.

Carriers who own or control these terminals and stations have the competitive advantage in a deregulated environment. Most carriers who would consider regular-route intercity bus service don't have the resources necessary to establish their own terminals, particularly in larger communities where connections to the intercity bus trunkline system would usually occur.

This Michigan Intercity Bus Terminal/Station Study, then, has four objectives.

1. Determine terminal characteristics such as location, accommodations, condition, use and security.
2. Determine ownership and/or leasing arrangements regarding terminals.
3. Determine order-of-magnitude operating costs including terminal depreciation or rent, utilities, and agent's income.
4. Determine source and amount of revenues.

Michigan has 245 intercity bus terminals or stations serving communities and special generators such as major airports, universities, and state institutions. This study examined 44, 18 percent, of these with terminals in larger communities having a higher sample rate and those in smaller communities a smaller sample rate.

The study produced 14 findings, addressed six perceptions, and

developed 12 considerations. Findings included...

1. Most terminals are located in downtown areas, although freeway interchanges are used as an alternative. Carriers have favored interchange locations in some cases to lower terminal operating costs, reduce carrier travel times, and improve user security.

2. Some 60 percent of the terminals surveyed are located near university/college campuses or have a supplemental terminal on the campus. This stresses the importance of providing convenient access to college students.

3. Two-thirds of Michigan's county seats have intercity bus terminals or stations. As key governmental centers, they offer a wide range of services often necessary to the intercity bus user and should be served by intercity bus service.

4. Approximately one-third of the surveyed intercity bus terminals have been newly constructed or undergone major renovation in the eighties. This reveals that considerable effort has been expended to make terminals functional, well-maintained, and attractive; however, much remains to be done.

5. The terminal buildings surveyed generally have ticket processing space, rest rooms, seats/benches, and vending machines; generally don't have telephones, lockers, video games, concession stands, and lounge areas. Telephones are viewed as the most critical shortcoming because of the resulting inconvenience and threatened security.

6. Schedule information, location convenience, and cleanliness received high marks from the terminal managers; security, parking costs, and long term parking low marks. There is a need for an assessment from the public's viewpoint in addition to the terminal managers. Their high and low marks array may be significantly different.

7. Security is the lowest rated terminal feature, particularly for terminals located in downtown areas. As the safety of the travelling public is a primary concern of the State, security improvements are prime candidates for State investment.

8. Several terminals were found to be operating in an

excellent manner; some were in poor operating condition. There is a need to upgrade terminals with major deficiencies to standards illustrated by excellent terminals.

9. Lack of on-site, long term parking is a problem for downtown terminals serving places of 10,000 or more. This could become more critical as additional special intercity bus services are instituted. These include weekend college student service and remote air terminals.

10. In urbanized areas, terminal agents generally receive 10-15 percent of ticket sales, 10-15 percent of package express sales, and some percentage of charter sales. In non-urbanized areas, percentage of ticket sales is usually the only basis used. When sales dwindle, so does the salary of the ticket agent and profit margin of the carrier. This could lead to loss of service unless other revenue producing services can be instituted.

11. In urbanized areas the annual cost of operating a terminal serving the whole urbanized-area exceeds $50,000 annually. In non-urbanized areas, annual operating costs vary from a few thousand to $30,000. Retaining terminals in urbanized areas seems wise because this is where boardings are highest; however, this can be misleading as terminals operating costs are also highest.

12. Regular-route ticket sales comprise over 70 percent of all revenues. This dramatizes the impact of decreasing regular-route ridership on terminal operations. This primary source of revenues continues to decline at an alarming rate.

The considerations focus on such terminal features as location, quality, convenience, safety, ownership, and cost.

Most objectives of the Michigan Intercity Bus Terminal/Station Study have been achieved to a considerable degree. Certainly terminals characteristics, ownership, and leasing arrangements have been described (see Part IV). However, financial characteristics, costs and revenues are rough order-of-magnitude

figures. This is due to the fact that no financial data was obtainable for half the terminals included in the study (see Part V). The findings, perceptions, and considerations statements provide facts and directions useful in providing adequate intercity bus terminals in Michigan.

There are several future directions beyond the scope of this study. These include (1) assessing state-sponsored terminals to determine the return on state dollars invested, (2) assessing the value of multimodal terminals in Michigan, (3) developing a set of criteria useful in locating and designing intercity bus terminals for Michigan communities of various sizes, and (4) improving the accuracy of unit operating costs through such activities as review of terminal grant applications and analysis of nationwide data.

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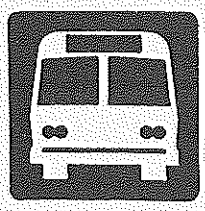
INTRODUCTION



I. INTRODUCTION

IA. NEED FOR STUDY

Terminal availability and condition are critical to the provision of adequate intercity bus service. A carrier needs adequate terminals to provide a service that meets people's intercity transportation needs in a convenient manner. An intercity bus passenger desires them so as to not travel long distances nor incur high costs to use intercity bus service. Ten percent walk, another 10 percent use local transit, and many ride with friends to access a terminal (1). At the same time, the condition of the terminal is a major concern of the intercity bus passenger. This was rated lowest of the six intercity bus service features rated in a 1985 Michigan study (1). A better information base regarding terminals could lead to the improved availability and condition of terminals in Michigan.

The Michigan Department of Transportation has an intercity bus terminal program designed to fund intermodal passenger terminal construction. Ten terminals have been funded under this program during the last 10 years (see Appendix A). Requests have been received to fund some eight additional terminals. Due to limited funding capability, it is important to prioritize submitted proposals and/or encourage development of other needed terminal development or redevelopment projects. An improved data base could contribute to this.

Furthermore, cost effectiveness and operating efficiency are key

concerns of the Department regarding its investments. This necessitates among other things a working knowledge of existing terminal ownership/leasing arrangements, order-of-magnitude terminal operating costs, and revenues generated to meet these costs.

IB. DEFINITION OF TERMINAL

A bus terminal is defined as a building along an intercity bus route where people board or deboard an intercity bus. A terminal may be used solely for intercity bus services, or may be inter-modal with connecting intercity rail and/or local transit services. In some communities, intercity bus service is accessed at a non-related business. These are differentiated from other terminals by referring to them as stations.

Intermodal terminals are usually located in larger communities. Examples of these are found in such urbanized areas as Battle Creek and Kalamazoo where intercity bus, rail and local transit services use the same facility. Intermodal terminals such as those at Alma and Cadillac, directly accommodate both intercity bus and local public transit services. Terminals in many communities, such as East Lansing and Saginaw, are easily accessed using local transit, even though the two modes do not share the same facility.

Smaller communities may have a designated intercity bus terminal or terminal services may be provided by a small, commercial

business. Such "terminals" sell tickets to, and provide shelter for, intercity bus patrons in addition to operating their primary business. In this study these are referred to as stations.

There are numerous "flag stops" located throughout the state where individuals may board or deboard a bus, but cannot purchase tickets. These stops are often located at shopping centers, small businesses, or in some cases, at a designated stop along a state highway. Flag stops have not been included in this study.

IC. CHARACTERISTICS OF THE STUDY AREA

The study area was the entire state of Michigan. This consisted of the upper and lower peninsulas, Michigan's 83 counties, and 13 urbanized areas. Michigan has...

- 9.3 million residents, eighth largest of the states, with 80 percent living in its 13 urbanized areas plus those portions of two out-of-state urbanized areas (South Bend and Toledo) which extend into Michigan. Some 85 percent reside in the southern half of the Lower Peninsula as defined by an imaginary line from Muskegon to Bay City (see Figure 1);
- over 57,0000 square miles or 36.5 million acres, twenty- third among all the states, with nearly 10 percent being owned by the federal government and 12 percent by the State;
- some 1,600 employers with 250 employees or more;
- over 90 percent of its four year college enrollment attend schools located in the southern half of the Lower Peninsula. This amounts to over one-quarter million students (see Figure 2);
- approximately 117,300 miles of roads carrying 64.2 billion annual vehicle miles of travel;
- some 9,500 miles of these are interstate freeways and state trunklines which carry 31.9 billion

annual vehicle miles of travel (8 percent of the roads carry nearly 50 percent of the traffic);

- a maximum driving distance of approximately 640 miles from boundary (New Buffalo to Ironwood). This is further than Detroit to St. Louis or Philadelphia.

There are approximately 200 intercity bus stations in Michigan. These vary from being intermodal terminals in urbanized areas to gas stations or stores in small communities selling tickets and providing shelter in addition to their primary commercial business. These terminals constitute the access points to the intercity bus regular-route system serving Michigan residents and visitors.

ID. STRATEGY TO MEET THE NEED

A number of tasks were designed as a strategy skeleton to meet the study need. These consisted of the following items.

- Categorize all 200 stations according to location, population served, passenger volume, and level of service.
- Field inspect a sampling of stations in selected categories. Determine ownership, type of leasing arrangements, type of facility and capacity, degree of intermodal capability, and condition of the terminal.
- Develop and apply criteria in establishing priority categories of terminal projects.
- Discuss survey results and analysis with intercity bus carrier representatives.

IE. CONTENT OF THE REPORT

The report presents a classification of all stations in Michigan (Part II). Of these, a selected number are discussed in more

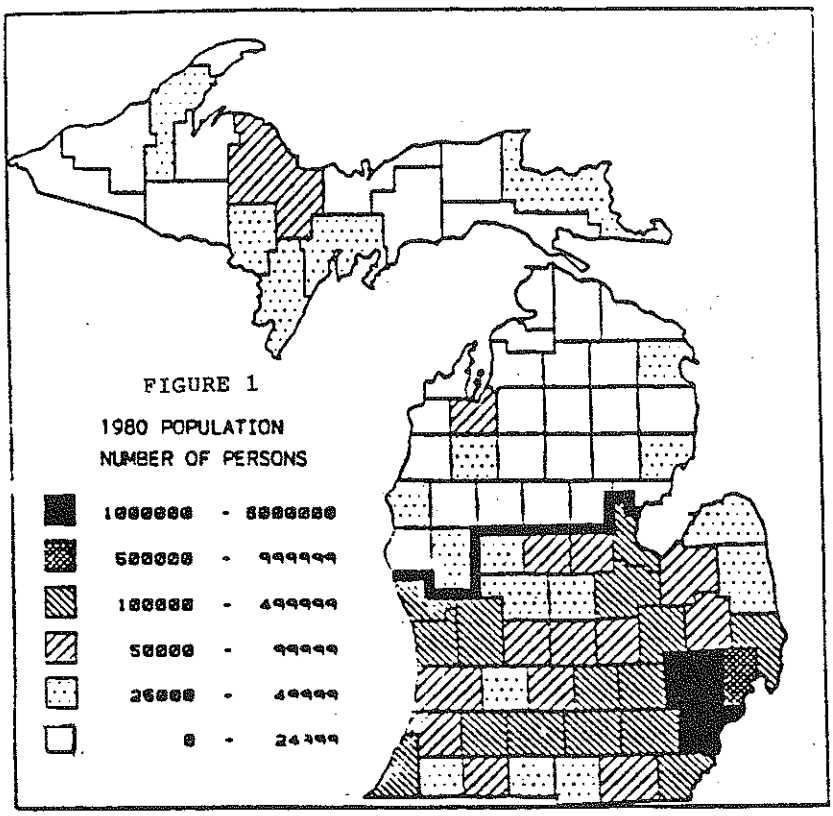


FIGURE 1
1980 POPULATION
NUMBER OF PERSONS
1000000 - 5000000
500000 - 999999
100000 - 499999
50000 - 99999
25000 - 49999
0 - 24999

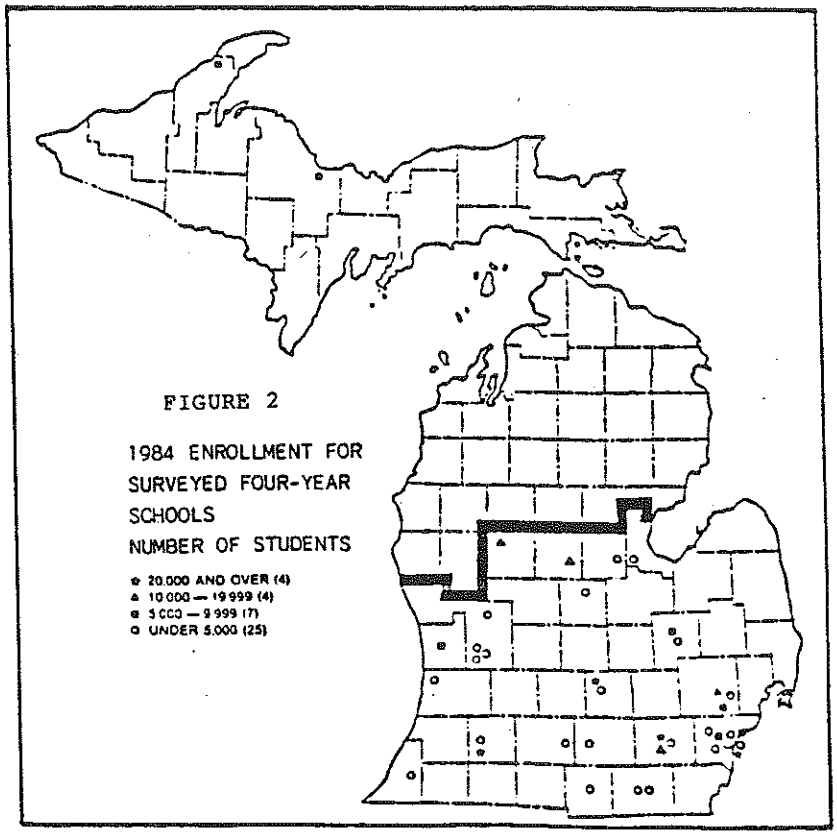
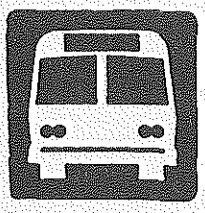


FIGURE 2
1984 ENROLLMENT FOR
SURVEYED FOUR-YEAR
SCHOOLS
NUMBER OF STUDENTS
☆ 20,000 AND OVER (4)
△ 10,000 — 19,999 (4)
□ 5,000 — 9,999 (7)
○ UNDER 5,000 (25)

detail using the results of a survey (described in Part III). The detailed examination includes terminal and site characteristics (Part IV) and financial characteristics (Part V). A set of findings and considerations (Part VI) have been developed based on the study tasks results.

