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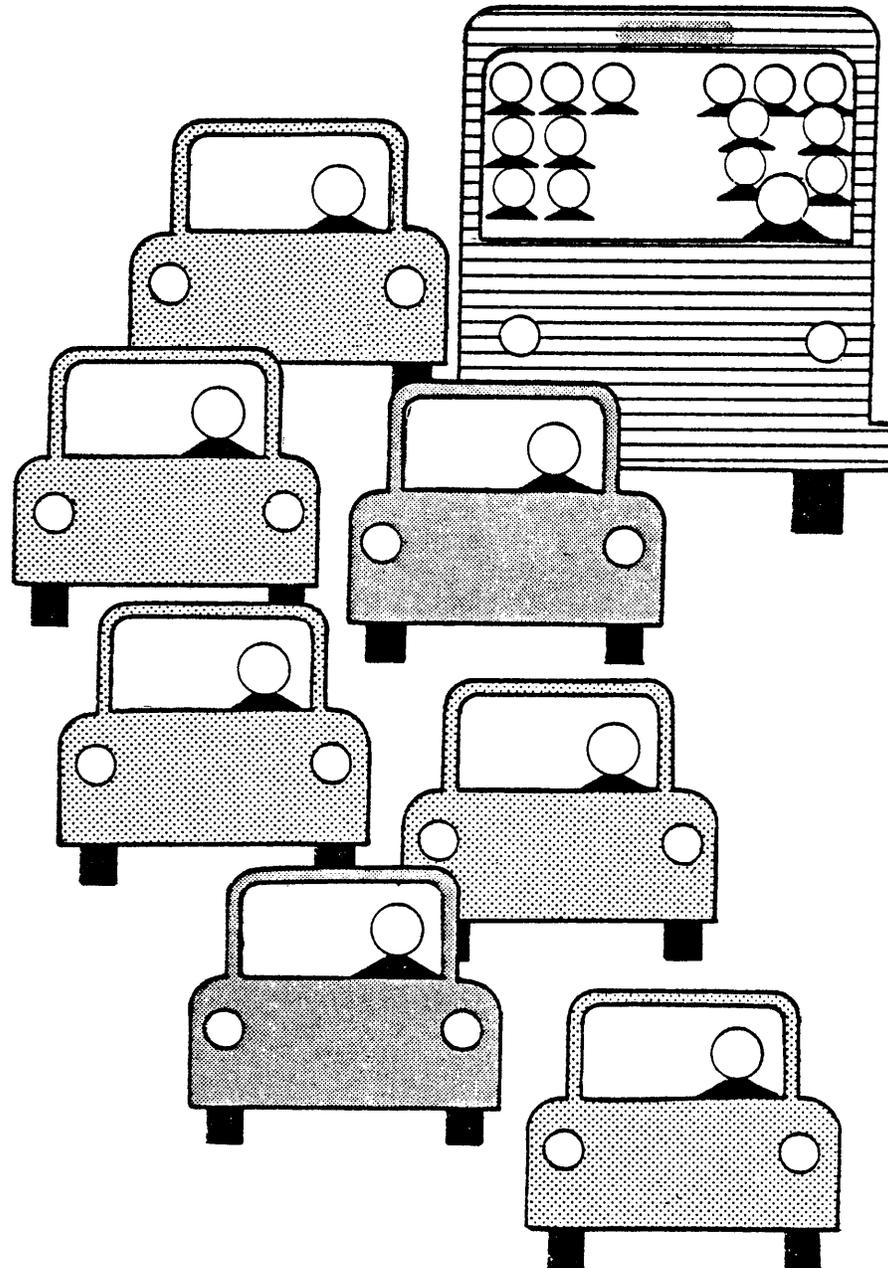
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PUBLIC TRANSPORTATION IN VIRGINIA

Service, Operations, Costs and Revenues
Fiscal Year 1977



Prepared by:

Virginia Department of Highways and Transportation

Public Transportation Division

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IN REPLY PLEASE REFER TO

Virginia Statewide Transit Statistical Report

EDWARD W. PIGMAN, JR.
STATE PUBLIC TRANSPORTATION COORDINATOR

To - Users of the Transit Statistical Report

Enclosed is a copy of the report entitled "Public Transportation in Virginia" covering the fiscal year ending June 30, 1977. This is the third in a series of annual reports and was prepared by the Public Transportation Division of the Virginia Department of Highways and Transportation from the financial, service, and operating data submitted by Virginia's intra-area transit operators. The number of published reports is limited; however, if you need additional copies, please contact Mr. R. S. McClellan at (804) 786-1154.

On the following page is a brief survey form comprised of four questions. It is our desire to improve the usefulness of the annual transit data report and to tailor its format more to meet the needs of you - the users of the report. Therefore, we are requesting all users of this report to fill out our brief questionnaire and return it to us in the attached envelope by September 1, 1979.

Your cooperation with the survey or any other assistance you might be able to offer to us in this effort will be greatly appreciated.

Sincerely,

A handwritten signature in cursive script that reads "Edward W. Pigman, Jr.".

Edward W. Pigman, Jr.
State Public Transportation Coordinator

RFJ/jh

Enclosures

TRANSPORTATION - AMERICA'S LIFELINES

TRANSIT DATA REPORT SURVEY

Your Name _____

Title and Organization _____

Address _____

Phone Number _____

1. Have you or your organization found the transit statistical reports useful? If so, in what ways?

2. In your opinion, does this report contain adequate____, excessive____, or insufficient____ data? (Please check one.)

3. It would be helpful for us to know which of the ten data tables included in this publication are most useful to you. In the corresponding spaces provided below, please indicate whether you found each of the data tables highly useful, of some use, or of little use. (Please check one.)

	FY-77 Report Data Table Number									
	1	2	3	4	5	6	7	8	9	10
Usage Rating										
Highly Useful										
Of Some Use										
Of Little Use										

4. How might this report be improved for next year?

PUBLIC TRANSPORTATION IN VIRGINIA

Service, Operations, Costs and Revenues
Fiscal Year 1977

Prepared by: Virginia Department of Highways and Transportation
Public Transportation Division
May, 1979

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INTRODUCTION

Background

In 1972, the Code of Virginia was amended to include Section 33.1-223.1., which requires each intra-urban transit operator in the state to file certain financial and operating information with the Highway and Transportation Commission, for each fiscal year of operation.

Similarly, the Urban Mass Transportation Act of 1964 has been amended to include Section 15, which has established a uniform system of accounts and records for use by transit systems, nationwide. Under the Section 15 system, public transportation providers in Virginia receiving federal assistance will also be required to report various data on their annual operations to the U.S. Department of Transportation. Therefore, the informational requirements of the Virginia Code have been adjusted to conform closely to those of Section 15, in order that reporting duplications to the state and federal governments need not occur. The state's data collection form is included in Appendix I.

The intent of this report is to present the reader with information about each intra-urban transit operator in Virginia with regard to its area(s) of operation, the service provided, the manpower, rolling stock, and other operational characteristics, and revenues and expenditures during 1977. Although the Department has compiled and published the information contained in this report, the accuracy of the base data is dependent upon the reports submitted by the twelve transit companies.

It is important to note that this report contains very generalized information, and therefore is not useful for making reliable comparisons among the systems because there are numerous and distinct variations in the sizes of the transit companies, their service areas, and their operating characteristics.

It also does not provide a basis for detailed evaluations of each system, and its individual routes and functions. Nevertheless, it is hoped that this document will be informative and useful to public and private planning and administrative officials, the general citizenry of the state, and to members of Virginia's transit industry. A glossary of terms, as they are used herein, is provided in Appendix II.

The Department appreciates the assistance of each of the transit operators who provided the data summarized in this report.

Recent Transit Development in Virginia

At the beginning of 1973, transit systems in Virginia were largely private enterprises, with the exception of public operations in the cities of Bristol, Staunton, Winchester, and Martinsville. A trend in public acquisition of the transit companies began in January, 1973. As of the date of this report, there are twelve (12) intra-urban mass transit systems in Virginia, all of which are publicly owned and operated. Table 1 provides a description of the various public takeovers and mergers which have led to the formation of these twelve systems.

In addition to public takeover of bus operations during recent years, several innovative and successful transit service projects have been instituted around the state.

For example, approximately 450 persons commute daily, during peak periods, from a fringe parking lot in Western Henrico County to Richmond's Central Business District (CBD) on Greater Richmond Transit Company buses. Service to and from the lot is fully express; the only stops made are along a loop route, in the downtown core, which passes by or near most of the employment and commercial centers in the CBD.

