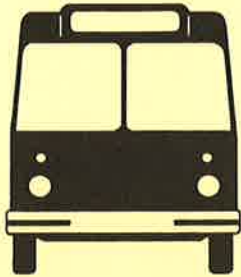


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Small City Transit

WESTPORT, CONNECTICUT:

Comprehensive Transit Service
in an Affluent Suburban
Community



March 1976
U. S. DEPARTMENT OF TRANSPORTATION
Urban Mass Transportation Administration
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Preface

This document was prepared by the Transportation Systems Center (TSC) as part of the information dissemination function of the Office of Service and Methods Demonstrations, Urban Mass Transportation Administration. This case study is one of thirteen studies of public transit systems in small communities and is intended to serve as an information resource for other communities in the process of planning or considering public transportation.

The information presented in this document is based on a visit to the site, interviews and phone conversations with the principals involved, and operating records obtained during 1975. The authors gratefully acknowledge the cooperation of local officials and transit operators at all of the sites selected for study, and of the TSC staff in compiling the information gained from these studies and assisting in its interpretation.

WESTPORT, CONNECTICUT: Comprehensive Transit Service
In An Affluent Suburban Community

In only about a year of operation, the "Minnybus" service in Westport, Connecticut, has achieved a degree of national recognition virtually unprecedented for a system of its size and scope. Enthusiasts have extolled it as a demonstration of the potential for successful public transit in a suburban setting where reliance on the private automobile has been customary for decades. At the same time, its detractors have pointed to the expense being borne by the taxpayers of Connecticut and elsewhere to finance this premium service for a very affluent community. Westport provides an example of what can be achieved by a community that makes a decision to provide a ubiquitous fixed-route service both to serve the town's transit dependent groups, and to provide relief from congestion at the local commuter rail station.

The Town of Westport, situated in southwestern Connecticut on Long Island Sound, might not appear to be a particularly hospitable environment for experiments in public transportation. Good market areas for transit have tended to be either less affluent (so that few households could afford second cars), densely populated, or highly congested with traffic, or have a large population of elderly people who cannot or will not drive. Westport has none of these characteristics. On the contrary, the average income among Westporters was over \$21,000 in 1970; the town's population density is only 1300 persons per square mile, in contrast to the 3,000 to 5,000 usually considered to be required for successful bus operations; and only about 8 percent of its 1970 population was over 65 years of age.

Some of its features are, however, favorable to the success of transit. Geographically, the town has both a clear center at Jesup Green and a discernible spine extending along the Boston Post Road. The town center includes an appreciable concentration of stores, restaurants, municipal offices and facilities, and some private office employment. As a result, there is both a peak destination point and a peak travel period (i.e., a rush hour), tending to create travel densities and parking problems at some hours of the day which make public transit attractive even to people who could use their cars.

A second factor tending to favor successful transit in Westport is its large population of rail commuters to New

York on the New Haven commuter line. About 2,400 people commute from Saugatuck Station and Green's Farms Station in Westport on this line each business day. This travel is concentrated primarily on five commuter trains in both the morning and evening peak hours.

Finally, 50 percent of Westport's population of 27,414 is under the driving age (1970 Census figure). Fully 13 percent - about 3,600 individuals - are between the ages of 11 and 15. This group accounts for almost half of the non-commuter ridership on the Minnybuses.

Origin and Planning

The idea for the bus service originated before 1968 in the mind of a citizen, Paul Green, who was a publisher of trade magazines. His personal and professional acquaintance with European transit systems stimulated an interest in attempting to provide comparable service in the Westport setting. At his own expense, he conducted an informal postcard survey of the town. Response was sufficient to suggest that the town was at least somewhat receptive to the idea, and in 1968 the election ballots included a referendum question on whether the town should establish a Transit District. Only 6,700 of the 13,000 citizens voting in that election voted on this question, and the result was that the Transit District was established by a vote of 4,000 to 2,700. No taxing authority was then included in the District's powers. The town's executive committee (called the Representative Town Meeting, or RTM) appointed Green as the Director (and only professional employee) of the newly created Transit District.