PART II
TERMINAL CLASSIFICATIONS



II. TERMINAL CLASSIFICATIONS

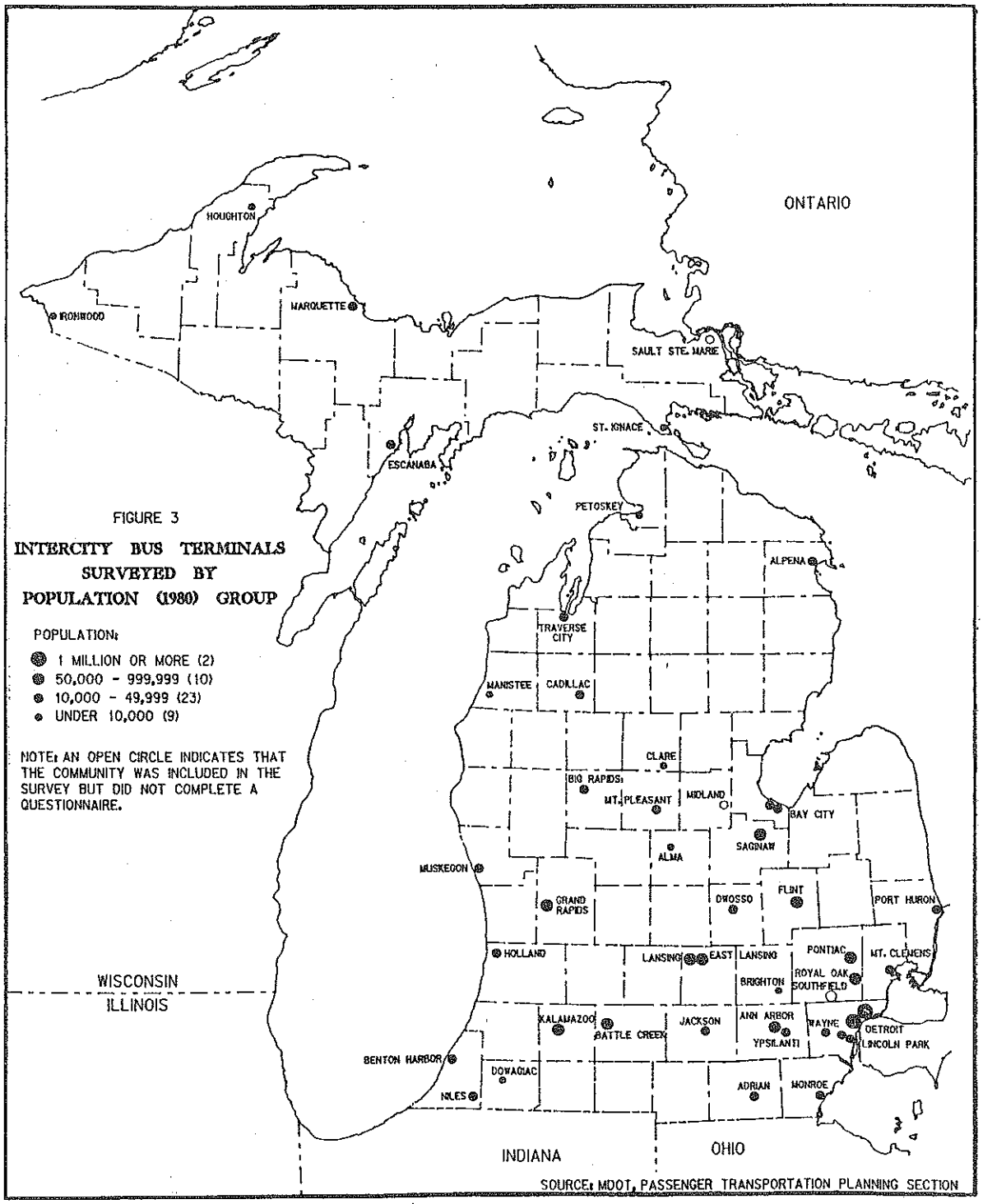
Michigan has 245 intercity bus terminals serving some 230 communities. These have been classified in this Michigan Intercity Bus Terminal/Station Study into four groups: (1) large metropolitan area, (2) small metropolitan area, (3) large community, (4) small community (see figures 3 & 4).

IIA. LARGE METROPOLITAN AREA

Metropolitan area consists of urbanized areas of one million or more population. Detroit is the only such area in Michigan. Within the Detroit urbanized area, population of 3,808,676, there are 16 community intercity bus terminals. These are located in the following communities:

Detroit (2)
Dearborn
Farmington
Inkster
Lincoln Park (2)
Livonia
Mt. Clemens
Pontiac
Plymouth
Romulus
Royal Oak
Southfield
Wayne
Wyandotte

For analysis purposes, only the two Detroit terminals have been classified as serving one million or more people. The remaining 14 terminals have been included in their respective population categories as their terminals characteristics are dictated by


ONTARIO
HOUGHTON
IRONWOOD
MARQUETTE
SAULT STE. MARIE
ST. IGNACE
ESCANABA
PETOSKEY
ALPENA
TRAVERSE CITY
MANISTEE
CADILLAC
CLARE
BIG RAPIDS
MT. PLEASANT
MIDLAND
BAY CITY
SAGINAW
ALMA
MUSKEGON
GRAND RAPIDS
OWOSSO
FLINT
PORT HURON
HOLLAND
LANSING
EAST LANSING
PONTIAC
MT. CLEMENS
ROYAL OAK
SOUTHFIELD
BRIGHTON
KALAMAZOO
BATTLE CREEK
JACKSON
ANN ARBOR
YPSILANTI
WAYNE
DETROIT
LINCOLN PARK
BENTON HARBOR
DOWAGIAC
NILES
ADRIAN
MONROE
WISCONSIN
ILLINOIS
INDIANA
OHIO
FIGURE 3
INTERCITY BUS TERMINALS SURVEYED BY POPULATION (1980) GROUP
POPULATION:
1 MILLION OR MORE (2)
50,000 - 999,999 (10)
10,000 - 49,999 (23)
UNDER 10,000 (9)
NOTE: AN OPEN CIRCLE INDICATES THAT THE COMMUNITY WAS INCLUDED IN THE SURVEY BUT DID NOT COMPLETE A QUESTIONNAIRE.
SOURCE: MDOT, PASSENGER TRANSPORTATION PLANNING SECTION

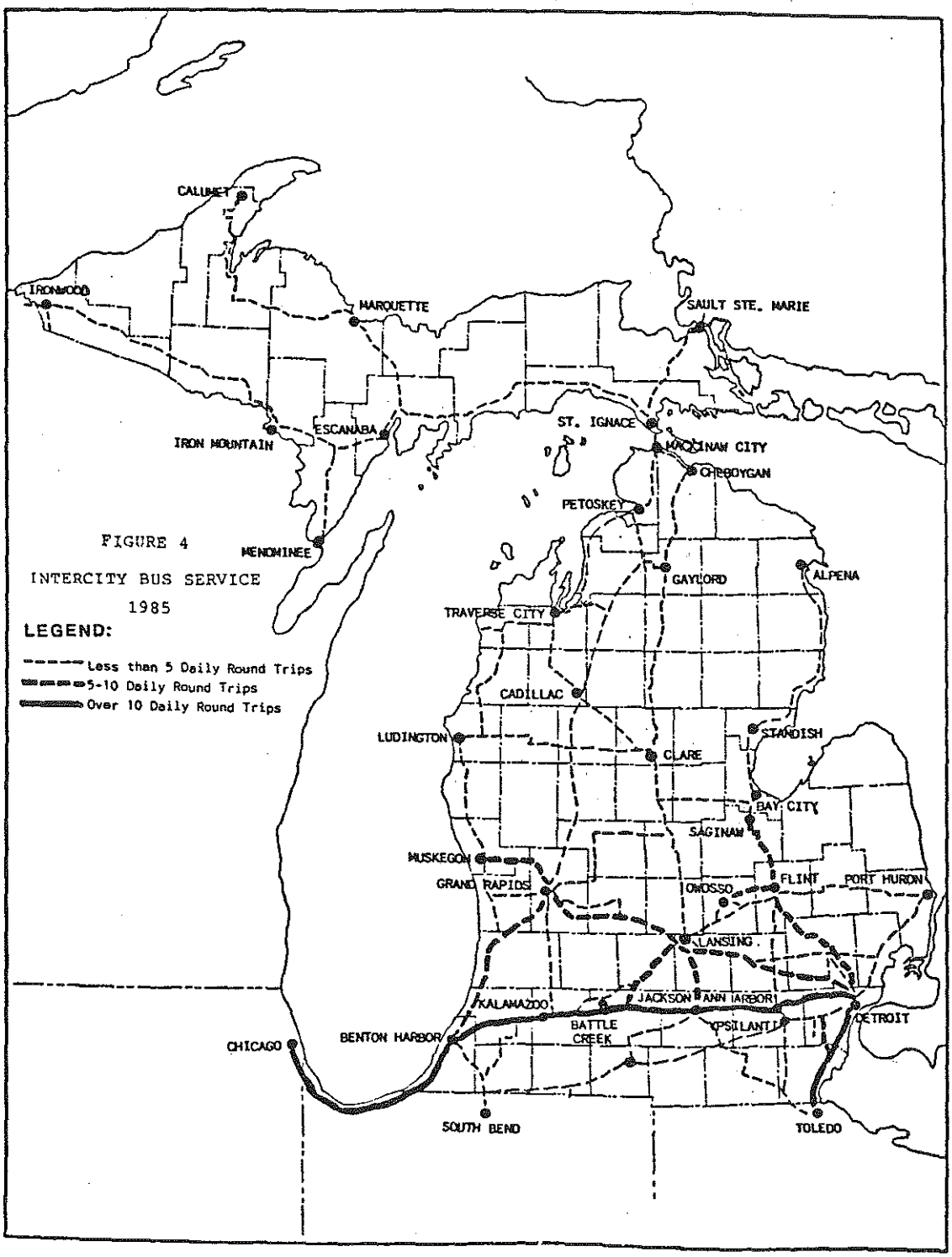


FIGURE 4

INTERCITY BUS SERVICE

1985

these community sizes more so than by Detroit. In addition, there are five special generator terminals: Detroit Metropolitan Airport, General Motors, Northville State Hospital, Oakland University, Willow Run Airport.

The level of service and passenger boardings at these terminals is usually quite high compared to the other terminal classifications. Detroit plus the other stops in the metropolitan area experience daily departures in excess of 50 and daily boardings well in excess of 500 persons (see Appendix H).

IIB. SMALL METROPOLITAN AREA

A small metropolitan area consists of the larger urbanized areas, other than Detroit where the central city itself is 50,000 or more. Altogether, there are 12 urbanized areas, other than Detroit, wholly in Michigan and two additional ones of which Michigan is a part. These areas contain 16 community terminals.

Ann Arbor/Ypsilanti (2)
Battle Creek
Bay City (2)
Benton Harbor/St. Joseph
East Lansing/Lansing (2)
Flint
Grand Rapids
Jackson
Kalamazoo
Muskegon
Niles/South Bend
Port Huron
Saginaw

For analysis purposes, however, cities in these urbanized areas were grouped with their population categories. This resulted in

Bay City, Benton Harbor, Jackson, Muskegon, Niles, Port Huron and Ypsilanti being included in the 10,000 to 50,000 population group. The eight remaining urbanized areas plus Dearborn, Livonia, Pontiac, Royal Oak, and Southfield comprise the 13 small metropolitan area terminals.

In addition, there are several special generator terminals in these areas: Federal Corrections Institution (Washtenaw County), Fort Custer (Kalamazoo County), State Hospital (Washtenaw County), Tri-City Airport (Saginaw County), University of Michigan (Washtenaw County), Western Michigan University (Kalamazoo County), Ypsilanti State Hospital (Washtenaw County). The level of service and passenger boardings at these terminals is moderately high. Most of these places have over five departures and 25 boardings daily. Some small metropolitan communities exceed 100 daily boardings (see Appendix H).

IIC. LARGE COMMUNITY

Large community consists of all cities with a population of 10,000 to 50,000. There are 16 Michigan communities with terminals or stations in this category.

Adrian	Marquette
Albion	Menominee
Alpena	Midland
Big Rapids	Monroe
Cadillac	Mount Pleasant
Escanaba	Owosso
Grand Haven	Sault Ste. Marie
Holland	Traverse City

For analysis purposes, these were supplemented with Farmington,

Inkster, Lincoln Park (2), Mt. Clemens, Romulus, Wayne, and Wyandotte located in the large metropolitan area and the eight communities in the small metropolitan areas listed previously. In addition, there is one special generator terminal in or near these communities: Traverse City Airport (Grand Traverse County).

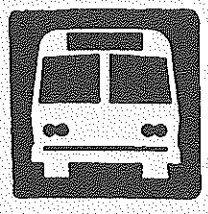
The level of service and passenger boardings at terminals in these communities is moderately low. Most communities have less than five departures daily and five to ten daily boardings (see Appendix H).

IID. SMALL COMMUNITY

Small community consists of cities with less than 10,000 population. There are 181 communities with intercity bus service in Michigan in this category. In addition, there are four special generators: Andrews College (Berrien County), Interlochen (Grand Traverse County), Kincheloe Air Force Base (Chippewa County), Michigan Technological University (Houghton County).

The level of service and passenger boardings at terminals in these communities is low. The number of daily departures is one or two and daily passenger boardings less than five persons (see Appendix H).

PART III
SURVEY PROCEDURES



III. SURVEY PROCEDURES

The intercity bus terminal survey was conducted during the latter part of 1985 and early 1986. Field visits were made by MDOT staff during November and December 1985 with follow-up activities extending into 1986. Survey questionnaires distributed and collected by Greyhound's Chicago regional office were obtained in the first few months of 1986. Consequently, the survey results provide a snapshot of 44 Michigan intercity bus terminals as of the end of 1985.

The survey procedures included (1) establishing terminal selection criteria, (2) selecting the terminals to be surveyed, (3) designing the questionnaire to be used in the survey, (4) conducting the survey of each terminal, and (5) executing a quality check on the data obtained.

IIIA. TERMINAL SELECTION CRITERIA

A number of criteria were developed to select the terminals to be surveyed. These included ...

- Cover the entire State of Michigan. The sample consisted of six terminals located in the Upper Peninsula, six in the northern part of the Lower Peninsula, and 32 in the southern part of the Lower Peninsula.

- Represent all urbanized areas. All 13 of Michigan's urbanized area terminals were included in the survey. This involved more than one terminal in four of these urbanized areas (Ann Arbor, Bay City, Detroit, and Lansing).

- Include communities of various population

size. The sample included terminals in communities of one million or more population (2), 50,000 to 100,000 (15), 10,000 to 50,000 (18), 5,000 to 10,000 (8), and 1,000 to 5,000 (1).

- Have several multimodal terminals. Some four terminals accommodated more than one transportation mode, either intercity rail and intercity bus or local transit and intercity bus (see Appendix D).

- Include several university communities. The sample included at least 11 terminals located in cities with universities or colleges (see Appendix H).

- Include all terminals in which the State has invested directly. All nine terminals to which the state of Michigan provided financial assistance as of December 1985 (see Appendix A) were included in the sample. The tenth State-Sponsored terminal, Albion, is also included in Appendix A, even though it was in the planning/design phase at the time of this Study. This facility was completed in 1986. In addition, the terminals in seven of the nine additional communities being considered for state funding were also included in the survey.

The distribution of the survey terminals by community size are presented in Figure 3.

IIIB. SAMPLE SIZE

There are some 245 terminals and stations in the state of Michigan. The study included 44 of these, an 18.1 percent sample.

Community Population	Surveyed Terminals	Total Terminals	% Sample
Under 10,000	9	181	5%
10,000 to 50,000	23	32	72%
50,000 to 1 Million	10	13	77%
1 Million or More	2	2	100%
Special Generators	0	17	0%
Total	44	245	18%

The return rate was 93.6 percent. Three of the 47 communities included in the sample did not participate. These consisted of Sault Ste. Marie, Midland, and Southfield. As there were a significant number of sample terminals in the 10,000 - 49,999 and 50,000 to 1 million groups no substitution was made for the non-responding communities.

IIIC. QUESTIONNAIRE DESIGN

A questionnaire was used to obtain sufficient data to address the study objectives. Among these was the need for information to assess state investment opportunities regarding intercity bus terminals. At the same time, the survey data should be comparable to similar surveys undertaken in other states and nationwide (1). Some considerations regarding questionnaire content, administration, form, and length are presented below.

IIIC1. Content

Specific subject areas included terminal location, terminal ownership, carrier and passenger arrangements, site characteristics and adequacy, terminal characteristics and condition, agents financial arrangement, terminal revenues, and terminal costs (see Appendix B).

