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TRANSPORTATION RESEARCH



Number 198, January 1979
ISSN 0097-8515

CIRCULAR

Transportation Research Board, National Academy of Sciences, 2101 Constitution Avenue, Washington, D.C. 20418

PROGRESS REPORT OF THE COMMITTEE ON MAINTENANCE AND OPERATIONS PERSONNEL

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 34th in a series which began in 1944.

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

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

SALARIES

This report, for comparative purposes, has been broken down into four regions as follows:

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

The following are the average monthly salaries of certain positions, by regions, as of July 1, 1978, 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	2605	2465	2538	2813
District Engineer	2382	2361	2422	2772
Area Supervisor	1316	1126	1392	1655
Laborer	723	586	768	884
Mechanic	954	855	1013	1235
Equipment Operator I	774	669	782	984
Equipment Operator II	816	764	916	1166
Equipment Operator III	946	859	965	1268

These averages all show an increase over 1978.

Using 1967, the current cost index base year, the relative change in selected classifications for 1978 is as follows: State Maintenance Engineer - \$193.82%, Equipment Operator I - \$198.76%, Laborer - \$207.93%, and Mechanic - \$200.99%. This will permit a general comparison with the various labor cost indexes available for your area.

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

North Atlantic States Pennsylvania
 Mississippi Valley States North Dakota
 Southeastern States Arkansas; North Carolina

Retirement Plan

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

Fourteen states reported no compulsory retirement age--an increase of 5 over last year; the compulsory retirement age is 65 in 10 states; 67 in one state; 70 in 24 states, and 72 in one state. The retirement age is established by statute in 22 states and by policy in 14 states.

Forty-nine of the reporting states indicate voluntary retirement is possible at an earlier age after a prescribed number of years. The most prevalent minimum years of service for voluntary retirement is 30 years, while the most prevalent minimum retirement age is 55.

Vacation and Sick Leave

All states indicated that permanent employees are granted vacation and sick leave. The minimum or starting basis on vacations ranges from 56 to 168 hours per year, and maximum from 120 to 248 hours per year. Vacation time is cumulative in 49 states, and the maximum time that may be carried over into a new year varies from 160 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 75 to 120 hours per year, and the maximum from 75 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. Twenty-one of these plans are wholly state-financed. The plan is mandatory in 9 states.

Forty-three states have a partially or wholly state-financed life insurance plan for their permanent employees, with 21 of these wholly state-financed. The plan is mandatory in 18 states.

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

Unionization

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

Thirty-two states report voluntary or mandatory organization of maintenance and operations supervisory personnel in unions or employee associations, with 18 states indicating no union or employee association for supervisory employees.

Forty-two states report mandatory or voluntary organization of their non-supervisory maintenance and operations employees in either national unions, local unions or employee associations, with 8 states indicating no union or employee association organization.

Membership in some type of union is mandatory for supervisors in four states and for non-supervisors in six states.

Service Awards

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

Working Hours and Conditions

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

Forty-five states have an 8-hour day, with 40 hours per week as the standard work week; four states have a less than 40-hour week (three 37½ and one 35), and one state reports a 43½-hour week.

Forty-nine states allow either compensatory time, straight time or time-and-a-half to their permanent field employees. For overtime work, 47 states report non-supervisory personnel earn time-and-a-half compensation for overtime. In 15 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; 47 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; 49 states furnish welding goggles and helmets; 42 states furnish some other types of protective clothing, even though minor, to their maintenance employees.

Forty states have automatic or automatically recommended salary advances.

Forty-nine states have a formalized job classification plan.

Only 8 states use convict labor.

Only two 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 13 states, and on a per diem basis in 14 states. In 16 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 19 states, for their replacement and maintenance in 44 states, and for pavement marking in 38 states.

In 47 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 10 states servicing is performed for some other state agencies and 6 states for all state agencies.

Lane Miles

The average lane miles per man varies from 5.8 to 38.0.

Maintenance Management System

Thirty-nine of the reporting states have changed or are in the process of changing to a maintenance management system or maintenance performance budget method of operation. Seven states contemplate making this change, while four states indicate they do not contemplate the change.

Basis of Crew Operations

The average number of lane miles handled by a general maintenance crew working out of one location varies from 26 to 1,020 according to the answers given.

The travel distance from a gang or section headquarters to their farthest point of work varies from 6 to 54, with 27 states reporting 25 or under.

Twelve states report that the same crew handles traffic signs and striping with the lane miles handled by each crew varying from 270 to 4,000.

Thirty-three states have special crews for traffic signs, with the lane miles handled by each crew varying from 250 to 5,560.

Forty-two states have special crews for striping, with the lane miles handled by each crew varying from 508 to 11,200 miles.

Twelve states indicate the same special crews handle both signs and striping with the lane mile per crew varying from 270 to 4,454 miles.

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. | <u>State Maintenance Engineer</u> - One in an executive capacity who supervises all activities of maintenance for the State Highway and Transportation Department. |
| 2. | <u>Assistant State Maintenance Engineer</u> - One who assists the State Maintenance Engineer in the work of supervising the activities of maintenance. |
| 3. | <u>District Engineer</u> (In some States, called <u>Division Engineer</u> or <u>Regional Engineer</u>) - One in an executive capacity who supervises highway activities within a district. |
| 4. | <u>District Maintenance Engineer</u> - One in an executive capacity who supervises maintenance activities of highways within a district. |
| 5. | <u>Assistant District Maintenance Engineer</u> - One who assists the <u>District Engineer</u> and/or the <u>District Maintenance Engineer</u> in supervising maintenance within a district. |
| 6. | <u>Resident Maintenance Engineer</u> - One who directs the activities of all maintenance employees and equipment and oversees the maintenance of highways within a residency. |
| 7. | <u>Area Supervisor</u> (In some States, called <u>Superintendent</u>) - One who directs the activities of all maintenance employees and equipment and oversees the maintenance of highways within a residency, excluding engineering requirements. |
| 8. | <u>Gang Foreman</u> - One who directs the activities of a group of men engaged in maintenance and betterment work such as a grading crew, bituminous repair crew, concrete pavement patching crew, bridge repair crew, roadside maintenance crew, etc. |
| 9. | <u>Sectionman</u> - One who in reality is a working foreman, or who can and does perform any of the work necessary to properly maintain the highways within a specified territory; in addition, supervises the work of operators and laborers when necessary. A highly skilled and trained man. |

Definitions of Maintenance and Operations Personnel Titles

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. |

Definitions of Maintenance and Operations Personnel Titles

Title

- | No. | Title and Description |
|-----|--|
| 23. | <u>District Traffic Engineer</u> - 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. | <u>Assistant District Traffic Engineer</u> - One who assists the District Traffic Engineer in the work of supervising traffic operations within a district. |
| 25. | <u>Traffic Supervisor</u> - One who directs the activities of all employees and equipment related to traffic operations within a district. |
| 26. | <u>Sign Supervisor</u> - One who directs the activities of all signing, both fabrication and erection. |
| 27. | <u>Sign Shop Foreman</u> - One who directs a crew of men in the activity of fabricating traffic signs. |
| 28. | <u>Traffic Signal & Lighting Foreman</u> - One who directs a crew of men in activities related to the operation and maintenance of traffic signals and lighting. |
| 29. | <u>Striper Foreman</u> - One who directs a crew of men in activities related to pavement markings. |
| 30. | <u>Sign Erection Foreman</u> - One who directs a crew of men in activities related to the erection and maintenance of all traffic signs. |
| 31. | <u>Sign Fabricator</u> - One who specializes in the fabrication of traffic signs. |
| 32. | <u>Sign Technician</u> - One who operates equipment and supervises laborers for all activities associated with signing, both fabrication and erection. |
| 33. | <u>Traffic Signal & Lighting Technician</u> - One who works in a technical capacity for operating and maintaining traffic signal equipment and highway lighting. |
| 34. | <u>Striper Technician</u> - One who operates equipment and supervises laborers regarding all activities of pavement markings. |

OTHER RELATED PERSONNEL TITLES

35. Chief Engineer - One in an executive capacity who supervises all engineering activities of a State Highway Department.

Definitions of Maintenance and Operations Personnel Titles

Title No.	Title and Description
36.	<u>Project Engineer</u> - 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, 1978)

MAINTENANCE PERSONNEL:

