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THE SOUTHWESTERN NEW JERSEY BUS FEEDER SUBSIDY

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The Law Revision and Legislative Services Commission authorized the release and publication of this program analysis at its meeting of February 13, 1974.

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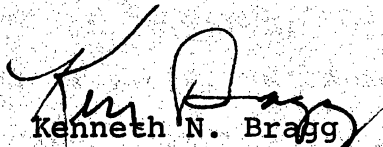
February 13, 1974

TO: Members of Law Revision & Legislative Services Commission

Pursuant to N.J.S.A. 52:11-47e, the Office of Fiscal Affairs herewith submits a program analysis of The Southwestern New Jersey Bus Feeder Subsidy.

This report is one of a series of program analyses completed by our Division of Program Analysis headed by Gerald D. Silliphant.

Throughout the analysis period, the staff enjoyed the cooperation and assistance of the Assistant Commissioner for Public Transportation, staff of the Public Transportation Section, Department of Transportation, and the Port Authority Transit Corporation.


Kenneth N. Bragg

FOREWORD

The Office of Fiscal Affairs was created by N.J.S.A. 52:11-43 et seq. which requires the Executive Director of the agency to "ascertain compliance with Legislative intent by the conduct of performance audits and efficiency studies..."

The Division of Program Analysis was established within the Office of Fiscal Affairs to carry out this statutory obligation. This Division is organized around a staff of professional analysts each of whom is assigned to one or more program analysis projects at any given time.

The accompanying program analysis of the Southwestern New Jersey Bus Feeder Subsidy is one of a series of such studies approved by the Law Revision and Legislative Services Commission. This particular study was authorized by a Commission resolution adopted in March 1973 and was the result of a direct Legislative request. Wesley Westmeyer, assisted by Deborah Savar, both of the Division of Program Analysis staff, prepared this study.

To date, a total of \$5 million in State funds derived from the Transportation Benefits Tax has been appropriated for the Southwestern Jersey Bus Feeder Lines. This program analysis delves into the expenditure details of the appropriation and also examines the substantive results of the bus feeder service in terms of providing effective passenger transportation in the Southwestern New Jersey area.

The methodology employed during the course of the program analysis was designed to disclose information, on which to base findings and conclusions, from as broad a base as possible. This necessitated the use of a variety of research techniques, including questionnaires, staff travel and observation on the feeder lines, and extensive literature searches. A vital component of the staff fact-gathering effort revolved around a comprehensive, two-part survey of users of public transportation in Port Authority Transit Corporation (PATCO) serviced areas. A return of almost 2300 completed questionnaires from this group of users provided invaluable insights into the characteristics and needs of the Southwestern New Jersey commuter population.

The principal findings of this program analysis are as follows:

1. State subsidized bus feeder service, during the first year of operation, has not been oriented toward passengers seeking transportation to PATCO Rapid Rail Line stations.

2. Only 8% of the users of bus feeder service operated under State subsidy by the Transport of New Jersey Bus Company (TNJ) actually transfer to the PATCO Rapid Rail Line, which represents fewer than 4% of the total number of the Line's passengers.

Based upon the above, and additional findings detailed in this report, several recommendations intended to improve bus feeder service have been developed by OFA staff, including:

1. *Continuation of the State bus feeder subsidy to TNJ should be contingent upon demonstration that the majority of bus feeder patrons transfer to the PATCO Rapid Rail Line in keeping with Legislative intent in providing the subsidy.*
2. *The New Jersey Department of Transportation Commuter Operating Agency (COA) should plan and implement bus feeder service to allow present commuters who drive to PATCO stations to use bus feeder services instead.*
3. *Further expansion of bus feeder service should follow appropriate planning efforts.*

This program analysis of the Southwestern New Jersey Bus Feeder Subsidy, provided from State funds, is issued at a time when a rapidly developing energy crisis almost certainly will lead to significant changes in private and public transportation patterns. The short supply and price escalation factors affecting gasoline deliveries for private transportation almost assuredly will lead to fairly drastic voluntary and imposed conservation steps. These may include more extensive use of car pools and increased usage of public transportation services.

At present, the scope and probability of these developments are conjectural but because no short-term solution to the energy crisis appears likely, continued observation of the Southwestern New Jersey Bus Feeder System in terms of these changing conditions is deemed essential.

The Office of Fiscal Affairs wishes to acknowledge the cooperation and assistance of many individuals and groups during the course of this study, including staff of the New Jersey Department of Transportation, the Port Authority Transit Corporation, local government officials and especially the many hundreds of commuters who returned completed survey questionnaires.

December 1973

Gerald D. Silliphant
Director
Division of Program Analysis
Office of Fiscal Affairs

SUMMARY AND RECOMMENDATIONS

In a resolution adopted in March, 1973, the Law Revision and Legislative Services Commission of the New Jersey State Legislature expressed its interest in "an early accounting" of "the expenditure of funds appropriated" for the bus feeder service to the Port Authority Transit Corporation (PATCO) Lindenwold-Philadelphia Rapid Rail Line and "requested and directed the Executive Director of the Office of Fiscal Affairs to conduct a suitable audit to determine all the pertinent details of the expenditure of funds appropriated to date for bus feeder service." This program analysis supplements the interim report made to the Commission on April 25, 1973.¹

The New Jersey State Legislature authorized creation of a passenger bus feeder service to and from the Lindenwold Line owned by PATCO by passing a supplemental appropriation (Chapter 125, Laws of 1972). This appropriation of \$750,000 allowed the Commuter Operating Agency (COA) of the New Jersey Department of Transportation to contract with the Transport of New Jersey Bus Company (TNJ) to provide such service for the period October 30, 1972 to February 1, 1973. The subsidy was extended from February 1 to June 30, 1973 by another supplemental appropriation for an additional \$1.25 million (Chapter 55, Laws of 1973).

The 1974 Appropriations Act continued the subsidy at a rate of \$2 million annually. A further supplemental appropriation raised the bus feeder subsidy total for fiscal year 1974 to \$3,000,000 (Chapter 245, Laws of 1973). The total appropriations of \$5 million were made from the Transportation Benefits Tax Fund.

The Legislature intended that the subsidy be used "to provide passenger bus feeder service to and from the Lindenwold High Speed Line operated by the Port Authority Transit Corporation (PATCO)."² The subsidy is administered by the Commuter Operating Agency (COA), which contracted for specific service with the Transport of New Jersey Bus Company (TNJ). As envisioned by the New Jersey Department of Transportation in 1969, such a subsidy program was to preserve deficit bus operations until the State bought the TNJ bus company.³ The creation of the bus feeder service in 1972 had advantages to the several parties concerned:

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1. A copy of the resolution and interim report appear in Appendix B, page 87.
 2. Chapter 55, Laws of 1973.
 3. New Jersey Department of Transportation, Buses: Crisis and Response, May 1, 1969.

1. Transport of New Jersey (TNJ) was able to receive a subsidy to continue operations in its Southern Division which was then operating at a deficit.
2. The Port Authority Transit Corporation (PATCO) was able to fulfill its plan to have complementary bus service - a requirement for Federal capital grants - and have competing commuter bus service curtailed.
3. The State initiated a cooperative effort to provide superior mass transportation service to the public while funding the effort through a reciprocal income tax on out-of-state residents.

Despite the clear Legislative mandate for subsidy of a bus feeder service to the Lindenwold Line, the first year of program operation has not been oriented toward passengers wishing transportation to a PATCO station. Recognizing the limited peak hour capacity of PATCO, the COA has responded by preserving mostly old bus routes which provide local service and commuter service directly to Philadelphia instead of feeder service to PATCO stations. The COA has not yet designated a means to provide bus service to existing PATCO customers due to planning and organizational shortcomings which were found during this analysis and are discussed in this report. The major findings and recommendations are summarized below.

Feeding Bus Passengers to PATCO

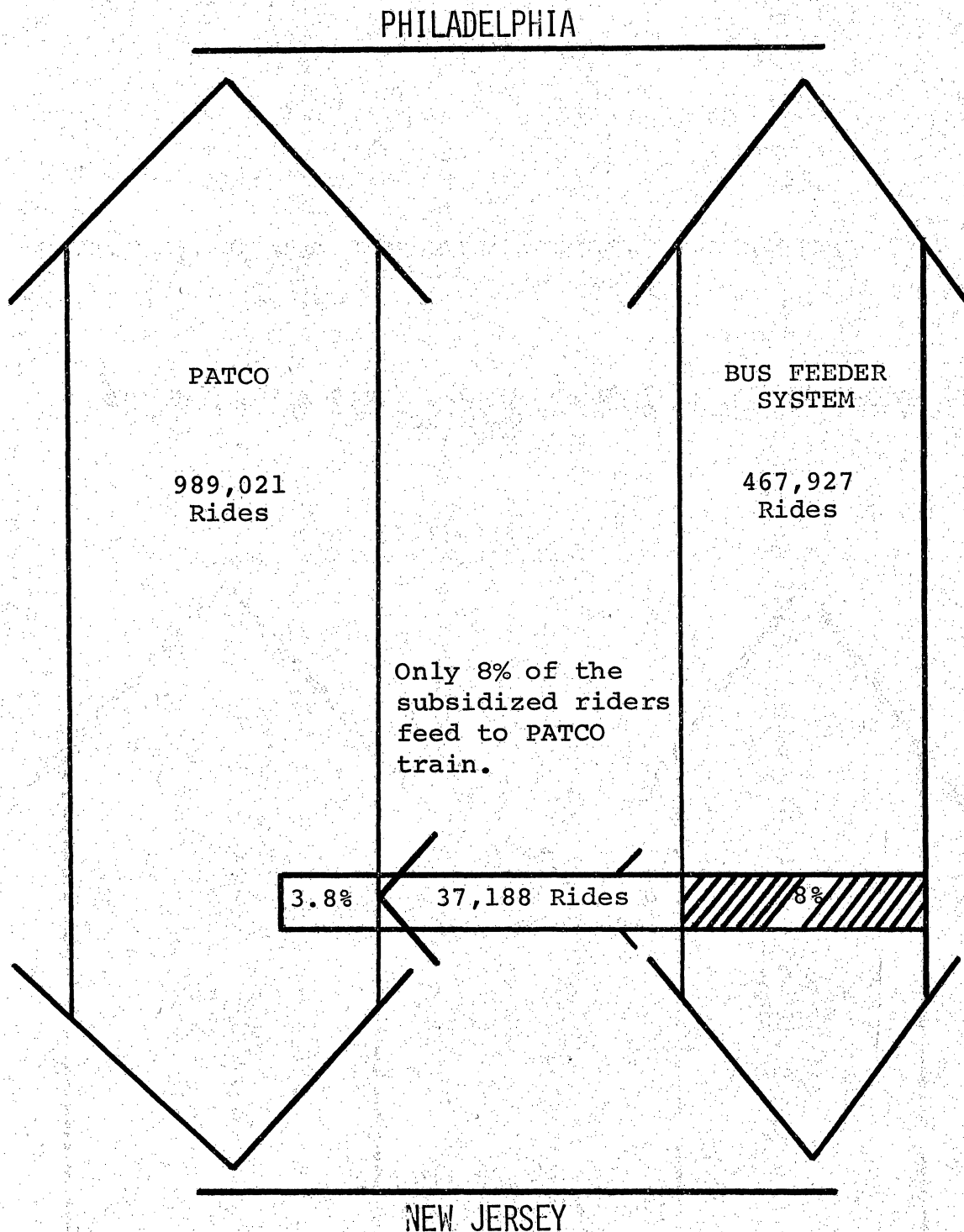
PATCO requested that not all bus routes supply additional rush hour patrons because the line does not have car capacity to handle the additional 2,700 passengers transferring from feeder buses during peak travel periods. As a result, nine of the pre-existing bus routes, now incorporated into the subsidized bus feeder system, were continued to run directly into Philadelphia (page 37). A survey conducted by PATCO showed that for the month of February, 1973 only 3.8% of PATCO patrons connected to or from a TNJ bus (see Exhibit A and page 37). An Office of Fiscal Affairs survey of PATCO patrons now driving their personal car to PATCO stations revealed that 63% of the 1,952 drivers surveyed would commute to PATCO by bus feeder if the schedule and routing were convenient (page 57).

The continuation of the bus feeder subsidy should be contingent upon demonstration that the transfer to PATCO is used by at least a majority of bus feeder patrons. The Commuter Operating Agency should immediately plan and implement bus feeder service to allow present PATCO commuters who now drive to use bus transportation.
(page 65)

Funding

The appropriation for the bus feeder subsidy is drawn from the Transportation Benefits Tax Fund, a fund dedicated to improving transportation between Pennsylvania and New Jersey. This fund is

EXHIBIT A: MONTHLY RIDERS CONNECTING BUS TO TRAIN
February, 1973



Source: TNJ Reports, to the New Jersey Department of Transportation
PATCO Survey "calendar monthly PATCO riding/revenue
comparisons by Transit Mode", March 21, 1973.

accumulating \$11 million annually (see Exhibit AA) from income taxes upon Pennsylvania residents working in New Jersey. While the Fund can only be used for transportation projects, the COA has not formalized an annual plan to use this funding to alleviate the "severe transportation problem"⁴ (page 65).

An annual plan by the COA should be presented to the Legislature showing the number of PATCO patrons transferring from the bus feeder lines, trends in bi-state commutation, and specific use of the Transportation Benefits Tax Act to ease the transportation problem (page 65).

The State subsidy per feeder bus rider amounted to 48¢ and this was 48% of expenses per passenger in fiscal 1973 (page 43). Many of these passengers rode the buses for local stops (page 43). Unlike any other New Jersey bus subsidy, county governments do not contribute funds toward continuing the local portion of the bus service. Meanwhile, two routes providing local service show such low levels of patronage that they fail to pass the minimum criterion of financial viability set by the COA (page 37).

The COA should re-evaluate present bus feeder routes and solicit financial participation from counties benefiting from the local bus service provided. (page 61)

Bus Route Planning

The bus feeder system has arrested the trend of decreasing bus ridership in the Camden area, by offering service beyond that justified by patron revenues (page 37). However, present bus feeder riders indicated in an OFA survey that more frequent bus service is desired (59% of 316 respondents - page 60). Other route planning problems result from lack of coordination with other forms of mass transit: two non-subsidized TNJ routes compete with part of the subsidized bus feeder system which have the advantage of lower fares (page 27); A Dial-A-Ride experiment has not been coordinated with bus feeder operations in the same service area (page 45). The COA has not planned an effective routing system and plans to initiate a support program to provide service cost studies and reports analyzing operations, information not available during the first year of the bus feeder program (page 30). Meanwhile, PATCO has announced priority expansion along a route to Gloucester County - a route that will carry fewer passengers than a proposed route to Burlington County which was rejected by PATCO (page 66).

-
4. Chapter 222, Laws of 1971, Section 4, "The Legislature finds and declares a severe transportation problem exists in connection with transportation interstate...due to the number of daily commuters...as to create a severe peak-load demand"... "wherever the total number of annual crossings...exceeds 100,000,000 but is less than 300,000,000, that fact reasonably demonstrates that a severe transportation problem exists."

EXHIBIT AA

TRANSPORTATION BENEFITS TAX

Collections		Appropriations ²
FY '72	\$ 6,126,357 ¹	0
FY '73	11,617,659 ¹	\$ 2,000,000 (bus feeder appropriations)
FY '74 est.	11,200,000	13,000,000 (PATCO capital project - \$10 million, bus feeder subsidy - \$3 million)
Total	\$28,944,016	\$15,000,000
Balance at end of '74 \$13,944,000		

- Sources: 1. N.J. Division of Taxation Annual Report Fiscal 1973
page 55.
2. Various Appropriation Acts.

The Department of Transportation should immediately begin evaluation of bus feeder routes in Southwestern New Jersey including identification of adjacent areas with potential bus-train commuters (page 61). Bus feeder service should be coordinated with PATCO and Dial-A-Ride. After additional peak hour capacity of the PATCO line is expanded, another OFA evaluation should determine the adequacy of bus feeder routing, commuter satisfaction, and subsidy per rider cost to inform the Legislature as to the efficacy of bus-train coordination (page 65). The Legislature should consider evaluating PATCO expansion plans, to determine if the route that would provide service to more riders deserves first priority (page 66).

Promotion of Bus Feeder Service

The bus feeder schedules and fare information have not been successful in promoting the service. Local government officials have not been informed of the service (pages 33, 61) and an Office of Fiscal Affairs survey of 1,952 present PATCO patrons shows that 90% have never ridden a bus feeder to a PATCO station (page 57). Only 1% of bus feeder riders surveyed by OFA on September 12, 1973 praised the system while 34% requested changes or offered complaints (page 54).

A major advertising campaign should be part of the continuing bus feeder program aimed at disseminating route, fare and schedule information through a variety of promotional techniques (page 62). One device used should be the placement of a chart on each bus which would give route, fare and schedule information (page 63). Another device to promote bus patronage is the construction of bus stop shelters equipped with schedule and route information. These shelters could be constructed by TNJ and local governments (page 59).

CHAPTER ONE: PURPOSE, SCOPE AND METHODOLOGY

Purpose and Scope

The Law Revision and Legislative Services Commission of the New Jersey State Legislature approved the following resolution by mail ballot in March 1973:

1. That the Executive Director of the Office of Fiscal Affairs is requested and directed to conduct a suitable audit to determine all pertinent details of the expenditure of funds appropriated to date for bus feeder services to and from the Lindenwold High Speed Line.
2. That the findings of such audit be made available to the Legislature expeditiously in accordance with provisions of law.⁵

The Executive Director of the Office of Fiscal Affairs responded to the resolution with a letter dated April 25, 1973,⁶ incorporating a report from the Division of State Auditing and announcing further research which would involve determinations such as:

1. Whether the objective has been attained of providing high speed transportation for South Jersey;
2. Whether there has been a restructuring of the bus services in relationship to the high speed transportation line so that choices of transportation have been more restricted and whether there was an expression of Legislative intent of this issue.

Accordingly, the purpose of this program analysis is to provide supplementary information on the desirability, efficiency, and effectiveness of the bus feeder service including the amount of subsidy per rider, the characteristics of people who take advantage of the subsidy, the type of commuters who do not take advantage of the subsidy and reactions of local government officials in the service area. The national energy shortage projected for 1974 adds a dimension of urgency and importance to providing high quality

5. A copy of the resolution appears in Appendix B, page 89.

6. See Appendix B for the full text of the letter and report from the Division of State Auditing.

mass transit. This national development implies that commuters will be switching to available mass transit rather than continuing to use personal forms of transportation.

Methodology

The methodology employed was to:

1. Interview Department of Transportation officials administering the program;
2. Solicit the views of county and municipal government executives in the service area by mail questionnaire;
3. Identify and communicate with all bus operations in the service area and all the other public agencies dealing with mass transit;
4. Physically ride scheduled bus feeder trips;
5. Analyze fare, schedule and ridership information;
6. Survey and identify the background, opinions and suggestions of bus feeder riders;
7. Survey and identify the background, opinion and suggestions of PATCO commuters;
8. Identify literature available from the federal government and universities on bus and rail transit in Southwestern New Jersey.

The surveys designed and distributed by the Office of Fiscal Affairs (items 6 and 7 above) were computer tabulated at the New Jersey Department of Transportation⁷ and the results have been integrated into the information bank now being assembled by the Department. These two surveys were conducted with the permission and cooperation of the Department of Transportation and PATCO. Their assistance was invaluable during the course of the analysis.

7. See Appendix A for details on the surveys and the Survey of County and Municipal Executives.

The analysts followed the wishes of the Commissioner of the Department of Transportation and did not contact the Transport of New Jersey Bus Company. The Department did obtain any information requested by the Office of Fiscal Affairs and forwarded the information in a timely manner. This analysis, however, does not incorporate any general information or observations on the bus feeder service by TNJ management.

CHAPTER TWO: THE DEVELOPMENT OF THE BUS FEEDER SUBSIDY

History of Mass Transit in the Philadelphia-South Jersey Area

The Camden-Burlington-Gloucester County area has seen the rise and fall of rail transit. The Camden and Amboy Railroad and Transportation Company was created in 1834 to carry freight between Philadelphia and Bordentown when the Delaware River was iced over.⁸ Horse-drawn trolleys were authorized in Camden in 1871 and rival light train companies grew rapidly not only along Camden streets, but paralleling heavy steam railway lines to National Park, Mantua, Woodbury, Almonesson, Haddonfield, Merchantville and Pennsauken. The trains became electrified beginning in 1890, and the trailways became merged into two companies by 1896 because of financial difficulties. Both companies were absorbed in 1904 into the Public Service Railway Company. In 1904, through service to Jersey City ran on an hourly basis, with 30-minute headways to Trenton, even though the trip to Jersey City took 8-1/2 hours and the trip to Trenton took 3 hours and 8 minutes.

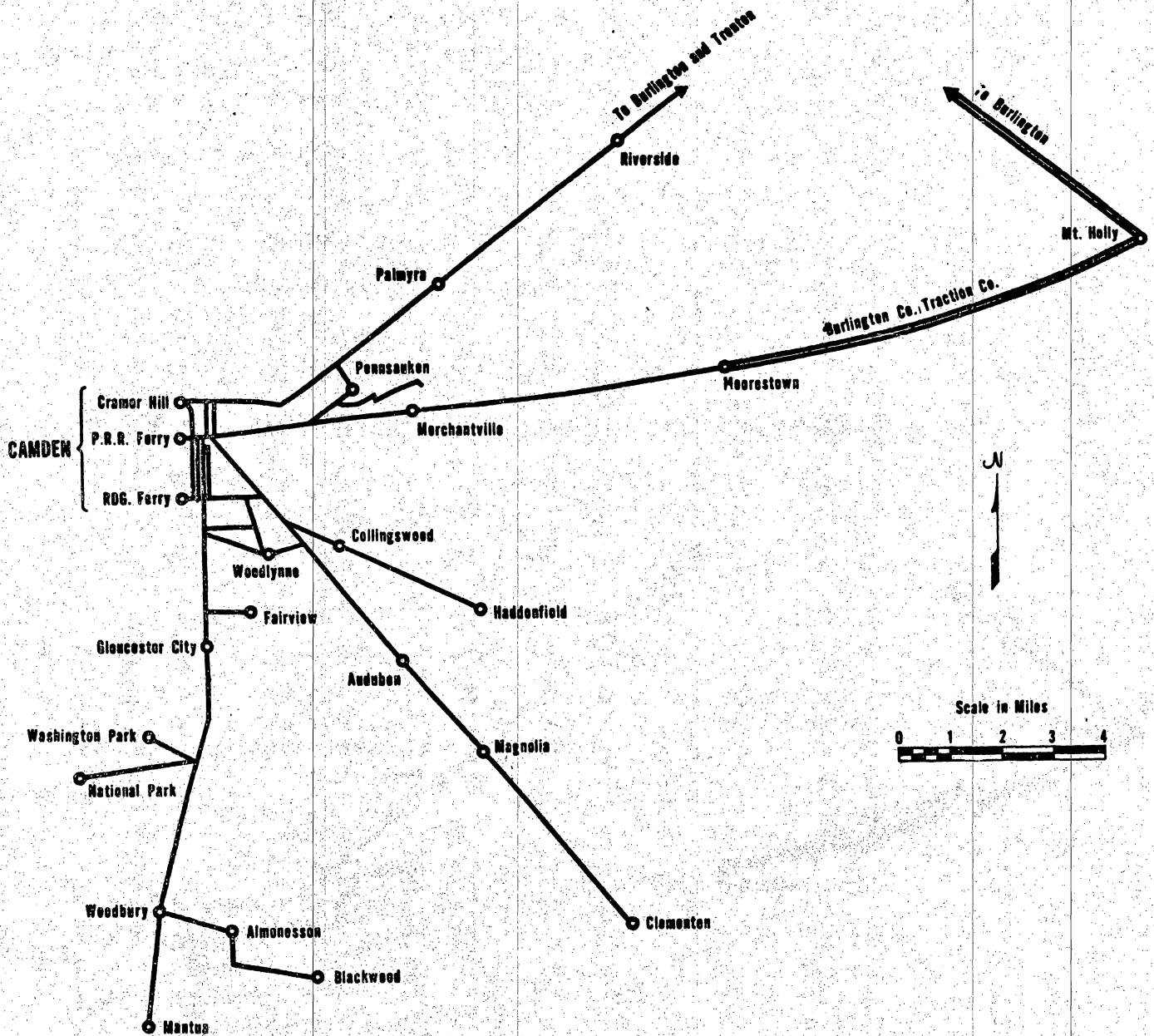
From 1904 to 1939 the Public Service Trolley Lines provided mass transit to the Camden area. The "Southern Division" Trolley service (see Exhibit B) began to change over to bus service because of the convenience of direct travel over the Benjamin Franklin Bridge. Trolley service to the Clementon Amusement Park lasted until 1937 while Trenton-Camden Trolley service was discontinued in 1931.