IIIC2. Administration

The questionnaire was designed to be administered by an interviewer meeting with the terminal manager. This allowed some flexibility in questionnaire design as all questions did not have

to be totally self-explanatory. Also, questions did not have to provide all the depth of data described as this could be obtained through the tactful probing of the interviewer. At the same time, an effort was made to design the questionnaire to be self-administered as not all interviews could be obtained through the personal interview process. For instance, Greyhound preferred to distribute the questionnaires through their regional office in Chicago to their Michigan station managers and then forward the completed questionnaires to MDOT.

IIIC3. Form and Length

Generally, a set of choices plus "other (please specify)" were provided for each question. Considerable space was provided for notes obtained in probing by printing the questionnaire on only one side of each sheet. The specifying of choices also permitted the data to be easily processed into the computer file.

As there were some cases where the questionnaire would be self administered, the sequencing of questions was considered important. Consequently, location and characteristics-related questions were placed first and financial questions last. Also questionnaire length was a factor, particularly when self-administered. A length of 10 - 15 minutes was considered to be the maximum allowable length in self administering situations and about 30 minutes in personal interview situations.

IIID. QUESTIONNAIRE DISTRIBUTION & COLLECTION

Two methods were used to distribute and collect questionnaires: (1) mail-out/field interview (2) Greyhound mail-out/mail-back. Both methods relied on the voluntary cooperation of the intercity bus carriers serving Michigan and owning terminals. A packet was sent to all regular-route carriers serving the state (see Appendix C). This packet included (1) a letter describing the study, (2) a draft questionnaire, (3) a map depicting terminals to be included in the study, and (4) a list of these terminals including selected secondary data (see Appendix E). Their review and comment regarding the materials and their permission for MDOT to conduct the survey were sought. All carriers agreed to cooperate in the study, sending letters indicating their support.

IIID1. Mail-Out/Field Interview

This technique involved mailing the questionnaire to the station manager in advance, conducting a personal interview within a few days of their receipt of the questionnaire, making some observations of the terminal site and building, and returning with a completed questionnaire, notes and photos. This technique was used to obtain data for 29 of the 44 terminals surveyed (see Appendix F).

IIID2. Greyhound Mail-Out/Mail-Back

This process consisted of providing Greyhound's Chicago regional office with blank questionnaires in sufficient quantities for them to mail one to each of their terminals included in the Michigan Intercity Bus Terminal Study. Once the station manager

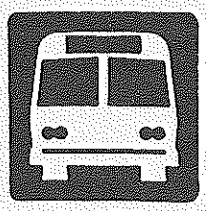
completed the questionnaire it was returned to Greyhound who, in turn, forwarded the completed questionnaires to MDOT. This technique was employed for 28 of the 44 terminals surveyed (see Appendix E). Some overlapping occurred where more than Greyhound used a given terminal.

IIIE. QUALITY CONTROL

Surveyors were briefed prior to visiting the terminals and station managers. This emphasized the need to accurately assess the terminal and site characteristics, to probe by asking questions of the station managers, and to be equipped with certain materials when conducting the survey (see Appendix G).

Follow up telephone calls to station managers and the Greyhound Chicago regional office were made to fill data gaps and correct/explain apparent data anomalies. One major data gap which could not be filled, even with follow-up actions, was the economic portion of the questionnaire (questions 14-17).

PART IV
TERMINAL CHARACTERISTICS



IV. TERMINAL CHARACTERISTICS

Terminal characteristics are discussed according to location, ownership, age, accommodations, condition, and individual terminal characteristics. Terminals in this chapter include both terminals and stations. Of the 44 surveyed in Michigan, 36 were terminals and 8 were stations.

IVA. LOCATION

Two aspects regarding location are to intercity bus terminals: the distribution of terminals throughout the state and the location of a terminal within a given community. Statewide distribution of terminals is addressed under "Community Size" whereas the location within a community is discussed under "Type of Area."

IVA1. Community Size

Intercity bus service providers use 245 terminals and stations to serve Michigan residents and visitors. Data was analyzed for 44 of these: 2 in the state's one large metropolitan area, 10 in small metropolitan areas, 23 in communities of 10,000 to 49,999 population and 9 in communities with under 10,000 population (see Appendix H).

IVA2. Type Of Area

Most (6 of 10) intercity bus terminals surveyed are on the fringe of the downtown area. These are viewed as having more security problems than those in other locations. Another 2 of 10 are in

the heart of downtown. One of 10 is located at a freeway interchange. This distribution is generally true for each of the four community sizes (see Table 1).

IVB. OWNERSHIP

Intercity bus terminals and stations in Michigan are owned by intercity bus companies, commission agents, and governmental entities. Two of 10 of those surveyed are owned by intercity bus companies, five of 10 by commission agents, two of 10 by the local community, and one of 10 by the State of Michigan.

Most of these located in metropolitan areas and larger communities are owned by intercity bus carriers; most of these in smaller communities by commission agents. Greyhound and Trailways own or lease most of the terminals surveyed, approximately 50 percent and 10 percent respectively. Three of the terminals (Battle Creek, Cadillac, and Houghton) are sponsored by the state and leased to the community/carrier (see Table 2).

IVC. AGE

Some 50 percent of the terminals and stations in Michigan were constructed or last rehabilitated in the eighties, and an additional 39 percent in the seventies.

Year	Under 10,000	10,000 to 50,000	50,000 to 1 Million	1 Million & Over	Total No.	%
1980 or later	5	6	5	1	17	52%
1970-79	2	9	2	0	13	39%
1960-69	0	0	0	0	0	0%
1950-59	0	0	1	1	2	6%
Before 1950	0	0	1	0	1	3%
Total	7	15	9	2	33	100%

Further, all four community sizes have their "share" of new or rehabilitated terminals and stations. Of the 33 terminals operating, the only three before 1970 are located in the small metropolitan and metropolitan areas.

IVD. ACCOMMODATIONS

Accommodations of intercity bus terminals have been stratified according to the structure itself and the site. In some instances, modifications may be made to one or the other of these to make it a suitable terminal or station. In others, no amount of structural improvements will overcome the inability to improve the site. Also, while location does help in the provision of some accommodations, particularly site, it has been discussed earlier in this section. For instance, locating a terminal adjacent to a shopping center may offer opportunities for off-street, drop-off, pick-up and automobile parking.

IVD1. Structure

All terminals regardless of age (see Table 3) and community size (see Table 4) have ticket processing space and restrooms, and most have seats/benches and vending machines. Few have the other

TABLE 1

TERMINAL LOCATION BY COMMUNITY POPULATION
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

Type of Area	Under 10,000	10,000 - 49,999	50,000 - 999,999	1 million or more	Total
Heart of Downtown	3	3	2	1	9
Fringe of Downtown Area	5	15	7	1	28
Freeway Interchange	1	3	1		5
Residential & Business		1			1
Near College		1			1
Total	9	23	10	2	44

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Planning Section, Surface Systems Unit.

TABLE 2

TERMINAL OWNERSHIP OR LEASOR BY COMMUNITY POPULATION
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

	Under 10,000	10,000 to 50,000	50,000 to 1 million	1 million & over	Total
Intercity Bus Carrier		3	5	1	9
Commission Agent	6	17		1	24
Local Community	2	2	4		8
State/Leased to Community	1	1	1		3
Total	9	23	10	2	44

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Planning Section, Surface Systems Unit.

TABLE 3

TERMINAL BUILDING ACCOMMODATIONS BY YEAR CONSTRUCTED/REHABILITATED
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

	Before 1950		1950 1959		1960 1969		1970 1979		1980 or later		Indicated/ Not Dated	
Feature	Yes	Unknown/ None	Yes	Unknown/ None	Yes	Unknown/ None	Yes	Unknown/ None	Yes	Unknown/ None	Yes	Unknown/ None
Ticket Processing Space	1		2		1		11		11	1	15	2
Restrooms	1		2		1		10	1	10	2	13	4
Concession Stand		1		2		1	1	10	3	9	1	16
Seats/Benches		2	2	2	1	1	10	12	12	12	14	20
Large Lounge Area		1		2		1		11	1	11		17
Vending Machines	1		2		1		8	3	7	5	11	6
Video Games		1	1	1	1		3	8	1	11	1	16
Telephones		1	2		1		4	7	2	10	5	12
Lockers		1	2			1	3	8	2	10	3	14

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Planning Section, Surface Systems Unit.

TABLE 4

TERMINAL BUILDING ACCOMMODATIONS BY COMMUNITY POPULATION
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

	Under 10,000		10,000 49,999		50,000 999,999		1 million or more	
Feature	Yes	Unknown/ None	Yes	Unknown/ None	Yes	Unknown/ None	Yes	Unknown/ None
Ticket Processing Space	9		21	3	9		2	
Restrooms	6	3	20	4	9		2	
Concession Stand	1	8	1	23	3	6		2
Seats/Benches	6	3	21	3	8	1	2	
Large Lounge Area		9		24	1	8		2
Vending Machines	4	5	17	7	7	2	2	
Video Games		9	4	20	2	7	1	1
Telephones	2	7	6	18	4	5	2	
Lockers	1	8	3	21	4	5	2	

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Planning Section, Surface Systems Unit.

TABLE 5

STRUCTURE FEATURE AVAILABILITY BY COMMUNITY POPULATION
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

Structure Feature	Under 10,000	10,000 to 50,000	50,000 to 1 million	1 million or More	Total
Ticket Processing	100%	100%	100%	100%	
Waiting Area	100%	88%	100%	100%	
Adequate Seating	67%	88%	89%	100%	
Drinking Water					
Public Restrooms	67%	95%	100%	100%	
Public Telephones	22%	25%	44%	100%	
Interior Lighting					
Terminal Security					

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Planning Section, Surface Systems Unit.

TABLE 6

ADEQUATE SITE FEATURE AVAILABILITY BY COMMUNITY POPULATION
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

Site Feature	Under 10,000	10,000 to 50,000	50,000 to 1 million	1 million or more	Total
Location Convenience	9	19	10	2	40
Bus Parking	6	15	10	2	33
Auto Parking Short Term	6	18	6	1	31
Auto Parking Long Term	2	5	2		9
Site Security	8	10	7	2	27

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Section, Surface Systems Unit.

TABLE 7

NUMBER OF ON SITE PARKING SPACES BY TERMINAL LOCATION
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

Parking Spaces	Heart of Downtown Area	Fringe of Downtown Area	Freeway Interchange	Other	Total
Under 10	2	3	1	1	7
10-24	1	3	2	1	7
25-49	1	2			3
50-99		1			1
100-199					
200 or more	1				1
None		1			1
Total	5	10	3	2	20

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Planning Section, Surface Systems Unit.

TABLE 8

NUMBER OF ON-SITE PARKING SPACES BY COMMUNITY POPULATION
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

Parking Spaces	Under 10,000	10,000 to 50,000	50,000 to 1 million	1 million or more	Total
Under 10		5	2		7
10-24	1	4	2		7
25-49		2		1	3
50-99			1		1
100-199					
200or more	1				1
None		1			1
Total	2	12	5	1	20

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Planning Section, Surface Systems Unit.

TABLE 9

RATING OF TERMINAL BUILDING & SITE: HEART OF DOWNTOWN
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

Feature	Poor	Fair	Satis-factory	Good	Very Good	Unknown/ None
Location Convenience		2		4	3	
Location Security		2	1	3	2	1
Cleanliness				6	2	1
State of Repair			2	3	3	1
Schedule Information				7	2	
Waiting Area				7	1	1
Parking Area Short Term			2	2	4	1
Parking Area Long Term	1	2	2	1	1	2
Parking Area Cost		1	1	1	2	4
Parking Area Security		3	1	1	1	3
Hours of Operation		1	1	5	2	

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Planning Section, Surface Systems Unit.

TABLE 10

RATING OF TERMINAL BUILDING & SITE: FRINGE OF DOWNTOWN
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

Feature	Poor	Fair	Satis-factory	Good	Very Good	Unknown/ None
Location Convenience		3	4	12	9	
Location Security	1	6	5	4	4	8
Cleanliness	1	3	6	10	7	1
State of Repair	2	1	11	7	5	2
Schedule Information	3	1	1	18	5	
Waiting Area		4	8	10	5	1
Parking Area Short Term	1	3	4	14	4	2
Parking Area Long Term	4	2	1	4	2	15
Parking Area Cost		1	3	1	4	19
Parking Area Security	1	5	2	3	4	13
Hours of Operation			8	6	4	10

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Planning Section, Surface Systems Unit.

TABLE 11

RATING OF TERMINAL BUILDING & SITE: FREEWAY INTERCHANGE
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

Feature	Poor	Fair	Satis-factory	Good	Very Good	Unknown/ None
Location Convenience					5	
Location Security			2		3	
Cleanliness		1		2	2	
State of Repair		1	1	1	2	
Schedule Information			1	1	3	
Waiting Area		1	1		3	
Parking Area Short Term			2		3	
Parking Area Long Term			2	1		2
Parking Area Cost					1	4
Parking Area Security		1			1	3
Hours of Operation			1	1	1	2

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Planning Section, Surface Systems Unit.

TABLE 12

RATING OF TERMINAL BUILDING & SITE: OTHER
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

Feature	Poor	Fair	Satis-factory	Good	Very Good	Unknown/ None
Location Convenience			1	I		
Location Security					1	1
Cleanliness					1	1
State of Repair			1		1	
Schedule Information				1	1	
Waiting Area		1			1	
Parking Area Short Term		1			1	1
Parking Area Long Term					1	1
Parking Area Cost					1	1
Parking Area Security					1	1
Hours of Operation			1			

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Planning Section, Surface Systems Unit.

features regardless of age, but the larger communities are more likely to have them than the smaller communities.

Certain items should be included as minimum standards for intercity bus terminals and stations (see Table 5). These include: (1) ticket processing space, (2) environmentally controlled passenger waiting area open to the public at times of bus arrivals and departures, (3) adequate seating, (4) drinking water, (5) public rest rooms, (6) public telephones accessible at all times, (7) adequate interior and exterior lighting, (8) adequate passenger security, (9) parking for vehicles dropping off or picking up passengers (2). These items relate to safety and comfort, and are consumer or user oriented. Additional features also are important to most terminals such as package express, baggage checking, schedule information, and food service (3).

IVD2. Site

Some of the items identified as minimum standards apply to the site on which the terminal is located instead of, or in addition to, the terminal structure. These include the obvious such as parking for buses, dropping off and picking up passengers, parking for personal vehicles transporting friends and relatives to and from the terminal, interior lighting, public telephones located outside the terminal structure, and adequate passenger security outside the terminal structure (see tables 6 through 8).

IVE. CONDITION

No distinction regarding condition can be made between terminals located in the heart and fringe of downtown and those located at freeway interchanges and other parts of the community (see tables 9 through 12).

Feature	Heart/Fringe of Downtown P/F	Sat	G/VG	Freeway Interchange & Other Parts P/F	Sat	G/VG
Cleanliness	11%	17%	72%	17%	0%	83%
State of Repair	9%	38%	53%	14%	29%	57%
Waiting Area	11%	23%	66%	29%	14%	57%
Average	11%	26%	63%	20%	15%	65%

However, those located in metropolitan areas are considered to be in better condition than those located in non-metropolitan areas.

IVF. INDIVIDUAL TERMINAL CHARACTERISTICS

Selected characteristics and special features of the 44 surveyed terminals and stations are briefly described below. This is intended to provide a glimpse or flavor of each terminal as seen through the eyes of the terminal manager and/or surveyor.

Adrian

This terminal is located in a smaller community in the southeast part of the state. It is located in a building which is privately owned and the Shortway Northstar service is operated as a side business to the owner's main concern. While it is a smaller operation, ticket processing space, rest rooms and three seats

for waiting passengers are provided in a clean, well organized atmosphere.

