PUBLIC TRANSPORTATION INTERIM SELECTION CRITERIA
AND MANAGEMENT OBJECTIVES

Final Report

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Michigan Transportation Research Program
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Interim management objectives and project selection criteria were developed for the Bureau of Urban and Public Transportation (UPTRAN), Michigan Department of Transportation. The objectives and criteria were suggested for UPTRAN review, and were based upon an analysis of pertinent state legislation, comparable federal practice, and existing UPTRAN practice. The criteria are used to evaluate proposed capital, operating, research, and demonstration projects, and to evaluate proposals and grant applications to conduct these projects. An overall management programming process was proposed which includes the use of the selection criteria and objectives, and relates them to the Bureau's annual budget formulation process.

Recommendations were made with regard to the implementation and use of the criteria, and the formulation of the resulting management procedures and project programming process.
INTERIM CRITERIA AND MANAGEMENT OBJECTIVES

EXECUTIVE SUMMARY

This report contains the results of a study to develop criteria for the selection of projects, proposals and grant applications submitted to UPTRAN by eligible recipients of state transportation funds. The study involved the review and analysis of relevant Michigan legislation, existing UPTRAN procedures and criteria and comparable federal activities.

Preliminary management objectives were developed to ensure that the criteria would be compatible with existing legislation and with bureau and Department policies. These interim management objectives are as follows:

1. To plan and provide for the current and long-range development of a system of public transportation in areas for which an eligible authority or agency does not exist.

2. To increase the efficiency and service of existing public transportation systems, management operations and facilities.

3. To encourage, coordinate and administer grants for research and demonstration projects to develop the application of new ideas and concepts in public transportation facilities and services as applied to state as opposed to nationwide problems, and to provide for sharing of the experience gained within the Michigan public transportation community.

4. To minimize the impacts of transportation energy constraints through the increase in public transportation energy efficiency and the equitable statewide distribution of new public transportation equipment, services and systems.

5. To improve the safety and security of public transportation systems, facilities, operating personnel, passengers and freight from harm or destruction from natural or accidental causes.

6. To increase the positive social, economic and environmental effects of existing and new public transportation systems in Michigan including the provision and improvement of transportation services to the transportation disadvantaged.

7. To increase the body of knowledge concerning the needs, alternatives, operations and characteristics of Michigan's public transportation system, including the solution of problems and the anticipation of problems, issues and opportunities.

8. To promote and encourage the development of Michigan's economy and the mobility of its citizens through cost-effective transportation investments.
Within the framework of the objectives, the results of an UPTRAN staff meeting of July 11, 1979, whereat the bureau administrators identified ten essential criteria, and extensive interviews with division administrators themselves, the consultant developed interim criteria.

Although these criteria are necessarily division specific, all are of two 'types': Level I criteria determine the eligibility of a project, proposal, etc., while Level II criteria, using a value-point system, permit ranking proposals and grant applications for funding.

A set of seven recommendations conclude the report:

1. These interim criteria should be tested on 1980-81 projects with regard to their appropriateness and utility.

2. The criteria should be reviewed by elements of state government, transportation agencies and other affected parties.

3. A set of final criteria should be developed.

4. The criteria should be reviewed annually and changed, if necessary, to reflect evolving priorities, conditions, or needs.

5. An UPTRAN appeal procedure should be developed for rejected applications and proposals.

6. A procedure should be developed describing the development, use and annual review of the objectives and criteria.

7. For certain selection criteria consideration should be given to quantifying measures of effectiveness and/or performance using a "Level of Service" methodology as a means of allocating funds to projects.
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>2. A MANAGEMENT PROJECT PROGRAMMING SYSTEM -- AN OVERVIEW</td>
<td>1</td>
</tr>
<tr>
<td>3. DEVELOPMENT OF INTERIM PUBLIC TRANSPORTATION MANAGEMENT OBJECTIVES AND SELECTION CRITERIA</td>
<td>5</td>
</tr>
<tr>
<td>3.1 Objectives</td>
<td>5</td>
</tr>
<tr>
<td>3.1.1 Legislation Analysis</td>
<td>5</td>
</tr>
<tr>
<td>3.1.2 UPTRAN Objectives</td>
<td>7</td>
</tr>
<tr>
<td>3.1.3 Federal Practice</td>
<td>8</td>
</tr>
<tr>
<td>3.1.4 Objectives Development</td>
<td>9</td>
</tr>
<tr>
<td>3.1.5 Interim Public Transportation Objectives</td>
<td>9</td>
</tr>
<tr>
<td>3.2 Criteria</td>
<td>10</td>
</tr>
<tr>
<td>3.2.1 UPTRAN Practice</td>
<td>10</td>
</tr>
<tr>
<td>3.2.2 Federal Practice</td>
<td>11</td>
</tr>
<tr>
<td>3.2.3 Criteria Development</td>
<td>13</td>
</tr>
<tr>
<td>4. RECOMMENDATIONS</td>
<td>14</td>
</tr>
</tbody>
</table>

### Appendices:

1. Interim Selection Criteria Demonstration and Development Programs   | 16   |
2. Interim Selection Criteria
   - Formula Operating Assistance                                      | 22   |
   - Bus Capital Assistance                                             | 23   |
   - Small-Vehicle Projects                                            | 25   |
3. Interim Selection Criteria Intercity Passenger Program              | 26   |
4. Interim Selection Criteria Freight Programs                         | 34   |
5. Excerpts from Operational Audit of UPTRAN                           | 38   |
6. UPTRAN Division Responsibilies                                      | 42   |
7. US-DOT Policy and Management Objectives                             | 46   |

**Figure 1:** Public Transportation Management Project Programming System | 4    |
**Figure 2:** Level I Selection Criteria Matrix                         | 15   |
The opinions, findings, and conclusions expressed in this publication are those of the author and not necessarily those of the Michigan State Department of Transportation and Michigan State Transportation Commission.
I. Introduction

This report contains the results of a study to develop criteria for the selection of projects, proposals, and grant applications by the Bureau of Urban and Public Transportation (UPTRAN) of the Michigan Department of Transportation. The development of selection criteria was recommended by the Office of the Auditor General in an Operational Audit Report. Among the report's recommendations was, "... (The Department should) ... develop standards and criteria to be used for making economic evaluation of annual programs and for requesting State funding for transportation facilities and services."

The Department concurred and solicited the services of the Michigan Transportation Research Program staff in the person of Mr. Leonard E. Newland who, in his capacity as Principal Investigator, performed this study and prepared this report.

This study involved the review and analysis of relevant Michigan Legislation through August 1, 1979 (P.A. 51, as amended) in terms of legislative explicitness and intent with regard to objectives and criteria to be used in the allocation of public funds for transportation programs under the organizational responsibility of UPTRAN. Comparable federal activities were also reviewed with regard to the use of criteria or objectives. Existing procedures and criteria used by UPTRAN in evaluating annual program solicitations were analyzed, and discussions held with UPTRAN Division Administrators and their staffs to obtain their views on criteria and criteria development. From these activities, and from independent analyses by the author, recommended Interim Public Transportation Management Objectives and Interim Selection Criteria were developed and are contained in this final report.

It is planned that after experience with the use of the criteria in the evaluation of projects, proposals, and grant applications, and the determination of the applicability of the criteria to the management objectives, these objectives and criteria may be revised.


For purposes of definition and in order to better understand how the objectives and criteria would be applied, a procedural context is suggested here (Figure 1). "Public Transportation Management Project Programming" refers to the overall process by which the Michigan annual public transportation program is developed on a project-by-project basis, the methods by which funds are allocated to projects, and the process by which the annual UPTRAN budget is developed. In Figure 1, "UPTRAN Management Objectives," are statements of intent which are descriptive of the long-term goals toward which UPTRAN is working. The objectives are based upon the content and intent of relevant legislation, the Michigan State Transportation Commission and the judgment of MDOT and UPTRAN management as outlined in the Summary below:

SUMMARY OF BUREAU FUNCTIONS*

1. Investigate urban and public transportation conditions and make recommendations for improvements to the Director, Advisory Councils, State Transportation Commission, Governor, and Legislature.

2. Review and comment upon policies, procedures, and programs of local and other state agencies which directly affect urban and public transportation.

3. Encourage, coordinate, and administer funds for research, demonstration and development projects in order to develop the application of new ideas and concepts in public transportation facilities and services.

4. Administer programs of state financial assistance for public transportation purposes in accord with state statutes, federal program requirements, and the accounting rules, regulations and procedures of the State of Michigan, State Transportation Commission, and the Department:
   a. Draft rules and regulations for the implementation and administration of the Comprehensive Transportation Fund.
   b. Develop forms and procedures as required for administration and reporting requirements of the Comprehensive Transportation Fund.

5. Prepare applications for such funds as may be available from public and private sources including agencies of the Federal Government. Such applications shall be reviewed and processed in accord with requirements of Sections 9 and 10 of Act No. 51 of the Public Acts of 1951, as amended.

6. Perform those functions as requested by the Legislature, Governor, State Transportation Commission and Director which are necessary to comply with provisions of present or future federal transportation acts.

7. Develop and administer procedures whereby public transportation projects may be modified in accord with Section 10h(2) and (3) of revised Act No. 51.

8. Develop and implement procedures to carry out Section 10e(5) through (9) of revised Act No. 51.

9. Prepare the annual senior and handicapper report called for by Section 10e(10) of revised Act No. 51.

*As approved by the Director of MDOT and Acting Chief Administrative Officer - UPTRAN, in memo dated July 12, 1979.
10. Develop and administer procedures for the implementation of Section 10e(1) of revised Act No. 51.

11. Develop a format and prepare the annual April 1 project report for review and approval by the Advisory Councils, Director, State Transportation Commission, Governor, and Legislature.

12. Review and comment on the needs study reports required by Section 9a of revised Act No. 51.


14. Provide staff support to the various councils and committees established in accord with Section 9a(4) and 9a(13) of revised Act No. 51.

15. Make recommendations on multiyear public transportation program agreements as provided for in Section 10e(2) of revised Act No. 51 for approval by the Advisory Councils, Director, State Transportation Commission, Governor, and Legislature.

