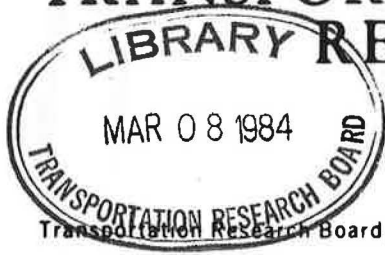


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PROGRESS REPORT ON MAINTENANCE AND OPERATIONS PERSONNEL

mode
1 highway transportation

subject areas
11 administration
40 maintenance

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 39th 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.

This year we did not receive a total response to the questionnaire. The State of Alaska failed to respond.

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 Valley 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, 1983, 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	3462	3410	3509	3928
District Engineer	3060	3259	3357	3810
Area Supervisor	1811	1745	2014	2252
Laborer	1000	843	1114	1217
Mechanic	1336	1234	1481	1717
Equipment Operator I	1068	966	1109	1221
Equipment Operator II	1172	1092	1346	1477
Equipment Operator III	1315	1236	1389	1646

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 five 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 StatesPennsylvania
 Mississippi Valley StatesIndiana
 Southeastern StatesArkansas & South Carolina
 Western StatesMontana

Retirement Plan

All states indicate their employees are protected by a state-sponsored retirement plan. In 42 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 70 in 30 states, and 72 in one state. The retirement age is established by statute in 21 states and by policy in 8 states.

Forty seven of the reporting states indicate voluntary retirement is possible at an earlier age after a prescribed number of years. Seventeen of the states reported a minimum of 10 years of service for voluntary retirement. Twelve states reported a 5 year minimum and 10 states reported a 30 year minimum. 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 reporting states, and the maximum time that may be carried over into a new year varies from 40 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 35 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. Thirty of these plans are partially state-financed. The plan is mandatory in 10 states.

Forty-three states have a partially or wholly state-financed life insurance plan for their permanent employees, with 22 of these wholly state-financed. The plan is mandatory in 15 states.

In 27 states all or part of the maintenance and operations personnel are protected against lawsuit by a state-financed liability plan.

Unionization

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

Thirty-six states report voluntary or mandatory organization of maintenance and operations supervisory personnel in unions or employee associations, with 12 states indicating no union or employee association for supervisory employees.

Forty-three states report mandatory or voluntary organization of their non-supervisory maintenance and operations employees in either national unions, local unions or employee associations, with 6 states indicating no union or employee association organization.

Service Awards

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

Working Hours and Conditions

Fourteen states pay all employees on a salaried basis, with 19 other states paying all permanent field and supervisory employees on a salaried basis. Twelve states pay all employees on an hourly basis.

Forty-five states have an 8 or 10 hour day, with 40 hours per week as the standard workweek. Four states have a less than 40 hour week.

All states allow either compensatory time, straight time or time-and-a-half to their permanent field employees. For overtime work, 46 states report non-supervisory personnel earn time-and-a-half compensation for overtime. In 9 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.

Twenty-nine states have automatic or automatically recommended salary advances.

All states that reported have a formalized job classification plan.

Twenty-three of the states reported the use of convict labor. This question had the largest percentage change in the entire report. The use of convict labor increased by 64% over the past year.

Only 3 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 5 states, actual expenses with a maximum in 12 states, and on a per-diem basis in 12 states. In 19 states the basis of reimbursement for meals and lodging differs.

Forty-one 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 20 states, for their replacement and maintenance in 42 states, and for pavement marking in 40 states.

In 44 states garage or shop operations for vehicle maintenance are under the jurisdiction of the Highway Department, in 31 states this is limited to Highway Department vehicles only, while in 9 states servicing is performed for some other state agencies and 5 states for all state agencies.

Lane Miles

The average lane miles per man varies from 4 to 40.1.

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.

Sixteen states report that the same crew handles traffic signs and striping, with the lane miles handled by each crew varying from 270 to 5,000.

Thirty-five states have special crews for traffic signs, with the lane miles handled by each crew varying from 141 to 6,950.

Thirty-nine states have special crews for striping, with the lane miles handled by each crew varying from 70 to 8,742 miles.

Equipment Management System

Twenty-three states reported they have implemented an equipment management system. Another 18 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

Title
No.

Title and Description

1. State Maintenance Engineer - One in an executive capacity who supervises all activities of maintenance for the State Highway and Transportation Department.
2. Assistant State Maintenance Engineer - One who assists the State Maintenance Engineer in the work of supervising the activities of maintenance.
3. District Engineer - (In some states, called Division Engineer or Regional Engineer) - One in an executive capacity who supervises highway activities within a district.
4. District Maintenance Engineer - One in an executive capacity who supervises maintenance activities of highways within a district.
5. Assistant District Maintenance Engineer - One who assists the District Engineer and/or the District Maintenance Engineer in supervising maintenance within a district.
6. Resident Maintenance Engineer - One who directs the activities of all maintenance employees and equipment and oversees the maintenance of highways within a residency.
7. Area Supervisor - (In some states, called Superintendent) - One who directs the activities of all maintenance employees and equipment and oversees the maintenance of highways within a residency, excluding engineering requirements.
8. Gang Foreman - 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. Sectionman - 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.

- | Title
No. | Title and Description |
|--------------|---|
| 10. | <u>Laborer</u> - One who performs manual labor. |
| 11. | <u>Skilled Craftsman</u> - One who, through special training or experience, has become proficient in a trade such as a carpenter, painter, mason, plumber, etc. |
| 12. | <u>Shop Superintendent</u> - One who is responsible for the operation of a central garage and the supervision of major overhaul and repair of equipment. |
| 13. | <u>Garage or Shop Foreman</u> - One who is responsible for the operation of a garage and the supervision of the maintenance and repair of equipment. |
| 14. | <u>Mechanic</u> - One who, under direct supervision, maintains and repairs all types of automotive equipment. |
| 15. | <u>Mechanic Helper</u> - One who assists the mechanic in the maintenance and repair of all automotive equipment. |
| 16. | <u>Equipment Operator I</u> - Operators of light trucks, mowers, patching rollers, etc. |
| 17. | <u>Equipment Operator II</u> - Operators of heavy trucks, light graders, and rollers used on resurfacing projects. |
| 18. | <u>Equipment Operator III</u> - Operators of specialized equipment such as cranes, shovels, heavy graders, paving machines, etc. |
| 19. | <u>Timekeeper or Clerk</u> - 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. | <u>State Traffic Engineer</u> - One in an executive capacity who supervises all activities related to traffic operations of the State Highway and Transportation Department. |
| 21. | <u>Assistant State Traffic Engineer</u> - One who assists the State Traffic Engineer in the work of supervising traffic operations. |
| 22. | <u>State Traffic Maintenance Engineer</u> - 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. |

Title
No.

Title and Description

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.
24. Assistant District Traffic Engineer - One who assists the District Traffic Engineer in the work of supervising traffic operations within a district.
25. Traffic Supervisor - One who directs the activities of all employees and equipment related to traffic operations within a district.
26. Sign Supervisor - One who directs the activities of all signing, both fabrication and erection.
27. Sign Shop Foreman - One who directs a crew of men in the activity of fabricating traffic signs.
28. Traffic Signal & Lighting Foreman - One who directs a crew of men in activities related to the operations and maintenance of traffic signals and lighting.
29. Striper Foreman - One who directs a crew of men in activities related to pavement markings.
30. Sign Erection Foreman - One who directs a crew of men in activities related to the erection and maintenance of all traffic signs.
31. Sign Fabricator - One who specializes in the fabrication of traffic signs.
32. Sign Technician - One who operates equipment and supervises laborers for all activities associated with signing, both fabrication and erection.
33. Traffic Signal & Lighting Technician - One who works in a technical capacity for operating and maintaining traffic signal equipment and highway lighting.
34. Striper Technician - 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.

Title
No.

Title and Description

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.

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, 1983)

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	Dept Dist Engr, CE IV
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	Staff Mtce Supt	Asst Staff Mtce Supt	District Engineer	Section Mtce Supt
Connecticut	Director of Mtce	Mtce Opers Manager Mtce Planning Mgr		Dist Mtce Manager
Delaware	Chief Mtce Engineer Civil Engr VI	Civil Engr VI	Civil Engr VI	Civil Engr III Civil Engr V
Florida	State Mtce Engineer	Engr of Mtce Oper	District Engineer	Dist Mtce Engr
Georgia	State Mtce Engineer	Asst State Mtce Engr Asst Chief, Const & Mtce	District Engineer	Asst Dist Engr, Mtce
Hawaii	Chief, Hwys Div		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	Asst Chief, Bureau of Const/Mtce	District Engineer	Dist Mtce Engineer
Kentucky	Dir, Div of Mtce	Asst Dir, Div of Mtce	Dist Hwy Gen Mgr	Dist Opers Engineer
Louisiana	Dir of Mtce & Field Operations	Chief Mtce & Opers Engr Mtce Sys Engr et al	District Admin	Dist Mtce Engineer
Maine	Dir, Bureau of Mtce & Operations	Hwy Mtce Engineer	Division Engineer	
Maryland	Deputy Chief Engr, Opers	Asst Chief Engr, Mtce	District Engineer	
Massachusetts	Maintenance Engineer	Asst Mtce Engineer	Dist Hwy Engineer	Dist Mtce Engineer
Michigan	Engineer of Mtce	Asst Engr of Mtce	District Engineer	Dist Mtce Engineer
Minnesota	State Mtce Engineer	Mtce Coord Engineer Equipment Engr et al	District Engineer	Dist or Area Mtce Engr
Mississippi	Maintenance Engineer	Asst Mtce Engineer	District Engineer	Dist Mtce Engineer
Missouri	Div Engr, Mtce & Traf	Asst Div Engr, Mtce	District Engineer	Dist Mtce & Traf Engr
Montana	Admin, Mtce & Equip Div	Chief, Mtce Mgmt Bureau	District Engineer	Mtce Chief
Nebraska	Maintenance Engineer	Mtce Opers Manager	Hwy Dist Engineer	Hwy Mtce-Dist Supt
Nevada	Chief Mtce Engineer	Asst Mtce Engineer	District Engineer	Asst District Engr
New Hampshire	State Mtce Engineer	Asst Mtce Engineer	Division Engineer	
New Jersey	Chief, Bur of Mtce	Asst Chief, Bur of Mtce	Regional Engr, Transp	Regional Mtce Engineer
New Mexico	Director of Operations	Chief, Mtce Section	District Engineer	Dist Mtce Engineer
New York	Dir, Highway Mtce	Asst Dir, Hwy Mtce		Regional Hwy Mtce Engr
North Carolina	Mgr of Mtce & Equip Br	Head of Maintenance	Division Engineer	Asst Division Engineer
North Dakota	State Mtce Engineer	Asst State Mtce Engr	District Engineer	Asst District Engineer
Ohio	Engineer of Mtce		Dist Deputy Dir	Dist Opers Engineer
Oklahoma	State Mtce Engineer	Asst State Mtce Engr	Division Engineer	Div Mtce Engineer
Oregon	Mgr, Maintenance Sec	Mtce Oper Engineer	Region Engineer	Region Mtce Engineer
Pennsylvania	Dir, Highway Mtce	Civil Engineer 5	Hwy Dist Engr 3	Civil Engineer 5 Hwy Dist Engr 1
Rhode Island	Asst Dir, Div of Mtce	Dpty Asst Dir of Mtce	Sr. Civil Engineer	
South Carolina	State Mtce Engineer	Asst State Mtce Engr	District Engineer	Dist Mtce Engineer
South Dakota	Const/Mtce Engineer	Mtce Opers Engineer	Regional Manager	
Tennessee	Engr Dir, Maintenance	Engr Admin of Mtce	Engr Director	Asst to Engr Dir
Texas	Chief Engr, Safety & Mtce Operations	Engineer V	District Engineer	Engineer V
Utah	Engineer of Mtce		District Engineer	Dist Mtce Engineer
Vermont	Dir of Maintenance	Chief of Mtce Support Chief of Tech Services		Dist Transp Admin
Virginia	Hwy Div Administrator	Hwy Div Asst Admin	Hwy Div Administrator	Hwy Asst Dist Engr
Washington	State Mtce Engineer	Hwy Mtce Engineer	Dist Administrator	Dist Mtce Engineer
West Virginia	Director of Mtce	Asst Dir of Mtce	District Engineer	Asst Dist Engr, Mtce
Wisconsin	Chief Mtce Engineer	Asst Chief Mtce Engr	District Director	Dist Chief Mtce Engr
Wyoming	State Constr & Mtce Engr		District Engineer	Dist Mtce Engineer