Alma

This terminal is located in a pleasant well-kept building in the heart of Alma's downtown area. The surveyors were very impressed with this operation; from the clean, large well-decorated waiting area to the friendly courteous employees. Please note the comment, "We leave the outside door unlocked so people can get in from the cold after hours." This terminal serves Shortway Northstar, G & M Coaches and Alma's local public transportation.

Alpena

This terminal is located on the fringe of the downtown area. It is owned by a private corporation and services Greyhound.

Ann Arbor

Greyhound owns this terminal located in the heart of the downtown area. The staff was knowledgeable and organized. It serves Greyhound, Shortway Northstar, Michigan Trailways, Tower Bus, and Ann Arbor's local transit system.

Battle Creek

This modern intermodal terminal in the heart of the downtown area was built in 1982 and serves Amtrak, Greyhound, Indian Trails, and the city's local transit system. Surveyors found it clean and spacious with courteous, helpful management. The concession

stand was a welcome addition and the rest rooms clean and well attended.

Bay City

There are two bus terminals in this city, one serving Greyhound and one serving Michigan Trailways. Both are on the fringe of the downtown area within walking distance of each other.

Greyhound

This terminal is owned by Greyhound and also serves Indian Trails. It has a waiting room which has 12 seats for waiting passengers and such accommodations as vending machines, video games, telephones, and lockers.

Michigan Trailways

Staff was unable to interview the manager of this terminal. However, these observations were noted. The bus company shares this property with a travel agency and apparently has two seats for waiting passengers. The terminal is clean and in a good state of repair.

Benton Harbor

This terminal, in the heart of the downtown area, is owned by Greyhound and also serves Indian Trails and Indiana Motor Bus. It has 12 seats for waiting passengers and vending machines. There are three designated bus bays on the site and automobile parking for 30 vehicles.

Big Rapids

This terminal is located near Ferris State College. The building is privately owned and divided into two offices. One section houses a real estate office, the other acts as the bus terminal

which serves Shortway Northstar and G & M Coaches. Automobile parking is available on the terminal site and on the street. The station has ample ticket processing space, rest rooms, vending machines, and seats for eight waiting passengers.

Brighton

The terminal in Brighton is located at a freeway interchange. It is privately owned and serves Greyhound, Shortway Northstar, and Michigan Trailways. Some of the other enterprises offered by the agent are a party store, restaurant, and gas station. The station also features ticket processing space, rest rooms and has 15 seats for waiting passengers. Buses are parked to load and unload on a site specified for bus use.

Cadillac

Shortway Northstar and Cadillac-Wexford County Transit operate out of a state-sponsored building located at the fringe of the downtown area. Accommodations include rest rooms, beverage and candy machines, benches for waiting passengers, and a telephone. Buses are parked on the side of the street to load and unload.

Clare

This terminal is located in a restaurant in the heart of the downtown area, and services Greyhound, Shortway Northstar, G & M Coaches, and the local public transit system. Buses load and unload in designated areas of the adjacent municipal lot, automobile parking is also in this lot.

Detroit

There are two terminals in Detroit, one is owned by Greyhound, the other serves Michigan Trailways.

Greyhound

This large terminal, constructed in 1957, provides 25 designated bus bays. It serves not only Greyhound but also Shortway Northstar, Tower Bus Lines, and American Trails. It also houses the following numerous accommodations; a large ticket processing space, rest rooms, vending machines, 65 seats for waiting passengers, a restaurant, video games, telephones and lockers.

Michigan Trailways

Located on the fringe of the downtown area, this building, owned by a private corporation, was converted to terminal use in 1983. It serves Michigan Trailways, Shortway Northstar, and Trailways Inc. Surveyors were impressed with the clean airy atmosphere through-out. Accommodations include a large ticket processing area, rest rooms, vending machines, 50 seats for waiting passengers, lockers and telephones.

Dowagiac

The community of Dowagiac owns this terminal on the fringe of the downtown area. This older station, built around 1905, was last rehabilitated in 1977 and serves as a staging area for Amtrak. Surveyors were impressed with the refurbished interior with such accommodations as a ticket processing space, rest rooms and pew style benches for waiting passengers. Security was given a "very good" rating as the area is well lit, and police alarmed.

East Lansing

East Lansing's terminal is on the fringe of the downtown area and adjacent to the Michigan State University campus. This station

serves Greyhound, Indian Trails, and Shortway Northstar. It has Western Union facilities. Accommodations include a ticket processing space, rest rooms, 42 seats for waiting passengers, vending machines, video games, and telephones.

Escanaba

The Greyhound terminal is located on the fringe of Escanaba. The building is privately owned with a one year lease. Buses are parked to load and unload on a site specified for bus use. Vending machines, rest rooms, a ticket processing space, and seats for 40 waiting passengers are included in accommodations.

Flint

The local community owns the Flint terminal which is located on a freeway interchange. This is a temporary facility being used until the permanent building is ready for occupancy. Surveyors, however, found this to be a clean, neat, well organized facility. The agent and her staff were courteous, helpful and well-informed. This station serves Greyhound, Indian Trails, Brooks Charters and Tours, Michigan Trailways, and the local transit system.

Grand Rapids

The Grand Rapids terminal, constructed in 1950, has a large waiting area with a capacity of 150 persons, and six designated bus bays. This station is owned by Greyhound and also serves Shortway Northstar and G & M Coaches.

Holland

The Holland station, located on a freeway interchange, serves Greyhound, Indian Trails, Shortway Northstar, and the local cab company. The accommodations include ten seats for waiting passengers, rest rooms, a ticket processing space, and vending machines. The overall condition of the terminal has been rated very good.

Houghton

The surveyors were unable to interview the terminal agent; however, the following observations were made. This terminal is located in the heart of the downtown area, near the Michigan Tech. University campus. The overall condition of the station was rated as good. Schedule information is posted on the door, along with the hours of operation. Beautiful scenery!

Ironwood

This terminal, in the Western Upper Peninsula, is located on the fringe of the downtown area. The structure, built in the 1800's, serves Greyhound, Wisconsin Michigan Trailways, Four Star, and Michigan Trailways. The station has six seats for waiting passengers and is run by a very helpful, knowledgeable couple.

Jackson

This agent services two bus lines, Greyhound and Shortway Northstar. The building is situated near a freeway interchange, and adjacent to a large shopping center. The accommodations

include a ticket processing area, rest rooms, 12 seats for waiting passengers, and vending machines.

Kalamazoo

Located on the fringe of the downtown area, this nice older terminal, owned by the community, was rehabilitated in 1977. It is an intermodal terminal serving Amtrak, Greyhound, and Indian Trails. Also located in the building are a concession area and a small crafts store. Security is good. Please see the comment; "A plus for security. There is good response by police and special ordinances to restrict loiterers making them easier to kick-out."

Lansing

Greyhound owns this building located on the fringe of the downtown area in Michigan's capital city. The station also serves Indian Trails and Shortway Northstar. Ticket processing space, rest rooms, vending machines, and a large waiting area are among the accommodations. Security and state of repair were rated low in this terminal. However, schedule information, hours of operation, and short term parking were rated good.

Lincoln Park

Two terminals were surveyed in this community.

Greyhound

This building is privately owned and leased by Greyhound. It is located on the fringe of the downtown

area. Buses are parked to load and unload on a site which can be used by others.

Trailways, Inc.

This station is located in a party store on a freeway interchange. There are approximately 10 spaces for automobile parking on the premises with no long term parking available.

Manistee

This station was operated until December of 1985. At this time a regular route was abandoned along the northwest corridor of the state. The state is currently investigating the possibility of continuing this route by subsidizing a bus line. Surveyors found this to be a very clean, pleasant station. It was run by people who were in the business to provide a service. Please note these comments: "We open weekends when buses are here." "The businessmen here solicited me to be the agent 19 years ago as they saw that the service was needed for our area."

Marquette

This terminal located on the fringe of the downtown area is owned by the local community. It is a newer terminal constructed in 1982 and serves Greyhound, Northern Michigan Coaches, and the local transit system. There are also several non-transportation related offices in this building. Accommodations include ticket processing spaces, rest rooms, 29 seats for waiting passengers and vending machines.

Monroe

The terminal is located three blocks from the downtown area. It is owned by the agent and serves Greyhound. The building was converted to terminal usage in 1979 and contains a ticket processing area, rest rooms 12 seats for waiting passengers, and vending machines.

Mt. Clemens

Tower Bus Lines is served by this station on the fringe of the downtown area. Location convenience was rated very good. There were six seats for waiting passengers.

Mt. Pleasant

This terminal is located three blocks from the Central Michigan University campus. It is a side business for the agent whose main concern is a tire store. Companies served are Greyhound, Shortway Northstar, and the local transit system.

Muskegon

Muskegon's bus terminal is in the heart of the downtown area. It is privately owned and serves Greyhound, Shortway Northstar, the local transit system, and taxicab companies. There is a ticket processing space, rest rooms, eight seats for waiting passengers, video games, vending machines, telephones, and lockers.

Niles

This terminal was constructed in 1984 and is owned by the local community. It is on the fringe of the downtown area. It serves

Indian Trails, Indiana Motor Bus, and the local public transit system. Both the agent and the surveyors agreed that the terminal is in very good condition. Please note the comment: "This is a small town - we really give personal service."

Owosso

This is the headquarters for Indian Trails. It is located in the same area where the company was founded in 1910. The building was last rehabilitated in 1976, at this time the seating area was limited, a restaurant was eliminated, and office space was enlarged. Condition of the terminal was rated good to very good. The personnel were extremely helpful and knowledgeable.

Petoskey

When this agent was interviewed in November 1985 she was in the process of searching for a new site for the station and her other business a book store. Zoning was of a particular concern to her. She was very knowledgeable and helpful to surveyors and clients.

Pontiac

Greyhound holds the lease agreement on this building located on the fringe of the downtown area. Also served from this building is the local transit system. There are 10 designated bus bays on the site, with automobile parking for 70. Ticket processing space, rest rooms, 80 seats for waiting passengers, and vending machines are among the accommodations.

Port Huron

This terminal, located on the fringe of the downtown area, is privately owed and leased by the agent on a month to month basis. The station serves Tower Bus and Brooks Charters and Tours. Parking is available nearby on an off-street site or at the city parking lot. Accommodations include a ticket processing space, rest rooms, 11 seats for waiting passengers, and vending machines.

Royal Oak

At the time of the interview and processing of questionnaires this terminal was not yet completed. It was estimated that the terminal should be operational by December 1985. It is owned by the local community and serves Greyhound and the local transit system. Accommodations would include ticket processing space, rest rooms, and seats for 20 to 30 waiting passengers.

Saginaw

Indian Trails owns this terminal on the fringe of the downtown area. The station also serves Greyhound and Michigan Trailways with the central transfer point for the City's transit system across the street. Surveyors were impressed with the cleanliness, pleasant atmosphere and personnel in this station.

St. Ignace

This terminal is located in an automobile body shop on the fringe of the downtown area. The bus lines served are Greyhound and

Shortway Northstar. Buses are parked on the street or shoulder to load and unload passengers. Automobile parking is available on the street in designated parking lanes.

Traverse City

This building, on the fringe of the downtown area, was constructed as a bus terminal around 1950. It is privately owned and leased by Shortway Northstar. Accommodations include a large ticket processing space, rest rooms, vending machines, 30 seats for waiting passengers, video games, telephones, and lockers. Brochures of possible interest were posted for passengers. Surveyors were impressed with the agent's knowledge of the business.

Wayne

This terminal is located on the fringe of the downtown area near the city boundary. The building is owned by a private individual and rented by the agent who serves Greyhound. Buses are parked to load and unload passengers on a site that can be used by others.

Ypsilanti

This terminal is on the fringe of the downtown area. It is privately owned and leased by Greyhound. It also serves Shortway Northstar. Accommodations include a ticket processing space, rest rooms, vending machines, and 11 seats for waiting passengers.

PART V
FINANCIAL CHARACTERISTICS

V. FINANCIAL CHARACTERISTICS

The financial characteristics of Michigan's intercity bus terminals include (1) the agent's arrangements and income, (2) the terminal's operating costs, and (3) ticket sales and other revenues. These are discussed using the 17 terminals for which survey data was reported as the basis.

VA. AGENT ARRANGEMENTS & INCOME

Terminal commission agents have arrangements with an intercity bus carrier, local public transportation provider, or the local community. Most of the agents are employed by an intercity bus carrier (see Table 13).

The percentage of ticket sales, package express sales, and charter sales are the common financial arrangements with an hourly wage being used occasionally. Percentage of ticket sales is virtually always used in Michigan as one basis of renumeration. The percentage varies from about 5 percent to more than 20 percent depending on the size of the community served. Ten and 15 percent are the most common as some 80 percent of the terminals surveyed are evenly split between these categories. Five percent is used only in communities having less than 10,000 population (see Table 15). Percentage of package express sales are often used in combination with passenger ticket sales as the financial arrangement with agents. This percentage is always at least 10 percent and often 15 percent. This is always part of

the financial arrangement in urbanized areas and one-third of the time in smaller communities. Percentage of charter sales are always included in the financial arrangement in urbanized areas are to a lesser extent in smaller communities (about one-third of the time.) These figures are similar to Oregon's 10 percent of sales and collections, typical for smaller cities (5).

The median income of terminal agents approaches $20,000 with higher annual incomes being realized by terminal agents in urbanized areas than in the smaller communities (see Table 14). The income distribution of agents is similar in the "Under 10,000" and "10,000 to 50,000". In urbanized areas, the percentage of charter sales feature is always included in their financial arrangement.

VB. TERMINAL OPERATING COSTS

The cost of operating an intercity bus terminal varies with the size of the community being served and other factors. Generally speaking, a terminal serving a large metropolitan area incurs more than $200,000 annually in operating costs. In small metropolitan areas, terminal operating costs are in the $50,000 plus category. For large and small communities, these costs range from a few thousand up to $30,000.

Rent and utilities comprise at least 50 percent of terminal operating costs regardless of community size. Other costs include property taxes, operating taxes/licenses, insurance,

terminal depreciation/amortization, furniture and office equipment depreciation, and other terminal-associated expenses. With the possible exception of operating taxes/licenses, these items cost several thousand dollars each.

VC. TICKET SALES & OTHER REVENUES

The major source of revenues is regular-route ticket sales representing over 70 percent of all revenues. Regular-route package, charter, and other services such as Western Union communication comprise the remaining revenue sources (see Table 16).

The amount of revenue generated per terminal varies with community size. Metropolitan area terminals generate revenues approaching $1 million annually; community terminals a figure toward $100,000 annually. The average terminal array of percentages is shown below.

	Community	Metropolitan Area
Regular-route ticket sales	66%	69%
Regular-route package	22%	11%
Charter	0%	17%
Other	12%	3%
Total	100%	100%
Number of Observations	10	3

Of course, these revenues are used to offset more than the agent's salary and terminal operating costs. Additional costs include driver wages, fleet maintenance, and administrative costs. Intercity carriers indicate that the cost of operating a terminal is 15 percent (order of magnitude) of ticket sales (2).

TABLE 13

WHO PROVIDES OR HIRES THE AGENT?
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

Entity	Under 10,000	10,000 to 50,000	50,000 to 1 million	1 million & over	Total
Intercity Carrier	5	17	8	2	32
Local Public Transportation		2			2
Other (City)	2				2

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Planning Section, Surface Systems Unit.

TABLE 14

AGENT'S ANNUAL INCOME BY COMMUNITY POPULATION
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

Income	Under 10,000	10,000 to 50,000	50,000 to 1 million	1 million & Over	Total
Under $5,000	2	2	0	0	4
$5,000 - 9,999	1	1	0	0	2
$10,000 - 14,999	1	2	0	0	3
$15,000 - 19,999	0	0	0	0	0
$20,000 or more	2	2	3	1	8
Total	6	7	3	1	17

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Planning Section, Surface Systems Unit.