The first necessity, as it seemed then, was to obtain vehicles. Since Federal funds were being requested, a feasibility study was required to establish the need for the system and to plan the specific the routes, schedules, and fare structure. In 1970, Green privately raised \$500 to finance a small study by a transit professional in the neighboring town of Torrington. Then, in 1971, two staff members of the Connecticut DOT produced a second report which proposed six routes linking most of the residential areas to the shopping centers along the Post Road. Annual passes costing \$10 to \$15 were recommended, and a deficit operation was projected.

Even at this early stage, the publicly stated transit objectives announced as motivating the transit system were realistic, as the later operating experience demonstrated. The chief concerns were to relieve housewives of

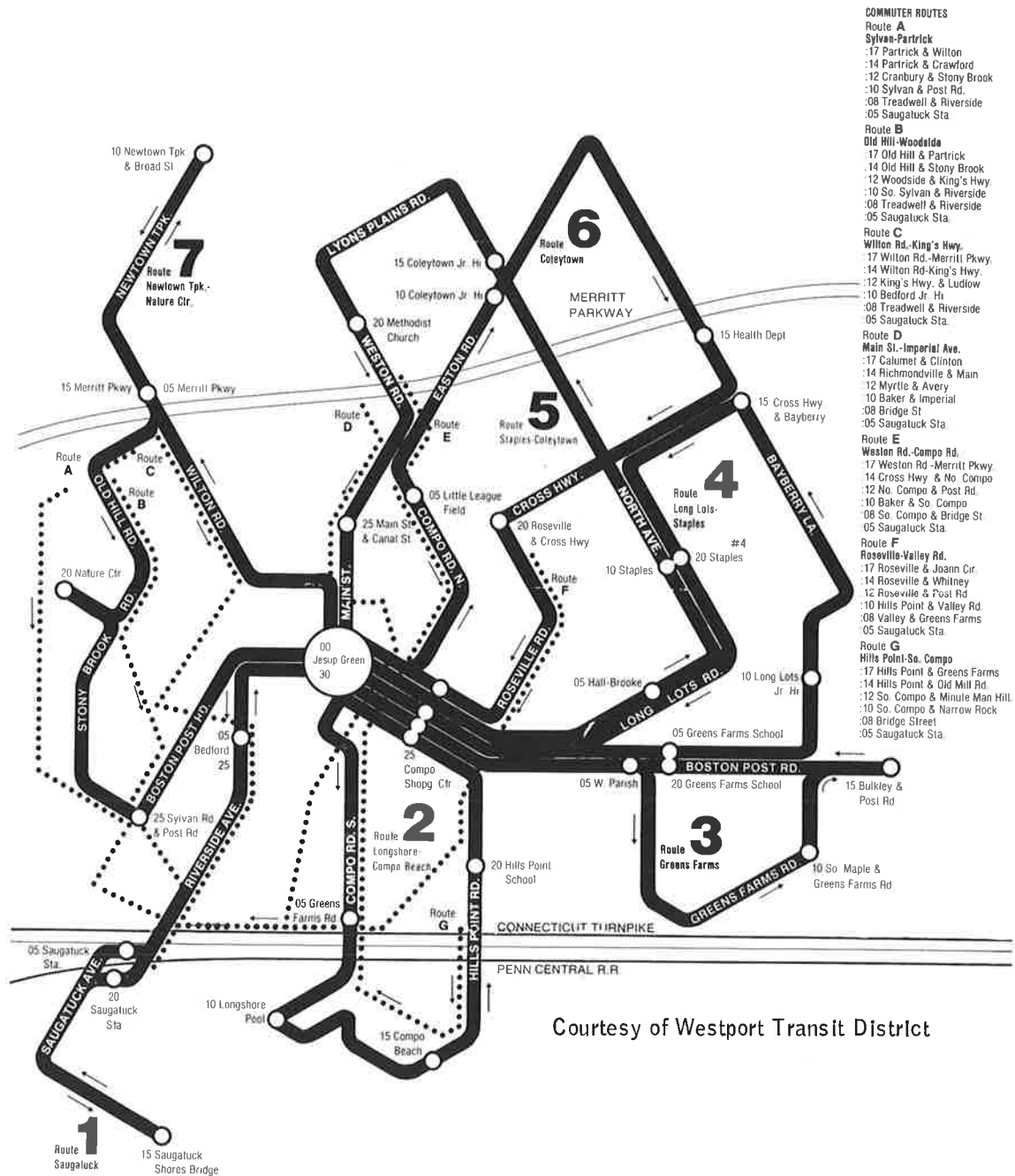
chauffeuring duties, to make it unnecessary for young teenagers to hitchhike around town, to provide mobility for the elderly, and to lessen the need for downtown parking space, especially at the rail station.