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

MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL TITLES USED BY STATE HIGHWAY DEPARTMENT (as of July 1, 1983)

MAINTENANCE PERSONNEL (cont'd):

State	(10) Laborer	(11) Skilled Craftsman	(12) Shop Superintendent	(13) Garage or Shop Foreman	(14) Mechanic
Alabama	Laborer	Skilled Craftsman	Equip Mtce Supv	Equipment Repair Supv	Welder, Auto, Body & Hwy
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	Hwy Equip Mech
Colorado	-	Maintenance Man	Sr Auto Shop Frm	Shop Foreman	Mechanic
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 Auto Mechanic I & II
Florida	Mtce Tech I&II, Trade Helpers	Carp, Welder, Elect	Dist Mobile Equip Mgr	Auto Repair Frm	-
Georgia	Laborer I Gen Laborers & Trade Hlpr	Skilled Laborer Bridge Mtce Wkrs Carpenters et al	Mtce Shop Manager	Mechanic Shop Supv	Mechanic, Senior Auto Mech I & Machinist
Hawaii	-	-	Auto Mech Supv	Auto Mech II	-
Idaho	-	Utility Craftsman	Shop Superintendent	Shop Foreman	Mechanic
Illinois	-	-	-	-	Automotive Mech
Indiana	Hwy Mtce Wkr IV	Engineer Asst V	Purchasing Admin V	Hwy Mechanic Supv IV	Hwy Equip Mech II
Iowa	Mtce Worker 1	-	-	Hwy Mtce Supt 2	Auto Mechanic
Kansas	-	-	Shop Superintendent	Auto Mechanic III	Auto Mechanic I & II
Kentucky	Mtce Laborer	Carp, Bridgemen Welders	Garage Supv	-	Auto & Diesel Mechanic
Louisiana	Labor Utility Bridge Tender	Mtce Repairman, Pntr Carpenter et al	Auto Shop Supv Equip Specialist	-	Auto Mechanic Auto Repair et al
Maine	Hwy Worker I	Mach, Elec, Carp & Other Trades	Equip Superintendent	Auto Mechanic Foreman	Auto Mechanic
Maryland	Highway Worker	Skilled Craftsman	Dist Equipment Supv	Auto Serv Supv II	Auto Serv Spec
Massachusetts	Laborer	Skilled Laborer	Supt, Shop & Equip	Dist Hwy Equipment Frm	Motor Equipment Repairman Auto Mechanic IVB
Michigan	Laborer IB	Bridge Wkr IIIB, IV, V	Motor Equipment Supt VIIIB	Transp Mtce Supv VI	-
Minnesota	Laborer 1 Laborer 2 et al Gen Serv Emp II	Bridge Worker	Equip Fabric Supt Hwy Equip Supv Equip Mtce Supt	Hwy Equip Mech Frm	Hwy Equip Fld Mech Hwy Equip Mech Equip Mechanic
Mississippi	-	-	-	Equip Repair Frm	-
Missouri	-	-	Dist Garage Foreman	Chief Shop Mechanic	Shop Mechanic
Montana	Laborer	Carpenter	Dist Shop Supt	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	Hwy Equip Mech Auto Mechanic
New Jersey	Mtce Worker	Bridge & Const Repr	Supv Garage Foreman Master Mech	Foreman & Asst Frm Mech	Auto Mechanic Auto Mechanic Auto Body Rpm Hwy Equip Spec Mtce Equip Mech
New Mexico	Utility Wkr I&II Mtce Worker I&II	Mtce Specialist	-	Auto Shop Frm I & II	-
New York	Laborer	Sign Shop Painter Sign Shop Metal Wkr	Regional Equip Mgr	Motor Equipment epair Supv I	-
North Carolina	Hwy Mtce Worker	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	Hwy Equip Mech
Pennsylvania	Hwy Mtce Wkr Semi-Skld Laborer	Welder, Carpenter Mason & Painter Semi-Skilled Labr	-	Hwy Equip Mgr 1,2,3	Auto Mech & Supv Diesel Mechanic Auto Mechanic
Rhode Island	Laborer	-	Auto Serv Spec	Auto Mech Foreman	-
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	-	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, Ldmn, Frm	Hwy Engineer B	Mtce Crew Supv Shop	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)	State
Mechanic Helper	Equipment Operator I	Equipment Operator II	Equipment Operator III	Timekeeper or Clerk	
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 Mtce Worker	Motor Patrol Oper Equipment Operator	Crane Oper Heavy Equip Oper	Area Hdqts Attendant Mtce Off Syst Tech	Arkansas California
Mechanic Helper	-	-	Heavy Equip Oper	Clerk	Colorado
-	Maintainer III	Maintainer IV	Maintainer V	-	Connecticut
Auto Mechanic I Auto Serviceman	-	-	-	Area Clerk	Delaware
Auto Serviceman	Mtce Tech I&II	Heavy Equip Oper I	Heavy Equip Oper II	Clerk II, IV, V	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 Construction Equip Operator	Hwy Mtce Operator Power Shovel Operator	Maintenance Clerk	Idaho Illinois
Hwy Equip Mech IV	Hwy Mtce Wkr IV	Hwy Mtce Wkr III	Hwy Mtce Wkr II	Hwy Mtce Clerk IV	Indiana
Auto Mech Helper	Equip Operator 1	Equip Operator 2	Equip Operator 3	-	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 Hlpr Skilled Laborer Mech Handyman Trades Hlpr IIB	Equip Operator I Skilled Laborer Laborer II	Equip Operator II Mtce Equip Oper Equip Operator IIB	Equip Operator III 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	Dist Cent Serv Supv 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
-	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
Mtce Asst Mech	-	-	-	-	
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
Mech Trades Hlpr	Hwy Mtce Wkr 2	Hwy Mtce Wkr 3	Hwy Mtce Wkr 4	Hwy Mtce Office Mgr	Oregon
Tradesman Hlpr	Equip Operator 2	Equip Operator 3	Equip Operator 4	Clerk 2	Pennsylvania
Auto Mech Hlpr	Motor Equip Oper	Utility Motor Equip Operator	Heavy Motor Equip Oper	Clerk Dispatcher	Rhode Island
Trades Helper/ Trades Worker Equip Serv Wkr I Equip Serv Wkr II	Hwy Mtce Wkr II Hwy Mtce Wkr I	Hwy Mtce Wkr III Hwy Mtce Wkr II	Hwy Mtce Wkr IV Hwy Mtce Wkr III	Clerk II,III, Chief Clerk, Clerk Typ II Adm Services Asst Office Supervisor Junior Account Clerk	South Carolina 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 Sr Mtce Worker	- 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, 1983)

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
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	-
Arkansas	Division Head, Traf	Asst Div Head, Traf	-	-	-
California	Chief, Div of Oper	Chief, Traffic Engr	-	Dist Traf Engineer	Asst Dist Traf Engr
Colorado	State Traf Engr	Chief, Transp Oper Asst State Traf Engr	-	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	State Traf Oper Engr	Deputy Traf Oper Engr	Traf Ser Engr	Dist Traf Oper Engr	Asst Dist Traf Op Engr
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 Div of Traf	Asst Dir, Div of Traffic	-	Dist Traffic Engr	Asst Dist Traf Engr
Louisiana	Dir of Planning	Asst Traf & Pln Engr Traf Oper Engr 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	Dist Traffic Engr	Asst Dist Traf Engr
Massachusetts	Depty Chief Traf Engr	Traf Oper Engr	Traf Mtce 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, Bur of Traf Engr	-	-	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	Traf Control Engr	Oper Ser Engr	Reg Traf Engr	Asst Reg Traf Engr
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	-	Traf Stud&Mark Coord	Reg Traffic Engr	-
Texas	-	-	-	Dist Traffic Engr	-
Utah	Engineer for Safety	-	Safety Oper Engr	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	Traf Supv	-	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 Oper Engr	-	Dist Chief Traf Engineer	-
Wyoming	State Traf Engr, Oper	Traf Staff Engr	-	Dist Traffic Engr	-

(25)	(26)	(27)	(28)	(29)	State
Traffic Supervisor	Sign Supervisor	Sign Shop Foreman	Traffic Signal & Lighting Foreman	Striper Foreman	
-	-	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
-	Sign Supervisor	Sign Shop Foreman	Sr. Traf Sig Frm	Stripper Foreman	Colorado
-	Signs & Mark Coord	Supt, Portland Plant	Dist Elec Supervisor	General Supervisor	Connecticut
Traffic Oper Mgr	-	-	Signals Superintendent	-	Delaware
-	-	Sign Shop Foreman	-	MHF I	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	Sign Shop Supervisor	-	Lead Wkr, Pavement Marking Frm	Illinois
-	Engr Asst V	Sign Shop Foreman	Elec Tech Supv IV	Engr Asst V	Indiana
District Traf Tech	-	Sign Shop Supt	Lighting Mtce Supt	District Paint Supt	Iowa
-	-	Sign Shop Wkr Supv	-	Mtce Supervisor	Kansas
Hwy Dist Frm	Hwy Dist Crew Frm	-	Hwy Sig Crew Frm	Hwy Dist Crew Frm	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 Shop Foreman	Traf Elec Foreman	Traf Section Frm	Massachusetts
Sign Supv VIII	Sign Supv VII	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	New Jersey
Incl Title 8	-	Sign Shop Foreman	Traf Elec Supv	Incl Title 8	New Mexico
-	-	Sign Shop, Supv II	Supv Electrician	-	New York
Traf Serv Supv	Traf Serv Crew Ldr	-	Traf Control Tech Supervisor	Traf Serv Crew Ldr	North Carolina
-	-	Sign Shop Foreman	-	-	North Dakota
Traf Control Supv	Sign Superintendent	Sign Supervisor 1	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	Signal Tech Mgr	Strip Crew Supv	Oregon
-	Traf Control Tech 3	Sign Shop Foreman	Civil Engineer 2	Highway Foreman 2	Pennsylvania
Hwy Mtce Supv Line Striping	Hwy Mtce Supv Sign	Commercial Artist	Traf Control Spec	Traf Line Painter Foreman	Rhode Island
-	-	Trades Worker Supv	Electrician Foreman	Hwy Mtce Crew Supervisor I-III	South Carolina
-	-	Sign Shop Foreman	Electronics Tech II	Hwy Mtce Frm	South Dakota
-	Hwy Marking Supt	-	-	Mtce Crew Leader	Tennessee
-	-	-	-	-	Texas
Signal Supervisor	Sign Supervisor	Sign Shop Foreman	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	Mtce Supervisor	Washington
Traffic Technician	-	Sign Shop Supv	Electronic Supv	Sign Shop Supv	West Virginia
Dist Traffic Supv	-	Mark/Sign Coord	Electrical Supv	Pvt Mark Crew Chief	Wisconsin
Dist Traf Tech	-	Sign Shop Supv	Sign & Elec Foreman	Hwy Striping Frm	Wyoming

MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL TITLES USED BY STATE HIGHWAY DEPARTMENT (as of July 1983)

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 I & II	Sign Layout Spec	-
California	Supervisor	Supervisor	-	Hwy Electrician I or II
Colorado	-	-	Sign Technician	Traf. Sig & Ltg Tech
Connecticut	Signs & Marking Supv	QCW & DOTM V	-	Electrical Tech II
Delaware	Sign Supervisor (Hwy Mtce Supervisor)	Trades Helper Sign Fabricator I&II	-	Signal Rprm I & II Instrm Tech I & II
Florida	MHF I	Sign Technician	-	-
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	Hwy Signal Install
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 Cntrl Elec Traffic Electrician
Massachusetts	Traf Sec Foreman	Sign Pntr & Letter	Craftsman	Electrician III,IV,V
Michigan	Sign Mechanic IIIB	Sign Mech II & III	Sign Mechanic IIIB	-
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	Engr Traffic III
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 Rprm 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	Sign Crew Supv	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	Hwy Mtce Wkr 4	-	Signal Tech
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	-	Elect & Traf Signal Tech
South Carolina	Incl Title 8	Trades Worker	-	-
South Dakota	Hwy Mtce Foreman Hwy Mtce Worker III	Sign Producer	-	-
Tennessee	-	-	Utility Worker 2	-
Texas	-	Journeyman Hwy Sign Spec	-	Elect Spec & Tech
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)	State
Striper Technician	Chief Engineer	Project Engineer	
-	Chief Engineer	Civil Engr I,II,III	Alabama
-	-	-	Alaska
Hwy Mtce Worker II	State Engineer	Resident Engineer	Arizona
Striping Machine Driver	Chief Engineer	Resident Engineer	Arkansas
Leadworker	Deputy Director	Resident Engineer	California
Heavy Equip Operator	Chief Engineer	Project Engineer	Colorado
Striper Tech			
Maintainers III,IV,V	Chief Engineer	Transp Senior Engrs	Connecticut
-	Civil Engineer VII	-	Delaware
HMT II	Stats Trans Engr	Project Engineer	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	Louisiana
-	Civil Engineer V	Proj Engr et al	Maine
-	Chief Engineer	Project Engineer	Maryland
Spray Painter	Chief Engineer	-	Massachusetts
Working Foreman			
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 Engineer II	Mississippi
Incl Title 17	Chief Engineer	Resident Engineer	Missouri
Striping Mach Oper	Director of Hwys	Field Proj Mgr	Montana
Incl Title 8	Deputy State Engr	Hwy Project Mgr II	Nebraska
Mtce Spec, Striping & Signing	Dir of Transp	Highway Engr III	Nevada
Carriage Operator	Deputy Commissioner	Project Engineer	New Hampshire
Hwy Maintainer II	Chief Engineer	Proj Engr Elect	New Jersey
-	Chief Engr Cons & Mtce		
Incl. in Titles 17 & 18	Chief Hwy Admin	Hwy Const Proj Manager I,II,III	New Mexico
Pav't Marking Suov	Chief Engr	Civil Engr I & II	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	Resident Engineer	Oklahoma
Legend Supv	Chief Engineer 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	Project 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, 1983)

MAINTENANCE PERSONNEL:

STATE	① STATE MAINT. ENGINEER				② ASST. STATE MAINT. ENGR.				③ DISTRICT ENGR.				④ DISTRICT MAINT. ENGINEER			
	#	MIN	MAX	Avg	#	MIN	MAX	Avg	#	MIN	MAX	Avg	#	MIN	MAX	Avg
ALABAMA	1	2319	4301	3800	3	2097	3522	2977	9	2819	4301	3721	9	2318	3529	2745
ALASKA																
ARIZONA	1	2863	3886	3886	1	2611	3546	3546	4	2863	3886	3801	4	2611	3546	3362
ARKANSAS	1	-	3510	3510	1	2487	3209	3023	10	-	3397	3397	10	2400	3135	2724
CALIFORNIA	1	3167	4211	4211	5	2951	3921	3249	11	2979	4415	4023	12	2563	3522	3093
COLORADO	1	3557	4767	4118	1	2849	3818	3298	6	3388	4540	3922	7	3227	4324	3735
CONNECTICUT	1	3361	4126	3743	2	3108	3814	3461	1	-	-	-	4	2873	3527	3200
DELAWARE	1	2222	3717	2806	-	-	-	-	3	2222	3717	2806	1	1698	2735	2066
FLORIDA	1	3833	3833	3833	4	2780	3624	3252	6	2333	4458	-	6	3239	3512	-
GEOORGIA	1	2333	3587	3444	2	1967	3017	2936	7	2333	3587	3241	7	1810	2767	2566
HAWAII	1	2494	4002	4002	1	2382	3645	3645	4	2382	3645	3510	2	1987	3292	2566
IDAHO	1	2733	4040	3848	1	2248	3323	3014	6	2733	3848	3694	6	2248	3323	2836
ILLINOIS	1	2635	3795	3600	3	2320	3360	3350	9	2635	3795	3600	9	2320	3360	3120
INDIANA	1	2548	3448	-	2	2212	3445	-	6	2212	3445	-	6	2052	3127	-
IOWA	1	2576	3476	3245	1	2342	3159	3065	6	2576	3476	3386	6	2134	2855	2780
KANSAS	1	2909	4827	3935	1	2390	3339	3587	6	2688	4320	3777	6	2390	3839	3473
KENTUCKY	1	2488	3984	3470	2	2256	3614	3444	12	2743	4166	3379	12	2256	3614	3296
LOUISIANA	1	3254	4540	3774	17	2135	4540	3527	9	2859	4145	3526	9	2586	3528	3278
MAINE	1	2444	3259	3259	1	2001	2794	2794	7	2001	2794	2794	-	-	-	-
MARYLAND	1	2598	3407	3407	1	2402	3156	3156	7	2401	3156	3156	-	-	-	-
MASSACHUSETTS	1	2877	3591	3591	1	2379	3130	3130	8	2877	3591	3591	8	2195	2840	2890
MICHIGAN	1	3082	4124	4124	1	2845	3814	3814	9	2558	3529	3529	6	2387	3268	3268
MINNESOTA	1	2793	4522	3703	3	2412	3343	3343	9	2793	4522	3814	15	2598	4207	3513
MISSISSIPPI	1	2405	3615	3207	1	2255	3388	3052	6	2601	3894	3207	6	2255	3388	3173
MISSOURI	1	3112	3678	3166	1	2253	2796	2796	10	2803	3495	2806	10	1990	2594	2582
MONTANA	1	2684	3443	3599	1	2061	2827	2827	5	2684	3462	3462	11	2250	3056	2877
NEBRASKA	1	2518	3526	3141	1	2027	2838	2838	8	2518	3526	3001	8	1632	2284	2071
NEVADA	1	2579	3545	3235	1	2360	3235	3235	3	2579	3545	3545	3	2360	3235	3235
NEW HAMPSHIRE	1	2439	3001	3001	1	2138	2627	2627	7	2000	2471	2471	-	-	-	-
NEW JERSEY	1	2706	3654	3180	3	2227	3006	2617	4	3132	4229	3681	4	2706	3654	3180
NEW MEXICO	1	-	-	3904	1	2433	3775	3775	5	2682	3775	3775	5	2433	3775	3520
NEW YORK	1	3936	4743	4743	1	3540	4264	4264	-	-	-	-	10	3540	4264	4107
NORTH CAROLINA	1	2738	4015	3829	1	2494	3653	2807	4	2474	3653	3556	14	2164	3164	3090
NORTH DAKOTA	1	2413	3535	3410	1	2085	3054	2995	8	2413	3535	3249	8	2085	2054	2895
OHIO	1	2228	3124	3124	-	-	-	-	12	2238	3180	2709	12	2024	2836	2430
OKLAHOMA	1	3273	4386	3273	1	2502	3352	2502	8	3273	4386	3346	8	2502	3352	2915
OREGON	1	3127	3992	3992	2	2837	3619	3619	5	2837	3619	3484	7	2447	3127	3127
PENNSYLVANIA	1	3104	3752	3752	4	2503	3236	3236	11	3193	3965	3965	11	2503	3236	3236
RHODE ISLAND	1	2058	2802	2322	1	1244	1832	1583	1	1789	2374	2019	-	-	-	-
SOUTH CAROLINA	1	2439	3457	3670	2	2168	3073	3073	7	2255	3196	3130	7	1853	2627	2746
SOUTH DAKOTA	1	2345	3754	2980	1	1983	3130	2661	4	-	-	2962	-	-	-	-
TENNESSEE	1	2197	3331	2766	1	2002	3033	2521	4	2197	3331	3180	4	1911	2486	2225
TEXAS	1	-	3850	-	1	2737	3447	-	24	-	3925	-	24	2737	3447	-
UTAH	1	2840	4198	3743	-	-	-	-	6	2840	4198	3769	6	1861	3348	2689
VERMONT	1	2224	4281	-	2	1775	3373	-	9	-	-	-	9	1775	3373	-
VIRGINIA	1	2366	3232	2705	1	1980	2705	2263	8	2366	3232	2705	8	1980	2705	2263
WASHINGTON	1	3470	4441	4441	1	2848	3645	3645	6	3470	4666	4373	6	2848	3645	3645
WEST VIRGINIA	1	2372	4249	2971	1	1957	2934	2934	6	2372	4249	2928	6	2049	3682	2544
WISCONSIN	1	3190	4433	4052	4	2636	3734	3300	8	3190	4433	3910	8	2686	3734	3610
WYOMING	1	3167	4912	4241	-	-	-	-	5	3167	4912	4241	5	2731	4237	3701
1983 AVERAGE				3559				3292					3450			3019
1944 AVERAGE				434				341					-			271
% INCREASE 1944-1983				820				907					-			1034
% INCREASE 1982-1983				1				2					-			3

