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PROGRESS REPORT ON MAINTENANCE AND OPERATIONS PERSONNEL

mode
1 highway transportation

subject areas
11 administration
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This report was prepared by the TRB Committee on Maintenance and Operations Personnel with the cooperation of the AASHTO Subcommittee on Maintenance. This report is the 38th in a series which began in 1944.

In 1971 the report was expanded to include Traffic Services personnel in addition to Maintenance Personnel. The policy questionnaire has been revised from time to time to keep it current with changing trends, but the general format of the report has been retained.

Response to the questionnaire was excellent this year, with all 50 states responding.

For comparative purposes, this report has been broken down into four regions as follows:

1. The North Atlantic States (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Vermont).
2. The Southeastern States (Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia and West Virginia).
3. The Mississippi States (Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota and Wisconsin).
4. The Western States (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Texas, Utah, Washington and Wyoming).

The following are the average monthly salaries of certain positions by regions, as of July 1, 1982, which gives a reasonable cross section for the comparison of current salaries in these four regions:

Job Title	AVERAGE SALARY (\$/MO.)			
	North Atlantic States	South Eastern States	Mississippi Valley States	Western States
State Maintenance Engineer	3410	3325	3434	3841
District Engineer	2923	3246	3310	3820
Area Supervisor	1779	1565	1967	2263
Laborer	926	778	1093	1118
Mechanic	1303	1136	1380	1667
Equipment Operator I	1016	876	1109	1196
Equipment Operator II	1096	1017	1331	1425
Equipment Operator III	1235	1132	1398	1615

PERSONNEL POLICIES

While all the states did not clearly indicate their data in some categories, the following can be determined from an analysis of the report on personnel policies:

Civil Service or Merit System

Only six states do not have a civil service, a merit system or some other comparable plan for all or part of their employees, as indicated by the following tabulation:

North Atlantic States	Pennsylvania
Mississippi Valley States	Indiana & North Dakota
Southeastern States	Arkansas & South Carolina
Western States	Montana

Retirement Plan

All states indicate their employees are protected by a state-sponsored retirement plan. In 43 of those states, all or part of the employees are also covered by Federal Social Security.

Nineteen states reported no compulsory retirement age. The compulsory retirement age is 65 in one state, 70 in 29 states, and 72 in one state. The retirement age is established by statute in 23 states and by policy in 8 states.

Forty-nine of the reporting states indicate voluntary retirement is possible at an earlier age after a prescribed number of years. The most prevalent minimum years of service for voluntary retirement is 10 years, while the most prevalent minimum retirement age is 55.

Vacation and Sick Leave

All states indicated that permanent employees are granted vacation and sick leave. The minimum or starting basis on vacations ranges from 48 to 168 hours per year, and maximum from 120 to 265 hours per year. Vacation time is cumulative in all 50 states, and the maximum time that may be carried over into a new year varies from 35 hours to unlimited, with two states reporting no limit on the amount of vacation that may be accumulated.

The minimum or starting basis on sick leave ranges from 48 to 168 hours per year, and the maximum from 48 to 240 hours per year. All states allow sick leave to be carried over into the ensuing year. The maximum that may be carried over into a new year ranges from 360 hours to unlimited, with 34 states reporting no limit to the amount that may be accumulated.

Insurance

All 50 states have a partially or wholly state-financed hospitalization plan for their permanent employees. Twenty-five of these plans are wholly state-financed. The plan is mandatory in 11 states.

Forty-three states have a partially or wholly state-financed life insurance plan for their permanent employees, with 21 of these wholly state-financed. The plan is mandatory in 17 states.

In 28 states all or part of the maintenance and operations personnel are protected against lawsuit by a state-financed liability plan.

Unionization

Fourteen states report that supervisory employees have collective bargaining rights, while in 28 states non-supervisory employees have collective bargaining rights.

Forty-four states report voluntary or mandatory organization of maintenance and operations supervisory personnel in unions or employee associations, with 14 states indicating no union or employee association for supervisory employees.

Forty-four states report mandatory or voluntary organization of their non-supervisory maintenance and operations employees in either national unions, local unions or employee associations, with six states indicating no union or employee association organization.

Service Awards

Forty-five states have some type of award for years of service.

Working Hours and Conditions

Fourteen states pay all employees on a salaried basis, with 20 other states paying all permanent field and supervisory employees on a salaried basis. Nine states pay all employees on an hourly basis.

Forty-three states have an 8-hour day, with 40 hours per week as the standard work-week. Five states have a less than 40-hour week.

Fifty states allow either compensatory time, straight time or time-and-a-half to their permanent field employees. For overtime work, 47 states report non-supervisory personnel earn time-and-a-half compensation for overtime. In 10 states, supervisory employees do not receive any allowance for overtime work.

Forty-eight states require their employees to report to an assembly point preparatory to their day's work, 46 states pay employees from the time they leave this assembly point until they return at the close of the day's work.

All states furnish hard hats and safety vests to their employees. All states furnish welding goggles and helmets, 42 states furnish some other types of protective clothing, even though minor, to their maintenance employees.

Thirty-two states have automatic or automatically recommended salary advances.

Fifty states have a formalized job classification plan.

Only 14 states use convict labor.

Only three of the states do not allow expenses to employees when they are away from their home station. Both meals and lodging are allowed on the basis of actual expenses in five states, actual expenses with a maximum in 11 states, and on a per diem basis in 13 states. In 20 states the basis of reimbursement for meals and lodging differs.

Forty-two states allow either total or partial reimbursement of moving expenses incurred when an employee is required to change his residence.

Maintenance Responsibility

The Maintenance Division is responsible for all or part of the original placement of highway signs in 24 states, for their replacement and maintenance in 43 states, and for pavement marking in 41 states.

In 45 states garage or shop operations for vehicle maintenance are under the jurisdiction of the Highway Department, in 32 states this is limited to Highway Department vehicles only, while in 10 states servicing is performed for some other state agencies and five states for all state agencies.

Lane Miles

The average lane miles per man varies from 4 to 39.6.

Basis of Crew Operations

The average number of lane miles handled by a general maintenance crew working out of one location varies from 50 to 1,000 according to the answers given.

Fifteen states report that the same crew handles traffic signs and striping, with the lane miles handled by each crew varying from 300 to 5,000.

Thirty-five states have special crews for traffic signs, with the lane miles handled by each crew varying from 139 to 6,950.

Thirty-seven states have special crews for striping, with the lane miles handled by each crew varying from 519 to 8,988 miles.

Equipment Management System

Twenty-four states reported they have implemented an equipment management system. Another 20 states indicated they intend to implement such a system.

TRB COMMITTEE A3C03

TRB-AASHTO JOINT COMMITTEE ON MAINTENANCE AND OPERATIONS PERSONNEL

DEFINITIONS OF MAINTENANCE AND OPERATIONS PERSONNEL TITLES

NOTE: In the following definitions of titles of maintenance personnel, the first subdivision in the state for supervision purposes is called a "district" or "division." The first subdivision in a district or division is called a "residency."

MAINTENANCE PERSONNEL TITLES

<u>Title No.</u>	<u>Title and Description</u>
1.	<u>State Maintenance Engineer</u> - One in an executive capacity who supervises all activities of maintenance for the State Highway and Transportation Department.
2.	<u>Assistant State Maintenance Engineer</u> - One who assists the State Maintenance Engineer in the work of supervising the activities of maintenance.
3.	<u>District Engineer</u> (In some states, called <u>Division Engineer</u> or <u>Regional Engineer</u>) - One in an executive capacity who supervises highway activities within a district.
4.	<u>District Maintenance Engineer</u> - One in an executive capacity who supervises maintenance activities of highways within a district.
5.	<u>Assistant District Maintenance Engineer</u> - One who assists the District Engineer and/or the District Maintenance Engineer in supervising maintenance within a district.
6.	<u>Resident Maintenance Engineer</u> - One who directs the activities of all maintenance employees and equipment and oversees the maintenance of highways within a residency.
7.	<u>Area Supervisor</u> (In some states, called <u>Superintendent</u>) - One who directs the activities of all maintenance employees and equipment and oversees the maintenance of highways within a residency, excluding engineering requirements.
8.	<u>Gang Foreman</u> - One who directs the activities of a group of men engaged in maintenance and betterment work such as a grading crew, bituminous repair crew, concrete pavement patching crew, bridge repair crew, roadside maintenance crew, etc.
9.	<u>Sectionman</u> - One who in reality is a working foreman, or who can and does perform any of the work necessary to properly maintain the highways within a specified territory; in addition, supervises the work of operators and laborers when necessary. A highly skilled and trained man.
10.	<u>Laborer</u> - One who performs manual labor.

Title

No.

Title and Description (Contd)

11. Skilled Craftsman - One who, through special training or experience, has become proficient in a trade such as a carpenter, painter, mason, plumber, etc.
12. Shop Superintendent - One who is responsible for the operation of a central garage and the supervision of the maintenance and repair of equipment.
13. Garage or Shop Foreman - One who is responsible for the operation of a garage and the supervision of the maintenance and repair of equipment.
14. Mechanic - One who, under direct supervision, maintains and repairs all types of automotive equipment.
15. Mechanic Helper - One who assists the mechanic in the maintenance and repair of all automotive equipment.
16. Equipment Operator I - Operators of light trucks, mowers, patching rollers, etc.
17. Equipment Operator II - Operators of heavy trucks, light graders, and rollers used on resurfacing projects.
18. Equipment Operator III - Operators of specialized equipment such as cranes, shovels, heavy graders, paving machines, etc.
19. Timekeeper or Clerk - One who keeps the time records of employees, hours of equipment usage, quantities of materials received, used, and on hand; maintenance cost records, etc.

TRAFFIC OPERATIONS PERSONNEL TITLES

20. State Traffic Engineer - One in an executive capacity who supervises all activities related to traffic operations of the State Highway and Transportation Department.
21. Assistant State Traffic Engineer - One who assists the State Traffic Engineer in the work of supervising traffic operations.
22. State Traffic Maintenance Engineer - One in an administrative capacity who programs and implements all phases of maintenance for traffic control activities under the supervision of the State Maintenance Engineer.
23. District Traffic Engineer - One in an executive capacity who supervises traffic operations within a district. May, in some cases, be two positions: one for design and one for maintenance.

Title

- | <u>No.</u> | <u>Title and Description (Cont'd)</u> |
|------------|--|
| 24. | <u>Assistant District Traffic Engineer</u> - One who assists the District Traffic Engineer in the work of supervising traffic operations within a district. |
| 25. | <u>Traffic Supervisor</u> - One who directs the activities of all employees and equipment related to traffic operations within a district. |
| 26. | <u>Sign Supervisor</u> - One who directs the activities of all signing, both fabrication and erection. |
| 27. | <u>Sign Shop Foreman</u> - One who directs a crew of men in the activity of fabricating traffic signs. |
| 28. | <u>Traffic Signal & Lighting Foreman</u> - One who directs a crew of men in activities related to the operation and maintenance of traffic signals and lighting. |
| 29. | <u>Striper Foreman</u> - One who directs a crew of men in activities related to pavement markings. |
| 30. | <u>Sign Erection Foreman</u> - One who directs a crew of men in activities related to the erection and maintenance of all traffic signs. |
| 31. | <u>Sign Fabricator</u> - One who specializes in the fabrication of traffic signs. |
| 32. | <u>Sign Technician</u> - One who operates equipment and supervises laborer for all activities associated with signing, both fabrication and erection. |
| 33. | <u>Traffic Signal & Lighting Technician</u> - One who works in a technical capacity for operating and maintaining traffic signal equipment and highway lighting. |
| 34. | <u>Striper Technician</u> - One who operates equipment and supervises laborers regarding all activities of pavement markings. |

OTHER RELATED PERSONNEL TITLES

35. Chief Engineer - One in an executive capacity who supervises all engineering activities of a State Highway Department.
36. Project Engineer - One who has charge in the field of one or more highway construction projects under the general supervision of a Division Construction Engineer or a Division Engineer.

(7-1-82)

Definitions of Maintenance and Operations Personnel Titles

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GENERAL DEFINITIONS

Maintenance - The preservation and upkeep of a highway, including all of its elements, in as nearly as practicable its originally constructed condition or its subsequently improved condition.

Traffic Operations - The operation of a highway facility and services incidental thereto to provide safe, convenient, and economical highway transportation.

NOTE: The word "Operations" in the committee's title indicates "Traffic Operation."

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MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL TITLES USED BY STATE HIGHWAY DEPARTMENTS (as of July 1, 1982)

MAINTENANCE PERSONNEL:

State	(1) State Maintenance Engineer	(2) Assistant State Maintenance Engineer	(3) District Engineer	(4) District Maintenance Engineer
Alabama	State Mtce Engineer	Asst State Mtce Engr	Division Engineer	Division Mtce Engr
Alaska	Deputy Commissioner	Asst Dpty Commissioner	-	Regional Director
Arizona	Asst State Engr, Mtce	Mtce Opers Engineer	District Engineer	Dist Mtce. Engr or Mtce Superintendent
Arkansas	State Mtce Engineer	Asst State Mtce Engr	District Engineer	Dist Mtce Supt
California	Chief, Div of Mtce	Chief, Office of	Dist Dir of Transp	Dist Mtce Engineer
Colorado	-	-	-	-
Connecticut	Director of Mtce	Mtce Opers Manager Mtce Planning Mgr	-	Dist Mtce Manager
Delaware	Chief Mtce Engineer Civil Engr VI	Asst Chief, Civil Engr VI	Civil Engr VI	Civil Engr III Civil Engr V
Florida	-	-	-	-
Georgia	State Mtce Engineer	Asst State Mtce Engr Asst Chief, Const & Mtce	District Engineer	Asst Dist Engr, Mtce
Hawaii	Chief, Hwys Div	Asst Mtce Engineer Engr Manager 1 Section Chief	District Engineer	Dist Mtce Engineer
Idaho	Mtce Supervisor Engr Manager 3 State Mtce Engineer	Asst Mtce Engineer Engr Manager 1 Section Chief	District Engineer Engr Manager 3 District Engineer	Dist Mtce Engineer Engr Manager 1 Dist Mtce Engineer
Illinois	-	-	-	-
Indiana	Hwy Engr Supv II	Hwy Engr Supv III	Hwy Engr Supv III	Hwy Engr Supv IV
Iowa	Maintenance Engineer	Asst Mtce Engineer	District Engineer	Dist Mtce Engineer
Kansas	Chief, Bureau of Const/Mtce Dir, Div of Mtce	Asst Chief, Bureau of Const/Mtce Asst Dir, Div of Mtce	District Engineer	Dist Mtce Engineer
Kentucky	-	-	Dist Hwy Gen Mgr	Dist Opers Engineer
Louisiana	Dir of Mtce & Field Operations Dir, Bureau of Mtce & Operations	Chief Mtce & Opers Engr Mtce Sys Engr et al Hwy Mtce Engineer	District Admin	Dist Mtce Engineer
Maine	Deputy Chief Engr, Opers	Asst Chief Engr, Mtce	District Engineer	-
Maryland	Maintenance Engineer	Asst Mtce Engineer	Dist Hwy Engineer	Dist Mtce Engineer
Massachusetts	Engineer of Mtce	Asst Engr of Mtce	District Engineer	Dist Mtce Engineer
Michigan	State Mtce Engineer	Mtce Coord Engineer Equipment Engr et al Asst Mtce Engineer	District Engineer	Dist or Area Mtce Engr
Minnesota	Maintenance Engineer	Asst Div Engr, Mtce	District Engineer	Dist Mtce Engineer
Mississippi	Div Engr, Mtce & Traf	Asst Div Engr, Mtce	District Engineer	Dist Mtce & Traf Engr
Missouri	Admin, Mtce & Equip Div	Chief, Mtce Mgmt Bureau	-	Chief, Field Mtce Bureau
Montana	Maintenance Engineer	Mtce Opers Manager	Hwy Dist Engineer	Hwy Mtce Dist Supt
Nebraska	Chief Mtce Engineer	Asst Mtce Engineer	District Engineer	Asst District Engr
Nevada	State Mtce Engineer	Asst Mtce Engineer	Division Engineer	-
New Hampshire	Chief Engr, Const & Mtce	Chief, Bureau of Mtce	Regional Engr, Transp	Regional Mtce Engineer
New Jersey	Director of Operations	Chief, Mtce Section	District Engineer	Dist Mtce Engineer
New Mexico	Dir, Highway Mtce	Asst Dir, Hwy Mtce	-	Regional Hwy Mtce Engr
New York	Mgr of Mtce & Equip Br	Head of Maintenance	Division Engineer	Asst Division Engineer
North Carolina	State Mtce Engineer	Asst State Mtce Engr	District Engineer	Asst District Engineer
North Dakota	Engineer of Mtce	-	Dist Deputy Dir	Dist Opers Engineer
Ohio	State Mtce Engineer	Asst State Mtce Engr	Division Engineer	Div Mtce Engineer
Oklahoma	Mgr, Maintenance Sec	Mtce Opers Supervisor Mtce Serv Supervisor Civil Engineer 5	Region Engineer	Region Mtce Engineer
Oregon	Dir, Highway Mtce	Dpty Asst Dir of Mtce	Hwy Dist Engr 3	Civil Engineer 5 Hwy Dist Engr 1
Pennsylvania	Asst Dir, Div of Mtce	Asst State Mtce Engr	District Engineer	Dist Mtce Engineer
Rhode Island	State Mtce Engineer	Mtce Opers Engineer	District Engineer	Asst Dist Engr/Mtce
South Carolina	Const/Mtce Engineer	Engr Admin of Mtce	Engr Director	Asst to Engr Dir
South Dakota	Chief Engr, Safety & Mtce Operations Engineer of Mtce	Engineer V	District Engineer	Engineer V
Tennessee	Engineer of Mtce	-	District Engineer	Dist Mtce Engineer
Texas	Dir of Maintenance	Chief of Mtce Support Chief of Tech Services	-	Dist Transp Admin
Texas	Hwy Div Administrator	Hwy Div Asst Admin	Hwy Div Administrator	Hwy Asst Dist Engr
Utah	State Mtce Engineer	Hwy Mtce Engineer	Dist Administrator	Dist Mtce Engineer
Vermont	Director of Mtce	Asst Dir of Mtce	District Engineer	Asst Dist Engr, Mtce
Virginia	Chief Mtce Engineer	Asst Chief Mtce Engr	District Director	Dist Chief Mtce Engr
Washington	State Constr & Mtce Engr	-	District Engineer	Dist Mtce Engineer
West Virginia	-	-	-	-
Wisconsin	-	-	-	-
Wyoming	-	-	-	-