Table 1

Summary of Public Acquisitions and
Other Changes in Transit System Operations

1973-1977

Current Name of Transit System	Private Enterprise(s) Acquired	Date of Public Acquisition	Other Major Changes in System Operations
WMATA - Metrobus	WV&M Coach Co., AB&W Transit Co., WM&A Transit Co.	January, 1973	
Tidewater Regional Transit	Virginia Transit Co., Norfolk Division, Community Motor Bus of Portsmouth	January, 1973 May, 1975	The Norfolk, Portsmouth, and Elizabeth River Tunnel bus operations merged to form the Tidewater Regional Transit System in September, 1977
PENTRAN	Citizens Rapid Transit	April, 1974	
Greater Richmond Transit Company	Virginia Transit Co., Richmond Division	September, 1973	
Greater Lynchburg Transit Company	Lynchburg Transit Co.	June, 1974	
Greater Roanoke Transit Company	Roanoke City Lines, Inc.	May, 1975	
Charlottesville Transit Service	Yellow Cab and Transit Co.	September, 1976	
Danville City Transit	Danville Traction and Power Company	July, 1977	
Petersburg Area Transit	Tri-city Coaches	July, 1977	
Martinsville City Bus	---	July, 1977	Bus service was discontinued in City of Martinsville

The Shirley Highway in Northern Virginia carries 36,000 commuters daily into and out of Washington, D. C., on two reversible express lanes designated exclusively for use by "high occupancy vehicles"; i.e., buses, carpools, and vanpools having a minimum of four passengers. It is estimated that of the 36,000 daily commuters, approximately two-thirds are aboard transit buses. Many of the express Metrobuses utilizing the reversible lanes serve designated fringe parking lots located in several areas of suburban Northern Virginia.

Similar commuter parking lots have been established in the Tidewater and Peninsula areas of Virginia; transit service is provided to and from these lots by express, semi-express, and conventional local buses.

In July, 1977, the first segment of the Metro rapid rail system in Virginia began operations. The route begins at National Airport and passes through Rosslyn, under the Potomac River, into D.C.

OVERVIEW OF INTRA-URBAN TRANSIT SYSTEMS - FY-77

Virginia's transit systems vary from very small local bus companies to large sophisticated mass transportation systems; each has a unique operating environment and diverse management and service practices. The companies' service areas range from small cities of 20,000 residents to large metropolitan regions of over 800,000 population. The smaller systems operate as few as 11 buses, while the larger systems maintain 200 to 600 vehicles for active service. Some provide transportation 24 hours daily; others, with less demand, limit service to several hours on weekdays only. The following is a brief description of each transit operation, presented to point out some of the differences among the systems and to reiterate the need for caution in attempts to compare one bus company with another.

Washington Metropolitan Area Transit Authority (WMATA-Metrobus)

The Metrobus system, operated by the Washington Metropolitan Area Transit Authority is a regional system providing transit service in two states - Virginia and Maryland - and the District of Columbia. WMATA's total service area covers approximately 500 square miles and contains an estimated 3 million persons. Note, however, that the data in this report are only for that portion of the Metrobus system serving Northern Virginia.

Metro is a system uniquely large to Virginia. To operate in Northern Virginia alone, WMATA employs over two times as many people, maintains more than twice as many buses, and covers more than three times the route mileage of any other transit system in the state. Service is provided twenty-four hours daily, seven days a week.

Metrobus service is largely oriented to work trips made to and from Washington, D.C. The buses operate in the suburban Virginia jurisdictions of Alexandria, Falls Church, Fairfax City, Arlington County, and in highly

populous areas of Fairfax County. The service is primarily local and express, regularly scheduled, fixed route transit; WMATA provides a small amount of charter service and a very minor amount of contract school service on a special route.

Generally, passengers who utilize the Metrobus system are more affluent than most transit riders. A comparatively large percentage of Metro users are "choice" riders, i.e., persons who have an alternative means of travel, but for various reasons prefer to take the bus.

During fiscal year 1977, Metrorail service was not operational in Virginia. Therefore, the data contained herein cover only bus operations in Northern Virginia.

Tidewater Transportation District Commission (Tidewater Regional Transit)

Tidewater Regional Transit (TRT) is a regional bus system serving a vast urbanized area in Southeastern Virginia. The system is managed and operated by the Tidewater Transportation District Commission, a public, quasi-governmental body, and one of four transportation district commissions in the state.

TRT is the principal mass transit carrier in the region comprised of the cities of Chesapeake, Norfolk, Portsmouth, Virginia Beach, and Suffolk. The system operations described in this report include service provided in all jurisdictions. Note, however, that the calculations involving population and square miles in the TRT service area do not include Suffolk and Chesapeake. Both cities contain vast areas of unpopulated land, and were, therefore, excluded to prevent large distortions in computed ratios. Approximately 91 percent of the daily vehicle miles operated by TRT are in the more densely populated cities of Norfolk, Portsmouth, and Virginia Beach.

TRT service is primarily regularly scheduled, fixed route transit. No special school bus service was provided in 1977. The system did, however, operate a relatively significant amount of charter vehicle mileage during

the year. Conventional public transit service was provided twenty hours daily, seven days a week.

TRT's service area is a large industrial and commercial center, housing major seaport operations. A significant portion of the Tidewater area population is employed by the U.S. Navy. Area employment is concentrated in large naval installations located in Norfolk and Portsmouth. Separate from the TRT system, a large number of the daily work trips to and from these facilities are made on buses and vans operated by independent employee-haul operators, who are also employed at the sites.

Virginia Beach is a major eastern resort city where summer travel is extensive. In season, TRT has offered an innovative and successful "Sunshine Special" transit service for beach-goers, on buses equipped with racks for surfboards.

Peninsula Transportation District Commission (PENTRAN)

PENTRAN is a regional bus service, operated by the Peninsula Transportation District Commission, in the cities of Hampton and Newport News. Work related travel in PENTRAN's service area is largely oriented through downtown Newport News to nearby shipyard facilities, housing Virginia's largest private employer.

In 1977, PENTRAN's service was primarily local, regularly scheduled, fixed-route transit, and a small amount of school bus operation in Hampton. Bus service was provided seventeen hours daily, Monday through Friday, and for thirteen hours on Saturdays.

Greater Richmond Transit Company (GRTC),

The Greater Richmond Transit Company is one of Virginia's larger intra-urban bus operators. GRTC is owned and operated by the City of Richmond, and is managed by a private firm, the ATE Management and Service Company.

Service is provided seven days a week, twenty-one hours daily. Operations include local and express, regularly scheduled fixed route transit within the city, and to a lesser extent in the counties of Chesterfield and Henrico, and a minor amount of charter service within the city only.

GRTC's service area is the site of the State Capitol, a major governmental, commercial, educational, medical, service, and retail center. Much of this activity is concentrated in Richmond's Central Business District (CBD), around the Capitol Square area downtown. GRTC's service is largely oriented to the CBD, providing for daily trips for employment, shopping, medical, educational, and other essential trip purposes.

Greater Roanoke Transit Company (GRTC)

The Greater Roanoke Transit Company provides public mass transportation service within the City of Roanoke and the Town of Vinton. GRTC is owned and operated by the city, and is managed by ATE Management and Service Company.

GRTC service is primarily conventional, local, regularly scheduled bus transportation; no school service and only a minor amount of charter bus operations are provided. The buses operate 16½ hours daily, Monday through Saturday, and for nine hours on Sundays.

Generally, the riders on Roanoke buses are highly dependent on public transportation, having no alternative means of travel.

Greater Lynchburg Transit Company (GLTC)

The Greater Lynchburg Transit Company is a medium-sized bus system operating in the City of Lynchburg. GLTC is a public corporation, owned and operated by the city, and managed by a private firm, ATE Management and Service Company.

The service provided by GLTC is primarily conventional, local fixed route transit. School and charter services comprise a very minor portion

of the company's operations. The buses operate seven days a week, eighteen hours per day.

The City of Lynchburg is a major manufacturing city, and a regional center served by three railroads. Lynchburg is also the site of several large educational institutions. The topography of the city is very hilly, and places some constraints on local bus operations.

Tri-city Coaches

Tri-city Coaches, a privately owned and operated company, provided transit service in the cities of Petersburg and Colonial Heights during 1977. The company was the major intra-urban carrier in the region. At the end of the 1977 reporting period, the City of Petersburg acquired some of the physical properties of the company and took over operation of the local fixed-route public transit. School and charter services were retained by the private operator.

Tri-city Coaches' operations were unique in FY-77, in comparison to those of the other eleven transit systems, due to the volume of contract school bus service the company provided. Seventy (70) percent of Tri-city Coaches' revenue and 64 percent of the total vehicle mileage travelled in 1977 were for school bus operations. Tri-city Coaches employed 85 bus drivers, 75 of whom were school bus operators.

In addition to school and conventional local transit service, Tri-city Coaches also provided a small amount of charter service. Local, regularly scheduled public transit was provided Monday through Friday, thirteen hours daily, and for ten hours on Saturdays.