	(1)	(2)	(3)	(4)	(5)
State	State Maintenance Engineer	Assistant State Maintenance Engineer	District Engineer	District Maintenance Engineer	Assistant District Maintenance Engineer
Alabama	State Maintenance Engineer	Asst.State Maint.Engr.	Division Engineer	Div. Maint. Engr.	Asst.Div.Maint.Engr.
Alaska	Dep.Commissioner M&O	State Maint.Engr.Highways M&O	Reg. Director M&O	Transp. Maint. Mgr.	Asst.Transp.Maint.Mgr.
Arizona	Asst.State Engr.-Maint. Sect.	Maint. Oper. Engr.	District Engineer	Dist. Maint. Engr. Dist. Maint. Supv. Dist. Maint. Supt. II	-
Arkansas	Civil Engr. VIII	Civil Engr. VI	Civil Engr. VII	Dist. Maint. Supt. II	Dist. Maint. Supt. I
California	Chief, Div. of Maint.	Chief, Hwy.Maint. Chief, Struc.Maint.	Dist.Dir. of Transp.	Branch Chief (various)	Section Chief, et al
Colorado	Staff Maint. Supt.	-	District Engineer	Dist. Maint. Supt.	Asst.Dist.Maint.Supt.
Connecticut	Director of Maint.	Oper. Maint. Mgr.	Dist. Maint. Mgr.	-	Dist.Maint.Oper.Supv.
Delaware	Chief, Maintenance	-	Asst. Chief Engr.	-	Asst.Dist.Maint.Engr.
Florida	State Maintenance Engineer	Deputy State Maint. Engr.	District Engineer	Dist. Maintenance Engr.	Asst. Dist.Maint.Engr.
Georgia	State Maintenance Engineer	Asst.State Maint.Engr.	District Engineer	Asst.Dist.Engr.-Maint.	Maint. Asst.
Hawaii	Chief, Land Transp.Fac.Div.	Asst.Chief,Const.& Maint.	District Engineer	Dist. Maint. Engr.	-
Idaho	Maint.Supv. Engr. Mgr. 3 Engr. of Maint.	Asst.Maint.Engr. Engr. Mgr. 1 Maint. Sect. Chiefs	Dist. Engr. Engr. Mgr. 3 District Engineer	Dist. Maint. Engr. Engr. Proj. Supv. Dist. Maint. Engr.	-
Illinois	Chief, Div. of Maint.	Asst. Chief, Div. of Maint.	District Engineer	Dist. Maint. Engr.	Asst.Dist.Maint.Engr.
Iowa	Maintenance Engineer	Asst. Maintenance Engineer	District Engineer	Dist. Maint. Engr.	-
Kansas	Engineer of Maintenance	Asst. Engr. of Maint.	District Engineer	Dist. Maint. Engr.	Asst.Dist.Maint.Engr.
Kentucky	Dir.Div. of Maint.	Asst.Dir.Div.of Maint.	District Engineer	Asst.Dist.Engr.Oper.	Dist. Maint. Engr.
Louisiana	Chief Maint.& Oper. Engr.	Road Maint. Engr. Br. Maint. Engr., et al Hwy. Maint. Engr.	District Engineer	Asst.Dist.Engr.-Maint.	Asst.Dist.Maint.Engr.
Maine	Engr.of Maint.& Oper.	-	Division Engineer	-	-
Maryland	Asst.Chief Engr.-Maint.	Chief,Bureau of Hwy.Maint.	District Engineer	Asst.Dist.Engr.-Maint.	-
Massachusetts	Maintenance Engineer	Asst. Maint. Engr.	Dist. Highway Engr.	Dist. Maint. Engr.	Asst. Dist. Maint. Engr.
Michigan	Engineer of Maintenance	Asst. Engr of Maint.	District Engineer	Dist. Maint. Engr.	Asst. Dist. Maint. Engr.
Minnesota	Director, Maintenance	Road Services Engr. Equipment Engr., et al	District Director	Asst. Dist. Dir.-Maint.	Maint. Oper. Engr. Maint. Pre-Oper. Engr. Asst. Dist. Maint. Engr.
Mississippi	State Maintenance Engineer	Asst.State Maintenance Engr.	District Engineer	Dist. Maint. Engr.	Asst. Dist. Maint. Engr.
Missouri	Div. Engr. Maint. & Traf.	Asst. Div. Engr.-Maint.	District Engineer	District Maint.& Traf.Engr.	Maint. Supt.
Montana	Administrator - Maint.	Asst. Admin. - Maint.	-	Chief, Field Maint.	-
Nebraska	Maintenance Engineer	Maint. Oper. Mgr.	District Engineer	Dist. Hwy. Maint. Supt.	-
Nevada	Chief Maintenance Engr.	Asst. Maint. Engr.	District Engineer	-	Asst. Dist. Engr.
New Hampshire	Maintenance Engineer	Asst. Maint. Engr.	Division Engineer	-	Asst. Division Engr.
New Jersey	Chief Engr,Const.& Maint.	Chief,Bureau of Maint.	Reg. Engr. Transp.	Reg. Maint. Engr.	Proj. Engr. Maint.
New Mexico	Asst.Chief Hwy.Admin.-Oper.	-	Dist. Hwy. Engr.	Dist. Maint. Engr.	-
New York	Dir. of Trans. Maint.	Dir. of Hwy. Maint.	Reg. Dir. of Transp.	Reg. Hwy. Maint.Engr. A,B,C	Sr.Civil Engr. Asst. Civil Engr. District Engineer
North Carolina	Mgr. of Maint. & Equip.	Head of Maintenance	Division Engineer	Asst. Div. Engr.-Maint.	-
North Dakota	Maintenance Engineer	Asst. Maint. Engr.	District Engineer	Asst. Dist. Engr.	-
Ohio	Engineer of Maintenance	-	Dist. Deputy Dir.	Dist. Maint. Engr.	Asst. Dist. Maint. Engr.
Oklahoma	State Maintenance Engineer	Asst.State Maint. Engr.	Division Engineer	Div. Maint. Engr.	Field Maint. Engr.
Oregon	State Highway Engineer	-	Region Engineer	-	Region Maint. Engr.
Pennsylvania	Dir. Hwy. Maintenance	Civil Engineer V	Hwy. D. E. II Hwy. D. E. III Sr. Civil Engr.	Hwy. Maint. Supt. VI	Civil Engr. III Hwy. Maint. Supt. IV
Rhode Island	Asst.Dir.-DOT-Div.of Maint.	-	-	-	-
South Carolina	Maintenance Engineer	Asst. Maint. Engr.	District Engineer	Dist. Maint. Engr.	-
South Dakota	Engineer of Maintenance	Engr.of Maint.Oper.,Engr.of Br.Maint. & Maint.Plan.Prog. Asst.State Maint.Engr.	District Engineer	Asst. Dist. Engr.-Maint.	-
Tennessee	State Maintenance Engineer	-	Regional Engineer	Reg. Maint. Engr.	Asst. Reg. Maint. Engr.
Texas	Chief Engr.,Maint.& Oper.	-	District Engineer	Dist. Maint. Engr. Supv. Maint. Engr.	Asst. Dist. Maint. Engr.
Utah	Engineer for Maintenance	-	District Directors	-	-
Vermont	Director of Maintenance	Asst.Dir.of Maint.	-	Dist.Transp.Admin.	Asst.Dist.Transp.Admin.
Virginia	State Hwy. Maint. Engr.	St.Hwy.Maint.Engr.Asst.	Hwy Dist. Engr.	Hwy. Asst. Dist. Engr.	-
Washington	Maint. and Oper. Engr.	Asst. Maint. & Oper. Engr.	District Administrator	Dist. Maint. Engr.	Asst. Dist. Maint. Engr.
West Virginia	Chief Engr Oper.	Dir.-Maint. Div.	District Engineer	Asst. Dist. Engr. Maint.	-
Wisconsin	Chief Maint. Engr.	Asst. Chief Maint.Engr.	District Engineer	Dist.Chief Maint. Engr.	Asst. Maint. Supv.
Wyoming	State Const.& Maint.Engr.	-	-	-	-

(6) Resident Maintenance Engineer	(7) Area Supervisor	(8) Gang Foreman	(9) Sectionman	State
District Engineer	Superintendent	Foreman	Hwy. Camp Guard	Alabama
Dist. Supv. (Supt.)	Inc. In Title #6	Maintenance Foreman	Inc. In Title #8	Alaska
-	Hwy. Maint. Crew Supv.	-	Hwy. Maint. Worker III (Leadman)	Arizona
-	Area Foreman	Job Supt.	Crewleader	Arkansas
-	Hwy. Superintendent	Hwy. Maint. Landscaping & Tree Supv.	Hwy. Landscaping, Maint. & Tree Leadworkers	California
-	Sr. Hwy. Foreman	Hwy. Foreman	Sr. Hwy. Maint.	Colorado
-	Maint. Gen. Supv.	Maint. Supv.	Maint. Crew Leader	Connecticut
Hwy. Maint. Oper. Mgr.	Hwy. Maint. Supt.	Hwy. Maint. Supv.	Labor Foreman I, II, III	Delaware
Maint. Engineer	Hwy. Maint. Foreman II	Hwy. Maint. Foreman I	Hwy. Maint. Tech. III	Florida
Maint. Area Mgr.	-	Hwy. Maint. Foreman II	-	Georgia
-	Const. & Maint. Supt. VI	Hwy. OSM Supv., et al	Hwy. Labor Supv.	Hawaii
-	Transp. Maint. Foreman	Br. Maint. Supt.	Hwy. Maint. Supv., et al	Idaho
-	Maint. Field Engr.	-	Hwy. Maint. Oper. Leadworker	Idaho
Dist. Maint. Coordinator	Sub-Dist. Supt.	Hwy. Maint. Leadworker	Hwy. Maintainer	Illinois
Resident Maint. Engr.	Hwy. Maint. Supv. 4	General Foreman	Unit Foreman	Indiana
-	Dist. & Area Supt.	Hwy. Maint. Supv. 3	Hwy. Maint. Supv. 1	Iowa
-	Maint. Supt.	Hwy. Maint. Supv. 2	Sub-area Supv.	Kansas
-	Superintendent	Hwy. Foreman	Asst. Hwy. Foreman	Kentucky
-	District Supv.	Foreman I, II, III, et al	-	Louisiana
Res. Maint. Engr.	Hwy. Maint. Supv.	Hwy. Foreman	Crew Leader	Maine
-	Hwy. Maint. Foreman	Supv. Road Maint.	-	Maryland
-	Area Supt.	Hwy. Repair Foreman	Hwy. Repair Working Foreman	Massachusetts
-	Br. Maint. Supv.	Transp. Maint. Supv.	Transp. Maint. Supv. IV	Michigan
-	Hwy. Maint. Supt., et al	Br. Foreman	Hwy. Maint. Worker	Minnesota
-	Hwy. Maint. Supt. II	Hwy. Maint. Foreman	Hwy. Maint. Worker., Sr. Equip. Oper. II	Mississippi
-	Maint. Area Supv.	Hwy. Maint. Foreman I-II	Hwy. Maint. Foreman	Missouri
-	Maint. Foreman	Special Maint. Foreman	-	Montana
-	Hwy. Maint. Supt.	-	Field Maint. Supv.	Montana
-	Hwy. Maint. Supt.	Hwy. Maint. Supv.	-	Nebraska
Maint. Supv.	Maint. Supt.	Sr. Hwy. Maint. Foreman	Hwy. Maint. Foreman	Nevada
Dist. Maint. Supv.	Area Supv.	Const. Foreman	Hwy. Patrol Foreman	New Hampshire
Resident Engineer	Hwy. Maint. Supt.	Foreman, Hwy. Maint., Bridge, et al	Asst. Foreman Hwy. Maint., Br., et al	New Jersey
Resident Engineer	-	Hwy. Maint. Foreman I, II	Inc. In Title #8	New Mexico
Road Maint. Supv.	Area Foreman	Br. Repair Supv. II	Br. Repair Supv. I	New York
-	Maint. Supt.	Hwy. Maint. Supv. II	Hwy. Maint. Supv. I	North Carolina
Proj. Engr. 2	County Supt.	Maint. Crew Leader II & III	Maint. Crew Leader I	North Carolina
-	Maint. Dist. Foreman	Foreman	Leadman	North Dakota
District Engineer	-	Hwy. Worker 3	Hwy. Worker 2	Ohio
Civil Engineer II	Hwy. Maint. Supt. II, III, IV	Hwy. Const. Supt.	-	Oklahoma
Chief Hwy. Maint. Supv.	Hwy. Maint. Supv.	Hwy. Maint. Supv.	Asst. Supv. or Special Supv.	Oregon
Assoc. Res. Maint. Engr.	-	Hwy. Foreman I, II, III	-	Pennsylvania
Res. Maint. Engr.	Hwy. Maint. Supt.	Road Maint. Foreman	Labor Foreman	Rhode Island
Res. Maint. Engr.	-	Hwy. Maint. Crew Supv. I-III	-	South Carolina
Dist. Maint. Engr.	Foreman II	Hwy. Maint. Supv.	Hwy. Maint. Foreman	South Dakota
-	Maint. Const. Supv. I & II	Hwy. Maint. Supv.	Hwy. Supv.	Tennessee
-	Sr. Marine Supv.	Reg. Maint. Supt.	-	Texas
-	Maint. Supv.	Maint. Const. Fore. II & III	-	Texas
-	Hwy. Maint. Gen. Supv.	Hwy. Oper. Foreman	Station Foreman	Utah
Hwy. Res. Engr. A	Hwy. Res. Maint. Supv.	Br. Maint. Supv.	Hwy. Maint. Worker B	Vermont
-	Hwy. Supt.	Hwy. Maint. Worker C	-	Virginia
-	County Maint. Supv.	Hwy. Foreman	-	Washington
-	Asst. Area Supv.	Maint. Supv.	Maint. Lead Tech.	Washington
-	Hwy. Foreman II	Asst. County Maint. Supv.	Foreman	West Virginia
-	-	County Employees	County Employees	Wisconsin
-	-	Hwy. Foreman I	-	Wyoming

MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL, TITLES USED BY STATE HIGHWAY DEPARTMENT (as of July 1, 1978)

MAINTENANCE PERSONNEL (cont'd)

State	(10) Laborer	(11) Skilled Craftsmen	(12) Shop Superintendent	(13) Garage or Shop Foreman	(14) Mechanic
Alabama	Laborer	Skilled Craftsmen	Div. Equip. Maint. Engr.	Mechanic Foreman	Auto & Heavy Equip. Mech. Mechanic
Alaska	Laborer	Elec., Painter, Carpenter, et al	Foreman	Inc. In Title #12	
Arizona	Laborer, et al	Bldg. Maint. Worker I, et al	Equip. Services Mgr.	Equip. Shop Foreman & Supv.	Equip. Mechanic I, et al Mechanic
Arkansas	Laborers I & II	Carpenter, Welder, Painter, Paint & Body	Dist. Equip. Supv.	Shop Foreman	
California	Hwy. Maint. Worker Serv. Asst., et al	Carpenter, Skilled Laborer	Hwy. Equip. Supt. I or II	Hwy. Mech. Supv. I or II	Hwy. Equip. Mech.
Colorado	Utility Worker		Sr. Shop Foreman	Asst. Shop Foreman	Auto & Equip. Mech.
Connecticut	DOT Maintainer II	Qualified Craft Worker	Repair Garage Supv.	Crewleader	Qualified Craft Worker
Delaware	Laborer	Labor II	Hwy. Equip. Supt.	Auto Supv.	Auto Mech. I, II, III
Florida	Hwy. Maint. Tech. I or II	Plumber Carpenter	Auto Equip. Repairman Foreman	Auto Equip. Repairman Foreman	Auto Equip. Repair Mech. I & II
Georgia	Laborer	Skilled Laborer DOT	Maint. Shop Mgr. -DOT	Mech. Shop Supv.	Mech., Sr.
Hawaii	Gen. Laborers Trade Helpers	Br. Maint. Workers Carpenters, et al	Auto Mech. Supv.	Auto Mech. II	Auto Mech. I & Machinist Mechanic
Idaho	Laborer	Maint. Carpenter		Shop Foreman	
Illinois					Auto Mech.
Indiana	Inc. In Title #16	Mech. II	Hwy. Shop Supv. IV	Inc. In Title #12	Mech. III
Iowa	Custodial Workers Maint. Workers 1 & 2				Auto Mech.
Kansas			Shop Supt.	Auto Mech. II	Auto Mech. I
Kentucky	Maint. Laborer	Carpenters, Bridgeman, Welders		Garage Foreman	Mech. Sr.
Louisiana	Laborer Utility	Welder, Painter, et al	Shop Supt. I & II		Mech. I, II, III
Maine	Hwy. Maintenance Man I	Mach. Elec. Carp. & Other Trades	Equip. Supt.	Auto Mech. Foreman	Auto Mech.
Maryland	Hwy. Worker I	Hwy. Worker II	Dist. Equip. Supv.	Auto Services Supv.	Auto Services Mech.
Massachusetts	Laborer		Supt. Shop & Equip.	Dist. Hwy. Equip. Foreman	Motor Equip. Repairman
Michigan	Laborer I	Br. Worker III, Welder IV, Elec.	Motor Equip. Supt. VII	Auto Mech. VI	Auto Mech. IV
Minnesota	Laborer I & II, et al	Carpenter, Br. Worker, et al	Equip. Fabr. Supt. Hwy Equip Supv	Hwy. Equip. Mech. Foreman	Hwy. Equip. Field Mech., et al
Mississippi	Gen. Laborer I & II	Carpenter Welder	Equip. Maint. Supt.	Shop Foreman II	Equip. Mech. I-V
Missouri			Dist. Garage Foreman	Chief Shop Mech.	Shop Mech.
Montana	Laborer	Truck Driver Under 5 Ton	Div. Shop Foreman	Working Shop Foreman	Mech.
Nebraska			Auto Equip. Repair Supt.	Auto Equip. Repair Supv.	Auto Mech. II
Nevada	Hwy. Maint. Laborer	Hwy. Maintainer	Hwy. Equip. Oper. Supv.	Supv. Equip. Mech. II	Equip. Mech. II
New Hampshire	Hwy. Maintainer I	Asst. Hwy. Patrol Foreman	Equip. Engr.	Garage Foreman I & II Garage Sub-Foreman Foreman Mech.	Hwy. Equip. Mech. Auto Mech. Mech.
New Jersey	Maint. Worker I & II	Br. Repair I & II Const. Repair I & II Maint. Specialist	Master Mech. Supv. Garage Foreman Auto Shop Foreman	Asst. Foreman Mech. Inc. In Title #17	Hwy. Equip. Special. Auto Mech. Motor Equip. Mech.
New Mexico	Utility Workers				
New York	Laborer	Maint. Asst., Br. Repair Asst., et al	Motor Equip. Maint. Supv.	Motor Equip. Maint. Supv. I	Motor Equip. Mech.
North Carolina	Gen. Utility Worker	Landscape Spec. I & II	Equip. Supt.	Mech. Supv. I & II	Mech. II
North Dakota		Trades Man Trades Helper	Motor Vehicle Shop Foreman		Mech. I & II
Ohio	Hwy. Worker I	Carpenter, Painter, et al	Equip. Supt. 3 -Maint.	Equip. Supt. 2 -Maint.	Auto Mech. I
Oklahoma	Hwy. Maint. Man II	Br. Repairman	Auto Shop Supt.		Auto Mech. II & III
Oregon	Laborer	Elec. or Carpenter	Hwy. Shop Supt.	Auto Shop Supv. Hwy. Shop Supv.	Hwy. Equip. Mech.
Pennsylvania	Hwy. Maint. Worker Semi-Skil. Laborer	Welder, Carpenter, Mason & Painter		Auto Equip. Foreman	Auto Mech. I & II Diesel Mech. Auto Mech.
Rhode Island		Semi-Skilled Laborer	Auto. Service Specialist		
South Carolina	Hwy. Maint. Worker I	Hwy. Maint. Worker II-IV		Trades Worker Supv.	Trades Worker Auto Mech.
South Dakota		Mech. II	Equip. Shop Foreman		Mech. I & II
Tennessee	Utility Worker I & II	Elec., Welder, Carpenter, et al	Reg. Garage Supt.	Dist. Chief Mech.	Mech.
Texas	Maint. Tech. I Marine Tech. I Maint. Workers	Maint. Tech. II & III Marine Tech. II & III Mech., Welder, Auto Body Worker, Carpenter, et al	Shop Foreman IV	Shop Foreman II & III	
Utah			Shop Supv.	Shops Foreman	Diesel Mech.
Vermont	Hwy. Maint. Worker A	Br. Maint. Mech.	Supt. Central Garage	Motor Shop Supv.	Motor Equip. Mech. B
Virginia	Hwy. Maint. Helper		Hwy. Dist. Equip. Supt.	Hwy. Equip. Repair Foreman	Hwy. Equip. Mech. A & B
Washington	Laborer	Hwy. Maint. Specialist	Equip. Supt., Hwy.	Equip. Supv., Hwy.	Equip. Mech. I & II, Hwy. Mech.
West Virginia	Laborer	Craftsman III	Dist. Equip. Supv.	Dist. Equip. Supv.	
Wisconsin					COUNTY EMPLOYEES
Wyoming	Hwy. Maint. Worker I		Dist. Equip. Supv.	Shop Foreman I & II	Mech. II