(5) Assistant District Maintenance Engineer	(6) Resident Maintenance Engineer	(7) Area Supervisor	(8) Gang Foreman	(9) Sectionman	State
Asst Div Mtce Engr	District Engineer	Highway Supt	Incl 16, 17, 18	Incl 16, 17, 18	Alabama
Transp Mtce Mgr	Transp Mtce Supt II	Transp Mtce Supt I	Transp Mtce Ldr II & III	Transp Mtce Ldr I	Alaska
Transp Mtce Supt II	-	Hwy Mtce Crew Supv	Inc. Title 7	Hwy Mtce Wkr III	Arizona
Asst Dist Mtce Supt	-	Area Foreman	Mtce Job Supt	Crew Leader	Arkansas
Asst Dist Mtce Engr	Region Superintendent	Area Supt	Supervisor	Leadworker	California
-	-	-	-	-	Colorado
Mtce Opers Supt	-	Mtce Gen Supv	Mtce Supervisor	Mtce Crew Ldr	Connecticut
Hwy Mtce Opers Mgr	-	Hwy Mtce Supt Hwy Mtce Supv	Hwy Mtce Asst Supv	Labor Foreman III, II, I	Delaware
-	-	-	-	-	Florida
Asst Dist Mtce Engr	Area Engr or Asst Area Engineer	-	Hwy Mtce Foreman II	-	Georgia
-	-	Const & Mtce Supt VI	Hwy Const & Mtce Supv	Hwy Labor Supv Hwy Mtce Supv	Hawaii
-	-	Transp Mtce Foreman	-	Hwy Mtce Oper Leadworker	Idaho
-	Dist Field Engineer	-	Hwy Mtce Lead Wkr	Hwy Maintainer	Illinois
Hwy Engr Supv V	Hwy Engineer III & IV	Mtce Supv III	Hwy Mtce Supv IV	Hwy Mtce Supv V	Indiana
-	Resident Mtce Engr	Hwy Mtce Supt 1,2,3	Hwy Mtce Supt 2&3	-	Iowa
-	Area Engineer	Dist & Area Supt	Dist & Area Supv	Sub-Area Supv	Kansas
Dist Mtce Engr	-	-	Highway Foreman	Asst Hwy Foreman	Kentucky
Asst Mtce Engr	-	Hwy Mtce Supt Equip Supt et al Hwy Dist Supv	Foreman I,II,III	-	Louisiana
-	-	-	Highway Foreman	Crew Leader	Maine
Asst Dist Engr, Mtce	-	Hwy Mtce Supv	-	Supv, Road Mtce	Maryland
Asst Dist Mtce Engr	-	Hwy Mtce Foreman	Hwy Repair Foreman	Hwy Repair Wkr Foreman	Massachusetts
Asst Dist Mtce Engr	-	Transp Mtce Supt	Transp Mtce Supv VI	Transp Mtce Supv IVB	Michigan
Mtce Opers Engr	Incl 4 & 5	Bridge Supv Hwy Mtce Supt et al Hwy Mtce Supt II	Bridge Foreman Hwy Mtce Foreman Hwy Mtce Frm II	Hwy Mtce Worker Hwy Mtce Wkr Sr Hwy Mtce Frm I	Minnesota
-	-	-	-	-	Mississippi
Maintenance Supt	-	Mtce Area Supv	Special Mtce Frm	Hwy Mtce Foreman	Missouri
-	-	Mtce Supervisor	-	Field Mtce Supv A & B	Montana
-	-	Hwy Mtce Supt	Hwy Mtce Supv	-	Nebraska
-	-	Hwy Mtce Supt	Sr Hwy Mtce Frm	Hwy Mtce Foreman	Nevada
Asst Div Engineer	Mtce Supervisor	Mtce Superintendent	Const Foreman	Hwy Patrol Frm	New Hampshire
Proj Engr, Mtce	Reg Mtce Superv	Area Supervisor	Frm, Hwy Mtce	Asst Frm, Hwy Mtce	New Jersey
Mtce Superintendent	-	Asst Mtce Supt	Hwy Mtce Supv I, II, III	Hwy Supv Mtce Lead Worker	New Mexico
Asst Reg Hwy Mtce Engr	Resident Engineer	Hwy Mtce Supv II	Bridge Rpr Supv II	Hwy Mtce Supv I	New York
District Engineer	County Mtce Engr Landscape Engr	Rd Mtce Supv Landscape Supv Hwy Mtce Supt	Mtce Crew Ldr II	Incl 8	North Carolina
-	-	-	Hwy Mtce Foreman	Equip Oper III	North Dakota
Dist Mtce Engineer	-	County Supv	Hwy Wkr Supv	Hwy Worker 3	Ohio
Field Mtce Engr	-	Transp Mtce Supt	Transp Mtce Supv	-	Oklahoma
Asst Region Engr	District Mtce Supv	-	Hwy Mtce Supv	Asst Supervisor or Special Supv	Oregon
Civil Engineer 4 Hwy Mtce Mgr 4	-	Hwy Mtce Mgr 2,3,4	Hwy Foreman 1,2,3	-	Pennsylvania
-	Chief Hwy Mtce Supv	Hwy Mtce Supv	Road Mtce Supv	Labor Foreman	Rhode Island
-	Resident Mtce Engr	-	Hwy Mtce Crew Supv I, II, III	-	South Carolina
-	Resident Mtce Engr	Hwy Mtce Supt	Hwy Mtce Supv	Hwy Mtce Foreman	South Dakota
Engineer 4	Engr Tech 4 Engineer 4	Dist Mtce Supt	Asst Dist Mtce Supt	Mtce Crew Ldr	Tennessee
Engineer IV	-	Mtce/Const Supt	Mtce/Const Frm	Mtce/Const Supv	Texas
Mtce Opers Supv	-	Station Supv	Hwy Opers Supv	-	Utah
-	-	Transp Mtce Gen Supervisor	Bridge Mtce Supv Transp Mtce Wkr Highway Foreman	Transp Mtce Wkr B	Vermont
Hwy Asst Dist Engr	Hwy Res Mtce Supv	Hwy Mtce Supt B	-	-	Virginia
Asst Dist Mtce Engr	-	Highway Supt	Mtce Supervisor	Mtce Lead Tech	Washington
-	-	County Mtce Supt	Asst Co Mtce Supt	Foreman	West Virginia
Area Mtce Supv	-	Asst Area Supv	(County)	(County)	Wisconsin
-	-	Hwy Mtce Area Supv	Hwy Mtce Area Crew Leader	-	Wyoming

MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL TITLES USED BY STATE HIGHWAY DEPARTMENT (as of July 1, 1982)

MAINTENANCE PERSONNEL (cont'd):

	(10)	(11)	(12)	(13)	(14)
State	Laborer	Skilled Craftsman	Shop Superintendent	Garage or Shop Foreman	Mechanic
Alabama	Laborer	Skilled Craftsman	Equip Mtce Supv	Equipment Repair Supv	-
Alaska	-	-	-	-	-
Arizona	Groundskeeper I & II	Bldg Mtce Wkr II	Equip Shop Supv II	Equip Shop Supv I et al	Equip Mech I & II
Arkansas	General Laborer	Welder	Equip Mtce Supv	Shop Foreman	Mechanic
California	Mtce Worker	Carpenter Struc Steel Painter	Shop Superintendent	Shop Foreman	Hvy Equip Mech
Colorado	-	-	-	-	-
Connecticut	DOT Maint II	Qual Craft Worker	Repair Garage Supv	-	Auto & Equip Mech
Delaware	-	-	Hwy Equip Supt	Auto Supervisor	Auto Mechanic III Auto Mechanic II
Florida	-	-	-	-	-
Georgia	Laborer I	Skilled Laborer	Mtce Shop Manager	Mechanic Shop Supv	Mechanic, Senior
Hawaii	Gen Laborers & Trade Hlpr	Bridge Mtce Wkrs Carpenters et al	Auto Mech Supv	Auto Mech II	Auto Mech I & Machinist
Idaho	-	Utility Craftsman	Shop Superintendent	Shop Foreman	Mechanic
Illinois	-	-	-	-	Automotive Moch
Indiana	Hwy Mtce Wkr IV	Engineer Asst V	Purchasing Admin V	Hwy Mechanic Supv IV	Hwy Equip Mech II
Iowa	Mtce Worker 1&2	-	-	Hwy Mtce Supt 2	Auto Mechanic
Kansas	-	-	Shop Superintendent	Auto Mechanic II	Auto Mechanic I
Kentucky	Mtce Laborer	Carp, Bridgemen Welders	-	Garage Foreman	Auto & Diesel Mechanic
Louisiana	Labor Utility Bridge Tender Hwy Worker I	Mtce Repairman, Pntr Carpenter et al	Auto Shop Supv Equip Specialist Equip Superintendent	-	Auto Mechanic Auto Repair et al Auto Mechanic
Maine	-	Mach, Elec, Carp & Other Trades	-	Auto Mechanic Foreman	-
Maryland	Highway Worker	Skilled Craftsman	Dist Equipment Supv	Auto Serv Supv II	Auto Serv Spec
Massachusetts	Laborer	-	Supt, Shop & Equip	Dist Hwy Equipment Frm	Motor Equipment Repairman
Michigan	Laborer IB	Bridge Wkr IIIB, IV, V	Motor Equipment Supt VIIIB	Transp Mtce Supv VI	Auto Mechanic IVB
Minnesota	Laborer 1	Bridge Worker	Equip Fabric Supt Hwy Equip Supv	Hwy Equip Mech Frm	Hwy Equip Fld Mech
Mississippi	Laborer 2 et al Gen Serv Emp II	-	Equip Mtce Supt	Equip Repair Frm	Hwy Equip Mech Equip Mechanic
Missouri	-	-	Dist Garage Foreman	Chief Shop Mechanic	Shop Mechanic
Montana	Laborer	Carpenter	Equip Mechanic Frm	Working Shop Foreman	Mech/Mach
Nebraska	-	-	Hwy Mech Supt	Hwy Mech Supervisor	Auto Mech II
Nevada	Hwy Mtce Laborer	Hwy Maintainer	Hwy Equip Opers Supv	Supv Equip Mech II	Equip Mech II
New Hampshire	Hwy Maintainer I	Asst Hwy Pat Frm	Garage Superintendent	Garage Frm/Shop Frm	Hvy Equip Mech Auto Mechanic
New Jersey	Mtce Worker	Brdge & Const Repr	Supv Garage Foreman Master Mech	Foreman & Asst Frm Mech	Auto Mechanic Auto Mechanic Auto Body Rpm
New Mexico	Utility Wkr I&II Mtce Worker I&II	Mtce Specialist	-	Auto Shop Frm I & II	Auto Body Rpm Hwy Equip Spec Mtce Equip Mech
New York	Laborer	Sign Shop Painter Sign Shop Metal Wkr	Regional Equip Mgr	Motor Equipment Repair Supv I	Mtce Equip Mech
North Carolina	Gen Utility Wkr	Mtce Mech I, II	Equipment Supt	Mechanic Supv I & II	Mechanic I & II
North Dakota	Mtce Worker I	-	Motor Veh Shop Frm	-	Mechanic I & II
Ohio	Hwy Worker 2	Painter, Welder et al	Equip Mtce Supt 3	Equip Mtce Supt 2	Auto Mechanic
Oklahoma	-	Mtce Repair Tech	Auto Shop Supt	Auto Shop Supv	Auto Mechanic II
Oregon	Laborer	Elec or Carpenter	Hwy Shop Supt	Auto Shop Supv Hwy Shop Supv	Hvy Equip Mech
Pennsylvania	Hwy Mtce Wkr Semi-Skld Laborer	Welder, Carpenter Mason & Painter	-	Hwy Equip Mgr 1,2,3	Auto Mech & Supv Diesel Mechanic
Rhode Island	Laborer	Semi-Skilled Labr	Auto Serv Spec	Auto Mech Foreman	Auto Mechanic
South Carolina	Hwy Mtce Wkr I	-	-	Trades Wkr Supv	Mechanic
South Dakota	-	Mechanic II	Equip Shop Foreman	-	Mechanic I & II
Tennessee	Utility Wkr I	Carpenter, Welder Electrician	Reg Garage Supt	Reg Garage Supv	Mechanic
Texas	Mtce Tech I & II	Mtce Tech III	Shop Foreman I-IV	Shop Foreman I-IV	Mtce Tech II & III
Utah	Mtce Worker	Painter, Plumber Electrician	Shop Manager	Shop Supervisor	Journey Mech-Wldr
Vermont	Transp Mtce Worker A	Bridge Mtce Mech	Supt Central Garage	Motor Shop Supv	Motor Equip Mech B
Virginia	Hwy Mtce Helper	Cpntr, Pntr, Plmb, Steamfit, Ldn, Frm	Hwy Engineer B	Hwy Equip Repair Foreman A & B	Hwy Equip Mech A & B
Washington	Laborer	Mtce Specialist	Equipment Supt	Equipment Supv	Equip Mech I
West Virginia	Laborer	Craftsman III & IV	Hwy Equip Spec I,II,III	Lead Mechanic	Mechanic II, III
Wisconsin	(County)	(County)	(County)	(County)	(County)
Wyoming	Hwy Mtce Wkr I	-	Dist Equip Supv	Shop Foreman I & II	Mechanic II

(15)	(16)	(17)	(18)	(19)	(20)
Mechanic Helper	Equipment Operator I	Equipment Operator II	Equipment Operator III	Timekeeper or Clerk	State
Asst & Serviceman	Hwy Mtce Technician I	Hwy Mtce Technician II	Hwy Mtce Technician III	Clerk I & Engineer Asst II Clerk Typist III	Alabama Alaska
Auto Serv Atnd I	Hwy Mtce Worker I	Hwy Mtce Worker II	Hwy Mtce Worker III	Typist I,II,III	Arizona
Mechanic Helper	Single Axle Truck Mower Operator Laborer	Backhoe Oper, Motor Patrol/Rough et al Equipment Operator	Dist Operator Lowboy Float Truck Dr Equipment Operator	Payroll Clerk Hwy Fld Office Asst	Arkansas California
	Maintainer III	Maintainer IV	Maintainer V	Supervisor Clerk	Colorado Connecticut
Auto Mechanic I Auto Serviceman				Area Clerk	Delaware Florida
Mechanic Auto Mech Hlpr Auto Serv Wkr	Laborer II Equip Oper I Tractor Oper et al	Equip Operator I Equip Oper II & III Truck Driver et al	Mtce Equip Operator Equip Oper IV Grader Oper et al	Clerk Senior or Maintenance Clerk Account Clerk IV	Georgia Hawaii
Mechanic Helper Serviceman	Hwy Maintenance Oper Trainee Hwy Maintenance Equip Operator Hwy Mtce Wkr IV	Hwy Construction Equip Operator Hwy Mtce Wkr III	Hwy Mtce Operator Power Shovel Operator	Maintenance Clerk	Idaho Illinois
Hwy Equip Mech IV	Equip Operator 1	Equip Operator 2	Equip Operator 3	Hwy Mtce Clerk IV	Indiana Iowa
Auto Mech Helper	Equip Operator I	Equip Operator II	Equip Operator III	Area Office Manager	Kansas
Mechanic Trainee	Light Equip Oper	Heavy Equip Oper	Specialist Equip Oper	Timekeeper	Kentucky
Trades Helper	Equip Operator I	Equip Operator II	Equip Operator III	Clerk II,III,IV Leaderman	Louisiana Maine
Laborer I & II	Highway Worker II	Highway Worker III	Highway Worker IV		
Auto Serv Mech Auto Serv Helper Skilled Laborer Mech Handyman Trades Hlpr IIB	Equip Operator I Skilled Laborer Laborer II	Equip Operator II	Equip Operator III Mtce Equip Operator Equip Operator IV	Shop Clerk Clerk Tallyman Calcs Clerk IV	Maryland Massachusetts Michigan
Hwy Equip Mech Auto Serv Atnd	Incl Title 9	Heavy Equip Oper	Incl Title 9	Incl Title 8	Minnesota
Mechanic Helper	Equip Operator Light Vehicles Maintenance Man	Equip Operator Mtrls Hndlg Equip Mtce Crew Leader	Equip Operator Heavy Machinery Dragline Operator	Dist Stock Clerk	Mississippi Missouri
Stockman & Serv Combination A&B Auto Mechanic I	Truck Driver Under 5 Ton Hwy Mtce Worker	Equip Operator I	Equip Operator II Hwy Mtce Wkr/Senior Mtce Spec Roadway	Field Business Mgr Office Clerk II Hwy Dist Office Mgr	Montana Nebraska Nevada
Trades Helper Auto Serviceman Mechanic Helper	Hwy Maintainer II Truck Driver	Hwy Maintainer III-A Equipment Operator	Hwy Maintainer III-B Heavy Equip Operator	Account Clerk III Clerk IV	New Hampshire New Jersey
Mtce Asst Mech	Equip Operator I Hwy Maintenance I Hwy Equip Operator	Equip Operator II Hwy Maintenance II Const Equip Operator	Equip Operator III Hwy Maintenance III Crane & Shovel Oper	Timekeeper or Clerk Transp Office Asst	New Mexico New York
Incl Title 14	Truck Driver & Machine Oper I Equip Operator I	Machine Oper II & III Equip Operator II	Machine Oper IV & V Incl in Title 9	Clerk III Clerk III & IV	North Carolina North Dakota
Asst Auto Mech	Equip Operator 1	Equip Operator 2	Equip Operator 3	Clerical Specialist	Ohio
Auto Mtce Wkr	Transp Mtce Wkr I	Transp Mtce Wkr II	Senior Transp Mtce Wkr	Transp Field Clerk	Oklahoma
Heavy Equipment Mech Trainee Tradesman Hlpr	Hwy Mtce Wkr 2 Equip Operator 2	Hwy Mtce Wkr 3 Equip Operator 3	Hwy Mtce Wkr 4 Equip Operator 4	Incl Title 16 Clerk 2	Oregon Pennsylvania
Auto Mech Hlpr	Motor Equip Oper	Utility Motor Equip Operator	Heavy Motor Equip Oper	Clerk Dispatcher	Rhode Island
Trades Helper/ Trades Worker	Hwy Mtce Wkr II	Hwy Mtce Wkr III	Hwy Mtce Wkr IV	Clerk II,III, Chief Clerk, Clerk Typ II	South Carolina
Equip Serv Wkr I Equip Serv Wkr II	Hwy Mtce Wkr I Utility Wkr 2	Hwy Mtce Wkr II Utility Wkr 3	Hwy Mtce Wkr III Reg Hwy Equip Oper	Adm Services Asst Office Supervisor Junior Account Clerk	South Dakota Tennessee
Maintenance Tech I Apprentice Mech Auto Serv Wkr	Maintenance Tech I Hwy Oper Spec 15 Incl Title 10	Maintenance Tech II Hwy Oper Spec 17 Incl Title 9	Maintenance Tech III Hwy Oper Spec 19 Equip Operator C	Clerk II Storekeeper	Texas Utah Vermont
Hwy Equip Mtce Apprentice Shop Assistant	Hwy Equip Oper A	Hwy Equip Oper B Mtce Tech I & II	Hwy Equip Oper C Mtce Tech III	Hwy Timekeeper Office Assistant	Virginia Washington
Mechanic I (County)	Equip Operator I (County)	Equip Operator II (County)	Equip Operator III (County)	Field Clerk (County)	West Virginia Wisconsin
Mechanic I	Hwy Mtce Wkr II	Hwy Mtce Equip Oper	Hwy Mtce Hwy Equip Oper		Wyoming

MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL TITLES USED BY STATE HIGHWAY DEPARTMENTS (as of July 1, 1982)