The "Trolley Wars" of the 1870s and 1880s were repeated in the 1920s and 1930s between bus companies. The Philadelphia Rapid Transit Co. started bus service in Camden after the opening of the Benjamin Franklin Bridge. The buses paralleled the rival trolley line routes and matched their schedules. Eventually Public Service converted all its trolley service to bus service.

The Public Service Coordinated Transport Co. (PSCT), Southern Division, became the major bus carrier in the Camden Metropolitan area after 1939. Smaller bus companies operating in the area have either discontinued service or have merged into the company, now separated from its long-time parent, Public Service Electric and Gas Company. The company is now the Transport of New Jersey Bus Company. Bus companies across the country have felt the cumulative effects of homeowners moving away from cities and buying cars, and PSCT was no exception. Public Service Coordinated Transport's Southern Division never realized a growth in passengers because

8. This and the following detail taken from "A History of Transit in Camden and Southern New Jersey" Appendix A, Praeger-Kavanaugh, Bus Feeder Study for the Lindenwold Rapid Transit and the Camden, N. J. Metro Region, 1968.

EXHIBIT B:
PUBLIC SERVICE TROLLEY LINES IN THE CAMDEN AREA, 1935



Source: Praeger-Kavanaugh, Bus Feeder Study for the Lindenwold Rapid Transit and the Camden, N. J. Metro Region, 1968.

of the competition with the automobile. In the 10 year period 1947 to 1957, mass transit use to Philadelphia over the Benjamin Franklin and Walt Whitman bridges fell, while daily personal trips by auto increased dramatically. Daily personal trips by bus to Philadelphia declined from 60,000 in 1947 to 50,000 in 1957, while daily personal trips by auto increased from 88,000 to 150,000 for the same period.⁹

The Bi-State Compact

The Delaware River Port Authority (DRPA) of Pennsylvania and New Jersey was created in 1931 by actions of the United States Congress, and the Pennsylvania and New Jersey Legislatures. Originally called the Delaware River Joint Commission, the compact agency had as one of its original purposes "the effectuation, establishment, construction, operation and maintenance of railroad or other facilities for the transportation of passengers across any bridge or tunnel owned or controlled by the commission, including the extensions of such railroad or other facilities within the City of Camden and the City of Philadelphia necessary for efficient operation in the Port District."¹⁰

A rail line started in 1939 provided passenger service from one end of the Benjamin Franklin Bridge to the other, but no connecting rail service was implemented in the Camden area prior to the creation of the Lindenwold Line in 1969.

While the construction of the Walt Whitman Bridge was underway, the Port Authority began exploring the feasibility of connecting Philadelphia and Southern New Jersey with rapid rail transit. In August, 1954, the Authority hired the firm of Parsons, Brinkerhoff, Hall and MacDonald to make a ridership survey. On July 18, 1956, the Authority reported to the Governors and Legislatures of both States. The report noted the importance of regional mass transit, the growing traffic congestion in both States and summarized the transportation situation of the moment:

"Of dramatic significance, then, is the fact that patronage of interurban mass transportation has been at a stagnant level, or actually declining, during recent years, while the Southern New Jersey area has been growing rapidly and its automobile traffic increasing in record proportions. Since the peak year (1948), patronage of the Bridge Line between Camden and Philadelphia has fallen off about 24 percent despite the Locust Street extension and the elimination

9. Plate II, "Daily Person Trips Over the Benjamin Franklin and Walt Whitman Bridges 1947-1958" in Delaware River Port Authority, Southern New Jersey Rapid Transit System, Haddonfield-Kirkwood Line, Camden, April 19, 1961.

10. Article Ib, Chapter 391, Laws of 1931.

of ferry service. The utilization of the commuting railroads in the Southern New Jersey area has declined 75 percent and bus patronage is at the 1947 level, thus essentially stagnant in relation to population growth trends. It is of equal importance that regional mass transportation interests have experienced operating deficits and thus are compelled to seek redress in the form of increased fares or reduced service, thereby threatening patronage still further.

"The dominant problem for the Southern New Jersey area is whether to accept the stagnation and decline of regional mass transportation and the intensification of traffic congestion and frustration of regional development that will result, or whether to re-invigorate regional mass transportation."¹¹

The Lindenwold-Philadelphia Rapid Rail Proposal

In 1959 and 1960 engineering consultants advising DPRA formally recommended creation of the "Haddonfield-Kirkwood Rapid Rail Line". The Authority then approved the project and proposed its creation to the Governors and Legislatures of both states, pledging to commit \$25 million of its own funds. The project won bi-state approval in 1961.

In 1968, the DRPA investigated changes needed in the existing bus routes to feed into the stations of the new rail line to be opened in 1969, now called the Lindenwold Line. With a grant supplied by the Federal Department of Housing and Urban Development, the Authority hired the firm of Praeger-Kavanaugh to examine the existing Public Service Coordinated Transport operation. The report, issued in September, 1968, recommended the establishment of specific new routes to provide feeder and cross country service and maintain local service where required. The consultant recommended that the Bi-State Compact be amended to give the Authority the power to operate the bus service and that the Authority should take over the Public Service Coordinated Transport Company.

On February 15, 1969, the Port Authority Transit Company (PATCO), a subsidiary of DRPA began rail service on the Lindenwold Line. The line was hailed as the predecessor of "a new era of mass transportation" and, in 1973, is still called the "most modern Rapid Rail Transit System in North America" by Walter Johnston, PATCO Executive Director. The line transports passengers over the 14.5 mile line in 22.5 minutes, covering eight New Jersey stations.

11. Delaware River Port Authority of Pennsylvania and New Jersey, Report on the Southern New Jersey Mass Transportation Survey, 1956, p. 5-6.

The line was built at an estimated cost of \$94.5 million.¹² Total annual ridership grew from 6.1 million in 1969 to 9.5 million in 1971. In 1973 daily patronage fluctuated between 40,000-50,000 rides.

The Origins of State Bus Subsidies

On May 1, 1969, the New Jersey Department of Transportation formally recommended to Governor Richard Hughes 1) that the State begin an interim program to subsidize local bus service on a 75/25 matching basis with local governments "to support bus services which would otherwise be terminated" and 2) public acquisition of the Public Service and Intercity Bus Companies.¹³ The department identified the developing stagnation and decline of service of the New Jersey bus industry and specifically pointed to the Camden area problem: The new Lindenwold Line seemed to accelerate ridership decline while the bus company regarded the Rail Line as a competitor to its direct service to Philadelphia. "The Southern Division of Public Service...is in serious financial condition and requires prompt restructuring to adapt it to the operations of the new high speed Lindenwold Transit Line."¹⁴ At that time the Department of Transportation warned that public ownership of bus companies was more desirable than a subsidy program:

"Once a subsidy program is undertaken, considerable and increasing amounts of public funds will be committed for the preservation of the existing operations, with no perceivable improvement for the benefit of the taxpayer. Subsidies can easily become a crutch for poor management. Once the arrangements are fixed and the threat of service curtailed, some of the chances for making improvements will become difficult.

"But even if one were willing to overlook the inefficiencies of small scale operations and duplications of routes inherent in the subsidization approach, there remains the problem of administration. With 274 bus companies in the State, most of which are very small operations with no fiscal control devices, any subsidy program will pose extreme administrative difficulties."¹⁵

The interim subsidy program to preserve local bus service was authorized by the 1969 amendment to the Transportation Act of 1966. As recommended, counties requesting preservation of essential bus service were required to provide 25% of the subsidy.

12. American Automobile Association, The Lindenwold Line. A Case Study of the Newest Rail Rapid Transit, February, 1972.

13. N. J. Department of Transportation, Buses: Crises and Response, May 1, 1969, p. 5.

14. Buses...op.cit. p. 2-3.

15. Ibid, p. 32.

On June 17, 1971, the Transportation Benefits Tax Act was passed in New Jersey to tax Pennsylvania residents working in New Jersey. The tax was a reciprocal tax because New Jersey residents who work in Pennsylvania were subject to a Pennsylvania income tax. The New Jersey legislation stipulated that the tax was to be imposed for a limited but unspecified period, for transportation purposes and was to be applied to the "severe interstate transportation problem." The tax raised \$6.1 million in fiscal 1972, \$10.9 million in fiscal 1973, and the estimate for fiscal 1974 is \$11.0 million. A balance of \$10.0 million is expected at the end of fiscal 1974 after the bus feeder subsidy and a \$10 million grant to PATCO for capital improvements are deducted.

The management of the Transport of New Jersey Bus Company was approached to run feeder bus lines to seven of the Lindenwold Line Stations. TNJ President John J. Gilhooley announced to the press in February of 1972 that "we're willing to take on the feeder lines if we can take over the whole operation. Together they can be profitable."¹⁶

Legislation was introduced in the New Jersey Assembly on June 29, 1972 to provide a \$750,000 subsidy for "passenger bus feeder service to and from the Lindenwold Line" for the period until February 1973. The bill passed both Houses of the Legislature without a single dissenting vote and became Chapter 125 of the Laws of 1972. On September 21, 1972, an agreement was signed between the Commuter Operating Agency and the Transport of New Jersey Bus Company to provide subsidized bus feeder service. This bus feeder service began on October 30, 1972.

Governor Cahill highlighted the bus feeder subsidy, and recommended its renewal for \$2 million in fiscal year 1974, in his Annual Budget Message released at the end of January, 1973. Upon the expiration of the contract for subsidy, additional authorization was sought to renew the contract and extend the system until the end of fiscal year 1973. Legislation authorizing this extension passed both houses by February 5, 1973, and was signed on March 7, 1973 (Chapter 55, Laws of 1973). Subsequently, the Commuter Operating Agency renewed the contract on March 28, 1973.

On March 30, 1973 the COA voted to allow PATCO to begin a \$30 million rail improvement project, \$10 million to come from the Transportation Benefit Fund and \$20 million to be financed by a federal grant. This \$30 million request plus the \$2 million request to continue the bus feeder subsidy were approved by enactment of the 1974 Appropriations Act and a supplemental appropriation added \$1 million to the bus feeder subsidy.

16. New York Times, February 6, 1972.

Related Bus Programs: The Dial-A-Ride Experiment

In May 1972, the New Jersey Department of Transportation and U. S. Department of Transportation sponsored a Dial-a-Ride experiment that began operations in the Haddonfield area. Using senior TNJ bus drivers on new 17-passenger buses, the experiment is intended to determine the acceptability of an on-call mass transit system in a limited area. The system is designed to be computer-dispatched, either responding immediately to a telephone request, or serving a pre-existing pickup arrangement. Service is provided 24 hours a day, every day of the year within the confines of Haddonfield, Lawnside, part of Barrington and part of Cherry Hill. Dial-a-Ride serves the Haddonfield Station of the Lindenwold Line. One specially constructed bus provides service for those confined to wheelchairs. The basic fare was 60¢ per ride with family and senior citizen discounts available, and this base fare was reduced to 30¢ in October, 1973.

Related Bus Programs: The Senior Citizens Half-Fare Program

On May 10, 1973, the Legislature approved a State subsidy to allow New Jersey citizens over the age of 62 to ride intra-state buses at non-peak hours for half-fare. The program was to begin by September 10, 1973 and the law (Chapter 126, Laws of 1973) appropriated \$6.4 million for the subsidy and administration of the program. The Department of Transportation determined

"in order to provide reduced fare ridership at a minimum of inconvenience to eligible senior citizens, while at the same time incurring a minimum of administrative expense for the State as well as the bus companies, the New Jersey Department of Transportation will allocate the appropriation predicated upon documented intrastate ridership."¹⁷

The Department hired Wilber Smith Assoc./Ford, Bacon Davis to survey all bus companies to obtain a comprehensive picture of actual bus ridership by senior citizens for the purpose of determining future allocations of revenue under the program.

National and State Trends in Bus Transit

The decline in mass transit use is well documented¹⁸ with many variables cited as causative factors. A basic cause is the rapid growth of urban population outside the concentration of public

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17. N. J. Department of Transportation, "Senior Citizens Half-Fare Program: Guidelines for Bus Operators", September 1973, p. 2-3.
 18. For example see American Transit Association, Transit Fact Book Washington, 1972; Wilfred Owen, The Metropolitan Transportation Problem, Washington, 1966; or J. R. Meyer, J. F. Kain, and M. Wohl, The Urban Transportation Problem, Cambridge, 1965.

transit systems.¹⁹ Population shifts between 1960 and 1970 show that population outside central cities increased by 33.5% while central city population increased by 1.5%.²⁰ In 1970, urban population outside central cities exceeded population inside central cities by 14 million people. As people spread away from central cities, rider densities for central city mass transit decrease, requiring mass transit to service a greater area to maintain ridership. The population spread in the suburbs also multiplies the numbers of origins and destinations required, making it more difficult to schedule regular point to point transit, and inform potential riders as to actual service. The move into the suburbs is also due to other factors: relocation of jobs outside of central cities, higher personal incomes, the desire to own a "cottage", fear of urban crime, the search for a better school district, etc.

Automobile ownership has shown a large increase. Both per-capita and per-household car ownership increased in the decade 1960-1970, with a rising percentage of households having two or more cars (usually one car is needed for the trip to work, a function formerly served primarily by mass transit). The percentage of no-car households declined over the decade: 20% of all households in the U. S. did not own a car in 1970 as compared to 24.5% in 1960.²¹ In the Philadelphia standard metropolitan statistical area (which includes Camden County) in 1970, 27.0% of the households owned no car, 45% owned one car and 28% owned two or more cars.

Other factors commonly cited in the decline of mass transit have to do with the industry itself. For example, fare increases and reduced service have been common and deferred maintenance and fleet replacement were necessary to continue operations when costs increased faster than revenues. Labor costs rose markedly in the last 25 years, and now compose the largest factor in bus operations costs. Public Service Coordinated Transport reported a rise in average hourly compensation of bus drivers from \$1.10 in 1946 to \$3.80 in 1969 and an average of \$5.00 per hour in 1973. The average gross hourly earnings for the transportation and public utilities industry in 1969 was \$3.64, rising to \$4.53 in 1972. The national average for all industry groups was \$3.04 in 1969 and \$3.59 in 1972.²²

19. Most of the following is adapted from Institute for Defense Analysis, Economic Characteristics of the Urban Public Transportation Industry, U. S. Department of Transportation, February, 1972.

20. Ibid, p. 1-2.

21. Ibid, p. 1-4.

22. Figures are from "Hourly and Weekly Earnings in Private Industry, by Industry Group: 1960 to 1972", U. S. Bureau of the Census, Statistical Abstracts of the U. S., 93rd Edition, 1973.

A sample of 51 United States bus properties in 1968 showed the following characteristics:

1. At a given fare, companies that provided higher bus miles per-capita experienced higher patronage.

This suggests that improved service levels will, indeed, attract riders.

2. The number of passengers does decrease with increases in fare.

While a ratio of 10% fare increase: 3% rider decrease is commonly cited, the survey shows a ratio of 10% fare increase: 6.7% rider decrease, more than double the industry "standard".

3. Bus patronage is higher in cities where the proportion of persons in the 19 to 64 age group is higher. This reflects the likelihood that the chief use of mass transit is for work trips and the primary beneficiaries of bus transit are the labor force.
4. Bus patronage is lower in cities where the proportion of households in the low-income range (under \$3,000) is higher than average, and the proportion of households in the high-income range (\$10,000 and above) is higher than average.

Some of the reasons for the lower ridership by the poor may be: a) higher unemployment in this group, b) lack of funds to ride, c) the tendency to live within walking distance of work locations, d) transit service is not accessible.²³

The Public Service Coordinated Transport Company plight was recorded in the 1969 Department of Transportation Report, Buses: Crises and Response. The State bus industry in the 20 year period 1947-1967 suffered from declining revenues and rising costs and equipment was being utilized beyond its useful life while service levels were being cut and no new service was initiated. The twenty year trends are shown in Exhibit C.

The biggest decline in bus ridership in New Jersey occurred on local intrastate service, a decline on annual passengers of 72% between 1947 and 1967, with the same decline recorded for the number of bus miles and number of bus trips.

23. Institute for Defense Analysis, op.cit, p. 2-14, 2-15.

EXHIBIT C: BUS INDUSTRY DECLINE, 1947 to 1967

	National*	State	PSCT
Decline in Annual Ridership	233%	276%	303%
Decline in Annual Bus Trips	NA	197%	227%
Decline in Revenue/Bus Mileage	134%	124%	138%
Decline in Number of Bus Companies	126%	167%	--
Decline in Number of Routes Operated	NA	150%	159%

*The 20 year period used here is 1950-1970.

Sources: Column 1 - U.S. Bureau of the Census.
Statistical Abstracts, op. cit. p. 554.

Columns 2 and 3 - NJ DOT
Buses: Crises and Response, 1969,
pp. 12-15.

The decline for Public Service Coordinated Transport was more exaggerated than the national decline in a number of respects:

1. For the ten years, 1959 to 1969, the U. S. average passenger decline was 11.4% while the decline for PSCT was 26.4%.
2. Between 1958 and 1966 the average fare for the industry increased 26.1%; PSCT was up 68.5%.
3. Revenue for the industry (1958-1966) up 8%; PSCT up 28.8% (due to 6 fare increases in that period).
4. Revenue passengers for the industry, down 14.2%; for PSCT down 23.6%.
5. Investment by PSCT in transport equipment has increased (1958-1967) almost twice as fast as the national average despite the decline in revenue passengers, indicating PSCT has made an unusual effort to provide a high standard of service.²⁴
6. Between 1956 and 1968 PSCT was granted six fare increases, a rate of one fare increase every other year.²⁵

Another picture of the national and Southern Division passenger decline was provided by the Bus Feeder Study for the Lindenwold Rapid Transit. Exhibit D shows the national decline in ridership 1935-1966, while Exhibit E shows the decline on specific routes in the 1960s. The routes depicted are now known by the letters in parentheses and are a part of the feeder bus system.

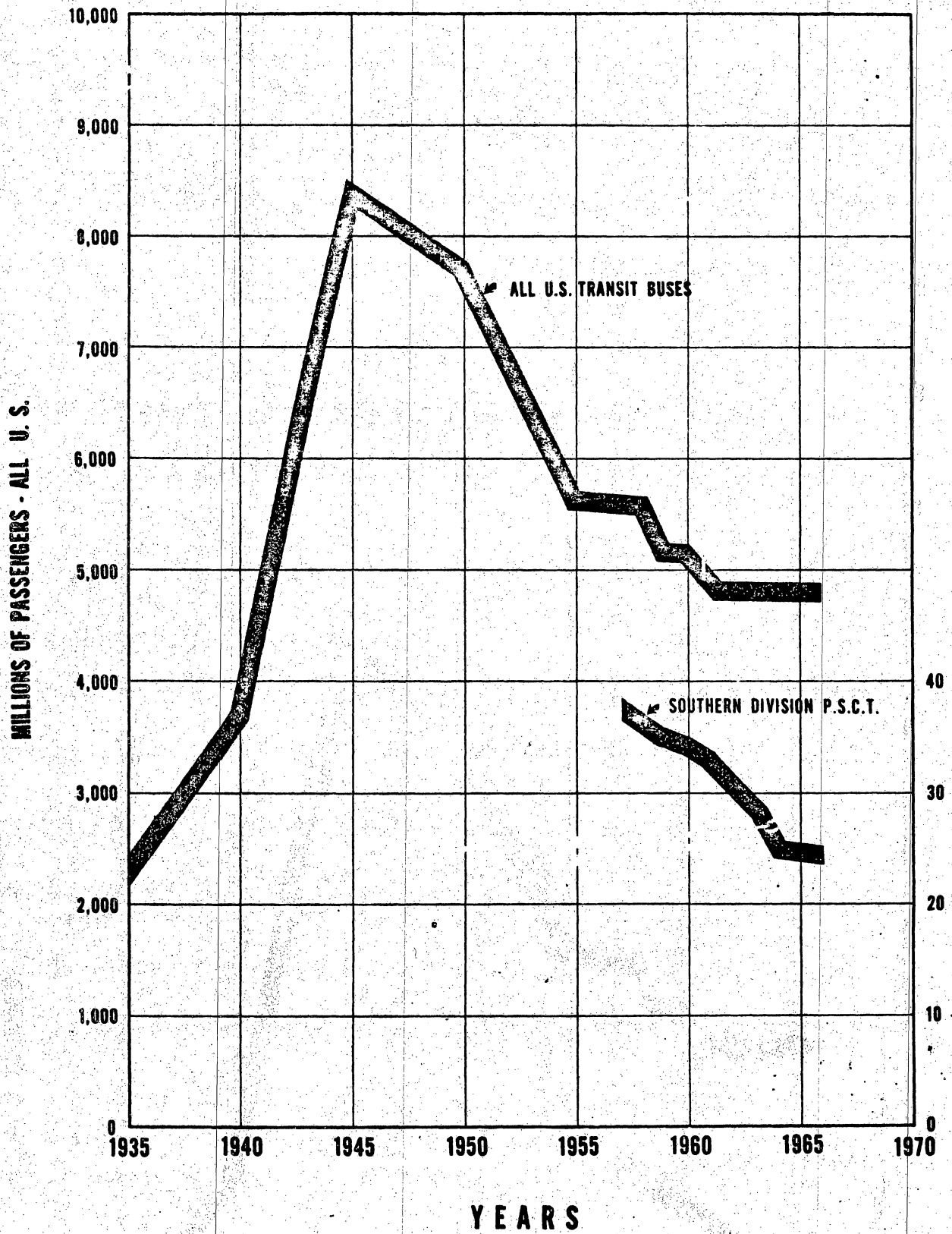
The Transport of New Jersey Bus Company sought permission in August, 1971 to discontinue four bus lines that had been affected adversely by the Lindenwold Line because the routes failed to generate fares to cover costs. The company was still directly competing with the Lindenwold Line when it opened in February, 1969. The new management of TNJ was seeking to cut costs statewide by discontinuing 44 routes, discharging employees (about 400 in the first 8 months) and by seeking a fare increase. State efforts by the Department of Transportation to merge TNJ into a feeder system accelerated in this background.