The initial studies were viewed by the Federal officials of the Urban Mass Transportation Administration (UMTA) as being insufficiently detailed to justify an immediate grant for the purchase of vehicles. Consequently, in November, 1971, a private consultant was commissioned to do a more thorough study. This study cost \$5,000, two-thirds of which was financed from UMTA funds for Technical Studies, administered by the Tristate Regional Planning Commission. The other third of the study cost was paid for by the Town of Westport.

The new study proposed a service arrangement similar to that described in the earlier report. Six fixed routes were to provide commuter access to Saugatuck Station in the mornings and evenings, while six other loop-shaped routes converging at the center of town (Jesup Green) would carry daytime passengers. (These routes were expanded when the system was initially implemented, see route map in Figure 1.) All the buses would be scheduled to arrive at the town center at the same time, enabling passengers to transfer to other routes. A "flower-shaped" system operating scheme was thus envisioned.

The consultant estimated that the system would be used by about 275 commuters per day, and between 245 and 320 passengers on the "regular" (i.e., non-commuter) service during the day. Operating costs exclusive of depreciation were estimated at \$185,500 annually, offset by revenues of \$97,500 to \$118,400, depending on the fare structure selected. The estimates of both ridership and operating costs proved to be extremely modest.

Some consideration was given to the consultant's suggestion that revenue be raised from parking fees at the station, and possibly at other town-owned downtown parking lots, but the primary source of operating subsidies was expected to be an appropriation from the general revenues of the town. The capital costs of the vehicles and equipment could be obtained from the Federal and State governments if the town made a commitment to provide operating subsidies for three to five years. For the first year, it was expected that some of the needed money could be provided by a Fund of the Stauffer Chemical Company which was devoted to financing public-service activities beneficial to the town's youth.



Courtesy of Westport Transit District

Figure 1. Route Map

The Community Decision

The first real opportunity for the town as a whole to focus on the issue was in October, 1972, when the request for initial funds came before the elected Board of Finance. The local newspapers had been providing extensive publicity to the proposal, and many citizen groups were already voicing support of the idea. The Golden Age Club, the Fairfield County Commuters' Action Committee, the Westport-Weston Community Council, and the chairperson of the town's Senior Citizen Committee were present and applauding when Green delivered the case for a bus system to the Board. Many of the town's teenagers expressed interest in the idea in letters-to-the-editor or in statements at town meetings, mentioning trips which they could make using the buses. At this point, the only vocal citizen opposition was expressed by the owner of a taxi company in the town. While disparaging the system's justification, he openly expressed a fear that it would "put the death knell on the taxi service."

The Board of Finance tabled the proposal until January, when it voted 3-3 on the question of appropriating money (which would later have been reimbursed by the State and Federal governments) to purchase seven minibuses. By established rules, the tie vote constituted a rejection of the measure. The Board members who voted against the appropriation "felt the plan was unsupported by facts, that it did not meet the needs of the elderly and infirm, and virtually all experiments had failed," and that "it was questionable whether there would be a right to terminate the contract in two to three years with the Federal government in the event a larger than anticipated deficit arose."

The tie vote, and the passage by the State of legislation giving Transit Districts authority to levy a one-cent gasoline tax to support transit systems, produced a heightening of interest in the idea and groundswells of both support and opposition. The town's Youth Affairs Council, the Staples High School PTA, the local legislative committee of the American Association of Retired Persons, and the Westport Commission on the Elderly voiced support. The town's First Selectman secured over 1,100 signatures on a petition favoring the system. A local public relations firm volunteered to conduct a survey of town opinion, which found 75 percent of the citizens favoring a minibus system.

The opponents of the plan consistently acknowledged the need for better transportation for the elderly, and accepted the legitimacy of the concern for the safety of hitchhikers.