TRAFFIC OPERATIONS PERSONNEL

	(20)	(21)	(22)	(23)	(24)
State	State Traffic Engineer	Assistant State Traffic Engineer	State Traffic Maintenance Engineer	District Traffic Engineer	Assistant District Traffic Engineer
Alabama	Traffic Engr (Design)	-	Traffic Engr (Serv)	Div Traf Engineer	-
Alaska	-	Deputy Comm	Asst Deputy Comm	-	Division Director
Arizona	Asst State Engr, Traf	Traf Engr, Oper & Design	-	Dist Traf Engr or Supv	-
Arkansas	Division Head, Traf	Asst Div Head, Traf	-	-	-
California	Chief, Div of Oper	Chief, Traffic Engr Chief, Transp Oper	-	Dist Traf Engineer	Asst Dist Traf Engr
Colorado	-	-	-	Sr Hwy Engineer	-
Connecticut	Manager of Traffic	Chief of Traf Engr	Operations Supt	Transp Asst Engr	Dist Serv Agent II
Delaware	-	-	-	Civil Engr III,IV	Civil Engr II
Florida	-	-	-	-	-
Georgia	St Traf & Safety Engr	Asst State Traf & Safety Engr	-	Dist Traffic & Safety Engineer	Transp Engr I
Hawaii	Traffic Engineer	Asst Traf Engr	-	-	-
Idaho	Traffic Supervisor Engineer Manager 2	Asst Traffic Engr Engineer Mgr 1	-	Dist Traffic Engr Engineer Proj Supv	-
Illinois	Engineer of Traffic	Traffic Oper Engr	-	Dist Traffic Engr	District Oper Engr Plan Engr, Design Hwy Engineer III
Indiana	Hwy Engr Supv II	Hwy Engr Supv III	Hwy Engr I	Hwy Engr Supv V	-
Iowa	State Traffic Engr	-	-	-	-
Kansas	Hwy Marking Engineer	-	-	-	-
Kentucky	Dir, Division of Mtce	Asst Dir, Div of Traffic	-	Dist Traffic Engr	Asst Dist Traf Engr
Louisiana	Dir of Planning	Asst Traf & Pln Eng Traf Oper Eng et al	Traf Serv & Oper Engr	Dist Traf Oper Engineer	Dist Traf Engr
Maine	Traffic Engineer	Asst Traf Engineer	-	Div Traf Engr	-
Maryland	Asst Chief Engr, Traf	-	Chief, Bureau of Traf Operations Traf Mtce Engineer	Dist Traffic Engr	Asst Dist Traf Engr
Massachusetts	Traffic Engineer	Asst Traf Engineer	-	Dist Traffic Engr	Asst Dist Traf Engr
Michigan	Engr of Traf & Safety	Asst Engr of Traf & Safety	Field Adm Engineer	Dist Traffic Engr	Asst Dist Traf Engr
Minnesota	Traffic Engineer	Asst Traf Engineer	Incl Title 20	Dist Traffic Engr	Dist Signal & Light Engineer et al
Mississippi	Traf Control & Safety Engineer	Asst Traf Control & Safety Engr	-	-	-
Missouri	Incl Title 1	Asst Div Engr, Traffic	-	Traffic Engineer	Dist Traffic Studies Engineer
Montana	Manager, Traf Unit	Asst Mgr, Traf Unit	-	Engr Traffic II	-
Nebraska	Traffic Engineer	-	-	-	-
Nevada	Chief, Traffic Engr	-	-	Hwy Engr II, Traffic	-
New Hampshire	Traffic Engineer	Asst Traffic Engr	Traffic Oper Engineer	-	-
New Jersey	Chief Engr, Transp Oper & Local Aide	Chief, Bureau of Traf Engineering	-	Proj Engr, Traffic	Principal Engr, Traf
New Mexico	Traffic Services Engr	Asst Traf Serv Engr	-	Dist Traffic Engr	-
New York	Dir, Traffic & Safety	Asst Dir, Traffic & Safety	-	Regional Traffic & Safety Engineer	-
North Carolina	Manager of Traf Engr	Asst Mgr Traf Engr Tech & Field Oper	-	Division Traf Engr	-
North Dakota	Planning Engineer	Asst Plan Engineer	-	-	-
Ohio	Engineer of Traffic	Asst Traffic Engr	-	Dist Traffic Engr	-
Oklahoma	State Traffic Engineer	Asst State Traf Engr	-	Div Traffic Engr	-
Oregon	State Traffic Engineer	-	Incl Title 2	Incl Title 3	Reg Traf Engineer
Pennsylvania	Civil Engineer 6	Civil Engineer 5	-	Civil Engr 4or5 Traf Cnt Spec Mgr	Civil Engineer 3 Traf Cnt Spec Supt
Rhode Island	-	-	Chief, Hwy Mtce Supervisor, Traffic	-	-
South Carolina	Traffic & Plan Engr	Asst Traf & Plan Engineer	-	Dist Traffic Engr	-
South Dakota	Traffic Operations Engr Traffic Design Engr	-	-	Dist Traffic Engr	-
Tennessee	Engineering Adm Mtce	-	Sign & Mark Coord	Reg Traffic Engr	-
Texas	-	-	-	Dist Traffic Engr	-
Utah	Engineer for Safety	Safety Oper Engr	Elec Tech Spec	Dist Traffic Engr	-
Vermont	-	-	Incl Title 2	-	-
Virginia	Hwy Division Admin	Hwy Div Asst Admin	Hwy Engr Prog Supv	Hwy Engr Prog Supv	Engineer A
Washington	State Traffic Engineer	Asst State Traf Engr	-	Dist Traffic Engr	Asst Dist Traf Engr
West Virginia	Dir of Traf Engr Div	Asst Dir, Traf Engr Division	-	Reg Traffic Engr	Asst Reg Traf Engr
Wisconsin	Chief Traffic Engineer	Traf Engr Supv	-	Dist Chief Traf Engineer	Dist Traf Engr Supv
Wyoming	State Traf Engr, Oper	Traf Staff Engr	-	Dist Traffic Engr	-

(25)	(26)	(27)	(28)	(29)	
Traffic Supervisor	Sign Supervisor	Sign Shop Foreman	Traffic Signal & Lighting Foreman	Striper Foreman	State
-	-	Traf Sign Shop Supv	Signal Shop Supv	-	Alabama
Traffic Cntrl Mgr	-	-	Transp Mtce Supt I	-	Alaska
Hwy Marking Crew Supv	Hwy Mtce Crew Supv	Hwy Mark Crew Supv	Traf Signal & Light Crew Supv	Hwy Mtce Wkr III	Arizona
-	Sec Head Traf Serv	Sign Shop Supervisor	-	Striping Supervisor	Arkansas
-	Supervisor	Supervisor	Hwy Elec Supervisor	Supervisor	California
-	-	-	-	-	Colorado
-	Signs & Mark Coord	Supt, Portland Plant	Dist Elec Supervisor	General Supervisor	Connecticut
Traffic Oper Mgr	-	-	Signals Superintendent	-	Delaware
-	-	-	-	-	Florida
-	Transp Engineer II	Sign Shop Prod Mgr	Transp Engineer III	Hwy Mtce Foreman II	Georgia
-	Traffic Signs & Marking Supv	-	-	Traffic Mark Supv	Hawaii
-	-	Sign Shop Supt	Traf Signal Supt	Transp Mtce Frm	Idaho
Field Engineer Operations Engr Elec Tech Supv IV	Incl Title 25 Engr Asst V	Sign Shop Supervisor Sign Shop Foreman Hwy Mtce Worker II	- Elec Tech Supv IV	Lead Wkr, Pavement Marking Frm Engr Asst V	Illinois Indiana
District Traf Tech	-	Sign Shop Supt	Lighting Mtce Supt	District Paint Supt	Iowa
-	-	Sign Shop Wkr Supv	-	Mtce Supervisor	Kansas
Traf Engr Tech I	Traffic Foreman	Sign Painter Sr	Traf Signal Rprm Pr	Striper Foreman	Kentucky
Sign & Traf Supv	Hwy Sign & Striper Supervisor	Sign Shop Foreman	Electrician Foreman	Striper Gang Foreman	Louisiana
-	-	Sign Shop Foreman	Electrician Foreman	Highway Foreman	Maine
-	Traf Sign Shop Supv	Traf Sign Shop Asst Supervisor	Traf Signal Shop Supv	Supv Pavement Mark	Maryland
Hwy Traf Mtce Frm	Supv of Traf Equip Traf Section Frm Sign Supv VII	Sign Shop Foreman	Traf Elec Foreman	Traf Section Frm	Massachusetts
Sign Supv VIII	-	Sign Supv VB	Electrician VI	Sign Mechanic IV	Michigan
Traf Control Supv	Sign Supervisor	Incl Title 8	Elec Traf Mtce Supv	Incl Title 25	Minnesota
-	-	-	-	-	Mississippi
-	-	Sign Shop Foreman	Signal & Lighting Foreman	Incl Title 8	Missouri
-	-	Painter Foreman	-	Painter Foreman	Montana
-	Sign Shop Supt	Sign Shop Supv	Hwy Communications Manager	Incl Title 8	Nebraska
-	Sign Shop Supv	-	-	Hwy Mtce Foreman	Nevada
Traffic Mtce Supv	Traffic Oper Tech	Sign Shop Foreman	Traf Signal Foreman	Traf Signal Tech	New Hampshire
-	Supv of Hwy Mark	Foreman Sign Shop	Foreman Electrical	Pavement Mark Frm Foreman Hwy Marking	New Jersey
Incl Title 8	-	Incl Title 9	Traf Elec Supv	Incl Title 8	New Mexico
-	-	Sign Shop Supv II	Supv Electrician	-	New York
Traf Serv Supv	Traf Serv Crew Ldr	Sign Shop Foreman	Traf Control Tech Supervisor	Traf Serv Crew Ldr	North Carolina
-	-	Sign Shop Foreman	-	-	North Dakota
Traf Control Supv	Sign Superintendent	Sign Supervisor I	Signal Elec Supv	Highway Worker 3	Ohio
Transp Mtce Supt	Sign Shop Supt	Sign Shop Supv	-	Transp Mtce Supv	Oklahoma
Incl Titles 4 & 5	-	Sign Shop Supt	Electrical Supt	Strip Crew Supv	Oregon
-	Traf Control Tech 3	Sign Shop Foreman	Civil Engineer 2 Traf Control Spec	Highway Foreman 2	Pennsylvania
Hwy Mtce Supv Line Striping	Hwy Mtce Supv Sign	Commercial Artist	Electrician Foreman	Traf Line Painter Foreman	Rhode Island
-	-	Trades Worker Supv	Electronics Tech II	Hwy Mtce Crew Supervisor I-III	South Carolina
-	Sign Supervisor	Sign Shop Foreman	-	Hwy Mtce Wkr II&III	South Dakota
-	Hwy Marking Supt	-	-	Mtce Crew Leader	Tennessee
-	-	-	-	-	Texas
Signal Supervisor	Sign Supervisor	Hwy Sign Supervisor	Electrician Supv	Hwy Oper Supervisor	Utah
Traffic Shop Supv	Incl Title 25	Incl Title 25	Transp Electrical Mtce Specialist	Marking Crew Ldr B	Vermont
Engineer A	Mtce Supt B	Highway Foreman	Hwy Equipment Elec Foreman A & B	Highway Foreman	Virginia
Highway Supt	Sign Supervisor	Dist Sign Fabricator	Traf Signal Supv Electronic Supv Hwy Engr Tech IV	Mtce Supervisor	Washington
Traffic Technician	-	Traf Tech III	-	Sign Shop Supv	West Virginia
Dist Traffic Supv	Mark/Sign Supv	Mark/Sign Coord	Electrical Supv	Pvt Mark Crew Chief	Wisconsin
Dist Traf Engineer	-	Sign Shop Supv	Sign & Elec Foreman	Hwy Striping Frm	Wyoming

MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL TITLES USED BY STATE HIGHWAY DEPARTMENT (as of July 1, 1982)

TRAFFIC OPERATIONS PERSONNEL (cont'd):

State	(30) Sign Erection Foreman	(31) Sign Fabricator	(32) Sign Technician	(33) Traffic Signal & Lighting Technician
Alabama	-	Traf Sign Painter II	Traf Sign Painter I	Traf Signal Tech I,II,III
Alaska	-	-	-	Traf Contrl Equip Tech
Arizona	Hwy Mtce Worker III	Hwy Sign Fabricator	Hwy Sign Installer	Traf Signal Light Tech
Arkansas	Signing Supervisor	Sign Maker	Sign Layout Spec	-
California	Supervisor	Supervisor	-	Hwy Electrician I or II
Colorado	-	-	-	-
Connecticut	Signs & Marking Supv	-	-	Electrical Tech II
Delaware	Sign Supervisor (Hwy Mtce Supervisor)	Trades Helper Sign Fabricator I&II	-	Signal Rprm I & II Instrm Tech I & II
Florida	-	-	-	-
Georgia	Hwy Mtce Foreman II	Skilled Laborer	Skilled Laborer	Traf Signal Tech
Hawaii	-	Sign Painter & Painter	-	Hwy Lighting Wkr & Electrician
Idaho	Transp Mtce Foreman	Hwy Sign Fabricator	-	Electrician
Illinois	Incl Title 29	Silk Screen Operator Sign Painter	Incl Title 25	Traffic Signal Engr Traffic Signal Tech Electronics Tech II
Indiana	Hwy Mtce Worker II	Hwy Mtce Worker III	Hwy Mtce Worker II	-
Iowa	-	Sign Shop Worker	-	Lighting Mtce Elect Lighting Mtce Tech
Kansas	-	Sign Shop Worker	-	-
Kentucky	Incl Title 26	Sign Painter	Incl Title 26	Traf Signal Reprn Jr&Sr
Louisiana	Statewide Sign Foreman	Bldg Mtce Supt I Carpenter, Welder Sign Painter	Statewide Sign Trdsm	Statewide Elect
Maine	Hwy Mtce Man IV	Sign Painter	Sign Shop Tech	Traf Signal & Light Tech
Maryland	Supv, Road Mtce	Sign Fabricator III	Sign Fab I & II	Electronic Tech Traffic Contrl Elec Traffic Electrician
Massachusetts	Traf Sec Foreman	Sign Pntr & Letter	Sign Shop Foreman Traf Sec Foreman Sign Mechanic IIIB	Electrician III,IV,V
Michigan	Sign Mechanic IIIB	Sign Mech II & III	-	-
Minnesota	Incl Title 8	Incl Title 9	Incl Title 26	Hwy Signal Tech Electronic Tech et al Electronics Technician
Mississippi	-	Silk Screen Printer	-	-
Missouri	Incl Title 8	Silk Screen Operator	Sign Painter	Signal Electrician
Montana	-	Painter	Engr Traffic I & II	Striping Mach Oper
Nebraska	-	Sign Painter II	Incl Title 27	Electronics Tech II
Nevada	Hwy Mtce Foreman	Sign Painter	Silk Screen Oper	-
New Hampshire	Dist Sign Supervisor Hwy Sign Mtce Foreman	Sign Fabricator Sign Letterer Sign Fabricator	Hwy Maintainer II	Traf Signal Rprmn II
New Jersey	Incl Title 29	Sign Fabricator	Highway Marker	Electrical Mech I
New Mexico	Incl Title 8	Sign Tech II	-	Traf Elec Tech I,II,III
New York	Labor Supervisor	Sign Shop Worker	Sign Shop Supv I	Electrician
North Carolina	Traf Sign Erector	Traf Sign Painter	-	Traf Control Tech
North Dakota	-	Sign Fabricator I&II	-	-
Ohio	Routemarker 2	Sign Worker 1	Sign Worker 2	Signal Electrician 2
Oklahoma	Transp Mtce Supv	Sign Shop Worker	Sr Sign Shop Wkr	-
Oregon	Sign Crew Supervisor	Incl Titles 16,17,18	-	Incl Title 11
Pennsylvania	Highway Foreman 3	Sign Technician 2	Sign Technician 1 Sign Technician 2	Civil Engineer 2 Traf Control Spec Electronics Equip Mech
Rhode Island	Sign Erector Foreman	Sign Painter	-	-
South Carolina	Incl Title 8	Trades Worker	-	Elect & Traf Signal Tech
South Dakota	Hwy Mtce Foreman Hwy Mtce Worker III	Sign Producer	-	-
Tennessee	-	-	Utility Worker 2	-
Texas	-	-	-	-
Utah	Hwy Opers Supv	-	Journeyman Hwy Sign Specialist	Journeyman Opers Spec
Vermont	Sign Crew Leader	Sign Painter	-	Maintenance Mech B
Virginia	Highway Foreman	Hwy Sign Fabricator	Traf Technician C	Hwy Equip Electrician
Washington	-	-	Sign Installation Technician	Signal Tech I,II,III Elec Tech I,II,III Electronic Technician
West Virginia	-	Craftsman I, II	-	-
Wisconsin	Signing Crew Chief	(Various Titles)	Signing Crew Member	Electrician
Wyoming	Hwy Traf Sign Tech II	Sign Fabricator	Hwy Traf Sign Tech I	Hwy Traf Signal Tech

OTHER RELATED PERSONNEL:

(34)	(35)	(36)	
Striper Technician	Chief Engineer	Project Engineer	State
-	Chief Engineer	Civil Engr I,II,III	Alabama
-	-	-	Alaska
Hwy Mtce Worker II	State Engineer	Resident Engineer	Arizona
Striping Machine Driver	Chief Engineer	Chief Proj Supv Resident Engineer	Arkansas
Leadworker	Deputy Director	Resident Engineer	California
Heavy Equip Operator	-	-	Colorado
Maintainers III,IV,V	Chief Engineer	Transp Senior Engrs	Connecticut
-	Civil Engineer VII	-	Delaware
-	-	-	Florida
Mtce Equipment Oper	Asst State Hwy Engr Deputy Commissioner	Transp Engr I or II	Georgia
Traffic Striping Machine Operator	Chief, Hwys Div	Area Engineer	Hawaii
Hwy Mtce Operator	State Hwy Admin	Proj Engr/Chief	Idaho
Incl Title 29	Dir of Highways	Project Engineer	Illinois
Hwy Mtce Worker II	Director Engineer I	Resident Engineer Hwy Engrs III & IV	Indiana
Equipment Oper 2 & 3	Director of Hwys Chief Engineer	Resident Const Engr	Iowa
-	State Transp Engr	Const Engineer	Kansas
Heavy Equip Oper	State Highway Engr	Resident Const Engr	Kentucky
Equip Oper I,II,III	Chief Engineer	Dist Const Engr Proj Engr et al	Louisiana
-	Civil Engineer V	-	Maine
-	Chief Engineer	Project Engineer	Maryland
Spray Painter Working Foreman	Chief Engineer	Senior Civil Engineer	Massachusetts
Sign Mechanic IIIB	Transp Admin Engr IX	Transp Construction Engineer VIII & IX	Michigan
Incl Title 9	Deputy Commissioner	Project Engineer	Minnesota
-	Chief Engineer	Resident Engineer et al	Mississippi
Incl Title 17	Chief Engineer	Resident Engineer	Missouri
-	Director of Hwys	-	Montana
Incl Title 8	Deputy State Engr	Hwy Project Mgr II	Nebraska
Mtce Spec, Striping & Signing Carriage Operator	Dir of Transp	Highway Engr III	Nevada
Hwy Maintainer II	Deputy Commissioner Chief Engineer	Project Engineer	New Hampshire
-	Dir of Engr & Oper	Project Engr, Mtce Project Engr, Const Hwy Const Proj Manager I,II,III	New Jersey
Incl Title 8	Chief Hwy Admin	-	New Mexico
Labor Supervisor	-	-	New York
Machine Oper III	Chief Engr, Oper	Resident Engineer	North Carolina
Equip Operator III	Chief Engineer	Project Coordinator	North Dakota
Routemarker 1	Asst Director	Project Engineer 2	Ohio
-	Director Chief Engineer	Transp Engr III	Oklahoma
Incl Titles 16&17	State Hwy Engineer	Project Manager	Oregon
Equip Oper 1,2, or 3	Chief Hwy Engineer	Civil Engineer 2 or 3 Transp Cntrl Mgr 1 or 2	Pennsylvania
Traffic Line Painter	-	-	Rhode Island
Incl Title 18	State Hwy Engineer	Project Engineer	South Carolina
-	Dir & State Hwy Engr	Area Engineer Resident Engineer	South Dakota
Paint Machine Oper	State Transp Engr	Engineer 2	Tennessee
-	Engineer/Director	Engineering Tech 2 Engineer IV	Texas
Hwy Opers Specialist	Director	Proj/Res Engineer	Utah
Marking Crew Ldr A	Dir of Engr & Const	Resident Engineer	Vermont
Highway Foreman	Chief Engineer	Const Project Engr	Virginia
Maintenance Tech III	Deputy Sec of Transp	Project Engineer	Washington
Center Line Mach Oper	Chief Engineer, Field Operations	-	West Virginia
Pvt Marking Crew Member	-	Project Engineer	Wisconsin
Hwy Painting Tech I&II	Supt & Chief Engr	Resident Engineer	Wyoming

MONTHLY SALARIES OF HIGHWAY PERSONNEL (as of July 1, 1982)

MAINTENANCE PERSONNEL:

State	(1) State Maintenance Engineer				(2) Assistant State Maintenance Engineer				(3) District Engineer				(4) District Maintenance Engineer				(5) Assistant District Maintenance Engineer			
	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.
Alabama	1	2539	3597	3597	3	1985	2808	2318	9	2635	3640	3597	9	2089	2947	2696	9	1187	2089	1716
Alaska	1	5050	6047	-	1	4885	5843	-	-	-	-	-	1	4725	5629	-	3	3309	3917	-
Arizona	1	2863	3886	3886	1	2611	3546	3546	7	2863	3886	3886	7	2176	2961	2736	-	-	-	-
Arkansas	1	3044	3409	3409	1	1804	2771	2771	10	2944	3297	3297	10	1590	2624	2624	10	1317	2203	2203
California	1	3167	4211	3837	5	2951	3921	3249	11	2879	4415	4023	12	2563	3566	3093	20	2563	3093	2956
Colorado	1	3298	4419	4419	1	2849	3818	3818	6	3298	4419	4419	8	2991	4009	4009	9	2409	3227	3227
Connecticut	1	3171	3892	3532	2	2932	3599	3265	-	-	-	-	4	2710	3327	3019	8	2506	3076	2791
Delaware	1	2222	3717	2806	-	-	-	-	3	2222	3717	2806	1	1698	2735	2066	-	-	-	-
Florida	1	2332	4165	3582	2	2394	3323	3249	6	3083	5250	4166	6	2245	3102	3132	6	1587	2484	1898
Georgia	1	2244	3449	3311	2	1891	2901	2901	7	2244	3449	3264	7	1740	2901	2547	7	1599	2444	2312
Hawaii	1	2494	4002	4002	1	2382	3825	3825	4	2382	3825	3593	2	1987	3292	2566	-	-	-	-
Idaho	1	2743	4055	3862	1	2256	3335	3025	6	2743	4055	3694	6	2256	3335	2853	-	-	-	-
Illinois	1	2685	3795	3600	3	2365	3575	3350	9	2685	4010	3590	9	2365	3575	3120	-	-	-	-
Indiana	1	2427	3759	3374	2	2106	3281	3001	6	2106	3281	-	6	1954	2977	-	6	1803	2708	-
Iowa	1	2576	3476	3245	1	2342	3150	3065	6	2576	3476	3386	6	2134	2855	2780	-	-	-	-
Kansas	1	2909	4827	3885	1	2390	3839	3587	6	2688	4320	3777	6	2390	3839	3473	-	-	-	-
Kentucky	1	2221	3557	3318	2	1827	2927	3318	12	2221	3557	3230	12	1827	2927	3083	35	1657	2655	2311
Louisiana	1	2716	3659	3659	17	1885	3332	3005	9	2454	3397	3397	9	2171	3134	3134	9	2028	3003	3003
Maine	1	2277	3184	3184	1	2001	2794	2794	7	2001	2794	2794	-	-	-	-	-	-	-	-
Maryland	1	2598	3407	3407	1	2402	3156	3156	7	2401	3156	3156	-	-	-	-	7	2059	2705	2543
Massachusetts	1	2689	3356	-	2	2034	2526	-	8	2689	3356	-	8	1878	2337	-	8	1667	2059	-
Michigan	1	3082	4124	4124	1	2845	3814	3814	9	2558	3529	3529	6	2387	3268	3268	5	2231	3021	3021
Minnesota	1	2793	4522	3703	3	2246	3113	3000	9	2793	4522	3852	15	2598	4207	3537	5	2246	3113	3113
Mississippi	1	2406	3214	3165	1	2255	3149	2922	6	2593	3311	3181	6	2255	3149	2980	-	-	-	-
Missouri	1	3091	3658	3146	1	2233	2776	2776	10	2783	3475	2973	10	1970	2574	2562	20	1735	2276	2239
Montana	1	2684	3542	3542	1	2061	2839	2726	-	-	-	-	11	2250	2962	2821	-	-	-	-
Nebraska	1	2398	3357	2990	1	1930	2702	2480	8	2398	3357	2857	7	1554	2175	2000	-	-	-	-
Nevada	1	2579	3545	3545	1	2360	3235	3235	3	2579	3545	3545	3	2360	3235	3235	-	-	-	-
New Hampshire	1	2238	2753	2753	1	1961	2410	2410	7	1835	2267	2267	-	-	-	-	7	1632	1999	1999
New Jersey	1	3487	4708	4098	1	2602	3513	3058	4	3012	4066	3539	4	2602	3513	3058	6	2141	2890	2516
New Mexico	1	-	-	3710	1	2433	3774	3654	5	2473	3774	3654	5	2433	3774	3428	5	1568	2554	2292
New York	1	3644	4392	4392	1	3278	3948	3948	-	-	-	-	10	3278	3948	3803	10	2327	2680	2600
North Carolina	1	2608	3824	3647	1	2375	3479	2672	14	2375	3479	3479	14	2061	3013	2872	35	1963	2872	2486
North Dakota	1	2413	3535	3535	1	2085	3054	2995	8	2413	3535	3234	8	2085	3054	2774	-	-	-	-
Ohio	1	2228	3124	3124	-	-	-	-	12	2238	3180	2709	12	2024	2836	2430	12	1840	2576	2208
Oklahoma	1	3273	4386	3273	1	2502	3352	2934	8	3273	4386	3226	8	2502	3352	2934	7	2161	2896	2545
Oregon	1	2920	3728	3728	2	2649	3379	3379	5	2649	3379	3379	4	2285	2920	2920	1	2285	2920	2920
Pennsylvania	1	3138	3793	3793	4	2530	3271	3271	11	3227	4008	4008	11	2530	3271	3271	22	2119	2766	2750
Rhode Island	1	1985	2248	2729	1	1171	1470	1718	1	1411	1591	1891	-	-	-	-	-	-	-	-
South Carolina	1	2332	3305	3353	2	2073	2939	2939	7	2156	3056	3048	7	1772	2512	2553	-	-	-	-
South Dakota	1	2255	3611	2729	1	1907	3011	2558	5	-	-	2817	5	1907	3011	2515	-	-	-	-
Tennessee	1	2197	3331	3180	1	2002	3033	2408	4	2197	3331	2639	4	1911	2486	2162	30	1850	2356	2099
Texas	1	-	-	3542	1	2517	3170	-	25	-	-	3487	25	2517	3170	-	25	2357	2968	-
Utah	1	2840	4148	3743	-	-	-	-	6	2840	4148	3810	6	1862	3348	2689	3	1677	2448	2394
Vermont	1	2224	3964	-	2	1775	3123	-	-	-	-	-	9	1775	3123	-	-	-	-	-
Virginia	1	2366	3232	2705	1	1980	2705	2263	8	2366	3232	2705	8	1980	2705	2263	8	1980	2705	2263
Washington	1	3244	4153	3953	1	2663	3409	3409	6	3244	4363	4188	6	2663	3409	3409	6	2296	2939	2939
West Virginia	1	2372	4249	2971	1	1857	2834	2834	6	2372	4249	2928	6	2049	3682	2544	-	-	-	-
Wisconsin	1	3190	4433	4036	4	2686	3734	3258	8	3190	4433	3846	8	2686	3734	3561	30	2260	3143	2819
Wyoming	1	3102	4813	4158	-	-	-	-	5	3102	4813	4158	5	2674	4149	3629	-	-	-	-
1982 Average				3517				3045				3373				2936				2542
1944 Average				434				341				-				202				264
% Increase 1944-1982				810				892				-				1005				962
% Increase 1981-1982				5				3				5				23				6

	(6)				(7)				(8)				(9)				(10)				State				
	Resident Maintenance Engineer				Area Supervisor				Gang Foreman				Sectionman				Laborer								
	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.					
41	1635	2669	2141		41	1075	1518	1376	-	-	-	-	-	-	-	512	673	840	799	Alabama					
3	3309	3917	-	-	5	2894	3431	-	11	-	-	-	16	-	-	1	-	-	-	Alaska					
-	-	-	-	-	50	1566	2059	2009	-	-	-	-	48	1354	1736	1683	38	921	1321	1172	Arizona				
-	-	-	-	-	83	1237	2063	1938	10	1237	2063	2009	123	956	1547	1514	36	598	971	787	Arkansas				
44	2444	2951	2684		147	1889	2684	2200	496	1646	1979	1888	655	1572	1804	1724	1333	1322	1437	1379	California				
-	-	-	-	-	39	2081	2788	2788	43	1798	2409	2409	388	1552	2081	1982	-	1050	1408	1216	Colorado				
-	-	-	-	-	31	1699	2015	1857	51	1544	1844	1694	139	1279	1548	1413	317	1020	1184	1102	Connecticut				
-	-	-	-	-	3	1282	2088	1600	17	1026	1599	1226	46	863	1362	1057	25	654	983	776	Delaware				
-	-	-	-	-	19	1173	1921	1464	4	935	1486	1149	14	802	1251	974	-	-	-	-	Delaware				
23	1738	2366	2114		132	1020	1610	1303	210	916	1198	1076	193	868	1131	1076	898	713	913	827	Florida				
49	1305	2444	1989		-	-	-	-	234	1076	1599	1369	-	-	-	-	231	756	1029	831	Georgia				
-	-	-	-	-	3	1987	2987	2435	19	1607	2013	1751	13	1107	1560	1293	85	1053	1243	1069	Hawaii				
-	-	-	-	-	49	1527	2256	1952	-	-	-	-	49	1256	1856	1651	-	-	-	-	Idaho				
30	2150	3140	2600		-	-	-	-	280	-	-	1858	1600	-	-	1808	-	-	-	-	Illinois				
12	1547	2466	-	-	37	1376	2035	-	37	1265	1482	-	146	1112	1302	-	553	830	973	-	Indiana				
24	1945	2597	2505		22	1394	1817	1688	9	1576	2058	1977	-	-	-	-	3	952	1144	1079	Iowa				
23	2125	3303	2797		105	1576	2058	1903	1	1718	2058	2194	-	-	-	-	1	1019	1241	1100	Kansas				
-	-	-	-	-	35	1523	2365	2158	35	1523	2008	1723	111	1334	2008	1723	-	-	-	-	Kansas				
-	-	-	-	-	-	-	-	-	188	1121	1796	1463	125	1017	1630	1264	574	567	907	907	Kentucky				
-	-	-	-	-	93	972	2004	1818	253	874	1731	1470	-	-	-	-	747	653	1358	904	Louisiana				
-	-	-	-	-	35	1485	2033	1934	127	1310	1745	1640	4	961	1249	1249	161	844	1084	1002	Maine				
23	1769	2318	2279		29	1416	1860	1748	-	-	-	-	194	994	1297	1173	759	723	1013	785	Maryland				
-	-	-	-	-	46	1320	1612	-	81	1100	1432	-	66	1072	1264	-	45	908	1056	-	Massachusetts				
-	-	-	-	-	13	1764	2354	2059	53	1648	2177	1913	54	1441	1813	1627	35	1100	1425	1263	Michigan				
-	-	-	-	-	30	1797	2702	2553	104	1735	2245	2174	1396	1479	1611	1605	63	783	1611	1143	Minnesota				
-	-	-	-	-	27	1191	1175	1438	70	985	1475	1163	51	913	1369	1077	412	601	901	687	Mississippi				
-	-	-	-	-	101	1373	1806	1738	40	1240	1625	1490	356	1113	1441	1382	-	-	-	-	Missouri				
-	-	-	-	-	22	1591	2215	2199	-	-	-	-	133	1808	1877	1856	8	1389	1389	1389	Montana				
-	-	-	-	-	30	1345	1882	1627	84	1164	1629	1362	-	-	-	-	-	-	-	-	Nebraska				
-	-	-	-	-	6	1816	2467	2467	30	1534	2067	1979	34	1412	1896	1778	-	1112	1472	-	Nevada				
10	1253	1518	1518		10	1284	1567	1567	21	1118	1352	1295	98	1118	1353	1236	265	773	886	827	New Hampshire				
5	1761	2377	2069		23	1521	2054	1788	122	1380	1862	1621	137	1251	1690	1471	565	808	1091	950	New Jersey				
-	-	-	-	-	16	1354	2206	1986	144	1170	2101	1616	16	831	1646	1239	82	651	1228	796	New Mexico				
68	2665	3572	3082		197	1356	1584	1491	21	1517	1765	1718	676	1019	1202	1119	1831	863	1024	966	New York				
76	1629	2375	2061		174	1360	1963	1629	560	1045	1490	1360	-	-	-	-	1066	707	1001	806	North Carolina				
-	-	-	-	-	8	1555	2278	2102	3	1280	1875	1649	89	1218	1784	1465	6	868	1272	1131	North Dakota				
-	-	-	-	-	88	1384	1840	1612	19	1142	1384	1263	59	1018	1162	1090	895	962	1104	1033	Ohio				
-	-	-	-	-	26	1913	2564	1924	112	1613	2161	1757	-	-	-	-	-	-	-	-	Oklahoma				
16	2076	2649	2649		-	-	-	-	130	1400	1791	1706	126	1400	1546	1472	33	889	1106	900	Oregon				
-	-	-	-	-	1857	2422	2372	-	1094	1374	1167	-	-	-	-	-	2681	857	1131	1072	Pennsylvania				
-	-	-	-	-	61	2119	2766	2750	757	1214	1566	1558	-	-	-	-	988	1214	1167	-	Pennsylvania				
2	1119	1300	1568		7	1041	1116	1279	26	943	1004	1135	3	885	941	1108	257	774	814	857	Rhode Island				
47	1456	2233	2020		-	-	-	-	278	841	1508	1204	-	-	-	-	800	580	871	678	South Carolina				
1	1754	2749	2322		9	1365	2092	1938	4	1255	1910	1670	77	1154	1744	1539	-	-	-	-	South Dakota				
5	1850	2356	2099		22	1316	1792	1514	45	961	1367	1129	111	802	1173	961	725	573	884	686	Tennessee				
7	-	-	-	-	-	1753	2357	-	-	1347	1935	-	-	1537	2207	-	4368	634	1249	-	Texas				
-	-	-	-	-	72	1484	2172	2055	16	1484	2172	2103	-	-	-	-	41	856	1251	908	Utah				
-	-	-	-	-	9	1130	1943	-	9	898	1544	-	123	737	1260	-	222	674	1142	-	Vermont				
55	1386	1893	1584		39	858	1475	-	624	1061	1449	1213	-	-	-	-	94	622	849	710	Virginia				
-	-	-	-	-	29	2080	2663	2535	59	1625	2080	1980	156	1625	1885	1794	3	1095	1269	1208	Washington				
-	-	-	-	-	54	1285	2579	1621	42	1173	2348	1325	257	1026	1234	1127	214	842	-	842	West Virginia				
-	-	-	-	-	28	1869	2458	2023	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin				
-	-	-	-	-	28	1552	2409	2267	34	1405	2181	2080	-	-	-	-	66	947	1469	1140	Wyoming				
				2227					1940					1610					1409					971	1982 Average
														141					152					121	1944 Average
														1141					926					802	%Increase 1944-1982
				2					9					6					5					4	%Increase 1981-1982

MONTHLY SALARIES OF HIGHWAY PERSONNEL (as of July 1, 1982)

MAINTENANCE PERSONNEL (cont'd):
(11)

State	(11)				(12)				(13)				(14)				(15)			
	Skilled Craftsman				Shop Superintendent				Garage or Shop Foreman				Mechanic				Mechanic Helper			
	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.
Alabama	24	927	1446	1248	8	1889	2669	2297	7	1130	1595	1446	96	998	1376	1248	14	861	1130	974
Alaska	-	-	-	-	3	3309	3917	-	4	-	-	-	37	-	-	-	15	-	-	-
Arizona	26	1267	1620	1487	3	1982	2694	2260	7	1696	2228	2067	91	1267	1620	1643	5	948	1240	1048
Arkansas	17	849	1378	1286	11	1237	2063	2063	10	1161	1920	1820	10	754	1218	1070	-	-	-	-
California	79	1685	2124	1848	21	2173	2879	2621	51	1889	2278	2073	333	1724	2073	1889	30	1311	1433	1373
Colorado	805	1408	1888	1712	8	2081	2788	2788	8	1798	2409	2409	94	1798	2081	1982	19	1630	1882	1552
Connecticut	47	1169	1422	1295	13	1544	1844	1694	-	-	-	-	165	1169	1422	1295	-	-	-	-
Delaware	16	898	1422	1102	4	1282	2088	1600	4	1173	1921	1464	33	1026	1600	1226	10	776	1199	935
Florida	220	955	1256	1218	-	-	-	-	31	1077	1425	1372	23	868	1131	1024	47	680	870	813
Georgia	122	828	1159	1056	6	1414	2151	1752	9	1257	1891	1626	106	966	1870	1148	35	934	1359	1038
Hawaii	31	1328	1657	1422	4	1658	1928	1791	2	1429	1612	1612	18	1360	1553	1404	7	1130	1243	1158
Idaho	14	1256	1856	1411	6	1604	2369	2100	6	1385	2046	1746	48	1256	1856	1482	10	937	1385	1077
Illinois	-	-	-	-	-	-	-	-	-	-	-	-	29	-	-	1007	-	-	-	-
Indiana	6	1112	1675	-	1	1112	1675	-	6	1265	1482	-	87	1112	1302	-	37	800	936	-
Iowa	-	-	-	-	-	-	-	-	1	1576	2058	2002	154	1295	1409	1394	22	1144	1241	1199
Kansas	-	-	-	-	6	1457	2191	1895	7	1222	1836	1571	97	1069	1507	1225	27	810	1141	948
Kentucky	43	759	1341	1153	-	-	-	-	16	1236	1979	1503	189	1121	1796	1154	-	-	-	-
Louisiana	142	849	1731	1377	29	1092	1913	1790	-	-	-	-	191	922	1731	1375	24	800	1299	983
Maine	39	1058	1382	1238	7	1553	2133	2035	13	1239	1651	1592	123	1058	1382	1345	11	866	1183	1124
Maryland	13	922	1214	960	7	1137	1489	1340	29	1059	1386	1248	54	994	1296	1166	24	933	1214	1092
Massachusetts	-	-	-	-	1	2490	3102	-	8	1160	1516	-	13	980	1304	-	17	774	991	892
Michigan	57	1235	1999	1617	1	1764	2354	2059	17	1648	2177	1913	77	1441	1813	1627	32	1121	1496	1309
Minnesota	92	1757	1810	1808	6	1937	2702	2621	18	1865	2509	2357	153	1810	1917	1874	30	1077	1721	1356
Mississippi	-	-	-	-	1	1220	1820	1411	10	1104	1664	1226	23	768	1149	873	-	-	-	-
Missouri	-	-	-	-	9	1450	1906	1853	10	1240	1625	1542	48	1084	1395	1248	25	933	1203	1038
Montana	4	1736	1772	1736	12	1591	2302	2222	9	1778	1862	1816	53	1687	1794	1726	42	1392	1531	1426
Nebraska	-	-	-	-	1	1445	2024	1782	3	1251	1751	1441	73	1007	1410	1134	22	871	1220	934
Nevada	220	1203	1599	1413	-	1816	2467	-	8	1668	2257	2257	62	1472	1979	1896	-	-	-	-
New Hampshire	112	986	1179	1130	1	1204	1469	1469	11	1153	1394	1335	23	1012	1231	1231	3	797	917	917
New Jersey	156	1063	1435	1249	4	1641	2216	1929	38	1316	1776	1546	131	1192	1609	1401	63	807	1090	949
New Mexico	18	873	1646	1192	-	-	-	-	13	792	1354	1756	85	831	1568	1157	-	-	-	-
New York	5	1144	1419	1407	10	2221	2601	2425	20	1365	1635	1521	280	1210	1419	1319	40	965	1140	1060
North Carolina	244	841	1629	1135	15	1629	2490	2214	119	1188	1874	1491	468	877	1559	1173	-	-	-	-
North Dakota	-	-	-	-	8	1280	1875	1653	-	-	-	-	4	1002	1468	1125	-	-	-	-
Ohio	38	1018	1384	1201	2	1520	2124	1822	18	1384	1840	1612	23	1107	1622	1405	20	962	1104	1033
Oklahoma	2	1091	1463	1181	9	1822	2442	2001	-	1428	1913	-	55	1536	2058	1556	2	1015	1360	1048
Oregon	20	1519	1751	1611	5	1546	1974	1877	5	1400	1791	1791	67	1449	1592	1519	11	1106	1383	1158
Pennsylvania	219	1170	1498	1417	-	-	-	-	62	1703	2217	2092	577	1260	1627	1583	165	988	1214	1200
Rhode Island	16	814	856	938	1	1041	1116	1116	2	1041	1116	1279	11	1003	1057	1162	6	-	912	1003
South Carolina	-	-	-	-	-	-	-	-	47	1064	1508	1379	113	984	1394	1172	124	664	1102	1024
South Dakota	5	976	1453	1207	9	1255	1910	1624	-	-	-	-	9	789	1210	1117	2	663	1009	976
Tennessee	4	725	1088	884	4	1129	1570	1316	11	921	1316	1088	134	884	1267	1045	-	-	-	-
Texas	3713	1163	1512	-	44	1112	2066	-	-	1112	2066	-	-	-	-	-	-	-	-	-
Utah	8	1006	2448	1812	1	1677	2448	2448	11	1108	2306	2120	76	1006	2090	1812	17	912	1895	1383
Vermont	18	818	1404	-	1	1492	2629	-	1	1130	1943	-	43	818	1475	-	-	-	-	-
Virginia	61	970	1584	1213	8	1657	2263	1893	75	1160	1584	1325	340	970	1449	1213	57	743	1015	849
Washington	17	1547	1794	1707	6	1980	2535	2240	7	1707	2185	1932	80	1625	1885	1794	26	1334	1547	1472
West Virginia	114	1072	1234	1103	7	1072	2579	1725	67	1072	1121	1097	287	981	1121	1068	31	889	934	905
Wisconsin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming	-	-	-	-	5	2194	3404	2505	21	1477	2531	2133	29	1339	2077	1694	3	1154	1791	1436
1982 Average				1332				1951				1698				1368				1093
1944 Average				155				-				206				172				136
% Increase 1944-1982				859				-				824				795				803
% Increase 1981-1982				5				6				8				4				6