Danville Traction and Power Company

Danville Traction and Power Company was, in 1977, a small privately owned bus system serving the City of Danville. Fiscal year '77 was the

company's last full year of operation. Since then, the City of Danville has acquired the company's assets and is currently providing local public transportation.

During FY-77, Danville Traction and Power provided school "tripper" service for the city, as well as conventional local mass transit. Service was offered Monday through Saturday, seventeen hours daily, and for five hours on Sundays. The buses operated on a network of seven separate routes, which were generally oriented to the CBD.

Employment in the City of Danville is largely in manufacturing, primarily textile industries. Most trips on Danville Traction and Power buses were work related and a large percentage of the transit patrons had no alternative means of transportation.

Charlottesville Transit Service (CTS)

The Charlottesville Transit Service is a small urban transit system owned and operated by the City of Charlottesville. CTS provides local regularly scheduled public transportation on weekdays and Saturdays, fourteen hours per day. The system provides no school bus service and only a minor amount of charter bus operations.

Charlottesville is a small city of relatively affluent residents. Employment, commercial, industrial, and retail activity in the area are scattered throughout several parts of the city and surrounding counties, rather than into a single geographic area such as the CBD. Major medical and educational activities are functions of the University of Virginia, which is largely served by a separate transit operator, the University Transit Service (UTS). UTS is owned and operated by the University of Virginia exclusively for members of the University community. It operates scheduled service with 11 buses on the grounds of the University, to and from commuter

parking lots, and to a limited number of residential areas in Charlottesville and Albemarle County which are densely populated with faculty and students.

Staunton Transit Service

The Staunton Transit Service is a small public bus operation serving the City of Staunton. The system is owned and operated by the local government.

Staunton Transit provides conventional, local, regularly scheduled public transportation, and school bus service for the local school system. Conventional transit service is in operation Monday through Saturday, for eleven hours daily.

The City of Staunton is characterized by steep topography. Although the transit system operates smaller than average vehicles, the buses are unable to traverse many city streets due to the terrain. Also characteristic of Staunton are overall low median family and per capita income levels. Much of the bus system's ridership is highly dependent on public transportation.

Winchester City Transit (WCT)

The small Winchester Transit System has been operated by the City of Winchester since 1950. Until 1977, bus service for the local public schools was provided by WCT. During fiscal year 1977, WCT provided local, regularly scheduled public transportation in the city, and a small amount of charter service.

Winchester buses operate twelve hours daily, Monday through Friday, and for seven hours on Saturday. All routes radiate from the downtown area into various sections of the city, forming partial and full loops.

Generally, the transit system's riders are highly dependent on public conveyance, having no alternative means of transportation.

Bristol City Bus System (CBS)

The Bristol City Bus System is a small urban transit system, jointly owned and operated by the Cities of Bristol, Tennessee, and Bristol, Virginia. CBS provides conventional local fixed route transit, a limited amount of charter service, and school transportation through a combination of "tripper" service, regular route deviation, and special school bus routes.

The Bristol buses operate on eleven separate routes, all of which are radial. The buses leave a central downtown transfer point every thirty minutes. Service is provided Monday through Friday only, for 12½ hours daily.

The City Bus System's service area is unique in that it is composed of two contiguous but otherwise independent cities separated by the Virginia-Tennessee border, which runs east-west through the cities' CBD.

TRANSIT SERVICE IN VIRGINIA FY-77

In 1977, conventional public mass transportation service was available to approximately 2.3 million Virginians residing in the urban and suburban service areas of the twelve transit operators described in this report.¹ Express and local bus routes served an estimated 1300 square miles in the state's urban areas. The twelve reporting transit operators provided for over 68 million unlinked passenger trips (not including school and charter passengers), and travelled over 34 million revenue vehicle miles, during FY-77. It should be noted that these figures do not include any of the numerous transit companies in Virginia operating commuter or employee-haul buses and vans, and subscription buses, because they are not required by the Virginia Code to report their operations to the Department.

The data and calculations discussed in this section of the report are presented to provide some insight into the levels of service offered by each system, and the degrees of public utilization of mass transportation, around the state. Service supplied is based upon the quantity of public transportation made available, in terms of number and sizes of rolling stock, volume of route mileage, and miles operated in revenue service. Passenger utilization is measured in terms of the number of trips made annually by the service area population, per capita and per unit of service supplied. Table 2 is a listing of the estimated population and area in square miles in each of the twelve transit system service areas.

¹The population figures cited in this report were extracted from estimates of the Tayloe-Murphy Institute, and were based as closely as possible on the transit service areas as submitted by each operator.

Table 2

TRANSIT SERVICE AREAS
ESTIMATED POPULATION AND AREA IN SQUARE MILES

TRANSIT SYSTEMS	ESTIMATED POPULATION IN SERVICE AREA FY-77	ESTIMATED AREA IN SQUARE MILES 1970
Bristol City Bus System	20,200	12.5
Winchester City Transit Lines	21,300	9.3
Staunton Transit Service	22,000	8.9
Charlottesville Transit Service	41,200	10.4
Danville Traction and Power Company	45,700	16.0
Tri-city Coaches	47,000	23.1
Greater Lynchburg Transit Company	65,500	50.1
Greater Roanoke Transit Company	101,500	43.1
Greater Richmond Transit Company	226,400	62.6
Peninsula Transportation District Commission	268,800	190.2
Tidewater Regional Transit	606,500	420.2
Washington Metropolitan Area Transit Authority	817,500	452.6
Statewide Total	2,283,600	1,299.0

Note: With the exception of WMATA, population and square mileage figures include only the incorporated area of the city or cities in which each system operates; generally, operations beyond city limits are an insignificant part of total operations. (This was based on transit route maps provided by each system.) The TRT service area includes the cities of Norfolk, Portsmouth, and Virginia Beach. PENTRAN includes Hampton and Newport News. WMATA, however, includes Arlington County, Alexandria, Falls Church, Fairfax City, and all of Fairfax County, because no accurate measure could be made of those parts of the county not served by Metrobuses.

Source: "Estimates of the Population of Virginia Counties and Cities", July, 1976, Tayloe-Murphy Institute.

Square miles were determined from 1970 census information and land use data maintained by the Department. All annexations, effective January, 1970, are included in the totals.

Table 3 provides breakdowns, by system, of the number of buses operated, revenue capacity miles operated, total miles of transit route, revenue vehicle miles operated, and daily hours of service.

Annual Revenue Capacity Miles Operated Per Capita

The number of revenue capacity miles operated provides a raw measure of the amount of service offered by a transit system. Its value is calculated by multiplying the average capacity (seated and standing) of the bus fleet times the total mileage travelled in revenue service. Its value is also largely influenced by the volume of route mileage and the frequency of service "headways".

The number of revenue capacity miles operated per capita provides an indication of the intensity of service supplied by a system, in relation to the population of the area served (see Table 4). The statewide average in 1977 was 846 capacity miles operated per capita. The values, by system, vary from 182 capacity miles per capita to 1,350. These variances are partially explained by the differences in system size, frequencies of service, total daily hours of service, and variances in vehicle capacities.

Miles of Transit Route Per Square Mile

This statistic is calculated to provide a measure of service accessibility, based upon the saturation of public transportation service in relation to the size of the area. Statewide, in 1977, the average number of bus route miles per square mile was 1.51.

Note that the route miles per square mile calculated for the WMATA system are probably somewhat low. Although Metrobus service does not extend into all parts of Fairfax County, the entire area of the county was utilized in this report because it was impossible to accurately subtract the square

Table 3

Service Characteristics FY-77

Transit Systems	Number of Active Licensed Vehicles ¹	Total Miles of Transit Route ² (Local and Express)	Daily Hours of Service (Weekdays)	Annual Revenue Vehicle Miles Operated (Thousands)	Annual Revenue Capacity Miles Operated (Millions)
Bristol City Bus System	17	64.8	12.5	376.7	15.8
Winchester City Transit Lines	11	48.5	12.0	206.9	6.4
Staunton Transit Service	15	43.4	11.0	141.4	7.7
Charlottesville Transit Service	12	37.8	14.0	300.0	7.5
Danville Traction and Power Company	30	76.0	17.0	533.3	26.6
Tri-city Coaches	13	72.0	13.0	311.0	12.8
Greater Lynchburg Transit Company	27	128.5	19.0	1,079.7	52.2
Greater Roanoke Transit Company	42	107.0	16.5	1,483.6	66.0
Greater Richmond Transit Company	219	357.4 Total 93.5 Express	20.8	4,825.5	253.7
Peninsula Transportation District Commission	118	236.0 Total 78.0 Express	17.0	2,043.3	113.9
Tidewater Regional Transit	186	379.2 Total 69.0 Express	20.0	5,451.2	271.8
Washington Metropolitan Transit Authority	590	413.0 Total 85.5 Express	24.0	17,749.0	1,103.6
Statewide Total	1,280	1,963.6	N/A	34,501.5	1,932.1

¹ Does not include vehicles used exclusively for school service.