24. N. J. Department of Transportation, Buses...op.cit., p. 13-15.

25. Ibid, p. 8.

EXHIBIT D:

ANNUAL BUS PASSENGER DECLINES, 1935-1966

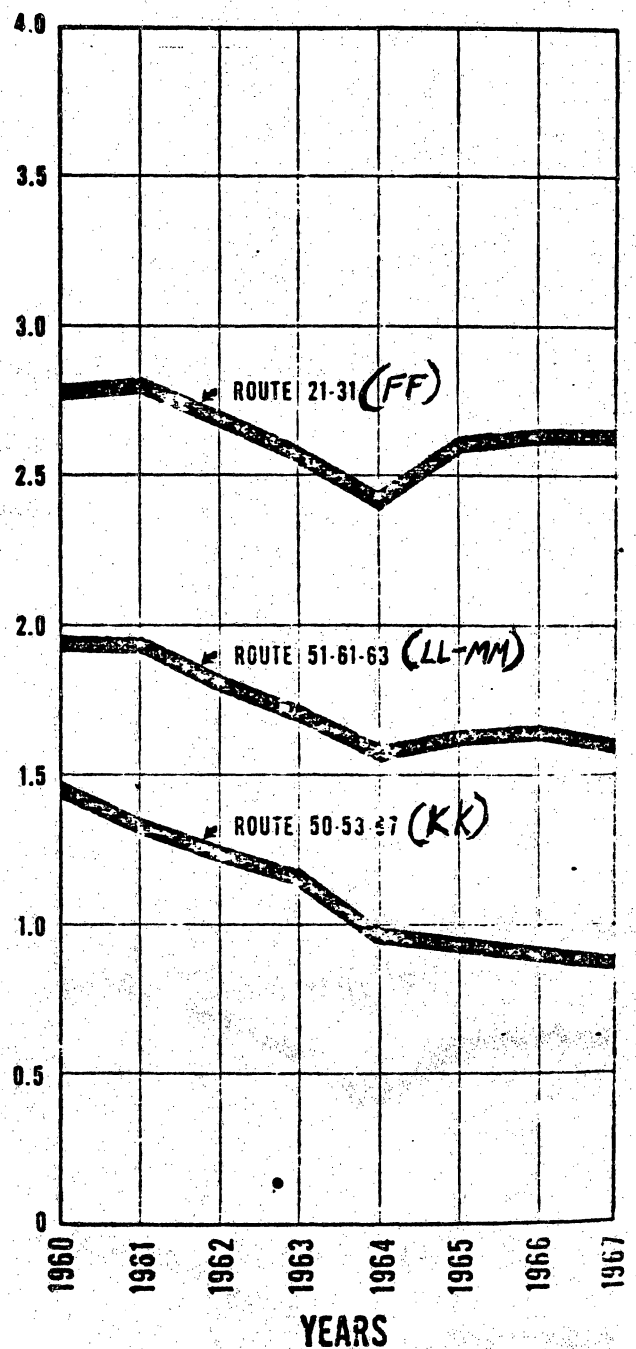
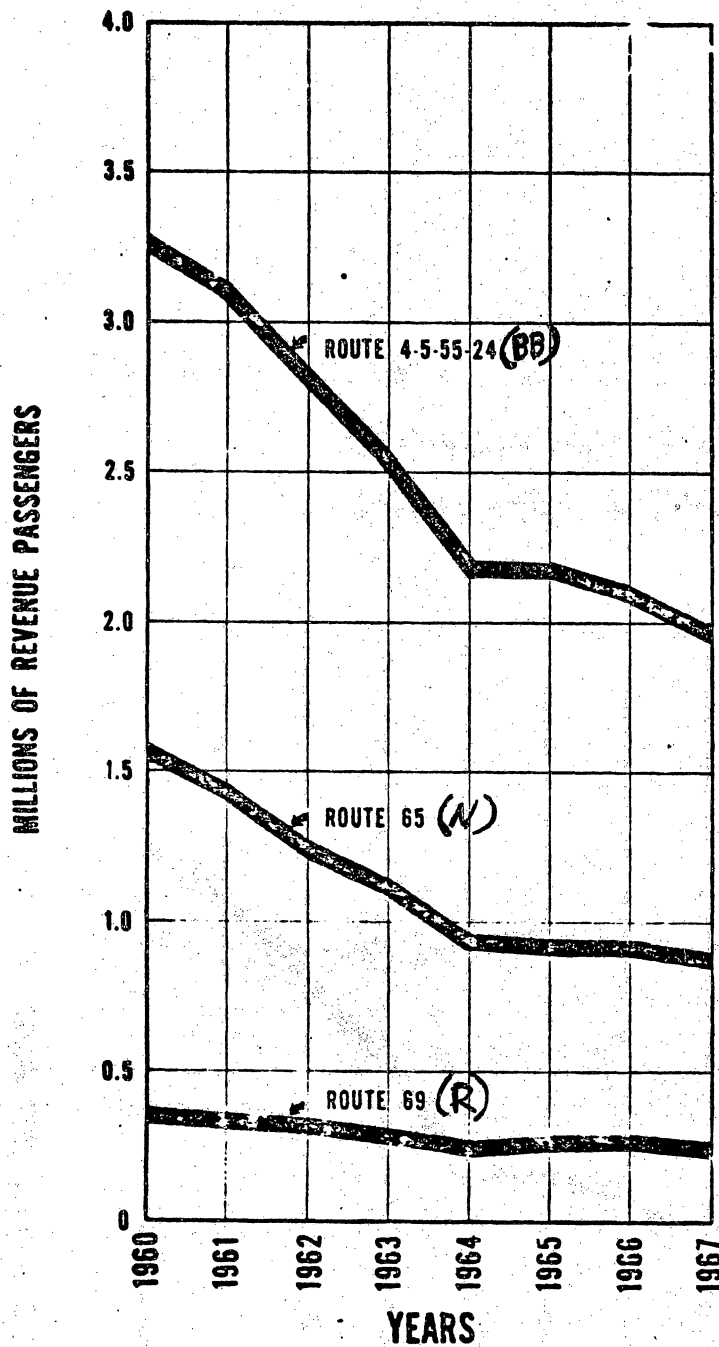


Source: Praeger-Kavanaugh, Bus Feeder Study for the Lindenwold Rapid Transit and Camden Metro Area, 1968.

EXHIBIT E

ANNUAL BUS PASSENGER DECLINE IN THE CAMDEN AREA, 1960-1967

PUBLIC SERVICE COORDINATED TRANSPORT SELECTED ROUTES - SOUTHERN DIVISION



Source: Praeger-Kavanaugh, Bus Feeder Study for the Lindenwold Rapid Transit and Camden Metro Area, 1968.

CHAPTER THREE: ELEMENTS OF BUS FEEDER OPERATIONS

In 1966, the State of New Jersey moved to give transportation problems an integrated approach,

"to promote an efficient, integrated and balanced transportation system for the State; to prepare and implement comprehensive plans and programs for transportation development in the State; and to coordinate the transportation activities of State activities, State-created public authorities and other public agencies with transportation responsibilities within the State."²⁶

The act as amended prescribes that among other duties, the Commissioner of Transportation shall:

"Develop plans for more efficient public transportation service by motor bus operations; develop statistics, analyses, and other data of use to bus operators in the provision of public transportation service; facilitate more effective coordination between bus service and other forms of public transportation, particularly the Commuter Railroads..."²⁷

As a part of the act broadening the pre-existing State Highway Department, the Commuter Operating Agency was created as a board made up of the Commissioner of Transportation, the Assistant Commissioner for Public Transportation, the State Treasurer and the President of the Board of Public Utility Commissioners. The agency is charged with, among other duties, contracting for bus service, with any motor carrier, which is "necessary to provide or encourage adequate commuter use of intercity bus service and would not otherwise be provided or made available without state assistance."²⁸

Commuter Operating Agency Procedure

The Commuter Operating Agency, created by the Transportation Act of 1966, is composed of the State Treasurer, the President of the Public Utilities Commission and the Commissioner and Assistant Commissioner of Transportation. One of the COA's major functions is the allocation of rail and bus subsidy funds.

26. Chapter 301, Laws of 1966, Section 1.

27. Chapter 30, Section 5, Laws of 1966 as amended by Chapter 71, Laws of 1967, and Chapter 345, Section 1, Laws of 1971.

28. Ibid, Section 19.

The COA "may enter into contracts with any motor bus carrier to operate passenger service which the agency shall determine (a) to be necessary to provide or encourage adequate commuter or intercity bus service and (b) would not otherwise be provided or made available without State assistance. Payment by the agency for such passenger service shall be based on the actual cost of such service to the motor bus carrier plus a 6% return on investment."²⁹

The COA may also buy, lease or rehabilitate buses used for passenger service by any State motor carrier. The subsidy program is designed to maintain passenger service "determined by the agency to be essential" and the criteria for determining the "essential" routes to be preserved are:

1. The availability of alternative means of public transportation;
2. The potential cost of continuing service sought to be curtailed or discontinued;
3. The cost to the State of providing alternative transportation facilities either by common carriers or highway improvement;
4. The resulting effect on state and local population trends, economic values and tax revenues.³⁰

The COA has, in the fiscal years 1971-1974, received applications for more subsidies than it had appropriations available. The COA priorities for subsidy allocation follow the statutory guidelines with first priority placed on the renewal of previous subsidies, if carrier performance remains satisfactory. Ten percent of the subsidy amount is withheld pending a verification of the amount of carrier loss during the subsidy period. The audit section of the Department of Transportation prepares carrier audits on the basis of a calendar year's operation, so that a full year picture is presented in April to COA staff for evaluation prior to allocation of the subsidies for the next fiscal year. Contracts with bus carriers require continued levels of service and vehicle maintenance with a minimum of delays and cancellations. The COA does have the flexibility to amend the contract for additional service for additional compensation not exceeding the estimated actual cost of such additional service. The contract specifies how the 6% return on investment is to be calculated and what quarterly reports are required from the carrier.

29. Laws of 1966 c. 301, Sec. 19, Amended by Laws of 1967, c. 71, Sec. 5 and Laws of 1971 c. 216, Sec. 1.

30. Laws of 1966 c. 301, Sec. 24, Amended by L. 1967 c. 71, Sec. 7 and L. 1971 c. 216, Sec. 2.

Bus Feeder Contract Administration

The bus feeder system was established by COA contract after Legislative approval of the Chapter 125, Laws of 1972. The new routes as initially established consisted of the 15 existing TNJ routes redirected into a PATCO station. Nine of fifteen routes were continued to go directly to Philadelphia over the Benjamin Franklin Bridge; this latter decision was forced because the Lindenwold Line did not have enough cars to handle additional peak hour riders and also had requested that some bus service to Philadelphia be continued. Two TNJ Southern Division Routes, the 7 (71) and 9 (9A) were not included in the bus feeder system. These latter routes serve Burlington County riders among others and while the routes compete with feeder routes when operating close to Camden, the COA reasoned that a more logical time to tie these routes into a bus feeder system would be after the planned spur rail line to Moorestown was completed.

Adjustments to the contracted routes began as a result of experimentation and observation by bus drivers and DOT inspectors provided alternatives. The bus drivers have suggested formal route changes to simplify the routes or to pick better roads. On at least two occasions, bus inspectors suggested stops or minor rerouting to serve new apartment complexes. More frequent service was worked out on some routes and a new route, the UU, was initiated to provide bus service from the Lindenwold Station to Camden County College and the various apartment complexes along that route. In July, 1973, TNJ absorbed the "54" line, a route formerly operated by the Southeastern Pennsylvania Transit Authority (SEPTA). The "54" line also became part of the bus feeder system.

COA did not attempt to study and optimize bus feeder routes before their implementation. It was recognized that a number of changes scheduled for the Lindenwold Line would change the nature of the bus feeder system. For example, the planned additions to the line would create new stations to feed into and eliminate the need for some of the intercounty bus routes; the addition of new cars would increase peak hour capacity on the Lindenwold Line, meaning all bus feeder service direct to Philadelphia could be eliminated. The solution reached was to feed PATCO stations on off-peak hours and provide direct fees service to Philadelphia on peak hours. Other changes have been suggested by passengers; e.g. many complained about having to transfer from a bus at the Broadway Station in Camden and enter an underground PATCO station. As a result, several routes were changed to feed into the Ferry Avenue Station. All such changes are considered on an individual basis and are not part of a comprehensive plan.

Another reason for adopting an ad hoc approach to new bus routes is the lack of State experience with the subsidy by contract approach. The contracts are short-term in scope (annual) and the Department has yet to formalize information to monitor contracts or evaluate specific route choices. There is neither a Department

mechanism nor available expertise to plan a bus route although both are proposed as a part of the 1975 Departmental Budget submission.

The Department of Transportation does have criteria it considers important for evaluating bus routes. The criteria mentioned in the statute are accepted with several further refinements. A judgment is made on the clientele served by the bus route; if a transportation-poor group is identified as a major patron (the aged, school children, handicapped persons commuting to hospital clinics) the Department will work to keep the route operative. The question of alternative transportation availability is considered, with the major financial criterion being if the route generates half its expenses through the fare box.

A quarterly report format required by contract from the TNJ became formalized in July, 1973. The reports consist of information recorded by bus route on revenues and total passengers carried. There is no procedure, however, to analyze the reports or identify trends of interest to the COA.

The Department of Transportation takes full responsibility for the operations of the contractor and the bus feeder system (with the exception that liability for civil suits must be borne by TNJ). The Bureau of Bus Operations is in frequent contact with bus company officials and during unusual events such as the strike on the Lindenwold Line or the opening of a new route, prepares daily or weekly status reports for the Commissioner and Assistant Commissioner. The Bureau itself has four budgeted positions and three temporary positions. The Bureau Chief is the only title charged with analytical and planning duties, four positions are field inspectors, and two positions are secretarial (see Exhibit F).

According to the Department of Transportation Administrative Directive 9.021-B, effective August 30, 1973, the duties of the Bureau of Bus Operations are:

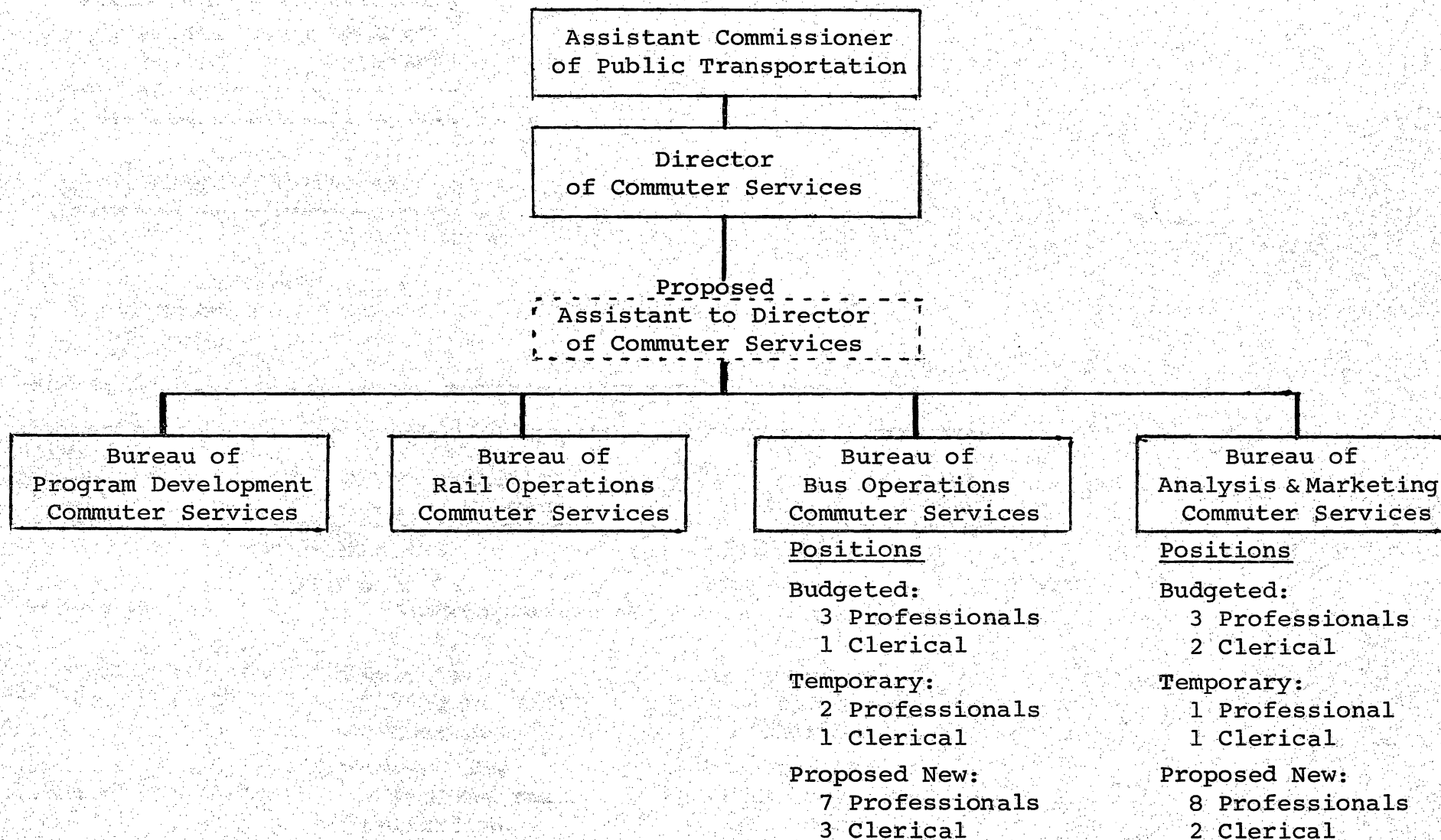
2a. Arrange for service cost studies, analyzing operations and implementing operating efficiencies, to be coordinated with the Bureau of Analysis and Marketing.

b. Coordinate bus service with other modes of transportation and take appropriate action upon complaints.

c. Negotiate service contracts; check compliance of bus operations with contract provisions, including on-time performance, and availability and maintenance of facilities and equipment.

EXHIBIT F:

ORGANIZATION CHART - DEPARTMENT OF TRANSPORTATION, DIVISION OF COMMUTER SERVICES - 1973



Source: FY 1975 Budget Request,
Department of Transportation

d. Visit assembly plants and repair facilities to determine competency of bidder's organization and facilities; inspect new and refurbished buses prior to their acceptance by the State for use in COA--contracted services.

e. Certify bus companies wishing to qualify for special "low fee" license plates.

The Chief of Commuter Operations and the Acting Chief, Public Transportation Systems of the Department of Transportation independently stated that the Department up to September, 1973 had no capability to perform bus route planning or statistical analysis of contractor-supplied data. The Department has not provided the Bureau of Bus Operations with marketing studies, impact studies of subsidy alternatives, analysis of fare structures, or support in studying possible schedule changes. To implement the administrative directive, an additional seven positions have been requested for fiscal 1975. The Department has requested eight new positions for fiscal year 1975 in the Bureau of Analysis and Marketing to perform these activities, among others. In total, 30 new positions, half of which are non-clerical positions related mostly to the functions in supervising, analyzing, and promoting the various bus subsidy programs, have been requested in the new budget request.

In accordance with the subsidy legislation, the Department has contracted for the "New Jersey Bus Study" which is planned to provide the Statewide information base upon which an effective monitoring system of the State bus industry could be established. As detailed in the "Interim Report: Overview and Policy Alternatives on Transportation in New Jersey" (January, 1973), the Bus Study will contain a policy statement, inventory of bus carriers as to routes, corporate structure, financial data, charter and franchise rights, schedules and fares, equipment and physical facilities, all "retrievable through electronic data processing procedures." The report is to make recommendations to make optimum use of available buses and supporting facilities. A second phase of the report will make in-depth studies of several travel corridors or urban centers. The report has not been submitted to date.

The COA entered into 22 bus assistance agreements in calendar year 1972, totalling \$2.78 million. County governments contributed \$465,700 of the total, making the State share \$2.3 million. Only three agreements did not have county participation; a subsidy to the Intercity Lines (now out of business), a subsidy to TNJ, Bergen Cross County service and the TNJ/PATCO Bus Feeder System. The bus feeder subsidy (only \$750,000 in this calendar year) was by far the largest single agreement.

Subsidy Calculation

The bus feeder subsidy allows the State, up to a current appropriation ceiling of \$2 million for fiscal 1974, to pay the difference between revenues and expenses (and a 6% annual return on investment) for service on designated TNJ routes. "Operating expenses" consist of operating and maintenance expenses (Accounts 4100-4600),³¹ depreciation (Account 5000), operating licenses and taxes, including income taxes (Account 5200), and operating rent (Account 5300). "Return on investment" means 1-1/2% per calendar quarter (6% annually) of the aggregate net value of carrier operating property which is actually owned and used by TNJ to provide the contracted services. No intangibles are included.³² An appendix to the initial contract shows that the 6% allowable return on investment was calculated to be \$134,000 on the basis of a peak vehicle requirement of 70 buses, plus 7 back-up buses for the itemized service (although a footnote adds that it is to be adjusted to a new total of 124 coaches because of the addition of new routes). The figures show the following:

"An average investment per bus of \$163,000, pro rata share of the Southern Division garages, shop equipment, furniture, fare boxes and service vehicles plus an allocation of total TNJ materials and supplies, Newark shops and general offices."

The period from October 28, 1972 to January 31, 1973 saw revenues of \$807,000, expenses of \$1,508,000, and a return on investment of \$27,900. This, plus the additional allowable start up and advertising expenses, totaled an allowable loss of \$772,000, while the appropriation was limited to \$750,000. (See Exhibit G) Based upon the one month, January, 1973, (\$271,000 total loss including return on investment) the feeder service would lose \$1,355,000 for the period February 1, 1973 to June 30, 1973 and \$3,252,000 for the 1974 fiscal year.