(16)				(17)				(18)				(19)				State
Equipment Operator I				Equipment Operator II				Equipment Operator III				Timekeeper or Clerk				
No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	
247	819	1074	950	179	927	1248	1187	162	1023	1411	1279	102	707	1187	1130	Alabama
11	-	-	-	39	-	-	-	91	-	-	-	9	-	-	-	Alaska
238	1034	1321	1177	181	1188	1517	1374	124	1354	1736	1619	27	740	1177	988	Arizona
584	637	1029	862	139	670	1083	977	55	754	1218	1055	10	708	1146	1059	Arkansas
-	-	-	-	950	1501	1646	1571	707	1572	1724	1650	64	1215	1454	1325	California
-	-	-	-	-	-	-	-	38	1512	2025	1925	19	711	952	784	Colorado
625	1078	1269	1174	239	1110	1312	1211	99	1169	1422	1295	-	1020	1184	1102	Connecticut
166	725	1102	863	49	802	1251	974	59	898	1422	1102	14	725	1102	863	Delaware
-	713	913	827	114	826	1072	1057	149	867	1131	1148	25	867	1131	1083	Florida
897	779	1077	922	460	828	1134	982	204	934	1359	1198	59	784	1076	948	Georgia
77	1060	1243	1133	59	1163	1475	1291	10	1328	1556	1462	4	1130	1553	1341	Hawaii
24	984	1454	1078	-	-	-	-	315	1139	1684	1418	5	984	1454	1190	Idaho
440	-	-	1808	73	-	-	1952	13	-	-	1822	-	-	-	-	Illinois
550	830	973	-	338	947	1109	-	18	1070	1252	-	37	869	1018	-	Indiana
762	1019	1241	1161	261	1100	1356	1315	129	1144	1409	1370	-	-	-	-	Iowa
536	894	1258	1025	432	980	1381	1193	176	1069	1507	1358	28	1069	1507	1221	Kansas
1107	689	1103	882	649	837	1341	1160	74	923	1478	1392	110	837	1341	1026	Kentucky
802	800	1293	1034	573	874	1425	1284	168	964	1571	1528	164	678	1286	1068	Louisiana
388	878	1131	1043	200	961	1249	1191	180	1011	1321	1253	-	-	-	-	Maine
271	822	1058	959	214	874	1134	1026	42	933	1216	1098	29	933	1216	1098	Maryland
453	948	1108	-	-	-	-	-	68	980	1264	-	10	796	1020	-	Massachusetts
37	1121	1496	1309	330	1235	1601	1418	44	1441	1813	1627	20	1171	1493	1332	Michigan
-	-	-	-	8	1757	1810	1810	-	-	-	-	-	-	-	-	Minnesota
465	695	1045	817	185	803	1203	1032	14	957	1432	1104	-	-	-	-	Mississippi
1649	883	1146	1030	1036	976	1262	1180	7	1084	1395	1285	21	966	1249	1163	Missouri
255	1470	1571	1514	46	1596	1600	1596	76	1669	1729	1669	11	1591	2102	1936	Montana
215	811	1135	884	-	-	-	-	510	937	1311	1085	22	701	982	833	Nebraska
-	-	-	-	-	-	-	-	92	1302	1741	1633	6	1413	1896	1896	Nevada
125	830	967	898	12	887	1024	990	39	917	1066	1021	6	804	933	933	New Hampshire
409	890	1201	1046	145	981	1323	1152	27	1192	1609	1401	-	-	-	-	New Jersey
235	831	1422	918	409	962	1646	1136	191	1061	1815	1312	28	684	1290	850	New Mexico
1555	913	1082	1000	515	965	1140	1060	103	1210	1419	1419	67	1020	1203	1135	New York
1516	707	1045	859	617	806	1188	979	803	917	1360	1114	99	707	1137	899	North Carolina
19	868	1272	1008	212	1107	1622	1240	-	-	-	-	9	747	1094	1017	North Dakota
590	962	1104	1033	176	1018	1162	1090	77	1076	1270	1174	135	868	1272	1144	Ohio
876	943	1264	951	100	1091	1463	1242	112	1613	2161	1604	111	1040	1393	1052	Oklahoma
657	1158	1316	1228	254	1260	1383	1326	49	1316	1449	1393	-	-	-	-	Oregon
654	988	1214	1208	2091	1055	1314	1307	253	1214	1566	1558	61	988	1214	1166	Pennsylvania
127	835	886	952	17	860	913	956	22	913	972	972	20	774	814	848	Rhode Island
710	639	905	810	373	691	979	882	247	777	1102	999	123	664	1240	937	South Carolina
-	663	1009	-	297	789	1210	1039	96	898	1326	1263	5	1255	1910	1706	South Dakota
673	653	1003	802	339	725	1088	884	68	764	1129	921	33	789	1210	1147	Tennessee
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Texas
105	1082	1576	1271	157	1209	1763	1523	99	1335	1951	1743	6	856	1251	935	Utah
-	-	-	-	-	-	-	-	37	818	1404	-	12	782	1342	-	Vermont
2633	743	1015	849	895	812	1109	929	82	888	1213	1015	228	812	1109	929	Virginia
-	-	-	-	476	1269	1625	1472	86	1547	1794	1707	29	1017	1301	1239	Washington
195	889	934	902	810	981	1026	998	450	1073	1121	1091	47	889	960	916	West Virginia
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin
63	1046	1624	1248	197	1213	1882	1536	80	1339	2077	1843	-	-	-	-	Wyoming

1036	1213	1355	1105	1982 Average
-	-	-	142	1944 Average
-	-	-	778	%Increase 1944-1982
1	2	2	6	%Increase 1981-1982

MONTHLY SALARIES OF HIGHWAY PERSONNEL (as of July 1, 1982)

TRAFFIC OPERATIONS PERSONNEL:

State	(20) State Traffic Engineer				(21) Assistant State Traffic Engineer				(22) State Traffic Maintenance Engineer				(23) District Traffic Engineer				(24) Assistant District Traffic Engineer				
	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	
Alabama	1	2089	2947	2669	-	-	-	-	1	1889	2669	2297	9	1482	2089	1985	-	-	-	-	
Alaska	-	-	-	-	1	5050	6047	-	1	4885	5843	-	-	-	-	-	1	4725	5629	-	
Arizona	1	2863	3886	3886	2	2611	3546	3546	-	-	-	-	4	2176	2961	2961	-	-	-	-	
Arkansas	1	2944	3297	3297	1	1805	2923	2923	-	-	-	-	-	-	-	-	-	-	-	-	
California	1	3413	4415	3945	2	3245	3921	3572	-	-	-	-	17	2563	3566	3093	48	2226	3093	2684	
Colorado	1	3298	4419	4419	1	3141	4209	4209	-	-	-	-	3	2584	3463	3463	-	-	-	-	
Connecticut	1	2932	3599	3265	1	2819	3460	3140	1	2506	3076	2791	4	1759	2146	1952	4	1712	2038	1875	
Delaware	1	2222	3717	2806	-	-	-	-	-	-	-	-	1	1944	3081	2325	2	1587	2484	1898	
Florida	1	2332	4165	-	3	2394	3323	-	1	2245	3102	-	6	2245	3102	-	13	1521	2652	-	
Georgia	1	2244	3449	3449	1	1891	2901	2901	-	-	-	-	7	1599	2444	2341	7	1305	1974	1782	
Hawaii	1	2171	3444	3444	1	1987	3000	2868	-	-	-	-	-	-	-	-	-	-	-	-	
Idaho	1	2488	3678	3335	1	2256	3335	3025	-	-	-	-	6	1948	2881	2610	-	-	-	-	
Illinois	1	2685	3795	3560	1	2525	3575	3355	-	-	-	-	9	2365	3360	3027	15	1695	3140	2570	
Indiana	1	2427	3759	3579	1	2106	3281	3122	1	1954	2977	2977	6	1803	2708	-	6	1547	2466	-	
Iowa	1	2134	2855	2779	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Kansas	1	2125	3303	3101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Kentucky	1	2221	3557	3318	2	1827	3318	3214	-	-	-	-	15	1657	3318	2879	11	1503	2655	2234	
Louisiana	1	2520	3462	3462	13	1885	3266	2851	1	2316	3266	3266	8	2028	3003	3003	5	1885	2669	2278	
Maine	1	2001	2794	2794	1	1848	2576	2576	-	-	-	-	7	1593	2331	2270	-	-	-	-	
Maryland	1	2224	3156	3156	-	-	-	-	1	1771	2322	2322	7	1771	2322	2235	7	1640	2158	2076	
Massachusetts	1	2689	3356	-	1	2034	2526	-	1	1878	2337	-	8	1667	2059	-	8	1516	1873	-	
Michigan	1	3082	4124	4124	1	2845	3814	3814	1	2558	3529	3529	9	2251	3021	3021	6	2085	2787	2787	
Minnesota	1	2793	4522	3936	4	2598	4207	3443	-	-	-	-	9	2246	3113	3087	3	2091	2789	2688	
Mississippi	1	2406	3214	3165	1	2051	2865	2699	-	-	-	-	-	-	-	-	-	-	-	-	
Missouri	-	-	-	-	1	2233	2776	2776	-	-	-	-	3	1854	2429	2429	16	1619	2117	2046	
Montana	1	2061	2864	2789	1	1890	2626	2435	-	-	-	-	5	1591	2157	2097	-	-	-	-	
Nebraska	1	2231	3123	2943	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Nevada	1	2360	3235	3235	-	-	-	-	-	-	-	-	2	1741	2359	2359	-	-	-	-	
New Hampshire	1	2087	2555	2555	1	1784	2197	2197	1	1360	1669	1669	-	-	-	-	-	-	-	-	
New Jersey	1	3487	4708	4098	1	2732	3688	3210	-	-	-	-	6	2360	3187	2774	7	2141	2890	2516	
New Mexico	1	2433	3774	3654	1	2101	3423	2727	-	-	-	-	5	2317	3774	3316	-	-	-	-	
New York	1	4453	5260	5260	1	4037	4844	4844	-	-	-	-	10	2664	3571	3035	-	-	-	-	
North Carolina	1	2875	3479	3159	2	2061	3013	3013	-	-	-	-	14	1704	2490	2375	-	-	-	-	
North Dakota	1	2413	3535	2850	2	2085	3054	2658	-	-	-	-	-	-	-	-	-	-	-	-	
Ohio	1	2228	3124	3124	6	1840	2576	2208	-	-	-	-	12	1840	2576	2208	-	-	-	-	
Oklahoma	1	3273	4386	3227	1	2502	3352	2934	-	-	-	-	8	2382	3193	2602	-	-	-	-	
Oregon	1	2649	3379	3379	-	-	-	-	-	-	-	-	-	-	-	-	5	1974	2520	2520	
Pennsylvania	1	2880	3715	3715	2	2530	3271	3271	-	-	-	-	11	2119	2766	2766	40	1857	2422	2422	
Rhode Island	-	-	-	-	-	-	-	-	1	1119	1300	1422	-	-	2033	2650	2650	-	-	1782	2318
South Carolina	1	2332	3305	3305	2	2073	2938	2980	-	-	-	-	4	1772	2512	2305	-	-	-	-	
South Dakota	1	1754	2749	2404	-	-	-	-	-	-	-	-	5	1754	2749	2322	-	-	-	-	
Tennessee	1	1754	2749	2333	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Texas	1	2002	3033	2299	-	-	-	-	1	1464	1973	1855	4	1850	2356	2099	-	-	-	-	
Texas	-	-	-	-	-	-	-	-	-	-	-	-	13	2517	3170	-	-	-	-	-	
Utah	1	2683	3917	3654	1	1862	2716	2452	1	1677	2448	2448	3	1862	3022	2793	-	-	-	-	
Vermont	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Virginia	1	2366	3232	2705	2	1980	2705	2263	8	1811	2474	2070	8	1811	2474	2070	8	1515	2070	1733	
Washington	1	2663	3409	3409	1	2296	2939	2798	-	-	-	-	5	2080	2663	2598	5	1707	2185	2132	
West Virginia	1	2372	4249	3115	1	2049	3682	2834	-	-	-	-	3	1407	3045	1954	3	1173	2040	1586	
Wisconsin	1	3190	4433	3700	2	2686	3734	3281	-	-	-	-	3	2500	3490	3200	-	-	-	-	
Wyoming	1	2674	4149	3763	2	2422	3757	3091	-	-	-	-	5	2422	3757	2785	-	-	-	-	
1982 Average	-	-	-	3322	-	-	-	3036	-	-	-	2422	-	-	-	2603	-	-	-	2230	
1944 Average	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
%Increase 1944-1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
%Increase 1981-1982	-	-	-	4	-	-	-	7	-	-	-	1	-	-	-	10	-	-	-	8	

(25)				(26)				(27)				(28)				(29)				State
Traffic Supervisor				Sign Supervisor				Sign Shop Foreman				Traffic Signal & Lighting Foreman				Striper Foreman				
No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	
-	-	-	-	-	-	-	-	1	1075	1518	1279	1	1482	2089	2089	-	-	-	-	Alabama
1	3309	3917	-	-	-	-	-	-	-	-	-	2	2894	3431	-	-	-	-	-	Alaska
7	1449	1908	1863	1	1566	2059	1971	1	1449	1908	1727	15	1566	2228	2006	11	1354	1736	1689	Arizona
-	-	-	-	1	1590	2624	2624	1	1237	2063	2063	-	-	-	-	2	1237	2063	2009	Arkansas
-	-	-	-	-	-	-	-	-	-	-	-	27	1935	2332	2124	-	-	-	-	California
-	-	-	-	4	1888	2529	2529	1	1888	2529	2529	7	2461	3298	3298	8	1888	2529	2529	Colorado
-	-	-	-	1	1842	2220	2031	1	1473	1765	1619	-	-	-	-	-	-	-	-	Connecticut
2	1587	2484	1898	-	-	-	-	1	1026	1600	1226	1	1282	2088	1600	-	-	-	-	Delaware
-	-	-	-	1	1279	1709	-	3	868	1131	-	-	-	-	-	9	1020	1343	1303	Florida
-	-	-	-	1	1474	2244	2244	1	965	1414	1117	1	1599	2444	2244	9	1076	1599	1412	Georgia
-	-	-	-	3	1603	1778	1603	-	-	-	-	-	-	-	-	1	1421	1573	1573	Hawaii
-	-	-	-	-	-	-	-	1	1385	2046	1684	1	1684	2488	2256	2	1527	2256	1952	Idaho
26	1375	2850	2090	-	-	-	-	9	-	-	2004	-	-	-	-	15	1858	1982	1881	Illinois
6	1161	1744	-	6	1112	1675	-	6	1070	1252	-	6	1161	1744	-	6	1112	1675	-	Indiana
6	1671	2082	2040	-	-	-	-	1	1394	1817	-	1	1394	1817	1566	6	1576	2058	1893	Iowa
-	-	-	-	-	-	-	-	1	1023	1441	1476	-	-	-	-	6	1334	2008	1723	Kansas
13	951	1792	1660	14	782	1475	1418	7	643	1213	1139	11	710	1338	1312	10	782	1475	1277	Kentucky
9	1064	1731	1616	5	939	1909	1767	5	874	1731	1473	14	1173	1909	1778	14	1064	1731	1635	Louisiana
-	-	-	-	-	-	-	-	1	1239	1651	1651	1	1286	1720	1720	1	1239	1651	1651	Maine
-	-	-	-	1	1313	1728	1657	1	992	1297	1248	1	1417	1858	1788	7	1059	1386	1328	Maryland
7	1320	1612	-	1	1532	1888	-	1	1160	1516	-	1	1160	1516	-	25	1192	1432	-	Massachusetts
1	1999	2694	2694	25	1192	1432	-	10	1496	1999	1748	1	1648	2177	1913	13	1441	1813	1627	Michigan
6	1596	2500	2293	10	1764	2354	2059	-	-	-	-	3	1735	2509	2176	-	-	-	-	Minnesota
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mississippi
-	-	-	-	-	-	-	-	1	1308	1693	1616	6	1240	1625	1613	-	-	-	-	Missouri
-	-	-	-	-	-	-	-	1	1739	1799	1745	-	-	-	-	3	1707	1799	1707	Montana
-	-	-	-	1	1345	1882	1656	1	1164	1628	1419	1	1554	2175	2085	-	-	-	-	Nebraska
-	-	-	-	1	1741	2359	2359	-	-	-	-	-	-	-	-	5	1412	1896	1896	Nevada
1	1253	1518	1518	1	1081	1307	1307	1	1012	1231	1231	3	1118	1352	1352	1	1236	1503	1503	New Hampshire
-	-	-	-	1	1521	2054	1788	1	1380	1862	1621	29	1380	1862	1621	8	1012	1231	1231	New Jersey
-	-	-	-	-	-	-	-	-	-	-	-	2	1422	2317	1891	6	1380	1862	1621	New Mexico
-	-	-	-	-	-	-	-	1	1707	2024	2024	10	1357	1585	1585	-	-	-	-	New York
14	1360	1963	1786	14	1137	1629	1490	-	-	-	-	14	1188	1704	1559	14	1137	1629	1490	North Carolina
-	-	-	-	-	-	-	-	8	1280	1875	1545	-	-	-	-	-	-	-	-	North Dakota
12	1104	1384	1244	1	1272	1674	1592	1	1076	1272	1272	17	1180	1674	1427	59	1018	1162	1090	Ohio
8	1913	2564	1924	-	1867	2502	-	1	1327	1778	1203	-	-	-	-	8	1613	2564	1757	Oklahoma
-	-	-	-	-	-	-	-	1	1546	1974	1974	2	1974	2177	2076	8	1400	1624	1624	Oregon
-	-	-	-	11	1374	1782	1782	1	1260	1627	1627	11	1627	2119	2119	21	1214	1566	1517	Pennsylvania
1	1041	1116	1279	1	1041	1116	1279	1	1043	1199	1062	1	1046	1119	1336	1	943	1004	1135	Rhode Island
-	-	-	-	-	-	-	-	7	1064	1508	1345	8	1245	1764	1425	9	841	1508	1287	South Carolina
-	-	-	-	1	1062	1592	1622	1	976	1453	1469	-	-	-	-	2	789	1210	1117	South Dakota
-	-	-	-	4	1129	1570	1316	-	-	-	-	-	-	-	-	5	898	1326	1263	Tennessee
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	802	1173	961	Texas
1	1862	2716	2629	1	1677	2448	2448	1	1350	1895	1895	5	1806	2305	2239	6	1484	2172	2103	Utah
1	1205	2070	-	-	-	-	-	-	-	-	-	1	898	1544	-	7	858	1475	-	Vermont
8	1515	2070	1733	3	1268	1733	1449	3	1061	1449	1213	19	1160	1733	1449	10	1061	1449	1213	Virginia
2	2080	2663	2663	-	-	-	-	6	1625	1885	1839	5	1707	2185	2132	6	1707	2185	2132	Washington
5	811	1946	1218	-	-	-	-	1	1173	1773	1173	1	1693	2579	2040	9	937	1407	1373	West Virginia
8	2110	3143	2667	-	-	-	-	11	1740	2292	1928	1	1937	2693	2580	17	1354	1685	1526	Wisconsin
2	1406	2181	1756	-	-	-	-	1	1714	2660	2297	5	1631	2531	2234	9	1477	2292	1885	Wyoming