They emphasized the high rate of car ownership (2.2 per household), the lack of "indisputable back-up evidence" on the anticipated ridership and operating deficit, and the extensive power of the Transit District to levy the gasoline tax at its own discretion. Sixteen members of the RTM who opposed the immediate implementation of the minibus plan urged consideration of less costly alternatives, chiefly a daytime dial-a-ride service for the elderly. An important concern was the possibility of being locked into a three-to-five year agreement with the Federal government to support the system even if the operating deficits proved to be well in excess of the forecasts. Some representatives expressed a fear of buses as an omen of urbanization.

A new state law required that at least two persons be on the Board of Directors of each Transit District. During the summer of 1973, therefore, the issue of support or opposition to the bus proposal became identified with the questions of whether another director would be appointed to serve with Paul Green and thus enable the Transit District to use the legal authority provided by the state law. During the summer, the Mercedes 3090 buses which were eventually purchased were displayed in the town, and residents showed an avid interest in riding them. Finally, on October 2, the RTM voted 22 to 17 to appoint another Director.

With this vote, the minibus proposal got its first official go-ahead, four years and eleven months after the town referendum establishing the Transit District had been passed. By early November, Green and Richard Bradley, the town's Coordinator of Youth and Human Resources, (who had been directed by his superior to assist in the work on the minibus plan) submitted to UMTA a detailed application for a capital grant to buy seven 16-passenger minibuses and two larger 30-passenger vehicles, as well as ancillary equipment. The initial cost was estimated at \$302,000, with the State providing matching funds for the Federal grant.

At this time, first year operating costs were being projected at \$234,500 and revenue at \$111,000. The deficit of \$123,500 would be covered by the State (which would provide at least half of the operating loss and 75 percent of the marketing cost), by the Stauffer Fund (which had promised a \$20,000 subsidy the first year and \$10,000 the second), and the remainder from general town revenues. The gasoline tax was not proposed as a means of subsidizing the transit operation, and has still not been used in Westport, though the Transit District retains the legal power to impose the levy.

In April, 1974, an UMTA grant of \$241,000 for capital equipment was approved, and in May, Bradley was appointed Executive Director of the transit system. The state had already committed \$94,000 in matching funds. The purchases were listed as nine buses, three bus shelters, fareboxes, benches, and a telephone-to-office communication system enabling each bus to communicate with the dispatcher. By this time, the projected first-year operating deficit had risen to \$149,000. In early July, following a vote of 3-2 by the Board of Finance, the RTM appropriated \$30,000 to cover the town's share of the operating deficit until December.

Finally bids were taken to supply the buses, and the diesel-powered Mercedes vehicles (Figure 2) were selected with UMTA's concurrence. Despite the relatively high price of \$26,000 per 16-passenger bus, these vehicles were selected over a competing bid because they conformed to specifications for unibody construction and diesel power - features which were sought in order to minimize maintenance and achieve greater fuel economy. A single 30-passenger bus was procured from another manufacturer for use on the most heavily patronized routes.

Starting of Service

The service which finally commenced in August, 1974, followed closely the outlines in the consultant's report in 1972. Seven "regular" (as distinguished from "commuter") routes were used, all looping from Jesup Green to the outskirts of town and back, meeting in the center every 35 minutes (Figures 3 and 4). In the morning and evening, other routes brought commuters to and from five commuter trains at Saugatuck Station. Some of the regular routes were lengthened to bring the service near almost every residence in Westport. System characteristics and operating data are summarized at the end of this report.

Revenue was to be derived primarily from annual passes: \$20 for adults, \$15 for school-age-children and senior citizens,* and discounts if families purchased passes together. As part of the intensive emphasis on the marketing of the service, arrangements were made so that these passes could be applied for by mail and paid for by Master Charge. A 50-cent fare is charged for individual rides to encourage riders to purchase passes.

*These passes are currently selling for \$25 for adults, \$20 for school age children, and \$15 for senior citizens.