Viewpoints: The PATCO Viewpoint

PATCO officials have displayed both a great deal of interest and disappointment with the bus feeder system. For a period of

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31. Account numbers refer to the Uniform System of Accounts for Motor Carriers of Passengers required by the Board of Public Utility Commissioners.
 32. Both terms are so defined in the initial subsidy contract dated September 21, 1972. There is disagreement between the State Department of Transportation and TNJ on how the value of property is to be calculated. The Department insists on book value while TNJ wishes to use market value - a higher figure.

EXHIBIT G:

BUS FEEDER SERVICE
STATEMENT OF REVENUES AND EXPENSES

	<u>10/28/72-12/31/72</u>	<u>1/1/73-1/31/73</u>	<u>TOTAL</u>
Passenger Revenues	<u>\$544,965</u>	<u>\$262,049</u>	<u>\$807,014</u>
Expenses			
Equipment, maintenance and garage expense	\$152,279	\$82,243	\$234,522
Transportation expense	487,715	249,801	737,516
Station Expense	18,505		
Traffic, solicitation and advertising		9,272	27,777
Insurance and safety expense	3,887	4,674	8,561
Administrative & general-Southern D.	44,168	24,969	69,137
Depreciation Expense	112,610	54,743	167,353
Operating taxes and licenses	45,430	22,968	68,398
Operating rents-net	37,908	31,971	69,879
Overhead Expense	614	283	897
Dial-A-Ride Credit	92,802	50,335	143,137
	<u>(12,417)</u>	<u>(6,831)</u>	<u>(19,248)</u>
	<u>\$983,501</u>	<u>\$524,428</u>	<u>\$1,507,929</u>
Loss from Feeder Service	(\$438,536)	(\$262,379)	(\$700,915)
Additional Expenses to start operation	(23,424)		(23,424)
Advertising (Start-Up)	(20,000)		(20,000)
Return on Investment @6%	(18,515)	(9,352)	(27,867)
	<u>(\$500,475)</u>	<u>(\$271,731)</u>	<u>(\$772,206)</u>
Contract Limitation	<u>500,000</u>	<u>250,000</u>	<u>750,000</u>
Balance	<u><u>(\$475)</u></u>	<u><u>(\$21,731)</u></u>	<u><u>(\$22,206)</u></u>

Source: Office of Fiscal Affairs, Division of State Auditing (See Appendix B for full details).

3-1/2 years, TNJ provided parallel service into Philadelphia. Coordination of rail and bus transit is desired and required by federal funding guidelines. PATCO has had to double the amount of parking at stations because of the demand for such facilities.

While PATCO will not be able to increase its peak hour capacity until 1975, it does advertise to increase its off-peak ridership. Officials feel that the bus feeder service could become more dependable, that weekend and holiday bus schedules could be better coordinated with train departures and arrivals and that a different type of bus would be more appropriate. TNJ uses coach-type buses almost exclusively in both single fare and multi-zone fare routes. However, PATCO officials suggest the city-type, rear door buses would be desirable for faster passenger exit and entry. PATCO promotes the bus feeder system by providing bus schedules at stations, advertising at stations and by using the symbol of the service--"The Bus Train Route" (see Exhibit H).

Viewpoints: Local Government Viewpoints

Local governments have had a substantial role in bus operations in New Jersey. No bus route or company could operate, prior to 1973, unless written consent of the municipal governing body was obtained (Section 89, Laws of 1962, c. 198). Municipalities in turn received a bus receipts tax based upon company revenues and proportion of route mileage in the municipality. Chapter 158, Laws of 1973, amends various sections of public utility statutes, changing "municipal consent" to "certificate of public conveyance" which is issued by the Board of Public Utility Commissioners.

The bus feeder program escaped jurisdiction of the previous "municipal consent" requirement because under the provisions of the Transportation Act of 1966, the service was deemed "essential" by the COA.

Local government officials surveyed by the Office of Fiscal Affairs have little knowledge or information about the "bus-train system". The Department of Transportation invited area legislators to a meeting in September, 1972 to explain the new system, but no invitation was extended to local government representatives. Only two mayors from the area managed to attend after a news story highlighted the event.

Some 55 questionnaires were sent by the Office of Fiscal Affairs to mayors and freeholders in the service area (see Appendix A for a copy of the questionnaire) to get their perspective on aspects of the bus feeder system. Forty-one questionnaires were returned indicating the following:

- Twenty-nine respondents (71%) felt the bus schedules and fare information is not easily accessible to potential riders.

EXHIBIT H:

SYMBOL OF THE BUS FEEDER SERVICE

**Bus and
BusTrain
Route**



**Service provided under contract with
New Jersey Department of Transportation**

..... The TNJ/PATCO

Bus and BusTrain way

The above is used on all bus feeder schedules.

- Forty-one (100%) officials noted growing auto traffic congestion in their communities.
- Forty-one (100%) officials felt bus transportation is necessary to satisfy the commuting needs of their constituency.
- Twenty-one (51%) respondents felt the bus feeder system does not provide an essential service to the majority of citizens, while twenty (49%) did.
- Commuters and senior citizens were identified as the largest number of bus patrons. These two groups would suffer the most should the existing bus service be curtailed.
- Twenty-four (59%) respondents observed the majority of riders changing to the Lindenwold Line, while 11 observed the majority of riders using buses for local travel.
- Thirty-seven (90%) respondents felt that more routes and more frequent service is needed.
- Thirty-four (83%) respondents thought that TNJ should continue to be subsidized by the State to preserve existing bus service.
- The criterion that a route must generate one-half of its costs from fares was supported by 19 (47%) respondents, while 21 (51%) thought the subsidy should continue regardless of revenue generated.
- Forty-one (100%) respondents feel the existing bus service is essential to the economics of the South Jersey area.
- Twenty-one (51%) have received complaints about the system; twenty (49%) have not. (17 are continuing to receive complaints.)
- Twenty-nine (71%) respondents felt the existing routes could be improved. But only seven (17%) have ever offered suggestions to TNJ, the DOT, or PUC. (Four suggestions were enacted upon according to the respondents.)
- Thirty (73%) felt ridership could be improved, 37 (90%) felt the counties and municipalities should promote use of the system and 30 (73%) felt the bi-modal bus-train system is superior to the former direct bus service to Philadelphia.
- Thirty-two (78%) municipalities and counties have offered no advice or opinion on the bus feeder routes to the Department of Transportation.

Only 6 respondents knew of private groups expressing opinions on the bus feeder routes.

Mayor Arthur Calabrese added,

"Here in Gloucester Township, little is known of the feeder service available to the residents of the community. We feel that not enough information is made available to the citizens of the various feeder lines that were available to them through this service. We feel more direct routes to the Lindenwold Line will be used through the more populated areas of the Township."

Three other respondents identified the same problem: "at present very, very few people know of the routes and times, information is hard to get" and ridership could be improved by "advertising bus routes and times"; "advertise a good service schedule and keep it just as the High Speed Line does"; increased ridership would result from "a good P.R. program and better information to the traveling public."

The Business Administrator of the City of Camden suggests ridership could be improved by "rerouting the bus lines to cover more areas in the City."

Edison D. Shinn, Mayor, City of Bridgeton, reports complaints about the bus system from older people as to "poor schedules, poor accommodations as to depot, object to changing mode of transportation at high speed line."

The Executive Director of the Salem County Community Development Program, J. L. Wheatley, praised the State Department of Transportation:

"Through the cooperation and very able assistance of Mr. John Hoschek, Bureau of Commuter Operations, Department of Transportation, we have been successful in establishing an inter-county bus system, serving the Western portion of Salem County."

Five other respondents wrote comments suggesting more advertising and public relations efforts, seven indicated service on existing routes is too infrequent, eight wrote suggesting better routes, two suggested raising bridge tolls to discourage drivers, two requested Dial-a-Ride be extended into their communities and one suggested a "free day" or other promotions to increase ridership.

Another aspect of the bus feeder operation was revealed by the mayor of a town that has a busy speedline station. He observed "because of all the buses coming in and out of the speedline station, there has been no noticeable lessening auto traffic."

Bus Feeder Ridership

The first two months of operation of the bus feeder system (October 28 - December 31, 1972) showed a decline in both passenger trips and average monthly revenue as compared to the previous ten months operations without subsidy. For the system as a whole, the number of passengers per bus mile declined from 1.33 to 0.73, a drop of 82% in ridership/bus-mile (see Exhibit I). This means a depressed amount of revenue per bus-mile as shown in Exhibit J. The monthly data submitted to the Department of Transportation show some growth in total monthly ridership since the feeder bus service began, but the average is still 12% below that of the first ten months of 1972.

The new routes have not attracted the ridership/bus-mile enjoyed the 10 months before the establishment of the bus feeder system, however, the total monthly passengers carried have increased. The increased level of patronage coupled with lower ridership/bus-mile indicates the bus feeder system has 1) expanded service beyond levels maintained by TNJ prior to subsidy and 2) the increased service has attracted additional patronage.

While the total monthly ridership is increasing, certain routes are doing very poorly. For example, there are two routes not making one-half of operating costs, which is the below the minimum revenue criterion, the KK-BK Clementon-Haddonfield Route and the LL-MM Berlin to Lindenwold Route. Only 5 of 15 feeder routes are earning revenues per mile greater than average expenses per mile. Other routes doing poorly in fare box are the BB-BK Haddonfield-Camden Route, the G-GG Salem to Philadelphia Route, the H-HH National Park to Philadelphia, the J-JJ Pennsville to Philadelphia, and the PP Haddonfield to Camden Route. These routes need review and consideration to determine what corrective measures will attract greater patronage.

The program has failed to provide coordination of rail and bus service for riders. For the month of February, 1973, PATCO reported that 37,188 of 989,021 total riders (3.8%) transferred between rail and TNJ buses. This percentage was verified by OFA staff in September, 1973. TNJ reports the bus feeder system carried 468,000 riders for February, 1973. Therefore, only 8% of bus feeder patrons transferred between bus and rail (see Exhibit A).

The low number of riders transferring between bus and rail is reflective of the policy of continuing rush hour bus service into Philadelphia. Nine (9) of the fifteen bus routes still provide direct service to Philadelphia (see Exhibit K for maps of routes not allowing bus-train transfers).

The following routes still provide interstate service:

1. A - Collingswood, Audubon-Camden, Philadelphia
27 weekday trips to Philadelphia 6:37 a.m.
to 9:20 p.m.

EXHIBIT I:

BUS FEEDER MONTHLY RIDERSHIP

AVERAGE NO. PASSENGERS/BUS-MILE/MONTH

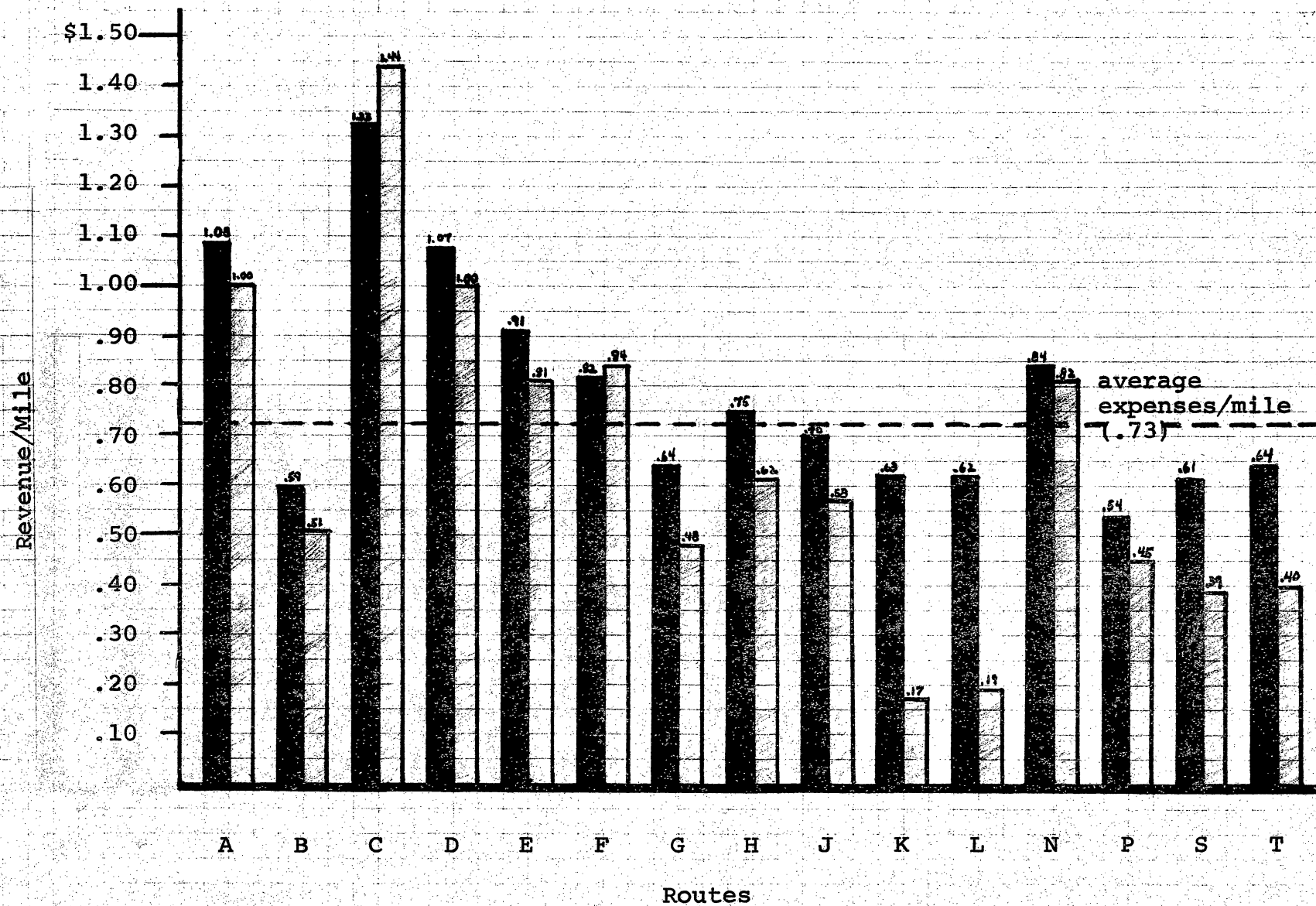
<u>Time Period</u>	<u>Ave. Pass./Bus-Mile</u>	<u>Riders/Month</u> (000s)
(TNJ Operations)		
1. Calendar 1967 ¹	1.86	1,348
2. 1/1/72 - 10/27/72 ¹	1.33	449
(Bus Feeder Operations)		
3. 10/28/72 - 12/31/72 ¹	0.73	524
4. January, 1973 ²	NA	510
5. February, 1973 ²	NA	467
6. March, 1973 ²	NA	552
7. April, 1973* ²	NA	505
8. May, 1973 ²	NA	517
9. June, 1973 ²	NA	534
10. July, 1973 ²	NA	553

*New route added (the UU)

Sources:

1. OFA calculations from data in reports to the PUC 1967, 1972;
2. Monthly figures supplied by the New Jersey Department of Transportation.

1972 BUS REVENUES/MILE

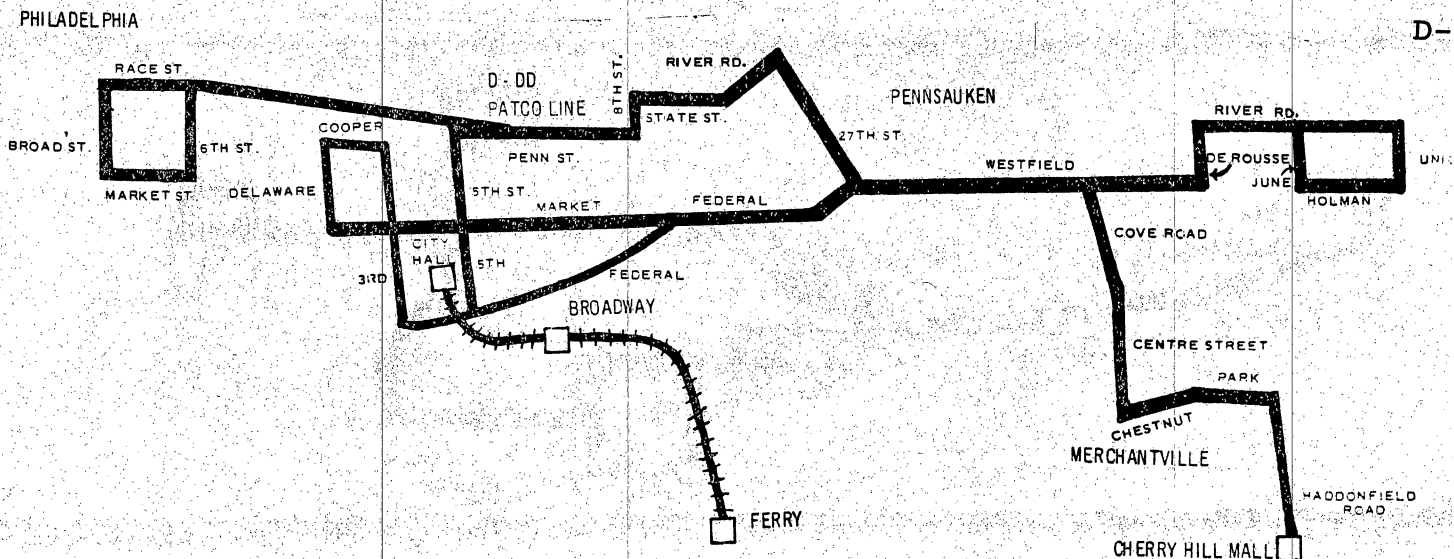
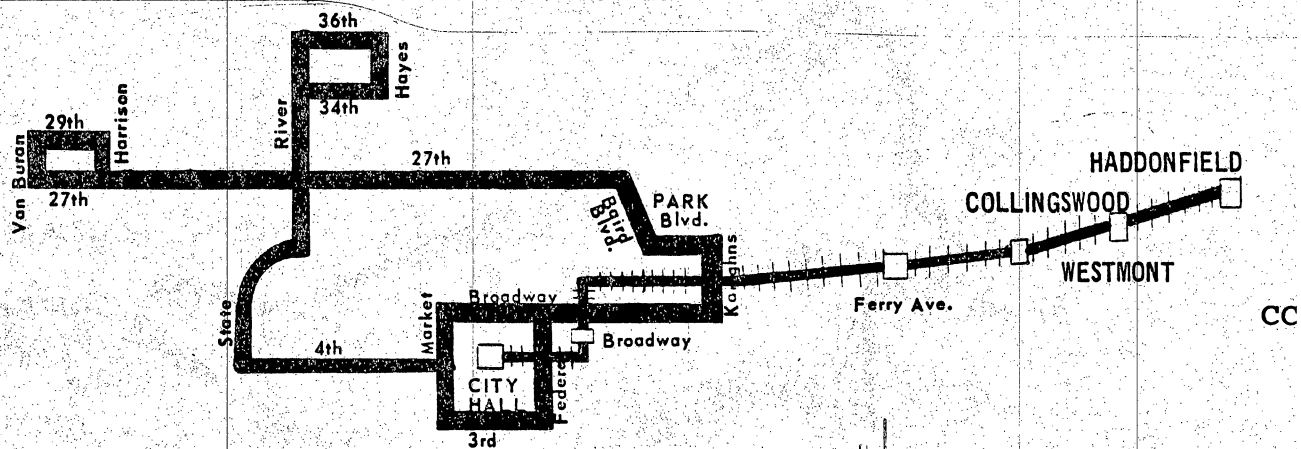
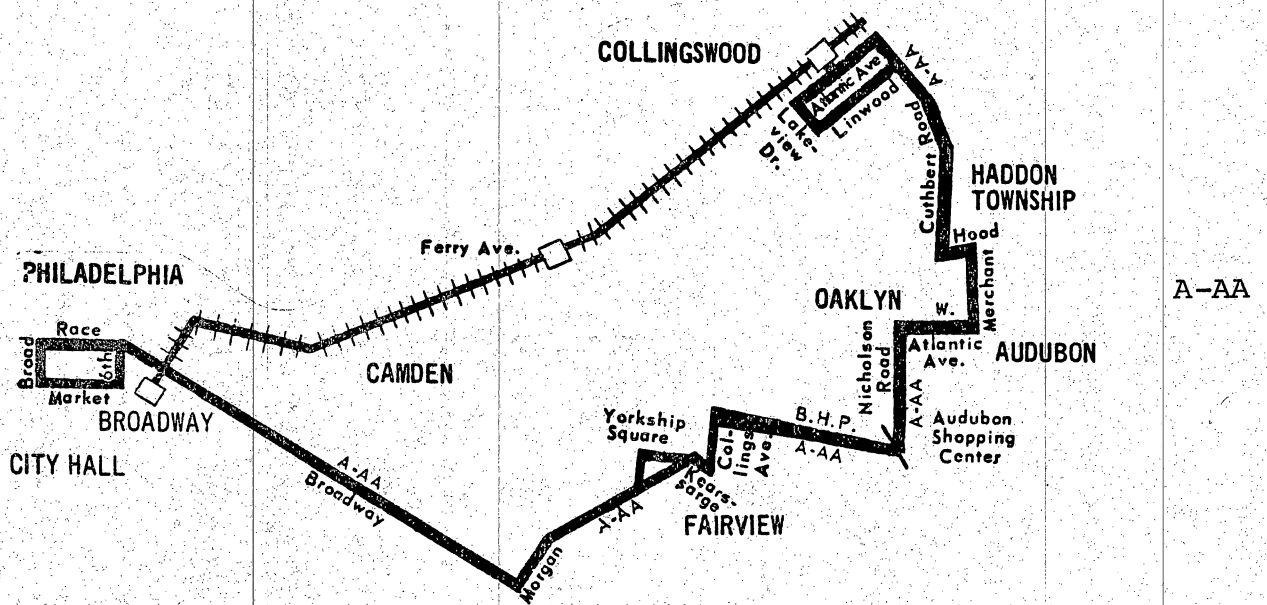