² Route miles represent local service routes only, except where otherwise noted.

Table 4

Calculated Indicators of Service Supplied FY-77

Transit Systems	Annual Revenue Capacity Miles Operated Per Capita	Miles of Transit Route Per Square Mile	Annual Revenue Vehicle Miles Operated Per Route Mile
Bristol City Bus System	783	5.2	5,813
Winchester City Transit Lines	301	5.2	4,265
Staunton Transit Service	349	4.9	3,259
Charlottesville Transit Service	182	3.6	7,937
Danville Traction and Power Company	583	4.8	7,017
Tri-city Coaches	273	3.1	4,319
Greater Lynchburg Transit Company	198	2.6	8,403
Greater Roanoke Transit Company	650	2.5	13,865
Greater Richmond Transit Company	1,121	5.7	13,502
Peninsula Transportation District Commission	424	1.2	8,658
Tidewater Regional Transit	448	.9	14,375
Washington Metropolitan Transit Authority	1,350	.9	42,976
Statewide Average	846	1.5	17,571

mileage contained in various dispersed areas of the county that are not served by Metrobus routes. It is also likely that other distortions occur because this measurement does not account for variations in route configurations nor for differences in land patterns in the twelve transit service areas.

Annual Revenue Vehicle Miles Operated Per Route Mile

This ratio is derived to give an indication of the intensity of service supplied by a system, in terms of the frequency with which vehicles traverse the routes, i.e., headways. Its value is influenced by several factors not used in the calculation, such as daily hours of service; variations in the length of service would decrease or increase the total number of times a vehicle travels a route in revenue service.

During FY-77, there were 17,571 vehicle miles travelled in regular passenger service, for each mile of transit route in the service area.

Annual Unlinked Passenger Trips Per Revenue Vehicle Mile Operated

The ratio of unlinked passenger trips to revenue vehicle miles operated gives an indication of the public's utilization of the transportation service offered. In 1977, the average number of transit trips made per mile operated in Virginia was 2.0 (see Table 5).

Unaccounted for in this measure of utilization are variables affecting public opinion of and demand for public transportation; examples are local traffic conditions, parking costs and availability, the location and distribution of residential and employment centers in the community, local income levels, etc.

Annual Unlinked Passenger Trips Per Capita

Similarly, this calculation does not account for variations in local

traffic and parking conditions, and socioeconomic factors. However, it is presented as a rough indication of how many persons in the transit service area chose to and/or were able to utilize the public transit service provided by each system. In 1977, the average urban/suburban resident in Virginia's transit service areas made 30 trips using public transportation.

Table 5
Calculated Indicators of
Passenger Utilization
FY-77

Transit Systems	Total Annual ¹ Unlinked Passenger Trips (Thousands)	Annual Unlinked Passenger Trips Per Revenue Vehicle Mile Operated	Annual Unlinked Passenger Trips Per Capita
Bristol City Bus System	1,062.5	2.8	52.6
Winchester City Transit Lines	287.9	1.4	13.5
Staunton Transit Service	448.2	3.2	20.4
Charlottesville Transit Service	515.0	1.7	12.5
Danville Traction & Power Company	1,115.8	2.1	24.4
Tri-city Coaches	606.8	2.0	12.9
Greater Lynchburg Transit Company	1,907.2	1.8	29.1
Greater Roanoke Transit Company	2,174.9	1.5	21.4
Greater Richmond Transit Company	17,476.0	3.6	77.2
Peninsula Transportation District Commission	4,536.4	2.2	16.9
Tidewater Regional Transit	11,905.1	2.2	19.6
Washington Metropolitan Area Transit Authority	26,529.1	1.5	32.5
Statewide Total	68,564.9	----	---
Statewide Average	---	2.0	30.0

¹Unlinked passenger trips do not include school or charter trips.

VIRGINIA TRANSIT OPERATIONS FY-77

The purpose of this section of the report is to describe some of the operating characteristics of the transit systems, in terms of the physical resources and manpower needed to provide for the 68.5 million trips made by Virginians in 1977, and the various types of operations in which each system was engaged during the year.

In FY-77, the twelve intra-urban transit operators in Virginia owned or leased a total of 1,280 buses. The systems were managed, operated, and maintained by 2,451 employees. The buses were operated by 1,670 bus drivers not including personnel who drove school buses exclusively. Table 6 lists transit personnel by system, according to job classification. Table 7 provides data on the average ages and capacities of the twelve bus fleets. Finally, the bar graphs in Figure 1 describe each system's vehicle utilization in terms of miles travelled by service type and deadheading.

Average Vehicle Age

As shown in Table 7, the average bus in Virginia, in FY-77, was eight (8) years old. This relatively low age indicates that several transit systems have made extensive capital investments to update and improve the condition of their rolling stock. It should be noted, however, that there are distinct variations in the types of buses operated by the twelve companies, and average vehicle age does not reflect the average life expectancy of a particular fleet.

Average Vehicle Capacity

The total capacity of a transit vehicle is the number of seated and standing passengers the bus can accommodate in a normal full load. The average bus in Virginia in 1977 was capable of carrying 66 passengers, which approximates the size of a typical conventional transit vehicle. Two of the smaller

Table 6

Transit System Employees
Drivers' Maximum Wage
FY-77

Transit Systems	Total Employees	Executive and Administrative Personnel	Vehicle Maintenance and Service Personnel	Facilities Maintenance Personnel	Transit ¹ Vehicle Operators	Maximum Hourly Wage of Vehicle Operators
Bristol City Bus System	37	5	6	0	11	\$4.17
Winchester City Transit Lines	11	2	1	0	8	4.30
Staunton Transit Service	21	3	2	0	7	4.86
Charlottesville Transit Service	25	4	3	0	18	4.15
Danville Traction and Power Company	42	4	9	0	29	Not Available
Tri-city Coaches	96	10	1	0	10	3.45
Greater Lynchburg Transit Company	66	9	10	1	46	4.72
Greater Roanoke Transit Company	96	12	21	1	62	4.52
Greater Richmond Transit Company	422	65	63	6	288	6.39
Peninsula Transportation District Commission	169	37	39	3	90	5.25
Tidewater Regional Transit	388	75	52	2	259	6.59
Washington Metropolitan Area Transit Authority	1,078	39	105	92	842	8.43
Statewide Total	2,451	265	312	105	1,670	---
Statewide Average	---	---	---	---	---	\$7.21

¹ Does not include drivers employed to drive school buses exclusively; school bus operators are included in total employees.

systems, Winchester and Charlottesville, operated smaller than average buses, with capacities of 36 and 29 passengers, respectively (see Table 7).

Transit Vehicle-Utilization

The information in Figure 1 is provided to reflect some of the variations among the twelve systems' operations, by service type, i.e., school, charter, and revenue service, and deadhead travel. The majority of Tri-city Coaches' travel, for example, was for contract school bus operations. The remaining eleven systems' vehicle mileage was logged almost exclusively in regular fixed route transit service. Deadhead mileage varied somewhat among the twelve systems also, largely because of differences in route configurations, the sizes and geographic layout of the service areas, and locations of storage and maintenance facilities. Charter service comprised a relatively insignificant part of transit operations in the state, in 1977.