⑤ ASST. DISTRICT MAINT. ENGR.				⑥ RESIDENT MAINT. ENGR.				⑦ AREA SUPERVISOR				⑧ GANG FOREMAN				STATE	
#	MIN	MAX	AVG	#	MIN	MAX	AVG	#	MIN	MAX	AVG	#	MIN	MAX	AVG		
9	1455	2203	1742	41	1814	2752	2411	41	1193	1814	1568	-	-	-	-	ALABAMA	
10	2382	3235	3073	-	-	-	-	53	1566	2059	1982	-	-	-	-	ALASKA	
10	2023	2726	2323	-	-	-	-	83	1729	2390	2150	38	1729	2390	2522	ARIZONA	
20	2563	3093	2956	40	2444	2951	2684	145	1889	2624	2200	493	1646	1979	1888	ARKANSAS	
9	2461	3298	2349	-	-	-	-	38	2126	2849	2461	40	1837	2461	2126	CALIFORNIA	
8	2656	3220	2957	-	-	-	-	17	1826	2166	1926	51	1659	1923	1321	COLORADO	
4	1587	2484	1898	-	-	-	-	3	1282	2088	1600	17	1026	1599	1226	CONNECTICUT	
6	2291	2967	-	25	2373	3237	-	19	1172	1921	1464	1	935	1486	1179	DELAWARE	
7	1663	2542	2329	44	1533	2333	2106	-	-	-	-	-	-	-	-	FLORIDA	
-	-	-	-	-	-	-	-	3	1987	3000	2435	19	1607	2013	1751	GEORGIA	
-	-	-	-	-	-	-	-	50	1521	2248	1911	-	-	-	-	HAWAII	
-	-	-	-	31	2150	3140	2600	-	-	-	-	261	-	-	1853	IDAHO	
6	1894	2845	-	12	1759	2589	-	38	1445	2136	-	43	1328	1986	-	ILLINOIS	
-	-	-	-	22	1625	2405	-	22	1394	1817	1646	9	1576	2058	1192	INDIANA	
-	-	-	-	22	1945	2597	2476	107	1578	2253	1873	1	1718	3255	2194	IOWA	
-	-	-	-	28	2125	3303	2791	35	1523	2365	2160	35	1334	2008	1828	KANSAS	
34	2046	3278	2743	-	-	-	-	-	-	-	-	113	1384	2216	1528	KENTUCKY	
4	2171	3134	3069	-	-	-	-	91	972	2004	1815	230	874	1731	1478	LOUISIANA	
-	-	-	-	-	-	-	-	35	1485	2033	1763	104	1310	225	1645	MAINE	
7	2059	2705	2543	21	1416	1860	1748	-	-	-	-	194	994	1297	1173	MARYLAND	
8	1941	2546	2546	31	1758	2317	2201	33	1324	1634	1632	75	1190	1550	1550	MASSACHUSETTS	
5	2231	3021	3021	-	-	-	-	13	1764	2354	2059	53	1648	2177	1913	MICHIGAN	
5	2412	3343	3247	-	-	-	-	28	1869	2917	2709	102	1804	2421	2303	MINNESOTA	
-	-	-	-	-	-	-	-	30	1313	1967	1674	76	1076	1612	1355	MISSISSIPPI	
20	1755	2296	2275	-	-	-	-	101	1393	1826	1755	38	1260	1645	1540	MISSOURI	
-	-	-	-	-	-	-	-	21	1591	2264	2264	-	-	-	-	MONTANA	
-	-	-	-	-	-	-	-	30	1412	1977	1700	85	1222	1711	1424	NEBRASKA	
3	2159	2953	2953	-	-	-	-	6	1816	2467	2467	30	1534	2067	979	NEVADA	
6	1778	2179	2179	10	1365	1654	1654	10	1400	1708	1708	17	1219	1474	1474	NEW HAMPSHIRE	
6	2227	3006	2617	4	1831	2472	2152	23	1582	2136	1860	120	1435	1936	1683	NEW JERSEY	
5	1568	2554	2370	-	-	-	-	16	1354	2206	2079	137	1170	2101	1710	NEW MEXICO	
10	2513	2894	2808	68	2878	3858	3329	227	1424	1663	1566	17	1593	1853	1804	NEW YORK	
35	2061	3012	2807	76	1710	2474	2164	174	1428	2061	1789	560	1097	1565	1428	NORTH CAROLINA	
-	-	-	-	-	-	-	-	8	1555	2278	2165	5	1280	1875	1671	NORTH DAKOTA	
12	1840	2576	2208	-	-	-	-	88	1354	1840	1612	17	1142	1384	1263	OHIO	
70	2161	2846	2336	-	-	-	-	29	1913	2564	1923	93	1613	2161	1663	OKLAHOMA	
-	-	-	-	14	2223	2837	2837	80	1576	1919	1327	12	1655	1827	1927	OREGON	
22	2096	2736	2736	-	-	-	-	60	1835	2396	2396	756	1300	1359	1359	PENNSYLVANIA	
-	-	-	-	2	1363	1530	1465	9	1189	1466	1266	27	1102	1209	1163	RHODE ISLAND	
-	-	-	-	47	1523	2335	2134	-	-	-	-	296	989	1641	1356	SOUTH CAROLINA	
-	-	-	-	4	1983	3130	2732	5	1678	2610	2154	-	-	-	-	SOUTH DAKOTA	
35	1850	2421	2162	12	1850	2421	2099	22	1316	1792	1570	44	961	1367	1173	TENNESSEE	
24	2562	3227	-	-	-	-	-	-	2035	2562	-	-	1671	2164	-	TEXAS	
4	1677	2448	2392	-	-	-	-	66	1484	2172	2033	13	1484	2172	2116	UTAH	
-	-	-	-	-	-	-	-	9	1130	2099	-	9	818	1667	-	VERMONT	
8	1990	2705	2263	57	1386	1893	1584	292	1268	1733	1449	639	1061	1449	1213	VIRGINIA	
6	2455	3143	3092	-	-	-	-	29	2225	2848	2733	65	1738	2225	2206	WASHINGTON	
-	-	-	-	-	-	-	-	53	1285	2579	1615	42	1173	2343	1362	WEST VIRGINIA	
30	2260	3143	2870	-	-	-	-	28	1869	2458	2023	-	-	-	-	WISCONSIN	
-	-	-	-	-	-	-	-	29	1585	2457	2323	34	1435	2226	2040	WYOMING	
-	-	-	2570	-	-	-	2235	-	-	-	1963	-	-	-	-	1983 AVERAGE	
-	-	-	234	-	-	-	-	-	-	-	-	-	-	-	-	141	1944 AVERAGE
-	-	-	984	-	-	-	-	-	-	-	-	-	-	-	-	1	% INCREASE 1944-1983
-	-	-	2	-	-	-	3	-	-	-	1	-	-	-	3	-	% INCREASE 1982-1983

13 GARAGE OR SHOP FOREMAN				14 MECHANIC			15 MECHANIC HELPER			16 EQUIP. OPER. I				STATE			
#	MIN	MAX	AVG	#	MIN	MAX	AVG	#	MIN	MAX	AVG	#	MIN	MAX	AVG		
7	1255	1905	1646	87	1108	1728	1390	14	823	1351	1097	246	910	1285	1071	ALABAMA	
16	1566	2228	2032	88	1267	1908	1811	5	975	1240	1095	252	1034	1321	1177	ALASKA	
10	1599	2236	1911	96	949	1670	1386					561	784	1198	969	ARIZONA	
54	1889	2278	2073	345	1724	2073	1889	31	1322	1437	1379					ARKANSAS	
8	1808	2529	2185	94	1630	2185	1888	19	1277	1712	1478					CALIFORNIA	
				130	1256	1528	1392					657	1159	1364	1262	COLORADO	
4	1173	1921	1464	33	1026	1600	1226	10	776	1199	935					CONNECTICUT	
30	1077	1425		27	1362	1362	1057	9	725	1102	803	166	725	1102	863	DELAWARE	
9	1307	1967	1653	140	969	1270		41	682	970			713	1481		FLORIDA	
2	1429	1612	1612	107	1039	1533	1247	49	971	1414	1037	889	812	1120	931	GEORGIA	
6	1380	2038	1704	18	1360	1553	1404	7	1130	1243	1158	77	1060	1243	1133	HAWAII	
				50	1251	1849	1458	11	934	1380	1064	29	981	1449	991	IDAHO	
				28			1865					450			1808	ILLINOIS	
40	1328	1983		107	1168	1759		44	839	1263		637	871	1315		INDIANA	
1	1576	2058	2002	138	1295	1409	1392	14	1144	1241	1190	735	1019	1241	1149	IOWA	
7	1394	2098	1735	109	1167	1919	1379	30	810	1141	987	530	894	1258	1095	KANSAS	
				136	1034	2012	1384	5	700	1120	910	1149	772	1236	971	KENTUCKY	
				190	921	1713	1381	14	800	1293	1038	842	800	1293	1035	LOUISIANA	
12	1239	1651	1592	121	1058	1382	1345	10	909	1058	1170	349	878	1131	1043	MAINE	
29	1059	1386	1248	54	994	1296	1166	24	933	1214	1092	271	822	1058	959	MARYLAND	
7	1256	1533	1456					17	774	991	892					MASSACHUSETTS	
17	1648	2177	1913	77	1441	1913	1627	32	1121	1496	1309	37	1121	1496	1309	MICHIGAN	
18	1940	2709	2547	152	1939	2053	2008	30	1149	1845	1444					MINNESOTA	
10	1165	1746	1391	26	838	1255	977					469	721	1081	909	MISSISSIPPI	
10	1260	1645	1589	46	1104	1415	1284	25	953	1223	1072	1660	903	1166	1061	MISSOURI	
12	1767	1872	1872	51	1701	1770	1770	39	1372	1503	1476	200	1503	1564	1564	MONTANA	
3	1314	1839	1514	77	1057	1430	1191	23	915	1280	968	232	851	1192	916	NEBRASKA	
8	1668	2257	2257	62	1472	1979	1896									NEVADA	
10	1256	1519	1455	23	1103	1341	1341	4	869	999	919					NEW HAMPSHIRE	
38	1369	1847	1608	23	1075	1285	1285	7	967	1117	1117	140	905	1054	979	NEW JERSEY	
13	1114	2101	1831	131	1240	1673	1457	63	840	1135	988	378	926	1249	1088	NEW MEXICO	
10	1433	1717	1597	74	651	1729	1267					233	684	1422	945	NEW YORK	
119	1247	1968	1638	280	1271	1490	1385	40	1013	1197	1113	1629	959	1136	1136	NORTH CAROLINA	
				468	921	1637	1287					902	775	1097	963	NORTH DAKOTA	
				4	1082	1468	1163					15	868	1272	1009	OHIO	
				26	1107	1622	1422					550	962	1104	1033	OKLAHOMA	
15	1384	1840	1612	346	1076	1521	1298	21	962	1104	1033	608	1301	1427	1414	OREGON	
	1613	2161		53	1536	2058	1598	2	1015	1360	1045	761	943	1264	979	PENNSYLVANIA	
4	1790	1974	1974	76	1626	1787	1774	3	1196	1500	1500	634	1043	1201	1201	RHODE ISLAND	
60	1549	2011	2011	44	1158	1482	1482	168	977	1201	1201	634	1043	1309	1300	SOUTH CAROLINA	
3	1130	1288	1232	15	1072	1205	1132	6	934	1071	974	112	982	1107	1033	SOUTH DAKOTA	
47	1113	1577	1463	111	1029	1458	1259	136	695	1152	911	761	723	1024	845	TENNESSEE	
				6	858	1316	1132	1	723	1095	1130	1	723	1095	903	TEXAS	
				25	1016	1512	1247	11	838	1316	1078					UTAH	
10	921	1316	1129	130	884	1267	1088					642	653	1003	848	VERMONT	
	1209	2246														VIRGINIA	
12	1108	2073	1306	75	1415	2090	1810	17	917	1895	1383	111	1082	1576	1287	WASHINGTON	
1	1130	2099		43	818	1516										WEST VIRGINIA	
76	1160	1584	1325	362	970	1449	1213	53	743	1015	849	2605	743	1015	849	WISCONSIN	
7	1826	2337	2289	79	1738	2015	156	26	1426	1654	1532					WYOMING	
13	1026	1345	1184	293	131	1121	1074	25	889	934	927	186	889	934	909		
23	1508	2583	2142	27	1366	2119	1683	3	1178	1828	1370	62	1067	1614	1254		
			1713				140								1977	1983 AVERAGE	
			206				172									1944 AVERAGE	
			332				242								240	% INCREASE 1944-1983	
			1				6								4	% INCREASE 1982-1983	