1925

1821

1585

1899

1581

1982 Average
1944 Average
%Increase
1944-1982
%Increase
1981-1982

8

5

5

9

6

MONTHLY SALARIES OF HIGHWAY PERSONNEL (as of July 1, 1982)

TRAFFIC OPERATIONS PERSONNEL (cont'd):

State	(30)				(31)				(32)				(33)				(34)			
	Sign Erector	Foreman	No. Min. Max. Aver.		Sign Fabricator	No. Min. Max. Aver.			Sign Technician	No. Min. Max. Aver.			Traffic Signal & Lighting Technician	No. Min. Max. Aver.			Striper Technician	No. Min. Max. Aver.		
Alabama	1	-	-	-	1	998	1376	1102	1	950	1310	1158	26	882	1676	1411	-	-	-	-
Alaska	1	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	-	-	-	-
Arizona	3	1354	1736	1598	5	1188	1517	1488	36	1109	1417	1347	43	1449	1908	1710	18	1188	1517	1403
Arkansas	1	1237	2063	2063	7	670	1083	880	1	709	1146	1146	-	-	-	-	5	800	1295	1077
California	-	-	-	-	-	-	-	-	-	-	-	-	172	1762	2124	1935	-	-	-	-
Colorado	-	-	-	-	-	-	-	-	8	1408	1888	1798	8	1667	2232	2025	8	1408	1888	1798
Connecticut	-	-	-	-	5	1169	1422	1295	-	-	-	-	4	1339	1616	1478	-	-	-	-
Delaware	3	1173	1903	1464	4	776	1199	935	-	-	-	-	5	898	1422	1101	-	-	-	-
Florida	45	916	1199	1155	-	-	-	-	8	786	1016	-	-	-	-	-	-	-	-	-
Georgia	10	1076	1599	1432	15	828	1159	1037	70	828	1159	1056	10	934	1599	1207	21	934	1359	1151
Hawaii	-	-	-	-	5	1328	1475	1357	-	-	-	-	9	1360	1657	1512	2	1163	1284	1163
Idaho	6	1527	2256	1952	4	984	1454	1205	-	-	-	-	8	1454	2148	1778	10	1139	1684	1418
Illinois	-	-	-	-	15	1875	2028	1891	-	-	-	-	12	1575	2850	2891	-	-	-	-
Indiana	6	1070	1252	-	6	947	1109	-	6	1070	1252	-	31	984	1482	-	12	1070	1252	-
Iowa	-	-	-	-	9	1057	1295	1094	-	-	-	-	1	1477	1593	1477	11	1100	1356	1276
Kansas	-	-	-	-	3	1023	1441	1232	-	-	-	-	1	1144	1409	1409	5	1144	1409	1409
Kentucky	-	-	-	-	2	643	1100	1100	-	-	-	-	9	480	1338	965	21	710	1338	1180
Louisiana	7	874	1731	1643	27	804	1909	1217	10	800	1293	930	61	800	1731	1500	171	800	1571	1106
Maine	3	1011	1321	1321	1	1011	1321	1321	1	1121	1478	1478	1	1338	1825	1825	-	-	-	-
Maryland	-	-	-	-	3	932	1215	1166	10	774	1057	992	26	774	1488	1166	-	-	-	-
Massachusetts	25	1192	1432	-	5	1044	1336	-	25	1160	1516	-	16	1044	1336	-	24	1044	1336	-
Michigan	31	1235	1601	1418	10	1121	1601	1361	42	1235	1601	1418	34	1235	1999	1617	17	1235	1601	1418
Minnesota	-	-	-	-	-	-	-	-	-	-	-	-	21	1423	1975	1813	-	-	-	-
Mississippi	-	-	-	-	4	913	1362	1132	-	-	-	-	6	1040	1454	1269	-	-	-	-
Missouri	-	-	-	-	2	933	1168	1116	1	883	1111	970	38	1170	1540	1351	-	-	-	-
Montana	-	-	-	-	6	1652	1709	1652	5	1456	2157	2027	9	1662	1709	1662	-	-	-	-
Nebraska	-	-	-	-	7	1007	1410	1145	-	-	-	-	6	1007	1410	1259	-	-	-	-
Nevada	2	1412	1896	1896	2	1600	2160	2067	1	1472	1979	1816	-	-	-	-	6	1302	1741	1741
New Hampshire	6	1012	1231	1231	1	1012	1231	1231	7	830	967	967	2	986	1179	1131	5	917	1066	1066
New Jersey	1	1118	1253	1352	4	945	1116	1116	11	981	1323	1152	37	934	1260	1097	117	830	967	967
New Mexico	-	-	-	-	4	873	1422	1141	-	-	-	-	8	962	2101	1517	-	-	-	-
New York	65	1020	1203	1203	11	965	1140	1104	1	1357	1585	1585	50	1210	1419	1419	20	1020	1203	1203
North Carolina	94	806	1137	957	14	806	1137	957	-	-	-	-	29	1091	1559	1360	70	841	1188	1045
North Dakota	-	-	-	-	4	1002	1468	1017	-	-	-	-	-	-	-	-	2	1218	1784	1465
Ohio	50	1018	1162	1090	15	1107	1622	1325	3	912	1056	984	-	962	1104	-	15	1142	1384	1263
Oklahoma	8	1613	2564	1757	-	943	1264	-	3	1091	1463	1120	-	-	-	-	-	-	-	-
Oregon	17	1383	1519	1500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania	64	1314	1703	1700	2	1055	1314	1314	10	988	1214	1214	11	1627	2119	2119	-	988	1214	1208
Rhode Island	1	957	1036	1124	3	801	974	1171	-	-	-	-	2	943	1004	1135	6	913	972	972
South Carolina	-	-	-	-	17	777	1102	877	-	-	-	-	23	1023	1568	1160	-	-	-	-
South Dakota	6	1154	1744	1539	3	898	1326	1271	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee	3	898	1326	1263	-	-	-	-	28	653	1003	802	-	-	-	-	24	764	1129	921
Texas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah	1	1484	2172	2605	-	-	-	-	5	1225	1719	1350	15	1284	2194	1660	32	1082	1951	1524
Vermont	4	782	1342	-	1	818	1404	-	-	-	-	-	1	858	1475	-	6	737	1260	-
Virginia	10	1061	1449	1213	30	812	1109	929	70	1061	1449	1213	46	970	1325	1109	12	1061	1449	1213
Washington	-	-	-	-	-	-	-	-	22	1472	1707	1625	53	1334	2080	1885	16	1547	1794	1750
West Virginia	-	-	-	-	7	889	1026	932	-	-	-	-	4	1173	2138	1515	12	842	1234	1081
Wisconsin	39	1354	1685	1545	24	1354	1685	1486	40	1190	1495	1490	10	-	-	2335	41	1190	1495	1490
Wyoming	2	1274	1976	1513	7	1213	1882	1502	2	1213	1882	1306	5	1405	2181	1794	31	1046	1624	1310
1982 Average	-	-	-	1501	-	-	-	1215	-	-	-	1301	-	-	-	1549	-	-	-	1273
1944 Average	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
% Increase 1944-1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
% Increase 1981-1982	-	-	-	9	-	-	-	(1%)	-	-	-	7	-	-	-	9	-	-	-	5

OTHER RELATED PERSONNEL:
(35)

(36)

	Chief Engineer			Project Engineer				State
	No.	Min.	Max.	Aver.	No.	Min.	Max.	
1	2947	4177	3337	150	1187	2089	1715	Alabama
-	-	-	-	-	-	-	-	Alaska
1	3768	5118	4525	43	1837	2961	2521	Arizona
-	3911	4380	4380	-	1694	2769	2615	Arkansas
2	3413	4415	3891	219	2226	3093	2684	California
1	3636	4872	4872	6	2126	2849	2713	Colorado
1	3533	4554	4043	21	1931	2351	2141	Connecticut
2	2429	4077	3081	-	-	-	-	Delaware
-	-	-	-	-	-	-	-	Florida
1	-	-	4922	314	1305	2244	1945	Georgia
1	2494	4002	4002	6	1987	3000	2671	Hawaii
1	-	-	4494	48	1767	2613	2248	Idaho
1	3065	4225	4000	-	1375	3140	2450	Illinois
1	3367	5261	4745	109	1547	2466	-	Indiana
1	3126	4220	4105	20	1945	2597	2480	Iowa
1	-	-	3714	24	1888	2936	2412	Kansas
1	2443	3913	3625	61	1626	2644	2214	Kentucky
1	2586	3528	3528	104	1768	3134	2877	Louisiana
-	2277	3184	3184	-	-	-	-	Maine
1	-	-	-	86	953	1860	1488	Maryland
1	3723	4693	-	-	-	-	-	Massachusetts
1	3250	4366	4366	60	2085	3021	2553	Michigan
1	-	-	4000	72	1883	3113	2703	Minnesota
1	2243	3942	3196	42	1829	2865	2412	Mississippi
1	3708	4375	4068	43	1735	2276	2276	Missouri
1	-	-	3875	-	-	-	-	Montana
2	2979	4171	3321	52	1445	2024	1832	Nebraska
1	-	-	-	12	1979	2697	2579	Nevada
1	-	3203	3203	60	1307	1999	1740	New Hampshire
1	4239	5722	4981	19	2141	2890	2516	New Jersey
1	-	-	4167	44	1815	3595	2646	New Mexico
-	-	-	-	-	-	-	-	New York
1	2738	4012	3824	42	1786	2608	2486	North Carolina
1	2931	4294	3820	8	2085	3054	2429	North Dakota
1	2720	3792	-	101	1520	2124	1822	Ohio
1	4583	4583	4583	26	2161	2896	2545	Oklahoma
1	-	4316	4316	46	1974	2520	2520	Oregon
1	3663	4276	4276	325	1857	2422	2422	Pennsylvania
-	-	-	-	-	1782	2318	2318	Rhode Island
1	-	-	3775	52	1346	2233	2103	South Carolina
1	-	-	3354	2	1754	2749	2322	South Dakota
1	2639	3836	3836	45	1754	2749	2322	Tennessee
1	-	-	4642	50	1570	1973	1792	Texas
1	3365	4912	4432	200	1316	1792	1514	Texas
1	3365	4912	4432	27	2357	2968	-	Texas
1	3365	4912	4432	27	1862	3022	2683	Utah
1	2357	4219	-	30	950	2472	-	Vermont
1	3091	4223	3533	34	1386	1893	1584	Virginia
1	-	5187	5187	56	2080	2663	2535	Washington
1	2745	4249	3193	-	-	-	-	West Virginia
-	-	-	-	174	1937	2940	2440	Wisconsin
1	4175	6477	5329	32	2422	3757	3148	Wyoming
		4043				2327		1982 Average
		-				-		1944 Average
		-				-		%Increase 1944-1982
		6				6		%Increase 1981-1982

MAINTENANCE QUESTIONNAIRE ON POLICIES AFFECTING MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL (as of July 1, 1982)

Questions asked the various State Highway Departments are answered in the table below. The numbers at the head of each column of the table refer to the question numbers.

CIVIL SERVICE OR MERIT SYSTEM

1. Are your maintenance and operations employees under a civil service plan, merit system, or some other comparable plan?
 - a. All
 - b. All but temporary
 - c. Supervisory only
 - d. None

4. Do you have a compulsory retirement age? If answer is "Yes", indicate the following:
 - a. Is it established by policy or statute?
 - b. Compulsory retirement age?
5. Is voluntary retirement possible after a prescribed number of years? If answer is "Yes", indicate the following:
 - a. Minimum years of service at which voluntary retirement is possible?
 - b. Minimum age at which voluntary retirement is possible?

RETIREMENT PLAN

2. Are your maintenance and operations employees included in any state-sponsored or controlled retirement plan?
3. Are your maintenance and operations employees included in a Federal Social Security retirement plan?

VACATIONS

6. Do maintenance and operations employees receive an annual vacation on full pay?
7. What is your annual vacation schedule for maintenance and operations personnel (working hours per year per years of service)?

State	CIVIL SERVICE OR MERIT SYSTEM				RETIREMENT PLAN							VACATION							
	(1a)	(1b)	(1c)	(1d)	State Plan (2)	Fed. Soc. Sec. (3)	Compulsory Retirement (4)	Voluntary Retirement			Annual Vacation Schedule								
								(4a)	(4b)	(5)	Minimum Hrs. /Yrs. (6)	Yrs. of Service (7)	Maximum Hrs. /Yrs. (8)	Yrs. of Service (9)	Cumulative Maximum (10)				
Alabama	x	-	-	-	Yes	Yes	Yes	Statute	70	Yes	30	None	Yes	104	1-5	234	25	Yes	480
Alaska	x	-	-	-	Yes	No	No	-	-	Yes	5	50-55	Yes	9.375	0-2	18.750	10	Yes	450
Arizona	x	-	-	-	Yes	Yes	Yes	Statute	65	Yes	5	50	Yes	96	0-3	168	15	Yes	240
Arkansas	x	-	-	x	Yes	Yes	Yes	Both	70	Yes	10	Any	Yes	96	0-3	264	20	Yes	Annual Accrual+40
California	x	-	-	-	Yes	Yes	Yes	Statute	70	Yes	5	50	Yes	80	1-3	160	24	Yes	320
Colorado	-	x	-	-	Yes	No	Yes	Statute	70	Yes	20at60 30atAny	55	Yes	96	1-5	168	15	Yes	336
Connecticut	x	-	-	-	Yes	Yes	Yes	Statute	70	Yes	10	55	Yes	70	0-5	140	20	Yes	35
Delaware	-	x	-	-	Yes	Yes	Yes	Statute	70	Yes	5	Var.	Yes	112.5	0-10	157.5	15	Yes	315
Florida	-	x	-	-	Yes	Yes	No	-	-	Yes	10	Any	Yes	104	1-5	156	10	Yes	240
Georgia	-	x	-	-	Yes	Yes	Yes	Policy	70	Yes	5	Any	Yes	120	1-5	168	10	Yes	360
Hawaii	x	-	-	-	Yes	Yes	Yes	Statute	70	Yes	5	55	Yes	168	Any	168	Any	Yes	720
Idaho	x	-	-	-	Yes	Yes	No	-	-	Yes	5at55	35	Yes	96	0-5	168	15	Yes	336
Illinois	-	x	-	-	Yes	Yes	No	-	-	Yes	8	60	Yes	80	1-5	200	25	Yes	80-200
Indiana	-	-	-	x	Yes	Yes	Yes	Statute	70	Yes	10	50	Yes	96	0-5	200	20	Yes	No Max. Twice the Annual Hrs.
Iowa	x	-	-	-	Yes	Yes	No	-	-	Yes	0	55	Yes	80	1-4	200	24	Yes	Annual Hrs.
Kansas	-	x	-	-	Yes	Yes	No	-	-	Yes	10	60	Yes	96	0-5	240	15	Yes	240
Kentucky	-	x	-	-	Yes	Yes	No	-	70	Yes	30	Any/30	Yes	96	1-5	168	15	Yes	450
Louisiana	-	x	-	-	Yes	No	Yes	Policy	70	Yes	30	55	Yes	96	1-3	192	15	Yes	411
Maine	x	-	-	-	Yes	No	No	-	-	Yes	10	50	Yes	96	0-5	192	20	Yes	320
Maryland	x	-	-	-	Yes	Yes	Yes	Policy	70	Yes	15	55	Yes	71	1-5	177.5	20	Yes	280
Massachusetts	x	-	-	-	Yes	No	Yes	Statute	70	Yes	10	55	Yes	80	0-5	200	20	Yes	200
Michigan	x	-	-	-	Yes	Yes	Yes	Statute	70	Yes	10at60	55	Yes	104	0-1	265	45	Yes	240
Minnesota	-	x	-	-	Yes	Yes	Yes	Statute	70	Yes	10	58	Yes	104	0-5	208	20	Yes	240
Mississippi	-	x	-	-	Yes	Yes	Yes	Statute	70	Yes	30	-	Yes	48	6 Mo.- 1 Yr.	144	5	Yes	360
Missouri	x	-	-	-	Yes	Yes	Yes	Statute	70	Yes	15	55	Yes	120	0-10	168	15	Yes	240/10 336/15
Montana	-	-	-	x	Yes	Yes	No	-	-	Yes	5at55	-	Yes	120	1-10	192	20	Yes	384
Nebraska	x	-	-	-	Yes	Yes	No	-	-	Yes	30	60	Yes	96	1-5	200	16	Yes	200
Nevada	x	-	-	-	Yes	No	No	-	-	Yes	10	55	Yes	120	6 Mo.- 10 Yrs.	168	15	Yes	240
New Hampshire	x	-	-	-	Yes	Yes	No	-	-	Yes	30	55	Yes	120	0-8	168	18	Yes	288
New Jersey	-	x	-	-	Yes	Yes	Yes	Policy	70	Yes	10at60 25at55	55	Yes	96	0-5	200	20	Yes	Year
New Mexico	x	-	-	-	Yes	Yes	No	-	-	Yes	7at60	Any/25	Yes	120	Ea.Yr.	120	More	Yes	240
New York	-	x	-	-	Yes	Yes	Yes	Statute	70	Yes	10	55	Yes	97.5	1-7	149.5	7	Yes	320
North Carolina	-	x	-	-	Yes	Yes	Yes	Policy	70	Yes	20	50	Yes	80	0-2	192	20	Yes	240
North Dakota	-	-	-	x	Yes	Yes	No	-	-	Yes	-	62	Yes	96	1-4	192	19	Yes	240
Ohio	x	-	-	-	Yes	No	Yes	Statute	70	Yes	5at60	Any/30	Yes	80	1-7	200	25	Yes	3Yrs.
Oklahoma	x	-	-	-	Yes	Yes	Yes	Policy	70	Yes	10	55	Yes	120	1-5	144	5	Yes	384
Oregon	-	x	-	-	Yes	Yes	Yes	Statute	70	Yes	30	55	Yes	96	0-5	192	20	Yes	250
Pennsylvania	-	-	-	x	Yes	Yes	No	-	-	Yes	10	Any/10	Yes	78	0-1	150	25	Yes	337.5
Rhode Island	x	-	-	-	Yes	Yes	Yes	Statute	70	Yes	10	55	Yes	80	6 Mo.- 5 Yrs.	208	20	Yes	208
South Carolina	-	-	-	x	Yes	Yes	Yes	-	72	Yes	30	60	Yes	120	0-10	120	22	Yes	360
South Dakota	-	x	-	-	Yes	Yes	Yes	Statute	70	Yes	5	55	Yes	120	1-15	160	15	Yes	240/ 320
Tennessee	-	x	-	-	Yes	Yes	No	-	-	Yes	30	48	Yes	90	0-5	180	20	Yes	315
Texas	-	-	-	x	Yes	Yes	Yes	Policy	70	Yes	10at60	50	Yes	84	0-2	168	20	Yes	336
Utah	-	x	-	-	Yes	Yes	No	-	-	Yes	30	48	Yes	104	0-5	156	10	Yes	320
Vermont	-	x	-	-	Yes	Yes	Yes	Statute	70	Yes	10	55	Yes	96	0-5	168	20	Yes	360
Virginia	-	x	-	-	Yes	Yes	Yes	Statute	70	Yes	5	55	Yes	96	0-5	168	20	Yes	336
Washington	x	-	-	-	Yes	Yes	Yes	Statute	70	Yes	5	60/5 55/25	Yes	96	0-1	176	26	Yes	240
West Virginia	-	-	-	x	Yes	Yes	No	-	-	Yes	5	60	Yes	120	0-5	192	15	Yes	240/280 360
Wisconsin	x	-	-	-	Yes	Yes	No	-	-	No	-	55	Yes	80	1-5	200	-	Yes	40
Wyoming	x	-	-	-	Yes	Yes	Yes	Statute	70	Yes	4	50	Yes	96	0-4	192	19	Yes	384

8. Are your annual vacations cumulative? If answer is "Yes", what amount of vacation may be carried over into a new year? (Do not include any unearned vacation.)