16. Work with other state agencies and local units of government providing public transportation to ensure that state funded transportation services are provided and implemented in a coordinated manner.

17. Perform other duties and functions as may be assigned by the State Transportation Commission in cooperation with the Governor.

As shown in Figure 1, "priorities" are essentially the ranking of the objectives by UPTRAN management at the bureau level. "Selection Criteria" are the result of a distillation of the UPTRAN objectives and priorities, legislative eligibility requirements, and divisional priorities into a sequence of "test questions" used to "score" recommended projects, proposals and grant applications on a comparative basis and to eventually approve or reject them. The criteria are used at the divisional level. Because of the diversity of content and thrust of the several UPTRAN programs, the criteria may be different for different divisions.

Therefore, the selection criteria can be used for evaluating two different cycles of programming activity. The first cycle begins with projects recommended to UPTRAN for evaluation. The project recommendations can come from several sources: Michigan Public Transit Association, public interest groups, the Michigan Transportation Research Program, the Michigan Transportation Commission, the Michigan Legislature, transportation authorities and agencies, citizens and from UPTRAN and other Department staffs. These projects would be subjected to the review and evaluation framework of
Figure 1: Public Transportation Management Project Programming System

Governor and Legislative Objectives → State Transp. Commission Policies → MDOI Procedures & Objectives

→ UTRIP Management Objectives

Priorities → Selection Criteria → EVALUATION

Recommended Projects

Projects → Projects Approved?

YES → Proposals and Applications

Proposals and Grant Applications → Proposals Approved

YES → Appeal Procedure

Appeal Successful?

YES → Modify

NO → Rejected

Cycle (1) → Projects Rejected

Immediate Funding?

YES → CYCLE (2)

NO → Projects Approved

Proposals Approved

NO → Proposals and Grants Implemented

Proposals and Applications → Projects Rejected

Proposals Approved

NO → Appeal Procedure

Appeal Successful?

YES → Modify

NO → Rejected
the selection criteria and may be approved or rejected. Approved projects for subsequent-year funding would be placed into the "Annual Budget Programming" process, along with the Public Transportation Management Objectives and Priorities. Approved projects for immediate funding would enter into Cycle I. Proposals and grant applications would be solicited for these projects and would be similarly subjected to evaluation and review using the selection criteria. Accepted proposals and grant applications could be modified for reevaluation or subject to an "Appeal Procedure." If the appeal is affirmative the proposal or grant application would be implemented or modified through negotiation for reevaluation.

Not all divisions would use both cycles. For example, the program activity of the Transit Bus Division is largely prescribed by legislation, so that in most cases only Cycle II would be used. In the case of research and demonstration projects and proposals, both cycles would be used.

Therefore, the first cycle is a programming procedure that determines whether recommended projects should be done at all, with the results becoming an input to the annual budget programming process. The second cycle is a funding procedure whereby UPTRAN funds are allocated to pre-programmed projects and activities for their implementation.

3. Development of Interim Public Transportation Management Objectives and Selection Criteria

This section relates the activities, analysis and considerations that went into developing the recommended interim objectives and criteria.

3.1 Objectives

Although the original statement of work for this study did not call for development of interim management objectives, it became clear during the analysis of selection criteria that at least a preliminary objectives development was necessary to insure that the resulting selection criteria would be reasonably compatible with the legislation and its intent, as well as policy interpretations by the Bureau embodied in the objectives.

3.1.1 Analysis of the Legislation. Prior to its amendment in the fall of 1978, P.A. No. 51, Sec. 10d.(1) stated "The Legislature shall annually appropriate from the general fund of the state, the amounts necessary to meet the purposes of Section 10e.(1)(b)."

This section stated:

"(2) The objectives of this fund include:

(a) Creation and preservation of public transportation services determined to meet transportation requirements in urban and rural areas.

(b) Provision of increased access to jobs, education, recreation and other cultural and social activities through public transportation."
(c) Encouragement of desirable economic development in urban and rural areas.

(d) Encouragement of proper land utilization and enhancement of the environment in urban and rural areas.

(e) Relief from congestion on existing streets and highways and reduction to a minimum the amount of land required to meet future demands for additional transportation needs."

As a result of its amendment in the fall of 1978, P.A. No. 51 is now silent with regard to a statement of objectives. Also prior to amendment, P.A. No. 51 Sec. 10d.(3) stated that "... the general functions of the Department of State Highway Commission shall include, but not be limited to the following: ...(1)... develop and periodically revise standards and criteria consistent with state transportation policies for the formulation and economic evaluation of proposals for the investment of state funds in transportation facilities and services. ..." As a result of the subsequent amendments this subsection (Section 10b.(3)(1)) is no longer in P.A. No. 51 (Underlined by author).

Certain other statements of functions survived the amendment process and have been interpreted as implied support of the recommended Interim Public Transportation Management Objectives. They are:

Public Act No. 51, as amended through August 31, 1979, Sec. 10b(4), ". . . the general functions of the Department of Transportation and the administration of the comprehensive transportation fund shall include the following: ... (b) planning and providing for the current and long-range development of a system public transportation in areas for which an eligible authority or eligible governmental agency does not exist ... (d) . . . encouraging, coordinating and administering grants for research and demonstration projects to develop the application of new ideas and concepts in public transportation facilities and services as applied to state as opposed to nationwide problems."

In regard to the "Management Project Programming" procedure discussed in the previous section, Sec. 10b.(4)(f) states, "In the administration and distribution of the proceeds from notes and bonds sold for public transportation purposes under this Act, the State Transportation Commission shall develop a schedule of priorities to insure the equitable distribution of comprehensive transportation funds consistent with this Act." (Underlined by author)

Sec. 9a provides for a continuing transportation needs study. It also provides for advisory councils to review transportation plans of the Department and to establish a local transportation committee which shall recommend legislation "... leading to improved organization, financing and planning of transportation programs and services ..."
Other legislation also implies certain management objectives:

Act No. 286 of the Public Acts of 1964, as amended through August 31, 1979, Sec. 6d, "The Director may establish a program of current and long-range planning for the transportation systems under the Department's jurisdiction."

Sec. 6e, "The Director may direct the preparation of budget requests, expenditure programs and periodical allotments."

"Act No. 295 of the Public Acts of 1976, as amended through August 31, 1979, Sec. 4(c), "The Commission may maintain adequate programs of investigation, research, promotion and development in connection with the purposes described in this section and provide for public participation in these (rail service continuation) areas."

Sec. 16, "The Commission may contract with a person, firm or public or private corporation to provide... service deemed by the Commission to be in the best interest of the state."

3.1.2 UPTRAN Activity with Regard to Objectives. The objectives that were in P.A. Act No. 51 prior to its amendment in the fall of 1978 have been used by UPTRAN during past fiscal years in its solicitation materials for annual program proposals and its informal evaluation process. In the FY 1980-81 Annual Application Information for the Rail Freight, Rail Passenger and Water Transportation Programs and the Intermediate and High Capacity Transit Programs, the following objectives were stated:

1. "Provide public transportation services which represent an effective, efficient and environmentally acceptable transportation solution;

2. Recognize unique community needs and the benefits and costs associated with various transit modal mixes;

3. Support basic community effort necessary to develop new, more efficient and effective public transit services to satisfy transportation needs;

4. Encourage development and implementation of new transportation technologies including hardware or operating techniques and efficient cost alternatives which result in effective transportation systems;

5. Provide state and local governments with the ability to make maximum use of federal funds and maximum use of existing capital and operating investments in urban facilities;

6. Promote and encourage the development of Michigan industry thereby increasing the potential for new tax base and employment opportunity;

7. Increase efficiency in land utilization and the accomplishment of social and economic development goals including pollution control and general upgrading of the environment;

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2 From Attorney General Opinion 5547 it is appropriate to read "Director" for "Commission."
3 Prepared by the Office of Programs and Evaluation Division, UPTRAN.
8. Provide equality of opportunity of access to jobs, education, housing, leisure time activity and other basic environmental needs.

9. Meet the transportation requirements of special service groups, such as senior citizens, handicapped citizens and low income citizens with the geographic service area."

3.1.3 Federal Practice. For the past four years, the U.S. Department of Transportation, Office of the Secretary, has published a "workbook"\(^4\) which is a compilation of all research, development and demonstration programs within the Department of Transportation categorized by "Management Objectives." The workbook is used as a formalized program planning tool and is the primary document which supports testimony before the Congress on annual departmental appropriations.\(^5\) The management objectives spelled out in the FY 1978 issue of the workbook are as follows:\(^6\)

1. Modernize Regulations/Legislation and Improve Economic Policies
   (All efforts to modernize the regulations and laws pertaining to interstate and international transportation services, to define and/or revise economic policies).

2. Increase Efficiency and Service
   (All activities aimed at improving the traffic flow whether by increasing capacity, reducing trip time, or minimizing congestion. This objective also includes those activities that reduce the costs of transportation such as fixed installation, vehicle and operating costs. Primarily aimed at improvements in existing transportation systems).

3. Improve Safety and Security
   (Efforts aimed at the protection of the system, the operating personnel, passengers and freight from harm or destruction from natural or accidental causes).


\(^5\)The workbook contains a wealth of information on programs and dollar amounts, almost to the level of anticipated grants and contracts. As a result, it has become a "best seller" to major DOT contractors and to State transportation agencies. The responsibility for its preparation was transferred last year to the new Research and Special Programs Administration, DOT. Coincidentally or otherwise, last year's printing was greatly reduced in quantity and at this moment it is out of print and unavailable. As a result, there is considerable pressure being brought to bear on the Research and Special Programs Administration, both from within DOT and outside, to make the volume generally available because of its planning value.

\(^6\)An expansion and elaboration of the management objectives can be found in Appendix VII.
4. Lessen Unfavorable Environmental Effects
   (Efforts aimed at reducing deleterious effects of transportation on the public and the natural environment.)

5. Minimize Adverse Impacts of Energy Constraints
   (Efforts aimed at reducing the energy requirements of transportation systems.)