(15)	(16)	(17)	(18)	(19)	
Mechanic Helper : Equipment Operator I : Equipment Operator II : Equipment Operator III : Timekeeper or Clerk : State					
Asst. Mechanic	Hwy. Maint. Tech. I	Hwy. Maint. Tech. II	Hwy. Maint. Tech. III	Clerk & Engr. Asst.	Alabama
Inc. In Title #14	Equip. Oper. IV	Equip. Oper. III	Equip. Oper. II	-	Alaska
Auto Service Attend. I, et al	Hwy. Maint. Worker I et al	Hwy. Maint. Worker II, et al	-	Gen. Office Clerk Typist	Arizona
-	Equip. Oper. I	Equip. Oper. II	Equip. Oper. III	Bookkeeper III	Arkansas
Mech. Helper	Inc. In Title #10	Hwy. Maint. Equip. Oper.	-	Hwy. Field Office Asst.	California
Auto Maint. Man	-	Hwy. Maint. Man	Hwy. Equip. Oper.	-	Colorado
DOT Maintainer 3 & 4	DOT Maintainer 3	DOT Maintainer 4	DOT Maintainer 5	Foreman's Aide	Connecticut
Auto Serviceman	Equip. Oper. I	Equip. Oper. II	Equip. Oper. III	Clerk I & II	Delaware
Auto Serviceman	Hwy. Maint. Tech. I, II	Hwy. Equip. Oper. I	Hwy. Equip. Oper. II	Clerk V	Florida
Mechanic	Laborer II	Equip. Oper. I	Maint. Equip. Oper.	Clerk Sr. Maint. Clerk	Georgia
Auto Mech. Helper	Equip. Oper. I	Equip. Oper. II & III	Equip. Oper. IV	Account Clerk IV	Hawaii
Auto Service Worker	Tractor Oper., et al	Truck Driver et al	Grader Oper., et al	-	-
Mech. Helper	Hwy. Maint. Oper. Trainee	-	Hwy. Maint. Oper.	Maint. Clerk	Idaho
Serviceman	Hwy. Maint. Equip. Oper.	Hwy. Const. Equip. Oper.	Power Shovel Oper.	-	Illinois
Mech. IV	Maint. Worker IV	Maint. Worker III	Maint. Worker II	Clerk VI	Indiana
Auto Mech. Helper	Equip. Oper. 1	Equip. Oper. 2	Equip. Oper. 3	-	Iowa
Auto Mech. Helper	Equip. Oper. I	Equip. Oper. II	Equip. Oper. III	Area Clerk	Kansas
Mech. Helper	Lt. Equip. Oper.	Hvy. Equip. Oper.	Special Equip. Oper.	Timekeeper	Kentucky
Trades Helper, Mech. Apprentice, et al	Equip. Oper. I	Equip. Oper. II	Equip. Oper. III	Clerk II	Louisiana
Laborer I & II	Hwy. Maint. Men II & IIA	Hwy. Maint. Men III	Hwy. Maint. Men IV	-	Maine
Auto Services Helper	Motor Equip. Oper. I	Motor Equip. Oper. II	Motor Equip. Oper. III	Shop Clerk	Maryland
Skilled Laborer	Skilled Laborer	-	Maint. Equip. Oper.	Clerk Tallyman	Massachusetts
Mech. Handyman	Laborer II	Equip. Oper. III	Equip. Oper. IV	Calculations Clerk IV	Michigan
Trades Helper II	-	-	-	-	-
Hwy. Equip. Mech. Appr. Auto Service Attend. Gen. Labor II	Inc. In Title #9 Equip. Oper. I	Hvy. Equip. Oper. Equip. Oper. II	Inc. In Title #9 Equip. Oper. III	Inc. In Title #8 Clerk II	Minnesota Mississippi
Mech. Helper	Maint. Man	Maint. Crew Leader	Dragline Oper.	Dist. Stock Clerk	Missouri
Service/Comb. B	Equip. Oper. I	Equip. Oper. II	-	Admin. Officer I	Montana
Auto Mech. I	Hwy. Maint. Worker	-	Sr. Hwy. Maint. Worker	Office Clerk II	Nebraska
-	-	-	Maint. Spec. Roadway	Hwy. Dist. Office Mgr.	Nevada
Trades Helper	Hwy. Maintainer II	Hwy. Maintainer III	-	Acc. Clerk III Clerk IV	New Hampshire
Mech. Helper	Truck Driver	Equip. Oper.	Hvy. Equip. Oper.	-	New Jersey
-	Equip. Oper. I	Equip. Oper. II	Equip. Oper. III	Timekeeper	New Mexico
Asst. Mech.	Hwy. Equip. Oper.	Const. Equip. Oper.	Crane & Shovel Oper.	Sr. Clerk T.M.-Typist Hwy. Reports & Inv. Clerk II & III	New York
Mech. I	Mach. Oper. I	Mach. Oper. II	Mach. Oper. III, IV, V	-	North Carolina
Inc. In Title #14	Equip. Oper. I	Equip. Oper. II	Inc. In Title #9	Clerk III	North Dakota
Asst. Auto Mech.	Equip. Oper. 1	Equip. Oper. 2	Equip. Oper. 3	Timekeeper	Ohio
Auto Mech. I	Equip. Oper. I	Equip. Oper. II	Equip. Oper. III	Hwy. Field Clerk	Oklahoma
Hwy. Equip. Mech. Trainee	Hwy. Maint. Worker	Sr. Hwy. Maint. Worker	Hwy. Maint. Spec.	Inc. In Title #16	Oregon
Tradesman Helper	Equip. Oper. I & II	Equip. Oper. III	Equip. Oper. IV	Clerk II	Pennsylvania
Auto Mech. Helper	Motor Equip. Oper.	Utility Motor Equip. Oper.	Hvy. Motor Equip. Oper.	Sr. Clerk Steno	Rhode Island
Trades Helper	Inc. In Title #11	Inc. In Title #11	Inc. In Title #11	Clerk I-III Chief Clerk	South Carolina
Equip. Service Worker I & II	Hwy. Maint. Worker I	Hwy. Maint. Worker II	Hwy. Maint. Worker III	Admin. Serv. Asst. Office Supv.	South Dakota
-	Dist. Hwy. Equip. Oper.	Reg. Hwy. Equip. Oper.	-	Jr. Acct. Clerk	Tennessee
-	-	-	-	-	Texas
Auto Serviceman	Hwy. Oper. Spec.	Hwy. Oper. Spec.	Hwy. Oper. Spec.	-	Utah
-	Inc. In Title #10	Equip. Oper. B	Equip. Oper. C	Storekeeper	Vermont
Hwy. Equip. Mech. Helper	Hwy. Equip. Oper. A	Hwy. Equip. Oper. B	Hwy. Equip. Oper. C	Hwy. Timekeeper	Virginia
Shop Asst. Hwy.	Maint. Tech. I	Maint. Tech. II	Maint. Tech. III	Maint. Div. Office Asst.	Washington
-	Equip. Oper. I	Equip. Oper. II	Equip. Oper. III	Field Clerk	West Virginia
-	-	-	-	-	Wisconsin
Mech. I	Hwy. Maint. Worker II	Lt. Equip. Oper.	Hvy. Equip. Oper.	-	Wyoming

MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL TITLES USED BY STATE HIGHWAY DEPARTMENTS (as of July 1, 1978)

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	Asst.State Maint.Engr. (Traf.)	Traf. Engr. Admn. Asst.	-	Div. Traf. Engr.	-
Alaska	Inc.In Title #3	-	-	Reg. Traf. Engr.	Asst. Reg. Traf. Engr.
Arizona	Asst.State Engr. Traf.	Traf. Engr. - Oper. Traf. Engr. - Design	-	Dist. Traf. Engr. Dist. Traf. Supv.	-
Arkansas	Civil Engr. VII	Civil Engr. VI	-	-	-
California	Chief,Div.of Oper.	Chief,Traf.Engr. Chief,Trans.Oper.	-	Chief, Branch	Asst. Dist. Traf. Engr.
Colorado	Staff Traf. Engr.	Asst. Staff Traf.Engr.	-	Traf. & Safety Engr.	-
Connecticut	Mgr. of Traf.	Chief Traf. Engr.	Trans. Engr. of Traf.	Trans. Asst. Engr.	Dist. Serv. Agent II
Delaware	Chief,Bureau of Traf.	-	-	Dist. Traf. Engr.	Asst. Dist. Traf. Engr.
Florida	State Traf.Oper.Engr.	Dep.State Traf.Oper. Engr.	State Traf.Services Engr.	Dist.Traf.Oper.Engr.	Asst.Dist.Traf.Oper. Engr.
Georgia	State Traf.& Safety Engr.	Asst.State Traf.& Safety Engr.	-	Dist.Traf.& Safety Engr.	Trans. Engr. I
Hawaii	Traf. Engr.	Asst. Traf. Engr.	-	-	-
Idaho	Traf.Supv. Engr.Mgr. 2	Asst.Traf.Engr. Engr.Mgr. 1	-	Dist. Traf. Engr. Engr. Proj. Supv.	-
Illinois	Engr. of Traf.	Traf. Oper. Engr.	-	Dist. Traf. Engr.	Oper. Engr.
Indiana	Chief,Div.of Traf.	Asst.Chief,Div.of Traf.	Hwy.Engr.Supv. IV	Dist.Traf.Engr.	Asst.Dist.Traf.Engr.
Iowa	-	-	State Traf.Maint.Engr.	-	-
Kansas	Hwy.Marking Engr.	-	-	-	-
Kentucky	Dir.,Div.of Traf.	Asst.Dir.of Traf.	Chief Traf.Engr.	Dist.Traf.Engr.	Asst.Dist.Traf.Engr.
Louisiana	Traf.& Planning Engr.	Asst.Traf.& Planning Engr.	-	Dist. Traf. Engr.	-
Maine	Engr. of Traf.	Asst.Engr. of Traf.	-	Div.Traf.Engr.	-
Maryland	Asst.Chief Engr.-Traf.	Asst.Chief-Traf.Div.	Chief-Bureau of Traf. Oper.	Reg. Traf. Engr.	Traf. Engr. IV
Massachusetts	Traf. Engr.	Asst. Traf. Engr.	Traf. Maint. Engr.	Dist. Traf. Engr.	Asst.Dist.Traf.Engr.
Michigan	Engr.of Traf.& Safety	Asst.Engr.of Traf. & Safety	Field Admn.Engr.	Dist. Traf.& Safety Engr.	Asst.Dist.Traf.& Safety Engr.
Minnesota	Traf. Engr.	Asst. Traf. Engr.	Inc.In Title #20	Dist. Traf. Engr.	-
Mississippi	Traf.Control & Safety Engr.	Asst.Traf.Control & Safety Engr.	-	-	-
Missouri	Inc.In Title #1	Asst.Div.Engr.-Traf.	-	Traf. Engr.	Dist.Traf.Studies Engr.
Montana	Mgr. Traf. Unit	Asst. Mgr. Traf. Unit	-	Engr. -Traf.	-
Nebraska	Traf. Engr.	-	-	-	-
Nevada	Chief Traf. Engr.	Hwy.Engr.IV Traf.	-	Hwy.Engr.II Traf.	-
New Hampshire	Traf. Engr.	Traf. Const. Engr.	-	-	-
New Jersey	Chief Engr.Transp.Oper. & Local Aide	Chief,Bureau of Elec.Oper.	Supv.Elec.,Const. Maint. & Oper.	Dist.Supv.Elec.Prin. Engr.	Asst.Dist.Supv. Elec.Sr.Engr.
New Mexico	Traf. Services Engr.	Asst.Traf.Services Engr.	-	Dist. Traf. Engr.	-
New York	Dir.,Traf.& Safety Div.	Chief,Safety Std.Sys.Bur.	-	Reg. Traf. Engr.	-
North Carolina	Mgr. of Traf. Engr.	Asst.Mgr. of Traf. Engr.	Inc.In Title #20	Div. Traf. Engr.	-
North Dakota	Traf. Engr.	-	-	-	-
Ohio	Engr. of Traf.	Asst. Traf. Engr.	-	Dist. Traf. Engr.	Asst. Dist. Traf. Engr.
Oklahoma	Chief Traf. Engr.	Asst.Chief Traf.Engr.	-	Div. Traf. Engr.	-
Oregon	Inc.In Title #3	-	-	Inc.In Title #5	-
Pennsylvania	Civil Engr. VI	Civil Engr. IV	Civil Engr. V	Civil Engr.IV,Traf. Cntl.Spec.III	Civ.Engr.III,Traf. Cntl.Spec.II
Rhode Island	-	-	Chief Hwy.Maint.Supv.- Traf.	-	-
South Carolina	Traf. & Plan. Engr.	Asst. Traf. & Plan. Engr.	-	Dist. Traf. & Plan. Engr.	-
South Dakota	Traf. Engr.	Traf. Oper. Engr. Traf. Design Engr.	Proj. Engr. Engr. I	Dist. Traf. Engr.	-
Tennessee	State Traf. Engr.	Asst.State Traf. Engr.	Reg. Traf. Engr.	-	-
Texas	-	-	-	Inc.In Title #4 & 5	-
Utah	Engr. for Safety	Traf. Engr.	Traf.Oper.Engr.	Traf. Engr.	-
Vermont	-	-	-	-	-
Virginia	State Hwy.Traf.Safety Engr.	State Hwy.Asst.Traf. Safety Engr.	-	Hwy.Dist.Traf.Engr.	Hwy.Traf.Engr.A
Washington	Traf. Engr.	-	-	Dist. Traf. Engr.	Hwy. Engr. 3
West Virginia	Dir.Traf.Engr.Div.	Asst.Dir.Traf.Engr.Div.	-	Reg. Traf. Engr.	Asst.Reg.Traf.Engr.
Wisconsin	Chief Traf.Engr.CE7	Traf.Engr.Supv.CE 7 & 6	-	Dist.Chief CE 7 Traf.Engr.CE 5	Dist.Chief Traf. Supv.CE5
Wyoming	State Traf.Engr.Oper.	Hwy.Traf.Signal Oper.Supv.	-	-	-