SICK LEAVE

9. Do you grant sick leave with pay to maintenance and operations employees?
 10. What is your annual sick leave schedule for maintenance and operations personnel (working hours per year per years of service)?
 11. Is your sick leave cumulative? If answer is "Yes", what is the maximum?

SICK LEAVE							State
(9)	Annual Sick Leave Schedule Minimum		Maximum		Cumulative Maximum	(11)	
	Hrs. /Yrs.	Yrs. of Service	Hrs. /Yrs.	Yrs. of Service			
Yes	104	1-Max	104	1	Yes	1200	Alabama
Yes	9.375	-	9.375	-	Yes	-	Alaska
Yes	96	All	96	All	Yes	Unlimited	Arizona
Yes	96	Any	96	Any	Yes	Unlimited	Arkansas
Yes	96	-	96	-	Yes	Unlimited	California
Yes	120	1	120	1	Yes	Cumulative	Colorado
Yes	105	-	105	-	Yes	Unlimited	Connecticut
Yes	112.5	-	112.5	-	Yes	-	Delaware
Yes	104	All	104	All	Yes	Unlimited	Florida
Yes	120	-	120	-	Yes	720	Georgia
Yes	168	Any	168	Any	Yes	Unlimited	Hawaii
Yes	96	All	96	All	Yes	Unlimited	Idaho
Yes	96	1	96	1	Yes	Unlimited	Illinois
Yes	48	All	48	All	Yes	Unlimited	Indiana
Yes	144	-	144	-	Yes	Unlimited	Iowa
Yes	96	1	96	1	Yes	Unlimited	Kansas
Yes	96	All	-	-	Yes	Unlimited	Kentucky
Yes	96	1-3	192	15	Yes	Unlimited	Louisiana
Yes	96	Any	96	-	Yes	960	Maine
Yes	120	All	-	-	Yes	Unlimited	Maryland
Yes	120	-	120	-	Yes	Unlimited	Massachusetts
Yes	104	0-1	104	1	Yes	Unlimited	Michigan
Yes	104	0-1	104	1	Yes	900	Minnesota
Yes	120	0-1	120	1	Yes	960	Mississippi
Yes	120	-	120	-	Yes	Unlimited	Missouri
Yes	8/Mo	-	96	All	Yes	Unlimited	Montana
Yes	96	1-5	240	19	Yes	1440	Nebraska
Yes	120	-	-	-	Yes	Unlimited	Nevada
Yes	120	0-8	120	18	Yes	720/0-8 960/over 18	New Hampshire
Yes	96	0-1	120	1	Yes	Unlimited	New Jersey
Yes	96	-	96	1	Yes	Unlimited	New Mexico
Yes	97.5	1-7	97.5	7	Yes	1600	New York
Yes	80	All	90	1	Yes	Unlimited	North Carolina
Yes	96	-	-	-	Yes	Unlimited	North Dakota
Yes	56	All	-	-	Yes	Unlimited	Ohio
Yes	120	1	120	-	Yes	360	Oklahoma
Yes	96	All	-	-	Yes	Unlimited	Oregon
Yes	-	-	112.5	1	Yes	1500	Pennsylvania
Yes	120	-	120	-	Yes	960	Rhode Island
Yes	120	-	120	-	Yes	720	South Carolina
Yes	-	-	112	1	Yes	Unlimited	South Dakota
Yes	90	0-5	90	20	Yes	Unlimited	Tennessee
Yes	96	-	96	-	Yes	Unlimited	Texas
Yes	104	-	104	-	Yes	Unlimited	Utah
Yes	96	0-5	168	20	Yes	Unlimited	Vermont
Yes	120	Any	120	Any	Yes	Unlimited	Virginia
Yes	96	-	96	-	Yes	-	Washington
Yes	144	-	144	-	Yes	Unlimited	West Virginia
Yes	-	-	-	-	Yes	Unlimited	Wisconsin
Yes	96	All	96	-	Yes	-	Wyoming

MAINTENANCE QUESTIONNAIRE ON POLICIES AFFECTING MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL (cont'd)

INSURANCE

12. Are your maintenance and operations employees protected by a wholly or partially state-financed hospitalization plan?
 a. If answer is "Yes", indicate whether plan is wholly state-financed or partially state-financed.
 b. Is participation optional or mandatory with employee?
13. Are your maintenance and operations employees protected by a wholly or partially state-financed life insurance plan?
 a. If answer is "Yes", indicate whether plan is wholly state-financed or partially state-financed.
 b. Is participation optional or mandatory with employee?
14. Are your maintenance and operations employees protected against lawsuit by a state-financed public liability plan?
 a. All
 b. All but temporary
 c. Supervisory only
 d. None

UNIONIZATION

15. Do maintenance and operations employees have collective bargaining rights?
16. Are your maintenance and operations employees organized by the following, and if so, is membership mandatory or voluntary?
 a. National union
 b. Local union or employee association

SERVICE AWARDS

17. Do your maintenance and operations departments give any type of recognition, such as pins or tokens, to employees serving a certain length of time with the department.

State	INSURANCE									UNIONIZATION					
	Hospitalization			Life Insurance		Public Liability				Supv. (15)	Non-Supv. (16a)	Supervisory		Local Union (16b)	
	(12)	(12a)	(12b)	(13)	(13a)	(13b)	(14a)	(14b)	(14c)			(14d)	National Union (16a)		Local Union (16b)
Alabama	Yes	Wholly	Mandatory	No	-	-	-	-	x	No	No	No	-	Yes	-
Alaska	Yes	Wholly	Mandatory	Yes	Wholly	Mandatory	-	-	x	Yes	Yes	No	-	Yes	Mandatory
Arizona	Yes	Partially	Optional	Yes	Wholly	Optional	x	-	-	No	No	No	-	Yes	Voluntary
Arkansas	Yes	Partially	Optional	Yes	Partially	Optional	-	-	x	No	No	No	-	No	-
California	Yes	Partially	Optional	Yes	Wholly & Partially	Mandatory	x	-	-	No	Yes	No	-	No	-
Colorado	Yes	Partially	Optional	Yes	Partially	Mandatory	x	-	-	No	-	No	-	Yes	Voluntary
Connecticut	Yes	Wholly	Optional	Yes	Partially	Optional	x	-	-	Yes	Yes	No	-	Yes	Voluntary
Delaware	Yes	Partially	Optional	No	-	Optional	-	-	x	Yes	Yes	Yes	Mandatory	-	-
Florida	Yes	Partially	Optional	-	Partially	Mandatory	-	-	x	No	Yes	No	-	No	-
Georgia	Yes	Partially	Optional	Yes	Partially	Mandatory	x	-	-	No	No	No	-	No	-
Hawaii	Yes	Partially & Wholly	Optional	Yes	Wholly	Optional	-	-	x	Yes	Yes	No	-	Yes	Voluntary
Idaho	Yes	Partially	Optional	Yes	Wholly	Optional	x	-	-	No	No	No	-	Yes	Voluntary
Illinois	Yes	Wholly	Mandatory	Yes	Wholly	Mandatory	x	-	-	No	Yes	No	-	Yes	Voluntary
Indiana	Yes	Partially & Wholly	Optional	Yes	Partially & Wholly	Optional	x	-	-	No	No	No	-	Yes	Voluntary
Iowa	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	No	Yes	No	-	No	-
Kansas	Yes	Wholly & Partially	Optional	Yes	Wholly	Mandatory	-	-	x	No	Yes	No	-	No	-
Kentucky	Yes	Partially	Mandatory	Yes	Wholly	Mandatory	-	-	x	No	No	No	-	No	-
Louisiana	Yes	Partially	Optional	Yes	Partially	Optional	-	-	x	No	Yes	Yes	Voluntary	Yes	Voluntary
Maine	Yes	Wholly	Optional	Yes	Partially	Optional	-	-	x	Yes	Yes	No	-	Yes	Voluntary
Maryland	Yes	Partially	Optional	No	-	-	-	-	x	No	No	Yes	Voluntary	Yes	Voluntary
Massachusetts	Yes	Partially	Optional	Yes	Partially	Optional	-	-	x	Yes	Yes	Yes	Mandatory	-	-
Michigan	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	No	Yes	No	-	Yes	Voluntary
Minnesota	Yes	Partially	Mandatory	Yes	Wholly	Mandatory	-	-	x	Yes	Yes	No	-	Yes	Voluntary
Mississippi	Yes	Wholly	Optional	Yes	Partially	Optional	-	-	x	No	No	No	-	Yes	Voluntary
Missouri	Yes	Partially	Optional	Yes	Wholly	Mandatory	x	-	-	No	Yes	No	-	Yes	Voluntary
Montana	Yes	Partially & Wholly	Optional	No	-	-	x	-	-	No	Yes	-	-	-	-
Nebraska	Yes	Partially	Optional	Yes	Wholly & Partially	Optional	-	-	x	No	Yes	No	-	No	-
Nevada	Yes	Wholly	Mandatory	Yes	Wholly	Mandatory	x	-	-	No	No	No	-	Yes	Voluntary
New Hampshire	Yes	Wholly	Optional	Yes	Partially & Wholly	Optional & Mandatory	-	-	x	Yes	Yes	No	-	Yes	Voluntary
New Jersey	Yes	Wholly	Optional	Yes	Partially	Mandatory	-	-	x	Yes	Yes	Yes	Voluntary	No	-
New Mexico	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	No	Yes	No	-	No	-
New York	Yes	Partially	Optional	Yes	Partially	Optional	-	-	x	Yes	Yes	Yes	Voluntary	Yes	Voluntary
North Carolina	Yes	Wholly	Optional	Yes	Partially	Mandatory	x	-	-	No	No	No	-	Yes	Voluntary
North Dakota	Yes	Wholly	Optional	Yes	Wholly	Optional	-	-	x	No	Yes	No	-	Yes	Voluntary
Ohio	Yes	Partially	Optional	Yes	Wholly	Mandatory	x	-	-	No	No	Yes	Voluntary	Yes	Voluntary
Oklahoma	Yes	Partially	Mandatory	Yes	Partially	Optional	-	-	x	No	No	No	-	Yes	Voluntary
Oregon	Yes	Wholly	Optional	No	-	-	x	-	-	No	Yes	No	-	No	-
Pennsylvania	Yes	Wholly	Optional	Yes	Wholly	Optional	x	-	-	Yes	Yes	Yes	Voluntary	Yes	Voluntary
Rhode Island	Yes	Wholly	Mandatory	Yes	Partially	Mandatory	-	-	x	Yes	Yes	Yes	Mandatory	-	-
South Carolina	Yes	Wholly	Mandatory	Yes	Wholly	Mandatory	-	x	-	No	No	No	-	Yes	Voluntary
South Dakota	Yes	Wholly	Mandatory	No	-	Optional	x	-	-	No	No	No	-	Yes	Voluntary
Tennessee	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	No	No	No	-	No	-
Texas	Yes	Wholly	Optional	Yes	Wholly	Optional	x	-	-	No	No	-	-	Yes	Voluntary
Utah	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	No	No	No	-	Yes	Voluntary
Vermont	Yes	Partially	Optional	Yes	Partially	Optional	-	-	x	Yes	Yes	No	-	Yes	Voluntary
Virginia	Yes	Wholly	Optional	Yes	Partially	Mandatory	x	-	-	No	No	No	-	-	-
Washington	Yes	Wholly & Partially	Mandatory	Yes	Partially & Wholly	Optional	x	-	-	Yes	Yes	Yes	Mandatory	-	-
West Virginia	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	No	No	No	-	-	-
Wisconsin	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	No	Yes	No	-	No	-
Wyoming	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	No	No	No	-	Yes	Voluntary

WORKING CONDITIONS

18. Check which of your maintenance and operations field employees are paid on a salaried basis and which are paid on an hourly basis.
 a. All
 b. Permanent Field Employees (exclusive of supervisory)
 c. Supervisory
 d. Temporary
19. Standard number of hours worked by each permanent field employee per day and per week.

				SERVICE AWARDS	WORKING CONDITIONS						State
Non-Supervisory		Local Union		(17)	Salary Basis				Working Hrs.		
National Union (16a)	Local Union (16b)	(17)	(18a)		(18b)	(18c)	(18d)	Per Day	Per Week		
Yes	Voluntary	Yes	Voluntary	Yes	S	S	H	8	40	Alabama	
No	-	Yes	-	Yes	-	H	S	H	7.5 37.5	Alaska	
No	-	Yes	Voluntary	Yes	S	-	-	8	40	Arizona	
No	-	-	-	Yes	S	-	-	8	40	Arkansas	
No	-	Yes	Voluntary	Yes	-	S	S	H	8 or 10	California	
No	-	Yes	Voluntary	Yes	-	S	S	H	8	Colorado	
No	-	Yes	Voluntary	No	-	H	S	H	7	Connecticut	
-	-	No	-	No	-	H	S	H	7.5 37.5	Delaware	
No	-	Yes	Voluntary	No	H	-	-	8/10	40	Florida	
No	-	No	-	Yes	S	-	-	8	40	Georgia	
No	-	Yes	Voluntary	Yes	S	-	-	8	40	Hawaii	
-	-	Yes	Voluntary	Yes	H	H	H	H	8	Idaho	
Yes	Voluntary	-	-	Yes	-	S	S	H	8	Illinois	
No	-	Yes	Voluntary	Yes	S	-	-	8	40	Indiana	
Yes	Voluntary	Yes	Voluntary	Yes	-	S	S	H	8	Iowa	
Yes	Voluntary	Yes	Voluntary	Yes	-	S	S	H	8	Kansas	
No	-	No	-	Yes	-	H	S	S	7.5 37.5	Kentucky	
Yes	Voluntary	Yes	Voluntary	Yes	-	S	S	H	8	Louisiana	
No	-	Yes	Voluntary	Yes	-	H	S	H	8	Maine	
Yes	Voluntary	Yes	Voluntary	No	-	H	S	H	8	Maryland	
Yes	Mandatory	Yes	Voluntary	No	H	-	-	8	40	Masachusetts	
No	-	Yes	Mandatory	Yes	H	H	S	H	8	Michigan	
Yes	Voluntary	Yes	Voluntary	Yes	S	S	S	H	8	Minnesota	
No	-	Yes	Voluntary	Yes	S	-	-	8	40	Mississippi	
Yes	Voluntary	Yes	Voluntary	Yes	-	S	S	H	8	Missouri	
Yes	Mandatory	Yes	Mandatory	Yes	-	S	S	H	8	Montana	
No	-	Yes	Voluntary	Yes	H	-	-	8	40	Nebraska	
No	-	Yes	Voluntary	Yes	S	S	S	S	8	Nevada	
No	-	Yes	Voluntary	Yes	H	H	S	H	8	New Hampshire	
Yes	Voluntary	No	-	Yes	S	-	-	8	40	New Jersey	
Yes	Voluntary	-	-	Yes	-	S	S	H	8	New Mexico	
Yes	Voluntary	Yes	Voluntary	Yes	S	S	S	H	8	New York	
No	-	Yes	Voluntary	Yes	-	S	S	H	8	North Carolina	
Yes	Voluntary	Yes	Voluntary	Yes	S	S	S	H	8	North Dakota	
Yes	Voluntary	Yes	Voluntary	Yes	H	-	-	8	40	Ohio	
No	-	Yes	Voluntary	Yes	S	S	S	S	8	Oklahoma	
-	-	Yes	Voluntary	Yes	S	-	-	8	40	Oregon	
Yes	Voluntary	-	-	Yes	-	S	S	H	7.5 37.50	Pennsylvania	
Yes	Mandatory	-	-	Yes	H	-	-	8	40	Rhode Island	
No	-	Yes	Voluntary	Yes	-	H	S	H	8	South Carolina	
No	-	Yes	Voluntary	Yes	-	H	S	H	8	South Dakota	
No	-	Yes	Voluntary	Yes	S	-	-	7.5	37.5	Tennessee	
-	-	Yes	Voluntary	Yes	-	H	S	H	8	Texas	
-	-	Yes	Voluntary	Yes	H	-	-	8	40	Utah	
No	-	Yes	Voluntary	Yes	H	-	-	8	40	Vermont	
-	-	-	-	Yes	-	S	S	H	8	Virginia	
Yes	Mandatory	-	-	Yes	-	S	S	H	8	Washington	
No	-	-	-	Yes	-	H	S	H	8	West Virginia	
No	-	Yes	-	Yes	H	H	H	H	8	Wisconsin	
No	-	Yes	Voluntary	Yes	-	S	S	H	8	Wyoming	

MAINTENANCE QUESTIONNAIRE ON POLICIES AFFECTING MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL (cont'd)

WORKING CONDITIONS (cont'd)

20. Is any allowance or adjustment made for overtime work? If answer is "Yes", indicate basis of payment for overtime (straight time, time and a half, compensatory time, none) for:
- Permanent field employees (exclusive of supervisory)
 - Supervisory
 - Temporary
21. Are your field employees required to report at an assembly point, such as a headquarters garage or shop, preparatory to their day's work? a. If answer to Question 21 is "Yes", are they paid from the time they leave this assembly point until they return at the close of the day's work (portal to portal)?
22. Are maintenance and operations employees furnished any time of protective clothing as indicated below:
- Hard hats and safety vests
 - Welding goggles and helmets
 - Other protective clothing for specialized operations (bituminous work, shop mechanics, etc.)
 - Normal operations (rain outfits, insulated undergarments, etc.)
23. Do you have automatic or automatic-recommended salary advancement?
24. Do you, by law or policy, require a formalized job classification plan?
25. Do you use convict labor?
26. Do you pay any travel expenses for maintenance and operations employees when they are away from the home station overnight? If answer is "Yes", is payment for meals and lodging respectively based on:
- Actual
 - Actual with a maximum
 - Per Diem

(WORKING CONDITIONS (continued))