6. Increase Knowledge Base
   (Efforts to advance the overall level of knowledge about the Nation's transportation system, its capabilities and problems.)

3.1.4 Objectives Development. As a result of analysis of the legislation, current UPTRAN objectives, and federal practice, Interim Public Transportation Management Objectives were developed. These objectives (which follow) are suggested for the consideration of Department management with regard to their appropriateness and compatibility with Department policies and perspectives.

3.1.5 INTERIM PUBLIC TRANSPORTATION MANAGEMENT OBJECTIVES

1. To plan and provide for the current and long-range development of a system of public transportation in areas for which an eligible authority or agency does not exist.

2. To increase the efficiency and service of existing public transportation systems, management operations and facilities.

3. To encourage, coordinate and administer grants for research and demonstration projects to develop the application of new ideas and concepts in public transportation facilities and services as applied to state as opposed to nationwide problems, and to provide for sharing of the experience gained within the Michigan public transportation community.

4. To minimize the impacts of transportation energy constraints through the increase in public transportation energy efficiency and the equitable statewide distribution of new public transportation equipment, services, and systems.

5. To improve the safety and security of public transportation systems, facilities, operating personnel, passengers and freight from harm or destruction from natural or accidental causes.

7 From Act No. 51, as amended, Section 10b(4)(b).
6. To increase the positive social, economic, and environmental effects of existing and new public transportation systems in Michigan, including the provision and improvement of transportation services to the transportation disadvantaged.

7. To increase the body of knowledge concerning the needs, alternatives, operations, and characteristics of Michigan's public transportation system, including the solution of problems and the anticipation of problems, issues, and opportunities.

8. To promote and encourage the development of Michigan's economy and the mobility of its citizens through cost-effective transportation investments.

3.2 Criteria

Based upon the foregoing Interim Public Transportation Management Objectives, interim criteria for the selection of projects, grant applications and proposals were developed after a survey of existing UPTRAN evaluation activities and relevant federal practice.

3.2.1 UPTRAN Practice. In the FY 1980-81 Annual Application Instructions (AAI) for annual program and project solicitations, eligibility and information requirements are spelled out. There are discussions of the review process and in two instances there were statements of project priorities (Rail Passenger Projects, Water Transportation Projects). There are no explicit statements of selection criteria to be used in evaluating applications, but within the discussions of requirements and purposes of the various programs there are implicit criteria. These materials were analyzed and discussions were held with UPTRAN division heads and members of their staffs. These activities resulted in the development of interim selection criteria for the projects administered by each of the divisions.

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Non-footnoted objectives are from the existing UPTRAN objectives (see paragraph 3.1.2) and the U.S. DOT objectives (see paragraph 3.1.3 and Appendix VII).
3.2.2 Federal Practice. Discussions were held with federal officials on the extent to which criteria are formalized and used in the selection of grant applications and proposals. With regard to the demonstration program, it was indicated that from time to time the Office of Management and Budget has pressed for the development of detailed criteria to be used in the allocation of demonstration grants. This has been resisted on the basis that demonstration projects, by their nature, cannot be evaluated in the traditional way. Whether a proposed demonstration project has a high probability of success is not nearly as important as the information and experience gained by the conduct of the demonstration, and the transfer of this experience to the public transportation community at large. It was indicated that it would be difficult, if not impossible, to place detailed criteria on what are essentially "social experiments." Generalized criteria have been developed, however, and are transmitted to potential participants in the demonstration program along with other information as follows:

"There are three basic ways in which a local area may become involved in the Service and Methods Demonstration Program. It may come as a result of a locally generated interest to test out an innovative idea that has broad national interest. Ideally, the idea would also match something already budgeted for testing in the program. Another way a local area may become involved is through efforts generated by Service and Methods Program staff to find a local site to test an innovative idea. A limited number of local areas are periodically contacted that appear to have the appropriate site characteristics for testing a particular demonstration concept. If local interest develops in such a test, a joint effort to implement the project may evolve. Finally, a local area may become involved by responding to a formal solicitation of interest circulated by the Service and Methods Demonstration Program. The solicitation is a broad request of local areas to express their interest in testing a particular innovation or set of innovations.

9 Telephone, with J. Bautz, Office of Service and Methods and Demonstrations, Urban Mass Transportation Administration; and D. Mitchell, Region 5, Urban Mass Transportation Administration on July 16, 1979.

The following criteria (random order) are considered in the selection of federal demonstration sites:

- Local and/or state funding is available either to help with the implementation of the demonstration, or at least continue a successful project after the demonstration period.
- The existing planning process is adequate.
- It is unlikely that results will be disruptive to the transportation planning process in the demonstration area.
- There is good potential that if the demonstration proves to be a success, it will be continued under local sponsorship.
- A detailed budget has been prepared including firm cost figures for all elements of the demonstration.
- Service area and type of service offered by the demonstration would be such that the project would have a significant impact on a particular population or rider group.
- Existing transportation operators are capable and willing to participate in the project. Organization and staffing are adequate for effective execution of the project.
- Adequate technical information about the site is available and specifically included in the project proposal.

Impact on other transportation modes, such as taxi services, should be minimal, or a well-defined strategy to integrate the modes should be included in the demonstration proposal.

- Area characteristics, such as population density, land use patterns, traffic corridors, location of major activity centers, etc., are suitable to the type of demonstration proposed.
- There is minimal jurisdictional or local controversy, dispute, etc., within the proposed service area, or between State DOT's, regulatory authorities, urban transportation units, and local jurisdictions.
- Legal and institutional status of the applicant is satisfactory."

With regard to federal capital and operating grant applications, it was indicated that there are no written selection criteria. As in the case of demonstrations, the Office of Management and Budget has pressed for the development of such criteria but to this date that has not been accomplished, nor does it appear that it will. Grant applications are informally evaluated, primarily on a financial basis, but there is no ranking of geographic areas in terms of their "transportation needs."
3.2.3 Criteria Development. In an UPTRAN staff meeting of July 11, 1979, ten generalized criteria were developed so that grant applications could be evaluated until the interim selection criteria were recommended. The criteria were as follows: (in random order)

1. Meet deadline.
2. Degree energy conservation effectiveness.
4. Consistent with state and local plans and objectives.
5. Meet other division objectives.
7. 10e(S) Review plan.
8. Degree of contribution to coordinate and consolidate services.
10. Adequacy and quality of information.

In an UPTRAN Division administrator staff meeting of July 25, 1979, draft evaluation criteria were reviewed. At this meeting it was concluded that the evaluation process and the criteria should be categorized into two levels:

1. The first level should be a screening process that determines the eligibility of an application in terms of whether the application fulfills the requirements of the Annual Application Instructions (AAI). These Level 1 screening questions should be "yes" or "no," non-subjective in nature. To this end, the first level of the evaluation criteria must complement the AAI; nothing should be required in Level 1 that was not required in the AAI. It is understood that some Level 1 determinants may be unique to a particular division or to particular programs.

2. The second level should rank eligible projects by assigning a weight to each criterion. Evaluation criteria in this level should be categorized within the ten-item structure developed by UPTRAN staff, July 11, 1979 (see 3.2.3). The weighting process must necessarily be somewhat subjective, but should be applied consistently. The process must also be documented. These criteria may also be division-specific or program-specific.

As a result of these meetings, the recommended interim selection criteria (Appendices I through IV) are categorized into Level 1 and Level 2 groupings. Figure 2 is a bureauwide overview of Level 1 requirements. It is suggested that this format be used by division administrators to assure that all applicable criteria are identified. The numerals in parentheses which follow the recommended interim selection criteria statements, or questions, correspond to the ten criteria developed in the July 11, 1979 meeting. The numbers in the left-hand margin of the recommended interim criteria are for weighting factors (or "scores") suggested in the July 25, 1979 staff meeting. The weightings shown are for 1980-81 project evaluations only and are subject to annual change.

4. Recommendations

4.1 The interim criteria should be used by UPTRAN to score at least a sample of the 1980-81 projects and applications so that the Divisions can review their respective selection criteria with regard to appropriateness and utility in actual use. With the federal practice and experience in mind, the Division Administrator should be especially critical with regard to the application of criteria in this manner. The Administrator should make a determination as to the validity of this procedure and the extent to which it is a workable management tool and should report to the Acting Chief Administrative Officer - UPTRAN on the findings.

4.2 The criteria should be reviewed with appropriate elements of the State Legislature, state transportation authorities, and agencies and other affected parties.

4.3 A set of criteria and weighting factors resulting from the above review should be prepared for use in developing the application instructions for the FY 1981-82 annual program solicitations tentatively scheduled to be issued by January 1, 1980.

4.4 The criteria and weighting factors should be reviewed annually and should be corrected for changing public transportation priorities, conditions, and needs.

4.5 An UPTRAN procedure should be developed to provide for the appeal of rejected applications and proposals by January 1, 1980, for inclusion in the 1981-82 annual application instructions.

4.6 A procedure should be developed and documented describing the development, use, and annual review of the objectives and criteria. This should follow the development of an appeal procedure and should incorporate it. The overall procedure (in the form of an easily updated "handbook") should directly relate to the UPTRAN annual budget programming process.
4.7 A "Level of Service" methodology development has been recommended by MTRP. For certain selection criteria, consideration should be given to the feasibility of quantifying measures of effectiveness and/or performance. Such a methodology might be a useful tool in allocating funds to projects within the same mode and across modes. It could also be useful in the evaluation of ongoing and completed projects.