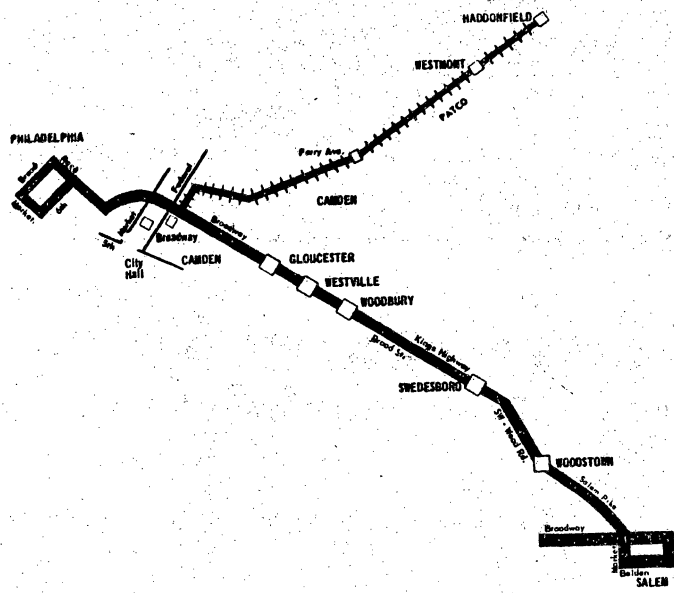
- TNJ Equivalent Route 1/1/72-10/27/72
- ▨ Bus Feeder Route 10/28/72-12/31/72

Source: OFA Analysis of TNJ
1972 Report to the Public
Utilities Commission

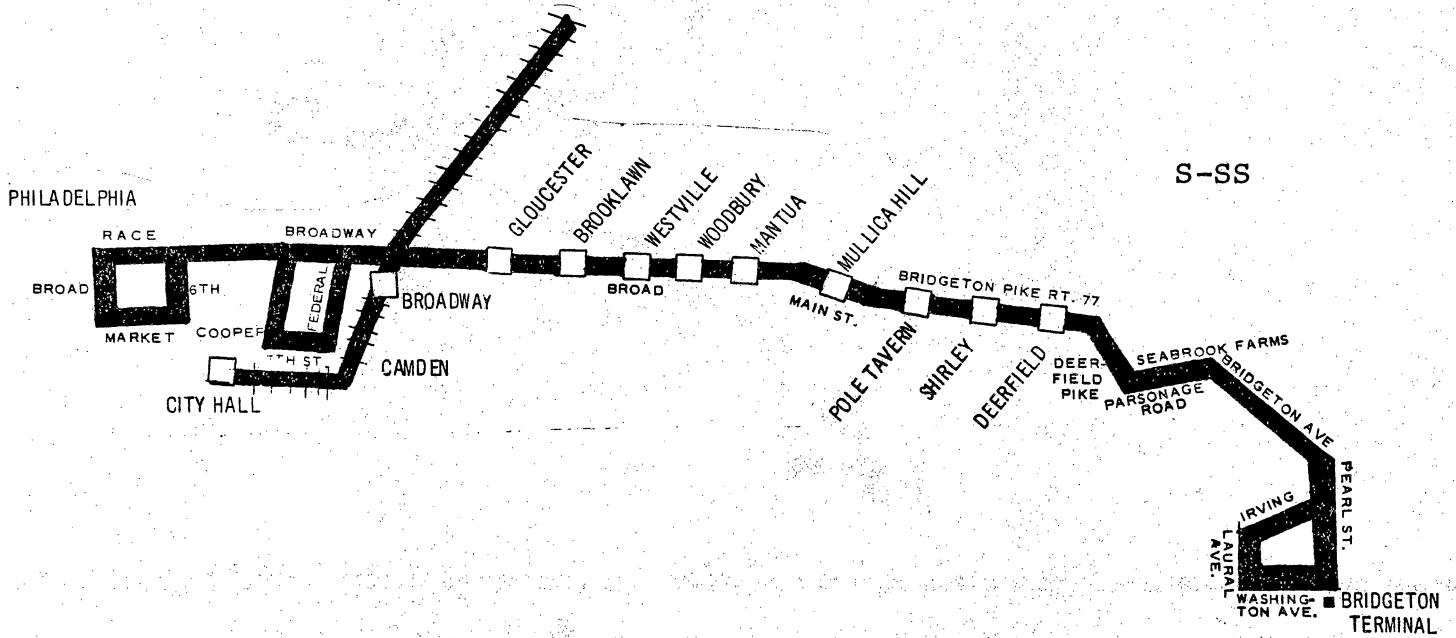
EXHIBIT K:

EXAMPLES OF BUS FEEDER ROUTES

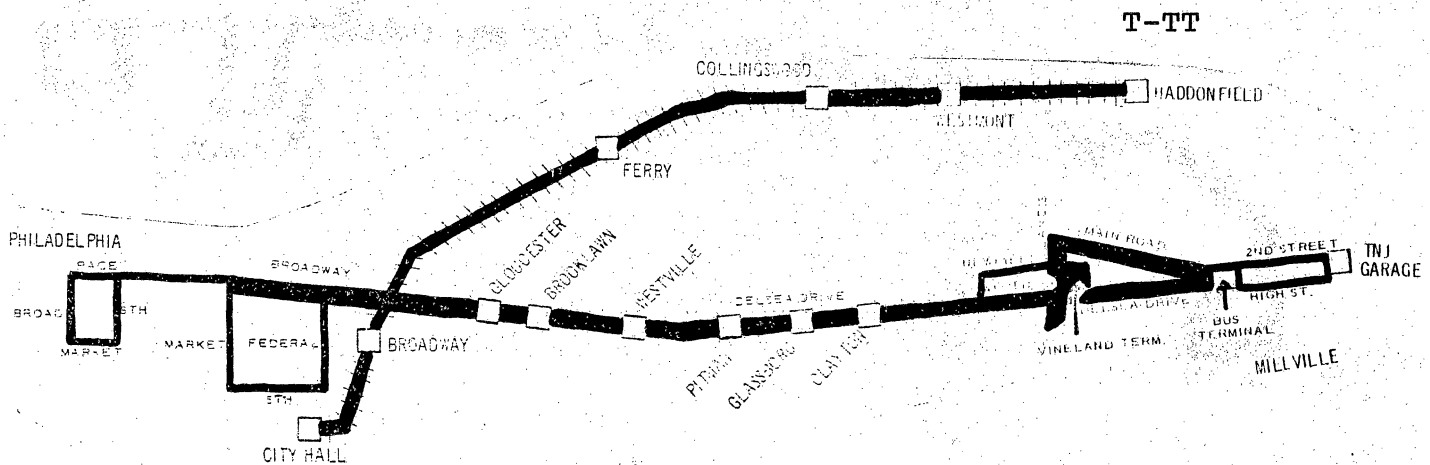




G-GG

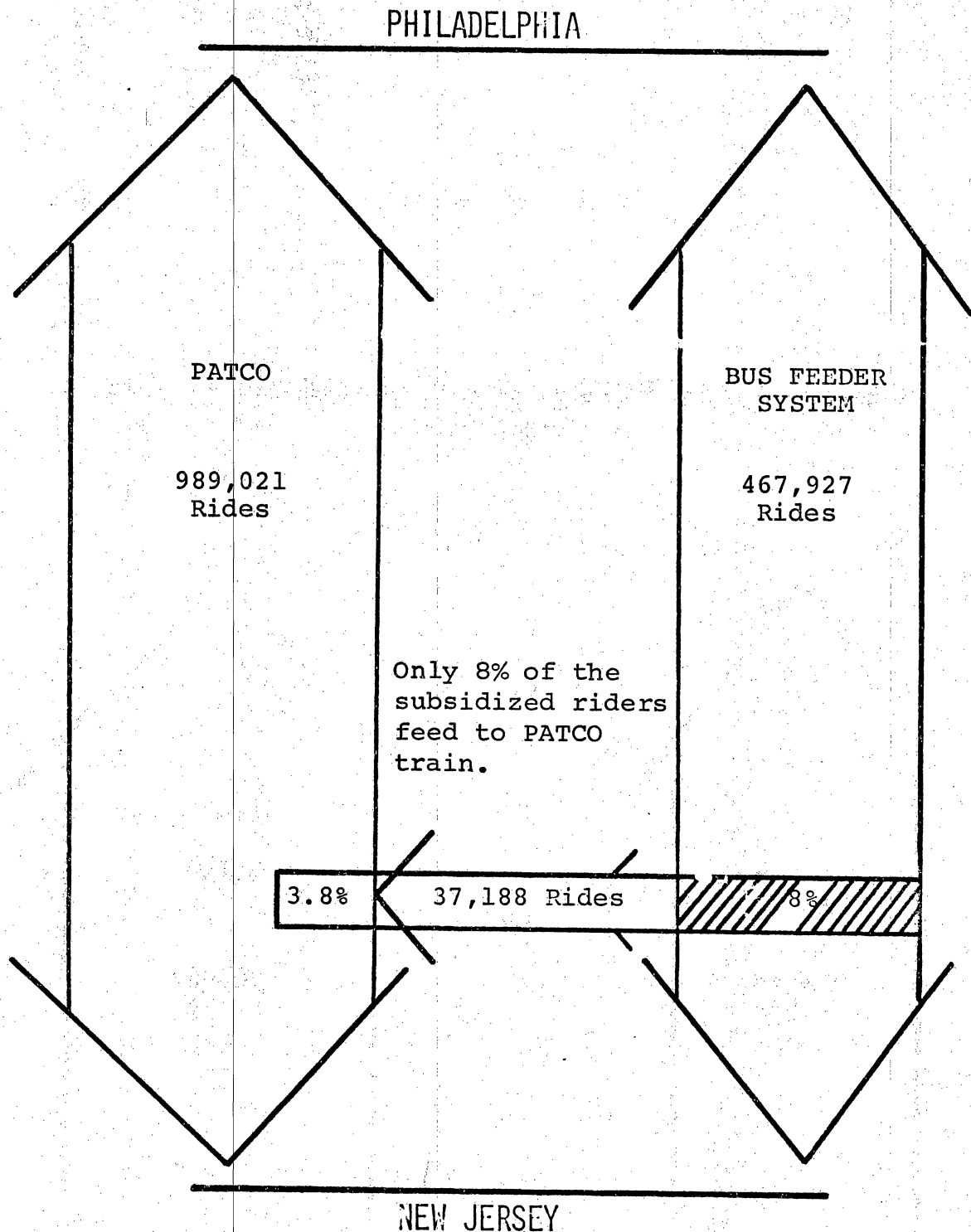


S-SS



T-TT

EXHIBIT A: MONTHLY RIDERS CONNECTING BUS TO TRAIN
February, 1973



Source: TNJ Reports, to the New Jersey Department of Transportation
PATCO Survey "calendar monthly PATCO riding/revenue
comparisons by Transit Mode", March 21, 1973.

2. D - Pennsauken-Camden, Philadelphia
16 weekday trips to Philadelphia, mainly peak hour service.
3. F - Williamstown, Blackwood, Ashland-Camden, Philadelphia
80 weekday trips to Philadelphia around the clock.
4. G - Salem-Woodbury-Camden, Philadelphia
14 weekday trips to Philadelphia, mainly peak hour service.
5. H - National Park, Bellmawr Park-Camden, Philadelphia
3 weekday trips to Philadelphia.
6. J - Pennsville-Camden, Philadelphia
13 weekday trips mainly at peak hours.
7. N-O- Barrington, Haddonfield-Camden, Philadelphia
46 weekday trips to Philadelphia around the clock.
8. S - Bridgeton-Camden, Philadelphia
9 weekday trips to Philadelphia, mainly at peak hours.
9. T - Millville-Camden, Philadelphia
17 weekday trips to Philadelphia.³³

The other six routes had 106,000 riders in February, 1973, indicating that at a maximum, 35% of the riders on this part of the bus feeder system connected to a PATCO train. Thus at least 65% of the riders on the BB-BK, CC, EE, KK-BK, LL-MM and PP Routes have local destinations and do not use the bi-modal aspect of the bus-train system. With the majority of routes still providing direct service to Philadelphia, only 8% of all riders on subsidized bus feeder routes actually utilized the "bus feeder" aspect in February, 1973.

The Commuter Operating Agency should immediately plan and implement bus feeder service oriented to PATCO patrons. The continuation of the bus feeder subsidy should be based upon demonstration that the bus feeder service is used by a majority of PATCO patrons.

The State subsidy provides a significant discount in the actual cost of the ride to the bus rider. For the initial period of the system, October 28, 1972 to June 30, 1973, the subsidy of \$2,000,000 amounted to 48¢ for each of the 4,135,000 riders. This compares to

33. This data is taken from schedules effective April 7, 1973 and may reflect more service than was run in February, 1973.

an average expense per passenger of \$1.01. For this start up period, the State provided 48% of the total system revenues while passenger fares provided 52%.

Routes and Scheduling Observations

The Department of Transportation recognizes the need to do more route evaluation within the constraint of peak-hour capacity limitations on the Lindenwold Line. Field observations, as described below, by the Office of Fiscal Affairs staff, however, need further evaluation by the Department.

1. On the occasions listed, a bus either did not make a scheduled stop at the indicated PATCO station or left the station without allowing passengers to board:

<u>Date</u>	<u>Time</u>	<u>Bus</u>	<u>Location</u>
7/25/73	7:01 a.m.	D	Haddonfield PATCO
7/25/73	9:25 a.m.	VV	Haddonfield PATCO
7/25/73	9:00 a.m.	BB	Ferry Avenue PATCO
7/25/73	9:35 a.m.	N-0	Ferry Avenue PATCO
7/25/73	12:11 p.m.	DD	Cherry Hill Mall
9/12/73	7 a.m.-noon	AA	Collingswood PATCO

(only 13 of 21 scheduled
buses arrived)

One bus driver indicated that the AA buses approaching the Collingswood station on off-peak hours will not enter the station area but will circle back without stopping. The Department should determine if this is an accurate description and if the practice exists in other states.

2. On July 25, three different bus drivers exhibited confusion over the fare. Passengers would, on a multi-zone trip, tell their destination and the driver would have to use his knowledge of the route to calculate how many zones were involved and then the correct fare. Transfers were also interpreted at different rates.

3. The return-trip ticket system providing a reduced fare for bus-train commuters, was observed to be operating at variance with the published rules: The system provides that the passenger may only use the return ticket on the date of issue after machine validation in a PATCO station. The ticket is valid on the next bus departing. A number of validating machines in PATCO stations were observed to be inoperative, or dating tickets indistinctly, or with the incorrect date. At least one bus driver indicated that the tickets were honored regardless of date or fact of validation because the validating equipment was so frequently out of order.

4. The DD route duplicates the 7A nonfeeder route between Camden and the Cherry Hill Mall but, while the 7A fare is 50¢, the DD fare is 55¢.

5. A similar situation exists between the VV route and "7" nonfeeder route, between Camden and the Moorestown Mall. The VV takes a longer route for 55¢, yet a passenger can pay 50¢ on the 7 bus and get to the Mall faster.

6. On July 25, 1973, a mildly warm day, buses observed serving downtown Camden did not utilize air-conditioners, while buses on suburban routes had their air-conditioners on.

7. Every bus observed in the system is a coach type bus, adapted to multi-zone use. The driver is required to issue a ticket to each passenger and collect it upon leaving the bus to verify the passenger did not travel more than the paid number of zones. This requires additional driver attention to departing riders and slows the boarding process for those waiting at the bus stop.

8. Several drivers were observed to arrive late at scheduled stops. While several buses were late because of heavy ridership and heavy traffic, two drivers justified running slightly behind schedule for passenger convenience. Catching the next scheduled bus meant a wait of up to 30-40 minutes and possibly missing a transfer bus to riders arriving a minute or two late at a bus stop. Other drivers keep right on schedule as much as possible or even arrive at stops early. The adherence to schedule thus varies from driver to driver. The Department has known drivers to change the route to an unadvertised street on both experimental or full time bases on their own.

Dial-a-Ride

There are a number of other bus operations in the bus feeder service area. They are:

- a) Dial-a-Ride
- b) Employer buses
- c) Senior citizens shuttles
- d) Apartment shuttles
- e) Echelon Mall shuttle

Dial-a-Ride is a two year transportation experiment sponsored by the New Jersey Department of Transportation under a Research, Development and Demonstration Grant from the U. S. Department of Transportation, Urban Mass Transit Administration. The State provides 20% of the project funds while the federal government provides 80%. "The Haddonfield experiment is the largest, most complex demand-activated transportation system yet attempted."³⁴ The objective of the demonstration is to provide accurate and reliable data to: the Urban Mass Transit Administration to decide on further

34. N. J. Department of Transportation and U. S. Department of Transportation, Haddonfield Dial-A-Ride Demonstration: First Progress Report

development, funding and implementation; the State of New Jersey and its local communities on the desirability of continuing such a system; and to other states and localities looking to implement modern mass transportation.

The experiment showed that initial waits for pick-up averaged 10-15 minutes with average travel times of 10 minutes. One way person trips totaled 5,100 in March, 1973.³⁵ The Haddonfield PATCO station generates 34% of the Dial-a-Ride trips - the greatest ridership attraction in the limited service area. The initial costs have been high - mostly because senior TNJ bus drivers are utilized, maximizing salary expenses, especially compared to a sister experiment in LaHabra, California, where non-union drivers are used.³⁶

The area served by the experiment was expanded in September, 1973 to include more of Cherry Hill Township.; In October, 1973, the base fare was reduced from 60¢ to 30¢.

Initial response to Dial-a-Ride has been disappointing. According to Dr. A. U. Simpson, President of DAVE Systems, Inc. (the contractor managing Dial-a-Ride), part of the problem is the lack of coordination between PATCO, TNJ, and Dial-a-Ride. DAVE Systems, Inc. feels all three could benefit from a cooperative system of feeding each other, as is done in similar multi-modal systems. Office of Fiscal Affairs inquiries at the New Jersey Department of Transportation showed that there were no plans in September, 1973 to coordinate the feeder bus and the Dial-a-Ride experiment.

Other Bus Services

The Insurance Company of North America provides a charter bus shuttle between the Lindenwold station and corporate headquarters in Voorhees Township. The service shuttles a few hundred employees on a daily basis.

At least one municipality, the Borough of Bellmawr has its own shuttle bus system. The Bellmawr shuttle began operations in 1970. It operates 2 buses with 30 minutes departures between 9 a.m. and 6 p.m., operating only in the borough although buses are planned to go to the Echelon Mall and connect with bus feeder stops in Runnemede. The system carries 200-300 passengers per week.

At least four apartment complexes (Coachman East in Lindenwold, Sutton Place in Collingswood, Scandia Hammin in Lindenwold and Kings Highway Towers in Moorestown) own and operate buses for use of their

35. Marcel Zobrak, "The Haddonfield Dial-A-Ride Experiment: Interim Results". Paper for the International Conference on Transportation Reserach, Belgium, June, 1973, p. 6.

36. Ibid, p. 16. Salaries plus fringes amount to \$7.79/hour Haddonfield per driver, \$3.12 in LaHabra.

residents. The Coachman East, using a union bus driver, shuttles over one hundred residents daily to the Lindenwold station. Others provide only rush hour service to a PATCO station or direct service to Philadelphia, utilizing maintenancemen as bus drivers. Ridership figures are not kept by these apartments as the total number of passengers carried is so small.

The Echelon Mall owns a shuttle service between the Mall and the Ashland PATCO station, a distance of less than one mile. The fare is 25¢ while the feeder buses serving the Mall charge a 10¢ fare between the same two points. The shuttle carries 1,000 people a week, operating to and from the Ashland station continuously, while the feeder buses are less frequent.

CHAPTER IV: BUS AND AUTO COMMUTERS TO PATCO STATIONS

The Office of Fiscal Affairs conducted two surveys on September 12, 1973 to gather current demographic and socio-economic background material, as well as attitudinal data, on the South Jersey residents who use the bus feeder system and rapid transit line. (Details of the conduct of the surveys and the detailed responses appear in Appendix A, page 70). The surveys were designed to answer questions about who uses the bus feeder system, what their attitudes and opinions are on the efficiency and quality of service and who drives a car to PATCO and why they don't ride a bus.

The two distinct transit populations identified were:

1. Bus feeder riders are those people who use the TNJ feeder bus service to travel to and from the High Speed Line, and
2. Park-and-rides are those individuals who drive their car to one of six suburban PATCO stations, park in the lot, and ride the train to their destination. Also included in this group are people who are dropped off at a PATCO station by a relative or friend and subsequently ride the train (kiss-and-rides).

A tally of bus feeder riders by PATCO, conducted in February, 1973, estimated the universe of bus transfers at 37,000 passengers per month, or 650-900 round-trip passengers daily. Parking facilities at the six suburban PATCO stations accommodate approximately 8,800 automobiles daily, which constitute the park-and-ride universe. Thus depending on which estimate of the bus feeder population is used, the staff surveyed between 57 and 82% of the bus feeder universe, and received responses amounting to an estimated 39% of the total. Forty percent (40% of the park-and-ride universe was surveyed, and the number of returns equalled 22% of the total park-and-ride universe. (See Appendix A for survey technique and copy of questionnaire.)

The large response rate becomes evident when the number of questionnaires returned is compared to the number distributed. Such a comparison reveals that 55% of the bus feeder population who received questionnaires, and 56% of the park-and-ride population receiving questionnaires, returned them. (See Exhibit L) This high response rate is a reflection of the cooperation of PATCO in advertising the survey at all stations a day in advance. The strong response to the surveys, partially attributable to the advertising, also indicates a great amount of interest in the mass transit system in the Camden-Philadelphia region.

EXHIBIT L

SURVEY OF PATCO COMMUTERS BY NEW JERSEY OFFICE OF FISCAL AFFAIRS On Wednesday, September 12, 1973 (7 a.m.-1 p.m.)

	Bus Feeder Riders	Park-and-Ride Commuters
Universe (Round Trips)	PATCO Estimate: 650-900* O.F.A. Estimate: 700-1000	8800**
Questionnaires Distributed or Mailed	572 57-82% of Universe	3476 40% of Universe
Questionnaires Returned	316	1952
Per Cent of Universe Responding	39% (Range: 32-45%)	22%

* Based on survey performed by PATCO in February 1973 which found 37,000 bus feeder riders transferring to PATCO.

** Total parking capacity at the six suburban PATCO stations.

The following picture emerges of what might be considered the "typical" bus rider (see Exhibit M, page 52). Approximately 1/3 (34%) of the respondents' annual family incomes fell in the \$5,000-\$10,000 bracket, with 27% earning \$10,000-\$15,000, 26% earning more than \$15,000, and 13% falling in the less than \$5,000 income bracket. More than half (58%) of the survey respondents were female. Of those responding, it was found that 1% of the survey group was under the age of 18, 37% were between the ages of 18-30, 46% were between 31-55, 10% were between 56-62, and 7% were older than 62 years of age. The majority of the survey group belongs to small households, with either one (15%), two (30%), or three (21%) members. Larger households, with 4, 5, or 6 members, comprises only 1/3 (34%) of the entire responding group.

An overwhelming 90% of all respondents indicated work as the purpose of their travel on that particular day. However, when asked how frequently they ride the bus (and subsequently the train) and for what purpose of travel, 96% responded that they ride the bus (and train) 4-7 days per week when work is the purpose of travel.

Ninety-one percent of the respondents indicated that they were travelling during peak hours (6:30-9:30 a.m./4:00-6:30 p.m.) and work was the purpose of their travel.