State	Adjustment for Overtime			Travel Time		Protective Clothing							Travel Expenses							
	(20)	(20a)	(20b)	(20c)	(21)	(21a)	(22a)	(22b)	(22c)	(22d)	(23)	(24)	(25)	(26)	(26a)	(26b)	(26c)	(26a)	(26b)	(26c)
Alabama	Yes	1-1/2	Comp	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	x	-	-	x
Alaska	Yes	1-1/2	None	1-1/2	-	-	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x
Arizona	-	1-1/2	1-1/2	1-1/2	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	-	-	x	-	-	x
Arkansas	Yes	1-1/2	None Straight & Comp	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	-	x	-	-	x
California	Yes	1-1/2	-	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	-	x	-	-	x
Colorado	Yes	1-1/2	None	1-1/2	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x
Connecticut	Yes	1-1/2	1-1/2 Straight & 1-1/2	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	-	-	-	-	-	-
Delaware	-	1-1/2 Comp	-	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	-	-	-	-	-	-
Florida	Yes	1-1/2	None	None	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	x	-	x	x	-	x
Georgia	Yes	1-1/2	Comp	-	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	x	-	-	x	-
Hawaii	Yes	1-1/2	1-1/2	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	-	x	-	-	x
Idaho	Yes	1-1/2	Straight	1-1/2	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	-	x	-	-	x	-
Illinois	Yes	1-1/2 & 2	1-1/2	1-1/2 & 2	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	-	-	x	-	-	x
Indiana	Yes	1-1/2	Straight	1-1/2	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x
Iowa	Yes	1-1/2	None	1-1/2	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	-	x	-	-	x	-
Kansas	Yes	1-1/2	None	1-1/2	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	-	-	x	-	-	x
Kentucky	Yes	1-1/2	Comp	-	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	-	x	-	-	x	-
Louisiana	-	1-1/2	Comp	None	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	x	-	-	x	-
Maine	-	1-1/2	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	x	-	-	x	-
Maryland	Yes	1-1/2	Comp	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	x	x	-	-
Massachusetts	Yes	1-1/2	1-1/2	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	x	x	x	-	-
Michigan	Yes	1-1/2	1-1/2	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	x	-	-	x	-
Minnesota	Yes	1-1/2	Straight	1-1/2	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	-	x	-	-	x	-
Mississippi	Yes	Comp	-	Comp	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	x	-	-	-	x	-
Missouri	Yes	1-1/2	Straight	1-1/2	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	x	-	-	-	x	-
Montana	Yes	1-1/2	Comp	1-1/2	Yes	Yes	Yes	Yes	No	No	No	Yes	No	Yes	-	-	x	-	x	-
Nebraska	Yes	1-1/2	Straight	1-1/2	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	x	-	-	x	-
Nevada	Yes	1-1/2	Straight & 1-1/2	1-1/2	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x
New Hampshire	Yes	1-1/2	Straight	Straight	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	x	-	-	-	x
New Jersey	Yes	1-1/2	1-1/2	1-1/2	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	-	-	-	-	-	-
New Mexico	Yes	1-1/2	Straight	1-1/2	Yes	-	Yes	Yes	Yes	No	No	Yes	No	Yes	-	-	x	-	-	x
New York	Yes	1-1/2 Comp & 1-1/2	1-1/2	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	-	x	-	-	x
North Carolina	Yes	1-1/2	None	1-1/2	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	-	-	x	-	-	x
North Dakota	Yes	1-1/2	Straight	1-1/2	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	-	-	x	-	-	x
Ohio	Yes	1-1/2	-	-	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	x	-	-	x	-
Oklahoma	Yes	1-1/2	-	-	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	-	-	x	-	-	x
Oregon	Yes	1-1/2	1-1/2	1-1/2	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x
Pennsylvania	Yes	1-1/2	-	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	-	x	-	-	x
Rhode Island	Yes	1-1/2	1-1/2	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	x	-	-	x	-
South Carolina	Yes	1-1/2	Comp	1-1/2	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	-	x	-	-	x	-
South Dakota	Yes	1-1/2	Comp	1-1/2	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	-	-	x	-	-	x
Tennessee	Yes	1-1/2	Comp	Straight	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	-	-	x	-	-	x
Texas	Yes	-	None	Straight	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	-	-	x	-	-	x
Utah	Yes	1-1/2	1-1/2	1-1/2	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	-	-	x	-	-	x
Vermont	Yes	1-1/2	1-1/2	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	-	x	-	-	x	-
Virginia	Yes	1-1/2	1-1/2	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	x	-	-	-	x	-
Washington	Yes	1-1/2	1-1/2	1-1/2	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x
West Virginia	Yes	1-1/2	Straight	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	-	x	-	-	x	-
Wisconsin	Yes	-	None	1-1/2	No	-	Yes	Yes	No	No	No	Yes	No	Yes	-	x	-	-	x	-
Wyoming	Yes	1-1/2	None	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	x	-	-	-	x	-

27. Does your policy provide reimbursement of expenses incurred when a maintenance or operations employee is required to change residence which necessitates his moving his family and furniture?
- Total
 - Limited
 - None

29. Are garage or shop operations for vehicle maintenance under the jurisdiction of the Highway Department? If answer is "Yes", which of the following do you maintain?
- Highway Department vehicles only
 - Vehicles for several state agencies
 - Vehicles for all state agencies

MAINTENANCE RESPONSIBILITY

28. Is the physical placement and maintenance of signing and marking the responsibility of the Maintenance Division?
- Original placement of highway signs
 - Replacement and maintenance of highway signs
 - Pavement marking

MAINTENANCE RESPONSIBILITY

Moving Expense			Signing & Marking Responsibility				Vehicle Maintenance			State
(27a)	(27b)	(27c)	(28a)	(28b)	(28c)	(29)	(29a)	(29b)	(29c)	
-	x	-	Yes	Yes	Yes	Yes	-	x	-	Alabama
x	-	-	Yes	Yes	Yes	Yes	-	-	x	Alaska
-	x	-	Yes	Yes	Yes	Yes	x	-	-	Arizona
-	x	-	No	No	No	Yes	x	-	-	Arkansas
-	x	-	No	Yes	Yes	Yes	x	-	-	California
-	x	-	No	Yes	Yes	-	x	-	-	Colorado
-	-	x	Yes	Yes	Yes	Yes	-	-	-	Connecticut
-	-	x	No	No	No	Yes	x	-	-	Delaware
-	x	-	No	Yes	Yes	Yes	-	x	-	Florida
-	x	-	Yes	Yes	Yes	Yes	x	-	-	Georgia
-	x	-	No	Yes	Yes	Yes	x	-	-	Hawaii
-	x	-	Yes	Yes	Yes	Yes	-	x	-	Idaho
-	x	-	No	No	No	No	-	-	-	Illinois
-	x	-	No	Yes	No	Yes	-	x	-	Indiana
-	x	-	Yes	Yes	Yes	Yes	x	-	-	Iowa
x	-	-	Yes	Yes	Yes	Yes	x	-	-	Kansas
x	-	-	No	No	No	No	-	-	-	Kentucky
x	-	-	Yes	Yes	Yes	Yes	x	-	-	Louisiana
x	-	-	No	Yes	No	Yes	-	x	-	Maine
-	-	x	Yes	Yes	Yes	-	x	-	-	Maryland
-	-	x	Yes	Yes	Yes	Yes	x	-	-	Massachusetts
-	x	-	Yes	Yes	Yes	Yes	x	-	-	Michigan
-	x	-	Yes	Yes	Yes	Yes	-	x	-	Minnesota
-	-	x	No	No	No	Yes	x	-	-	Mississippi
x	-	-	Yes	Yes	Yes	Yes	x	-	-	Missouri
-	x	-	No	Yes	Yes	Yes	x	-	-	Montana
x	-	-	Yes	Yes	Yes	Yes	x	-	-	Nebraska
x	-	-	No	Yes	Yes	Yes	x	-	-	Nevada
-	-	x	No	No	No	Yes	x	-	-	New Hampshire
-	-	x	Part	Yes	Yes	Yes	x	-	-	New Jersey
-	x	-	No	Yes	Yes	Yes	x	-	-	New Mexico
-	x	-	No	Yes	Yes	Yes	-	x	-	New York
-	x	-	No	Yes	Yes	Yes	x	-	-	North Carolina
-	x	-	Yes	Yes	Yes	Yes	x	-	-	North Dakota
x	-	-	No	No	No	Yes	-	-	x	Ohio
-	x	-	No	Yes	Yes	Yes	x	-	-	Oklahoma
-	x	-	Yes	Yes	Yes	Yes	x	-	-	Oregon
x	-	-	No	Yes	Yes	Yes	x	-	-	Pennsylvania
-	-	x	-	Yes	Yes	Yes	-	-	x	Rhode Island
-	x	-	Yes	Yes	Yes	Yes	x	-	-	South Carolina
-	x	-	Yes	Yes	Yes	Yes	-	x	-	South Dakota
x	-	-	Yes	Yes	Yes	Yes	x	-	x	Tennessee
-	x	-	Yes	Yes	Yes	Yes	x	-	-	Texas
-	x	-	No	Yes	Yes	Yes	-	x	-	Utah
x	-	-	Yes	Yes	Yes	Yes	-	x	-	Vermont
-	x	-	No	Yes	Yes	Yes	-	-	x	Virginia
-	x	-	No	Yes	Yes	Yes	x	-	-	Washington
-	x	-	No	Yes	Yes	Yes	x	-	-	West Virginia
x	-	-	Yes	Yes	Yes	No	-	-	-	Wisconsin
x	-	-	No	Yes	Yes	Yes	x	-	-	Wyoming

MAINTENANCE QUESTIONNAIRE ON POLICIES AFFECTING MAINTENANCE AND TRAFFIC OPERATIONS (cont'd)

- LANE MILES**
 30. Number of lane miles maintained by state forces on the following systems, a lane mile being defined as any single driving lane:
 a. Interstate and Freeways
 b. Primary and Secondary
 c. County, Township, Municipal and Service Roads
 d. Total Lane Miles
 31. What is your average number of maintenance and traffic operations field employees?
 a. Permanent
 b. Temporary
 c. Total
 32. Average lane miles per man using information from Questions 30 and 31.
- BASIS OF OPERATIONS**
 33. Average lane miles covered by each general maintenance crew working out of one location (gang or section headquarters)?
 34. Do you have special crews for traffic signs and striping?
 a. Same crew handles traffic signs and striping (Yes or No)
 Average lane miles per crew
 b. Traffic signs (Yes or No)
 Average lane miles per crew
 c. Striping (Yes or No)
 Average lane miles per crew

State	RELATIONSHIP, MILES TO NUMBER OF EMPLOYEES								BASIS OF OPERATIONS						
	Lane Miles				Average Number of Employees				Lane Miles Per Crew						
	(30a)	(30b)	(30c)	(30d)	(31a)	(31b)	(31c)	(32)	(33)	(34a)	(34b)	(34c)			
Alabama	3,815	24,334	-	28,154	894	256	1,150	24.48	687	No	-	Yes	687	-	3,128
Alaska	-	-	-	-	206	-	206	-	-	Yes	-	-	-	-	-
Arizona	4,669	10,818	1,196	16,683	779	10	789	21.14	359	No	-	Yes	1,556	Yes	5,300
Arkansas	2,113	32,083	548	34,744	1,810	23	1,833	18.38	450	No	-	Yes	6,950	-	5,790
California	21,815	25,875	-	47,690	4,704	512	5,216	9	167	No	-	Yes	2,000	Yes	3,000
Colorado	7,557	17,500	400	25,457	1,210	117	1,327	21	65	Yes	3,130	Yes	-	Yes	-
Connecticut	3,090	7,070	-	10,160	1,571	-	1,571	6.47	200	No	-	Yes	2,500	Yes	2,500
Delaware	170	3,238	6,164	9,572	461	5	466	20.8	190	No	-	Yes	870	No	-
Florida	7,500	28,200	-	35,700	-	-	-	-	-	No	-	Yes	800	Yes	4,000
Georgia	5,400	35,250	367	41,017	2,732	163	2,895	14.2	245	No	-	Yes	900	Yes	5,900
Hawaii	310	1,944	-	2,254	321	-	321	7.02	113	Yes	448	Yes	778	Yes	519
Idaho	2,206	9,193	-	11,399	494	100	594	19	152	Yes	1,100	Yes	2,300	Yes	4,600
Illinois	7,116	31,084	1,432	39,632	2,857	194	3,051	13.0	370	Yes	4,500	-	-	-	-
Indiana	4,725	24,950	-	29,675	2,002	103	2,105	14.1	265	No	-	Yes	1,562	Yes	1,484
Iowa	3,551	20,639	-	24,190	1,340	7	1,347	17.96	174	No	-	No	-	Yes	4,031
Kansas	3,744	18,493	1,534	23,771	1,325	7	1,332	17.85	207	No	-	No	-	Yes	3,962
Kentucky	5,477	23,437	25,026	53,940	2,961	-	2,961	-	450	Yes	4,495	-	-	-	-
Louisiana	3,190	19,415	15,568	38,173	3,265	-	3,265	12	600	No	-	Yes	3,800	Yes	4,700
Maine	1,250	8,712	11,984	21,946	1,134	27	1,161	18.9	300	No	-	Yes	1,000	Yes	3,500
Maryland	317	4,872	2,243	6,432	1,616	-	1,616	3.98	50	No	-	Yes	280	Yes	620
Massachusetts	3,436	8,077	481	11,994	919	6	925	15.6	123	Yes	300	No	-	No	-
Michigan	2,868	4,544	-	7,412	668	5	673	11.0	212	No	-	Yes	3,000	Yes	1,500
Minnesota	3,583	24,986	-	28,569	1,674	32	1,706	16.7	173	No	-	Yes	1,786	Yes	2,381
Mississippi	4,965	19,990	-	22,953	1,234	38	1,272	18	227	No	-	Yes	2,295	Yes	3,826
Missouri	8,491	61,052	3,348	72,891	3,233	-	3,233	22.5	205	No	-	No	-	Yes	5,206
Montana	4,625	11,912	2,187	18,724	554	20	574	32.6	139	No	-	No	139	Yes	1,440
Nebraska	1,977	19,739	130	21,846	897	17	914	23.9	245	No	-	Yes	728	Yes	3,120
Nevada	3,049	9,150	2,250	14,449	391	-	-	37	200	Yes	2,033	-	-	-	-
New Hampshire	771	7,791	457	9,019	680	36	716	12.6	92	No	-	Yes	1,500	Yes	1,500
New Jersey	2,644	7,722	-	10,366	-	-	-	5.8	150	Yes	2,073	-	-	-	-
New Mexico	4,371	15,833	6,758	26,963	1,139	17	1,156	23.32	168	No	-	Yes	5,393	Yes	8,988
New York	4,680	33,330	3,778	41,788	5,763	45	5,808	7.19	61	No	-	Yes	839	Yes	2,098
North Carolina	2,874	144,269	12,242	159,385	5,882	386	6,268	25.43	360	No	-	Yes	1,696	Yes	8,684
North Dakota	2,284	13,548	-	15,832	370	30	400	39.6	-	Yes	-	-	-	-	-
Ohio	12,029	30,078	-	42,107	2,313	-	2,313	18.20	-	Yes	-	-	-	-	-
Oklahoma	3,400	22,520	-	25,920	1,510	25	1,535	17	230	No	-	Yes	2,800	Yes	2,800
Oregon	3,264	17,859	-	21,123	1,230	20	1,250	16.9	228	No	-	Yes	1,200	Yes	3,800
Pennsylvania	19,182	79,157	-	98,339	6,968	125	7,093	13.86	125	No	-	Yes	1,468	Yes	4,100
Rhode Island	434	2,482	-	2,917	360	17	377	8.0	188	No	-	Yes	745	Yes	1,000
South Carolina	2,984	81,459	-	84,443	2,595	-	2,595	32.54	350	No	-	Yes	1,796	Yes	8,444
South Dakota	3,177	15,103	-	18,280	515	44	559	32.70	234	Yes	2,031	-	-	-	-
Tennessee	4,774	20,314	-	25,088	2,000	10	2,010	0.08	1,000	Yes	5,000	Yes	5,000	Yes	5,000
Texas	-	-	-	176,785	6,716	110	-	-	634	No	-	-	-	Yes	7,366
Utah	3,640	10,196	-	13,836	570	34	604	22.9	192	Yes	2,306	-	-	-	-
Vermont	1,606	4,481	-	6,087	490	15	505	12.4	150	No	-	Yes	1,520	Yes	2,030
Virginia	4,332	108,434	-	112,766	5,244	162	5,406	20.9	460	No	-	Yes	1,800	Yes	4,500
Washington	5,364	11,414	-	16,778	1,251	81	1,332	12.6	150	No	-	Yes	3,300	Yes	3,300
West Virginia	2,565	66,200	-	68,765	2,687	-	2,687	-	200	Yes	2,000	Yes	2,000	Yes	2,000
Wisconsin	3,635	22,065	-	25,700	249	-	249	103	-	No	-	Yes	734	Yes	2,336
Wyoming	3,610	11,500	516	15,626	512	51	563	28	260	No	-	Yes	-	Yes	-

35. Have you implemented an equipment management system?
 36. If the answer to Question 35 is "No", do you intend to implement one?
 37. If the answer to Question 35 is "Yes", does your system provide for:
 a. Control of number of units
 b. Determination of optimum replacement intervals
 c. Determination of shop personnel requirements
 d. Determination of parts requirements
 e. Managing preventative maintenance programs
 f. Control of utilization

38. Do you work four 10-hour day work week? If "Yes", check the applicable statements:
 a. Field crews
 b. Shop personnel
 c. Summer months
 d. Winter months
 e. Management's prerogative
 f. Union concurrence

(35)	(36)	(37a)	(37b)	(37c)	(37d)	(37e)	(37f)	(38)	(38a)	(38b)	(38c)	(38d)	(38e)	(38f)	State
No	-	-	-	-	-	-	-	Yes	x	x	x	-	-	-	Alabama
No	No	-	-	-	-	-	-	Yes	x	x	x	x	-	x	Alaska
Yes	-	x	x	x	x	x	-	Yes	x	-	x	-	x	-	Arizona
Yes	-	-	x	x	x	x	-	Yes	x	x	x	-	x	-	Arkansas
No	Yes	-	-	-	-	-	-	Yes	-	-	-	-	x	-	California
Yes	-	x	x	-	-	x	x	No	-	-	-	-	-	-	Colorado
No	Yes	-	-	-	-	-	-	No	-	-	-	-	-	-	Connecticut
Part	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	Delaware
Yes	-	x	x	-	-	x	-	Yes	x	x	-	-	-	-	Florida
Yes	-	x	-	-	x	x	x	Yes	x	-	x	-	x	-	Georgia
No	No	-	-	-	-	-	-	No	-	-	-	-	-	-	Hawaii
Yes	-	x	x	x	-	x	x	Yes	-	-	-	-	x	-	Idaho
No	Yes	x	x	-	-	x	x	Yes	x	-	x	-	x	x	Illinois
Yes	-	x	x	x	x	x	x	-	-	-	-	-	-	-	Indiana
No	Yes	-	-	-	-	-	-	Yes	-	-	x	-	x	-	Iowa
Part	Yes	x	x	x	-	x	-	Yes	x	x	x	-	x	x	Kansas
No	Yes	x	x	x	x	x	x	Yes	-	-	-	-	x	-	Kentucky
Yes	-	x	x	x	x	x	x	Yes	x	x	x	-	x	-	Louisiana
Yes	-	x	x	-	x	x	-	No	-	-	-	-	-	-	Maine
Yes	-	x	x	x	x	x	x	No	-	-	-	-	-	-	Maryland
No	Yes	-	-	-	-	-	-	No	-	-	-	-	-	-	Massachusetts
No	Yes	-	-	-	-	-	-	Yes	x	-	x	-	x	-	Michigan
No	Yes	-	-	-	-	-	-	Yes	x	x	x	-	x	x	Minnesota
No	Yes	-	-	-	-	-	-	No	x	x	x	-	x	-	Mississippi
No	No	-	-	-	-	-	-	No	-	-	-	-	-	-	Missouri
Yes	-	x	-	x	-	x	x	Yes	x	x	x	-	-	x	Montana
No	Yes	-	-	-	-	-	-	Yes	x	-	x	-	-	-	Nebraska
Yes	-	x	x	x	x	x	x	Yes	x	-	x	-	-	-	Nevada
No	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	New Hampshire
Yes	-	x	x	x	x	x	x	No	-	-	-	-	-	-	New Jersey
No	Yes	x	x	-	x	x	-	No	x	-	x	-	x	x	New Mexico
Yes	-	x	x	x	x	x	x	Yes	x	-	x	-	x	-	New York
Yes	-	-	x	x	x	x	-	Yes	x	x	x	-	x	-	North Carolina
No	Yes	-	-	-	-	-	-	Yes	x	-	x	-	x	x	North Dakota
No	-	-	-	-	-	-	-	Yes	x	x	x	-	x	-	Ohio
No	Yes	-	-	-	-	-	-	Yes	x	-	x	-	x	-	Oklahoma
No	No	-	-	-	-	-	-	Yes	x	-	x	-	x	x	Oregon
Yes	-	x	x	-	-	x	x	No	-	-	-	-	-	-	Pennsylvania
No	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	Rhode Island
No	No	-	-	-	-	-	-	-	-	-	-	-	-	-	South Carolina
No	Yes	-	-	-	-	-	-	x	-	x	-	-	-	-	South Dakota
No	Yes	-	-	-	-	-	-	Yes	x	-	x	-	-	-	Tennessee
Yes	-	-	-	-	-	x	-	Yes	x	-	x	-	-	-	Texas
Yes	-	x	-	x	-	x	x	Yes	-	-	-	-	x	-	Utah
Part	-	-	-	-	x	-	-	No	-	-	-	-	-	-	Vermont
Yes	-	x	x	x	-	x	x	No	-	-	x	-	x	-	Virginia
Yes	-	x	x	x	x	x	x	Yes	x	x	x	x	x	x	Washington
Yes	-	x	x	x	x	x	x	Yes	x	-	x	-	x	-	West Virginia
No	No	-	-	-	-	-	-	Yes	x	-	-	-	x	-	Wisconsin
No	Yes	-	-	-	-	-	-	Yes	x	-	x	-	x	-	Wyoming