TABLE 15

AGENT INCOME SOURCES BY COMMUNITY POPULATION
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

Source c/	Under a/ 10,000 5%	10%	15%	10,000 to 50,000 5%	10%	15%	50,000 b/ to 1 million 5%	10%	15%	1 million & Over 5%	10%	15%	20%	Total 5%	10%	15%	20%
% of Ticket Sales	2	1	3	0	3	3	0	2	1	0	0	0	1	2	6	7	1
% of Package Express Sales	0	2	4	0	3	3	0	2	1	0	0	1	0	0	7	8	0
% of Charter Sales	0	2	0	1	1	0	0	3	0	0	1	0	0	1	7	0	0

Notes: a/ Hourly wage paid in addition to percentage of sales at one terminal in a city with under 10,000 population.
b/ Western Union contract supplements percentage of ticket, package, and charter sales at two urbanized area terminals.
c/ Some sales percentages were not exactly 5,10,15 or 20. These were tabulated with the nearest percentage depicted in the table.

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Planning Section, Surface Systems Unit.

TABLE 16

ANNUAL TICKET SALES ($000) BY COMMUNITY POPULATION
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

Source	Under 10,000 No.	$	10,000 to 50,000 No.	$	50,000 to 1 million No.	$	1 million & Over No.	$	Total No.	$
Regular-route	4	236	6	291	2	1050	1	680	13	2257
Regular-route package	2	53	4	42	2	250	1	75	9	420
Charter	-	--	-	--	2	375	1	50	3	425
Other a/	1	10	-	--	1	24	-	--	2	34
Number of Terminals/Total Revenue	4	299	6	333	2	1699	1	805	13	3136

Notes: a/ "Other" includes revenues received from Western Union.

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Planning Section, Surface Systems Unit.

PART VI
FINDINGS AND CONSIDERATIONS

VI. FINDINGS & CONSIDERATIONS

Findings have been developed for various features of intercity bus terminals and several prevailing perceptions addressed. Considerations are suggested regarding many of these findings and perceptions. Finally, the limitations associated with the study are identified.

VIA. FINDINGS

1. Finding: Location. Most terminals are located in downtown areas, although freeway interchanges are used as an alternative. Of the surveyed terminals, 84 percent were located in the heart of downtown or its fringe with most of the remainder being at freeway interchanges. These percentages are fairly consistent

Area Type	Number	%
Heart of Downtown	9	20%
Fringe of Downtown Area	28	64%
Freeway Interchange	5	11%
Other	2	5%

regardless of community size. The terminals in the downtown area tend to be older terminals and those at freeway interchanges are newer.

> Consideration: Evaluate the location of intercity bus terminals on a case-by-case basis as to whether community needs can best be met with a downtown terminal or if another location is preferable. Location determinants include (1) access percentages (walk, local transit, automobile, etc.), (2) schedule differential between downtown and interchange terminal location, (3) cost factors differential

(construction, maintenance, rent, etc.), and (4) land availability, particularly for parking.

2. Finding: Location. Some 60 percent of the terminals surveyed are located near university/college campuses or have a supplemental terminal on the campus. For instance, the East Lansing terminal is on the fringe of downtown near Michigan State University. In Ann Arbor, a supplemental terminal in the Union Building serves University of Michigan students and visitors.

Area Type	Terminals Surveyed	With Colleges	% of Those Surveyed
Heart of Downtown	9	6	67%
Fringe of Downtown Area	28	15	54%
Freeway Interchange	5	1	25%
Other	2	2	100%

All but three of these terminals located near colleges are serving communities of 50,000 or more population.

> Consideration: Continue to locate terminals within convenient access of Michigan's larger universities and colleges. This includes providing a supplemental terminal on the campus in some instances. This will best serve college students, which presently comprise some 17 percent of the total intercity bus ridership and could comprise a higher percentage (3) with improved terminal locations, service schedules, and marketing. This is particularly applicable to four year universities with a fall enrollment of 10,,000 or more (8).

3. Finding: Location. Two-thirds of Michigan's county seats have intercity bus terminals or stations (see Figure 5). The percentage is somewhat higher in the southern half of the Lower

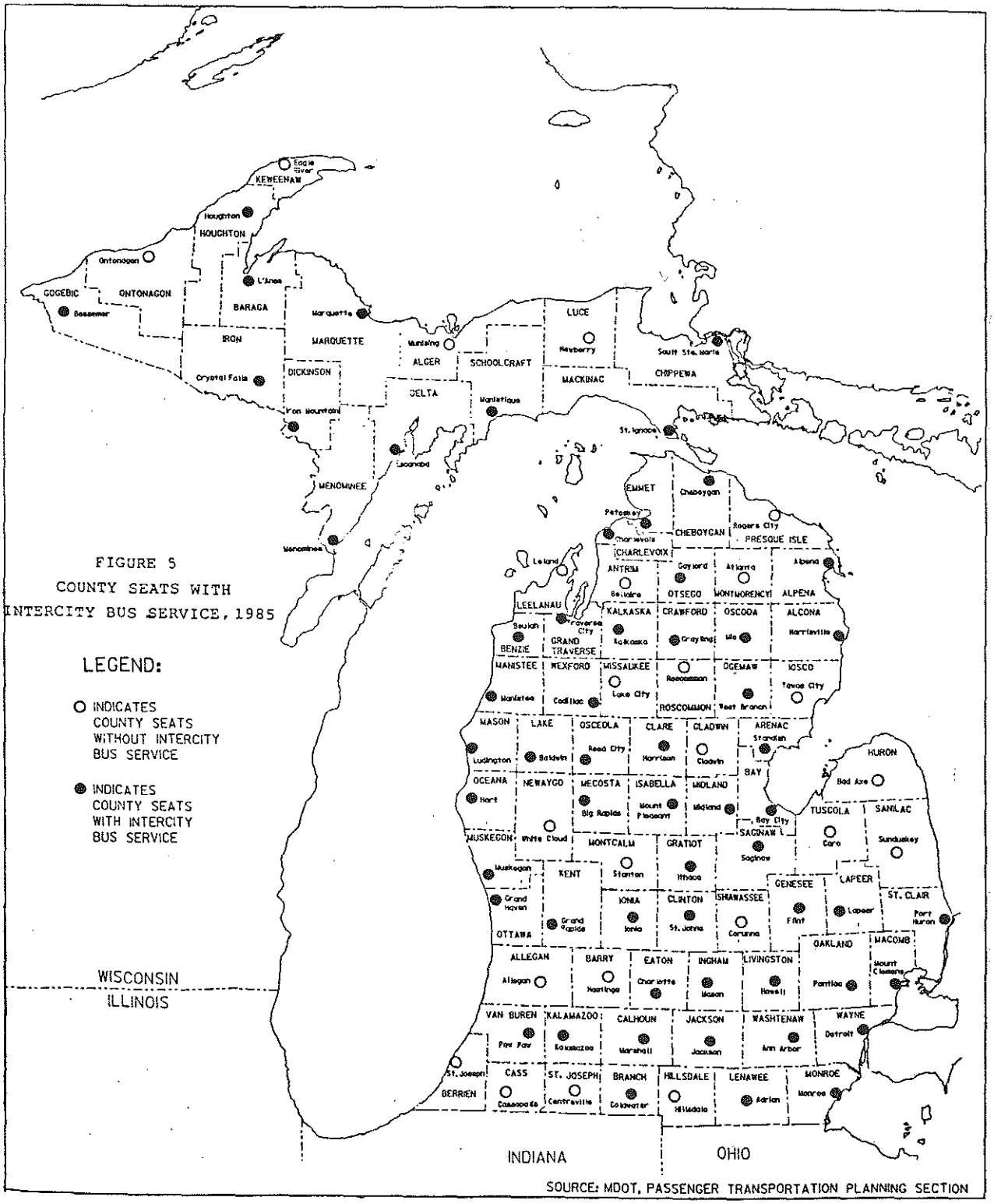


FIGURE 5
COUNTY SEATS WITH
INTERCITY BUS SERVICE, 1985

LEGEND:

○ INDICATES COUNTY SEATS WITHOUT INTERCITY BUS SERVICE

● INDICATES COUNTY SEATS WITH INTERCITY BUS SERVICE

SOURCE: MDOT, PASSENGER TRANSPORTATION PLANNING SECTION

Peninsula; somewhat lower in the northern half of the Lower Peninsula; still lower in the Upper Peninsula.

Michigan Part	Number of County Seats	With Terminal No.	%
Upper Peninsula	15	10	60.0%
Northern 1/2 Lower Peninsula	29	18	62.1%
Southern 1/2 Lower Peninsula	39	29	74.4%
Total	83	57	68.7%

All 26 county seats without terminals or stations have a population less than 10,000. Three of these are over 5,000, all located in the southern half of the lower peninsula.

> Consideration. Establish terminals or stations in county seats in Michigan whenever possible, particularly communities with 5,000 or more population.

4. Finding : Age of Terminal. Approximately one-third of the surveyed intercity bus terminals have been newly constructed or undergone major renovation in the eighties. Another one-third are in the 1970-79 age group. This reflects the fact that

Year	Actual Number	%	Adjusted Number	%
1980 or later	12	27%	15	34%
1970-79	11	25%	14	32%
1960-69	1	2%	5	11%
1950-59	2	5%	6	14%
Before 1950	1	2%	4	9%
Not reporting	17	39%	-	-

considerable work has already been done, particularly with terminals in the larger Michigan cities. Much of this is the result of the Intercity Terminal Program administered by UPTRAN. It also suggests that terminal renovation or restoration may suffice in many instances.

> Consideration: Continue to upgrade the family of intercity bus terminals in Michigan, particularly those with higher levels of departures and boardings. This will improve the image of intercity bus service.

5. Finding: Accommodation of Terminals. The terminal buildings surveyed generally have ticket processing space, rest rooms, seats/benches, and vending machines; generally don't have telephones, lockers, video games, concession stand, and lounge areas. Of the "have not" features, the most needed is telephones to call friends for a ride from the terminal. Large metropolitan area terminals, such as the Greyhound and Trailways terminals in the downtown area of Detroit, have most of the features. The

Feature	Yes	No or Unknown
Ticket Processing Space	41	3
Rest rooms	37	7
Seats/Benches	37	7
Vending Machines	30	14
Telephones	14	30
Lockers	10	34
Video Games	7	37
Concession Stand	5	39
Lounge Area	1	43

presence of these features tend to decrease as the size of the population center decreases.

Consideration: Provide telephones in all Michigan terminals in communities with 10,000 or more population. This will improve convenience and safety for intercity bus passengers and their friends who are driving them to or picking them up from the bus station.

6. Finding: Schedule information, location convenience and cleanliness received high marks from the terminal managers; security, parking costs, and long term parking low marks. Terminals in the heart of downtown rate higher than average in most categories (9 of 11); terminals in the downtown fringe lower (1 of 11). There are too few observations to compare the rating of terminals at interchanges with the average. The ratings depicted here consist of the sum of very good and good terminals as a percentage of total terminals rated.

Feature	Down-town Heart	Down-town Fringe	Freeway Inter-change	Other	Average
Schedule Information	100	82	80	100	91
Location Convenience	78	75	100	50	76
Cleanliness	89	61	80	50	70
Waiting Area	89	54	60	50	66
Short Term Parking	67	64	60	50	60
State of Repair	67	43	60	50	55
Hours of Operation	78	36	40	50	54
Location Security	56	29	60	50	49
Parking Costs	33	18	20	50	30
Parking Area/Security	22	25	20	50	29
Long Term Parking	22	21	20	50	28
Number of Terminals Rated	9	28	5	2	- -

While intercity bus service users also rated schedule information high, they did not concur with the high terminal cleanliness ranking of the terminal managers (3).

7. Finding: Security. Security is the lowest rated terminal feature particularly in downtown areas. Both the location of the terminal and parking area security received a low rating from the station managers. The very good and good ratings as a percentage of total terminals rated is low (see Finding 6 table). In addition, 3 of 9 terminals in heart of downtown received fair or poor ratings as did 7 of 28 terminals in the fringe of downtown (4 in 10,000 to 50,000 and 3 in 50,000 to 1 million population group). Terminals being located at freeway interchanges isn't the total answer to improving security as 1 of 5 freeway interchange terminals rated received only a "fair" security rating. At the same time, security is not viewed as a major problem by Michigan intercity bus service users (3).

Feature	Heart of Downtown	Fringe of Downtown	Freeway Interchange	Other
Location Security				
Very Good/Good	5		3	1
Satisfactory	1	5	2	0
Fair/Poor	2	7	0	0
Parking Area Security				
Very Good/Good	2	7	1	1
Satisfactory	1	2	0	0
Fair/Poor	3	6	1	0
Terminals Rated	9	28	5	2

In addition to location, other security factors include terminal appearance and design (sight-line-distance), access control, use of vandal-resistant materials, lighting, electronic devices such as alarm systems and closed circuit television, and uniformed patrols with the latter two being the most effective (7).

Consideration. Improve security at terminals located in the heart and fringe of downtown. Don't relocate terminals to freeway interchanges solely to improve safety. All such terminals and stations, regardless of the size of community in which they are located, should offer security to all people using them.

8. Finding: Several terminals were found to be operating in an excellent manner. Specific characteristics that constitute excellent operation include: knowledgeable, courteous staff who were obviously intent on serving the customer; large, easy-to-read signs indicating schedule time, location of rest rooms, parking facilities, and similar informational data; clean, comfortable waiting areas with pleasant amenities such as plants, music, and other features indicating concern for passenger comfort and convenience; and clean, well-maintained rest rooms.

Consideration: Terminals operating in an excellent manner should be recognized by the companies using them and provided as a model for emulation and encouragement to the other terminals throughout the state.

9. Finding: Some terminals were found to be operating in a poor manner. Specific characteristics that constitute poor operation include: missing or inadequate informational signs concerning schedules or other facilities; unkept, dirty, or deteriorating conditions for the terminal building; unclean rest rooms; loiterers in and about the immediate vicinity of the terminal.

Consideration: Efforts should be made to provide clean, well-maintained terminals with convenient informational aides and helpful

staff where these features may be lacking. Passenger service should be the prime concern in all terminals.

10. Finding: Parking. Lack of on-site, long term parking is a problem for downtown terminals located in places of 10,000 or more. For some 75 percent of the terminals, the number of spaces provided is less than 10. These must accommodate both short and long term parking needs. However, a small percentage of passengers need long term parking. While approximately 60 percent of passengers access bus terminals using an automobile (3), most do so as a passenger and would not need long term parking spaces. In fact, Texas reports that only 2.8 percent drove to the terminal (6). An exception is where the terminal accommodates rail passenger service. In these cases, about 25 percent of rail passenger users drive an automobile to access the terminal (4) with many requiring long term parking spaces. At the same time, the cost of parking seems to be acceptable.

Consideration: Assure that the number of on-site parking spaces are sufficient to accommodate short and long term parking needs. A higher number of spaces is required to serve intermodal terminals and remote terminals serving Amtrak and large hub airports.