(25) Traffic Supervisor	(26) Sign Supervisor	(27) Sign Shop Foreman	(28) Traffic Signal & Lighting Foreman	(29) Striper Foreman	State
-	Sign Shop Supv.	Sign Fab. Plant Mgr.	Signal Shop Supv.	-	Alabama
Inc.In Title #23 Hwy. Marking Crew Supv.	Inc.In Title #23 Hwy.Maint.Crew Supv. Admin. Officer III	Inc.In Title #23 Hwy.Marking Crew Supv. Admin. Officer I	Inc.In Title #24 Traf.Signal Supv., et al	Maint. Foreman Hwy.Maint.Worker III Job Supt.	Alaska Arizona Arkansas
-	Hwy. Maint. Supv.	Inc.In Title #8	Hwy. Elec. Supv.	Hwy. Maint. Supv.	California
Traf. Foreman	-	Traf. Shop Foreman	Traf. Signal Tech. Foreman	-	Colorado
Inc.In Title #23 Oper. Mgr.	Signs & Markings Coord.	Supt. Portland Plant Sign Shop Foreman	Dist. Elec. Supv.	Gen. Supv.	Connecticut Delaware
-	-	Sign Shop Supv.	-	Hwy. Foreman II	Florida
-	Chief of Sign Shop Oper.	Sign Shop Prod. Mgr.	Elec. Signal Engr.	Hwy. Maint. Foreman II	Georgia
-	Traf. Signs & Marking Supv.	-	Traf.Sig.& Hwy.Lighting	Traf.Marking Supv.	Hawaii
-	-	Sign Shop Supt.	Traf. Signal Supt.	Transp. Maint. Foreman	Idaho
Traf.Field Engr. Oper. Tech.	Inc.In Title #25 Engr. Asst. V-IV	Sign Shop Foreman Maint. Worker II	- Elec.Tech.Supv.IV-III	Lead Worker,Pavement Marking Foreman Maint. Worker II	Illinois Indiana
Traf.Control Engr.	Traf.Sig.& Marking Engr.	Sign Shop Supv. Sign Shop Worker Supv.	Traf. Sig. Tech. 2	Hwy. Maint. Supv. 2 Striper Supv.	Iowa Kansas
Dist.Traf. Supv. Sign & Traf. Supt.	Traf. Foreman Sign Foreman	Sign Painter Shop Sign Foreman	Traf. Sig. Inst. (Jr-Pr) Elec. Foreman	Striper Foreman Striping Gang Foreman	Kentucky Louisiana
-	-	Sign Shop Foreman	Elec. Foreman	Hwy. Foreman	Maine
Traf. Engr. III	Chief,Sign Design Section	Traf. Sign Shop Supv.	Traf. Sig. Tech.	Supv. Hwy. Markings	Maryland
Hwy.Traf.Maint. Foreman Sign Supv.VIII	Supv.of Traf.Equip Traf.Sect.Foreman Sign Supv. VII	Sign Shop Foreman Sign Supv. V	Traf. Elec. Foreman Elec. 12	Traf. Sect. Foreman Sign Mech. IV	Massachusetts Michigan
Traf. Oper. Coord.	Signing Supv. Sign Supv.	Inc.In Title #8 Hwy.Maint. Supv. II	Elec. Traf. Maint. Supv. Hwy. Maint. Supt.	Inc.In Title #25 Foreman,Hwy.Maint.II	Minnesota Mississippi
-	-	Sign Shop Foreman	Signal & Lighting Foreman	Inc.In Title #8	Missouri
-	-	Painter Foreman	-	-	Montana
-	Sign Shop Supt.	Sign Shop Supv.	Communications Mgr.	Inc.In Title #8	Nebraska
-	Sign Shop Supv.	-	-	Hwy. Maint. Foreman	Nevada
Traf.Maint. Supv.	-	Sign Shop Foreman	Traf. Signal Foreman	Pavement Marking Foreman	New Hampshire
-	Supv. of Hwy. Marking	Foreman Sign Shop	Foreman Elec. Oper.	Foreman Hwy. Marking	New Jersey
Traf. Supv.	-	Sign Shop Foreman	Traf. Elec. Supv.	Inc.In Title #8	New Mexico
Engr.in Charge of Crews Traf. Services Supv.	Sign Shop Supv. II Traf. Services Crew Leader	Sign Shop Supv. I Inc.In Title #26 Sign Shop Foreman	Supv. Elec. Traf.Control Tech. II	Laborer Supv. Traf.Services Crew Leader	New York North Carolina North Dakota
Traf.Control Supt. Traf. Supt.	Sign Supt.	Sign Supv. 2	Sig. Elec. Supv. I	Routemaker 2 Traf. Marking Foreman	Ohio Oklahoma
Inc.In Title #5	-	Sign Shop Supt.	Elec. Supt.	Striping Crew Supv.	Oregon
-	Traf. Control Spec. I	Sign Shop Foreman	Civil Engr. II Traf. Control Spec. I Elec. Foreman	Hwy. Foreman II Traf. Line Painter Foreman	Pennsylvania Rhode Island
Hwy.Maint.Supv. Traf.	-	Hwy.Maint.Crew Supv. I-III Sign Shop Foreman	Trades Worker Supv.	Hwy.Maint.Crew Supv. I-III Hwy.Maint.Worker II & III	South Carolina South Dakota
Signing & Marking Coord.	Hwy. Marking Supt. Sign Supv.	-	-	-	Tennessee Texas
Signal Supt.	-	-	-	-	Utah
-	Traf. Shop	Supv.	Traf. Sig. Supv.	Marker Crew Leader B	Vermont
Hwy.Traf.Tech. Supv.	Hwy. Foreman	Hwy. Foreman	Hwy.Equip.Elec.Foreman A & B Traf. Sig. Supv.	Hwy. Foreman	Virginia Washington
-	-	Traf. Tech. III	Elec. Tech. IV	Sign Shop Supv.	West Virginia
Dist.Traf.ET 6 Supv.ET 5	Marking & Signing Supv. ET 6	Marking & Signing Coord. ET 4 & 5 Sign Shop Supv.	Elec. Supv. ET 6 Hwy. Engr.	Marking ET 2 Crew Chief ET 1 Hwy. Striping Foreman	Wisconsin Wyoming

MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL TITLES USED BY STATE HIGHWAY DEPARTMENT (as of July 1, 1978)

TRAFFIC OPERATIONS PERSONNEL (cont'd)

