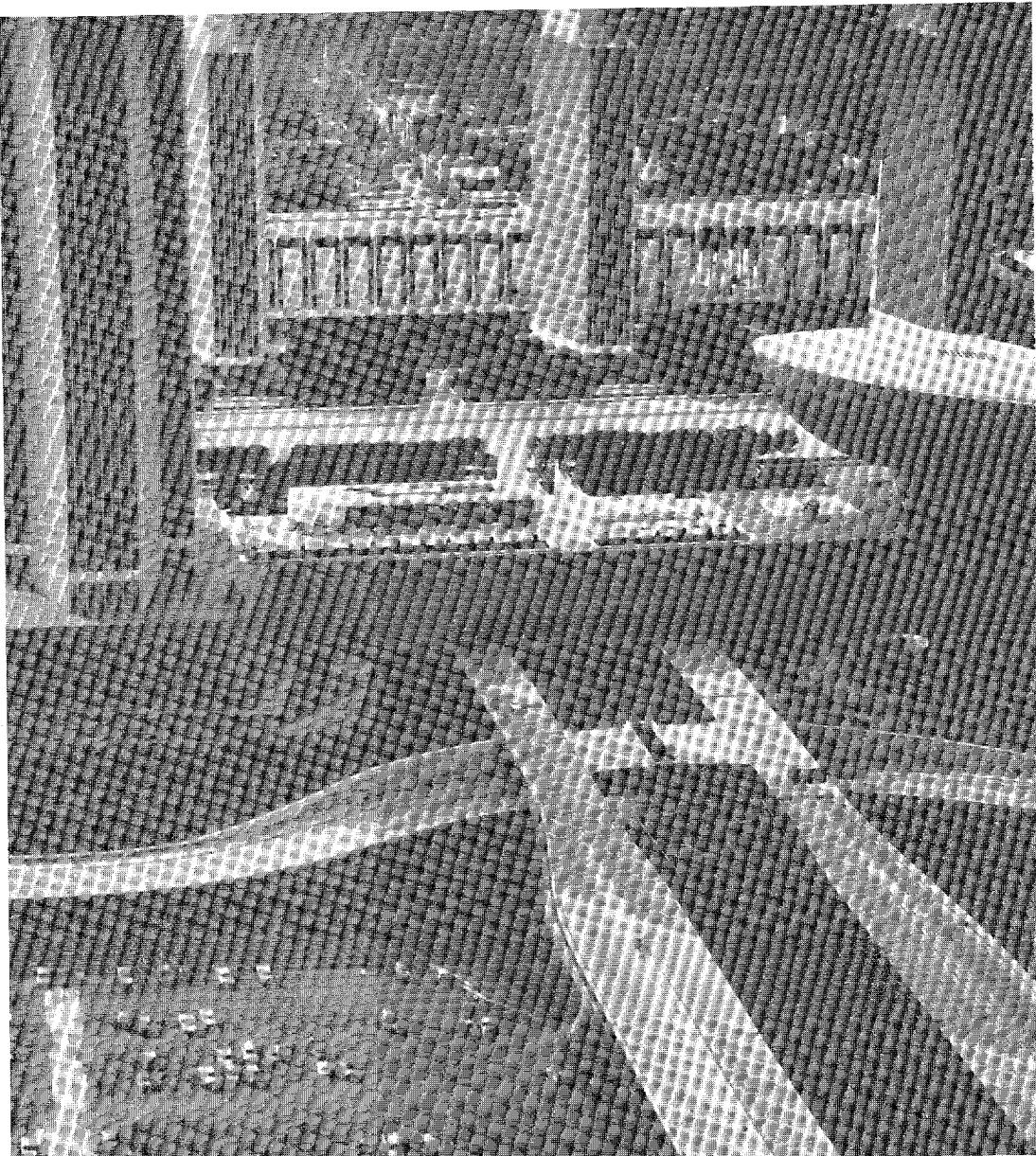


HIGHWAY STATISTICS CHARTS

1977



U. S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration

THE CHARTS CONTAINED WITHIN THIS PUBLICATION HAVE BEEN PREPARED AS A CONVENIENT VISUAL SUPPLEMENT TO VARIOUS TABLES PUBLISHED IN "HIGHWAY STATISTICS 1977" AND PRIOR YEARS, WHICH MAY BE OBTAINED FROM THE SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402, AND NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VA. 22161

HIGHWAY STATISTICS CHARTS

Introduction

These graphical presentations of highway data are intended to help in the interpretation and understanding of the extensive detailed data compiled in the annual Highway Statistics.

Figures 1-5 show expenditures for capital outlay and maintenance for facilities under State jurisdiction. The amounts and proportions of mileage under State jurisdiction vary. The ranking of States aids comparisons, while the per vehicle mile and per registered vehicle comparisons relate the expenditures to indicators of usage and tends to reduce the range. Expenditures per mile average \$12,028 and \$3,815 per mile for capital outlay and maintenance respectively, compared to \$8.47 per 1,000-vehicle-miles of travel and \$87.05 per registered vehicle. Some of the variations among States may be easier to visualize by considering total road and street miles per 1,000 persons, with the most populous States having less than 20 miles per 1,000 and most of the less populous western States exceeding 60 miles per 1,000 persons. Differences in costs are also influenced by the share expended in the standard metropolitan statistical areas as shown in figures 7 and 8. Figures 9 and 10 show that road mileage has increased gradually from just under 3 million miles in the early 1920's to 3.9 million miles in 1977. Nearly half the total mileage is now hard surface while the great majority of the mileage is classed as local rural roads.

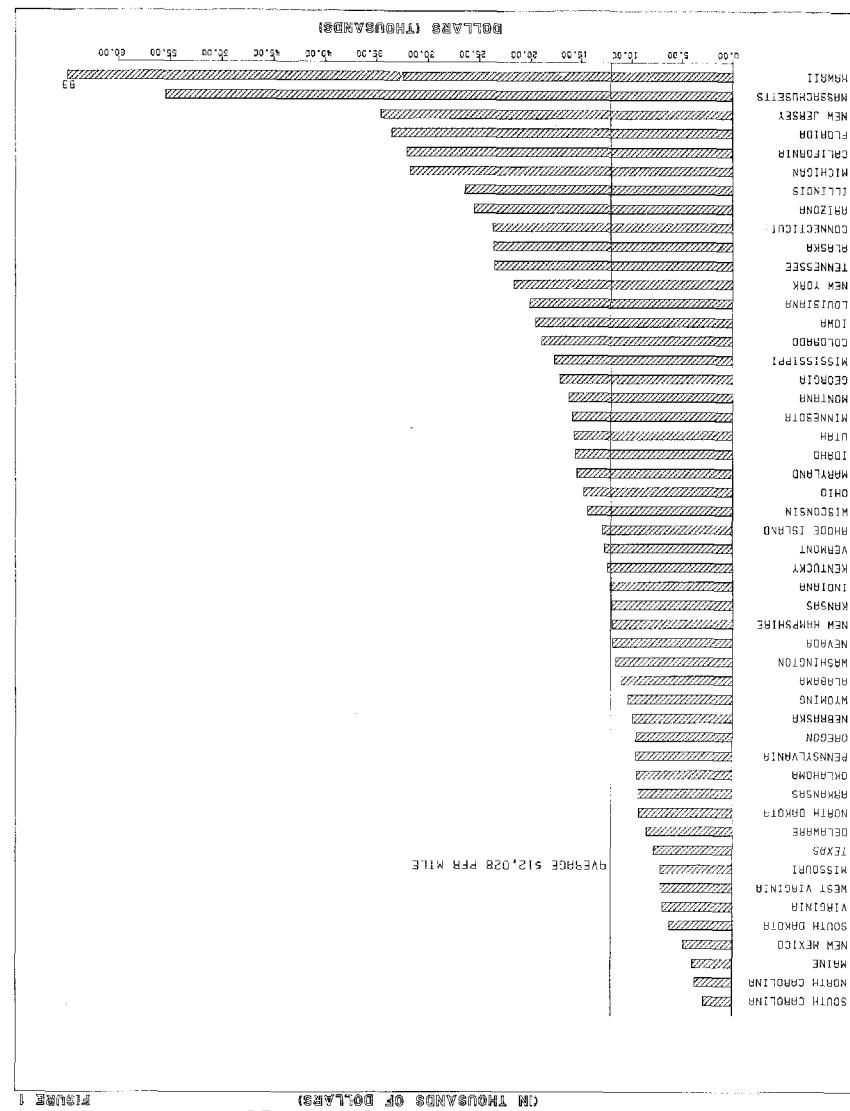
The trends in receipts and disbursements shown in figures 11-14 show that highway user imposts, mainly fuel and vehicle taxes, provide the bulk of the funds, while capital outlay accounts for about half the expenditures. While States and cities were the principle collecting agencies in the early years, Federal collections became important in the 1930's and since World War II. Details for 1977 are shown in figure 17. Since most Federal funds go to the States for aid to State programs, State and local expenditures are substantial compared to direct Federal expenditures. The outstanding obligations in figure 15 are very substantial for some of the large States with extensive toll facilities, but when shown as dollars per registered vehicle in figure 16 some rankings change significantly.