1983 AVERAGE
1944 AVERAGE
% INCREASE 1944-1983
% INCREASE 1982-1983

MONTHLY SALARIES OF HIGHWAY PERSONNEL (as of July 1, 1983)

TRAFFIC OPERATIONS
PERSONNEL:

MAINTENANCE PERSONNEL (cont'd):

STATE	⑰ EQUIP. OPER. II			⑱ EQUIP. OPER. III			⑲ TIMEKEEPER or CLEER			⑳ STATE TRAFFIC ENGR.						
	#	MIN	MAX	AUG	#	MIN	MAX	AUG	#	MIN	MAX	AUG	#	MIN	MAX	AUG
ALABAMA	188	1029	1491	1240	147	1135	1685	1467	102	785	1420	1275	1	2318	3530	3194
ALASKA																
ARIZONA	177	1188	1517	1374	72	1354	1736	1619	28	740	1177	988	1	2863	3886	3886
ARKANSAS	345	862	1307	1106	151	1142	1671	1392	85	949	1424	1191	1	-	3397	3397
CALIFORNIA	942	1501	1646	1572	730	1572	1724	1646	53	1231	1520	1397	1	3413	4415	3945
COLORADO	-	-	-	-	38	1588	2126	1837	19	784	1050	907	1	3388	4540	3922
CONNECTICUT	236	1193	1411	1302	96	1256	1528	1392	-	-	-	-	1	3108	3814	3461
DELAWARE	49	802	1251	974	59	390	1422	1102	14	725	1102	863	1	2222	3717	2806
FLORIDA	109	826	1462	-	141	868	1606	-	95	622	913	-	1	3833	-	-
GEORGIA	464	861	1179	994	218	1021	1500	1201	43	851	1180	734	1	2333	3587	3587
HAWAII	59	1163	1475	1291	10	1328	1556	1462	4	1130	1553	1341	1	2171	3444	3244
IDAHO	-	-	-	-	309	1135	1678	1401	5	981	1449	1144	1	2479	3664	3323
ILLINOIS	58	-	-	1952	15	-	-	1822	-	-	-	-	1	2685	3775	3560
INDIANA	354	995	1493	-	92	1125	1692	-	45	912	1367	-	1	2543	3948	-
IOWA	254	1100	1356	1293	127	1144	1409	1372	-	-	-	-	1	2134	2855	2779
KANSAS	429	983	1381	1280	179	1069	1507	1367	29	1069	1507	1229	1	2125	3303	3101
KENTUCKY	649	937	1502	1220	76	1034	1655	1428	115	937	1502	1132	1	2488	3984	3713
LOUISIANA	381	874	1425	1313	153	964	1571	1526	155	713	1286	1071	1	2859	4145	3510
MAINE	180	961	1249	1191	176	1011	1321	1253	-	-	-	-	1	2001	2794	2794
MARYLAND	214	874	1134	1026	42	933	1216	1098	29	933	1216	1098	1	2224	3156	3156
MASSACHUSETTS	56	1064	1371	1306	-	-	-	-	7	860	1006	1006	1	3100	3870	3870
MICHIGAN	295	1235	1601	1418	44	1441	1813	1627	20	1171	1493	1332	1	3082	4124	4124
MINNESOTA	7	1882	1939	1939	-	-	-	-	-	-	-	-	1	2793	4522	3435
MISSISSIPPI	159	881	1320	1177	39	987	1480	1277	-	-	-	-	1	2405	3615	3207
MISSOURI	1030	996	1282	1212	6	1104	1415	1342	20	986	1269	1198	-	-	-	-
MONTANA	46	1569	1646	1646	128	1635	1718	1718	5	1732	2359	2020	1	2061	2877	2877
NEBRASKA	-	-	-	-	497	984	1377	1134	26	736	1031	861	1	2343	3280	3091
NEVADA	-	-	-	-	95	1302	1741	1633	6	1413	1896	1896	1	2360	3235	3235
NEW HAMPSHIRE	12	967	1117	1117	39	999	1162	1162	6	877	1017	1017	1	2274	2784	2784
NEW JERSEY	136	1020	1376	1198	5	1240	1673	1457	7	965	1141	1141	1	2841	3836	3338
NEW MEXICO	413	962	1646	1194	210	1061	1815	1400	27	792	1290	1036	1	2433	3775	3775
NEW YORK	520	1013	1197	1113	106	1271	1490	1490	68	1071	1263	1192	1	4809	5681	5681
NORTH CAROLINA	617	847	1247	1074	808	963	1428	1221	99	743	1195	986	1	2494	3653	3317
NORTH DAKOTA	220	1107	1622	1270	-	-	-	-	20	786	1151	963	1	2413	3535	3125
OHIO	187	1018	1162	1090	72	1076	1270	1174	155	928	1104	1016	1	2228	3124	3124
OKLAHOMA	260	1091	1463	1157	112	1175	1574	1303	110	1040	1393	1090	1	3273	4326	3273
OREGON	263	1365	1500	1500	48	1427	1572	1572	16	1365	1738	1691	1	2837	3619	3619
PENNSYLVANIA	2135	849	1416	1416	251	1201	1550	1550	60	977	1201	1201	1	2849	3675	3675
RHODE ISLAND	13	1019	1146	1072	18	1072	1205	1132	18	934	1071	974	-	-	-	-
SOUTH CAROLINA	369	813	1154	961	247	879	1246	1048	124	615	1297	976	1	2439	3457	3457
SOUTH DAKOTA	282	858	1316	1073	108	934	1380	1313	4	1305	1986	7803	1	1983	3130	2500
TENNESSEE	300	725	1088	921	62	764	1129	961	33	653	1003	848	1	2002	3033	2299
TEXAS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UTAH	187	1209	1763	1558	104	1335	1951	1704	6	856	1251	962	1	2683	3916	3783
VERMONT	-	-	-	-	37	818	1516	-	12	782	1449	-	-	-	-	-
VIRGINIA	910	812	1109	129	80	888	1213	1015	228	812	1109	929	1	2366	3232	2705
WASHINGTON	510	1358	1734	1635	81	1654	1918	1902	76	1087	1392	1335	1	2848	3645	3645
WEST VIRGINIA	813	981	1026	999	423	1073	1121	1092	21	889	960	909	1	2372	4249	3115
WISCONSIN	-	-	-	-	-	-	-	-	-	-	-	-	1	3190	4933	3910
WYOMING	204	1237	1919	1526	82	1366	2119	1863	-	-	-	-	1	2731	4237	4030
1983 AVERAGE				1200				1400				1150				3400
1944 AVERAGE				-				-				142				-
% INCREASE 1944-1983				-				-				816				-
% INCREASE 1982-1983				4				3				5				3

21 ASST. STATE TRAFFIC ENCL. EDGE.				22 STATE TRAFFIC MAINT. ENCL. EDGE.			23 DISTRICT TRAFFIC ENCL. EDGE.			24 ASST. DISTRICT TRAFFIC ENCL. EDGE.					
#	MIN	MAX	Avg	#	MIN	MAX	Avg	#	MIN	MAX	Avg	#	MIN	MAX	Avg
				1	2097	3194	2550	9	1991	2204	1935				
2	2611	3546	3546					4	2176	2761	2749				
1	2487	3209	3023												
2	3245	3921	3572					17	2563	3566	3093	48	2226	3093	2684
1	3227	4324	3735					3	2455	3557	3073				
1	2988	3668	3328	1	2656	3260	2958	4	1891	2307	2099	4	1841	2191	2016
								1	1940	3081	2326	2	1587	2484	1898
1	2935							1	1698	2735	2060				
1	2209			1	2209			6	2498	3251		10	2535	3100	
2	1967	3017	2836					7	1810	2767	2567	7	1357	2053	1886
1	1987	3000	2868												
1	2249	3323	3014					6	1941	2870	2563				
1	2525	3575	3355					9	2365	3360	3027	15	1695	3140	2570
1	2212	3445		1	2052	3127		6	1894	2845		6	1759	2589	
2	2254	3614	3375					12	1856	3614	2782	10	1384	3278	2325
14	2029	3134	3069	1	2586	3398	3398	7	2171	3134	3115	5	1885	3003	2157
1	1848	2576	2576					7	1593	2331	2270				
				1	1771	2322	2322	7	1771	2322	2235	7	1640	2158	2076
1	2871	3591	3591	1	2195	2800	2890	8	1758	2317	2317	6	1945	1895	1800
1	2845	3814	3814	1	2558	3529	3529	9	2231	3021	3021	6	2085	2787	2787
4	2595	4207	3473					9	2412	3343	3300	2	2246	2995	2938
1	2050	3082	2991												
1	2253	2796	2796					3	1874	2449	2449	16	1630	2137	2083
1	1890	2571	2526					5	1591	2170	2167				
								2	1741	2359	2359				
1	1945	2395	2395	1	1483	1819	1819								
								6	2454	3214	2855	7	2227	3006	2617
1	2101	3423	2957					5	2317	3775	3464				
1	4360	5232	5232					10	2877	3857	3278				
2	2164	3164	3016					14	1780	2615	2490				
1	2085	3045	2600												
6	1840	2576	2208					12	1840	2576	2208				
1	2502	3352	2896					8	2383	3193	2580				
1	2447	3127	3127	1	2223	2837	2837	5	2114	2699	2699	5	1662	2120	2081
2	2503	3236	3236					11	2011	2622	2622	40	1837	2396	2396
									2503	3236	3236		1762	2243	2243
				1	1159	1482	1340								
2	2163	3073	3116					4	1853	2627	2433				
								4	1823	2858	2380				
				2	1625	2162	1850	4	1850	2421	2162				
									2562	3227					
				1	1862	2716	2540	3	1862	3022	2497				
2	1980	2705	2263	8	1811	2474	2070	8	1811	2474	2070	8	1515	2076	1733
1	2455	3143	3143					6	2225	3470	2951	6	1826	2848	2567
1	2049	3682	2834					3	1773	3045	2221	3	1407	2771	1783
2	2686	3734	3281					3	2510	3490	3200				
2	2474	3838	3649					5	2474	3838	2866				
			3135				2551				2629				2230
				3				4				1			