State	(30) Sign Erection Foreman	(31) Sign Fabricator	(32) Sign Technician	(33) Traffic Signal & Lighting Technician
Alabama	-	Sign Painter	Maint. Tech. (Utility Laborer)	Traf. Sig. Tech.
Alaska	Inc. In Title #29	Inc. In Title #33	Inc. In Title #33	Equip. Tech. Elec., et al
Arizona	Hwy. Maint. Worker III	Hwy. Sign Fab.	Hwy. Sign Installer	Traf. Sig. & Lighting Tech.
Arkansas	Job Supt.	Signman I & II	Sign Supv.	-
California	Inc. In Title #27	Inc. In Title #27	-	Hwy. Elec. I or II
Colorado	-	Sign Fab.	-	Traf. Sig. Tech. I & II
Connecticut	Signs & Marking	QCW & DOT Grade 5	-	Elec. Tech.
Delaware	Dist. Sign & Markings Supv.	Sign Fab. I & II	Trades Helper	Traf. Sig. Rep. Instrument Tech. I & II Engr. Tech. IV
Florida	Hwy. Foreman I	Sign Shop Foreman	Sign Tech.	Engr. Tech. IV
Georgia	Hwy. Maint. Foreman II	DOT Skilled Laborer	DOT Skilled Laborer	Traf. Sig. Tech.
Hawaii	-	Sign Painter & Painter	-	Hwy. Lighting Worker & Elec.
Idaho	Transp. Maint. Foreman	Hwy. Sign Fab.	-	Traf. Sig. Tech.
Illinois	Inc. In Title #29	Sign Painter Silk Screen Oper.	Inc. In Title #25	Traf. Sig. Engr. or Tech.
Indiana	Maint. Worker III	Inc. In Title #30	Maint. Worker IV	Elec. Tech. I & II
Iowa	-	Sign Shop Worker	-	Traf. Sig. Tech. 1
Kansas	-	Sign Shop Worker	-	-
Kentucky	Inc. In Title #26	Inc. In Title #27	Lt. Equip. Oper. & Laborers - Hwy.	Elec. Tech. I-V
Louisiana	Statewide Sign Foreman	-	Statewide Sign Tradesman	Statewide Sig. Tradesman
Maine	Hwy. Maint. Man IV	Sign Painter	Sign Shop Tech.	Traf. Sig. & Lt. Tech.
Maryland	Supv. - Road Maint.	Sign Fab. III	-	Traf. Control Elec. II
Massachusetts	Traf. Sect. Foreman	Sign Painter Letterer	Sign Shop Foreman (Fab)	Traf. Elec.
Michigan	Sign Mech. III	Sign Mech. II & III	Traf. Sect. Foreman Sign Mech. III	Elec. III, IV & V
Minnesota	Inc. In Title #8	Inc. In Title #9	Inc. In Title #26	Hwy. Signal & Elec. Tech.
Mississippi	Hwy. Maint. Supt. II	Silk Screen Painter	-	Elec. Equip. Tech. II
Missouri	Inc. In Title #8	Silk Screen Oper.	Sign Painter	Sig. Elec.
Montana	-	Painter	-	Traf. Engr. III, Designer I & II, Design Tech.
Nebraska	-	Sign Printer	Inc. In Title #27	Elec. Tech.
Nevada	Hwy. Maint. Foreman	Sign Painter	Silk Screen Oper.	-
New Hampshire	Dist. Sign Supv. Hwy. Sign Maint. Foreman	Sign Fab. Sign Letterer	Trades Helper	Traf. Sig. Repairman I & II
New Jersey	Inc. In Title #29	Sign Fab.	Hwy. Marker	Elec. Mech. I
New Mexico	Inc. In Title #8	Sign Tech. I & II	-	Traf. Elec. Tech. I, II, III
New York	Laborer Supv.	Sign Shop Worker	-	Elec. Maint. Asst. Elec. Traf. Control Tech. I
North Carolina	Traf. Sign Erector	-	Gen. Utility Worker	Traf. Control Tech. I
North Dakota	-	Sign Fab.	-	-
Ohio	Routemaker 2	Sign Metal Worker Sign Worker 2	Routemaker 2	Sig. Elec. 2
Oklahoma	Sign Foreman	Sign Maker I & II	-	-
Oregon	Sign Crew Supv.	Inc. In Titles #16 & 17	-	Inc. In Title #11
Pennsylvania	Hwy. Foreman III	Sign Tech. II	Sign Tech. I or II	Civil Engr. II Traf. Control Spec. I Elec. Equip. Mech.
Rhode Island	-	Sign Painter	-	-
South Carolina	Inc. In Title #8	Inc. In Titles #10 & 11	-	Elec. Trades Helper
South Dakota	Hwy. Maint. Foreman Hwy. Maint. Worker III	Traf. Sign Fab. II	-	-
Tennessee	-	-	-	-
Texas	-	-	-	-
Utah	-	-	-	-
Vermont	Sign Crew Leader	Sign Painter	Inc. In Title #26	Inc. In Title #28
Virginia	Hwy. Foreman	Hwy. Sign Fab.	-	Hwy. Equip. Elec.
Washington	-	Dist. Sign Fab., Hwy.	Sign Installation Tech.	Traf. Sig. Tech.
West Virginia	Traf. Tech. III	-	-	Elec. Tech. II & III
Wisconsin	Signing Crew Chief ET 1	ET2, ET1, EA2	Sign Tech. ET1, EA2	Elec.
Wyoming	Dist. Sign Foreman	-	-	-

OTHER RELATED PERSONNEL

(34) Striper Technician	(35) Chief Engineer	(36) Project Engineer	State
	Admin. Engr.	Civil Engr. I, II, III	Alabama
Equip. Oper. & Laborers	-	-	Alaska
Hwy. Maint. Worker II	State Hwy. Engr.	Res. Engr. or Chief Proj. Supv.	Arizona
Signman II	Deputy Dir. & Chief Engr.	Civil Engr. IV & V	Arkansas
Hwy. Maint. Leadworker	Chief Engr.	Res. Engr.	California
Hwy. Equip. Oper.	Chief Engr.	Res. Engr.	Colorado
DOT Maintainer 3,4,& 5	Chief Engr.	-	Connecticut
-	Chief Engr.	-	Delaware
Hwy. Maint. Foreman I	-	-	Florida
Maint. Equip. Oper.	Asst. State Hwy. Engr.	Proj. Engr.	Georgia
Traf. Striping Mach. Oper.	Chief, Land Transp. Fac. Div.	Area Engr.	Hawaii
Hwy. Maint. Oper.	State Hwy. Engr.	Proj. Engr.	Idaho
Inc. In Title #29	Dir. of Hwy.	Engr. Proj. Coord.	Illinois
Inc. In Title #32	Chief, Hwy. Engr.	Proj. Engr.	Indiana
Equip. Oper. 2 & 3	Chief Engr. Hwy. Div.	Res. Const. Engr.	Iowa
-	State Transp. Engr.	Res. Engr.	Kansas
Hwy. Equip. Oper.	State Hwy. Engr.	Res. Const. Engr.	Kentucky
Striping Mach. Oper.	Chief Engr.	Proj. Engr.	Louisiana
Striper Tech.	-	-	Maine
Motor Equip. Oper. II	Chief Engr.	Proj. Engr.	Maryland
Spray Painter Working Foreman Sign Mech. III	Chief Engr.	Sr. Civil Engr.	Massachusetts
Inc. In Title #9	Dep. Comm. Bureau of Oper.	-	Michigan
Equip. Oper. II	Chief Engr.	Proj. Engr.	Minnesota
Inc. In Title #17	Chief Engr.	Res. Engr.	Mississippi
-	Dir. of Hwys.	-	Missouri
Inc. In Title #8	Dep. State Engr.	Hwy. Proj. Mgr.	Montana
Maint. Spec. Striping & Sign Carriage Oper. Trades Helper Inc. In Title #32	State Hwy. Engr.	Hwy. Engr. III	Nebraska
Inc. In Title #8	Dep. Comm. & Chief Engr.	Proj. Engr.	Nevada
Const. Equip. Oper.	Dir. of Engr. & Oper.	Proj. Engr.	New Hampshire
-	Chief Hwy. Admin.	-	New Jersey
Equip. Oper. I	Chief Engr.	Sr. Civil Engr.	New Mexico
Routemarker I	Chief Engr.	Res. Engr.	New York
-	Chief Engr.	Res. Engr.	North Carolina
Inc. In Titles #16 & 17	Chief Engr.	Proj. Engr.	North Dakota
Equip. Oper. I, II, III	Asst. Dir. Traf. Services	Proj. Engr. 2	Ohio
Traf. Line Painter	Asst. Dir. - ODOT Oper.	Res. Engr.	Oklahoma
Inc. In Titles 10 & 11	Chief Hwy. Engr.	Res. Engr.	Oregon
-	Chief Hwy. Engr.	Civil Engr. II or III	Pennsylvania
-	Asst. Dir. - ODOT Oper.	T.C. Mgr. I or II	Rhode Island
Marker Crew Leader A	Chief Hwy. Engr.	-	South Carolina
-	State Hwy. Engr.	Assoc. Res. Const. Engr.	South Carolina
-	Dir. & State Hwy. Engr.	Res. Const. Engr.	South Dakota
-	Dir., Bureau of Hwy.	Res. Engr.	Tennessee
-	Engr. - Dir.	Engr. 2	Tennessee
-	Asst. Dir. UDOT	Engr. IV & V	Texas
-	Dir. of Engr. & Const.	-	Texas
-	Hwy. Chief Engr.	Res. Engr.	Utah
-	Hwy. Chief Engr.	Hwy. Const. Proj. Engr.	Utah
-	Dep. Secretary	Proj. Engr.	Vermont
Center Line Paint Mach. Oper. Marking Tech. ET1, EA2	State Hwy. Engr.	-	Virginia
Striper Tech. I & II	Supt. & Chief Engr.	Proj. Engr.	Washington
		Res. Engr.	West Virginia
		Proj. Engr.	Wisconsin
		Res. Engr.	Wyoming

MONTHLY SALARIES OF HIGHWAY PERSONNEL (as of July 1, 1978)