Walking, for the purpose of getting to a bus stop and, after disembarking from a train, getting to a final destination, is minimal. Eighty-one percent of the survey group said that they walked less than five blocks to the bus stop where they boarded the feeder bus, and 59% said they walk for five blocks or less to their destination after leaving the train.

Haddonfield and Lindenwold stations experienced the heaviest bus feeder traffic, with 30% and 28% of the survey group, respectively, disembarking from buses at these two stations. As for the other stations, Ashland claimed 9% of the survey group, Westmont 4%, Collingswood 10%, Ferry Avenue 12%, and Broadway 7%. Most (81%) of the bus riders who subsequently took the train were bound for Philadelphia, regardless of their purpose of travel.

Forty-two percent of the bus riders indicated they did not use PATCO prior to inauguration of the bus feeder system.

In summary, then, the "typical" bi-modal traveller is a middle-aged (31-55) female from a 2-person household, who falls in the \$5,000-\$10,000 annual family income bracket and is travelling during peak hours for work-related purposes, probably in Philadelphia.

General Description of Bus Feeder Riders

"Transit captivity" is a term used in transportation literature to imply a state of unavoidable dependence on public transportation for those trips that cannot be made on foot. Several groups theoretically portrayed as being "transit captive" are the poor,

EXHIBIT M:

OFFICE OF FISCAL AFFAIRS
SURVEY OF PATCO COMMUTER CHARACTERISTICS

		Feeder Bus*	Park and Ride
Age	under 18	0	0
	18-30	37%	34%
	31-55	47%	54%
	56-62	10%	9%
	over 62	6%	3%
Sex	male	42%	67%
	female	58%	33%
Income	less than \$5,000	13%	3%
	\$5,000-\$10,000	33%	18%
	\$10,000-\$15,000	28%	31%
	more than \$15,000	26%	48%
Household Size	3 or less	66%	55%
	4 or more	34%	45%
Cars in Household	0	28%	0
	1	54%	35%
	2 or more	18%	65%

Total surveyed 316 1,952
(Estimated total daily commuters)(700-900) (8,800)
Source: Survey of commuters on Wednesday, September 12, 1973

* Only bus feeder patrons changing to or from a PATCO train are considered here. Feeder bus patrons on routes still going through to Philadelphia and those riding for local bus stops are excluded.

the aged, the under 18 age group, and the severely handicapped, because these groups lack automobiles; can't afford the substantial expenditure necessary to buy a car; are physically impaired, prohibiting driving; or are too young or old to obtain a drivers license.

Survey responses reveal that the bus feeder population does not fit neatly into any of the above categories. Rather than being in the fringe age categories (less than 18 or over 62), they are distributed among the "middle" ages of 18-55. Although many respondents are in the comparatively low \$5,000-\$10,000 category, 54% of the survey group fall in income ranges over \$10,000. The OFA survey did not attempt to quantify the handicapped population, but direct staff observations of the bus feeder system and its patrons disclosed no handicapped patrons while several were observed using the Dial-a-Ride service to travel to and from the PATCO stations.

The "transit captivity" theory, which identifies the previously mentioned groups as captive, is modified in a study by the U. S. Department of Transportation³⁷ which found that:

"Bus patronage is lower in cities where the proportion of households in the low-income range (under \$3,000) is higher and the proportion of households in the high-income range (\$10,000 and above) is higher. Some of the reasons for the lower ridership by the poor may be: (a) unemployment in this group is higher, (b) they lack funds to ride, (c) they tend to live within walking distance of the work place, (d) transit service is not accessible;" and,

"Bus patronage is higher in cities where the proportion of persons in the 19 to 64 age group is higher. This reflects the likelihood that the chief use of mass transit is for work trips and the primary beneficiaries of bus transit are members of the labor force."³⁸

Nevertheless, the OFA survey responses suggest that the bus feeder riders feel they are indeed "transit captives". In response to the survey question, "Could you have used one of these cars (refers to previous question on number of cars in households) to get to the PATCO station instead of taking the bus?", seven out of every ten respondents (70%) claimed that they could not have used a car to get to the station.

37. Institute for Defense Analysis, Economic Characteristics of the Urban Public Transportation Industry, U. S. Department of Transportation, Washington, D. C., page 15.

38. Ibid, pages 1-5.

The number of households without a car (28% in the bus feeder survey population compared to 20% nationally³⁹) points to a potentially greater need for other modes of transportation. But even this fact does not fully explain the preponderance of "no choice but to take the bus" respondents. The majority of those respondents in the no car and one car households (82% of the survey group) are members of 2 or 3 person households. This indicates that families are reluctant to tie up the car with one member's trip to work.

Although the bus feeder population cannot technically be classified as "transit captives", it appears from questionnaire responses that the majority (70%) of the bus feeder survey group perceive themselves as having limited transit alternatives.

Bus Feeder Rider Evaluations

Space was provided on the survey questionnaires for comments on bus operations. The vast majority (93%) of the compiled responses dealt with complaints regarding service levels and schedules, requests for new routes, and various suggestions for improving the system.

Although 70% of the bus feeder population indicated that they had no choice but to take the bus to the PATCO station, the remaining 30%, chose to ride the bus instead of driving a car. Most of this group responded that they "prefer the bus", others cited a dislike for driving, while some were discouraged from driving by "too much traffic." Ten respondents, or 4% of those submitting comments, chose the bus in order to leave their cars free for their spouses in case of emergency.

Some reasons for choosing the bus were such as: "I think the bus is a great way to relieve streets of cars of those people who use them solely to and from the Speedline," and "I can't understand why when Mass Transportation is so convenient anyone would drive."

While only 1% of the bus feeder universe on the survey date unequivocally praised the system, 34% of the total submitted comments requesting changes in the system or complaints concerning various aspects of feeder operations.

General Description of Park-and-Rider

Striking contrasts are evident between the bus feeder survey population and the park-and-ride survey group. Not only do the two groups differ in age, sex, and income (see Exhibit M, page 52), but in their attitudes on the mass transit issues, as well.

More than 2/3 (67%) of the park-and-ride population is male. Thirty-four percent of the survey group were between the ages of 18-30, 54% were between the ages of 31-55, 9% fell in the 56-62 year age group, and 3% were over the age of 62.

39. Loc. cit.

Almost half (48%) of the survey group rank in the highest annual family income bracket of over \$15,000. Thirty-one percent earn \$10,000-\$15,000, 18% earn \$5,000-\$10,000, and 3% fall in the lowest category of less than \$5,000.

The survey population was relatively evenly divided between small and large households, with 55% reporting 1, 2, or 3 member households and 45% reporting membership in a 4, 5, or 6 person household.

Of those responding, 90% chose work as the purpose of their travel on the survey date. Eighty-one percent fell in the category of those travelling daily (4-7 days per week) for work-related purposes.

Seventy-eight percent travelling during peak hours do so for work-related purposes. Further examination of responses reveals, however, that work is the single most frequently expressed purpose of travel for any time period - peak (6:30-9:30 a.m./4:00-6:30 p.m.), off-peak (other than peak), or one way, peak/one way, off-peak (see Exhibit N, page 56).

Lindenwold and Ferry Avenue stations, the stations with the two largest parking facilities, contributed 51% of the survey responses, with 26% parking at Lindenwold and 25% parking at Ferry Avenue. Ashland and Haddonfield stations both claimed 14% of the survey group, Westmont 9%, and Collingswood 16%. No PATCO parking facilities are available at either the Broadway or City Hall Stations.

The overwhelming majority (90%) of respondents indicated Philadelphia as their destination, regardless of purpose of travel.

Ninety-two percent of the survey indicated that they personally drove to the station, 6% were dropped off by a spouse, and 1% were passengers in a carpool. (This survey was directed at patrons who own a car ignoring the number of people who also may be in a vehicle for the ride to the station.)

Parking problems appear to be minimal, as evidenced by the fact that 85% of the survey group indicated that they always get a parking space, though not always free.

The majority (84%) of respondents are within walking distance of their destination after disembarking from a train. Eleven percent indicated the necessity of transferring to another train and 2% transfer to a bus. Only 1% resorted to a taxi for the final leg of their journey.

Thus, the "typical" park-and-ride commuter would appear to be a middle-aged (31-55) male from a small (1, 2, or 3 person) household, who falls in the \$15,000-plus annual family income bracket and is

EXHIBIT M

OFA SURVEY OF PATCO PARK-AND-RIDE COMMUTERS
PURPOSE AND TIME OF TRAVEL

Purpose of Travel	<u>Time of Travel</u>		
	Peak (6:30-9 a.m. 4-6:30 p.m.)	Off-Peak (Other than Peak)	One Way Peak, One Way Off-Peak
Work	1521	66	111
Personal	14	25	5
Shopping	1	21	3
School	53	10	47
Social	0	5	2
Total	1589	127	168

Source: OFA survey of Lindenwold Park and Ride Patrons - people riding PATCO on September 12, 1973.

travelling during peak hours for work-related purposes, to Philadelphia.

Transit Flexibility

In comparison to national norms, the Camden area PATCO patrons could be considered a privileged transportation group. According to a 1970 study performed by the Automobile Manufacturers Association,⁴⁰ 29.2% of all households in twelve selected standard metropolitan statistical areas owned two or more cars. The O.F.A. survey found that almost 2/3 (65%) of the park-and-ride population belongs to households owning two or more cars. The remaining 35% belong to single-car households (see Exhibit M, page).

Nonetheless, the OFA park-and-ride survey responses reveals that they view their range of alternatives for the trip to the PATCO station as limited:

- a) Sixty-seven percent (67%) indicated that there is no bus feeder stop near their home, thus implying that they have no alternative but to drive;
- b) Sixty-three percent (63%) of the survey group claim that that they would switch to the bus for the trip to the station if the service was available;
- c) Fifty percent (50%) of the park-and-rides cite the lack of an available stop as their main reason for not using the bus; and
- d) Ninety percent (90%) indicated they have never ridden a bus to a PATCO station.

However, the availability or unavailability of a bus stop is clearly a subjective judgment, based on an individual's inclination to walk and personal determination of what is "near" their home. Obviously, some may limit their conception of availability to one or two blocks from their home, while others may consider a stop available if it is within a much greater walking distance. Some perspective on this problem may be gained by referring to a standard definition of "availability" as "within a walking time of 5-10 minutes" or an approximate "walking distance of one-quarter mile."⁴¹

It should be noted that nine of the ten townships, for which the greatest number of survey responses were received, are areas serviced by TNJ's feeder system. Whether or not bus feeder service actually is "available", as defined above, it would appear that

40. IDA, op. cit., p. 15.

41. Winnie and Hatry, Measuring the Effectiveness of Local Government Services: Transportation, Urban Institute, 1972.

the park-and-ride population is either unaware of the location of bus stops or does not consider them "available" enough, a condition which serves to limit this group's use of public transportation.

Advantages of Driving

The advantages of driving most frequently cited by the 915 park-and-ride commuters who submitted comments include reliability, freedom from a fixed schedule and waiting periods, protection from the elements, privacy, security, and monetary savings. Park-and-ride commuters also claim that they can get to a PATCO station faster by driving. These reasons explain why such a large number, ninety percent (90%) of the entire survey group responded that they had never ridden the bus feeder to a station. The increasing awareness of the energy shortage and the rise in gasoline prices since the survey, however, will affect the value of these advantages to PATCO patrons, and attract new numbers of patrons to PATCO.

Ten percent of the park-and-rides who contributed remarks indicated reliability of the automobile mode of travel as an advantage over public transportation. However, sixty-six percent of the entire feeder bus rider survey indicated that the bus usually runs on schedule, while 18% indicated that it always does.

Commuters who need a car to make frequent quick business trips in the course of their daily affairs (e.g. salesmen), as well as those with very irregular or staggered working hours (factory shift workers, retail industry employees), are lost to the bus feeder system. For example, a Camden businessman who scheduled a meeting in Moorestown could possibly take bus-train transportation changing three times or take a non-feeder bus direct. The shortest combination after peak-hour service totals 50 minutes. Driving time is approximately 25 minutes without the worry of finding bus stops, getting to a stop on time or catching a connection. Buses also do not serve all possible destinations in Moorestown, while the car or taxi would.

Although all but one of the feeder routes provides some service in the evening hours (6:00 p.m. - midnight), the infrequent service and lengthy waiting periods between evening buses discourages evening bus traveling. On most routes, the waiting time between buses in the evening is an hour or more.⁴² These unique situations also preclude the regular use of bus feeder service and place the advantage clearly with the automobile.

A common complaint of both the bus riders and the park-and-rides was the exposure of bus stops to the elements. Many in both groups objected to having to wait outside for a bus in inclement weather, and thus were discouraged from using the bus unless

42. See bus schedules in Appendix C.

necessary, particularly in the colder, wetter seasons. A few commuters suggested shelters at bus stops as a means to equalize the advantages of the automobile.

One device to be tried in a promotion campaign would be the expenditure of funds to construct shelters at bus stops, for the purpose of providing protection from the elements to present customers and attracting passengers by making waiting time more comfortable and private. Shelters would identify bus routes to passersby and serve as an advertising device. Shelters should be considered on the most heavily travelled routes, as well as on any other routes chosen by the company. There should be permanent maps posted within the shelters, depicting the connections possible from that point.

With the possible exception of Camden, the crime rates of the bus feeder serviced communities do not warrant undue fear for personal safety while waiting for a bus. Station bus stops are relatively secure due to the presence of PATCO police.

While a small number (8%) of the park-and-ride comments state that driving to the station is cheaper than riding the bus, this assumption has been disproved by various analyses.⁴³ In terms of out-of-pocket costs (which exclude auto depreciation, repairs, insurance, etc.), it appears to be cheaper to drive, especially if parking is free or inexpensive. However, cumulative cost factors, such as auto maintenance and depreciation as well as the cost of an individual's lost time while driving and the social cost of automobile exhaust emissions polluting the air make the true cost advantage weigh heavily in favor of mass transportation.

New car registrations have risen in Camden County, New Jersey,⁴⁴ indicating a trend for increased traffic congestion and air pollution. One strong mandate to reverse the trend through governmental regulation is the recent federal ruling that New Jersey significantly reduce automobile traffic in order to conform to national air quality standards. Obviously, clean air will be a difficult goal to achieve, in Camden County, without a widespread acceptance of public transportation. Increased monitoring of trends coupled with the quick communication with riders and responsive changes in routing and number of bus trips would expand the number of bus users.

43. Chase, editor, "The Value of Travel Time", Problems in Public Expenditure Analysis, 1968, p. 78-80.

Dorfman, editor, "The Costs of Urban Transportation", Measuring Benefits of Government Investments, 1965, p. 242-45.

Thompson, editor, "Traffic Congestion as a Price Problem", A Preface to Urban Economics, 1965, p. 335-338.

44. R. L. Polk and Co., Motor Statistical Division, Passenger Cars, Camden County, 1972-6/73.

Complaints

The majority of the written comments from feeder bus riders fell into two categories: (1) 77 requests for new routes, usually in the respondent's area, and (2) 63 requests for more frequent service during peak hours, evenings, and weekends. In the first category, there were several requests for more local bus routes to shopping malls, for more cross-county runs, and for more PATCO routes in the Cherry Hill and White Horse Pike areas. Most of the requests for more frequent evening and weekend service were from commuters who depend on public transportation to get to jobs during off-peak hours. In total, 59% of the bus feeder riders felt present service should be expanded, offering more frequent service.

These comments were echoed in the responses from the park-and-rides, who also felt that service is too infrequent, especially on weekends and in the evenings. Many pointed to the lack of evening service as the major factor preventing them from using the bus service, and therefore, requiring them to drive. The volume of complaints on these particular service problems suggests that TNJ might make substantial gains in ridership if services were increased.

Transportation literature corroborates this hypothesis. A study conducted by the U. S. Department of Transportation found that "at a given fare level, (bus) properties that provided higher bus-miles per capita experienced higher patronage. This suggests that improved service levels will, indeed, attract riders."⁴⁵ The major argument for more attention to routes is that present routes do not service PATCO patrons. As previously noted, 67% of the OFA park-and-ride survey respondents indicated that there was no feeder bus stop near their home,⁴⁶ and 50% cited this condition as their main reason for not using the service. Among this group are Burlington and Gloucester County residents, who are presently without feeder service. Cherry Hill, with the majority of survey respondents and generally regarded as the fastest growing township in the county,⁴⁷ is serviced in limited areas during peak hours by only one feeder route, the VV. One other TNJ route provides some service to sections of Cherry Hill, but this is direct service to Philadelphia. These area residents compose the largest group of the 63% of the park-and-ride survey group who claim that they would switch to the bus for the trip to the PATCO station. Promotion of bus feeder services to those patrons currently parking at PATCO stations would be a simple task as well as routing buses to serve areas where identified PATCO commuters live.

45. IDA, op. cit., p. 15.

46. See also page 57.

47. Gannon, The Impact of Rail Rapid Transit Systems on Commercial Office Development, The Case of the Philadelphia-Lindenwold Speedline, Transportation Studies Center, University of Pennsylvania, p. 71-80.

A study by the University of Pennsylvania's Transportation Studies Center on the impact of the Lindenwold Line on commercial development in Camden County⁴⁸ suggests that since the Line began operations in February, 1969, significant demographic changes have occurred in Camden County, causing certain previously slow-developing communities to grow at a rapid pace and other, formerly prominent, communities to fade in importance. Bus routes do not now reflect these population changes.

Most of TNJ's feeder routes in the Camden County area are actually the same routes that have been run by the old Public Service Coordinated Transport Company for twenty years. These routes do not now serve the communities' transportation needs.

Accordingly, it is recommended that the Commuter Operating Agency establish a permanent staff for the on-going evaluation of all subsidized bus feeder routes. A first market analysis should be the Cherry Hill area and some Burlington County communities, as these areas have emerged from the OFA survey as communities with significant numbers of PATCO patrons. The evaluation should result in new routes for immediate inclusion in the feeder system.

"The inauguration of the Philadelphia-Lindenwold Rapid Transit Line together with the revised bus system must be well-publicized and must be received by the public with an enthusiastic positive attitude if the project is to be a success. The new transportation system, which is the result of great effort and financial resources, must not be allowed to fall short of its great potential because of lack of communication with the public and insufficient public relations activities."⁴⁹

This warning issued in a 1968 bus feeder implementation study was heeded by the COA, and a portion of the State subsidy money was earmarked for this specific purpose. The firm of Keyss, Martin and Co. was hired in September, 1972 by John Gilhooley, President of the TNJ Bus Company, to handle the public relations for the conversion of the existing bus system to bus feeder. However, in February, 1973, the COA informed the firm that further public relations by an outside firm was no longer possible because of the lack of funds, and that the Department of Transportation would do all further public relations. The complaints from TNJ and PATCO patrons of the lack of available information on routes, fares, and schedules, and the uninformed state of bus drivers on these subjects lead to the conclusion that the COA has not been successful in its public relations efforts.

Survey respondents cite the difficulty of obtaining information, especially when schedule boxes are empty and drivers are uninformed.

48. Gannon, loc. cit.

49. Bus Feeder Study for the Lindenwold Rapid Transit and the Camden, N.J. Metropolitan Region, Praeger-Kavanaugh, p. 180-181.

Through direct observation, the staff confirmed the paucity of available information, either from schedule boxes, bus drivers, or advertising on buses. In several observed cases, drivers were hesitant about and unsure of the fares they charged, and on occasions became involved in disputes with customers who had been charged a different fare by another driver.

When observations were conducted by the staff in the early stage of the analysis, PATCO trains and stations were virtually devoid of advertising of bi-modal transportation. The only exception was to be found on TNJ's bus schedules, available in PATCO stations, which contain a short explanation of the bi-modal operation and display the symbol of the system. Recently, however, PATCO has begun to advertise "the bus-train system" in the train stations, but continues to advertise only PATCO service on local radio stations. Survey responses reveal that 42% of the bus feeder riders did not use the Speedline before the bus feeder service became effective, thus suggesting that TNJ has provided PATCO with new patronage.

It is recommended that the Department investigate the cost and possible methods of implementing an effective bus feeder advertising campaign, the goal being the dissemination of route, fare, and schedule information to all South Jersey feeder service areas. This should include exploring the possibility of bus feeder serviced municipalities and counties promoting further usage of the system.

In addition to an advertising campaign, a variety of promotional techniques could be employed by TNJ to stimulate ridership. For example, Dial-a-Ride once set aside a "free ride day" when all those in the service area could utilize the service without a fee. The response was large, but not as great as anticipated due to the minimal amount of advertising beforehand. Despite the limited success of the promotion, Dial-a-Ride management still recommends the "free ride day" as a sound technique for introducing people to a service they might otherwise not have tried.⁵⁰ Although this has not been repeated, Dial-a-Ride is presently experimenting with a new promotional technique - reducing fares by 50%. The usual fare for adults under 62 years of age was 60¢ and 30¢ for those over 62 years of age. Recently, the fares have been reduced to 30¢ and 15¢, respectively. Group discount fares are available also. The initial reports show greatly increased ridership for an area also served by bus feeder routes.

The driver "is and must play the part of a salesman..."⁵¹ In essence, the bus driver is the representative of the company and must "sell" the service. To perform this role effectively, he must be well-acquainted with all pertinent information.

50. Information related to OFA analyst in a conversation with Mr. Ron Serviss, Control Supervisor of DAVE Systems, Inc., the corporation that operates approximately 20 Dial-a-Ride systems.

51. Bus Feeder Study for the Lindenwold Rapid Transit and the Camden, N.J. Metro Region, Praeger-Kavanaugh, p. 180.

While all bus drivers observed by OFA staff were very courteous, some confusion over zone fares was observed on three different occasions. A pictorial display prominently placed on each bus, easily visible to passengers and driver, showing route traveled, fares for each zone, and schedule information, would further help to eliminate confusion for both drivers and passengers.

Feedback from patrons could be obtained through the use of a suggestion box, which could be placed in Speedline stations or on buses. This device would hopefully "establish in the patron a sense of identification with the system,"⁵² as well as provide TNJ with continuing reactions to the system.

An advertising suggestion was offered by the engineering consulting firm of Praeger-Kavanaugh-Waterbury, who observed:

"In some areas Bell Telephone Company places a bus route map in the front part of its Yellow Pages, which demonstrates what can be done if industry is made to feel it is a participant. Who can say that commercial interests would not donate advertising for bus service as part of their own advertising? They would if they thought it would increase sales."⁵³

Along these same lines, local newspapers or community publications could be approached by the Department to ascertain their willingness to donate space, if only in the form of press releases, to advance the bus feeder system.

A telephone information service is another possible promotional technique which could be established by the Department. As not all information can be obtained from a bus schedule, this service would ensure fast responses to an individual patron's specific questions, no matter how detailed.