Table 7

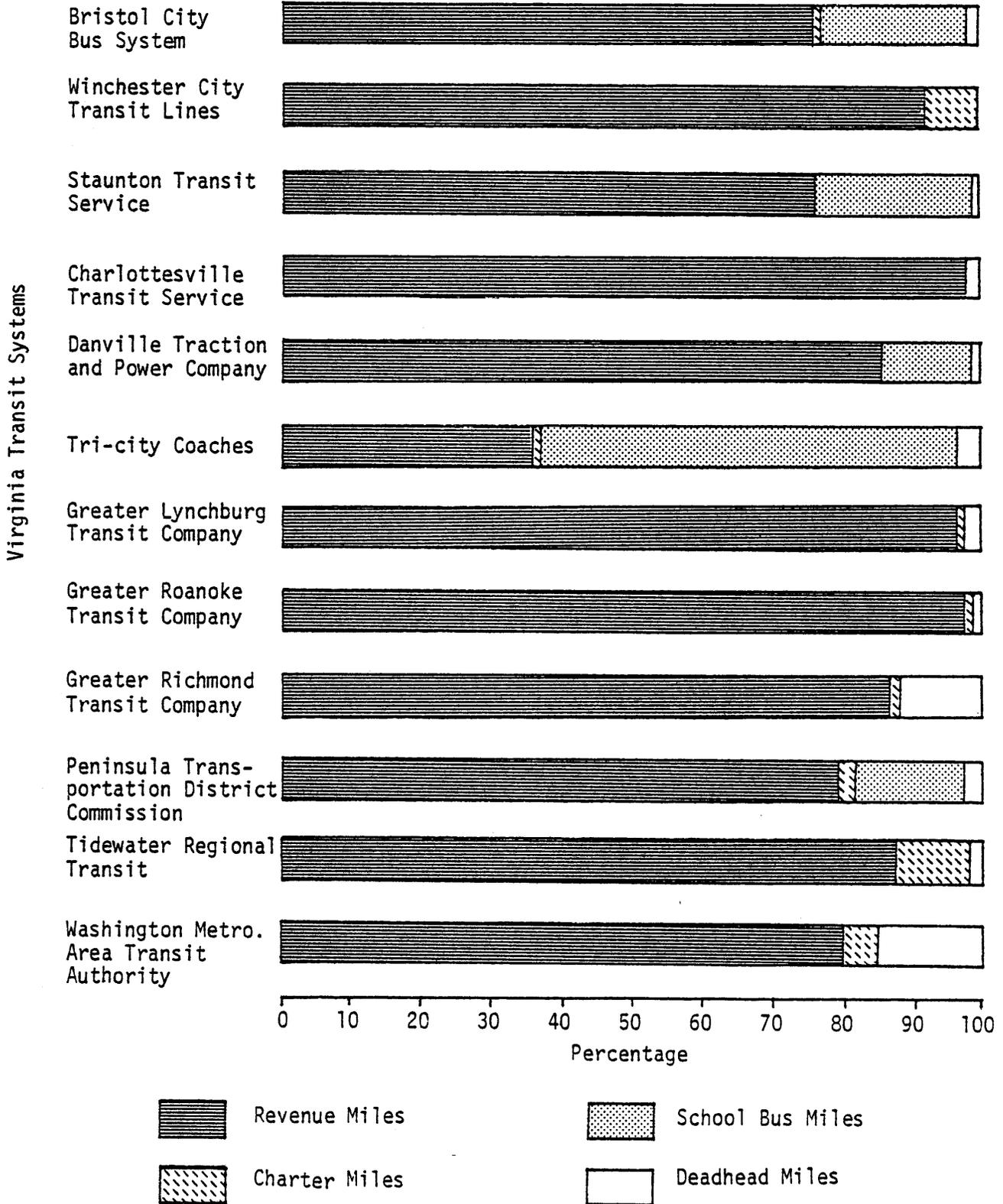
Average Ages and Capacities
of Transit Vehicles
FY-77

Transit Systems	Average Vehicle Age (Years)	Average Seating Capacity of Transit Vehicles	Average Total Capacity of Transit Vehicles
Bristol City Bus System	11	35	47
Winchester City Transit Lines	7	26	36
Staunton Transit Service	8	48	60
Charlottesville Transit Service	2	21	29
Danville Traction and Power Company	21	40	60
Tri-city Coaches	15	34	49
Greater Lynchburg Transit Company	4	39	58
Greater Roanoke Transit Company	6	38	51
Greater Richmond Transit Company	7	45	60
Peninsula Transportation District Commission	3	46	65
Tidewater Regional Transit	12	44	54
Washington Metropolitan Area Transit Authority	8	48	77
Statewide Average	8	45	66

Note: Vehicles used exclusively for school service were not used in these calculations.

Figure 1

TRANSIT VEHICLE UTILIZATION
Percentage Breakdown of Vehicle Miles Travelled
FY-77



TRANSIT REVENUES AND COSTS
FY-77

The financial data reported by each transit operator, for fiscal year 1977, are summarized in Table 8. Total revenue collected, expenditures, cost-revenue ratios, and financial assistance received are listed for each system and statewide. It should be noted that only operating expenses are shown; capital outlays during 1977 are not listed.

Table 9 provides a breakdown of each system's income, by source - passenger fares (regular and discount), school and charter revenues, and "other" income from nonpassenger sources - and the percentage each source contributed to total revenue received during the year. Although school and charter services were a minor part of most systems' operations in terms of vehicle miles operated, a significant amount of revenue was generated by provision of these services. As noted earlier, 70 percent of Tri-city Coaches' income in 1977 was from school and, to a lesser extent, charter operations. Five other systems reported that as much as 22 to 53 percent of their total income was derived from school and charter passengers. Note, however, that some systems do not provide separate school bus transportation; fares collected from students riding the regular transit routes were included in the sums of school and charter revenue.

The revenues and costs listed in Table 8 show that passenger fares and income from auxiliary sources, such as sale of advertising space, do not cover the costs of operating public transit systems. (Tri-city Coaches was an exception, in 1977, due to the contract school service provided, which guarantees stable demand and income.) Public transportation is a public service, and like most other municipal and regional services, assistance from sources other than user fees is needed. Transit fares charged do not approach the actual costs of providing the service. The

Table 8

Transit Costs and Revenues
Capital and Operating Assistance Received
FY-77

Transit Systems	Total Annual ¹ Revenue	Total Annual ² Operating Expenses	Revenue ³ Cost Ratio	Operating Assistance ⁴ Received	Capital Assistance ⁴ Received
Bristol City Bus System	\$ 169,272	\$ 309,955	\$.55	\$ 148,513	\$ 0
Winchester City Transit Lines	49,172	146,245	.34	59,355	1,025
Staunton Transit Service	71,358	177,046	.40	174,890	0
Charlottesville Transit Service	124,601	297,009	.42	157,759	354,520
Danville Traction and Power Company	411,651	501,871	.82	86,195	0
Tri-city Coaches	680,242	658,188	1.03	14,092	0
Greater Lynchburg Transit Company	522,511	1,182,182	.44	668,412	1,856,062
Greater Roanoke Transit Company	577,401	1,614,499	.36	1,037,098	154,556
Greater Richmond Transit Company	5,100,435	7,840,393	.65	2,892,252	995,375
Peninsula Transportation District Commission	2,015,010	2,694,549	.75	614,897	3,003,694
Tidewater Regional Transit	4,064,783	8,394,559	.48	4,403,195	354,872
Washington Metropolitan Area Transit Authority	19,708,776	40,057,605	.49	13,898,460	6,122,182
Statewide Total	\$33,495,212	\$63,874,101	---	\$24,155,118	\$12,842,286
Statewide Average	---	---	\$.52	---	---

¹Includes revenue from regular and discount passenger fares, school and charter operations, and non-passenger income from sale of advertising space, etc.

²Does not include capital outlays during FY-77.

³Computed ratio of revenue received to operating expenditures in FY-77

⁴Includes assistance received from one or a combination of local, state, and federal governments. Although expenses show do not include capital outlays; capital assistance received is shown for the reader's information.

Table 9

Revenue by Source
FY-77

Transit Systems	Transit ¹ Passenger Fares	Percent of Total Revenue	School and ² Charter Revenue	Percent of Total Revenue	Other ³ Income	Percent of Total Revenue
Bristol City Bus System	\$ 114,621	68%	\$ 50,404	30%	\$ 4,247	2%
Winchester City Transit Lines	22,103	45	25,859	53	1,210	2
Staunton Transit Service	40,429	57	30,929	43	0	0
Charlottesville Transit Service	122,008	98	2,295	2	298	0
Danville Traction and Power Company	309,896	75	89,069	22	12,686	3
Tri-city Coaches	197,845	29	478,633	70	3,764	1
Greater Lynchburg Transit Company	494,441	95	21,669	4	6,401	1
Greater Roanoke Transit Company	561,728	97	10,441	2	5,232	1
Greater Richmond Transit Company	4,953,221	97	108,943	2	38,271	1
Peninsula Transportation District Commission	1,378,866	68	610,093	30	26,051	1
Tidewater Regional Transit	3,606,716	89	393,733	10	64,334	1
Washington Metropolitan Area Transit Authority	17,590,181	89	1,839,884	9	278,711	1
Statewide Total / Average	\$29,392,055	88%	\$3,661,952	11%	\$441,205	1%

¹Transit passenger fares include regular fares and special fares from elderly and handicapped, passes, and other discount fares.

² School and charter revenues include revenue from charter operations, contract school bus service, and student fares.

³Other revenue is from non-passenger services; for example, income from sale of advertising space.

average cost of a bus ride in Virginia, in 1977, was approximately \$.30; the average cost of operating a bus a distance of one mile was \$1.52. Many systems offer discount fares to elderly, handicapped, and student riders, which further erodes the passenger revenue base. Several systems operate in areas where school transportation is entirely separate from the public transit system, and where charter operations are restricted, so additional revenue cannot be derived from these sources.