- STATE
- ALABAMA
 - ALASKA
 - ARIZONA
 - ARKANSAS
 - CALIFORNIA
 - COLORADO
 - CONNECTICUT
 - DELAWARE
 - FLORIDA
 - GEORGIA
 - HAWAII
 - IDAHO
 - ILLINOIS
 - INDIANA
 - IOWA
 - KANSAS
 - KENTUCKY
 - LOUISIANA
 - MAINE
 - MARYLAND
 - MASSACHUSETTS
 - MICHIGAN
 - MINNESOTA
 - MISSISSIPPI
 - MISSOURI
 - MONTANA
 - NEBRASKA
 - NEVADA
 - NEW HAMPSHIRE
 - NEW JERSEY
 - NEW MEXICO
 - NEW YORK
 - NORTH CAROLINA
 - NORTH DAKOTA
 - OHIO
 - OKLAHOMA
 - OREGON
 - PENNSYLVANIA
 - RHODE ISLAND
 - SOUTH CAROLINA
 - SOUTH DAKOTA
 - TENNESSEE
 - TEXAS
 - UTAH
 - VERMONT
 - VIRGINIA
 - WASHINGTON
 - WEST VIRGINIA
 - WISCONSIN
 - WYOMING

1983 AVERAGE
 1944 AVERAGE
 % INCREASE 1944-1983
 % INCREASE 1982-1983

MONTHLY SALARIES OF HIGHWAY PERSONNEL (as of July 1, 1983)

TRAFFIC OPERATIONS PERSONNEL (cont'd):

STATE	25 TRAFFIC SUPERVISOR			26 SIGN SUPERVISOR			27 SIGN SHOP FOREMAN			28 TRAFFIC SIGNAL & LIGHTING FOREMAN						
	#	MIN	MAX	AVG	#	MIN	MAX	AVG	#	MIN	MAX	AVG	#	MIN	MAX	AVG
ALABAMA	-	-	-	-	-	-	-	-	1	1192	1814	1351	1	1645	2492	2318
ALASKA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ARIZONA	5	1449	1908	1869	1	1566	2059	2059	1	1449	1908	1804	10	1566	2059	1999
ARKANSAS	-	-	-	-	1	2297	3033	2724	1	1729	2390	2162	-	-	-	-
CALIFORNIA	-	-	-	-	-	-	-	-	-	-	-	-	37	1935	2332	2124
COLORADO	-	-	-	-	4	1837	2461	2126	1	1837	2461	2126	7	2655	3557	3073
CONNECTICUT	-	-	-	-	1	1981	2414	2197	1	1583	1877	1740	-	-	-	-
DELAWARE	2	1587	2484	1898	-	-	-	-	1	1026	1600	1226	1	1282	2098	1600
FLORIDA	-	-	-	-	-	-	-	-	3	869	1131	-	-	-	-	-
GEORGIA	-	-	-	-	1	1533	2333	2333	1	1003	1471	1262	1	1663	2542	2437
HAWAII	-	-	-	-	3	1603	1778	1603	-	-	-	-	-	-	-	-
IDAHO	-	-	-	-	-	-	-	-	1	1380	2038	1678	1	1678	2470	2248
ILLINOIS	26	1375	2850	2090	-	-	-	-	9	-	-	2004	-	-	-	-
INDIANA	6	1219	1831	-	6	1168	1759	-	6	1124	1315	-	7	1220	2136	-
IOWA	6	1671	2082	2040	-	-	-	-	1	1576	2057	1768	1	1492	1830	1624
KANSAS	-	-	-	-	-	-	-	-	1	1023	1476	1476	-	-	-	-
KENTUCKY	9	1384	2216	1627	11	1139	1826	1478	-	-	-	-	16	1034	2012	1425
LOUISIANA	10	1064	1731	1632	5	939	1909	1778	5	874	1731	1486	21	1173	1909	1840
MAINE	-	-	-	-	-	-	-	-	1	1239	1651	1651	1	1286	1720	1720
MARYLAND	-	-	-	-	1	1313	1728	1657	1	992	1297	1248	1	1417	1858	1789
MASSACHUSETTS	6	1324	1634	1634	1	1477	1827	1827	1	1256	1533	1533	1	1256	1533	1533
MICHIGAN	1	1999	2694	2694	10	1764	2354	2059	9	1496	1999	1748	1	1764	2354	2059
MINNESOTA	5	1780	2685	2577	14	1616	2090	2032	-	-	-	-	5	1804	2709	2308
MISSISSIPPI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MISSOURI	-	-	-	-	-	-	-	-	1	1328	1713	1713	7	1260	1645	1610
MONTANA	-	-	-	-	-	-	-	-	1	1701	1808	1808	-	-	-	-
NEBRASKA	-	-	-	-	1	1412	1977	1740	1	1222	1711	1490	1	1632	2284	2190
NEVADA	-	-	-	-	1	1741	2359	2359	-	-	-	-	-	-	-	-
NEW HAMPSHIRE	1	1366	1654	1454	1	1178	1429	1429	1	1103	1341	1341	3	1219	1474	1474
NEW JERSEY	-	-	-	-	1	1582	2136	1860	1	1435	1936	1686	29	1435	1936	1686
NEW MEXICO	-	-	-	-	-	-	-	-	1	1170	1906	1170	2	1422	2317	2104
NEW YORK	-	-	-	-	-	-	-	-	1	1844	2186	2186	10	1425	1664	1664
NORTH CAROLINA	14	1428	2061	1875	14	1195	1710	1565	-	-	-	-	14	1247	1739	1637
NORTH DAKOTA	-	-	-	-	-	-	-	-	8	1280	1875	1665	-	-	-	-
OHIO	12	1104	1384	1244	1	1272	1674	1592	1	1076	1272	1272	18	1180	1684	1427
OKLAHOMA	29	1913	2564	1923	-	1867	2502	-	1	1327	1778	1327	-	-	-	-
OREGON	-	-	-	-	-	-	-	-	1	1703	2176	2069	1	1917	2447	2447
PENNSYLVANIA	-	-	-	-	11	1359	1762	1762	1	1246	1609	1609	11	1609	2096	2096
RHODE ISLAND	1	1081	1319	1156	1	1081	1319	1156	1	1159	1482	1340	1	1159	1482	1340
SOUTH CAROLINA	-	-	-	-	-	-	-	-	7	1113	1577	1424	8	1302	1845	1508
SOUTH DAKOTA	-	-	-	-	-	-	-	-	1	1016	1511	1527	-	-	-	-
TENNESSEE	-	-	-	-	5	1129	1570	1367	-	-	-	-	-	-	-	-
TEXAS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UTAH	1	1862	2716	2716	1	1677	2448	2448	1	1350	1895	1895	5	1561	2306	2306
VERMONT	1	1205	2234	-	-	-	-	-	-	-	-	-	1	898	1667	-
VIRGINIA	8	1515	2070	1733	3	1268	1733	1449	3	1061	1449	1213	19	1160	1733	1449
WASHINGTON	-	-	-	-	-	-	-	-	6	1738	2015	2015	5	2015	2337	2337
WEST VIRGINIA	4	1072	2405	1349	-	-	-	-	1	1173	1995	1342	1	1407	2406	2138
WISCONSIN	8	2110	3143	2667	-	-	-	-	11	1740	2292	1928	1	1937	2693	2580
WYOMING	3	1435	2226	1720	-	-	-	-	1	1751	2716	2583	5	1666	2583	2324
1983 AVERAGE				1955				1952				1645				1351
1944 AVERAGE																
% INCREASE 1944-1983																
% INCREASE 1982-1983				0				2				4				3

MONTHLY SALARIES OF HIGHWAY PERSONNEL (as of July 1, 1983)

TRAFFIC OPERATIONS PERSONNEL (cont'd):