MAINTENANCE PERSONNEL

State	(1) State Maintenance Engineer				(2) Assistant State Maintenance Engineer				(3) District Engineer				(4) District Maintenance Engineer				(5) Assistant District Maintenance Engineer			
	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.
Alabama	1	2022	2680	2680	1	1397	2219	1979	9	1864	2470	2613	9	1157	2219	1777	9	870	1286	1159
Alaska	1	3708	5163	3992	1	3194	4448	3478	5	3567	4966	3600	5	2821	3930	3300	4	2434	3392	3200
Arizona	1	2175	2953	2776	1	1984	2612	2694	7	2175	2953	2928	7	1396	2250	2023	-	-	-	-
Arkansas	1	1631	2375	2375	1	1404	2045	2045	10	1555	2266	2266	10	1178	1711	1711	10	1207	1495	1495
California	1	2559	3310	3009	2	2374	2870	2608	11	2374	3310	2737	11	1876	2608	2490	33	1556	2265	2160
Colorado	1	2294	3073	3073	-	-	-	-	7	2344	3141	3141	9	1982	2655	2655	9	1712	2294	2294
Connecticut	1	2012	2475	2243	1	1835	2231	2033	4	1835	2231	2033	-	-	-	-	6	1499	1841	1669
Delaware	1	1794	2504	2454	-	-	-	-	3	1971	2745	2696	-	-	-	-	2	1641	2276	2047
Florida	1	1840	2493	2557	1	1724	2338	2372	5	1962	2658	2659	5	1616	2190	2242	5	1423	1927	1791
Georgia	1	1831	2733	2498	2	1531	2286	2189	7	1831	2733	2498	7	1402	2091	1940	7	1283	1915	1805
Hawaii	1	1797	2833	2883	1	1715	2756	2756	4	1715	2894	2725	1	1561	2494	2276	-	-	-	-
Idaho	2	2009	2968	2595	1	1652	2441	2009	6	2009	2968	2543	6	1499	2214	1831	-	-	-	-
Illinois	1	2465	3355	2955	3	1860	2880	2590	9	2465	3615	2946	9	1860	2880	2350	-	-	-	-
Indiana	1	2067	2762	2630	1	1811	2398	2398	6	1811	2398	2134	6	1670	2175	2136	6	1540	1974	1657
Iowa	1	1863	2622	2500	1	1692	2377	2377	6	1775	2500	2459	6	1535	2158	2158	-	-	-	-
Kansas	1	2030	3044	2656	1	1775	2656	2428	6	2030	3044	2645	6	1775	2656	2431	1	1543	2321	1942
Kentucky	1	1882	2915	2518	5	1707	2776	2399	12	1882	2915	2582	12	1549	2518	2177	33	1405	2285	1792
Louisiana	1	1611	2407	2101	6	1313	2296	1794	10	1611	2407	2103	18	1500	2296	2107	4	1313	1936	1939
Maine	1	1627	2167	2167	1	1436	1909	1909	7	1142	1517	1379	-	-	-	-	-	-	-	-
Maryland	1	1942	2552	2492	1	1665	2188	2188	7	1943	2758	2635	7	1542	2025	2003	-	-	-	-
Massachusetts	1	1936	2432	-	2	1784	2243	-	8	1936	2432	-	8	1646	2059	-	8	1422	1779	-
Michigan	1	2434	2973	2703	1	2025	2531	2278	9	2025	2531	2278	9	1894	2368	2131	5	1653	2030	1841
Minnesota	1	2085	2840	2667	3	1792	2434	2037	9	2085	2840	2741	16	1933	2528	2435	4	1792	2434	2268
Mississippi	1	1675	2670	2355	-	1515	2420	-	6	1675	2670	2520	5	1515	2420	2209	6	1375	2195	1926
Missouri	1	2225	2833	2670	1	1767	2239	2239	10	2090	2593	2487	10	1511	2071	2041	18	1329	1826	1746
Montana	1	1970	2349	2149	1	1510	1867	1581	-	-	-	-	11	1649	2013	1755	-	-	-	-
Nebraska	1	1697	2367	2065	1	1419	1970	1724	8	1697	2367	1984	8	1338	1854	1488	-	-	-	-
Nevada	1	1842	2562	2562	1	1679	2330	2330	6	1842	2562	2562	-	-	-	-	6	1679	2330	2330
New Hampshire	1	1702	2094	2094	1	1491	1834	1834	7	2491	1834	1834	-	-	-	-	7	1240	1519	1519
New Jersey	1	2639	3562	3100	1	1969	2659	2314	4	2280	3077	2679	4	1969	2659	2314	4	1620	2187	1904
New Mexico	1	-	-	-	-	-	-	-	5	1896	2667	2564	5	1637	2303	2198	-	-	-	-
New York	1	3440	3865	3761	1	2803	3188	3090	10	3268	3669	3554	9	2053	2867	2737	40	1353	1915	1789
North Carolina	1	2051	2866	2866	1	1866	2603	2603	14	1866	2063	2543	14	1617	2255	2203	35	1404	1956	1911
North Dakota	1	1968	2637	2470	1	1700	2277	2200	8	1968	2637	2366	8	1700	2277	2144	-	-	-	-
Ohio	1	1937	2466	2466	-	-	-	-	12	1903	2553	2200	12	1324	1680	1500	12	1205	1456	1350
Oklahoma	1	1730	2700	2000	1	1575	2500	1730	8	1730	2700	2200	8	1575	2500	2000	8	1305	2100	1575
Oregon	1	-	-	-	-	-	-	-	5	2120	2706	2655	-	-	-	-	4	1830	2337	2300
Pennsylvania	1	2378	2916	2725	2	1902	2489	2173	11	2489	3125	2854	11	1821	2378	2082	22	1397	1821	1596
Rhode Island	1	1816	2208	2208	-	-	-	-	1	1273	1725	1725	-	-	-	-	-	-	-	-
South Carolina	1	1803	2578	2456	2	1560	2218	2111	7	1560	2218	2111	7	1367	1944	1851	-	-	-	-
South Dakota	1	1685	2647	2095	1	1425	2215	1868	5	1550	2426	1988	5	1425	2215	1787	-	-	-	-
Tennessee	1	1636	2370	2158	1	1492	2158	1792	4	1636	2370	2262	4	1363	1967	1793	8	1308	1722	1508
Texas	1	2558	2558	2558	-	-	-	-	5	2558	2558	2558	23	2170	2434	2320	16	1574	1999	1702
Utah	1	2236	3265	2945	-	-	-	-	21 6	2516 1999	2516 2918	2516 2697	5	1466	2504	2051	-	-	-	-
Vermont	1	1891	2984	-	1	1510	2342	-	-	-	-	-	9	1510	2342	-	9	1202	1842	-
Virginia	1	1866	2441	2441	2	1491	1950	1950	8	1708	2233	2233	15	1491	1950	1950	-	-	-	-
Washington	1	2504	3196	2829	1	2272	2899	2566	6	2629	3357	2971	6	2060	2629	2328	6	1820	2213	2057
West Virginia	1	2163	3523	2629	1	1869	3043	2060	10	1614	2629	2164	10	1464	2385	1812	-	-	-	-
Wisconsin	1	2416	3382	3136	4	2034	2848	2580	9	2416	3382	2900	9	2034	2848	2475	30	1712	2398	2040
Wyoming	1	2169	2905	2390	-	-	-	-	5	2169	2905	2390	5	1874	2510	2169	-	-	-	-
1978 Average		2824	2601			2463	2245			2709	2497			2350	2131			2040	1877	
1944 Average		434				341				-				292				264		
% Increase 1944-78		551				622				-				705				673		
% Increase 1977-78		7.6				9.2				5.7				8.0				5.6		

(6) Resident Maintenance Engineer				(7) Area Supervisor				(8) Gang Foreman				(9) Sectionman				(10) Laborer				State
No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	
48	1397	1783	1590	48	929	1191	1092	19	725	899	856	11	606	749	731	270	522	654	541	Alabama
15	2434	3392	3200	-	-	-	-	35	1898	2252	2100	-	-	-	-	30	1208	1981	1750	Alaska
-	-	-	-	46	1190	1565	1500	-	-	-	-	46	1030	1318	1318	23	700	895	797	Arizona
-	-	-	-	86	951	1382	1382	44	951	1382	1382	126	682	990	984	196	465	600	497	Arkansas
-	-	-	-	74	1630	1967	1967	475	1180	1485	1418	679	1076	1352	1294	668	692	1076	983	California
-	-	-	-	38	1552	2081	2010	36	1341	1798	1750	379	1158	1552	1525	10	784	1050	952	Colorado
-	-	-	-	29	1206	1441	1324	59	1094	1317	1205	150	903	1102	1002	374	720	848	784	Connecticut
3	1340	1835	1550	4	1131	1542	1353	15	947	1295	1200	80	637	964	855	-	-	-	-	Delaware
21	1184	1694	1639	105	842	1110	976	188	756	991	874	264	718	939	829	1999	589	760	675	Florida
45	1177	1751	1618	-	-	-	-	238	841	1228	992	-	-	-	-	432	557	736	634	Georgia
-	-	-	-	4	1424	2169	1750	19	1046	1533	1255	16	687	1494	918	92	633	873	696	Hawaii
-	-	-	-	50	1118	1652	1350	-	-	-	-	44	876	1295	1088	-	565	835	-	Idaho
-	-	-	-	39	1450	2180	1950	286	-	-	1275	1793	-	-	1225	-	-	-	-	Illinois
18	1365	1740	1478	37	1206	1540	1305	39	1010	1310	1059	144	849	1106	1040	-	-	-	-	Indiana
24	1417	1957	1910	2	1153	1536	1498	125	1049	1460	1278	23	955	1294	1086	7	629	960	854	Iowa
-	-	-	-	35	974	1474	1405	44	847	1282	1219	115	847	1282	1219	-	-	-	-	Kansas
-	-	-	-	44	782	1274	998	211	710	1155	862	133	643	1048	782	928	457	745	556	Kentucky
-	-	-	-	63	720	1111	1057	288	567	1085	923	-	-	-	-	517	505	737	546	Louisiana
-	-	-	-	20	1035	1372	1308	169	786	1037	946	53	603	794	693	332	507	663	579	Maine
23	1328	1745	1734	34	1063	1396	1360	164	804	1048	1042	-	-	-	-	176	554	710	571	Maryland
-	-	-	-	32	1036	1271	-	94	927	1111	-	93	830	996	-	525	703	823	-	Massachusetts
-	-	-	-	13	1386	1670	1528	45	1294	1545	1419	56	1153	1320	1236	39	852	1035	943	Michigan
-	-	-	-	35	1272	1933	1768	101	1225	1599	1524	1477	1039	1133	1129	28	821	1133	921	Minnesota
-	-	-	-	27	805	1285	1123	121	615	1055	813	242	520	790	671	416	460	720	517	Mississippi
-	-	-	-	99	1047	1420	1358	38	936	1266	1209	359	839	1134	1056	-	-	-	-	Missouri
-	-	-	-	22	1526	1612	1526	-	-	-	-	139	1320	1377	1349	5	979	1050	985	Montana
-	-	-	-	30	995	1367	1167	83	887	1210	970	-	-	-	-	-	-	-	-	Nebraska
-	-	-	-	6	1273	1758	1758	26	1063	1460	1415	49	972	1332	1306	-	-	-	-	Nevada
10	952	1104	1104	10	916	1117	1117	21	797	964	922	98	797	964	880	265	550	632	611	New Hampshire
4	1333	1799	1566	27	1151	1554	1353	118	994	1342	1168	128	902	1218	1060	601	769	866	818	New Jersey
2	1637	2303	2060	5	1221	1719	1471	135	787	1221	1126	-	-	-	-	74	484	714	582	New Mexico
66	1835	2351	2141	-	-	-	-	211	1021	1330	1113	688	787	907	847	1890	677	787	737	New York
80	978	1341	1160	165	858	1171	1051	647	722	1070	896	77	634	858	746	1358	557	754	656	North Carolina
-	-	-	-	9	1209	1619	1529	4	994	1332	1209	74	947	1269	1020	-	-	-	-	North Dakota
20	1205	1456	1300	88	997	1205	1100	324	842	888	850	625	735	804	825	78	688	752	710	Ohio
-	-	-	-	85	820	1305	1030	25	940	1500	1180	-	-	-	-	327	555	855	622	Oklahoma
16	1662	2120	2110	-	-	-	-	143	1122	1743	1350	120	1122	1300	1245	16	699	881	850	Oregon
11	1224	1596	1397	67	1340	1742	1527	847	989	1281	1126	-	-	-	-	3027	742	913	823	Pennsylvania
2	990	1406	1406	8	840	1114	1114	26	749	999	999	3	696	944	944	266	593	712	650	Rhode Island
47	974	1704	1466	-	-	-	-	283	637	1143	912	-	-	-	-	876	494	667	550	South Carolina
1	1311	2023	1425	9	1206	1847	1344	7	1109	1686	1254	95	1020	1539	1202	-	-	-	-	South Dakota
23	1216	1613	1457	95	697	1000	920	10	880	1216	1125	326	591	880	806	1793	475	734	623	Tennessee
-	-	-	-	50	1437	1771	1612	15	1130	1151	1140	-	-	-	-	2163	375	654	543	Texas
-	-	-	-	126	1267	1489	1391	46	588	696	595	-	-	-	-	46	588	696	595	-
-	-	-	-	4	1170	2030	1700	16	1147	1537	1404	70	1147	1537	1404	26	630	1282	857	Utah
-	-	-	-	9	962	1441	-	9	758	1140	-	126	613	925	-	213	556	830	-	Vermont
47	1306	1708	1708	39	721	1086	-	622	860	1000	916	-	-	-	-	267	512	586	586	Virginia
-	-	-	-	50	1094	1429	1306	622	860	1000	916	-	-	-	-	267	512	586	586	-
-	-	-	-	24	1518	1938	1716	67	1250	1594	1412	174	1133	1446	1281	16	805	1028	909	Washington
-	-	-	-	55	899	1614	1226	40	815	1464	987	281	778	952	860	656	626	626	626	West Virginia
-	-	-	-	28	1332	1748	1510	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin
-	-	-	-	29	1150	1541	1450	30	1042	1398	1250	-	-	-	-	47	671	901	750	Wyoming
1830 1668				1538 1393				1306 1171				1136 1042				848 734				1978 Average
-				-				141				152				121				1944 Average
-				-				826				647				601				% Increase 1944-78
7.6				8.9				7.8				5.8				9.6				% Increase 1977-78