11. Finding: Terminal Agent Financial Arrangement. The percentage of ticket sales (usually 10-15%), package express sales (10-15%), and charter sales are common elements in terminal managers/carrier financial arrangements in urbanized areas. Package express sales and charter sales percentages are used to a

TABLE 17

PARKING RATING
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

Feature/Rating	Heart of Downtown	Fringe of Downtown	Interchange & other	Under 10,000	10,000 to 50,000	50,000 to 1 million	1 million & Over
Parking Short Term							
Poor/Fair	0	4	0	2	2	1	0
Satisfactory	2	4	3	1	5	1	1
Good/Very Good	6	18	4	6	16	5	1
Parking Long Term							
Poor/Fair	3	6	0	0	6	2	1
Satisfactory	2	1	2	2	1	2	0
Good/Very Good	2	6	2	2	6	2	0
Parking Cost							
Poor/Fair	1	1	0	0	0	1	1
Satisfactory	1	3	0	0	2	2	0
Good/Very Good	3	5	2	4	4	1	1

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Section, Surface Systems Unit.

TABLE 18

LOCATION SECURITY RATING
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

Community Size	Heart of Downtown P/F	S	G/VG	Fringe of Downtown P/F	S	G/VG	Freeway Interchange/Other P/F	S	G/VG	Total P/F	S	G/VG
Under 10,000	0	1	2	0	0	5	0	0	1	0	1	8
10,000 to 50,000	1	0	2	3	4	9	0	0	4	4	4	15
50,000 to 1 million	1	0	1	4	2	1	0	1	0	5	3	2
1 million & Over	0	0	1	0	0	1	0	0	0	0	0	2
Total	2	1	6	7	6	16	0	1	5	9	8	27

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Section, Surface Systems Unit.

lesser extent (about one-third of the time) in non-urbanized areas.

12. Finding: Terminal Operating Costs. The annual operating cost of operating an intercity bus terminal varies with the size of the community being served and other factors. This is generally $50,000 or more for urbanized areas and from a few thousand to $30,000 for non-urbanized areas. A rule-of-thumb for terminal operating costs is 15 percent of ticket sales (1).

13. Finding: Terminal Operating Costs. Rent and utilities comprise at least 50 percent of terminal operating costs regardless of community size. Such items as property taxes, licenses, insurance premiums, terminal depreciation/amortization, and office equipment constitute the remaining 50 percent.

14. Finding: Revenues. Regular-route ticket sales comprise over 70 percent of all revenues. Regular-route package, charter, and other services such as Western Union communication are the other major revenue sources.

VIB. PERCEPTIONS

A number of perceptions are commonly held regarding intercity bus terminals. Some of these are statistically - based; others based on an experience, a friend's experience, or cursory review of selected information. This section addresses a number of

perceptions by relating the findings of the Michigan Intercity Bus Terminal/Stations Study to them.

Intermodal Terminals

1. Perception: Multimodal terminals improve interconnections among passengers transportation modes. In terms of service provision, intercity bus carriers share three Michigan surveyed terminals with intercity rail passenger transportation (Battle Creek, Dowagiac, and Kalamazoo). In addition, 13 surveyed terminals or stations preserved by local transit (see Appendix B). Regarding intercity transportation users, some general statements regarding connectivity

Mode Used	Access to Terminal		Egress from Terminal	
	Bus	Rail	Bus	Rail
Local Bus	11.0%	2.0%	9.2%	2.8%
Intercity Bus	5.0%	0.0%	2.8%	1.0%
Commuter Rail	0.5%	4.5%	0.9%	3.0%
Intercity Rail	0.7%	0.0%	0.5%	1.4%
Total	17.2%	6.5%	13.4%	8.2%

can be made. A higher percentage of intercity bus users rely on connecting schedules and modes than rail users (3, 4). A higher percentage of connectivity occurs in accessing bus terminals than when egressing, but the opposite is true for rail terminals. Generally speaking, about 10 percent of all intercity terminal users rely on connectivity when going to and from terminals. This is about the same percentage as a decade ago.

Consideration: Improve service connectivity among the passenger transportation modes,

maintain time series terminal access and egress data, and reevaluate the degree of connectivity in the future. Coordinated schedules among carriers should be provided in urbanized areas and county seats where applicable.

2. Perception: Intermodal terminals are not currently in widespread use relative to the number of intercity bus terminals. There are 10 intermodal terminals in Michigan (see Appendix A). This constitutes seven percent of the approximately 150 terminals in Michigan. This recognizes that some 90 communities with stations, rather than terminals, or communities with no intercity bus service currently may warrant a terminal in the future. At the same time, less than 20 percent of Michigan's communities with existing intercity bus terminals are served by local transit and/or intercity rail passenger service. These factors limit the potential for additional intermodal terminals in Michigan. Nationwide, less than four percent of all terminals are intermodal (1).

Consideration. Establish criteria for use in justifying Michigan communities for intermodal terminals. This would not automatically qualify communities meeting these criteria; only make them eligible for consideration.

3. Perception: Publicly-owned terminals encourage use by more carriers. The inability to secure space in existing terminals and the difficulty in establishing new terminals are deterrents to providing new intercity bus services (1). If this is true, publicly-owned terminals should encourage entry of new carriers into existing markets. The question is, do they? The 10

publicly-owned, State-Sponsored terminals in Michigan have not witnessed this phenomena. None is used by a new carrier. Three are used by only one carrier; five by two carriers; five by two carriers; one by three carriers (see Appendix A).

> Consideration: Promote use of existing publicly-owned terminals by more carriers.

4. Perception: Terminals in downtown areas threaten the security of intercity bus passengers. The perception is that these downtown area terminals are dirty, are poorly lighted, have little activity particularly during the evening hours, and are in or near areas with higher crime rates. The intercity bus terminal study results indicate there is some validity to this perception. However, the user's of Michigan intercity bus service did not view this as a major problem (3).

5. Perception: Newly-constructed or rehabilitated terminals contribute to revitalizing downtowns and obviating service discontinuance. The nine multipurpose terminals may have helped stabilize the downtown of the communities in which they are located, but have not served as a catalyst to revitalizing downtowns. All nine are attractive structures with good security. As to obviating service discontinuance, all nine communities continue to have intercity bus service. The amount of service has not changed appreciably since 1977, although the use of the service has decreased by 50 percent.

Terminal	Average Daily Departures 1985	1977	Weekly Ticket Sales 1985	1977
Alma	6	--	10	--
Battle Creek	20	93.4	284	654
Cadillac	6	8.1	39	56
Dowagiac	2	--	--	--
Houghton/Hancock	--	12.8	--	100
Kalamazoo	32	112.4	467	817
Marquette	3	18.7	--	115
Niles	11	5.1	14	38
Pontiac	15	--	132	--
Total	95	250.5	946	1,780

Consideration: Continue to modernize intercity bus terminals in Michigan assuming that attractive, security-controlled terminals contribute to community vitality.

6. Perception: Intercity bus service, including terminals, has always been provided by the private sector; therefore, this should continue to be the case. At least two states have assisted the intercity bus industry for a number of years in the construction and rehabilitation of terminals, California and Michigan (1). Michigan has assisted since the mid-seventies when it participated in developing terminals in Dowagiac and Kalamazoo. These opened in 1977. Other states have examined intercity bus terminals in their plans for intercity transportation; in particular, Arizona, Iowa, Oregon and Texas (2). In addition, South Dakota has provided state funds for intercity bus terminal development in at least one instance (1).

At the same time, the intercity bus industry has been faced with narrowing profit margins and/or mounting losses. The question is

should steps be taken to preserve and improve essential parts of the intercity bus industry infrastructure which, apparently, will otherwise be lost?

VIC. LIMITATIONS

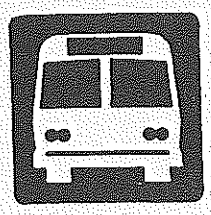
The study and its findings are subject to several limitations. Some of these resulted from dealing with a somewhat sensitive subject, intercity bus terminals. Of particular sensitivity are the cost-related data items.

1. Limitation: A somewhat small sample size and/or limited number of observations particularly when stratifying the data. Forty-four terminals of the 245 in Michigan constitutes a 18.1 percent sample for questions answered by all 44 terminal managers. However, several questions only received 13 usable responses. This reduces the sample to 5.3 percent. Any stratification further reduces the sample size and the level of confidence one has in expanding the data. Consequently, the data has to be used with care when making general statements regarding intercity bus terminals. This is particularly true for terminals located in smaller communities.

2. Limitation: Lack of financial data. This resulted primarily from a preference by Greyhound Lines not to report on financial data items for any of their terminals. This reduced the number of observations to the point that financial data could be used only to develop general considerations and a few parameters.

3. Limitation: The rating of terminal and station accommodations are based on station manager perceptions, not those of the intercity bus user or the community. This introduces the possible bias of the station manager. While the manager's perceptions may be similar to those of the user and the community, one cannot assume this to be true. For example, the condition of the terminal received the lowest rating of the six items rated by users as one-third rated terminal condition fair or poor (3). User rating was based on their general impression and not specific accommodations. At the same time, less than 20 percent of the managers rated terminal condition as fair or poor.

APPENDICES



APPENDIX A

Summary of Michigan Passenger Terminal Implementation

MICHIGAN DOT INTERCITY TERMINAL PROGRAM PROJECTS
NOVEMBER, 1986

City	1980 City Population	Year Opened	State Cost	Local Cost	Intercity Bus	Intercity Rail
Operating						
Dowagiac	6,307	1977	$76,000	$17,500 Property 13,000 Cash	IT	A
Kalamazoo	79,722	1977	1,000,000	115,000 Property	GL, IT	A
Cadillac	10,199	1980	268,000	In-Kind	SWNS	
Houghton	7,512	1982	425,000	Property	GL	
Marquette	23,288	1983	750,000	652,000 (UMTA) Property	GL	
Alma	9,652	1983	417,332	208,668	MT, SWNS	
Pontiac	76,715	1983	3,000,000	Property	GL, SWNS	
Battle Creek	35,724	1983	2,000,000	Property	GL, IT, SWNS	A
Niles	13,115	1984	140,000	400,000 (UMTA)	IN, IT	A
Albion	11,059	1986	75,000	In-Kind	GL	A
Planning/Design						
Alpena	12,214		500,000	In-Kind	GL	
Bay City	41,593		1,700,000	Property	GL	
Benton Harbor	14,707		200,000	(UMTA)	GL, IN, IT	A
Flint	159,611		3,000,000	Property	GL, IT, MT	A
Southfield	75,568					
Early Planning						
Grand Rapids	181,843				GL, SWNS	A
Holland	26,281				GL, SWNS	A
St. Joseph	9,622				-	A

Source: MDOT, Bureau of Urban and Public Transportation, Intercity Division.

APPENDIX B
Bus Terminal/Station Questionnaire

MICHIGAN INTERCITY BUS TERMINAL SURVEY

This survey is being conducted by the Michigan Department of Transportation (MDOT) in cooperation with the intercity bus carriers serving Michigan communities. The intent of the survey is to generate information useful to Michigan carriers, local communities, and MDOT. For purposes of this survey, a terminal is defined as any location where passengers board or deboard and includes all publicly and privately-owned buildings and other structures. All information is requested on a voluntary basis, will be treated as confidential, and used when possible in combination with other questionnaires received. This data will supplement that obtained from other sources (see the enclosed table). Thank you for your assistance.

Larry K. Britton, Manager
Passenger Transportation Planning Section
Bureau of Transportation Planning
Michigan Department of Transportation

1. Where is the terminal located?

_____
Number & Street City or Village

_____
Nearest Major Intersection

2. What is the type of area in which the terminal is located?

(1) _____ Heart of downtown area (near main four corners)

(2) _____ Fringe of downtown area

(3) _____ Freeway interchange

(4) _____ Other (please specify) _____

_____

3. Who owns the terminal?

(1) _____ Greyhound

(2) _____ Indian Trails

(3) _____ Shortway Northstar

(4) _____ Tower

(5) _____ Other intercity carrier (please specify) _____

(6) _____ Local community

(7) _____ Other (please specify) _____

4. What is the length of the lease and year of expiration?

(1) _____ None (terminal owned by carrier)

(2) _____ One year

(3) _____ Two years

(4) _____ Other (please specify) _____

5. What is the leasing fee?

(1) _____ None

(2) _____ Percent of ticket and package revenues

(please specify %) _____

(3) _____ Monthly rent (please specify amount) _____

(4) _____ Other (please specify) _____

_____

6. Where Amtrak is a terminal user, what is Amtrak's leasing fee?

(1) _____ None

(2) _____ Percent of ticket and package revenues

(please specify %) _____

(3) _____ Monthly rent (please specify amount) _____

(4) _____ Other (please specify) _____

7. Who uses the terminal? (check all that apply)

(1) _____ Amtrak

(2) _____ Greyhound

(3) _____ Indian Trails

(4) _____ Shortway Northstar

(5) _____ Other intercity carrier(s) (please specify) _____

_____

(6) _____ Local public transportation (please specify) _____

_____

(7) _____ Non-transportation user(s) (please specify) _____

_____

8. In what year was the terminal constructed? _____

   (a) Last rehabilitated? _____

   (b) Converted to terminal use? _____

9. Where are the buses parked to load and unload?

   (1) _____ On the street or shoulder.

   (2) _____ On the site in space which can be used by others.

   (3) _____ In designated bus bays on the site (specify number of bays provided) _____

   (4) _____ Other (please specify) _____ _____

   _____

10. What automobile parking areas are available?

    (specify number of spaces)

    (1) _____ On the terminal building site

    (2) _____ On the nearby off-street site

    (3) _____ On the street in designated parking lane

    (4) _____ On the street, but not in any designated parking lane

    (5) _____ Other (please specify) _____

11. Does the terminal have the following accommodations?

    (check all that apply)

    (1) _____ Ticket processing space

    (2) _____ Restrooms

    (3) _____ Concessions (food and beverage)

    (4) _____ Seats for waiting passengers (specify number) _____

    (5) _____ Other (please specify) _____

12. What is the condition of the terminal?

	POOR	FAIR	SATIS-FACTORY	GOOD	VERY GOOD
(1) Location					
(a) Convenience (access)	____	____	_____	____	____
(b) Security	____	____	_____	____	____

(2) Cleanliness ____ ____ _____ ____ ____

(3) State of Repair ____ ____ _____ ____ ____

(4) Schedule information ____ ____ _____ ____ ____

(5) Waiting area ____ ____ _____ ____ ____

(6) Parking area

(a) Short Term ____ ____ _____ ____ ____

(b) Long Term ____ ____ _____ ____ ____

(c) Cost ____ ____ _____ ____ ____

(d) Security ____ ____ _____ ____ ____

(7) Hours of operation ____ ____ _____ ____ ____

13. Who provides, or hires, the agent?

(1) _____ One or more intercity carriers

(2) _____ Local public transportation

(3) _____ Other (please specify) _____

14. What is the agent's financial arrangement?

(1) _____ Percentage of ticket sales (indicate %) _____

(2) _____ Percentage of package express sales (indicate %) _____

(3) _____ Percentage of charter sales (indicate %) _____

(4) _____ Other (please specify) _____

15. What is the agent's annual income? (estimate if necessary)

(1) _____ Under $5,000

(2) _____ $5,000 - 9,999

(3) _____ $10,000 - 14,999

(4) _____ $15,000 - 19,999

(5) _____ $20,000 or more

16. What are the annual ticket sales (in dollars)?

(1) $_____ Regular-route passenger

(2) $_____ Regular-route package

(3) $_____ Charter

(4) $_____ Other (please specify) _____

17. What is the annual cost to operate the terminal?

(1) $_____ Rent

(2) $_____ Utilities (gas, oil, electric, telephone, etc.)