OTHER RELATED PERSONNEL

STATE	33 TRAFFIC SIGNAL & LIGHTING TECHNICIAN				34 STRIPER TECHNICIAN				35 CHIEF ENGINEER				36 PROJECT ENGINEER				
	#	MIN	MAX	Avg	#	MIN	MAX	Avg	#	MIN	MAX	Avg	#	MIN	MAX	Avg	
ALABAMA	24	979	2002	1665					1	3272	4992	4089	150	1318	2492	1924	
ALASKA																	
ARIZONA	32	1449	1908	1707	18	1188	1517	1403	1	3768	5118	5118	14	1837	2961	2472	
ARKANSAS					5	1042	1545	1195	1		4480	4480	31	2401	3135	2869	
CALIFORNIA	205	1762	2124	1935					2	3413	4415	3938	219	2226	3093	2684	
COLORADO	8	1798	2409	2081	8	1440	1929	1667	1	3636	4872	4209	6	2185	2927	2529	
CONNECTICUT	5	1440	1737	1589					1	3745	4827	4286	29	2076	2827	2302	
DELAWARE	5	898	1432	1101					2	2429	4077	3081					
DELAWARE	7	1026	1600	1226							4922						
FLORIDA					90	768	1016		1								
GEORGIA	6	1162	1663	1333	11	1039	1533	1258	1	3152	4955	4955	400	1357	2053	1876	
HAWAII	9	1360	1637	1511	2	1163	1284	1163	1	2494	4002	4002	6	1987	3000	2714	
IDAHO	8	1440	2141	1777	10	1135	1678	1401	1			4477	43	1761	2603	2244	
ILLINOIS	12	1375	2391	2850					1	3065	4225	4200		1375	3140	2450	
INDIANA	36	1034	1331		12	1124	1315		1	3535	5524		109	1624	2589		
IOWA	1	1477	1593		15	1100	1356	1249	1	3126	4220	4105	18	1945	2597	2333	
IOWA	1	1194	1407		3	1144	1409	1306									
KANSAS									1			3714	28	1888	2936	2408	
KENTUCKY	17	937	1502	1030	20	937	1502	1120	1	2743	4166	3807	62	1856	2974	2317	
LOUISIANA	60	800	1731	1292	172	800	1571	1140	1	3254	4540	3653	49	2171	3528	3015	
MAINE	1	1338	2225							2444	3259	3259					
MARYLAND	26	774	1485						1				86	938	1860	1490	
MASSACHUSETTS	16	1124	1449	1442					1	3664	4604	4604					
MICHIGAN	34	1235	1799	1617	17	1235	1601	1418	1	3250	4366	4366	55	2085	3021	2553	
MINNESOTA	24	1524	2115	1959					1			4000	64	2020	3343	2927	
MISSISSIPPI	6	1137	1702	1486					1	2242	4061	3207	34	1834	2748	2544	
MISSOURI	41	1190	1557	1388					1	3728	4395	4088	45	1755	2296	2291	
MONTANA	1	1732	2423	2423	8	1635	1712	1712	1	3458	3458	3458	53	1732	2359	2236	
NEBRASKA	7	1057	1480	1292					2	3128	4380	3488	52	1518	2125	1924	
NEVADA					6	1302	1741	1741			4270	4270	13	1779	2697	2697	
NEW HAMPSHIRE	2	1075	1285	1235	5	999	1162	1162	1			3491	3491	55	1424	2179	1897
NEW HAMPSHIRE					3	905	1054	1054									
NEW JERSEY	117	1120	1673	1457					1	3626	4896	4262	1	2227	3006	2617	
NEW MEXICO	10	962	2101	1441					1			4167	33	1815	3595	2756	
NEW YORK	50	1271	1490	1490	20	1155	1392	1352	1	5353	5353	5353	402	2205	2526	2405	
NORTH CAROLINA	29	1146	1637	1474	70	883	1247	1146	1	2875	4210	4015	42	1875	2788	2615	
NORTH DAKOTA					2	1218	1784	1465	1	2931	4294	3920	8	2085	3054	2560	
OHIO	13	1142	1384	1263	73	912	1056	984	1	2720	3792	3792	105	1520	2124	1822	
OKLAHOMA									1	4583	4583	4583	26	2383	3193	2580	
OREGON	11	1626	2058	1950	3	1499	1655	1655	1		4622	4622	35	2119	2498	2684	
PENNSYLVANIA	11	1609	2097	2096	94	977	1201	1201	1	3330	3965	3965	378	1549	2011	2011	
PENNSYLVANIA						1119	1416	1416						1837	2396	2396	
RHODE ISLAND	2	1102	1249	1163	5	1045	1139	1100									
SOUTH CAROLINA	24	1070	1641	1227					1			4265	52	1408	2335	2208	
SOUTH DAKOTA									1			3488	56	1678	2610	2067	
TENNESSEE					22	764	1129	961	1	2639	3836	4011	37	1570	2099	1850	
TENNESSEE													57	1316	1792	1570	
TEXAS											4342			2562	3227		
UTAH	14	1284	2194	2089					1	3865	4912	4588	27	1861	3022	2659	
VERMONT	1	858	1593		6	737	1361		1	2357	4557		30	1005	2669		
VIRGINIA	48	970	1325	1101	12	1061	1449	1213	1	3091	4223	3533	31	1386	1843	1584	
WASHINGTON	50	1424	2225	1881					1		5586	5586	44	2225	2348	2807	
WEST VIRGINIA	4	1227	2090	1544	12	842	1234	1081	1	2745	4249	3292					
WISCONSIN	10			2335	41	1190	1495	1490					174	1957	2940	2440	
WYOMING	5	1435	2226	1874	30	1067	2016	1290					30	2474	3838	3229	
1983 AVERAGE				1607				1307				4099				2322	
1944 AVERAGE																	
% INCREASE 1944-1983																	
% INCREASE 1982-1983					5			3				1				3	

MAINTENANCE QUESTIONNAIRE ON POLICIES AFFECTING MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL (as of July 1, 1983)