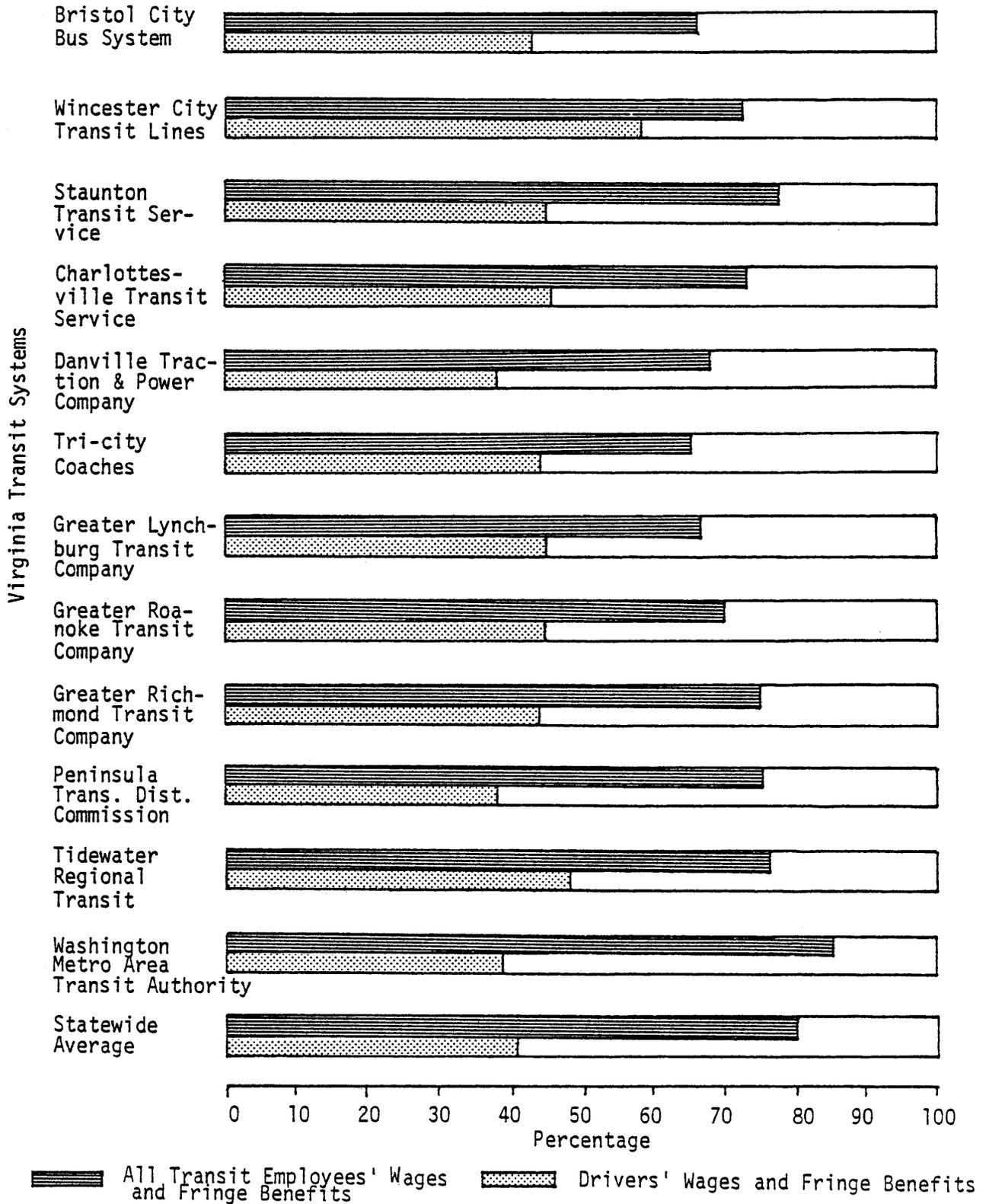
While fares have remained relatively stable, the costs of providing public transportation have escalated sharply during recent years, primarily because of inflated labor and petroleum costs. Since the 1974 oil embargo, the price of diesel fuel has increased by approximately 170 percent. A bus driver's maximum hourly salary in Virginia increased from an average of \$5.63 in FY-75 to \$7.21 in FY-77. These dollar amounts are somewhat inflated by including in the calculations the large number of drivers employed, and the salaries paid, by the Metrobus system in Northern Virginia. Nevertheless, this represents an increase of 28 percent over a three year period. As Figure 2 illustrates, labor costs comprise a large portion of the operating costs of a bus system. In 1977, in Virginia, employees' wages and fringe benefits (i.e., all transit personnel) accounted for 80 percent of the total outlays of the twelve intra-urban transit operators. Nationally, in 1976-77, salaries and benefits represented 75 percent of the costs of operating all modes of mass transit (rapid rail, trolley coach, motor bus, etc.) many of which are more automated than bus operations.²

The gap between transit revenues and costs - the deficit - is universal among transit operations in the U.S. For comparison, revenue-cost ratios

²American Public Transit Association, Transit Fact Book, '77-'78 Edition, Washington, D.C.: APTA Statistical Department, June, 1977.

Figure 2

Cost of Wages and Fringe Benefits
As Percentage of Total Operating Expenditures
FY-77



and average losses per vehicle mile operated (revenue miles and total miles) were calculated for Virginia and four other states, from information readily available. As shown in Table 10, Virginia's revenue-cost ratio and average loss per vehicle mile in 1977, were comparable to and in several cases more favorable than the other states surveyed. Nationally, in 1977-78, the average deficit per vehicle mile was \$.96, considerably higher than Virginia's average of \$.72.³ Note also that the national average is based on a sampling of operators of all modes of mass transit, many of which serve areas with characteristics more amenable to transit patronage, such as greater population densities and lower rates of auto ownership than are found in Virginia.

The bar graphs in Figure 3 provide a breakdown of each system's expenditures by function - general administration, operations, and maintenance - as a proportion of total costs in FY-77. As expected, most expenses were incurred in system operations, which includes the salaries and benefits of drivers, dispatchers, and other operations personnel, fuel, oil, tires, and other supplies. But, variations are evident among the systems' expenditures for general administration and maintenance of the vehicles and fixed facilities.

³APTA, Transit Fact Book, '77-'78 Edition.

Table 10
Operating Losses
Comparison With Other States

	Virginia	Michigan	Texas	Minnesota	California	U.S.
Revenue-Cost Ratio	.52	.40	.57	--	.37	--
Loss Per Vehicle Mile Operated	\$.72	--	\$.62	\$.72	--	\$.96
Loss Per Revenue Vehicle Mile Operated	\$.88	\$1.30	--	--	\$1.44	--

-- Indicates information not available

Sources: 1977 Texas Transit Statistics, Texas State Department of Highways and Public Transportation
UPTRAN Quarterly Report, Public Transportation in Michigan, Michigan Department of State
Highways and Transportation, September, 1978.

Transportation Development Act, Annual Report, California Department of Transportation, FY-77

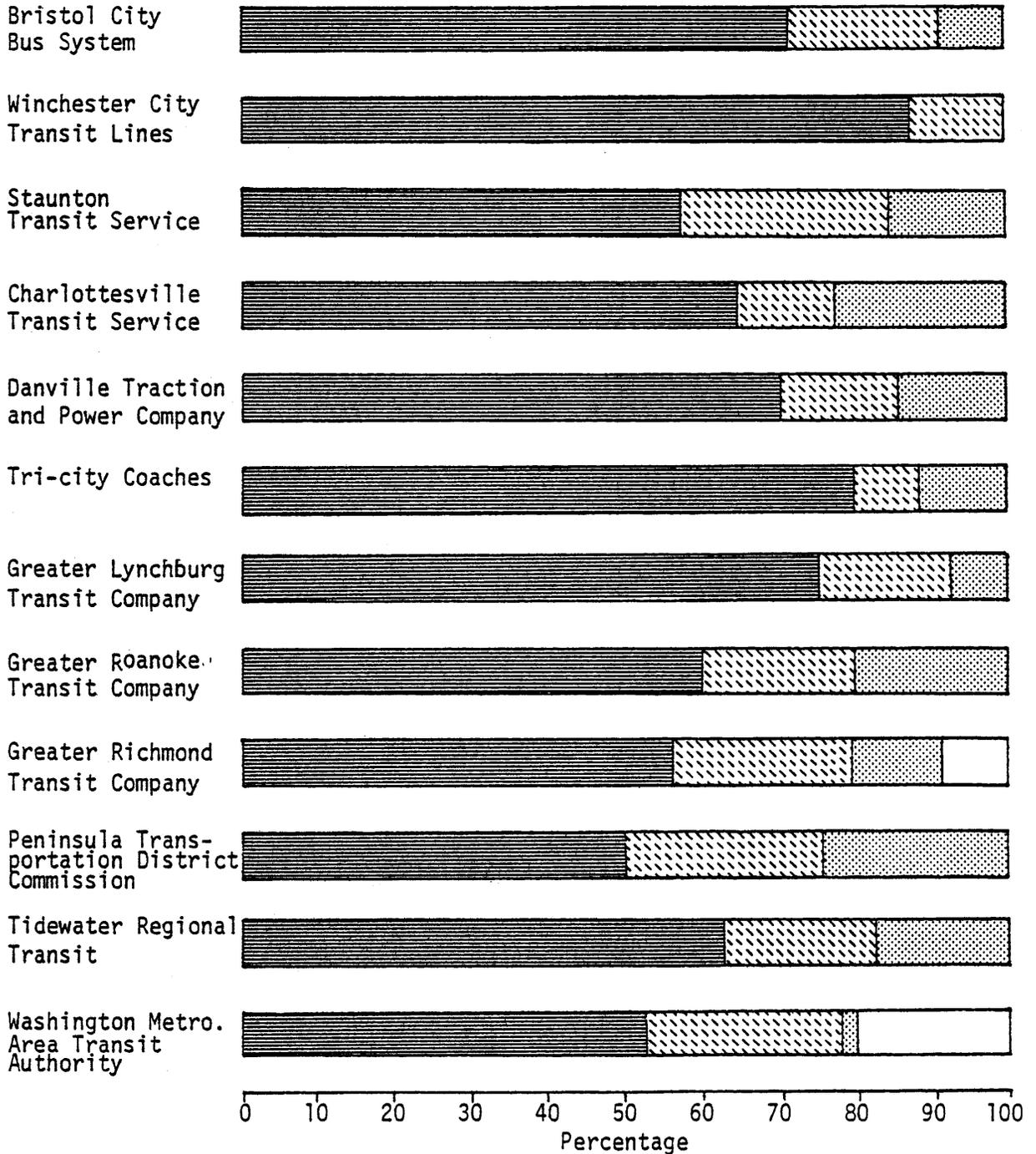
Systems Data Sheet, Minnesota Department of Transportation, 9-1-77 to 8-31-78