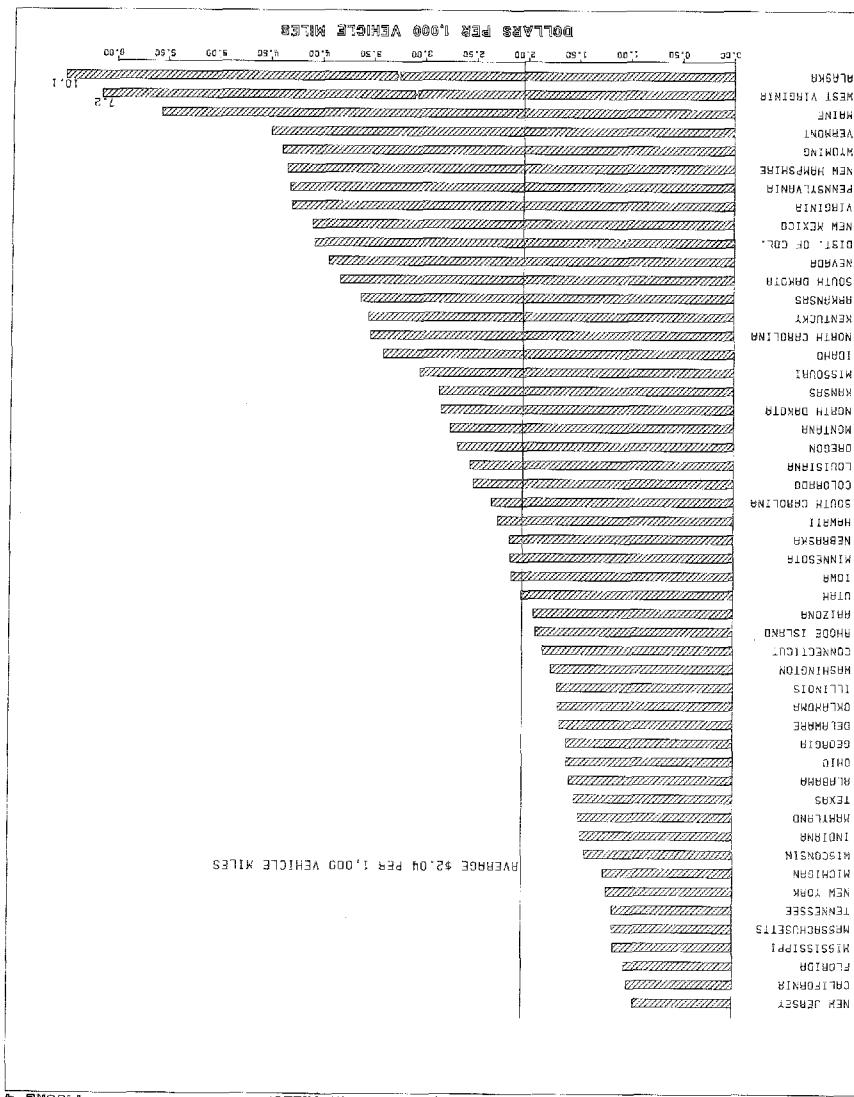
Relationships among mileage, population, vehicles, drivers, revenue and expenditures in both constant and current dollars by 5 years intervals in figures 18 and 20 show that population is increasing faster than mileage, but that drivers, vehicles, and fuel consumption are all outpacing population. User imposts and other revenues, for the nation and in most States, are not keeping pace with the increasing travel and the declining purchasing power of the highway dollar.

Data Sources

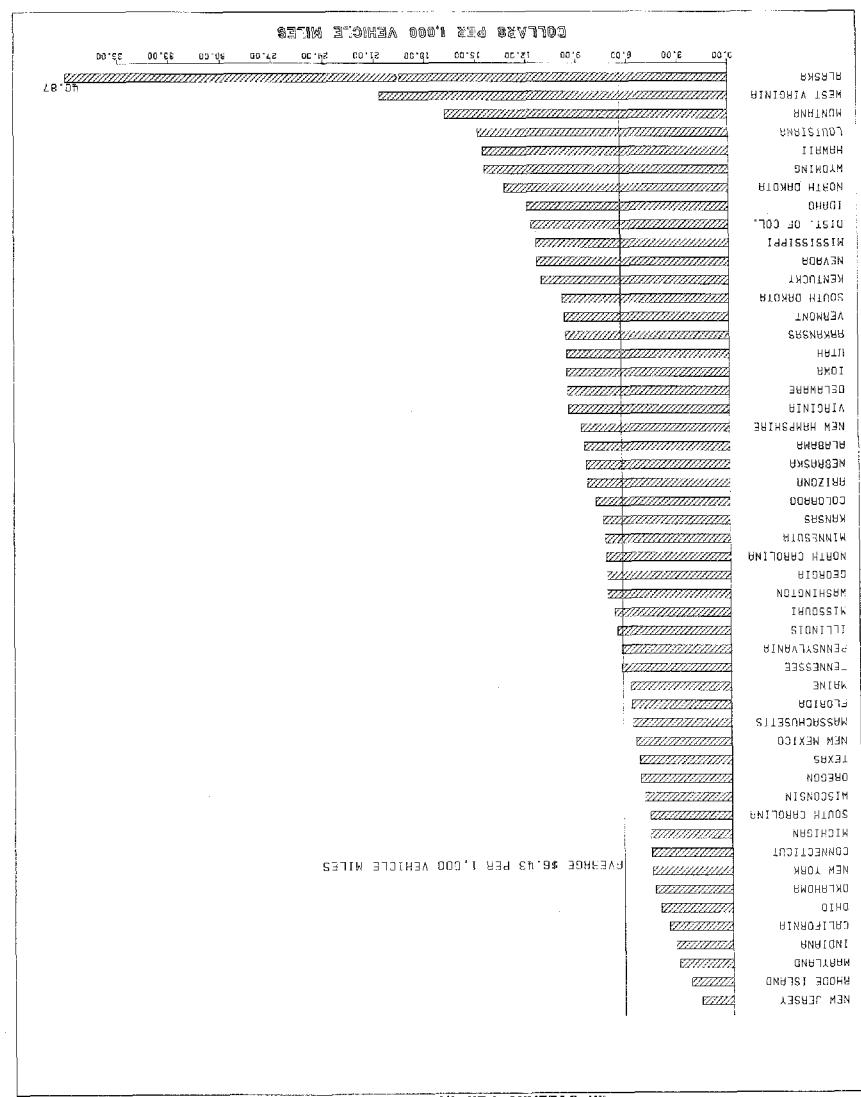
Except for the population statistics from the Bureau of the Census, all chart data have been derived from tables published by the Highway Statistics Division, Federal Highway Administration. These tables are as follows:

Fig.	TABLE	Fig.	TABLE
1	SF-4A SF-6; M-1	14	HF-12; HF-202
2	SF-4A SF-6; M-1	15	SB-2; UB-2; LB-2; UB-42; LB-42;
3	SF-4A; SF-6; VM-2	16	SB-2; UB-2; LB-2; UB-42; LB-42; MV-1
4	SF-4A; SF-6; VM-2	17	SF-21
5	SF-4A; SF-6; MV-1	18	M-1; MV-1; DL-1; MF-1; MF-21; HF-10; POPULATION FROM CENSUS
6	M-1; POPULATION FROM CENSUS	19	MF-3; MV-3; DF
7	SF-4A; SF-6; SF-15	20	HF-11; HF-12; MV-1; MF-21; DL-1; POPULATION FROM CENSUS, SELECTED HIGHWAY STATISTICS
8	SF-4A; SF-6; SF-15	21	DL-1A
9	M-2; M-4; M-5; M-6; M-203	22	MV-1; MV-200
10	M-2; M-200	23	MF-24; MF-25; MF-26; MF-225; MF-226
11	HF-11; HF-201		
12	HF-12; HF-202		
13	HF-11; HF-201		





EXPENDITURES PER VEHICLE MILE OF TRAVEL
FOR CAPITAL OUTLAY ON ROADS AND STREETS
FOR MAINTENANCE ON ROADS AND STREETS
UNDER STATE JURISDICTION - 1977
EXPENDITURES PER VEHICLE MILE OF TRAVEL
EXCLUDING TOLL FACILITIES



EXPENDITURES PER REGISTERED VEHICLE

FOR CAPITAL OUTLAY AND MAINTENANCE ON ROADS AND STREETS UNDER STATE JURISDICTION - 1977

RELATIONSHIP BETWEEN TOTAL ROAD AND STREET EXPENDITURES PER REGISTERED VEHICLE
MILEAGE AND POPULATION BY STATE
1972 AND 1977

FIGURE 6

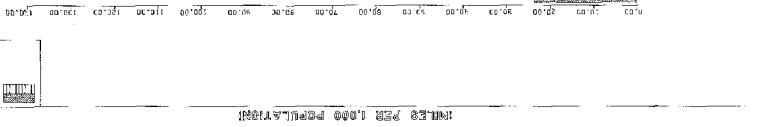


FIGURE 6

IN DOLLARS

PER VEHICLE

BY STATE

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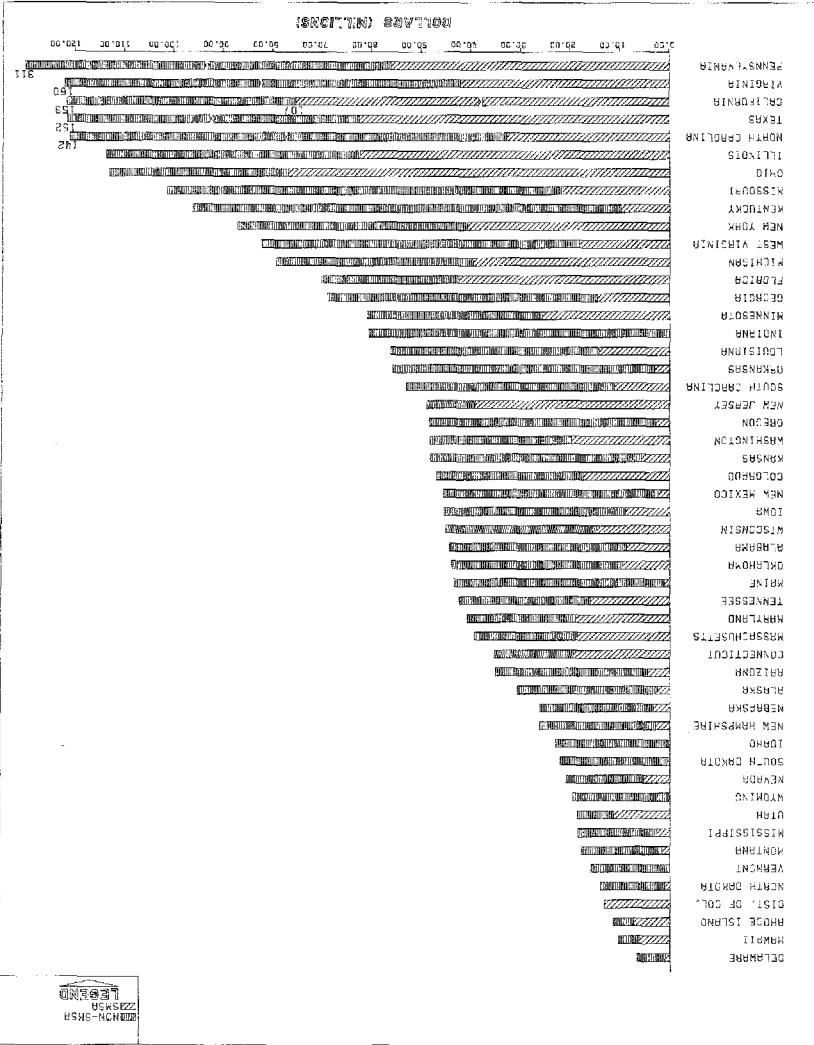
1972

1977

1972

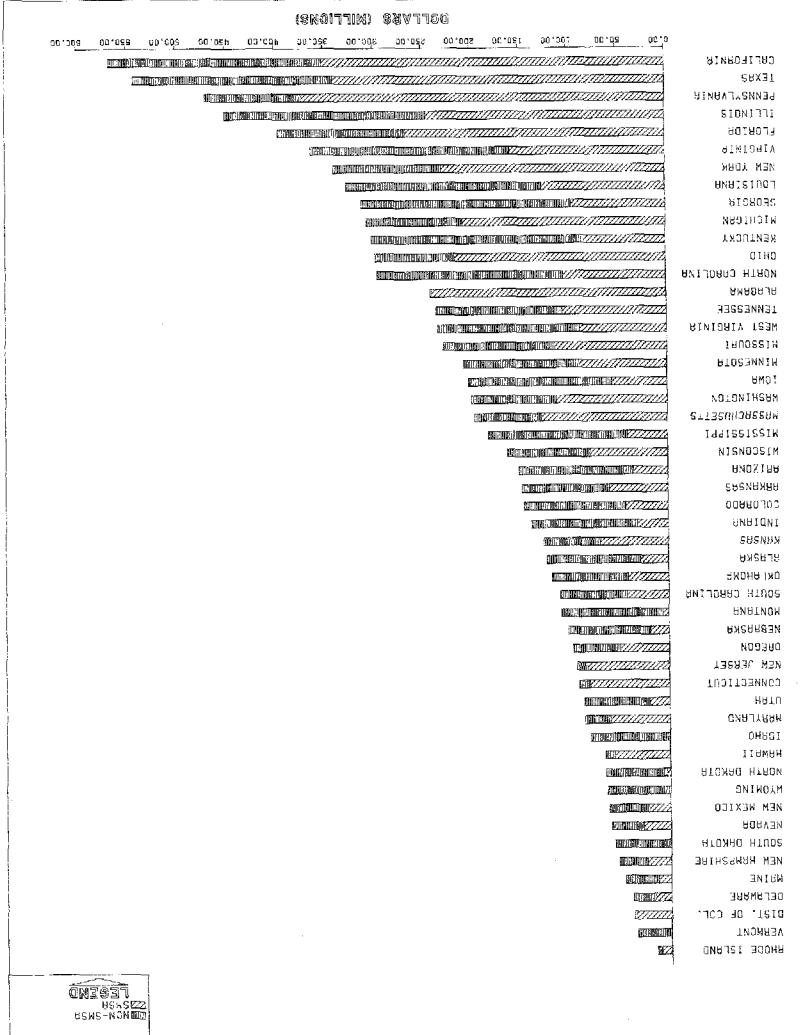
in millions of dollars

TOTAL EXPENDITURES FOR CAPITAL OUTLAY ON ROADS
AND STREETS UNDER STATE JURISDICTION
SHOWING SMSA PORTION - 1977
EXCLUDING TOLL FACILITIES