Follow-up promotion and report-back news items could be standard procedure in transportation advertising campaign. A concerted effort normally would be made to keep the public informed of basic route, fare and schedule information. This has not been the case with the bus feeder system. PATCO does have a once-a-month handout called "PATCO PATTERN" to report progress on meeting certain types of complaints and to stress certain areas of desired customer cooperation.

A complaint file, kept in the Department of Transportation's Bureau of Bus Operations was made available to the OFA staff. Most of these complaints, approximately fifty, were received in the first few months of feeder operations, and declined in volume over time. Complaints from this file were very similar in nature to those received through the survey and reported in this chapter, thus indicating that these problems are of long duration. To its credit, the Department made an attempt to answer each letter.

52. Ibid, p. 181.

53. loc. cit.

CHAPTER FIVE: CONCLUSIONS

The bus feeder subsidy is the largest component of the subsidy program (the two month appropriation was 27% of the total annual program) that totaled 22 Bus Assistance Agreements for the calendar year, 1972. The program operates in unique circumstances - in an area where a "severe transportation problem"⁵⁴ exists and funded by monies dedicated to solving the transportation problem. With this in mind, the operations of the COA and the Department of Transportation must be called disappointing. The large sums of money realized by the Transportation Benefits Tax have not been employed to do the necessary planning and evaluation work needed to ease the transportation emergency, nor has an adequate public relations campaign been established to inform commuters about public transportation services. The bus feeder system neither routes bus commuters to PATCO nor serves existing PATCO customers. While there are no guidelines which state the minimum number of passengers transferring between bus and train to qualify a bus system as a bus feeder system, the wording of the supplemental appropriation "to provide a bus feeder system to and from the Lindenwold High Speed Line" indicates its use by the majority of passengers carried must be to connect with PATCO. Clearly, an 8% transfer is inadequate.

The continuation of the bus feeder subsidy should be contingent upon annual demonstration that the transfer to or from PATCO is used by at least a majority of bus feeder patrons.

Immediate bus feeder system planning and route changing efforts should center on the PATCO patrons now driving to stations four days a week since some 1,200 people indicated on the OFA survey of PATCO park-and-riders some interest in switching to a feeder bus. This area is of special concern to the COA and the Legislature and it is recommended that a specific plan to ease the severe transportation problem in Camden County be devised by the Commuter Operating Agency including bus routes, PATCO operations, and road improvements and incorporating a continuing advertising campaign for the bus-train system. The plan should be updated and submitted annually to the Legislature showing the percentage of PATCO customers transferring from bus feeder service, the use and balances in the Transportation Benefit Fund, trends in public transit use, and trends in area automobile registrations.

A further effort is needed after PATCO peak hour capacity is expanded to assure that commuters switching from the bus to the train are satisfied and that the modified routes and schedules are effectively drawing the maximum number of commuters. It is recommended that after completion of the next phase of PATCO expansion, the Office of Fiscal Affairs re-examine the bus routes, commuter satisfaction and COA performance to independently verify the adequacy of these efforts to ease the severe transportation problem.

54. Section 4, Chapter 222, Laws of 1971, defines a severe transportation problem as a circumstance of interstate peak-load requirements and the minimum number of annual crossings to make the tax operative is 100,000,000.

A critical feature of the long-term resolution of the transportation problem is the expansion of the PATCO Lindenwold Line. In September, 1973, the Delaware River Port Authority revealed it was altering its published expansion plans to expand south into Gloucester County (Glouco) as a first priority instead of Northeast to Moorestown in Burlington County (Burlco). While the decision involves complex issues, it bears greatly on the future shaping of the bus feeder program and the resolution of the severe transportation problem.

The Delaware River Port Authority spokesman summarized the decision criteria on September 19, 1973, as follows:

1. Capital Cost - "significant advantage" to the Glouco Route
2. Local Share of Capital Cost - "decided advantage" to Glouco Route
3. Increase in System Patronage - "slight advantage" to Burlco Route
4. Increase in System Passenger Miles - "significant advantage" to Glouco Route
5. Increase in PATCO Net Income - "short-term significant advantage" to Burlco Route, "long-term slight advantage" to Glouco Route
6. Increase in DRPA/PATCO Net Income - "short-term significant advantage" to Burlco Route, "long-term slight advantage" to Glouco Route
7. Section 13C Liability (The Federal Urban Mass Transit Act requires new mass transit to employ transit employees displaced by the improvement) - "significant advantage" to Glouco Route
8. Increase in Bus Feeder Subsidies (by N.J. COA) - "significant advantage" to Glouco Route

The announced route choice is claimed still to be tentative. The Delaware River Port Authority would not be committed until September, 1974 to an actual route, and PATCO must have explicit written approval from the Governors of New Jersey and Pennsylvania before the route may be finalized. The State of New Jersey appropriated \$10 million in the fiscal 1974 Appropriations Act for PATCO capital improvements without designating a priority expansion route. *It is recommended that the Legislature consider the PATCO expansion route and indicate the first priority expansion that would best alleviate the severe transportation problem.*

Transportation in the Pennsylvania-New Jersey district is a special concern and the bus feeder subsidy, as a result, requires no county or local government participation. Local bus service may receive State assistance when the county or any public authority requests assistance, but the public agency or authority is required to reimburse the Department of Transportation for not less than 25% of the cost of providing such passenger service (Laws of 1961,

Chapter 134, Section 5). For calendar year 1972, counties provided \$465,736 of a total of \$2.78 million in bus assistance.

There are two bus feeder routes, the P and the CC that provide local bus service in the City of Camden. The CC route, while stopping near the City Hall PATCO station, also stops at Camden High School. The P route also services a wide area of Camden County. Limited observations of both routes by OFA staff indicate very few riders on this route connect to a PATCO station. *It is recommended that the COA examine the amount of local bus service provided by the feeder system and encourage financial participation on the part of Camden County and any other county to a degree appropriate with local service provided.*

The severe transportation problem in this Southwestern part of the State may be eased by the full implementation of the bus-train transit system. Full implementation, however, is a long-term solution. With funds available, more vigorous pursuit of interim results are possible.

The current energy crisis adds a dimension to the bus feeder program. Buses are six times as efficient as autos in terms of energy conservation⁵⁵ per passenger carried and increased use of bus transit as opposed to private auto use is a method to conserve energy. In view of the importance of energy conservation, *it is recommended that increased bus service and new routes be added to the bus system after appropriate planning. The routes could be implemented in calendar year 1974 without waiting for PATCO expansion or increased PATCO peak hour capacity to lure commuters out of private cars. All such routes could be interim routes and, in the absence of PATCO capacity, could go straight to Philadelphia, but should be supported by non-bus feeder revenues.*

55. New Jersey State Senate, Report of Ad Hoc Committee on Energy and the Environment, April 5, 1972, p. 31.

APPENDIX A

APPENDIX A - SURVEYS

The methodology of this program analysis included conducting surveys of three distinct groups of interest:

- 1) feeder bus/train riders
- 2) park-and-rides
- 3) southern New Jersey county and municipal executives

In respect to the first two groups, the purpose of the surveys was to identify what kinds of people use the bi-modal system and what attitudes and opinions they hold on mass transit. The survey of local county executives was intended to determine what input these officials had in the establishment of the feeder system and their personal opinions and observations of the impact of the system on their communities.

As previously mentioned, this type of data was not available to the staff from any other source, a condition partially attributable to the newness of the program. Therefore, a mail-back questionnaire survey was considered the only means to acquire direct, accurate socio-economic and attitudinal data from these three groups. It was believed that this information could be of great value to the Legislature in any future considerations of this program.

According to PATCO officials, the system's heaviest ridership occurs on Wednesdays. Therefore, a Wednesday, September 12, 1973, was chosen as the survey date. Analytical staff was assigned to conduct the surveys between the hours of 7 a.m. - 1 p.m., with the aid of seven Kelly Girl Associate temporaries.

The previously cited PATCO survey of TNJ feeder bus passengers, taken in November, 1972, provided a ridership figure on which an OFA survey strategy was developed. Surveyors were prepared to distribute 1,000 questionnaires in order to confidently expect a return of 200-500 questionnaires. It was estimated that this would constitute a survey of 20-50% of the daily feeder bus riders who transfer to PATCO trains.

The survey procedure called for a staff member and a Kelly aide to be assigned to each PATCO station. At the station, they were to position themselves at or near a TNJ feeder bus stop. As a bus pulled into the station, a surveyor would hand a survey questionnaire to each passenger disembarking from a feeder bus. A total of 572 questionnaires were distributed as follows:

Lindenwold	-	120	Collingswood	-	27
Ashland	-	65	Ferry Avenue	-	50
Haddonfield	-	175	Broadway	-	105
Westmont	-	30	City Hall	-	0

Due to set-up difficulties and unexpectedly heavy traffic at two of the stations (Haddonfield and Lindenwold), the staff estimated that approximately one to two hundred feeder bus riders were missed and did not receive questionnaires.

Of the 572 questionnaires distributed, 316, or 55%, were returned and computer processed by the New Jersey Department of Transportation's Division of Data Processing. The results of this survey are summarized in Chapter IV.

The survey of the park-and-ride population was conducted concurrently. During breaks in the bus schedule, surveyors collected approximately 4,200 license plate numbers as follows:

Lindenwold	- 1200	Collingswood	- 350
Ashland	- 550	Ferry Avenue	- 1000
Haddonfield	- 550	Broadway	- 0
Westmont	- 550	City Hall	- 0

These figures represent about half of the available parking spaces at each station. A total of 8,800 parking spaces are provided among the six stations with parking facilities for commuters.

With the cooperation of the New Jersey Division of Motor Vehicles, the staff obtained the names and addresses of the registration holders of these vehicles. Survey questionnaires were then mailed to approximately 3,476 of those park-and-rides on the Motor Vehicles listing.

In a cover letter, they were asked to complete the questionnaire or forward it for completion to the person who was using their automobile on the survey date or the person who was dropped off at a PATCO station by their vehicle on that date. Of the 3,476 questionnaires mailed, 1,952 park-and-rides or 56%, returned completed questionnaires, representing about 22% of the vehicles commuting daily to PATCO stations. This survey was also computer processed by the Department of Transportation and the results are summarized in Chapter IV. On the following pages are copies of the survey questionnaires and the cover letter.

Comments, suggestions, and complaints were solicited and space was provided on the questionnaires for this purpose. These remarks were processed by the OFA staff and arranged in categories according to greatest volume. The results of this effort are summarized in Chapter IV.

The survey of 54 county and municipal executives was sent to all the Mayors of Camden County, several Gloucester, Salem, Burlington, and Cumberland County Mayors, and the directors of the Boards of Freeholders of Camden, Cumberland, Gloucester, and Salem Counties. The purpose of this survey was to determine what impact, if any, local county officials had on the revision of existing bus service to the feeder system. Forty-five (83%) completed questionnaires were returned, and the results are summarized in Chapter III. A copy of the questionnaire and cover letter are on the following pages.

New Jersey State Legislature, Office of Fiscal Affairs
Division of Program Analysis, State House, Suite 232
Trenton, New Jersey 08625

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SURVEY OF FEEDER BUS RIDERS

The State of New Jersey appropriated two million dollars of your taxes in fiscal year 1973 and has recently authorized an additional two million dollars in fiscal 1974 for the establishment and maintenance of a bus feeder system for travel to and from the Lindenwold High Speed Line. This survey is being conducted by the New Jersey State Legislature in order to determine the need for improvements in the system and to facilitate planning for better transportation in the South Jersey area. Your cooperation in filling out and returning this form is essential to the success of the survey, and would, therefore, be greatly appreciated. Please return this questionnaire by Friday, September 28. Thank you.

Please check the appropriate box.

BACKGROUND OF RESPONDENTS

(Italicized numbers represent respondents to question)

What is your age?

1 <input type="checkbox"/> under 18	2
2 <input type="checkbox"/> 18-30	117
3 <input type="checkbox"/> 31-55	145
4 <input type="checkbox"/> 56-62	31
5 <input type="checkbox"/> over 62	21
	316 Total

Are you

1 <input type="checkbox"/> male	119
2 <input type="checkbox"/> female	163
	282 Total
	34 Not Specified

What is your annual family income?

1 <input type="checkbox"/> less than \$5,000	38
2 <input type="checkbox"/> \$5,000-\$10,000	99
3 <input type="checkbox"/> \$10,000-\$15,000	80
4 <input type="checkbox"/> over \$15,000	77
	294 Total
	22 Not Specified

How many persons are in your household?

1 <input type="checkbox"/> 1	45
2 <input type="checkbox"/> 2	92
3 <input type="checkbox"/> 3	64
4 <input type="checkbox"/> 4	43
5 <input type="checkbox"/> 5	32
6 <input type="checkbox"/> 6 or more	28
	304 Total
	12 Not Specified

What is the name of the town in which you live?

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For a one-way trip, what is the name of the station where you...

board the train?

1	<input type="checkbox"/> Lindenwold	88
2	<input type="checkbox"/> Ashland	30
3	<input type="checkbox"/> Haddonfield	94
4	<input type="checkbox"/> Collingswood	12
5	<input type="checkbox"/> Westmont	31
6	<input type="checkbox"/> Ferry Avenue	38
7	<input type="checkbox"/> Broadway	23
8	<input type="checkbox"/> City Hall	0
		316 Total

get off the train?

1	<input type="checkbox"/> Lindenwold	4
2	<input type="checkbox"/> Ashland	5
3	<input type="checkbox"/> Haddonfield	13
4	<input type="checkbox"/> Collingswood	1
5	<input type="checkbox"/> Westmont	8
6	<input type="checkbox"/> Ferry Avenue	3
7	<input type="checkbox"/> Broadway	5
8	<input type="checkbox"/> City Hall	19
9	<input type="checkbox"/> a Philadelphia station	255
		313 Total

Letter of the bus route you usually ride? _____ ☐

3 Not Specified

SURVEY QUESTIONS

1. What is the purpose of your travel today?

1	<input type="checkbox"/> work	284
2	<input type="checkbox"/> personal business	4
3	<input type="checkbox"/> shopping	3
4	<input type="checkbox"/> school	22
5	<input type="checkbox"/> social, recreation, entertainment	2
6	<input type="checkbox"/> other _____	1
		316 Total

2. How many cars in operating condition do you have in your household?

1	<input type="checkbox"/> none	91
2	<input type="checkbox"/> one	169
3	<input type="checkbox"/> two	44
4	<input type="checkbox"/> three or more	11
		315 Total
		1 Not Specified

3. Could you have used one of these cars to get to the PATCO station instead of taking the bus?

1	<input type="checkbox"/> yes	95
2	<input type="checkbox"/> no	220
		315 Total
		1 Not Specified

4. If your answer is yes, what is your main reason for taking the bus?

1 <input type="checkbox"/> prefer the bus	39
2 <input type="checkbox"/> don't like to drive	18
3 <input type="checkbox"/> too much traffic	13
4 <input type="checkbox"/> no parking space at station	2
5 <input type="checkbox"/> other (specify) _____	23
	95 Total
	221 Not Specified

5. Is this trip part of a round trip by bus today?

1 <input type="checkbox"/> yes	294
2 <input type="checkbox"/> no	18
	312 Total
	4 Not Specified

6. Will you be traveling during peak or off-peak hours?

1 <input type="checkbox"/> peak (6:30 a.m.-9:00 a.m./4:00 p.m.-6:30 p.m.)	267
2 <input type="checkbox"/> off-peak (other than above)	25
3 <input type="checkbox"/> one way/peak, one way/off-peak	21
	313 Total
	3 Not Specified

7. How will you get to the bus stop where you boarded this bus?

1 <input type="checkbox"/> taxi	1
2 <input type="checkbox"/> other bus	14
3 <input type="checkbox"/> walked less than five blocks	255
4 <input type="checkbox"/> walked more than five blocks	39
5 <input type="checkbox"/> hitch-hiked	1
6 <input type="checkbox"/> Dial-a-Ride	3
7 <input type="checkbox"/> bike	0
	313 Total
	3 Not Specified

8. How will you get to your destination after leaving the train?

1 <input type="checkbox"/> taxi	5
2 <input type="checkbox"/> other bus	45
3 <input type="checkbox"/> other train	34
4 <input type="checkbox"/> walk less than five blocks	183
5 <input type="checkbox"/> walk more than five blocks	45
6 <input type="checkbox"/> hitch-hike	0
	312 Total
	4 Not Specified

9. How frequently do you ride the bus?

1 <input type="checkbox"/> 4-7 days per week	291
2 <input type="checkbox"/> 1-3 days per week	18
3 <input type="checkbox"/> less than 1 day per week	5
	314 Total
	2 Not Specified

10. Do you think that the buses run often enough?

1	<input type="checkbox"/> yes	133
2	<input type="checkbox"/> no	175
		308 Total
		8 Not Specified

11. Do you think that more routes are needed?

1	<input type="checkbox"/> yes	117	If yes, in what area? _____
2	<input type="checkbox"/> no	133	
		250 Total	
		66 Not Specified	

12. Does the bus run on schedule?

1	<input type="checkbox"/> always	56
2	<input type="checkbox"/> usually	238
3	<input type="checkbox"/> hardly ever	18
		312 Total
		4 Not Specified

13. How did you get to the Speedline before the bus feeder service was available?

1	<input type="checkbox"/> drove my auto	79
2	<input type="checkbox"/> taxi	11
3	<input type="checkbox"/> other bus	59
4	<input type="checkbox"/> walked	24
5	<input type="checkbox"/> didn't use the Speedline	130
6	<input type="checkbox"/> bike	2
7	<input type="checkbox"/> hitch-hiked	3
8	<input type="checkbox"/> Dial-a-Ride	3
		311 Total
		5 Not Specified

14. How would you rate the cleanliness of the bus?

1	<input type="checkbox"/> clean	140
2	<input type="checkbox"/> mostly clean	151
3	<input type="checkbox"/> fairly dirty	18
4	<input type="checkbox"/> very dirty	5
		314 Total
		2 Not Specified

15. How would you rate the crowdedness of the bus?

1	<input type="checkbox"/> always get a seat	293
2	<input type="checkbox"/> sometimes get a seat	22
3	<input type="checkbox"/> never get a seat	0
		315 Total
		1 Not Specified

16. How does the cost of the bus/train system of travel compare to the cost of taking a direct bus to your destination?

- 1 ☐ bus/train costs more 99
2 ☐ bus/train costs same as just bus 128
3 ☐ bus/train costs less than direct bus 34
4 ☐ no basis for comparison 48

309 Total

7 Not Specified

17. What is your main reason for not using Dial-a-Ride to get to the train station?

- 1 ☐ too expensive 31
2 ☐ takes too long to arrive 5
3 ☐ doesn't service my community 272
4 ☐ other (specify) _____ 4

312 Total

4 Not Specified

Please use the margin for any comments or suggestions you wish to offer. Thank you for your cooperation.



New Jersey State Legislature

COPY

KENNETH N. BRAGG
EXECUTIVE DIRECTOR

OFFICE OF FISCAL AFFAIRS

STATE HOUSE, SUITE 232
TRENTON, NEW JERSEY 08625
TELEPHONE (609) 292-8014

GEORGE B. HARPER
STATE AUDITOR

GERALD D. SILLIPHANT
DIRECTOR, PROGRAM ANALYSIS

JOHN P. CALLAHAN
DIRECTOR, OPERATIONAL SERVICES,
AND ASSISTANT STATE AUDITOR

THOMAS L. BERTONE, D.P.A.
DIRECTOR, BUDGET REVIEW

September 21, 1973

Dear New Jersey Motorist:

The Office of Fiscal Affairs has been authorized by the New Jersey State Legislature to perform a study of the feeder bus service to and from the Philadelphia-Lindenwold High Speed Line. As part of our research, the staff has designed questionnaires to survey three groups of Speedline users - people who arrive at the station by feeder bus, people who drive to the station and park in a PATCO lot, and people who are dropped off at the station by another person.

On Wednesday, September 12, between the hours of 7:00 a.m. and 1:00 p.m., our staff distributed questionnaires to passengers getting off feeder buses at all eight New Jersey PATCO stations, and collected 4,000 license plate numbers of automobiles parked in PATCO lots and automobiles dropping people off at the stations. With the cooperation of the N. J. Division of Motor Vehicles, our office has obtained the names and addresses of the registration holders of these vehicles. We would appreciate it if you would complete this questionnaire or forward it to the person who was using your automobile on Wednesday, September 12, between the hours of 7:00 a.m. and 1:00 p.m., or to the person who was dropped off at a PATCO station by your vehicle on that date.

To ensure the anonymity of respondents, only the return envelopes have been coded. As a questionnaire arrives, our staff will check off its matching code number on the control sheet of names and addresses and discard the envelope. The unmarked questionnaire will then be sent directly to the N. J. Department of Transportation for computer tabulation. ABSOLUTELY NO attempt will be made to match names and addresses with the questionnaires' responses. Complete CONFIDENTIALITY will be maintained at all times.

The sole purpose of this survey is to ascertain the attitudes and opinions of mass transportation users in order to aid in planning for improved transportation in the South Jersey area. Toward this end, your help is enlisted. .

Sincerely,

Gerald D. Silliphant
Director

Division of Program Analysis

GDS/md
Enclosure

New Jersey State Legislature, Office of Fiscal Affairs
Division of Program Analysis, State House, Suite 232
Trenton, New Jersey 08625

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SURVEY OF PARK-AND-RIDE COMMUTERS

The State of New Jersey appropriated two million dollars of your taxes in fiscal year 1973 and has recently authorized an additional two million dollars in fiscal 1974 for the establishment and maintenance of a bus feeder system for travel to and from the Lindenwold High Speed Line. This survey is being conducted by the New Jersey State Legislature in order to determine the need for improvements in the system and to facilitate planning for better transportation in the South Jersey area. Your cooperation in filling out and returning this form is essential to the success of the survey, and would, therefore, be greatly appreciated. Please return this questionnaire by Friday, September 28. Thank you.

Please check the appropriate box.

BACKGROUND OF RESPONDENTS

What is your age?

1 <input type="checkbox"/>	under 18	4
2 <input type="checkbox"/>	18-31	655
3 <input type="checkbox"/>	31-55	1042
4 <input type="checkbox"/>	56-62	166
5 <input type="checkbox"/>	over 62	68
		1935 Total
		8 Not Specified

Are you

1 <input type="checkbox"/>	male	1231
2 <input type="checkbox"/>	female	607
		1838 Total
		100 Not Specified

What is your annual family income?

1 <input type="checkbox"/>	less than \$5,000	60
2 <input type="checkbox"/>	\$5,000-\$10,000	325
3 <input type="checkbox"/>	\$10,000-\$15,000	574
4 <input type="checkbox"/>	over \$15,000	871
		1830 Total
		111 Not Specified

How many persons are in your household?