(3) $_____ Property taxes

(4) $_____ Operating taxes and licenses

(5) $_____ Terminal depreciation/amortization

(6) $_____ Furniture and office equipment

(7) $_____ Other terminal-associated expenses

(8) $_____ Total

APPENDIX C

Carriers Serving Michigan Communities

INTERCITY BUS CARRIERS SERVING MICHIGAN COMMUNITIES, FEBRUARY 1986

1. Indian Trails (1482, 1482A)
2. Michigan Trailways (7098)
3. G & M Coaches (1602, 1603)
4. Shortway North Star (1567)
5. Greyhound Lines (285, 315, 344, 373, 375, 376, 377, 378, 380, 381, 401, 527, 528)
6. Indiana Motor Bus Co. (1315)
7. Four Star Lines (958)
8. Wisconsin Michigan Trailways (7407, 7410)
9. Tower Bus (1609)
10. Brooks Charters and Tours (1650)
11. American Trails (1611)
12. Shortway Lines (1425, 1427, 1430)
13. Northern Michigan Coaches (7415)
14. Rainbow Coach and Tours (379)
15. Trailways Lines, Inc. (7052)
16. Eastern Canadian Greyhound Lines (738)

APPENDIX D

Selected Characteristics of Surveyed Terminals

AGE OF TERMINAL BY COMMUNITY POPULATION
MICHIGAN INTERCITY BUS TERMINAL STUDY
NOVEMBER/DECEMBER 1985

Population & Type of Activity	Before 1950	1950-1959	1960-1969	1970-1979	1980 or later	Total
Under 10,000						
Constructed					1	1
Last Rehabilitated				2	4	6
Conversion						
Total				2	5	7
10,000 to 50,000						
Constructed				1	3	4
Last Rehabilitated				5	2	7
Conversion				3	1	4
Total				9	6	15
50,000 to 1 Million						
Constructed	1	1		1	3	6
Last Rehabilitated				1		1
Conversion					2	2
Total	1	1		2	5	9
1 Million or More						
Constructed		1				1
Last Rehabilitated						
Conversion					1	1
Total		1			1	2

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Planning Section, Surface Systems Unit, Intercity Bus Terminal Study, 1985.

TERMINAL/STATION OWNERSHIP BY COMMUNITY POPULATION
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

Terminal	Terminal or Station	Commission Agents Own	Commission Agents Lease	Gov't Entities State Sponsored/ Local	Carrier Owned or Leased	Other (Users)
Under 10,000						
Alma	T			X		Local Transit
Brighton	S	X				Local Transit, Restaurant, Party Store, Gas Station
Clare	S	X				Restaurant
Dowagiac	T			X		Local Transit & Intercity Rail
Houghton	T			X		Local Transit
Ironwood	T		X			--
Manistee	S	X				Auto Body Shop
Petoskey	S		X			Book Store
St. Ignace	S		X			Auto Body Shop
10,000 to 50,000						
Adrian	S	X				News Agency
Alpena	T				X	--
Bay City (Greyhound)	T				Greyhound	--
Bay City (Trailways)	T					--
Benton Harbor	T				Greyhound	--
Big Rapids	T		X			--
Cadillac	T			X		Local Transit
Escanaba	T					--
Holland	T					Taxi
Jackson	T		X			--
Lincoln Park (Greyhound) 1/	T				Greyhound	--
Lincoln Park (Trailways) 1/	S	X				Party Store
Marquette	T			X		Local Transit, Taxi, Medical & Insurance Offices
Monroe	T	X				--
Mt. Clemens 1/	T					--
Mt. Pleasant	S	X				Tire Store
Muskegon	T		X			Local Transit, Taxi Service
Niles	T			X		Local Transit
Owosso	T				Indian Trails	--
Port Huron	T		X			--
Traverse City	T		X			--
Wayne 1/	T		X			--
Ypsilanti	T		X			--

50,000 to 1 Million				
Ann Arbor	T		Greyhound	Local Transit
Battle Creek	T	X		Local Transit, Intercity Rail
East Lansing	T		Greyhound	Western Union
Flint	T	X		Local Transit
Grand Rapids	T		Greyhound	--
Kalamazoo	T	X		Small Crafts Store, Intercity Rail
Lansing	T		Greyhound	--
Pontiac 1/	T	X		Local Transit
Royal Oak 1/	T	X		Local Transit
Saginaw	T		Indian Trails	--
1 Million or More				
Detroit (Greyhound)	T		Greyhound	--
Detroit (Trailways)	T		Trailways	--

Note: 1/ Lincoln Park, Mt. Clemens, Pontiac, Royal Oak and Wayne are part of the Detroit urbanized area and, therefore, may have different terminal characteristics and requirements than other terminals in their respective population groups.

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Planning Section, Surface Systems Unit.

TERMINAL/STATION LOCATION IN RELATION TO SCHOOL CAMPUS
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

University/College	On Campus	Adjacent to Campus	Within 15 Minutes Walking Distance	Local Transit Available	Auto Only Means of Access
Adrian College				X	
Albion College					X
Alma College			X	X	
Andrews (Berrien Springs)					X
Aquinas (Grand Rapids)				X	
Calvin (Grand Rapids)				X	
Central Mi. (Mt. Pleasant)			X	X	
Eastern Mi. (Ypsilanti)		X			
Ferris State (Big Rapids)		X	X		
Gd. Rapids Baptist College				X	
Grand Valley St. (Allendale)					X
Hillsdale				X	
Hope College (Holland)				X	
Kalamazoo College			X	X	
Lake Superior (Sault St. Marie)				X	
Mercy College (Detroit)				X	
Mi. State Univ. (E. Lansing)		X		X	
Mi. Tech. Univ. (Houghton)			X	X	
Northern Mi. Univ. (Marquette)			X	X	
Oakland Univ. (Rochester)					X
Saginaw Valley (Univ. Center)					X
Univ. of Mi. (Ann Arbor)	X			X	
Univ. of Mi. (Dearborn)					X
Univ. of Mi. (Flint)				X	
Wayne St. (Detroit)				X	
Western Mi. (Kalamazoo)			X	X	
Total	1	3	7	19	6
Percent (of 26 schools)	3.8%	11.5%	26.9%	73.1%	23.1%

Notes: 4 of 10 within walking distance (15 min) (42.3%)
3.5 of 10 not within walking distance, but local transit available (34.6%)
2 of 10 need a car (23.1%)

Source: MDOT, Bureau of Transportation Planning, Passenger Transportation Planning Section, Surface Systems Unit.

APPENDIX E

Terminals Included in Study Sample

TERMINALS SURVEYED BY MDOT PLANNING STAFF

Adrian
Alma
Battle Creek*
Bay City (two terminals in community)
Big Rapids
Brighton*
Cadillac
Clare
Detroit (two terminals in community)
Dowagiac
Flint*
Houghton
Ironwood
Jackson*
Kalamazoo*
Lincoln Park (two terminals in community)
Manistee
Marquette*
Midland*
Mt. Clemens
Mt. Pleasant*
Niles
Owosso
Petoskey
Pontiac*
Port Huron
Saginaw*
St. Ignace
Traverse City

*Denotes places also to be surveyed by Greyhound

TERMINALS MDOT REQUESTED GREYHOUND TO SURVEY

Alpena
Ann Arbor
Battle Creek*
Bay City (two terminals in community)***
Benton Harbor
Brighton*
Detroit (two terminals in community)
East Lansing
Escanaba
Flint*
Grand Rapids
Holland
Jackson*
Kalamazoo*
Lansing
Lincoln Park (two terminals in community)
Marquette*
Midland* (**)
Monroe
Mt. Pleasant*
Muskegon
Pontiac*
Royal Oak
Saginaw*
Sault Ste. Marie**
Southfield
Wayne
Ypsilanti

*Denotes places also surveyed by MDOT Planning Staff
**Terminals for which no questionnaire was completed.
***Indicates one terminal surveyed.

APPENDIX F

Survey Team Instructions

MATERIALS FOR SURVEY PROCESSING

Questionnaires

Pens and paper pads

Copies of survey support letters from bus companies

Maps and directories for public relations and your usage

Copy of the letters and packets submitted to companies

Copy of the terminal table (one is included in previous packet)

Your schedule of places, people and times

Camera (slide film)

City maps with terminals located (if available)

WHEN CONDUCTING THE SURVEY

Observe

Go over the survey with agent (even if he/she has previously completed questionnaire)

Make notes

Ask questions

Example: If terminal recently moved to a highway interchange, has this improved your patronage and do more people tend to be using intracity public transportation?

Copies of the survey support letters (see attachment___), and sample packets were provided each of the teams. Team members contacted by phone the terminal managers prior to the visitation for an appointment. A confirmation letter was then sent to the manager with a copy of the questionnaire for their perusal before the meeting. Team members also were requested to take a camera for a slide presentation of the terminals visited.

APPENDIX G

Survey Comments Made by Terminal Agents

SUMMARY OF AGENT AND SURVEYOR COMMENTS
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

BUILDING LOCATION, CONDITION, AND MAINTENANCE

The ticket processing area is small.
Agent salted slippery drive after survey team tip-toed over ice.
Interior great, exterior needs some work.
The agent will provide you with a key to the rest rooms.
Everything is very good with the exception of the rest rooms which were not up to standards of the other stations.
This is a sparkling clean station, full of plants and music to add to the comfortable feeling. It is difficult to believe security is rated so low.
The owner of the building is trying to get the bus station to move.
This is a temporary facility.
In 1970 we eliminated the restaurant and enlarged the office space.
Finding a new terminal location is difficult. High rent and zoning problems are two major barriers.
The roof is bad, not much improvement to the building has been made. Owner hasn't helped out.

BUS TERMINAL SIGNS

Bus signs fairly visible.
Bus sign visibility very poor.
Sign in the front "yard" cannot be seen in winter.

HOURS OF OPERATION

I am trying to lengthen the hours.
We open weekends when buses are here.

WHERE BUSES ARE PARKED TO LOAD AND UNLOAD

The buses are parked in front of the building to load and unload.
Buses are parked to load and unload behind the building.
Buses are parked to load and unload on the side of the building in an area marked "No Parking - Bus Stop."

AUTOMOBILE PARKING

No long term parking is available.
Park long term at your own risk. You have to check with police for a longer period of time.

ROUTES TIMES AND SCHEDULE INFORMATION

Service for our area was discontinued on December 1, 1985.
After Shortway bought-out Northstar, fares were changed and schedules were changed with no notice of changes.
Rainbow expressed interest in picking-up the Petoskey to Ludington run.
Regarding the carrier Shortway Northstar. There is a lack of communication from the Company to the Agent.
Bus drivers are not giving accurate information to their passengers.
People trying to get back to schools are having trouble.
Shortway is not cooperative with the customers. Guiding them to the wrong buses.
We have a continued change of schedules with no advance warning.
Runs have been cut.
Scheduling is impossible.
Soo Canada to Detroit run eliminated.
Flowers and business people have a 12 hour layover.
Carrier and agent want to combine terminals with dial-a-ride for economic reasons.
Schedule information is posted on the door.

FINANCIAL ASPECTS

The high minimum overhead is due to liability insurance.
Regular-route fares are down 10% from 1984.
We maintain a month-to-month lease for our terminal to wait and see what happens to the economy in this area.
We do not handle charter sales as they are not profitable for us.
The bus company reimburses our long distance calls.
Subsidize rent to assist in service, this is a fixed cost that cannot be changed.
At intermodal terminals - Amtrak is subsidized to the point of killing the bus service.
We have lost 50% express from the island.
We have increased freight business.
Please note that the annual income of $3,438.00 does not cover the salary of even one of the employees who work on this.
If it were not in combination with the local public transit, the costs would be more than the income.

SECURITY

A plus for security. There is good response by police and special ordinances to restrict loiterers making them easier to kick-out.
The Dowagiac terminal is well lit and police alarmed.

OTHER COMMENTS

We leave the outside door unlocked so people can get in from the cold.
Carriers should have more input in the design of the structure and operations once they are going.
The businessmen here solicited me to be the agent 19 years ago as they saw that the service was needed for our area.
Blood, eyes, and organs were shipped from here.
Paychecks came in via bus.
Main route for getting to the Veterans Hospital was via bus.
Is the State of Michigan going to buy terminals?
The main need is for the freight service.
Substantial freight, exceptionally high to Traverse City.
Prisoners no longer transported through St. Ignace.
Trailways called when Greyhound went on strike, never heard another word.
A new terminal is needed, ridership is increasing.
No other intercity public transportation available in this area.
Dial-a-ride is available.
Small town - we really give personal service.
A Michigan Trailways bus was parked in front of the Houghton Terminal in the afternoon hours of December 10.
Public phones are provided inside and out.
The central transfer point for the City's transit system is just across the street.

APPENDIX H

Intercity Bus Terminals in Michigan

MICHIGAN CITIES WITH INTERCITY BUS SERVICE AND ASSOCIATED TERMINALS 1/
MICHIGAN INTERCITY BUS TERMINAL/STATION STUDY
NOVEMBER/DECEMBER 1985

Community	1980 Population	County	Station/ Terminal	Route Schedule No.	No. of Carriers	Daily Departures	Passenger Boardings	Near University	Served by Local Transit
Under 10,000									
Ada		Kent	S	1567	1	5	1*		
Alger		Arenac	S	-	-	-			
Alma	9652	Gratiot	T	1567, 1602, 1603	2	6,**	2	x	x
AuGres	768	Arenac	S	378	1	2	1*		
Bagley		Menominee	S	527,7415	2	FS			
Baldwin (c)	674	Lake	S	1567	1	2	1		
Baraga	1055	Baraga	S	527	1	2	1*		
Bark River		Delta	S	527,528,7415	2	4			
Bear Lake	388	Manistee	S	1567	1	FS	1*		
Belding	5634	Ionia	S	1602	1	2	1*		
Belleville	3366	Wayne	S	-	-	-			
Bellevue	1289	Eaton	S	1482	1	1	1*		
Benzonia	466	Benzie	S	1567	1	FS			
Berrien Springs	2042	Berrien	S	1315,1319	1	4	1*		
Bessemer (c)	2553	Gogebic	S	528	1	2			
Beulah (c)	454	Benzie	S	1567	1	2	1*		
Birch Creek		Menominee	S	527,7415	2	FS			
Blaney Park		Schoolcraft	S	528	1	2			
Blissfield	3107	Lenawee	S	1567	1	4	1		x
Boyne Falls	378	Charlevoix	S	378,1567	2	6	1		
Bradley		Allegan	S	377	1	FS			
Brighton	4268	Livingston	S	375,380,7098	2	12	2		x
Bronson	2271	Branch	S	380	1	FS	1*		
Brooklyn	1110	Jackson	S	-	-	-			
Buckley	357	Wexford	S	1567	1	2,**	1		
Calumet	1013	Houghton	S	527	1	1	1		
Capac	1377	St. Clare	S	1650	1	FS			
Carbondale		Menominee	S	527,7415	2	FS			
Carney	252	Menominee	S	527,7415	2	7			
Cedar Springs	2615	Kent	S	1567	1	FS	1		