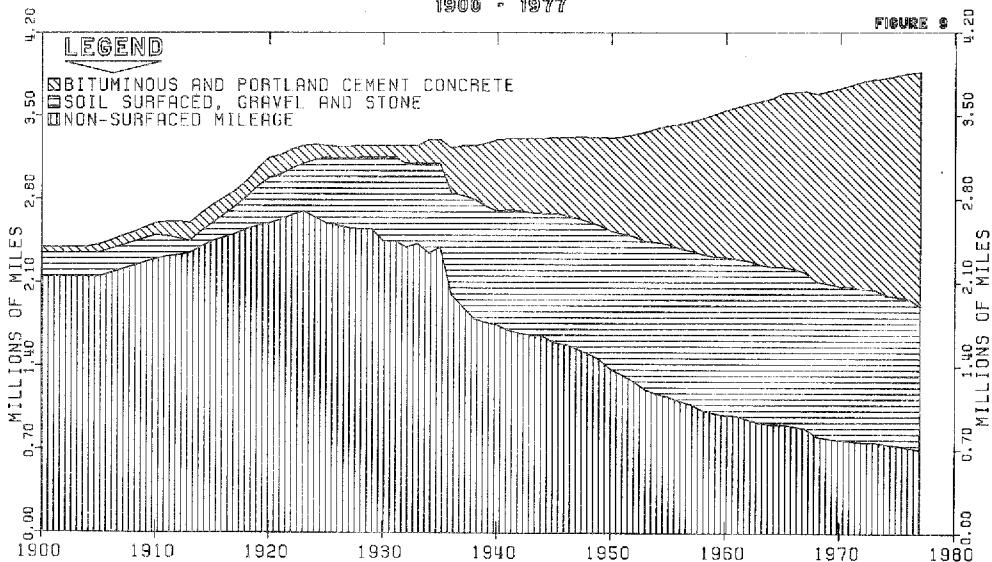
TOTAL EXPENDITURES FOR CAPITAL OUTLAY ON ROADS
AND STREETS UNDER STATE JURISDICTION
SHOWING SMSA PORTION - 1977
EXCLUDING TOLL FACILITIES

in millions of dollars



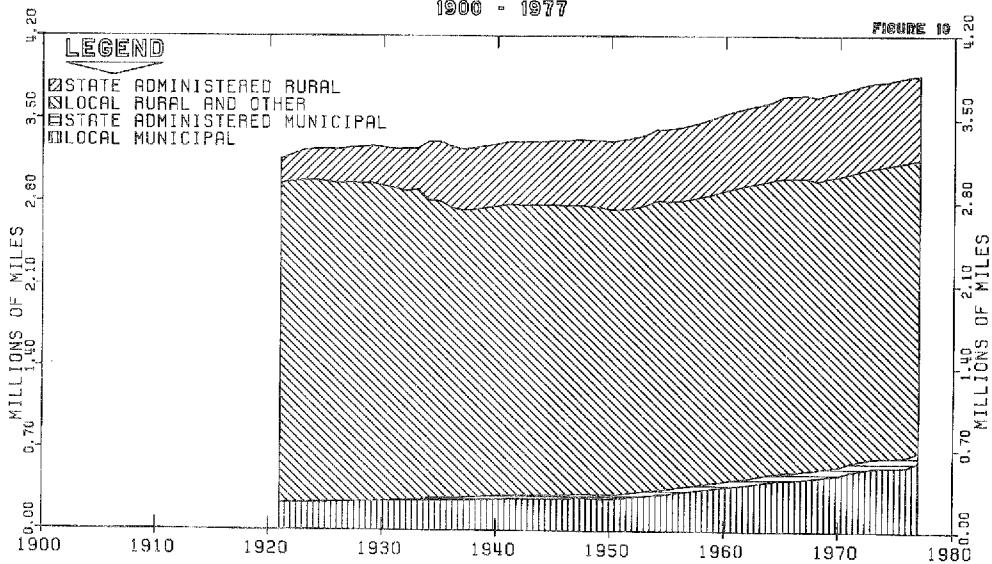
TOTAL ROAD AND STREET MILEAGE IN THE UNITED STATES
BY SURFACE TYPE
1900 - 1977

FIGURE 8



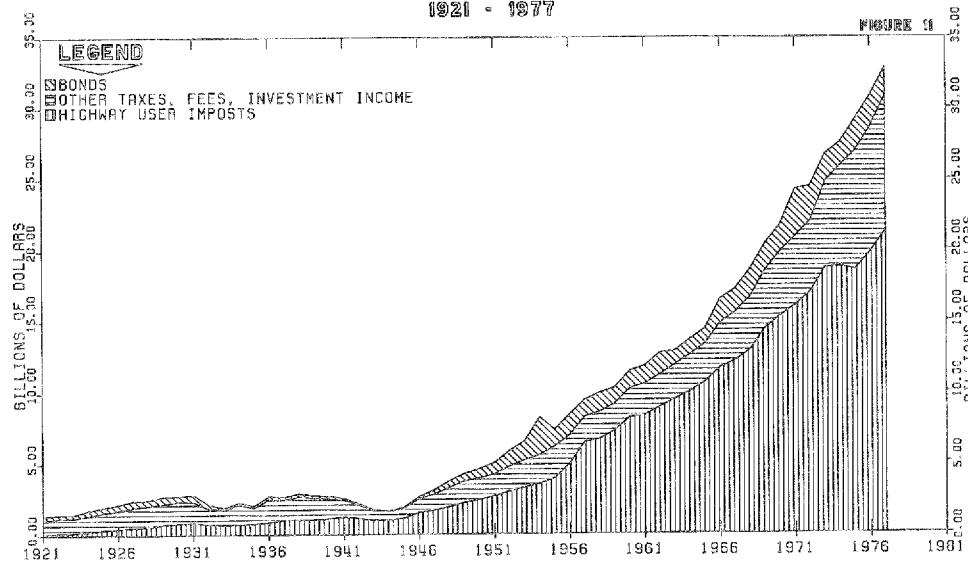
TOTAL ROAD AND STREET MILEAGE IN THE UNITED STATES
BY ADMINISTRATIVE JURISDICTION
1900 - 1977