1 <input type="checkbox"/>	1	169
2 <input type="checkbox"/>	2	521
3 <input type="checkbox"/>	3	354
4 <input type="checkbox"/>	4	429
5 <input type="checkbox"/>	5	255
6 <input type="checkbox"/>	6	170
		1898 Total
		44 Not Specified

What is the name of the town in which you live? _____

--	--	--	--

For a one-way trip, what is the name of the station where you...

board the train?

1 <input type="checkbox"/>	Lindenwold	509
2 <input type="checkbox"/>	Ashland	267
3 <input type="checkbox"/>	Haddonfield	262
4 <input type="checkbox"/>	Collingswood	167
5 <input type="checkbox"/>	Westmont	309
6 <input type="checkbox"/>	Ferry Avenue	413
7 <input type="checkbox"/>	Broadway	1
8 <input type="checkbox"/>	City Hall	1
		1929 Total
		7 Not Specified

get off the train?

1 <input type="checkbox"/>	Lindenwold	9
2 <input type="checkbox"/>	Ashland	4
3 <input type="checkbox"/>	Haddonfield	1
4 <input type="checkbox"/>	Collingswood	6
5 <input type="checkbox"/>	Westmont	3
6 <input type="checkbox"/>	Ferry Avenue	17
7 <input type="checkbox"/>	Broadway	40
8 <input type="checkbox"/>	City Hall	115
9 <input type="checkbox"/>	a Philadelphia station	1719
		1914 Total
		20 Not Specified

SURVEY QUESTIONS

1. What is the purpose of your travel today?

1 <input type="checkbox"/>	work	1750
2 <input type="checkbox"/>	personal business	47
3 <input type="checkbox"/>	shopping	27
4 <input type="checkbox"/>	school	114
5 <input type="checkbox"/>	social, recreation, entertainment	7
		1945 Total

2. How many cars in operating condition do you have in your household?

1 <input type="checkbox"/>	none	9
2 <input type="checkbox"/>	1	673
3 <input type="checkbox"/>	2	1004
4 <input type="checkbox"/>	3 or more	254
		1940 Total
		3 Not Specified

3. Will you be traveling during peak or off-peak hours?

1 <input type="checkbox"/>	peak (7 a.m.-9 a.m./4 p.m.-6 p.m.)	1640
2 <input type="checkbox"/>	off-peak (other than above)	131
3 <input type="checkbox"/>	one way/peak, one way/off-peak	172
		1943 Total
		2 Not Specified

4. How did you get to the train station?

1 <input type="checkbox"/>	personally drove	1780
2 <input type="checkbox"/>	passenger in car pool	17
3 <input type="checkbox"/>	driven by wife/husband	114
4 <input type="checkbox"/>	other (specify) _____	25
		1936 Total
		6 Not Specified

5. How do you find the parking situation?

1	<input type="checkbox"/> always get a space	1586
2	<input type="checkbox"/> sometimes get a space	261
3	<input type="checkbox"/> never get a space	28
		1875 Total
		65 Not Specified

6. How will you get to your destination after leaving the train?

1	<input type="checkbox"/> bus	37
2	<input type="checkbox"/> taxi	4
3	<input type="checkbox"/> walk	1663
4	<input type="checkbox"/> other train	206
5	<input type="checkbox"/> hitch-hike	0
		1910 Total
		30 Not Specified

7. How frequently do you take the train?

1	<input type="checkbox"/> 4-7 days per week	1729
2	<input type="checkbox"/> 1-3 days per week	130
3	<input type="checkbox"/> less than one day per week	78
		1937 Total
		5 Not Specified

8. Is there a feeder bus stop near your home?

1	<input type="checkbox"/> yes, _____ blocks away	589
2	<input type="checkbox"/> no	1223
		1812 Total
		129 Not Specified

9. Did you ever ride the feeder bus to the train station?

1	<input type="checkbox"/> yes, _____ times	180
2	<input type="checkbox"/> no	1644
		1824 Total
		75 Not Specified

10. Did you think the cost of the bus trip was

1	<input type="checkbox"/> too high	222
2	<input type="checkbox"/> reasonable	226
3	<input type="checkbox"/> cheap	27
		475 Total
		1420 Not Specified

11. What is your main reason for not using the feeder bus system?

1	<input type="checkbox"/> no stop near my home	909
2	<input type="checkbox"/> prefer to drive	345
3	<input type="checkbox"/> cheaper to drive	147
4	<input type="checkbox"/> don't like buses	29
5	<input type="checkbox"/> takes too long	159
6	<input type="checkbox"/> other (specify) _____	239
		1828 Total
		106 Not Specified

12. If a bus stop was conveniently located near your home and the service and facilities were acceptable, would you take the bus instead of driving to the train station?

1 <input type="checkbox"/> yes	1144
2 <input type="checkbox"/> no	679
	1823 <i>Total</i>
	117 <i>Not Specified</i>

13. If you were able to phone for a bus pick-up at your door when you wanted a ride for a charge of 60¢, would you use this service instead of your car?

1 <input type="checkbox"/> yes	351
2 <input type="checkbox"/> sometimes	600
3 <input type="checkbox"/> no	962
	1913 <i>Total</i>
	28 <i>Not Specified</i>

The following space is available for any comments or suggestions you may wish to offer. Thank you for your cooperation.



New Jersey State Legislature

OFFICE OF FISCAL AFFAIRS

STATE HOUSE, SUITE 232
TRENTON, NEW JERSEY 08625
TELEPHONE (609) 292-8014

KENNETH N. BRAGG
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GEORGE B. HARPER
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JOHN P. CALLAHAN
ASSISTANT STATE AUDITOR

GERALD D. SILLIPHANT
DIRECTOR, PROGRAM ANALYSIS

THOMAS L. BERTONE, D.P.A.
DIRECTOR, BUDGET REVIEW

COPY

July 24, 1973

Dear Mayor/Freeholder:

The Law Revision and Legislative Services Commission of the New Jersey Legislature unanimously resolved in March 1973 that a full study be conducted by the Office of Fiscal Affairs of the bus feeder services to the Lindenwold Rapid Transit Line initiated with State subsidies. Staff in the Division of Program Analysis have been assigned to conduct such a study over the summer months. The study will involve determinations such as,

- 1) whether the objective has been attained of providing high speed transportation for South Jersey;
- 2) whether there has been a restructuring of the bus services in relationship to the high speed transportation line so that choices of transportation have been more restricted and whether there was an expression of Legislative intent of this issue.

We hope to enlist your aid in our research. Attached to this letter is a questionnaire which should only require a few minutes of your time but would be of great help to our study. If possible, we would appreciate having the questionnaire returned by August 10.

Thank you for your cooperation.

Sincerely,

Gerald D. Silliphant
Director
Division of Program Analysis

GDS/md
Attachment

NEW JERSEY STATE LEGISLATURE
OFFICE OF FISCAL AFFAIRS
State House, Suite 232
Trenton, New Jersey 08625

SURVEY OF COUNTY AND MUNICIPAL EXECUTIVES

Please circle your answer or fill in where appropriate.

- | | <i>Number Responding</i> | |
|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----|
| | Yes | No |
| 1. Did your municipality or county offer any opinion or advice in the determination of routes in the bus feeder system? | 10 | 32 |
| 2. To your knowledge, have any private groups expressed opinions on bus feeder route designation? | 6 | 38 |
| Name of organization? _____ | | |
| 3. Do you feel that bus transportation is necessary to satisfy the commuting needs of your constituency? | 41 | 4 |
| 4. Do you feel that the bus feeder provides an essential service to the majority of your constituency? | 20 | 21 |
| 5. Which group do you think comprises the majority of bus feeder ridership? | | |
| a) people who commute to work. | a) | 32 |
| b) people over 62 on a fixed income who use public transportation for doctor's appointments, visiting or shopping. | b) | 8 |
| c) people under 18 who do not drive and use public transportation for recreation or school transportation. | c) | 2 |
| d) people in lower income brackets who cannot afford to buy an automobile and use public transportation for commuting, recreation and shopping. | d) | 6 |
| e) other (specify) | | |

6. Which group do you feel would suffer the greatest hardship if existing bus service were curtailed?

- | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----|----|
| a) people who commute to work. | a) | 24 |
| b) people over 62 on a fixed income who use public transportation for doctor's appointments, visiting or shopping. | b) | 20 |
| c) people under 18 who do not drive and use public transportation for recreation or school transportation. | c) | 1 |
| d) people in lower income brackets who cannot afford to buy an automobile and use public transportation for commuting, recreation and shopping. | d) | 6 |
| e) other (specify) | | |

7. Do you observe that most bus riders use the service for

- | | | | | |
|-----------------------------------------------------------|----|----|----|----|
| a) local travel or b) to connect with the high speed line | a) | 11 | b) | 24 |
|-----------------------------------------------------------|----|----|----|----|

8. Do you feel that bus service should be increased--more routes, more frequent buses?	Yes	No
	37	5

9. Do you think that TNJ should continue to be subsidized by the State to preserve the existing bus service?	Yes	No
	34	6

10. One of the criteria used by the State Department of Transportation to deem a route worthy of continuance is if it generates $\frac{1}{2}$ of its operating costs from passenger revenue. Do you think that a route should be subsidized even if it does not make half its costs from passenger revenue?	Yes	No
	21	19

11. Do you feel that the existing bus service is essential to the economics of the South Jersey area?

Yes	No
41	1

12. Did you ever receive any complaints about the bus feeder system?

Yes	No
21	20

Nature of most complaints: _____

13. Are you still receiving complaints?

Yes	No
17	18

14. Do you think that existing routes could be improved?

Yes	No
29	7

15. Have you made any suggestions for changes to Transport of New Jersey, the Department of Transportation, or the Public Utilities Commission?

Yes	No
7	34

16. Were these suggestions acted upon?

Yes	No
4	6

17. Do you think that ridership on the bus feeder routes could be improved?

Yes	No
30	3

18. How would you suggest doing this?

written responses

4.

19. Do you think that the county and municipality should promote use of the bus feeder system?

Yes No

37 4

20. Do you think that the bi-modal system of transportation (bus/train) is more desirable than the previous methods of direct bus transportation to Philadelphia or driving?

Yes No

32 6

In what ways?

21. Do you think that bus schedule and fare information is easily accessible to potential riders?

Yes No

11 29

22. Is auto traffic congestion increasing in your community?

Yes No

41 2

Please use the space below for any comments or suggestions you wish to make. Thank you again for your cooperation.

Name

Municipality

APPENDIX B

**Law Revision and Legislative Services
Commission Resolution and Office of
Fiscal Affairs Initial Response**



New Jersey State Legislature

C O P Y

KENNETH N. BRAGG
EXECUTIVE DIRECTOR

OFFICE OF FISCAL AFFAIRS

STATE HOUSE, SUITE 232
TRENTON, NEW JERSEY 08625
TELEPHONE (609) 292-8014

GEORGE B. HARPER
STATE AUDITOR

GERALD D. SILLIPHANT
DIRECTOR, PROGRAM ANALYSIS

JOHN P. CALLAHAN
DIRECTOR, OPERATIONAL SERVICES,
AND ASSISTANT STATE AUDITOR

THOMAS L. BERTONE, D.P.A.
DIRECTOR, BUDGET REVIEW

April 25, 1973

TO: Members of the Law Revision & Legislative
Services Commission

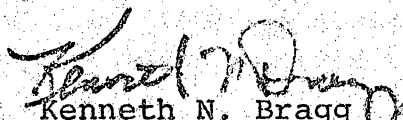
This letter is in response to a resolution (copy attached) of the Law Revision and Legislative Services Commission which directs the Office of Fiscal Affairs to determine all pertinent details of the expenditure of funds appropriated for the bus feeder services to and from the Lindenwold High Speed Line.

This assignment has been divided into two parts. One part has been assigned to the Division of Program Analysis and will involve determinations such as,

- (1) whether the objective has been attained of providing high speed transportation for South Jersey;
- (2) whether there has been a restructuring of the bus services in relationship to the high speed transportation line so that choices of transportation have been more restricted and whether there was an expression of Legislative intent of this issue.

The program analysis part of the study will be scheduled for completion by September 1, 1973.

The other part of this survey consists of a report by the Division of State Auditing regarding expenditure of funds utilized to provide bus feeder service to the Lindenwold High Speed Line under the provisions of A-1389 and A-2109. The financial report by the Division of State Auditing has been completed and a copy of the report is attached.


Kenneth N. Bragg
Executive Director

KNB/g
attch.

WHEREAS, The Governor's Budget Message for fiscal 1974 includes a recommendation for \$10 million representing the State's share necessary to match a Federal grant for the facilities and equipment required for the extension of the PATCO Rapid Transit Line;

WHEREAS, In 1972 the Legislature appropriated \$750,000 for passenger bus feeder service to and from the Lindenwold High Speed Line and an additional \$1,250,000 would be provided for such service by 1973 Assembly No. 2109, awaiting action by the Governor; and

WHEREAS, It is in the interest of the State that an early accounting be made of the expenditure of funds appropriated for this service; now, therefore,

RESOLVED by the Law Revision and Legislative Services Commission:

1. That the executive Director of the Office of Fiscal Affairs is requested and directed to conduct a suitable audit to determine all pertinent details of the expenditure of funds appropriated to date for bus feeder services to and from the Lindenwold High Speed Line.

2. That the findings of such audit be made available to the Legislature expeditiously in accordance with provisions of law.

(NOTE - Approved by LR & LSC through mail ballot, March 1973.)

OFFICE OF FISCAL AFFAIRS



INTER-COMMUNICATION

C O P Y

FROM: J. P. Callahan
Director
Division of State Auditing

TO: K. N. Bragg

(Institution or Department)

April 24, 1973

SUBJECT: Bus Feeder Service to and from
Lindenwold High Speed Line

In your letter of March 23, 1973, you requested the staff of the State Auditor to provide information pursuant to the expenditure of funds utilized to provide bus feeder service to the Lindenwold High Speed Line under the provisions of Assembly Bill #1389 and Assembly Bill #2109.

In response to this request, we have conducted an analysis of the transactions relative to this bus feeder service as recorded on the books and records of the New Jersey Department of Transportation. Our examination to date has been limited to a test of the DOT records pertaining to this service and a review of the signed contracts, Assembly Bills, contractor's billings and other pertinent data. We have not reviewed the records of the contractor to determine that all revenues and expenses were properly chargeable to the contract. We have examined the internal audit reports of the DOT audit staff who have conducted such field examinations and have relied on their findings related to these records.

Assembly Bill #1389, which was approved on August 16, 1972, was enacted to provide passenger bus feeder service to and from the Lindenwold High Speed Line operated by the Port Authority Transit Corporation for the approximate period October 28, 1972 to December 31, 1972. This legislation empowered the Department of Transportation to enter into contracts for the installation of such service. The sum of \$750,000 was appropriated for this purpose. Assembly Bill #2109, which was approved on March 5, 1973, provided an additional \$1,250,000 for the extension of this service to June 30, 1973, thus making the total funds available \$2,000,000 for Fiscal 1973. The proposed 1974 Budget provides an additional \$2,000,000 for 1974 operations.

In conformance with this legislation the Department of Transportation in September 1972 entered into an agreement with Transport of New Jersey to provide such service. Essentially the agreement provided for the following:

1. The discontinuance by Transport of New Jersey of certain bus service to Philadelphia which was in substantial competition with the Lindenwold High Speed Line.

Apr. 24, 1973

2. The establishment by Transport of New Jersey of certain feeder bus service to and from the Lindenwold High Speed Line. This service was to encompass 1,389 trips per day on week days, 982 trips on Saturday and 320 trips on Sundays.
3. In return for such services the State agreed to reimburse Transport of New Jersey for any losses sustained in operating these new lines plus an annual return of 6% on the total investment used in providing this service up to the maximum amount of the appropriation available for this purpose. (\$750,000 to January 31, 1973 and \$1,250,000 for the period February 1, 1973 to June 30, 1973).
4. The agreement further provided for such items as specifications of routes, fares, computation of revenues, indemnification provisions, etc.

By subsequent agreement the original contract with Transport of New Jersey was extended to June 30, 1973.

Based on our review for the period October 30, 1972 to January 31, 1973, the losses sustained by Transport of New Jersey plus the allowable return of investment from these operations amounted to \$772,000. Reimbursement has been limited to \$750,000, which is the total appropriation available for this period. Details of these revenues and costs are set forth in Exhibit I.

In arriving at allowable reimbursement under the contract(s), two factors have significant influence:

1. Many of the items of expense are allocations of costs which are spread over the total operations of Transport of New Jersey. The methods of allocation (which are valid) have been reviewed and accepted by the internal audit staff of the Department of Transportation. We do recognize, however, that other methods exist which might yield differing results.
2. The contract allows a 6% return on investment in assets used in providing this service. The DOT has used book value in computing this return while the contractor has claimed that the fair market value is the proper base. Details of these computations are set forth in Exhibit II. Because of the overrun through January 31, this is somewhat of a mute question at the present time but conceivably could be an issue in later negotiations.

Apr. 24, 1973

Lastly, we direct your attention to the projected losses in relation to available appropriations. Based on January, 1973 results (\$271,000 loss including 6% return), the feeder service will bill DOT approximately \$1,355,000 for the period February 1, 1973 to June 30, 1973. This would be \$105,000 in excess of the \$1,250,000 currently appropriated. Likewise the Fiscal Year 1974 billings would be \$3,252,000 as against the proposed appropriation of \$2,000,000. Since this is a projection based upon only one month there may be fluctuations but it does indicate an area for future surveillance.

The above data was developed in the course of our current audit of Public Transportation Systems under the Department of Transportation and, as such, this data together with additional findings, if any, will be included as part of our published audit of Public Transportation Systems when completed.

JPC:jm

cc: G. B. Harper

BUS FEEDER SERVICE

STATEMENT OF REVENUES AND EXPENSES

	<u>10/28/72-12/31/72</u>	<u>1/1/73-1/31/73</u>	<u>TOTAL</u>
Passenger Revenues	<u>\$544,965</u>	<u>\$262,049</u>	<u>\$807,014</u>
Expenses			
Equipment, maintenance and garage expense	\$152,279	\$82,243	\$234,522
Transportation expense	487,715	249,801	737,516
Station Expense	18,505		
Traffic, solicitation and advertising		9,272	27,777
	3,887	4,674	8,561
Insurance and safety expense	44,168	24,969	69,137
Administrative & general-Southern D.	112,610	54,743	167,353
Depreciation Expense	45,430	22,968	68,398
Operating taxes and licenses	37,908	31,971	69,879
Operating rents-net	614	283	897
Overhead Expense	92,802	50,335	143,137
Dial-A-Ride Credit	<u>(12,417)</u>	<u>(6,831)</u>	<u>(19,248)</u>
	<u>\$983,501</u>	<u>\$524,428</u>	<u>\$1,507,929</u>
Loss from Feeder Service	(\$438,536)	(\$262,379)	(\$700,915)
Additional Expenses to start operation	(23,424)		(23,424)
Advertising (Start-Up)	(20,000)		(20,000)
Return on Investment @6%	(18,515)	(9,352)	(27,867)
	<u>(\$500,475)</u>	<u>(\$271,731)</u>	<u>(\$772,206)</u>
Contract Limitation	500,000	250,000	750,000
Balance	<u>(\$475)</u>	<u>(\$21,731)</u>	<u>(\$22,206)</u>

TRANSPORT OF NEW JERSEYINVESTMENT RELATED TO BUS FEEDER SERVICE

<u>ASSET</u>	<u>BOOK VALUE</u>	<u>APPRAISED VALUE</u>
Newark Shops	\$23,040	23,040
Maplewood General Office	88,133	88,133
Revenue Equipment (131 Buses)	1,223,959	1,835,100
Service Equipment	5,795	9,575
Materials and Supplied	48,208	48,208
Fare Registry Equipment	17,724	82,802
Furniture and Office Equipment	10,111	9,170
Land and Structure (Newton & Turnerville)	315,861	1,150,568
Shop Garage Equipment	6,454	22,019
	<u>\$1,739,285</u>	<u>\$3,268,615*</u>
Annual Return on Investment @ 6%	<u>\$ 104,000</u>	<u>\$ 180,000*</u>

Notes

1. Allocations of common facilities are based on proportionate share of total costs applicable to the feeder service.
2. Book Value is used by D.O.T. to compute "Return on Investment". Contractor has claimed appraised value as the proper basis for this computation. * Contractor has used \$3,000,000 as round number.

Auditor's Note

Book Value is asset cost less accumulated depreciation. Appraised value is Book value plus an additional amount which is asset appreciation on unrealized gain.

In computing return on investment, the use of Book value is the generally preferred accounting method for two reasons:

- 1) Appraisals will fluctuate in value depending upon a number of economic factors and is therefore difficult to ascertain at any point in time.
- 2) It is assumed that the company will continue in business ("going concern concept") and will recoup its investment through depreciation. To utilize appraised value would be to allow an additional profit on an unrealized increase in the theoretical value.

It would also appear inconsistent to claim an increase in value of assets while at the same time claiming depreciation on these assets as an allowable item of cost under the contract.

APPENDIX C:

FEEDER BUS ROUTES

<u>Route</u>	<u>(Old Route)</u>	<u>From</u>	<u>To</u>	Peak Hour Headways in Minutes*			Number of Trips		
				<u>Weekday</u>	<u>Sat.</u>	<u>Sun.</u>	<u>Weekday</u>	<u>Sat.</u>	<u>Sun.</u>
AA	(2-3)	Collingswood-Philadelphia		20	30	90	38	26	10
BB	(4-5-55)	Haddonfield-Camden		20	60	0	34	12	0
CC	(12-80)	Camden-Camden High School		40	60	120	22	13	6
D-DD	(14-15-18-25)	Cherry Hill Mall-Pennsauken-Philadelphia		15	35	90	42	28	10
EE	(16-34-38)	Woodlynne-Camden		20	45	0	33	23	0
F-FF	(21-31)	Williamstown-Philadelphia		7	25	35	97	80	35
G-GG	(27-107)	Salem-Woodbury-Philadelphia		20	100	120	24	15	7
H-HH	(41-42)	National Park-Philadelphia		70	0	0	9	0	0
J-JJ	(47)	Pennsville-Philadelphia		20	20	120	29	23	12
KK	(50-53-67)	Lindenwold-Haddonfield		30	60	0	19	8	0
LL-MM	(51-61)	Berlin-Erial-Westmont		20	30	90	37	24	12
NO	(65)	Barrington-Philadelphia		15	30	60	46	33	18
RR	(69)	Barrington-Haddonfield		20	0	0	28	0	0
P	(68)	Medford Lakes-Philadelphia		15	60	0	35	16	0
S-SS	(103)	Bridgeton-Philadelphia		40	60	30	15	13	12
T-TT	(105)	Millville-Philadelphia		15	30	60	27	26	14
UU		Camden Co. College-Lindenwold		30	0	0	24	0	0
VV		Moorestown Mall-Camden		30	60	0	30	15	0

*Note: Times are estimates to give indications of amount of peak hour service

Source: Various Bus-Train Schedules.

APPENDIX D:

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