Letter to Mr. John P. Woodford from Dr. Charles G. Overberger, April 5, 1978.
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<tr>
<th>Criterion</th>
<th>Demo &amp; Developm't</th>
<th>Intermedi- ate &amp; High Level*</th>
<th>Research</th>
<th>Formula Operating Assistance</th>
<th>Bus Capital Assistance</th>
<th>Small Vehicle</th>
<th>Intercity Capital Equipment</th>
<th>Intercity Passenger Terminals</th>
<th>Intercity Operating Assistance</th>
<th>Service Developm't</th>
<th>Fare Reduction</th>
<th>Rail Passenger</th>
<th>Waterways and Port Developm't</th>
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<td>1. Adequate multiyear program been submitted?</td>
<td>✓</td>
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<td>2. Is application compatible with program?</td>
<td>✓</td>
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<td>3. State Annual Application Information satisfied?</td>
<td>✓</td>
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<td>4. Applicant satisfy all eligibility requirements (Act 51)?</td>
<td>✓</td>
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<td>5. 10(f) review completed?</td>
<td>✓</td>
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<td>6. E&amp;H requirements met, if required?</td>
<td>✓</td>
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<td>7. Section 10(e)(5) plan submitted?</td>
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<td>8. Federal guidelines and requirements met?</td>
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<td>9. If applicant eligible for Federal funds, are state funds minimum?</td>
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<td>10. If equipment is for fleet expansion will route services be expanded?</td>
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<td>11. Adequate information to permit UPRRAN review?</td>
<td>✓</td>
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<td>12. Can work be completed on time and at cost?</td>
<td>✓</td>
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<td>13. Will proposed project serve general public?</td>
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<td>14. Applied research rather than pure research?</td>
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<td>15. Does applicant have MPSC certificate?</td>
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<td>16. Is minimum reg. sched. service 150 miles/day/seven-day week?</td>
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<td>17. All equipment, systems and devices proven hardware?</td>
<td>✓</td>
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<td>18. Research completed within 2 years?</td>
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<td>19. Literature search indicate research is not duplicative?</td>
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<td>20. Is carrier managed by a public transit authority?</td>
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<td>21. Any violations of ICC, MISC or MMV rules?</td>
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<td>22. Applicant eligible for FRA funds?</td>
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</table>
APPENDIX I

Interim Selection Criteria,
Demonstration and Development Programs

DEMONSTRATION AND DEVELOPMENT PROJECTS

Level I - General*

1. Does the applicant satisfy the eligibility requirements in the Annual Application Information (AAI)?

2. Has the 10f process been completed?

3. Are all of the equipments, systems and devises proposed for the demonstration program proven hardware with operational experience?

4. Has the proposal addressed the transportation needs and problems of special user groups (i.e., handicappers, seniors and economically disadvantaged) as outlined in the AAI?

5. Is the project feasible with regard to the proposed level of funding and time duration? (1) (5) (10)

6. Is research not required as a part of the project? (5)

Level II - Specific*

1980-81
Weight Points

30 1. Evaluation of federal and/or local funding available for the project. (9)

20 2. Evaluation of potential that the demonstration will be continued under local sponsorship if it proves to be a success. (5)

10 3. Evaluation of service to be offered with regard to suitability for this particular demonstration. (10)

25 4. Evaluation of the capability and willingness of existing transportation operators to participate in the project. Evaluation of the organization and staffing with regard to suitability for effective execution of the project. (5) (10)

20 5. Evaluation of the adequacy of technical information with regard to the site and/or service available (such as area characteristics, population density, land use patterns, traffic corridors, location of major activity centers, etc.). Are these characteristics suitable to the type demonstration proposed? (10)

*For explanation of refer to paragraph 3.2.3.
<table>
<thead>
<tr>
<th></th>
<th>Points</th>
<th>Description</th>
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<tbody>
<tr>
<td>6.</td>
<td>30</td>
<td>Evaluation of freedom from jurisdictional or local controversy, dispute, etc., within the proposed service area, or between regulatory authorities, urban transportation units and local agencies. (5)</td>
</tr>
<tr>
<td>7.</td>
<td>25</td>
<td>Evaluation of the proposed project with regard to the potential for reducing the impacts of transportation energy supply constraints in the demonstration area. (2)</td>
</tr>
<tr>
<td>8.</td>
<td>25</td>
<td>Evaluation of the proposed project with regard to the potential for positive environmental, social and economic effects. (3)</td>
</tr>
<tr>
<td>9.</td>
<td>35</td>
<td>Assessment of the demonstration experience by the applicant. Can pros and cons, operational problems and solutions and overall effectiveness of the demonstration be shared by the Michigan public transportation community? How will this be done? (4)</td>
</tr>
<tr>
<td>10.</td>
<td>15</td>
<td>Evaluation of the demonstration project with regard to problems relevant to Michigan. (4)</td>
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<tr>
<td>11.</td>
<td>40</td>
<td>With regard to the proposed project's cost, evaluation of project risks which could greatly reduce the project's effectiveness. (6)</td>
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<tr>
<td>12.</td>
<td>25</td>
<td>Evaluation of the contribution of the project to the coordination and consolidation of other services. (8)</td>
</tr>
<tr>
<td>13.</td>
<td>20</td>
<td>Evaluation of the project with regard to support for local community development objectives as enunciated by local elected officials. (3)</td>
</tr>
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</table>

**Total Maximum Points**: 320
INTERMEDIATE AND HIGH-CAPACITY TRANSIT PROJECTS

Level I - General

1. Has the applicant submitted a multiyear program? Is the proposed transit project compatible with the program? Is the program adequate?

2. Does the applicant satisfy the statutory eligibility and other requirements? (Act No. 51)

3. Has the 10f review process been completed?

4. Has the proposal addressed the transportation needs and problems of special user groups (i.e., handicappers, seniors and economically disadvantaged) as outlined in the guidelines?

5. Have federal guidelines and planning requirements been met?

6. Will the project use reliable, proven equipment and hardware that meets established performance standards? (5)

Level II - Specific

1980-81
Weight
Points

25 1. Evaluation of project support from local constituents as well as from elected and/or appointed officials demonstrating high local commitment. (5)

25 2. Evaluation of the cost/benefit ratio of the proposal in terms of people moved, levels of service and urban area impacts. (6)

30 3. Evaluation of the feasibility of the proposal in terms of construction and implementation. (5) (10)

20 4. Evaluation of the project with regard to benefits to the quality of life in terms of land use, pollution reduction, congestion amelioration, etc. (3) (4) (5)

35 5. Evaluation of favorable economic impacts of the project. (3) (5)

35 6. Evaluation of the project with regard to its support of the maintenance and/or growth of a framework, or "backbone" of a regional, integrated public transportation system. (5) (8)

30 7. Evaluation of the energy conservation potential of the proposed project. (2)
8. Evaluation of federal and/or local funding available for the project.

9. Evaluation of the project with regard to support of local community development objectives as enunciated by local elected officials. (3)

Total Maximum Points

250
RESEARCH PROJECTS*

Level I - General

1. Is the project applied research that responds to existing needs rather than pure research? (5)

2. Will the research have a duration of no more than two years? (5)

3. Has the 10f review process been completed?

4. Can the research needed to address the topic be done within the proposed time and cost limits? (1) (5) (6) (10)

Level II - Specific

1980-81
Weight
Points

25  1. Evaluation of the research with regard to its relevance to Michigan rather than to the nation-at-large. (5)

30  2. Evaluation of potential for attracting federal funding to conduct this research so that state funding can be minimized.

35  3. Evaluation of the potential to reduce costs to the state through operational, technical or management improvements or the creation of more cost effective alternatives to existing systems, equipment or practices upon successful completion of the research. (6)

25  4. Evaluation of the research with regard to its potential to result in improved transportation financing and/or create equitable funding. (5) (6)

40  5. Evaluation of the research with regard to its potential to strengthen the delivery of intermodal public transportation services. (8)

40  6. Evaluation of the research with regard to improving the safety and/or energy conservation of public transportation services, equipment, facilities or operations. (2) (5)

40  7. Evaluation of research with regard to its potential to yield results which will have immediate utility for, or applicability to the operation of public transit systems. (5)

Total Maximum
Points

235

*For ranking proposed research topics or statements.
RESEARCH PROPOSALS**

Level I - General

1. Does the proposal contain the results of a literature search or other survey that indicates that the proposed research has not been done or is not underway? (5)

2. Will the work content yield the desired results in the proposed time frame and at the proposed cost? (1) (6)

Level II - Specific

1980-81
Weight
Points

35 1. Evaluation of the proposal insofar as it indicates a thorough understanding of the problem and its dimensions; e.g., interdisciplinary aspects, data availability, knowledge of transportation needs, intergovernmental relationships, federal and state policies, probable risks and uncertainties. (10) (5)

30 2. Evaluation of the content of the work program and its technical approach with regard to its being comprehensive, adequate and directly related to the solution of the problem. (5) (10)

40 3. Evaluation of the qualifications of the proposal team in terms of their experience and professional backgrounds to assure the successful conduct of the work program. (5)

20 4. Evaluation of the proposal with regard to appropriate management, coordination and information flow to ensure that the project is properly administered and that requirements for UPTRAN technical surveillance can be met. (5)

Total Maximum Points

125

**For ranking proposals submitted for the conduct of the research projects identified and ranked above.
APPENDIX II

Interim Selection Criteria,
Formula Operating Assistance
Bus Capital Assistance
Small Vehicle Projects

FORMULA OPERATING ASSISTANCE PROJECTS

Level I - General*

1. Is there a multiyear program for the area? Is this application compatible with that program?

2. Is the applicant eligible for federal funds? If so, does the proposed project minimize state funding and maximize federal funding?

3. Has the application been submitted for the review process?

4. Have the statutory eligibility requirements been met?

5. Is the application complete and is there adequate information for review by UPTRAN?

6. Will the transportation services be "open door" and serve the general public?

Level II - Specific*

1980-81
Weight
Points

20 1. Does this proposal have the potential for providing an alternative to automobile travel in case of sudden and severe transportation energy improvement or expansion? (10)

40 2. Has the applicant adequately explained and justified the need for the proposed service improvement or expansion? (10)

20 3. Will special population groups be better served as a result of the service improvement? (7)

35 4. Does the project provide for integration with other public transit modes (e.g., intercity bus, rail, local taxi), if applicable? (8)

25 5. Does the proposed operation meet community development objectives? (3)

35 6. Are there sufficient funds and revenues programmed to support the described service objectives? (6)

30 7. In the financial profile of the operation, are all costs eligible according to the Administrative Rules? (5)

Total Maximum
Points

205

*For explanation refer to paragraph 3.2.3.
BUS CAPITAL ASSISTANCE PROJECTS

Level I - General

1. Is there a multiyear program for the area? Is this application compatible with that program? Is the program adequate?

2. Is the applicant eligible for federal funds? If so, does the proposed project minimize state funding and maximize federal funding?