FIGURE 10



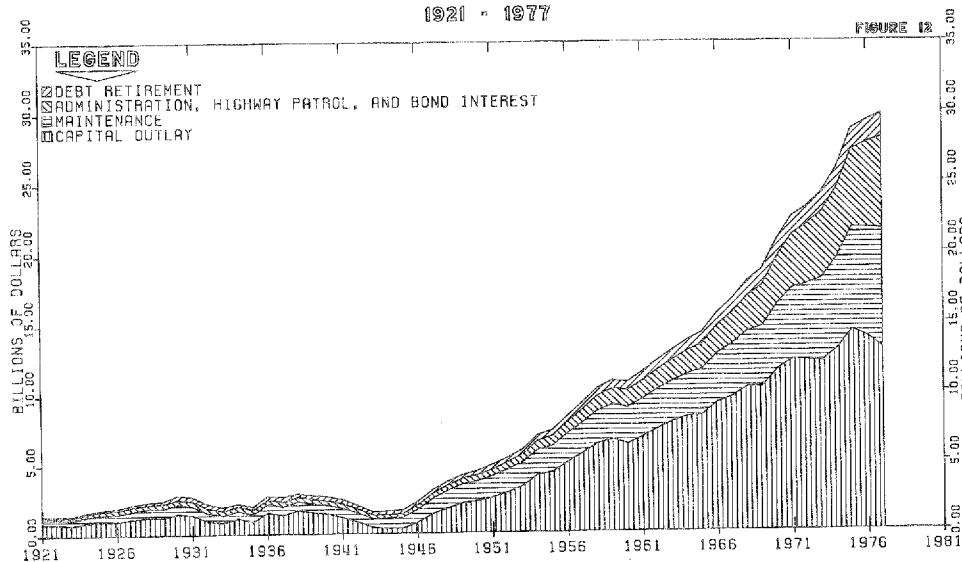
TOTAL RECEIPTS FOR HIGHWAYS, BY SOURCE

1921 - 1977



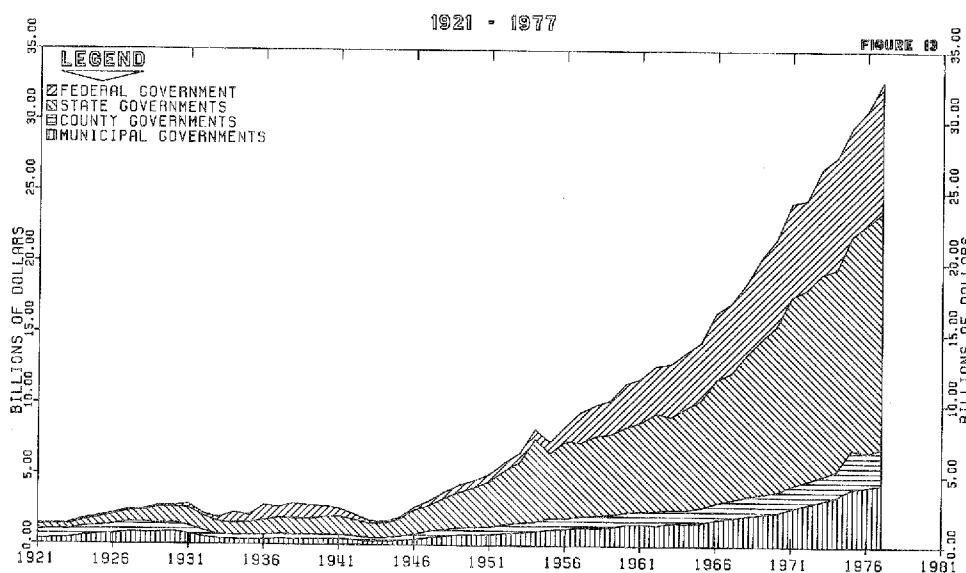
TOTAL DISBURSEMENTS FOR HIGHWAYS, BY FUNCTION

1921 - 1977



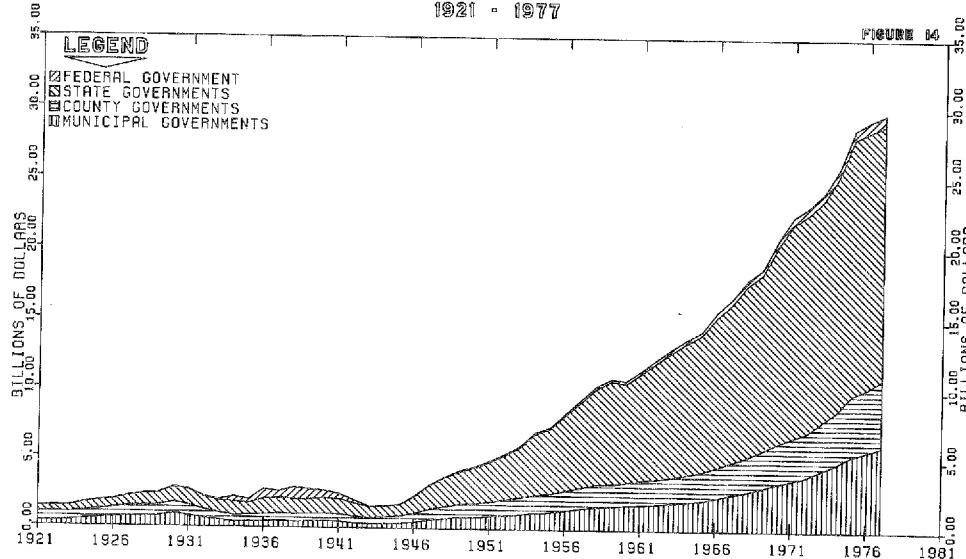
TOTAL RECEIPTS FOR HIGHWAYS, BY GOVERNMENTAL UNITS

1921 - 1977



TOTAL DISBURSEMENTS FOR HIGHWAYS, BY GOVERNMENTAL UNITS

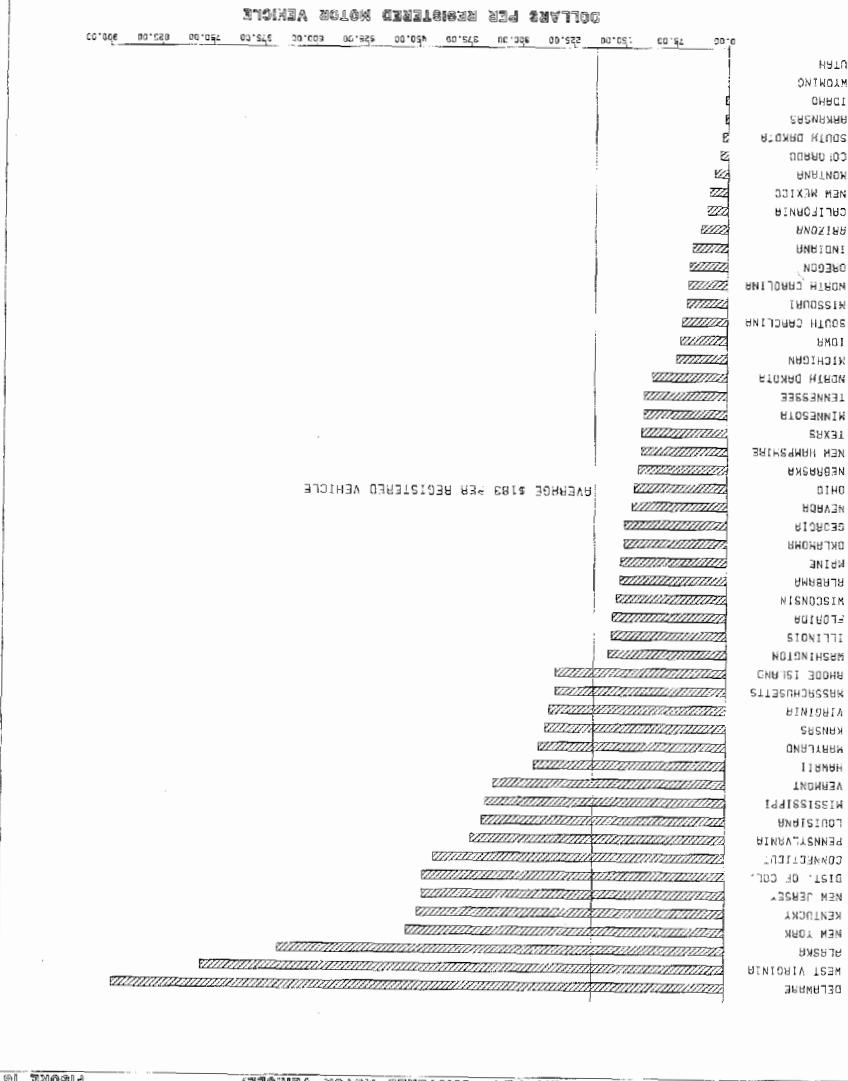
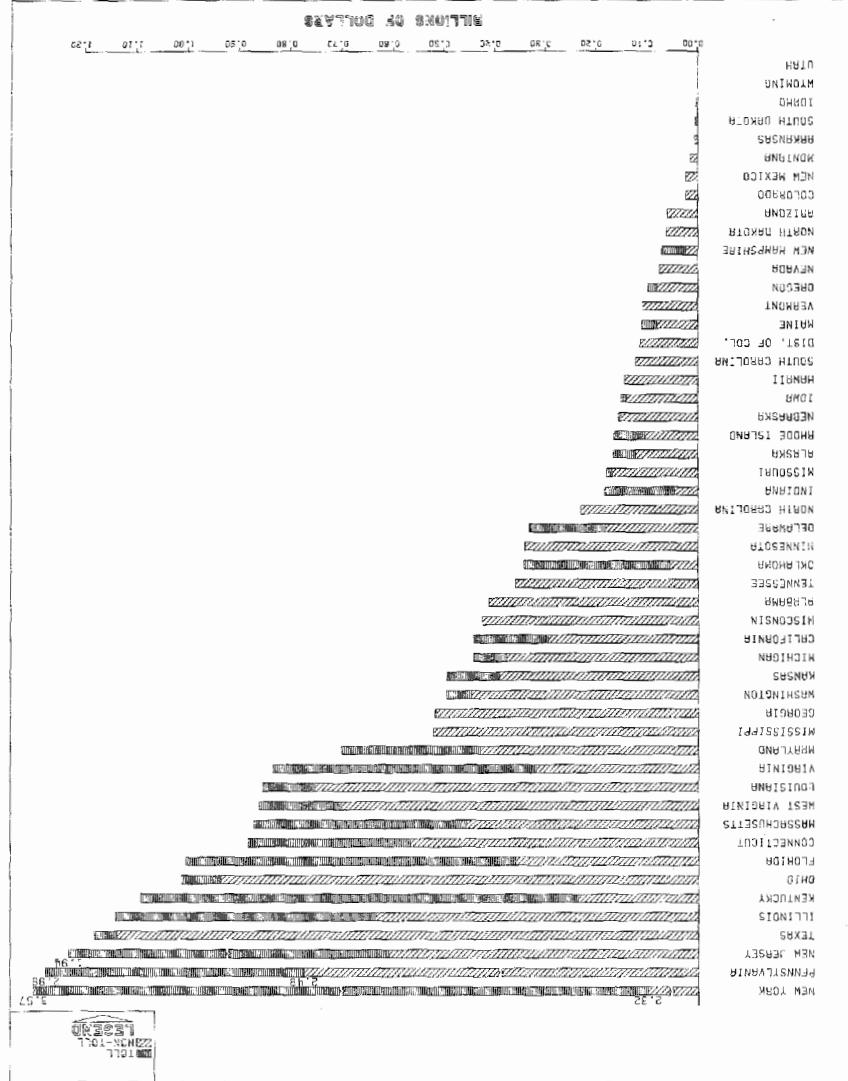
1921 - 1977