Figure 2 . Westport Minnybus at High School



Figure 3 . Bus Shelters at Jesup Green



Figure 4 . Central Transfer Point at Jesup Green

Regular service departs from the town center between 8:20 a.m. and 5:05 p.m. on weekdays, and from 8:30 to 5:30 on Saturday. On weekdays, between 7:00 and 8:15 in the morning, and from 5:40 until 7:00 in the evening, the buses are devoted to commuter service. Thirteen drivers were hired for the system at a wage rate of \$4.00 plus fringe benefits, and time-and-a-half for overtime. An informal seniority system was initially followed to decide on work assignments, with the result that those at the top of the seniority list (drivers who had experience in other transit systems) were able to accumulate a large number of work hours early in the week, and have a three-day weekend. This system has since been discontinued in favor of a system in which all drivers get equal preference in choosing work hours. All are now on four-day weeks. The working agreement calls for the use of a strict seniority system only to determine the order in which jobs will be protected if there is a cutback.

The drivers' working-level supervisor is the local school bus operator, who contracts with the Transit District to provide this service and also to garage and maintain the buses. The contract calls for one and a half full-time workers for the maintenance tasks.

As soon as final commitments to implement the system were secured, the Director prepared an advertising campaign to sell the system to its potential riders. Initially, \$10,000 was set aside for marketing expenses. A local public-relations firm was retained to develop the advertising, and many alternative advertising themes and approaches were considered. The name to be given to the system was recognized as an extremely important marketing device. The firm developed about 25 possible names, from which "Minnybus" was selected. This was part of a conscious strategy to present the buses as lovable, tiny, and cute. Also, several young drivers and several female drivers were hired in order to convey an image of the system as being open to all kinds of people, and drivers were instructed to be more than usually friendly. During the first year of operation, \$19,000 has been budgeted for advertising and public relations. The professional quality of this campaign gained respect for the quality of the transit management within the Westport community, which includes many professionals employed by New York advertising consultants.

From the week of August 10, 1974, when the system started, ridership has averaged well over 10,000 per week. The trend of non-commuter ridership was steadily upward from the opening of school, approaching 12,000 per week by the

end of the first year of operation. The usage of the system by New York City commuters grew sharply at first, and had leveled off at approximately 150 round trips per day, or about 1,500 boardings per week by December, 1974. In 1975, with the introduction of commuter service to the Green's Farms station, commuter ridership rose to about 230 round trips per day. By the end of the first year, 6400 passes had been sold in a town whose population was under 30,000. Actual operating costs for the first year of operation were \$298,000.

A local market research firm was engaged to perform a series of surveys to gather evaluative data. The Transit District and the firm conducted on-board surveys, surveys of passholders as a group, and Westport residents generally. Individuals between the ages of 12 and 19 were found to account for 72 percent of the daytime ridership on the regular service. Only 3 percent of the riders - about 50 people per day - were elderly. Ridership is low during the late morning and early afternoon, peaking in later afternoon as the teenagers get out of school. From the dismissal of classes until the last regular run from Jesup Green at 5:05, the ridership exceeds the system's capacity. The route passing the high school has the highest ridership, except in the three weeks of summer operation last August when the service to the beach was widely used.*

The high teenage ridership has often been noted in commentaries on the Westport service. While the bulk of the ridership does consist of teenagers (whose usage of the system has far exceeded expectations), it would be inaccurate to say that the system serves only teenagers. When riders from the elderly and 20-64 age groups are added together, the daily adult ridership on the "regular" service numbers about 250, which is within the range forecast by the consultant for total daily ridership. When the daily commuters are also included, over 600 one-way trips are made on the buses each day by adult riders.

Cash revenue from individual-trip fares was highest at the beginning, near \$3,000 per month. It tapered off to about \$2,000 by December as more of the riders bought annual

*In 1975 the Transit District rented four vans owned by the school district to handle this load. A capital grant request has been filed with UMTA to purchase more vehicles to provide a permanent response to the evening demand.

passes. Revenue collected from the sale of passes totalled over \$74,600 in the first year of operation, although only \$56,000 was actually credited to first-year operations. Fare revenue from individual trips totalled \$22,300 in the first year. Thus, the early revenue predictions by the planners were not badly off target.

Transit and the Community

The general reaction of the Westport community was enthusiastic from the beginning. The opening day ceremony, on a Saturday, was a major town event, with political candidates and others eagerly riding the buses. During the first several weeks, drivers reported people waving at the buses delightedly from the street, not because they wanted a ride, but simply to greet the Minny as it came by.