3. Has the application been submitted for the 10f review process?

4. Have the statutory eligibility requirements been met?

5. Is the application complete and is there adequate information for review by UPTRAN?

6. Will the transportation services be "open door" and serve the general public?

7. If this application is for demand-responsive service vehicles, has the applicant submitted a Section 10e(5) plan?

Level II - Specific

1980-81
Weight Points

25 1. Does the request for vehicle fleet expansion coincide with the Description of Service for operating assistance? (10)

30 2. Are the new vehicles of proper size and capacity for the proposed service expansion? (10)

20 3. Are passenger service facilities, accessories and support equipment consistent with areawide service requests plans? (10)

35 4. Are operating and maintenance facility requests reasonable with regard to the size and mix of the vehicle fleet and service objectives? (10) (5)

20 5. With regard to radio and communications equipment, has the applicant adequately justified the requirement in terms of greater operational efficiencies, increased ridership and/or reduced operating costs? (10)

30 6. Are there any cost reduction benefits that would result from this capital equipment? (6)

30 7. Is there energy conservation potential in the use of this equipment? (2)
8. Does the proposed improvement meet community development objectives enunciated by local elected officials? (3)

9. What are the intermodal features of the project (if applicable)? (8)

Total Maximum Points

235
SMALL VEHICLE PROJECTS

Level I - General

1. Is there a multiyear program for the area? Is this application compatible with that program? Is the program adequate?

2. Is the applicant eligible for federal funds? If so, does the proposed project minimize state funding and maximize federal funding?

3. Has the application been submitted for the 10f review process?

4. Have the statutory eligibility requirements been met?

5. Is the application complete and is there adequate information for review by UPTRAN?

6. Will the transportation services be "open door" and serve the general public?

7. If this application is for demand-responsive service vehicles, has the applicant submitted a Sec. 10e(5) plan?

Level II - Specific

1980-81
Weight
Points

25 1. Is the applicant's system design reasonable with regard to ridership estimates, the service area demographics, population densities and human services agencies' travel experience and expectations? (10)

40 2. Does the application appear to have the potential for providing an alternative to automobile travel in case of sudden and severe transportation energy shortages? (2)

20 3. Is the project consistent with state and local plans and objectives? (4) (3)

25 4. If there are other public transit services in the area, to what degree will this system contribute to the coordination and consolidation of these services? (8)

25 5. Are there sufficient funds and revenues to provide the service proposed over a 3-5 year period? (5) (6)

20 6. Does the proposed system meet community development objectives as enunciated by local elected officials? (3)

Total Maximum Points

155
APPENDIX III

Interim Selection Criteria,
Intercity Passenger Programs

INTERCITY CAPITAL EQUIPMENT PROJECTS

Level I - General*

1. Does the applicant hold a Michigan Public Service Commission (MPSC) certificate?

2. Does the carrier-applicant operate 150 miles per day or more of regularly scheduled service in Michigan, seven days per week minimum?

3. Will the equipment be used for replacement purposes? If the equipment would be used to expand the carrier's fleet, will the carrier expand his regular route services for a minimum of two years?

4. Does the carrier operate under the management of a public transit authority?

5. In the previous year, has the carrier been cited for violations of ICC, MPSC or Michigan Motor Vehicle rules or regulations?

6. Has the 10f review process been completed?

Level II - Specific*

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<thead>
<tr>
<th>1980-81 Weight Points</th>
<th>30 1. What is the need for the additional equipment? Will level-of-service be increased or new routes initiated? (5)</th>
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<tr>
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<td>35 2. Will replacement equipment sustain existing service? (5)</td>
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<td>25 3. Will this be an effective use of state funds? Will the operation be cost-effective? (6)</td>
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<tr>
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<td>40 4. With regard to the use of this equipment, what is the potential for increased energy efficiency and conservation? What is the potential for specialized or contract services (e.g., commuting subscription, car pools integrated with bus service, group services, etc.) particularly during severe energy emergencies? (2)</td>
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<td>30 5. Will the vehicles be used in coordinated and consolidated services (serve intermodal terminals)? (8)</td>
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Total Maximum Points

160

*For explanation refer to paragraph 3.2.3.
INTERCITY OPERATING ASSISTANCE - SERVICE DEVELOPMENT PROJECTS

Level I - General

1. Have the required application specifications as outlined in the AAI been satisfied?

2. Have the eligibility requirements been satisfied?

3. Does the proposal describe the projects, activities, services and plans that are part of this application, or are ongoing, that address the transportation needs of seniors and handicappers?

4. Has the IOf review process been completed?

Level II - Specific

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<td>8.</td>
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1. Is there a relationship and contribution of the project service to the statewide transportation network? (4) (5)

2. Is there a significant volume of traffic in and through the service area? (10)

3. What is the existing ridership and will the estimated ridership that would result from the implementation of this application be higher? (6) (5)

4. Is there a potential for an increase in energy efficiency and conservation? What is the potential for specialized or contract services particularly during severe energy emergencies? (2)

5. What is the potential for coordination with existing services? (8)

6. Does the application contain information on the population and population mix (students, age, income, handicappers or other special groups) of the area to be served? (10)

7. Does the application identify traffic generators in the service area (state institutions, colleges and universities, military bases, county seats, hospitals, etc.)? (10)

8. Does the application explain the need for the project service? Are there special needs that would be served? (10)

9. Is the nature of the proposed project described? What is the service area and proposed schedule? Is the service new, expanded or continued service availability? (10)
10. Is the nature of the need for financial assistance in operating the service explained? (10)

11. Has the application identified the existing commission agencies or terminal facilities on the route, or the plans to establish new agencies, if any? (10)

12. Does the application contain the current system operating cost? (10)

13. Will the proposed service be cost-effective? (6)

14. Does the service support local community development objectives as enunciated by local elected officials? (3)

Total Maximum Points

270
INTERCITY OPERATING ASSISTANCE - FARE REDUCTION PROJECTS

Level I - General

1. Have the required application specifications as outlined in the AAI been satisfied?

2. Have the eligibility requirements been satisfied?

3. Does the proposal describe the projects, activities, services and plans that are part of this application, or are ongoing, that address the transportation needs of seniors and handicappers?

4. Has the 10f review process been completed?

Level II - Specific

1980-81
Weight
Points

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<tr>
<th>Value</th>
<th>Question</th>
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<tbody>
<tr>
<td>15</td>
<td>1. Does the proposal indicate the operating division, corridor or schedules for which a fare reduction project is proposed? (10)</td>
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<td>2. Has the applicant provided information regarding operations and service performance outlined in the AAI? Is this information favorable? (10)</td>
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<td>15</td>
<td>3. Is the proposed project adequately described, as outlined in the AAI? (10)</td>
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<tr>
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<td>4. Does the proposal identify traffic generators such as state institutions, colleges and universities, military bases, etc.? Are these traffic generators important with regard to demand and ridership? (10)</td>
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<td>5. Has the applicant cited reasonable causes why the service is not generating revenues? (5) (10) (6)</td>
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<td>6. What is the energy saving potential of the fare reduction project? Can the fare subsidy be at least partly recovered through savings on energy costs? (6) (2)</td>
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Total Maximum Points

105
INTERCITY PASSENGER TERMINAL FACILITIES PROJECTS

Level I - General

1. Have the eligibility requirements as outlined in the AAI been met?

2. Is the application complete as requested in the AAI?

3. Does the application described projects, activities, services and plans which are proposed or ongoing, which address the transportation needs of seniors and handicappers?

4. Has the I0f review process been completed?

Level II - Specific

1980-81
Weight
Points

25  1. Will the proposed terminal facility (or improved facility) provide better service to intercity rail and bus passengers? (5) (8)

20  2. Will it integrate this service with public transportation modes and services, where possible? (8)

20  3. What is the population to be served? What is the population mix (age, special groups, income, where possible)? Is the location of the terminal reasonable with regard to population distribution, travel patterns and modal integration? (5)

20  4. Is the availability of intercity modes high? (10)

20  5. Are there unusual market contributors (e.g., universities, military bases, hospitals, government buildings)? (10)

25  6. Will the terminal be integrated with or supportive of urban renewal projects (e.g., downtown revitalization, transit mall developments and/or attractive to surrounding or integrated private sector investment)? (3)

30  7. Are the local agencies, institutions and operators who would be effected by the terminal project supportive and have they established cooperative activities as a part of this project? (3) (5)

25  8. If this is an application for an intermodal terminal, have plans been established, or are they underway, for the provision of the management and coordination of the transportation functions of the terminal (e.g., provision for public information concerning transfers and trip planning; integration of the assistance during time period of drastically disrupted schedules — bad weather, energy emergencies or operational dislocations)?
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<td>20</td>
<td>9.</td>
<td>Will the facility have energy conservation features? (2)</td>
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<td>25</td>
<td>10.</td>
<td>Are the financial estimates and projections reasonable and sound? Given this consideration and those above, does this project appear to have a reasonable probability of success in its implementation and on-going operation? Is it cost-effective? (6) (5)</td>
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<td>Are accessibility features provided and described? Are they adequate? (4)</td>
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<td>Is the proposal cost-effective for the carriers? (5) (6)</td>
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<td>20</td>
<td>13.</td>
<td>Does the proposal support local community development objectives as enunciated by local elected officials? (3)</td>
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**Total Maximum Points**

310
INTERCITY RAIL PASSENGER PROJECTS

Level I - General

1. Has the applicant adequately satisfied the information requests in the AAI to establish eligibility to participate in the programs?

2. Has the applicant's "Annual Public Transportation Program" (where applicable) satisfied all of the elements of the program as described in the AAI, including transportation service to seniors and handicappers? Is the applicant's response comprehensive and adequate?