TOTAL HIGHWAY OBLIGATIONS OUTSTANDING

DECEMBER 31, 1976

FIGURE 15



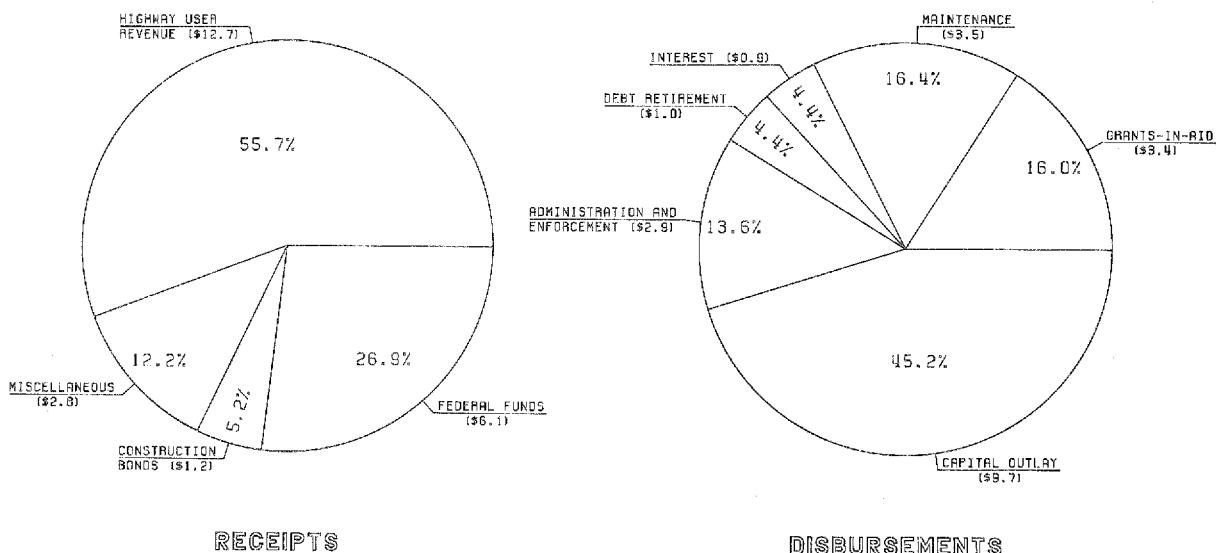
DOLLARS PER REGISTERED MOTOR VEHICLE
AS OF DECEMBER 31, 1976

TOTAL HIGHWAY OBLIGATIONS OUTSTANDING

FIGURE 16

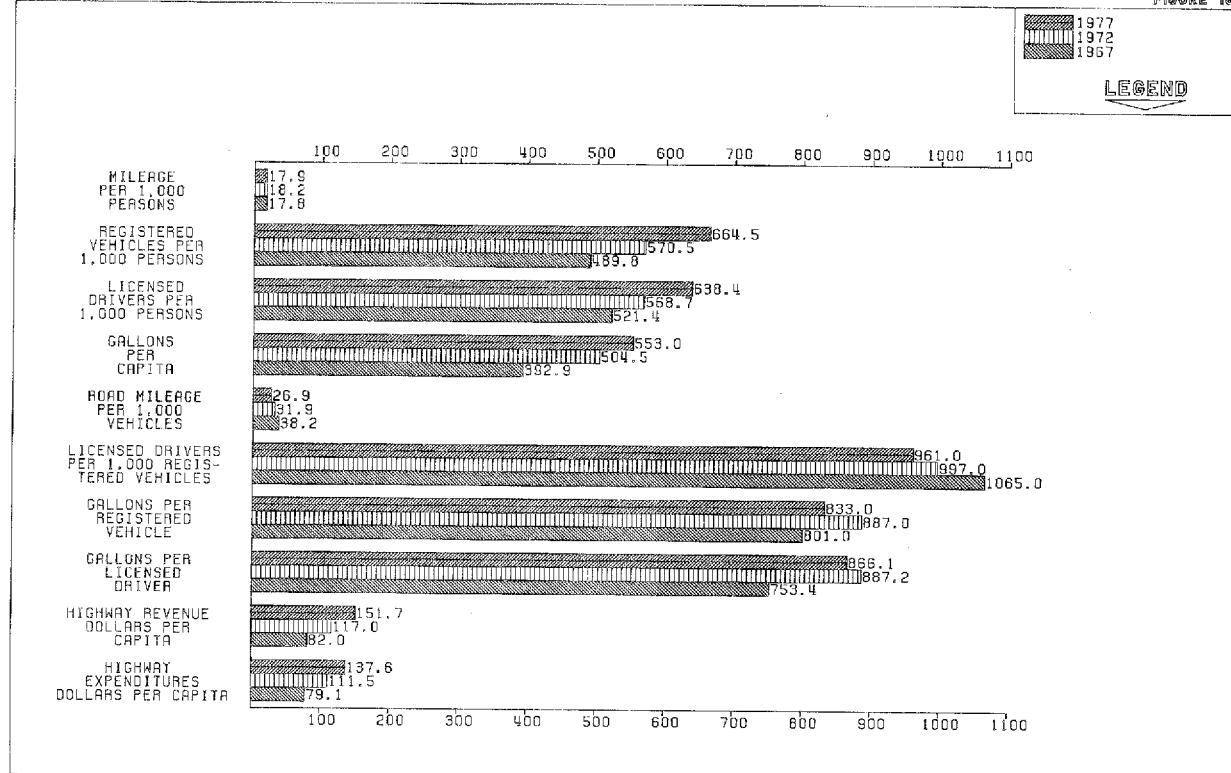
FIGURE 17

STATE RECEIPTS AND DISBURSEMENTS FOR HIGHWAYS
1977
(IN BILLIONS OF DOLLARS)