Community	1980 Population	County	Station/ Terminal	Route Schedule No.	No. of Carriers	Daily Departures	Passenger Boardings	Near University	Served by Local Transit
Champion		Marquette	S	527	1	FS			
Charlevoix (c)	3296	Charlevoix	S	1567	1	3	1		
Charlotte (c)	8251	Eaton	S	1482	1	8	2		
Chassell		Houghton	S	527	1	FS	1*		
Cheboygan (c)	5106	Cheboygan	S	378	1	2	2		
Chesaning	2656	Saginaw	S	1482	1	2	1		
Chum's Corner		Grand Traverse	S	1567	1	1,**			
Clare	3300	Clare	S	378,1567,1603	3	10,**	3		
Coldwater (c)	9461	Branch	S	380	1	2	1		
Crystal Falls (c)	1965	Iron	S	528,7410	2	4	1*		
Custer	341	Mason	S	-	-	-	1*		
Daggett	274	Menominee	S	527,7415	2	5	1*		
Davison	6087	Genesee	S	1650	1	2	1*		
Decatur	1915	Van Buren	S	1482	1	2			
Douglas	948	Allegan	S	376	1	HS			
Dowagiac	6307	Cass	T	1482	1	2	1*		
Drayton Plains		Oakland	S	378	1	9	1*		
Dundee	2575	Monroe	S	-	-	-	1		
Durand	4241	Shiawassee	S	1482	1	1,D			
East Tawas	2584	Iosco	S	378	1	2			
Edmore	1176	Montcalm	S	1602	1	2	1*		
Elk Rapids	1504	Antrim	S	1567	1	FS	1*		
Elmira		Otsego	S	-	-	-			
Emmett	285	St. Clare	S	1650	1	FS			
Engadine		Mackinac	S	528	1	2			
Epoufette		Mackinac	S	528	1	FS			
Erie Junction		Monroe	S	-	-	-			
Euclid Corners		Bay	S	-	-	-			
Evart	1945	Osceola	S	1567,1603	2	FS,**	1*		
Farwell	804	Clare	S	1567	1	FS,**			
Fenton	8098	Genesee	S	7098	1	FS	1*		
Flat Rock	6853	Wayne	S	-	-	-			
Frankfort	1603	Benzie	S	1567	1	2	1*		
Galesburg	1822	Kalamazoo	S	380	1	FS			
Gaylord (c)	3011	Otsego	S	378	1	4	1		
Gladstone	4533	Delta	S	527,528,7415	2	5,D			
Goodells Corner		St. Clare	S	1650	1	FS			
Gould City		Mackinac	S	528	1	FS			
Grayling (c)	1792	Crawford	S	378	1	4	1		
Greenville	8019	Montcalm	S	1602	1	2	1		
Hancock	5122	Houghton	S	527	1	2			
Harrison (c)	1700	Clare	S	378	1	FS	1*		

Community	1980 Population	County	Station/ Terminal	Route Schedule No.	No. of Carriers	Daily Departures	Passenger Boardings	Near University	Served by Local Transit
Harrisville(c)	559	Alcona	S	378	1	2	1*		
Hart (c)	1888	Oceana	S	1567	1	2			
Harvey		Marquette	S	527,7415	2	FS			
Hermansville		Menominee	S	528	1	FS			
Homer	1791	Calhoun	S	380	1	FS			
Honor	281	Benzie	S	1567	1	FS			
Horton		Jackson	S	-	-	-			
Houghton Lake		Roscommon	S	378	1	4	1		
Houghton (c)	7512	Houghton	T	-	-	-	1	x	
Howard City	1118	Montcalm	S	1567	1	4	1		
Howell (c)	6976	Livingston	S	-	-	-			x
Idlewild		Lake	S	1567	1	FS			
Imlay City	2495	Lapeer	S	1650	1	2	1*		
Indian River		Cheboygan	S	378	1	FS			
Ionia (c)	5920	Ionia	S	1567	1	5	4		
Iron Mountain (c)	8341	Dickinson	S	7410	1	2	1		
Iron River	2426	Iron	S	528,7410	2	3	1*		
Ironwood	7741	Gogebic	T	528,958,7407	3	3	1*		
Ishpeming	7538	Marquette	S	527	1	2	1*		
Ithaca (c)	2950	Gratiot	S	1567	1	1,3SS,**	1		
Kalkaska (c)	1654	Kalkaska	S	1567	1	2	1		
Kawkawlin		Bay	S	-	-	-			
Keweenaw Bay		Baraga	S	527	1	FS			
Lakeview	1139	Montcalm	S	1602	1	FS			
Lapeer (c)	6198	Lapeer	S	1650	1	2	1*		
Leslie	2110	Ingham	S	1567	1	D,**	1*		
Levering		Emmet	S	378,1567	2	FS			
Linwood		Bay	S	-	-	-			
Loretto		Dickinson	S	528	1	FS			
Lowell	3707	Kent	S	1567	1	1,FS	1		
Ludington (c)	8937	Mason	S	1567	1	3	2		
L'Anse (c)	2500	Baraga	S	527	1	2	1*		
Mackinaw City	820	Cheboygan	S	378,1567	2	6	1		
Mancelona	1432	Antrim	S	1567	1	FS	1*		
Manistee (c)	7566	Manistee	S	1567	1	2	2		
Manistique (c)	3962	Schoolcraft	S	528	1	2	1		
Manton	1212	Wexford	S	1567	1	4	1		
Maple Rd.		Clinton	S	1609	1	2			
Marenisco		Gogebic	S	528	1	2			
Marion Corner	816	Osceola	S	1567	1	-			
Marshall (c)	7201	Calhoun	S	380	1	5	1		
Martin	447	Allegan	S	377	1	FS			

Community	1980 Population	County	Station/ Terminal	Route Schedule No.	No. of Carriers	Daily Departures	Passenger Boardings	Near University	Served by Local Transit
Mason (c)	6019	Ingham	S	1567	1	HS,D,**			
Mesick	374	Wexford	S	1567	1	HS,**	1		
Michigamme		Marquette	S	527	1	FS			
Milan	4182	Washtenaw	S	7098	1	4	1*		
Moline		Allegan	S	377	1	HS			
Montague	2332	Muskgon	S	1567	1	FS			
Mottville		St. Joseph	S	-	-	-			
Nadeau		Menominee	S	527,7415	2	HS			
Napoleon		Jackson	S	-	-	-			
Naubinway		Mackinac	S	528	1	2			
Negaunee	5189	Marquette	S	527	1	HS			
New Era	534	Oceana	S	1567	1	FS			
Norway	2919	Dickinson	S	528	1	FS			
Oakley	412	Saginaw	S	1482	1	FS			
Omer	403	Arenac	S	378	1	FS			
Oscoda		Iosco	S	378	1	2	1		
Oshtemo		Kalamazoo	S	1482	1	-			
Ovid Jct.	1712	Clinton	S	-	-	-			
Paw Paw (c)	3211	Van Buren	S	1482,1483	1	B,D	3		
Pellston	565	Emmett	S	378,1567	2	FS	1*		
Pentwater	1165	Oceana	S	1567	1	HS			
Perry Jct.	2051	Shiawassee	S	1482	1	FS,**	1*		
Petoskey (c)	6097	Emmet	S	378,1567	2	6	4		
Pine Run		Genesee	S	7098	1	4			
Pittsfield		Washtenaw	S	-	-	-			
Plainwell	3751	Allegan	S	377	1	2			
Plymouth	9986	Wayne	S	1609	1	6,HS	1		
Portland	3963	Ionia	S	1567	1	1,D	1*		
Potterville Jct.	1502	Eaton	S	1482	1	FS			
Powers	490	Menominee	S	527,528,7415	2	7,D	1*		
Rapid River		Delta	S	527,528,7415	2	8	1*		
Reed City (c)	2221	Osceola	S	1567,1603	2	6,FS,**	2		
Rochester	7203	Oakland	S	1609	1	1,D	1		
Rockford	3324	Kent	S	1567	1	1,FS	1		
Rome Center		Lenawee	S	1567	1	FS			
Rothbury	522	Oceana	S	1567	1	FS			
Rudyard		Chippewa	S	1567	1	D			
Saugatuck	1079	Allegan	S	376	1	4	1*		
Scottville	1241	Mason	S	1567	1	2	1*		
Shelby	1624	Oceana	S	1567	1	FS	1*		
Shelbyville		Allegan	S	377	1	FS			
Shepherd	1534	Isabella	S	-	-	-			

Community	1980 Population	County	Station/ Terminal	Route Schedule No.	No. of Carriers	Daily Departures	Passenger Boardings	Near University	Served by Local Transit
Six Lakes		Montcalm	S	1602	1	FS			
South Haven	5934	Van Buren	S	376	1	6	1		
Spring Lake	2731	Ottawa	S	-	-	-	1		
Standish (c)	1264	Arenac	S	378	1	2	1*		
Stephenson	967	Menominee	S	527,7415	2	6			
Stevensville	1268	Berrien	S	1180,1482,1483	2	16,D	1*		
Sturgis	9468	St. Joseph	S	380	1	1	1*		
St. Charles	2276	Saginaw	S	1482	1	FS	1		
St. Ignace (c)	2632	Mackinac	S	378,528,1567	2	8	1		
St. Johns (c)	7376	Clinton	S	1567	1	-			
St. Joseph (c)	9622	Berrien	S	1482,7086,7088	2	4,D,FS	1*		
Swartz Creek	5013	Genessee	S	1482	1	2			
Tecumseh Jct.	7320	Calhoun	S	-	-	-			
Thompson		Schoolcraft	S	528	1	FS			
Three Lakes		Baraga	S	527	1	FS			
Utica	5282	Macomb	S	1609	1	2	1*		
Vulcan		Dickinson	S	528	1	FS			
Wakefield	2591	Gogebic	S	528	1	2	1		
Walhalla		Mason	S	1567	1	FS	1*		
Wallace		Menominee	S	527,7415	2	6			
Watersmeet		Gogebic	S	528	1	2			
Watervliet	1867	Barrien	S	1482	1	1	1*		
Wayland	2023	Allegan	S	377	1	2			
West Branch (c)	1785	Ogemaw	S	-	-	-			
Whitehall	2856	Muskegon	S	1567	1	2	1*		
			S						
----------			S						
10,000 to			S						
50,000			S						
----------			S						
Adrian (c)	21186	Lenawee	S	1567	1	4	2		x
Albion	11059	Calhoun	T	380	1	5	2		
Alpena (c)	12214	Alpena	T	378	1	1	2		
Bay City (c)	41593	Bay	T	101,378,1427,1482,7098	4	20	10		x
Benton Harbor	14707	Berrien	T	373,376,380,1482,1483,1315,1319	3	34	29		x
Big Rapids (c)	14361	Mecosta	T	1567,1603	2	8	8	x	x
Cadillac (c)	10199	Wexford	T	1567	1	6,**	7		x
Escanaba (c)	14355	Delta	T	527,528,7415	3	7	1		
Farmington	11022	Oakland	S	375,1609	2	3	1		
Grand Haven (c)	11763	Ottawa	S	375,1567	2	7	2		
Holland	26281	Ottawa	T	375,376,1567	2	12	1		
Inkster	35190	Wayne	S	380	1	FS	1		

Community	1980 Population	County	Station/ Terminal	Route Schedule No.	No. of Carriers	Daily Departures	Passenger Boardings	Near University	Served by Local Transit
Jackson (c)	39739	Jackson	T	101,380,1567,7086,7088	3	26,D,**	36		
Lincoln Park	45105	Wayne	T/S	285,315,344,380,381,401,7052	2	54	5		
Marquette (c)	23288	Marquette	T	527,7415	2	3	1	x	x
Menominee (c)	10099	Menominee	S	7415	1	2	1*		
Midland (c)	37250	Midland	S	378	1	4	5		x
Monroe (c)	23531	Monroe	T	315,344,381,401,1427	2	18,D	1		
Mt. Clemens (c)	18806	Macomb	T	1609,1611	1	8	1		x
Mt. Pleasant (c)	23746	Isabella	S	378,1567,1603	3	10,**	6	x	x
Muskegon (c)	40823	Muskegon	T	375,1567	2	6	35		x
Niles	13115	Berrien	T	1315,1319,1482	2	11	1		x
Owosso	16455	Shiawassee	T	1315,1482	2	8	5		
Port Huron (c)	33981	St. Clare	T	1611,1650	2	2	1		x
Romulus	24857	Wayne	S	-	-	-	11		
Sault Ste. Marie (c)	14448	Chippewa	S	1567	1	1	2		
Traverse City (c)	15516	Grand Traverse	T	1567	1	5,**	19		x
Wayne	21159	Wayne	T	380	1	3	1		x
Wyandotte	34006	Wayne	S	-	-	-			
Ypsilanti	24031	Washtenaw	T	380,1567	-	16,**	32		x
50,000 to 1 million									
Ann Arbor (c)	107966	Washtenaw	T	101,380,1567,1609,7086,7088,7098	5	23,**	71		x
Battle Creek	56339	Calhoun	T	101,380,1482,7086,7088	3	20,**	49		x
Dearborn	90660	Wayne	S	380,1567	1	5,D,**	6		
East Lansing	51392	Ingham	T	375,380,1482,1567	3	26,**	122	x	x
Flint (c)	159611	Genesee	T	101,378,1315,1427,1482,1650,7098	6	26,**	108		x
Grand Rapids(c)	181843	Kent	T	375,376,377,1315,1567,1602,1603	4	23,**	127		x
Kalamazoo (c)	79722	Kalamazoo	T	101,377,380,1315,1482,1483,7086,7088	4	32	79		x
Lansing	130414	Ingham	T	375,380,1315,1482,1567	4	27	79		x
Livonia	104814	Wayne	S	1427	1	8	1*		
Pontiac (c)	76715	Oakland	T	101,378,1609	2	15	23		x
Royal Oak	70893	Oakland	T	101,375,378	1	11	7		x
Saginaw (c)	77508	Saginaw	T	101,378,1427,1482	3	25	32		x
Southfield	75568	Oakland	T	375,1567	2	9,D,**	15		x
1 Million And Over									
Detroit (c)	1203339	Wayne	T	315,344,375,378,380,381,401	7	75,**	503		x

Community	1980 Population	County	Station/ Terminal	Route Schedule No.	No. of Carriers	Daily Departures	Passenger Boardings	Near University	Served by Local Transit
Special Generators									
Andrews College Road		Berrien		1315, 1319	1	4		x	x
Detroit Metro Airport		Wayne		101,378,380,1425,1426,1427,1567	3	38,**			x
Federal Corr. Inst.		Washtenaw		-	-	-			
Fort Custer		Kalamazoo		380	1	3	1		x
General Motors		Wayne		-	-	-			x
Interlochen Cor.		Grand Traverse		1567	1	FS	1*		
Kincheloe A.F.B.		Chippewa		1567	1	1	1*		
Michigan Tech. Univ.		Houghton		527	1	FS		x	
Northville State Hospital		Wayne		-	-	-			
Oakland University		Oakland		-	-	-		x	x
State Hospital Rd.		Washtenaw		-	-	-			x
Traverse City Airport		Grand Traverse		-	-	-			x
Tri-City Airport		Saginaw		378	1	4			x
Univ. of Mich. Union		Washtenaw	S	1567	1	6,**		x	x
Western Mich. Univ.		Kalamazoo		-	-	-		x	x
Willow Run Airport		Washtenaw		-	-	-			
Ypsilanti State Hospital		Washtenaw		-	-	-			

Notes: a. U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population & Housing.
b. * indicates 1 or less tickets purchased daily.
c. Large Metropolitan area (Detroit urbanized area).
d. Small Metropolitan area (all other urbanized areas).
e. Large Communities (10,000 - 49,999 population).
f. Small Community (under 10,000 population).
g. Schedule numbers, number of carriers, & number of departures resourced from Russell's Official National Motor Coach Guide, November, 1985.
h. Schedule numbers include only those routes departing from the community, not connecting schedules.
i. One schedule for "daily except Sunday and Holidays" and one schedule for "Sundays and Holidays" considered one departure.
j. Schedules stating "except Saturday, Sunday and Holidays" included in count.
k. Limo service from hotels to airport not included.
l. "**" indicates there is an additional "Friday and/or Sunday Departure Schedule".
m. Flag Stops (FS), Drop(s) (D), Highway Stops (HS), and Station Stops (SS) noted as indicated.
n. (c) County Seat.

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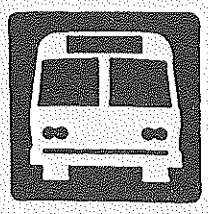

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