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 (4a)	Min. Yrs. Service (4b)	Min. Age (5)	Min. Yrs. Service (5a)	Min. Age (5b)	Annual Vacation Schedule (6)	Minimum (7)	Maximum (7)	Cumulative Maximum (8)			
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	70	Yes	5	50	Yes	96	0-3	168	15	Yes	240
Arkansas	-	-	-	x	Yes	Yes	Yes	Both	70	Yes	10	53	Yes	96	0-3	264	20	Yes	Annual Accrual*40
California	x	-	-	-	Yes	Yes	No	-	-	Yes	5	50	Yes	84	1-3	168	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	84	0-5	140	20	Yes	70
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	55	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	240
Kansas	-	x	-	-	Yes	Yes	No	-	-	Yes	10	60	Yes	144	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	All
Maine	x	-	-	-	Yes	No	No	-	-	Yes	10	60	Yes	96	0-5	192	20	Yes	520
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	234	30	Yes	240/275
Mississippi	-	x	-	-	No	Yes	Yes	Statute	70	Yes	30	-	Yes	48	6 Mo.- 6 Mo.-5Yr	144	5	Yes	360 240/10 336/15
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	5	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 10at60	55	Yes	120	0-8	168	18	Yes	288
New Jersey	-	x	-	-	Yes	Yes	Yes	Policy	70	Yes	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	10r More	Yes	240
New York	-	x	-	-	Yes	Yes	Yes	Statute	70	Yes	10	55	Yes	97.5	1-7	149.5	7	Yes	520
North Carolina	-	x	-	-	Yes	Yes	Yes	Statute	70	Yes	20	50	Yes	94	0-2	206	20	Yes	240
North Dakota	x	-	-	-	Yes	Yes	No	Policy	-	No	-	-	Yes	96	0-3	192	18	Yes	240
Ohio	x	-	-	-	Yes	No	Yes	Statute	70	Yes	Sat60	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	58	Yes	96	6 Mo.- 5Yrs.	192	20	Yes	250
Pennsylvania	-	-	-	x	Yes	Yes	No	-	-	Yes	10	Any/10	Yes	42	0-1	102	25	Yes	337.5
Rhode Island	x	-	-	-	Yes	Yes	Yes	Statute	70	Yes	10	55	Yes	80	6 Mo.- 5 Yrs.	224	25	Yes	208
South Carolina	-	-	-	x	Yes	Yes	Yes	-	72	Yes	30	60	Yes	120	1-10	240	22	Yes	360 240/ 320
South Dakota	-	x	-	-	Yes	Yes	Yes	Statute	70	Yes	5	55	Yes	120	1-15	160	15	Yes	315
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	300
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	240 240/280 360
West Virginia	x	-	-	-	Yes	Yes	No	-	-	Yes	5	60	Yes	120	0-5	-	15	Yes	40
Wisconsin	x	-	-	-	Yes	Yes	No	-	-	No	-	55	Yes	80	1-5	200	-	Yes	40
Wyoming	x	-	-	-	Yes	Yes	Yes	Policy	70	Yes	4	50	Yes	96	0-4	152	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		Annual Sick Leave Schedule 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	-	-	-	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	-	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	1500	New York
Yes	96	All	96	1	Yes	Unlimited	North Carolina
Yes	96	-	96	-	Yes	Unlimited	North Dakota
Yes	56	56	56	-	Yes	Unlimited	Ohio
Yes	120	1-5	120	5	Yes	360	Oklahoma
Yes	96	All	96	-	Yes	Unlimited	Oregon
Yes	62	-	62	1	Yes	1500	Pennsylvania
Yes	120	-	120	-	Yes	960	Rhode Island
Yes	120	-	120	-	Yes	1440	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	Each	96	Each	Yes	-	Washington
Yes	144	-	144	-	Yes	Unlimited	West Virginia
Yes	-	-	-	-	Yes	Unlimited	Wisconsin
Yes	96	All	96	-	Yes	Unlimited	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.	Non-Supv.	National Union	Supervisory			
	(12)	(12a)	(12b)	(13)	(13a)	(13b)	(14a)				(14b)	(14c)	(14d)	(15)
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		Yes Voluntary
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	Yes	Partially	Optional	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 & Wholly	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	Wholly	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	No	Yes	No		No
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	Wholly & Partially		x			No	Yes			
Nebraska	Yes	Partially	Optional	Yes	Partially	Optional			x	Yes	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	No	Yes	Voluntary	Yes Voluntary
Ohio	Yes	Partially	Optional	Yes	Wholly	Mandatory	x			No	Yes	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		Yes
Pennsylvania	Yes	Wholly	Optional	Yes	Wholly	Optional	x			Yes	Yes	Yes	Voluntary	No
Rhode Island	Yes	Wholly	Mandatory	No		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			x			Yes	No	No		Yes Voluntary
Tennessee	Yes	Partially	Optional	Yes	Partially	Optional	x			No	No	No		Yes Voluntary
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 & Wholly	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)	Voluntary	Local Union (16b)	Voluntary		(18a)	(18b)	(18c)	(18d)	Per Day	Per Week (19)	
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	Voluntary	Yes	S	-	-	8	40	Arkansas	
No	-	Yes	Voluntary	Yes	S	S	H	8 or 10	40	California	
No	-	-	-	Yes	S	S	H	8	40	Colorado	
No	-	Yes	Voluntary	No	H	S	H	7	35	Connecticut	
-	-	No	-	No	H	S	H	7.5	37.5	Delaware	
Yes	Voluntary	No	-	No	H	-	-	8/10	40	Florida	
No	-	No	-	Yes	S	-	-	8	40	Georgia	
No	-	Yes	Voluntary	Yes	S	-	-	8	40	Hawaii	
No	-	Yes	Voluntary	Yes	H	H	H	8	40	Idaho	
Yes	Voluntary	No	-	Yes	S	S	H	8	40	Illinois	
No	-	Yes	Voluntary	Yes	S	-	-	8	40	Indiana	
Yes	Voluntary	Yes	Voluntary	Yes	S	S	H	8	40	Iowa	
Yes	Voluntary	Yes	Voluntary	Yes	S	S	H	8	40	Kansas	
No	-	No	-	Yes	H	S	S	7.5	37.5	Kentucky	
Yes	Voluntary	Yes	Voluntary	Yes	S	S	H	8	40	Louisiana	
No	-	Yes	Voluntary	Yes	H	S	H	8	40	Maine	
Yes	Voluntary	Yes	Voluntary	No	H	S	H	8	40	Maryland	
Yes	Mandatory	Yes	Voluntary	No	H	-	-	8	40	Masachusetts	
No	-	Yes	Mandatory	Yes	H	S	H	8	40	Michigan	
Yes	Voluntary	Yes	Voluntary	Yes	S	S	S	8	40	Minnesota	
No	-	Yes	Voluntary	Yes	S	-	-	8	40	Mississippi	
Yes	Voluntary	Yes	Voluntary	Yes	S	S	H	8	40	Missouri	
Yes	Mandatory	Yes	Mandatory	Yes	S	S	H	8	40	Montana	
No	-	Yes	Voluntary	Yes	H	-	-	8	40	Nebraska	
No	-	Yes	Voluntary	Yes	S	S	S	8	40	Nevada	
No	-	Yes	Voluntary	Yes	H	H	S	8	40	New Hampshire	
Yes	Voluntary	No	-	Yes	S	-	-	8	40	New Jersey	
Yes	Voluntary	-	-	Yes	S	S	H	8	40	New Mexico	
Yes	Voluntary	Yes	Voluntary	Yes	S	S	H	8	40	New York	
No	-	Yes	Voluntary	Yes	S	S	H	8	40	North Carolina	
Yes	Voluntary	Yes	Voluntary	Yes	S	S	S	8-10	40	North Dakota	
Yes	Voluntary	Yes	Voluntary	Yes	H	-	-	8	40	Ohio	
No	-	Yes	Voluntary	Yes	S	S	S	8	40	Oklahoma	
-	-	Yes	Voluntary	Yes	S	-	-	8	40	Oregon	
Yes	Voluntary	-	-	Yes	H	-	-	7.5	37.50	Pennsylvania	
Yes	Mandatory	-	-	Yes	H	-	-	8	40	Rhode Island	
No	-	Yes	Voluntary	Yes	H	S	H	8	40	South Carolina	
Yes	Voluntary	Yes	Voluntary	Yes	H	-	-	8	40	South Dakota	
No	-	Yes	Voluntary	Yes	S	-	-	7.5	37.5	Tennessee	
-	-	Yes	Voluntary	Yes	H	S	H	8	40	Texas	
No	-	Yes	Voluntary	Yes	H	-	-	8	40	Utah	
No	-	Yes	Voluntary	Yes	H	-	-	8	40	Vermont	
No	-	-	-	Yes	S	S	H	8	40	Virginia	
Yes	Mandatory	-	-	Yes	S	S	H	8	40	Washington	
No	-	-	-	Yes	H	S	H	8	40	West Virginia	
No	-	Yes	-	Yes	H	H	H	8	40	Wisconsin	
No	-	Yes	Voluntary	Yes	S	S	H	8	40	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:
- a. Permanent field employees (exclusive of supervisory)
 - b. Supervisory
 - c. 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:
- a. Hard hats and safety vests
 - b. Welding goggles and helmets
 - c. Other protective clothing for specialized operations (bituminous work, shop mechanics, etc.)
 - d. 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:
- a. Actual
 - b. Actual with a maximum
 - c. 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	No	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	YPR	1-1/2	1-1/2	1-1/2	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes			x			x
Arkansas	Yes	1-1/2	None	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes		x			x	
California	Yes	1-1/2	Straight & Comp	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	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No						
Delaware	Yes	1-1/2	Straight & 1-1/2	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No						
Florida	Yes	1-1/2	Comp	None	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes		x		x		x
Georgia	Yes	1-1/2	None	1-1/2	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	Yes	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	1-1/2	1-1/2	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	Yes	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	No	Yes	No	Yes			x			x
Kentucky	Yes	1-1/2	Comp		Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes			x			x
Louisiana		1-1/2	Comp	None	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes		x			x	
Maine	Yes	1-1/2		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
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	Yes	No	Yes	Yes	No	Yes			x			x
Mississippi	Yes	Comp	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	Yes	Yes			x			x
Nevada	Yes	1-1/2	Straight & 1-1/2	1-1/2	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes			x			x
New Hampshire	Yes	1-1/2	Straight	Straight	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	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	Yes	No	No	Yes	No	Yes			x			x
New York	Yes	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	Comp & 1-1/2	1-1/2	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes			x			x
North Dakota	Yes	1-1/2	Comp	1-1/2	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	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	Yes	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	1-1/2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes			x			x
Rhode Island	Yes	1-1/2	1-1/2	1-1/2	Yes	NO	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	Straight	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	Yes	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	No	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	No	Yes	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	No	-	-	-	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	-	No	Yes	Yes	Yes	x	-	-	Oregon
-	x	-	No	Yes	Yes	Yes	x	-	-	Pennsylvania
-	-	x	No	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	3,812	23,991	-	27,804	918	280	1,198	23.21	678	No	Yes	678	Yes	3,089	
Alaska	-	-	-	-	206	-	206	-	Yes	-	-	-	-	-	
Arizona	4,669	10,818	1,196	16,683	788	-0-	788	21.17	359	No	Yes	1,542	Yes	5,769	
Arkansas	2,249	32,027	550	34,826	1,575	-	1,598	21.79	450	No	Yes	6,950	-	5,790	
California	21,929	25,895	-	47,825	4,870	525	5,395	9	180	Yes	Yes	1,900	Yes	3,500	
Colorado	7,557	17,500	400	25,457	1,192	117	1,327	21	65	Yes	3,130	Yes	Yes	-	
Connecticut	3,090	7,070	-	10,160	1,605	-	1,605	6.33	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	5,272	28,174	-	33,446	-	-	-	-	No	Yes	800	Yes	4,000	-	
Georgia	5,620	35,862	327	41,809	2,682	337	3,019	13.80	187	No	Yes	920	Yes	3,801	
Hawaii	310	1,944	-	2,254	321	-	321	7.02	113	Yes	448	Yes	778	Yes	519
Idaho	2,323	8,737	453	11,512	494	100	594	19	153	Yes	1,100	Yes	2,300	Yes	4,600
Illinois	7,266	31,089	1,399	39,754	2,901	175	3,076	12.90	370	Yes	4,500	-	-	-	-
Indiana	4,725	24,950	-	29,675	1,975	103	2,078	14.30	265	No	Yes	1,562	Yes	1,484	-
Iowa	3,551	20,142	-	24,312	1,308	14	1,322	18.39	174	No	No	-	Yes	4,052	-
Kansas	3,828	18,550	1,553	23,931	1,323	-0-	1,323	18.09	208	No	No	-	Yes	3,989	-
Kentucky	5,477	23,437	25,026	53,940	3,130	25	3,155	17.10	450	Yes	4,495	-	-	-	-
Louisiana	3,274	19,456	15,596	38,326	2,908	-	2,908	13.0	618	No	Yes	3,800	Yes	4,700	-
Maine	1,138	6,906	8,064	16,108	1,007	26	1,033	15.6	221	No	Yes	2,300	Yes	2,650	-
Maryland	317	4,872	2,243	6,432	1,616	-	1,616	3.98	50	No	Yes	280	Yes	620	-
Massachusetts	-	-	-	12,360	1,053	79	1,132	10.92	125	Yes	270	No	Yes	70	-
Michigan	2,868	4,510	-	7,378	627	5	632	11.80	212	No	Yes	3,000	Yes	1,500	-
Minnesota	3,628	24,927	-	28,555	1,609	82	1,691	16.90	173	No	Yes	-	Yes	-	-
Mississippi	3,044	20,266	-	23,310	1,229	35	1,264	18	265	No	Yes	2,331	Yes	3,885	-
Missouri	8,526	61,090	3,360	72,976	3,238	32	3,270	-	206	Yes	No	-	Yes	5,210	-
Montana	4,758	11,855	2,353	18,966	567	13	580	32.7	141	No	No	141	Yes	1,500	-
Nebraska	1,972	20,089	-	22,061	878	23	901	-	248	No	Yes	735	Yes	3,150	-
Nevada	2,875	8,850	883	12,608	391	18	409	32.6	233	Yes	1,400	-	-	-	-
New Hampshire	787	7,788	513	9,088	588	36	624	14.6	94	No	Yes	1,500	Yes	1,500	-
New Jersey	2,644	7,722	-	10,366	-	-	-	6.0	150	Yes	2,073	-	-	-	-
New Mexico	4,449	16,012	6,989	27,450	1,170	15	1,185	23.16	168	No	Yes	5,490	Yes	7,464	-
New York	4,758	33,362	3,780	41,900	5,200	72	5,272	79.0	6,291	No	Yes	635	Yes	2,095	-
North Carolina	2,853	144,415	12,417	159,685	5,882	386	6,268	25.48	360	No	Yes	1,699	Yes	8,742	-
North Dakota	3,266	12,384	548	16,198	370	34	404	40.09	-	Yes	-	-	-	-	-
Ohio	6,424	35,651	-	42,075	2,270	-	2,270	18.53	478	Yes	1,500	-	-	-	-
Oklahoma	3,524	23,029	-	26,553	1,42	20	1,362	19.5	295	No	Yes	2,800	Yes	2,800	-
Oregon	2,943	15,081	-	18,024	1,212	60	1,272	-	235	No	Yes	1,200	Yes	2,400	-
Pennsylvania	19,496	78,321	-	97,817	7,209	400	7,609	12.86	130	No	Yes	1,460	Yes	4,075	-
Rhode Island	435	2,580	-	3,015	432	-0-	432	7.0	188	No	Yes	745	Yes	1,000	-
South Carolina	3,075	81,852	-	84,927	2,322	-	2,322	36.57	352	No	Yes	1,807	Yes	8,493	-
South Dakota	2,874	14,548	894	18,316	483	44	527	34.76	254	Yes	3,053	-	-	-	-
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	-	-	-	177,077	6,800	-	6,800	-	640	No	Yes	634	Yes	7,366	-
Utah	3,723	10,320	-	14,043	522	42	564	24.9	192	Yes	2,338	-	-	-	-
Vermont	1,606	4,481	-	6,087	491	20	511	12.4	150	No	Yes	1,520	Yes	2,030	-
Virginia	4,417	108,822	-	113,239	4,900	150	5,050	22.4	460	No	Yes	1,800	Yes	4,500	-
Washington	5,512	11,396	-	16,908	1,249	231	1,480	11.4	150	No	No	-	Yes	2,800	-
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	-	Yes	-	-
Wyoming	3,742	11,628	516	15,886	512	51	563	31.0	264	No	Yes	3,177	Yes	1,588	-

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	-	-	-	-	-	-	-	-	-	-	-	-	-	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	Yes	-	-	x	-	-	-	Colorado
No	Yes	-	-	-	-	-	-	No	-	-	-	-	-	-	Connecticut
-	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	Delaware
No	Yes	-	-	-	-	-	-	Yes	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	No	-	-	-	-	-	-	Indiana
No	Yes	-	-	-	-	-	-	Yes	x	-	x	-	x	-	Iowa
Part	-	x	x	-	-	-	x	Yes	x	x	x	-	x	x	Kansas
Yes	-	x	x	-	x	x	-	Yes	x	x	x	-	x	-	Kentucky
Yes	-	x	x	x	x	x	x	Yes	x	x	x	-	x	-	Louisiana
Yes	-	x	x	-	x	x	-	Yes	x	x	x	-	-	x	Maine
Yes	-	x	x	x	x	x	x	No	-	-	-	-	-	-	Maryland
No	-	-	-	-	-	-	-	No	-	-	-	-	-	-	Massachusetts
No	Yes	-	-	-	-	-	-	Yes	x	-	x	-	x	-	Michigan
No	Yes	-	-	-	-	-	-	Yes	x	x	x	-	x	x	Minnesota
No	Yes	-	-	-	-	-	-	Yes	x	x	x	-	x	-	Mississippi
No	No	-	-	-	-	-	-	No	-	-	-	-	-	-	Missouri
Yes	-	x	x	x	-	x	x	Yes	x	x	x	-	-	x	Montana
No	Yes	-	-	-	-	-	-	Yes	-	-	x	-	-	-	Nebraska
Yes	-	x	x	x	x	x	x	Yes	x	-	x	-	x	-	Nevada
No	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	New Hampshire
Yes	-	x	x	x	x	x	x	No	-	-	-	-	-	-	New Jersey
No	Yes	x	x	-	x	x	-	No	-	-	-	-	-	-	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
Yes	-	x	x	x	x	x	x	Yes	x	-	-	-	x	-	North Dakota
No	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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	-	-	-	-	-	-	Yes	x	x	x	-	x	-	South Carolina
No	Yes	-	-	-	-	-	-	Yes	x	-	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	Yes	-	-	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

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