American Public Transit Association, Transit Fact Book, 1976-77

Figure 3

EXPENDITURES BY FUNCTION
Percentage Breakdown
FY-77

Virginia Transit Systems



SUMMARY

Public mass transportation is an expensive service which is made more so by general economic inflation during recent years in the U.S. While many people can choose whether or not to use transit, others are totally dependent on it for mobility. In 1977, the residents of Virginia's cities and suburbs served by mass transportation made an average of 30 trips each on buses (not including school and charter passengers and numerous operations not included in this report), for a total of more than 68.5 million unlinked trips. This suggests that many people who are not "captive" transit riders chose buses as an attractive means of travel. There has been evidence of a slowdown in the decline of transit usage. Between 1945 and 1976, in the U.S., transit ridership dropped 47 percent on motor buses, and 69 percent on all modes of transit.⁴ Virginia, too, has experienced similar heavy passenger losses during the past quarter century. However, between 1975 and 1977, the decline slowed to less than 7 percent in Virginia.

During the past several years, an increasing financial commitment to public transportation service has been shown by the local, state, and federal governments. Public acquisition of private bus companies, increased capital investments to improve maintenance and storage facilities and rolling stock, installation of passenger shelters at bus stops, and many service improvements have been instituted in Virginia. Buses are more modern and comfortable; between 1975 and 1977, the average age of Virginia transit vehicles dropped from 11 years to 8 years. The buses travelled 3 percent more vehicle miles in 1977 than in 1975, to provide

⁴APTA, Transit Fact Book, '77-'78 Edition.

additional service. Transit service has also changed to meet differing demands; the fringe commuter parking lots, reversible express lanes for high occupancy vehicles, and express routes are examples of these innovations.

Perhaps these changes and commitments are evidence of increased awareness of the costs of not providing public mass transportation.

Motor buses consume less than one-half the energy used by private automobiles, measured in BTU's per passenger mile.⁵ The acres of roadway required for automobile usage is 24 times greater than that required for motor bus travel, per passenger mile.⁶

Saving natural resources is not the only potential benefit of mass transit. A cost-benefit study by ATE Management and Service Company for one urban area in Virginia attempted to quantify some of the costs which might result if public bus service were discontinued. Information from rider surveys indicated that many current transit users would purchase cars, use their available autos more, suffer severe employment hardships due to lack of transportation, and many would simply stop making low-priority trips for purposes such as recreation and shopping.

Notwithstanding personal losses to these transit riders, additional costs would have to be borne by the public in general - from increased traffic control measures, upsurges in motor vehicle accidents, higher unemployment, and lost income taxes. Estimates of the costs of these changes, as indicated in the report, proved to be higher than the cost of providing public transportation.

More difficult to quantify, but no less real, would be added traffic congestion, heightened levels of vehicular noise and air pollution, and

⁵APTA, Transit Fact Book, '77-'78 Edition.

⁶APTA, Transit Fact Book, '77-'78 Edition.

immobility for many young, handicapped, elderly, and low income citizens.

Mass transportation has the potential to enhance the quality of life in Virginia's urban and suburban communities, by reducing congestion, pollution, costly fuel consumption, depletion of natural resources, and perhaps, more importantly, by providing a means of travel for persons unable to drive, and, offering a choice to those who can.

APPENDIXES

I.

Commonwealth of Virginia
Department of Highways and Transportation
Annual Transit Report

Financial, Operating, and Statistical Data for the Year Ending _____, 19__.

Name of Transit Company: _____

Name and Phone Number of Person Completing this Form:
_____, _____

I. Annual Revenue Summary

(Show annual total receipts to nearest dollar)

A. Regular Passenger Fares for Transit Service	\$ _____
B. Special Transit Fares:	
1. Elderly and Handicapped Fares	\$ _____
2. Student Fares	\$ _____
3. Discount Tickets	\$ _____
4. Other Special Fares	\$ _____
	SUBTOTAL (B) \$ _____
C. Contract School Bus Service Revenue	\$ _____
D. Charter Service Revenue	\$ _____
E. Auxiliary Transportation Revenue (sale of advertising space, etc.)	\$ _____
F. Non-transportation Revenue	\$ _____
TOTAL ANNUAL REVENUE (A. through F.)	\$ _____

II. Summary of Annual Expenses by Object Class and Function

(Show total annual expenses to nearest dollar)

EXPENSE OBJECT CLASSES	FUNCTIONS			TOTAL ANNUAL EXPENSES
	OPERATIONS	MAINTENANCE	GENERAL ADMINISTRATION	
A. Labor:				
1. Operators' Salaries & Wages	\$ _____			\$ _____
2. Others' Salaries & Wages	\$ _____	\$ _____	\$ _____	\$ _____
B. Fringe Benefits:				
1. Operators' Fringe Benefits	\$ _____			\$ _____
2. Others' Fringe Benefits	\$ _____	\$ _____	\$ _____	\$ _____
C. Services:	\$ _____	\$ _____	\$ _____	\$ _____
D. Materials & Supplies Consumed				
1. Fuels & Lubricants	\$ _____	\$ _____	\$ _____	\$ _____
2. Tires & Tubes	\$ _____	\$ _____	\$ _____	\$ _____
3. Other	\$ _____	\$ _____	\$ _____	\$ _____
E. Utilities	\$ _____	\$ _____	\$ _____	\$ _____
F. Casualty & Liability Costs	\$ _____	\$ _____	\$ _____	\$ _____
G. Taxes	\$ _____	\$ _____	\$ _____	\$ _____
H. Purchased Transportation Service, Leases, Rentals	\$ _____	\$ _____	\$ _____	\$ _____
I. Miscellaneous Expenses	\$ _____	\$ _____	\$ _____	\$ _____
TOTAL ANNUAL EXPENSES	\$ _____	\$ _____	\$ _____	\$ _____

III. Summary of Public Assistance Received

SOURCE	ANNUAL CAPITAL ASSISTANCE RECEIVED (Show total amount by source, to nearest dollar)			ANNUAL OPERATING ASSISTANCE RECEIVED (Show total amount by source, to nearest dollar)		
	FEDERAL	STATE	LOCAL	FEDERAL	STATE	LOCAL
A. UMT Act of 1964, as amended						
1. Section 3	\$ _____					
2. Section 5	\$ _____			\$ _____		
B. Funds Dedicated to Transit From State or Local Funds		\$ _____	\$ _____		\$ _____	\$ _____
C. Funds Dedicated to Transit at Their Source (i.e., Revenues not going into General Funds, but into Transit Fund)						
1. Dedicated Taxes:						
a. Income Taxes			\$ _____			\$ _____
b. Sales Taxes			\$ _____			\$ _____
c. Property Taxes			\$ _____			\$ _____
d. Utility Taxes			\$ _____			\$ _____
e. Gasoline Taxes			\$ _____			\$ _____
f. Other Taxes (please identify)			\$ _____			\$ _____
_____			\$ _____			\$ _____
_____			\$ _____			\$ _____
_____			\$ _____			\$ _____
2. Bridge, Tunnel, and Highway Tolls		\$ _____	\$ _____		\$ _____	\$ _____
3. Shared Federal Government Revenues			\$ _____			\$ _____
4. Other Dedicated Sources (please identify)						
_____		\$ _____	\$ _____		\$ _____	\$ _____
_____		\$ _____	\$ _____		\$ _____	\$ _____
_____		\$ _____	\$ _____		\$ _____	\$ _____
D. Other Sources of Transit Assistance (please identify)						
_____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
_____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
_____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
TOTAL ANNUAL PUBLIC ASSISTANCE RECEIVED	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____

IV. Vehicle Identification Table (Active, licensed vehicles only)

(* See sample on page 5 before completing this table.)