3. Where applicable, has the 10f review process been accomplished? Is it satisfactory with regard to the review process outlined in the AAI?

4. Is the applicant eligible for funds administered by the Federal Rail Administration (FRA)?

5. Does the application relate to the "priorities for state assistance" outlined in the AAI? Is this satisfactory?

6. Does the application contain materials responding to the "state criteria" listed in the AAI?

Level II - Specific

1980-81
Weight
Points

35 1. Requests for institution of rail passenger service in corridors where none presently is provided require a market analysis to insure that there is adequate demand to warrant such service. Does the market study include the information requested in the AAI, and does it justify new or added service in the subject corridor? (10) (5)

25 2. Has a feasibility analysis addressing the preceding criteria and detailing market potential factors such as local population, ridership, revenue forecasts, service frequency, service speed, alternative fare structures been prepared? Does this analysis take into account and address the quality of existing rail facilities and equipment including availability for rail passenger service?

25 3. Does the revenue/passenger analysis contain at a minimum, present travel by season of the year to other communities in the corridor by all modes and the methodology of developing potential passenger forecasts? Are the results of this analysis favorable? (10) (5)

20 4. Have operating cost estimates been developed based upon the feasibility analysis factors? Are these cost estimates reasonable? (5) (6) (10)
5. Have the applicants currently receiving state financial assistance for rail passenger operations included in this year's application, the proposed actions to be taken to reduce problems outlined in the various evaluation reports prepared by UPTTRAN for improving rail passenger services on existing state supported trains? Are these actions satisfactory? (5)

6. Has the applicant estimated energy savings which result from ridership (on a load factor basis) and/or new riders diverted from less energy efficient modes? Are the savings significant? (2)

7. Are any energy cost savings sufficient to "recover" at least part of state costs? (6) (2)

8. Will the proposed service contribute to the coordination and consolidation of public transportation modes? (8)

9. Does the proposal support local community development objectives as enunciated by local elected officials? (3)

Total Maximum Points

225
APPENDIX IV
Interim Selection Criteria,
Freight Programs

FREIGHT PROJECTS

Level I - General*

1. Has the applicant adequately satisfied the information requests in the AAI to establish eligibility to participate in the programs?

2. Has the applicant's "Annual Public Transportation Program" (where applicable) satisfied all of the elements of the program as described in the AAI? Is the applicant's response comprehensive and adequate?

3. Is the applicant eligible for funds administered by the Federal Rail Administration (FRA)?

4. Does the application adhere to the "priorities for state assistance" outlined in the AAI?

5. Does the application contain materials responding to the "state criteria" listed in the AAI?

6. Are the information and data required in the printed applications in the AAI for each of the subprogram areas (Short Line Operations, Acquisitions of Rail Properties, etc.) complete for UPTRAN evaluation?

7. Has the 10f review process been completed?

Level II - Specific*

1980-81
Weight
Points

30 1. Are the traffic and income projections reasonable? Is the degree of local shipper support sufficiently high so that traffic expectations could be met? Under any expectation, is there sufficient traffic potential in the area/corridor to be served? (5) (10)

30 2. Has the applicant assured that the management team will have the qualifications described in the proposal? (5)

20 3. Is there a potential for consolidating and integrating intermodal facilities? (8)

20 4. Does the proposed operation have energy conservation potential? (2)

30 5. Are community interest groups along this corridor or at these facilities generally in favor of the proposal? (3)

*For explanation refer to paragraph 3.2.3.
6. From the operational, business and financial viewpoints, is the application reasonable and can the operation, in fact, be implemented as proposed? Is it a cost-effective plan? (6)

7. Does the proposed operation foster the development of a viable free-enterprise rail system? (4) (5)

8. Does the proposal support local community development objectives as enunciated by local elected officials? (3)

Total Maximum Points

225
WATER TRANSPORTATION PROJECTS

Level I - General

1. Has the applicant adequately satisfied the information requests in the AAI to establish eligibility to participate in the programs?

2. Has the applicant's "Annual Public Transportation Program" (where applicable) satisfied all of the elements of the program as described in the AAI? Is the applicant's response comprehensive and adequate?

3. Has the 10f review process been accomplished? Is it satisfactory with regard to the review process outlined in the AAI?

4. Does the application relate to the "priorities for state assistance" outlined in the AAI? Is this satisfactory?

5. Have the application forms in the AAI been satisfactorily and adequately completed?

Level II - Specific

1980-81
Weight Points

30 1. Are the projected port traffic volumes reasonable in view of current and expected tonnage and tonnage mix? (10) (5)

30 2. Will the projected traffic justify the operating and/or capital costs in terms of revenues and retirement of capital? Is the project cost-effective? (6)

25 3. Are the project objectives reasonable and realizable? (6)

30 4. Is the experience of the management team and the structure of the business appropriate and sufficient to the realization of objectives, revenues and the support of an on-going, reasonably successful operation? (6)

20 5. Are the stated public benefits and economic impacts (employment and income) realistic? (3) (6) (10)

35 6. Are there special characteristics, actual or potential of the region to be served either in terms of economic potential or anticipated shifts in traffic demand (such as the transportation of energy) which should be taken into consideration? (2)

20 7. Are there any potential favorable impacts on Michigan's tourist industry? Are these quantified? (2) (5)
8. Are there potential energy savings which could occur through the institution of expanded ferry services or port facilities and water cargo/bulk service? (2)

9. Does the project have the general support of community groups? (3)

10. Does the project support local community development objectives as enunciated by local elected officials? (3)

Total Maximum Points

260
APPENDIX V
Excerpts from Operational Audit
of
Bureau of Urban and Public Transportation

OPERATIONAL AUDIT OF
BUREAU OF URBAN AND PUBLIC TRANSPORTATION
AND GENERAL TRANSPORTATION FUND
DEPARTMENT OF TRANSPORTATION
July 1, 1974 through June 30, 1978 *

MULTI-YEAR PLANS

Recommendation:

1. We recommend the bureau request all governmental agencies and authorities to submit a multi-year transportation plan. The multi-year transportation plan should be used by the department to evaluate transit agencies annual program requests and justification for grants and operating assistance.

Response:

1. Originally there apparently was some confusion on whether the phrase "annual plans" is the same or accepted by the Auditor General to be the same as "annual program." This had presented some confusion for the Auditor General's review as well as to our ability to respond. The Auditor General needed to clarify what is meant by "Annual Plans." Act 51 as amended and the Administrative Rules 247.660(e) and 247.660(f) require eligible governmental agencies and authorities to submit an annual public transportation program—not a "plan" or "multiyear plans." Since our discussion, the Auditor General has clarified this issue. The Urban Mass Transportation Administration requires a Transportation Improvement Program (TIP) which includes an annual element. The TIP is submitted in a three to five year program. The TIP is also submitted through the regional planning agencies.

The Bureau of Transportation Planning personnel are aware that the eligible governmental agencies and authorities do submit--an annual public transportation program to this bureau directly. They have been provided copies in the past and have reviewed and commented on them. Again, there may be confusion between an "annual plan" and "annual program." The annual program requirement under Act 51, as amended, and Rules 247.660(e) and 247.660(f) are being complied with by the transit agencies and authorities. Recommendation number one is/has been adhered to. Confusing the annual program with the TIP may also be happening. TIP's, an UMTA requirement, are used for reference when reviewing the annual program and the "annual element" for a particular fiscal year is the guideline for review of the "annual program."

The planning process established by the Bureau of Transportation Planning will provide for multi-year plans for nonurbanized areas. This has been discussed with the Auditor General staff and clarification of this issue was to be forthcoming in the final report; however, this clarification was not included.

*Letter to James Bolthouse, DMB, from J. C. Kellogg, dated July 2, 1979
EVALUATION OF ANNUAL PROGRAMS

Recommendation:

2. We recommend the department:

(a) Develop standards and criteria to be used for making economic evaluation of annual programs and for requesting State funding for transportation facilities and services.

(b) Develop a more complete review procedure of all annual programs. This review procedure should provide for input of regional planning agencies, as provided for by Section 10f, Act 297, P.A. 1976, and the Bureau of Transportation Planning. Further, the review and evaluation of annual programs should ensure that requests for funding and that promised service improvements are compatible with the transit systems multi-year plans.

Response:

2. (a) Agree. Although the amendment to Act No. 51 has eliminated the specific mandate that the Department "Develop and periodically revise standards and criteria consistent with State transportation policies.", the responsibility is still implied in the current Section 10b(4)(c) mandate to investigate public transportation conditions and make recommendations for improvement to the State Transportation Commission. This responsibility could not be carried out properly without standards and criteria by which to evaluate transportation systems.

(b) During the period of the audit, the dynamic needs of transit agencies may have resulted in variance from what a regional planning commission felt necessary in the number of transit vehicles in a plan. The regional planning commissions do not have approval authority, only review prerogatives. Also, the basis for the 1990 needs projections should be examined for concrete relevancy to specific agencies. Is the 1990 plan inflexible? The question of whether regional planning agencies have veto power over transit agencies is significant here with regard to requests for vehicles. The Auditor General's staff indicated in subsequent discussions that where we approve a different number of vehicles for an agency from a transportation plan, or if the request is not approved by the regional planning agency, that we explain why we approved the request. We intend to do this henceforth if it occurs.

Transit agencies are by law required to submit annual transit plans to regional planning agencies for comments. This procedure provides for input by regional planning agencies. The law does not require the regional planning agencies to comment. Review in reference to the TIP does provide multiyear review. This is the responsibility of the regional planning agency and Transportation Planning. This Bureau also reviews with reference to the TIP.
Again, contrary to the present conclusion by the Auditor General, regional planning agencies are not required by law to comment. This was brought out in our subsequent discussions with Auditor General's staff. We will, however, strengthen efforts through Transportation Planning to have planning agencies submit comments. A more complete review of the annual program is active now as explained to the Auditor General's staff.

EVALUATING IMPROVEMENTS AND EFFICIENCY OF BUS TRANSPORTATION SERVICES

Recommendation:

3. (a) Develop criteria and methods to determine if state gas taxes are used to operate efficient and effective public transportation systems.