The "public relations" job of selling a particular image of the buses (cute, endearing, etc.) had quickly and easily succeeded. This was the conscious objective of the marketing effort, and guided a number of decisions about the operation: the drivers were not uniformed, the buses would stop anywhere along the route to pick up or discharge passengers, and the management consistently emphasized to drivers the important of friendliness and helpfulness to riders. An indication of the importance of this policy was obtained in the ridership survey, in which 17 percent of the elderly riders and 23 percent of those in the 20-64 age group mentioned friendliness of the drivers in response to the question, "What do you like most about the system?" Surprisingly, the adults mentioned this much more frequently than the youthful riders, perhaps because they rode the buses by choice rather than by necessity.

While it is impossible to determine by systematic analysis the exact causes of the high ridership, two conclusions seem plausible:

- (1) The length and exhaustiveness of the town's decision process was perhaps the most effective marketing device imaginable: it not only publicized the system, but gave people a stake in its success since they had battled for it over persistent opposition.
- (2) The professional assistance in planning, marketing, and evaluation, while fairly expensive and large in proportion to the expenditures on operations, was an important factor in the system's success. It enabled the system to function according to the

schedule without a rash of unanticipated headaches, so that people could use the system and depend on it. The marketing created an attractive image of the system and effectively communicated route and schedule information, including modifications in winter due to cold weather or snow. The survey data from the market research firm served the important purpose of selling the system to the RTM and the Stauffer Fund, who were covering part of its deficit.

Secondary Impacts

Numerous beneficial side-effects have been cited as additional justifications for the bus service. Most of these are based either on personal survey data or on informal feedback received by the Executive Director or others in the town. These effects include:

- (1) Emancipated housewives -- some are only now able to work, since children can ride the bus during the day, rather than being chauffeured.
- (2) Fewer second and third cars in Westport households.
- (3) Increased downtown retail sales.
- (4) Increased use of downtown facilities, such as the public library.
- (5) Easier parking at the railroad station.
- (6) Possibility of scheduling activities for youth and elderly in the downtown area.
- (7) Young teenagers developing independence earlier, by planning their own trips without reliance on parents.
- (8) Possibility for after-school and off-campus activities by high school students, without fearing that they will miss the school bus.
- (9) Accomodation of multiple campus high school programs, with students using the Minnybus to go from one campus to the other.
- (10) Increased attractiveness of Westport as a place to own a home. Real estate advertisements in local papers commonly boast that a particular home is

adjacent to a Minnybus route, and real estate agents take an interest in the route and schedule plans under consideration by the Transit District.

Over 30 percent of both the morning and evening commuters reported in response to the survey that they were considering eliminating one of the family cars as a result of the service, and 20 percent of the commuters said they had actually done so. Among regular-service riders, 49 percent said that they would have been unable to make the trip they were taking without the bus service, indicating substantial induced travel.

The impact of the system on the lifestyle of the town's elderly citizens seems to have fallen short of the expectations of its proponents. Individual retired citizens have used the buses regularly, and have expressed great appreciation for the service. Others have complained about the difficulty of boarding the bus and the need to walk to its route and wait for the bus to come. It is possible that door-to-door service may be the only really adequate answer to the transportation needs of the town's elderly.

Some important negative impacts have also been noted. Downtown merchants have complained of increased theft and vandalism, apparently as a result of greater access by teenagers to the downtown. The Director of Youth Services in the town mentioned that some parents had used the bus service as a means of disposing of their children after school.

The most acute impact has been on the taxi operator, who has threatened lawsuits ever since the approval of the project. His company had not been highly profitable for some time, but it seems evident that the bus service has cost him some of his business. The threat of a lawsuit has prevented the introduction of a dial-a-ride service in the off-peak morning hours, as originally planned. A study is now underway to design an arrangement whereby the Transit District could contract with the taxi operator to provide various types of paratransit service including shared ride service.

In addition to these general impacts, one accident has already occurred as a result of a child confusing the Minnybus with a school bus, and expecting traffic to stop when he got off. The accident was not serious, but it prompted an advertising campaign to warn both drivers and schoolchildren of this danger.