Vehicle Categories	Type of Vehicle	Year of Manufacture	Manufacturer	Model	Seating Capacity	Total Capacity (including standees)	Number of Vehicles Owned in Each Category	Number of Vehicles Leased in Each Category
TOTAL								

Total number of inactive vehicles in fleet _____

* Sample

Type of Vehicle	Year of Manufacture	Manufacturer	Model	Seating Capacity	Total Capacity (including standees)	Number of Vehicles Owned in Each Category	Number of Vehicles Leased in Each Category
Motor Bus	1964	6MC	6MC-3501	35	48	5	1
Motor Bus	1976	Rohr	Flxible 4509	41	54	7	0
Motor Bus	1960	6MC	6MC 3714	37	49	1	0
TOTAL						13	1

V. Transit Service Supplied

A. Average Weekday, Weekend Service

	AVERAGE WEEKDAY					WEEKEND	
	A.M. Peak	Off-Peak Daytime	P.M. Peak	Off-Peak Evening	Total	Saturday	Sunday
Number of Vehicles In Operation (In-line service)							
Number of Vehicle Miles Operated (In-line Service)							
Number of Vehicle Hours Scheduled (In-line Service)							

B. Annual Service

	HOURS	MILES
Total Annual Vehicle		
Annual Revenue Vehicle (In-line Service)		
Annual Charter Vehicle		
Annual School Bus		

VI. Transit Service Consumed

	AVERAGE WEEKDAY					WEEKEND		ANNUAL TOTAL
	A.M. Peak	Off-Peak Daytime	P.M. Peak	Off-Peak Evening	Total	Saturday	Sunday	
Number of Unlinked Passenger Trips (In-line Service)								

Average Peak Load Factor _____ (see definition before computing average load factor)
 Average Off-Peak Load Factor _____

VII. Weekday Time Period Schedule

	WEEKDAY	SATURDAY	SUNDAY
Total Hours of Service During Day			
Beginning Hour of Daily Service			
Ending Hour of Daily Service			
Total Hours of A.M. Peak Service			
Beginning Hour of A.M. Peak Service			
Total Hours of P.M. Peak Service			
Beginning Hour of P.M. Peak Service			

VIII. Transit Way Descriptors

- A. Total Miles of Transit Route (miles of direct roadway) _____ Miles
- B. Total Miles of Express Bus Route _____ Miles
- C. Please attach to this form a system-wide transit route map or equivalent

IX. Transit System Employee Count and Wage Scale

A. Employee Count

	TOTAL NUMBER OF PERSONS EMPLOYED	NUMBER OF PERSONNEL ON DUTY ON AVERAGE WEEKDAY					NUMBER OF PERSONNEL ON DUTY ON AVERAGE WEEKEND	
		A.M. Peak	Off-Peak Daytime	P.M. Peak	Off-Peak Evening	Total	Saturday	Sunday
		Transportation Executive, Professional, and Supervisory Personnel						
Transportation Support Personnel								
School Bus Operators								
Revenue Vehicle Operators								
Other Mode Operators								
Maintenance Executive, Professional, and Supervisory Personnel								
Vehicle Maintenance Mechanics								
Facilities Maintenance Personnel								
Vehicle Servicing Personnel								
Maintenance Support Personnel								
General Administration Executive, Professional and Supervisory Personnel								
General Administration Support Personnel								
TOTAL TRANSIT SYSTEM EMPLOYEES								

B. Vehicle Operator's Hourly Wage Scale

\$ _____ to \$ _____
(Minimum) (Maximum)

X. Annual Vehicle Maintenance

	Motor Bus	School Bus	Other Modes	Total
A. <u>Maintenance Indicators:</u>				
1. Total Annual Number of Road Calls for Mechanical Failures				
2. Total Annual Number of Road Calls for Other Reasons				
3. TOTAL				
B. <u>Labor Hours:</u>				
1. Total Annual Labor Hours for Inspection and Maintenance				
C. Number of Maintenance Facilities				

XI. Annual Energy Consumption

TYPE OF VEHICLE	ANNUAL ENERGY CONSUMED	
	Gallons of Diesel Fuel	Gallons of Gasoline
Revenue Vehicle		
School Bus		
Other Mode Vehicles		
Service Vehicles		
TOTAL ANNUAL ENERGY CONSUMPTION		

XII. Annual Accident Record

A. Annual Number of Accidents Classified as:	Collision	Non-Collision	On-the-Job	TOTAL
1. Fatality				
2. Personal Injury				
3. Property Damage				
ANNUAL TOTAL ACCIDENTS				

II.

Glossary of Terms

1. Active Licensed Vehicles - transit vehicles regularly maintained in condition for active service.
2. Annual - refers to a twelve (12) month operating period.
3. Annual Revenue Vehicle Miles Operated - the total number of miles travelled, during the reporting period, by the transit vehicles in in-line service only; does not include deadheading or school and charter service.
4. Annual Vehicle Miles Operated - the total number of miles travelled, during the reporting period, by the transit vehicles, including miles of in-line service, school and charter service, and deadheading.
5. Average Total Vehicle Capacity - an average of the number of passenger seats aboard the vehicles and the number of standing passengers that can be accommodated in a normal full load.
6. Capital Assistance Received - funds received from federal, state, and local sources to aid in the procurement of capital equipment; i.e., vehicles, bus shelters, fareboxes, etc.
7. Deadhead Miles - miles travelled by the transit vehicle while carrying no passengers; i.e., to and from maintenance and storage facilities.
8. Executive and Support Personnel - includes administrative and supervisory personnel engaged in general administration of the transit system; also includes support personnel such as secretaries and clerical workers employed in the administrative, maintenance, and operations phases of the system.
9. Expense Functions -
 - a. Operations - includes expenditures for operators' wages and fringe benefits, materials, and supplies consumed, utilities, casualty and liability costs, taxes, etc.
 - b. Maintenance - includes expenditures for maintenance workers' wages and fringe benefits, materials and supplies consumed, utilities, casualty and liability costs, taxes, etc.
 - c. General Administration - includes salaries and benefits paid to executive and supervisory personnel and administrative support employees, materials and supplies consumed, utilities, taxes, leases, and rentals, etc.
10. Facilities Maintenance Personnel - mechanics, carpenters, plumbers, etc., performing maintenance and repairs on all buildings, grounds, and equipment other than transit and service vehicles.

11. Fiscal Year - refers to the period July 1 through June 30. (Only one system in Virginia operated on a calendar year basis - Danville Traction and Power Company.)
12. Intra-urban Service - defined by the Code of Virginia as operations "within the exclusive jurisdiction of any county, city, or town, or within the boundaries of any district as defined in Section 15.1-1344 of the Virginia Code, or any jurisdiction contiguous thereto."
13. Miles of Express Transit Route - the total miles of direct roadway over which the transit vehicles travelled while in revenue service. Express service is generally characterized by higher operating speeds and no, or a limited number of, stops between origin and destination, for passengers to board and alight. The measure is taken without respect to the number of traffic lanes and does not account for any two-directional travel on the routes by the transit vehicles. Does not include school or charter routes.
14. Miles of Transit Route - the total miles of direct roadway over which the transit vehicles travelled while in revenue service. The measure is taken without respect to the number of traffic lanes and does not account for any two-directional travel on the routes by the transit vehicles. Includes express route miles, unless otherwise noted; does not include school or charter routes.
15. Operating Assistance Received - funds received from federal and local sources for general operating assistance; i.e., special fare subsidies, grants, etc.
16. Revenue Capacity Miles Operated - the revenue vehicle miles operated times the average passenger capacity of the fleet. The average passenger capacity is determined by averaging the sum of the seated capacity and standing capacity of the vehicles in the fleet.
17. Total Annual Operating Expenses - the sum of yearly expenditures for operation, maintenance, and general administration of the transit system; includes expenses incurred in school and charter operations.
18. Total Annual Revenue - the total annual income from regular transit fares, special discount transit fares, school bus and charter operations, and nontransportation revenue such as from sale of advertising space.
19. Unlinked Passenger Trips - the total number of passengers who boarded the transit vehicles. A passenger is counted each time he boards even though it may be on the same journey from origin to destination.
20. Vehicle Maintenance and Service Personnel - transit system employees who perform preventive maintenance and repairs on transit vehicles, and personnel performing service functions such as cleaning, sweeping, and washing of the transit and service vehicles.