(b) In cooperation with transit agencies and authorities, develop uniform policies and methods to manage and control the operating costs of transit systems and routes.

Response:

3(a)-(b)

We agree with the recommendations. For example, we are in the process of developing criteria and methods to evaluate urban transit systems. The Office of Programs and Evaluation has contracted with Peat, Marwick, Mitchell and Co. funded jointly with UMTA (Section 9). The Interagency Transportation Coordination Section presently has an agreement with the Department of Management and Budget to develop a uniform system of cost accounting funded jointly with UMTA (Section 9). Additionally, the Office of Programs and Evaluation for the past two years has developed criteria, methods, and produced several evaluation reports for elderly and handicapper bus transit systems.
Recommendation:

30. (a) We recommend the bureau review its existing programs and related projects with eligible governmental agencies and authorities to:

(1) Eliminate duplication of service in service areas.

(2) Better coordinate transportation services in order to make better use of limited resources and to more effectively respond to the essential mobility of the public.

(b) We also recommend the bureau ensure that each eligible governmental agency and authority is including all transportation services in its jurisdiction in its annual program.

(c) We further recommend the department incorporate elderly and handicapped programs into the transportation program of eligible transit agencies and authorities for distribution of operating assistance funds.

Response:

30. Disagree with Auditor General that E&H response has not been accommodated in annual programs, we have made grants conditional upon this accommodation.

New application procedures being developed to respond to the new State Transportation Legislation include extensive coordination requirements to insure optimum use of existing agency transportation funds.

The recommendation regarding inclusion of E&H services within an eligible authority service program is possible now at the request of the eligible authority, thus making the E&H service eligible for formula assistance. Henceforth, every effort will be made to eliminate duplication of services where they exist. Systems are requested to indicate all services within their service area as a requirement of coordination.

Recommendation:

31. We recommend the bureau require agencies to submit data necessary in monitoring and evaluating existing and continuing programs.

Response:

31. The Auditor General suggests that personnel for the Bus Division have not required certain agencies to submit this data. This is not true. The correct situation is that it has been requested but some agencies will not submit. We do agree with the recommendation that information should be received and will strengthen our efforts to obtain this information.
APPENDIX VI

UPTRAN
Division Responsibilities

UPTRAN DIVISION
RESPONSIBILITIES

DEMONSTRATION AND DEVELOPMENT DIVISION

1. Develop and administer programs of financial assistance for development and demonstration projects requested by agencies/authorities, intercity carriers and Department staff.

2. Implement criteria, standards and guidelines for the distribution of state funds for development and demonstration projects.

3. Provide comprehensive technical management, transit engineering design and/or speciality services for the implementation of conventional and new technology urban transit systems.

4. Manage jointly with agencies/authorities, transit project feasibility, design and construction.

5. Secure federal funds as appropriate for development and demonstration projects administered by agencies/authorities and the Department.

6. Administer state and federal fiscal management requirements for projects implemented by agencies/authorities and the Department.

FREIGHT DIVISION

1. Develop and administer programs of financial assistance for continuation and improvement of rail freight and port facility services.

2. Implement criteria, standards and guidelines for the provision of state funds for rail freight and port facility projects.

3. Provide technical and operational assistance to intercity rail carriers and port authorities.

4. Monitor and evaluate rail freight and port facility projects provided with state and federal funds.

5. Secure federal funds for rail freight and port facility projects.

6. Work with other divisions and bureaus in the development of an integrated intercity transportation system.
7. Coordinate intercity freight transportation activities with other operating modes to achieve intermodality and maximum efficiency of resource use.

8. Administer state and federal fiscal management requirements for projects implemented by intercity carriers.

INTERCITY DIVISION

1. Develop and administer programs of financial assistance to intercity passenger carriers for continuation and expansion of public transportation services and facilities.

2. Implement criteria, standards and guidelines for the provision of state and federal funds for intercity passenger transportation services and facilities.

3. Monitor and evaluate intercity passenger transportation services and facilities provided with state and federal funds.

4. Secure federal funds for operating and capital projects administered by intercity passenger carriers and the Department.

5. Work with other divisions and bureaus in the development of an integrated intercity transportation system.

6. Coordinate intercity passenger transportation activities with other operating modes to achieve intermodality and maximum efficiency of resource use.

7. Administer state and federal fiscal management requirements for projects implemented by intercity carriers and the Department.

8. Provide technical and management assistance to intercity passenger carriers in the areas of marketing, terminal management, training and equipment acquisition.

BUS TRANSIT DIVISION

1. Develop and administer programs of financial assistance to agencies and authorities for public transportation services and facilities.

2. Assist agencies and authorities in the development and implementation of new or expanded public transportation services.

3. Develop and implement new countywide public transportation services including coordination and consolidation with other local transportation providers.

4. Provide technical assistance to agencies and authorities in the areas of transit management, accounting, marketing, training and equipment acquisition.
5. Monitor and evaluate the effectiveness of state funds provided to transit agencies and authorities for operating and capital projects.

6. Secure federal funds for operating and capital projects administered by agencies/authorities and the Department.

7. Implement criteria, standards and guidelines for the provision of state funds to agencies and authorities for operating and capital purposes.

8. Administer fiscal management requirements for projects implemented by agencies and authorities and the Department.

9. Work with other divisions and bureaus in the development and implementation of integrated public transportation services provided by agencies and authorities.

PROGRAM ADMINISTRATION DIVISION

1. Develop, maintain and implement a program and project evaluation system for public transportation services provided with state and federal funds.

2. Carry out special research studies on the interrelationships of transportation programs and services.

3. Develop and implement computer simulation models for use in analyzing Bureau public transportation policies, programs, projects and services.

4. Establish annual and multiyear program funding targets for modal Divisions.

5. Develop procedures and processes for implementation of Section 10h(2) and (3) of Act No. 51.

6. Prepare the annual public transportation program required by Section 10h(1)(a) of Act No. 51.

7. Prepare alternative public transportation programs and policies to solve existing and potential needs.

8. Develop fiscal management requirements for projects implemented by agencies/authorities/intercity carriers and the Department.

9. Develop criteria, standards and guidelines for the provision of funds to implement public transportation services and facilities by agencies/authorities/intercity carriers and the Department.

10. Review other state department and agency budgets and program proposals for consistency with Department-sponsored public transportation services.

GOVERNMENT AND CONSUMER AFFAIRS DIVISION

1. Coordinate with other bureaus, divisions and local communities in providing recommendations to improve public transportation services; maintain liaison with consumers or groups with unique needs and provide information as requested.
2. Carry out federal-state legislative policy and program analyses, implement administrative processes and formulate recommendations for bureau program statement impact.

3. Develop and implement the statewide transportation marketing program, including coordination of intermodal marketing by other divisions.

4. Develop and implement transportation programs for the elderly, handicapped and other special groups.

5. Serve as a central clearinghouse for information regarding all transportation services available within the State.

6. Coordinate and assist operating divisions in securing federal funds for capital and operating projects administered by agencies/authorities/intercity carriers and the Department.
APPENDIX VII

US-DOT Policy
and
Management Objectives
POLICY AND RD&D MANAGEMENT OBJECTIVES STRUCTURE

1. MODERNIZE REGULATION/LEGISLATION
   - 1.1 REVISE ECONOMIC REGULATIONS
   - 1.2 ELIMINATE RESTRICTIONS ON INTERMODAL COMPETITION
   - 1.3 IMPROVE PROCESS FOR RESOLVING TRANSPORTATION ISSUES
   - 1.4 RECOVER COST FROM BENEFICIARIES

2. INCREASE EFFICIENCY AND SERVICE
   - 2.1 IMPROVE AND INCREASE EFFECTIVE USE OF EXISTING FACILITIES
   - 2.2 IMPROVE FLOW MANAGEMENT
   - 2.3 INCREASE OPERATIONAL AND MAINTENANCE EFFICIENCY
   - 2.4 IMPROVE QUALITY OF PASSENGER PUBLIC TRANSPORTATION AND ENHANCE USER ACCEPTANCE
   - 2.5 IMPROVE SERVICES FOR THE DISADVANTAGED
   - 2.6 IMPROVE INTERMODAL CONNECTIONS
   - 2.7 IMPROVE VEHICLE TECHNOLOGY
   - 2.8 ENHANCE EFFECTIVENESS OF FREIGHT SERVICE

3. IMPROVE SAFETY AND SECURITY
   - 3.1 PREVENT ACCIDENTS
   - 3.2 REDUCE SEVERITY OF INJURY/DAMAGE
   - 3.3 INCREASE SECURITY OF PASSENGERS, CREW AND CARGO
   - 3.4 INCREASE MATERIAL TRANSPORT SAFETY
   - 3.5 INCREASE SEARCH AND RESCUE EFFECTIVENESS
   - 3.6 CONDUCT IMPACT STUDIES/ASSESSMENTS

4. LESSEN UNFAVORABLE ENVIRONMENTAL IMPACTS
   - 4.1 ABATE NOISE
   - 4.2 DECREASE AIR POLLUTION
   - 4.3 REDUCE WATER POLLUTION
   - 4.4 ENHANCE COMMUNITY ACCEPTANCE
   - 4.5 CONDUCT IMPACT STUDIES/ASSESSMENTS

5. MINIMIZE ADVERSE IMPACTS ON ENERGY CONSTRAINTS
   - 5.1 IMPROVE ENERGY EFFICIENCY AND CONSERVATION IN TRANSPORTATION SYSTEM
   - 5.2 IMPROVE FUEL TRANSPORTATION AND DISTRIBUTION
   - 5.3 MONITOR TRANSPORTATION ENERGY CONSERVATION MEASURES
   - 5.4 CONDUCT IMPACT STUDIES/ASSESSMENTS

6. INCREASE KNOWLEDGE BASE
   - 6.1 IMPROVE TRANSPORTATION PLANNING AND IMPLEMENTATION
   - 6.2 CONDUCT IMPACT AND PAYOFF STUDIES/ASSESSMENTS
   - 6.3 IMPROVE INFORMATION SYSTEMS AND DATA COLLECTION/BASES
   - 6.4 TECHNOLOGY/MODELING/RESEARCH/NEW ANALYTICAL TOOLS
   - 6.5 URBAN TRANSPORTATION SYSTEMS
   - 6.6 INTER-URBAN TRANSPORTATION SYSTEMS
   - 6.7 AIR/SURFACE OCEANIC SYSTEMS
   - 6.8 IMPROVE CONSUMER EDUCATION AND PARTICIPATION
   - 6.9 UNIVERSITY RESEARCH AND TRAINING (NOT CLASSIFIED ELSEWHERE)
   - 6.10 HP&BR (RESEARCH PORTION)
   - 6.11 R&D FACILITIES AND ADMINISTRATIVE CONTROL
DOT POLICY AND RD&D MANAGEMENT OBJECTIVES

1. **Modernize Regulations/Legislations and Improve Economic Policies**
   
   All efforts to modernize the regulations and Laws pertaining to interstate and international transportation services, to define and/or revise economic policies.