Financial Results and Plans

By December, as a result of increases both in service and in costs, the originally projected deficit for the first year had grown from \$150,000 to \$220,000. About \$18,000 of this increase was the result of a bookkeeping requirement that part of the revenue from the sale of passes be counted as applicable to the second year. As a result, the Transit District began its second year with an \$18,000 credit for pass revenue collected in the previous year.

The Public Protection and Transit Committee of the RTM balked at the \$43,000 of town funds required to subsidize this deficit (despite 75 percent state assistance), and insisted on an increase in the price of annual passes. A higher price is now being charged for the passes.

The extent to which the system is subsidized is the chief concern of its critics, both within and outside Westport. For the first fiscal year of operation (ending June 30, 1975), Westport received an operating subsidy from the State of Connecticut of \$135,200. This amounts to about 25 cents per passenger boarded, or \$6.20 per vehicle-hour. In fiscal year 1976, Westport will also receive about \$50,000 of Federal "Section 5" funds for both capital and operating expenses under the National Mass Transportation Act of 1974.

This level of subsidy is not considered high, on a per-passenger basis, in comparison to subsidies provided to other large and small transit systems by state and (recently) Federal funds. Nor are the costs of the Westport system higher than those of other systems; on the contrary, costs on a per-passenger and a per vehicle-hour basis are lower than the industry average. Nonetheless, it is clear that the outside subsidies to Westport require the taxpayers of Connecticut, and, to a lesser extent, taxpayers nationally, to pay much of the bill for transit service in a comparatively high income community.

Conclusion

Westport has produced a well-managed, well-planned transit system which serves undeniable transportation needs within its community, particularly those of teenagers without convenient access to an automobile. The system was realistically conceived, and it benefited crucially from the keen and sustained interest of many community groups over the period from 1968 to 1974. It was spared the problems which tight budgets or short deadlines often impose on local

officials. Today it provides an unquestionably high level of service, and does so in a relatively efficient way. Nonetheless, the total burden of the operating subsidy, both on the town and on the state, may be greater than is feasible for many other communities.

SUMMARY OF WESTPORT TRANSIT SYSTEM CHARACTERISTICS

DEMOGRAPHICS

Population in service area: 28,000
Population density: 1,300 persons per square mile
Median household income: \$21,380 (after federal income tax)
Cars owned per household: 2.2
Percent carless households: n/a
Percent transit dependent: n/a
Average distance to service: 55 percent of riders walk less than 2 minutes, 13 percent more are 2-5 minutes away

COVERAGE AND SERVICE

Number of routes: 14: 7 commuter, 7 general
Average route length (one-way): 6 miles
Average route time (one-way): 18 min.
Time of service and average headway:
 commuters 7-9 am M-F 25 minutes
 5:30-7pm
 general 9-5 all, except 35 minutes
 Sunday
Number, types, and average capacity of vehicles:
 8 Mercedes mini-buses 16 passenger
 1 twin coach bus 33 passenger
Number of vehicles in service: 8

COST AND PRODUCTIVITY

Operating cost per month: n/a
Vehicle miles per day: 1,347
Vehicle hours per day: 82.1
Driver hours per day: n/a
Operating cost per vehicle hour: \$11.53
Operating cost per vehicle mile: n/a
Operating cost per passenger: \$0.74
Passengers per vehicle hour: 16
Passengers per vehicle mile: n/a
Driver wage rate per hour: \$4.40

REVENUE AND SUBSIDY

Fares: 50¢ per ride, \$25/year prepaid pass
Revenue per passenger: \$0.14 per boarding,
 \$0.20 per completed trip

Subsidy per passenger: \$0.38 per boarding,
\$0.54 per completed trip

Operating ratio: 3.7

Lease or buy vehicles: Buy

Funding:

	<u>Capital</u>	<u>Planning/Evaluation</u>
Federal	\$192,000	-
State	48,000	-
Local	-	-
Private	-	\$15,000
Total	\$240,000	\$15,000

RIDERSHIP

Average Passengers per weekday: 1,400

Ridership growth rate: Multiplied by 2 in 1 year
and at capacity

Ridership composition:
elderly 3%
youth 55%
handicapped few

Trip purpose: school, recreation, work