RELATIONSHIPS AMONG HIGHWAY MILEAGE, VEHICLES, DRIVERS,
FUEL CONSUMPTION AND FINANCING
1967, 1972 AND 1977

FIGURE 18



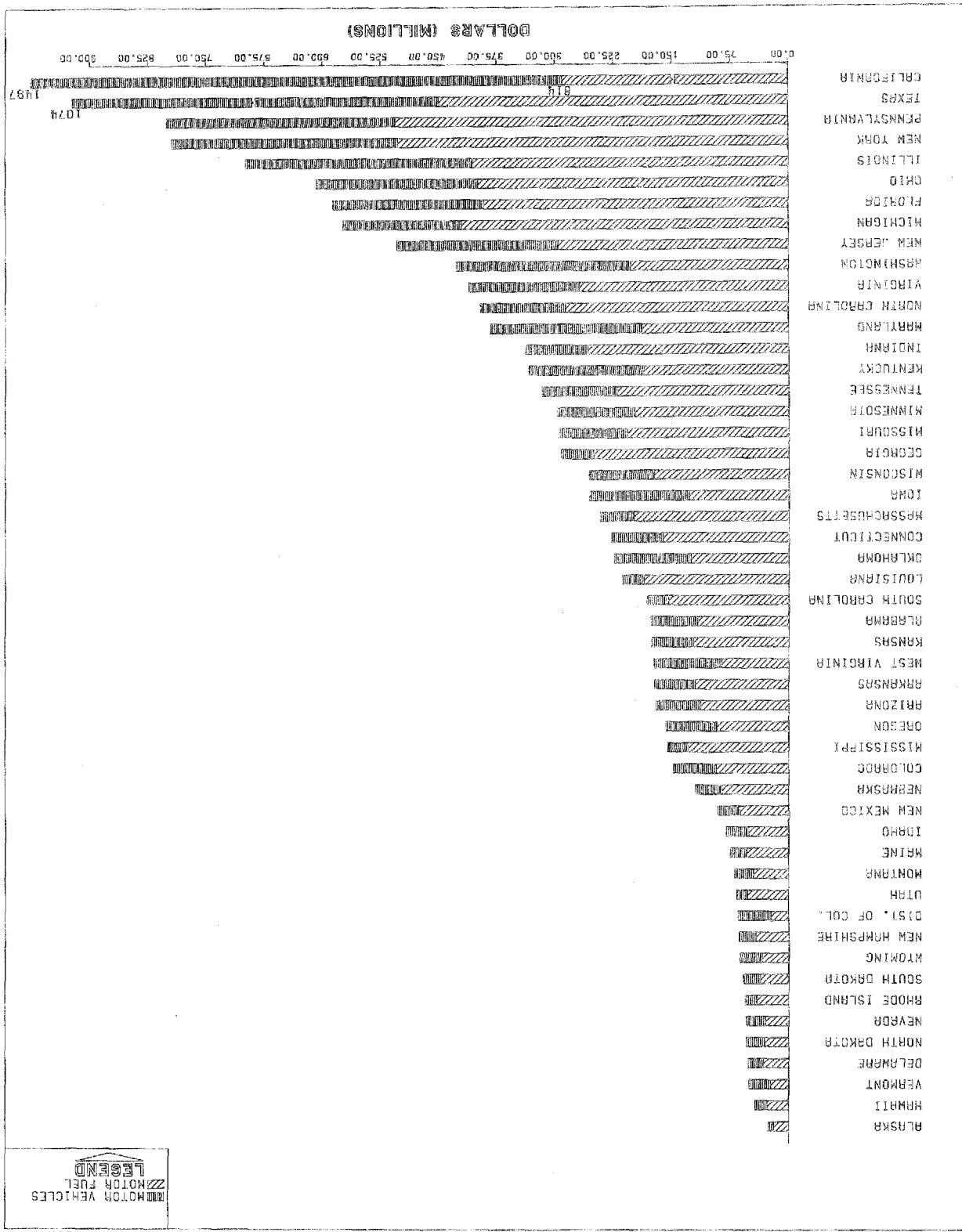


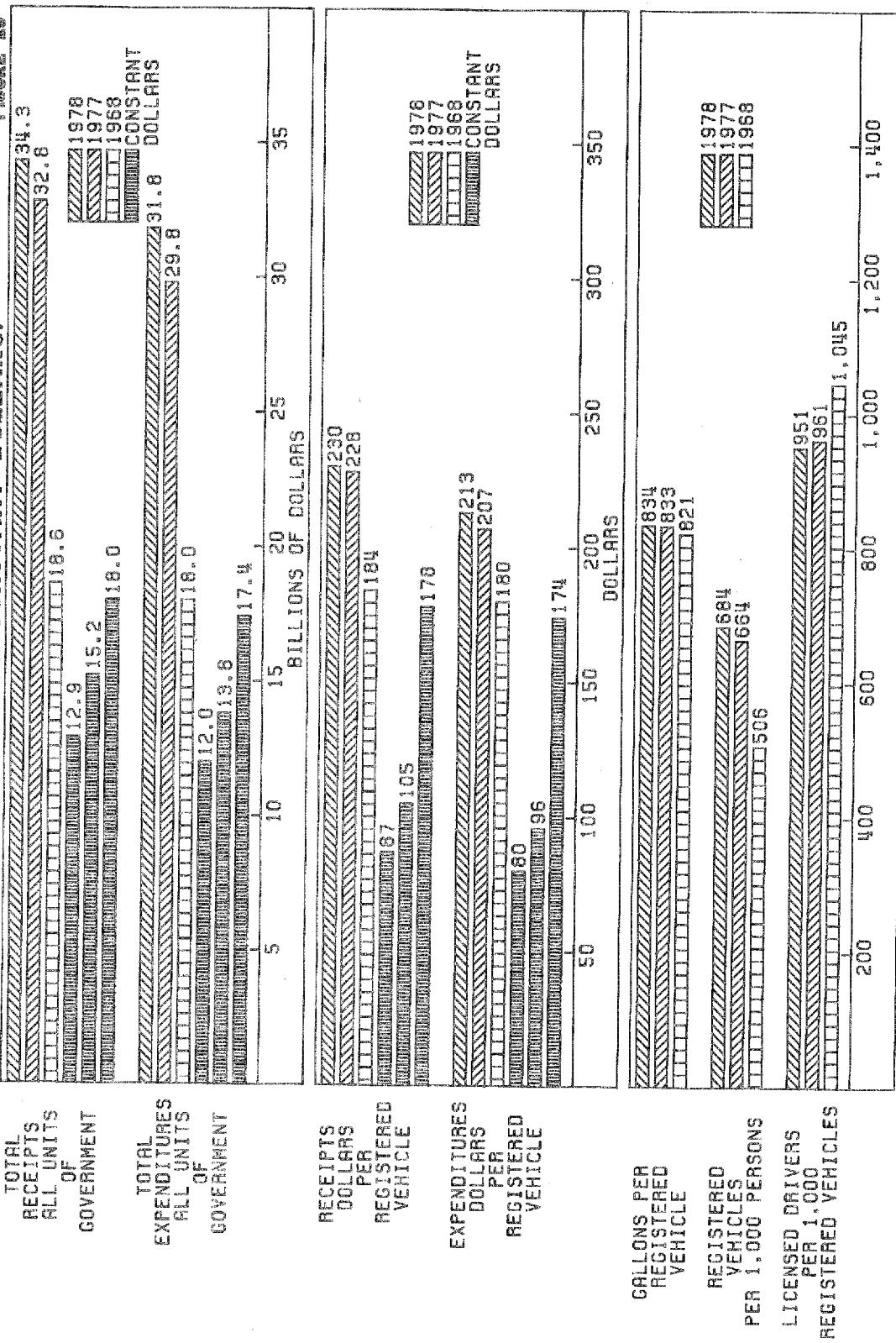
FIGURE 19 (IN MILLIONS OF DOLLARS)