   These efforts can be further subdivided:

1.1 **Revise Regulations**
   
   Efforts to re-examine regulation of interstate transportation to determine which parts are necessary as a minimum to protect the public interest and those which, through the passage of time, have become more of a burden than a help. Includes efforts to achieve specific reforms in the regulatory system by advocacy before regulatory agencies and through proposed Legislation.

1.2 **Eliminate Restrictions on Intermodal Competition**
   
   Efforts to promote equal competitive opportunities among modes. Includes all activities to place greater reliance on forces of open-market competition and to prohibit anti-competitive practices.

1.3 **Improve Economic Policies/Procedures**
   
   Efforts to develop and/or revise economic policies and procedures. Includes efforts to modernize Federal financing policies, remedy inequities in government subsidies, explore use of trust funds and to simplify the grant making process. Also includes efforts to assure that minorities and women participate fully in employment and capital opportunities provided by Federal transportation expenditures.

1.4 **Recover Costs from Beneficiaries**
   
   Efforts directed toward the recovery of costs, when Federal expenditures are used to finance transportation investments or operations, from the users and other beneficiaries in a manner that is appropriate to the degree of benefits received. Examples are: not collecting fees from users of inland waterways, charging various classes of general aviation for use of air traffic control systems; acceptable level of losses of Amtrak that are to be financed by the general taxpayer.
DOT POLICY AND RD&D MANAGEMENT OBJECTIVES

2. Increase Efficiency and Service

All activities aimed at improving the traffic flow whether by increasing capacity, reducing trip times, or minimizing congestion. This objective also includes those activities that reduce the costs of transportation such as fixed installation, vehicle, and operating costs. Primarily aimed at improvements in existing transportation systems.

These efforts can be further subdivided:

2.1 Increase Efficiency and Productivity of Existing Systems

Efforts to improve and increase the effective use of existing systems/subsystems by increasing operational maintenance efficiency, and reducing the operating and acquisition costs of existing equipment and facilities. Also includes efforts to encourage the development of more efficient labor and management practices and other efforts to increase the productivity of labor and capital. Excludes efforts primarily directed toward increasing energy efficiency (see subobjective 5).

2.2 Improve Vehicle/Pathway/Flow Control Systems

All efforts to improve the cost-effectiveness of transportation systems/subsystems by developing and demonstrating equipment, facilities and/or flow control techniques that use technology that is within the state-of-the-art but which, if adopted would result in significant improvement in the existing systems/subsystems.

2.3 Improve Quality of Transportation Service and Enhance User Acceptance

Efforts directed toward the improvement of the service availability, dependability and reliability and other efforts to promote user convenience.

2.4 Improve Services for the Disadvantaged

Efforts to improve the availability of adequate public transportation for the poor, handicapped and elderly.

2.5 Improve Intermodal Connections and Cooperation

This objective includes all actions to increase intermodal cooperation except those directed toward removing regulatory barriers to intermodal cooperation which is included in objective 1.2. Includes actions to improve
connectivity between modes, to encourage intermodal joint use of facilities, and to standardize documentation requirements for shippers and carriers.

2.6 Financial Assistance to Maintain, Modernize, Expand Essential Transportation

Provide, pursuant to statute, operating subsidies and financial assistance directed toward managing, operating, maintaining, improving, expanding and increasing the effective utilization of essential public transportation systems.
DOT POLICY AND RD&D MANAGEMENT OBJECTIVES

3. Improve Safety and Security
   Efforts aimed at the protection of the system, the operating personnel, passengers and freight from harm or destruction from natural or accidental causes.

   These efforts can be further subdivided:

3.1 Prevent Accidents
   Efforts aimed at avoiding accidents caused by human failures, vehicle failures or hazards associated with fixed installations.

3.2 Reduce Severity of Injuries/Damage
   Efforts aimed at reducing the effect of accidents by improving the vehicle or fixed installation.

3.3 Increase Security of Passengers, Crews, and Cargo
   Efforts involved in reducing the danger to people and cargo from criminal acts.

3.4 Increase Material Transport Safety
   Efforts to minimize the hazards due to accidents involving materials which are hazardous either by themselves or due to the way they are contained. i.e., high pressure piping or containers, etc.

3.5 Increase Search and Rescue Effectiveness
   Efforts made to reduce the effect of accidents by locating and removing the people and vehicles.

3.6 Conduct Impact Studies/Assessments
   Efforts aimed at assessing the impact of safety regulations on other research activity that includes more than one of the subobjectives 3.1 -3.5. Also includes the acquisition of data pertaining to accident prevention, transportation security and program evaluation.
4. **Lessen Unfavorable Environmental Effects**

Efforts aimed at reducing deleterious effects of transportation on the public and the natural environment.

These efforts can be further subdivided:

4.1 **Abate Noise**

Efforts aimed at lowering effective perceived noise levels.

4.2 **Reduce Air Pollution**

Reducing adverse aviation side effects of pollution must continue to be a major consideration. Includes efforts aimed at lowering effects of power generation or vehicle operation.

4.3 **Reduce Water Pollution**

Efforts aimed at lowering effect of spillage of cargo or fuel.

4.4 **Enhance Community Acceptance**

Efforts aimed at improving the impact of transportation in such matters as desirable land use changes, dislocation of homes and business, taking of scarce land, etc., population shifts and aesthetic factors. Also includes the efforts to reduce adverse impacts of transportation on the environment that include more than one of the other subobjectives (e.g., noise, air pollution).

4.5 **Conduct Impact Studies/Assessment**

Efforts aimed at assessing the impact of transportation activities on the environment that include more than one of the subobjectives, 4.1 - 4.4 includes. Also includes efforts aimed at assessing the impact of environmental regulations on users and providers of transportation services and the development of means to simplify the regulatory process.
5. **Minimize Adverse Impact of Energy Constraints**

Efforts aimed at reducing the energy requirements of transportation systems.

These efforts can be further subdivided:

5.1 **Improve Energy Efficiency and Conservation in Transportation Systems**

Research and development work on transportation directed toward improving the energy efficiency of all transportation systems, but especially automobiles.

5.2 **Improve Fuel Transportation and Distribution**

Efforts to evaluate adequacy of current and projected fuel distribution facilities and distribution systems.

5.3 **Conduct Impact Studies/Assessments**

Efforts aimed at providing key indicators on a current basis or crucial factors related to transportation energy demands, conservation and service and other data collection and analysis efforts. Includes efforts directed toward the development of forecasts of impacts fuel shortages and price increases.
6. Increase Knowledge Base

Efforts to advance the overall level of knowledge about the Nation's transportation systems, its capabilities and problems.

These efforts can be further subdivided:

6.1 Improve Transportation Planning

Efforts to raise technical abilities of planners at all levels to provide solutions to major transportation problems.

6.2 Conduct Impact and Payoff Studies/Assessments

Studies to improve knowledge of the impact and payoff of or assessments of transportation systems not otherwise classified elsewhere. Includes policy studies, system analyses, technology assessments and other activities aimed at establishing policy and management goals and objectives as a basis for DOT planning activity.

6.3 Improve Analytical Tools/Techniques

Efforts aimed at acquiring, reducing and analyzing data on transportation systems and demands. Includes the development of service and performance statistics of existing transportation systems and efforts aimed at providing support to all kinds of management by making information available on a timely basis.

6.4 Improve Analytical Tools/Technique

Includes efforts directed toward the development of new techniques of forecasting, the development of analytical and simulation models, and methodologies for developing and evaluating networks, etc.

6.5 Improve Technology Transfer

Activities aimed at ensuring that the benefits of research and development are made available to other government agencies and to private enterprise.

6.6 Investigate/Develop Research/New Technology/Systems

All research activities aimed at investigating new approaches to transportation, including research on new technical concepts for the transportation services not yet related to one of the service areas (e.g., urban intercity, etc.). Also includes activities aimed at investigating new technology
and/or development of advanced transportation systems for application to one of the transportation service areas.

6.7 Improve Consumer Education and Participation
Includes efforts to improve the transportation consumer education and participation in transportation planning and development.

6.8 Conduct University Research and Training
(Not Classified Elsewhere)
Includes the TST Program for University Research projects not classified elsewhere and the UMTA University Research and Training Grant program.

6.9 Improve RDT&E Facilities
Activities involved in planning and acquisition and improving research, development, test and evaluation facilities.

6.10 Provide Administrative and Management Control
Activities required to administer and coordinate the R&D and/or grant programs but which are not applicable to any specific program/project. Includes efforts aimed at the development of a better process for resolving conflicting points of view that often accompany the transportation issues involving conservation of scarce energy resources, the provision of safe transportation, protection of the environment, and the availability of satisfactory transportation for the poor.

6.11 HP&R (Research Portion) and Other
Funds available to State Highway departments for research and development, necessary in connection with the planning, design, construction, and maintenance of highways, etc., which are not to exceed 1-1/2 per centum of the sums apportioned each fiscal year to any State for the Federal-Aid Highway systems.