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TOTAL HIGHWAY USER REVENUE

FINANCIAL, FUEL, AND VEHICLE RELATIONSHIPS 1968, 1977 AND 1978 ESTIMATED (CURRENT VS. 1967 CONSTANT DOLLARS)

FIGURE 20

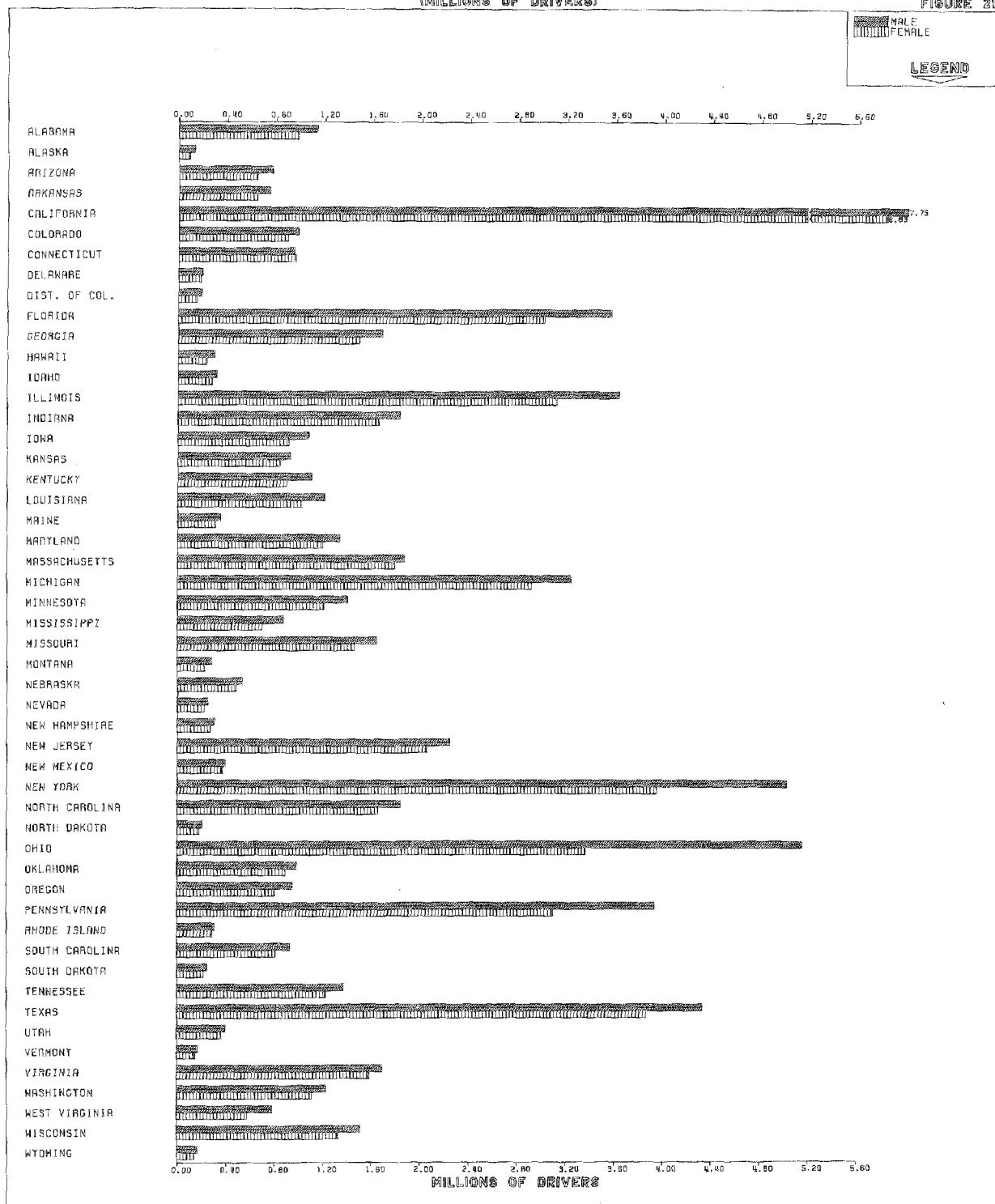


ESTIMATED LICENSED DRIVERS, BY SEX

1977

(MILLIONS OF DRIVERS)

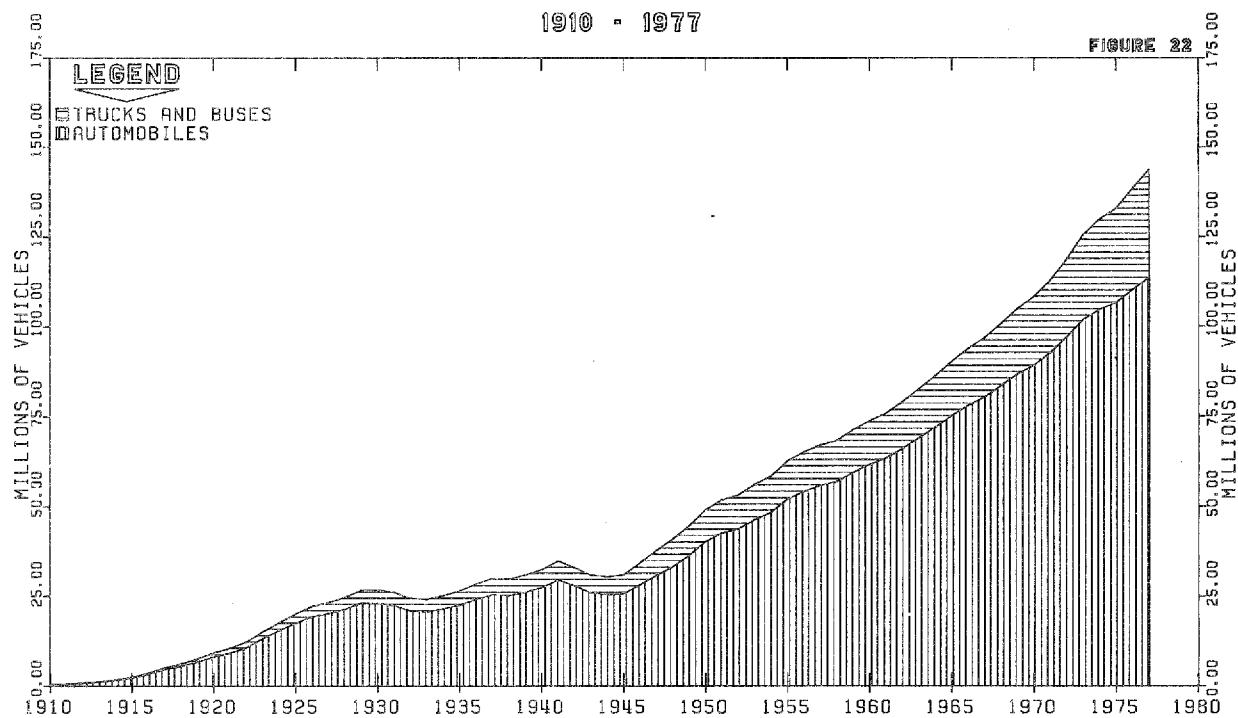
FIGURE 21



TOTAL MOTOR VEHICLE REGISTRATIONS

1910 - 1977

FIGURE 22



TOTAL MOTOR FUEL USE IN THE UNITED STATES (EXCLUDING "LOSSES")

1949 - 1977

FIGURE 23