MONTHLY SALARIES OF HIGHWAY PERSONNEL (as of July 1, 1978)

MAINTENANCE PERSONNEL (cont'd)																					
State	(11)				(12)				(13)				(14)				(15)				
	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	
Alabama	49	809	993	870	9	1397	1783	1637	16	993	1191	1056	147	809	1024	943	19	678	838	707	
Alaska	10	1550	1981	1850	12	1898	2252	2100	-	-	-	-	15	1208	2252	1800	-	-	-	-	
Arizona	29	733	1232	950	1	1852	2184	2515	13	1028	1353	1350	95	842	1232	1090	20	653	937	845	
Arkansas	106	600	930	877	11	951	1382	1382	10	826	1200	1200	99	641	930	930	-	-	-	-	
California	6	1076	1352	1200	24	1630	2160	2060	50	1418	1708	1556	315	1294	1418	1352	26	983	1076	1030	
Colorado	-	-	-	-	8	1552	2081	2081	9	1341	1798	1798	86	1050	1408	1341	15	907	1216	1050	
Connecticut	56	862	1055	958	14	1094	1317	1205	17	903	1102	1002	146	862	1055	958	35	766	936	851	
Delaware	34	552	726	673	4	1131	1542	1400	2	947	1295	1245	52	663	1097	896	7	613	814	744	
Florida	-	842	1110	1033	26	889	1176	1032	115	889	1176	1032	23	718	939	874	49	563	723	643	
Georgia	134	798	1049	1002	-	-	-	-	-	-	-	-	-	798	1049	923	-	-	-	-	
Hawaii	30	625	877	782	5	1127	1675	1421	9	994	1465	1254	116	777	1127	923	35	720	1035	771	
Idaho	8	868	1232	1060	4	1054	1429	1331	2	969	1187	1187	18	900	1143	1026	8	710	873	770	
Illinois	8	920	1360	1084	-	-	-	-	6	1174	1735	1345	57	966	1428	1073	13	721	1065	783	
Indiana	-	-	-	-	-	-	-	-	-	-	-	-	29	-	-	1416	-	-	-	-	
Iowa	79	849	1106	887	43	1010	1310	1051	-	-	-	-	131	707	926	741	35	621	776	629	
Kansas	-	-	-	-	-	-	-	-	-	-	-	-	142	1001	1086	1079	20	885	960	952	
Kentucky	-	-	-	-	6	931	1407	1389	7	847	1282	1205	90	738	1115	1023	32	572	847	731	
Louisiana	40	530	1155	643	-	-	-	-	30	676	1100	906	140	530	821	745	13	457	643	556	
Maine	118	604	1111	871	18	694	1137	1069	-	-	-	-	159	567	966	799	184	515	747	603	
Maryland	41	646	851	775	8	989	1310	1138	13	786	1037	946	132	646	851	741	14	493	701	567	
Massachusetts	651	586	754	727	7	919	1204	1204	30	804	1048	996	31	754	982	899	21	622	802	763	
Michigan	-	-	-	-	1	1646	2059	-	8	979	1195	-	18	830	996	-	46	724	856	-	
Minnesota	42	972	1129	1050	1	1386	1670	1528	15	1294	1545	1419	70	1153	1320	1236	5	878	1087	982	
Mississippi	18	1153	1320	1236	5	1373	1933	1808	18	1322	1792	1722	168	1272	1350	1317	30	757	1209	966	
Missouri	120	1235	1392	1273	6	735	1165	965	2	670	1055	828	75	460	1165	716	372	470	720	519	
Montana	2	560	870	645	9	1108	1503	1409	10	936	1266	1202	50	795	1071	965	23	673	909	762	
Nebraska	324	1150	1150	1150	12	1526	1612	1526	11	1320	1320	1320	54	1263	1263	1263	8	1029	1029	1029	
Nevada	-	-	-	-	1	1055	1450	1277	5	791	1076	937	81	748	1015	873	36	667	900	731	
New Hampshire	227	816	1112	1096	1	1332	1842	1842	8	1163	1602	1602	69	1017	1395	1367	-	-	-	-	
New Jersey	112	703	840	772	1	1203	1476	1476	8	821	1025	995	23	703	840	840	5	568	653	653	
New Mexico	132	902	1218	1060	1	722	877	877	5	674	796	796	5	674	796	796	-	-	-	-	
New York	132	902	1218	1060	8	1333	1799	1566	38	1044	1409	1227	128	902	1218	1060	53	733	825	779	
North Carolina	27	680	1109	885	14	868	1415	1296	-	-	-	-	72	648	1056	852	-	-	-	-	
North Dakota	470	752	1060	837	10	1351	1567	1459	19	1024	1196	1109	272	914	1070	990	47	752	867	809	
Ohio	130	634	978	806	15	1283	1779	1531	139	897	1341	1119	453	822	1119	971	28	691	936	814	
Oklahoma	3	673	902	681	8	994	1332	1244	-	-	-	-	7	818	1096	920	-	-	-	-	
Oregon	106	842	888	888	1	1324	1680	1500	17	1205	1456	1380	144	901	997	930	22	787	862	800	
Pennsylvania	10	630	985	815	8	940	1500	1213	-	-	-	-	66	750	1305	908	3	690	1080	710	
Rhode Island	20	1238	1434	1375	4	1238	1580	1565	5	1300	1434	1425	89	1179	1367	1320	7	881	1122	1050	
South Carolina	268	882	1126	989	-	-	-	-	67	1126	1459	1281	495	947	1224	1077	134	742	913	823	
South Dakota	20	630	782	725	1	759	1133	1133	-	-	-	-	1	722	1008	1008	1	593	785	785	
Tennessee	1308	505	832	672	-	-	-	-	44	828	1143	1092	174	608	976	807	44	535	726	670	
Texas	5	835	1241	996	9	1109	1686	1232	-	-	-	-	14	713	1034	855	4	609	861	657	
Utah	45	560	841	734	4	880	1216	1125	31	697	1000	920	154	591	880	806	-	-	-	-	
Vermont	5598	838	1128	981	27	1302	2190	1582	12	1170	1345	1229	-	-	-	-	-	-	-	-	
Virginia	50	838	1128	976	1	1321	1928	1800	12	1147	1537	1458	62	946	1267	1148	7	714	1051	887	
Washington	37	946	1658	1235	1	1269	1963	-	1	962	1441	-	28	686	1034	-	-	-	-	-	
West Virginia	18	686	1034	-	1	1269	1963	-	1	962	1441	-	28	686	1034	-	-	-	-	-	
Wisconsin	-	-	-	-	8	1306	1708	1708	76	1000	1250	1194	332	764	1000	836	66	612	764	732	
Wyoming	18	1017	1298	1219	6	1518	1938	1716	7	1313	1674	1482	83	1133	1446	1281	21	932	1189	1053	
	144	816	856	840	10	991	1464	1179	10	815	1205	977	419	664	856	801	-	-	-	-	
1978 Average			1097	957			1621	1469				1323	1215			1141	1019			910	793
1944 Average				155									206				172				136
% Increase 1944-78				608									542				563				569
% Increase 1977-78				9.6				4.6					2.8				5.9				5.4

(16)				(17)				(18)				(19)					
Equipment Operator I				Equipment Operator II				Equipment Operator III				Timekeeper or Clerk				State	
No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.		
478	606	749	696	324	725	899	887	290	838	1024	998	100	630	929	866	Alabama	
40	1542	1891	1800	320	1583	2023	1900	30	1708	2155	2050	-	-	-	-	Alaska	
262	786	1004	888	309	902	1318	1140	-	-	-	-	29	525	835	710	Arizona	
397	485	704	652	875	535	780	756	188	641	929	896	10	683	990	965	Arkansas	
-	-	-	-	1522	1126	1235	1180	-	-	-	-	88	932	1116	1067	California	
-	-	-	-	818	1050	1408	1277	34	1158	1552	1510	-	-	-	-	Colorado	
746	766	905	836	296	791	936	863	108	817	967	891	-	-	-	-	Connecticut	
125	596	788	659	44	637	849	730	58	719	964	835	11	573	814	657	Delaware	
1999	589	760	675	121	683	890	767	150	718	939	829	38	718	939	829	Florida	
1017	650	843	747	392	602	802	722	227	777	1127	874	39	584	809	708	Georgia	
72	640	873	773	68	743	1065	918	15	868	1146	1072	4	754	1184	1039	Hawaii	
32	687	1014	716	-	-	-	-	317	795	1174	951	6	757	1118	839	Idaho	
-	-	-	1225	72	-	-	1519	17	-	-	1239	-	-	-	-	Illinois	
1085	621	776	668	276	707	926	875	83	849	1106	964	21	520	676	531	Indiana	
880	735	960	899	259	787	1045	1000	128	817	1086	1044	-	-	-	-	Iowa	
847	572	847	720	439	622	931	859	174	677	1019	975	29	622	931	862	Kansas	
1070	457	745	556	834	530	862	676	73	583	951	821	112	530	862	643	Kentucky	
759	515	747	648	569	551	871	802	202	604	924	887	56	535	855	630	Louisiana	
636	534	746	670	190	603	794	662	147	646	851	775	-	-	-	-	Maine	
310	622	802	784	180	663	856	851	46	707	917	912	44	707	917	861	Maryland	
749	724	856	-	-	-	-	-	86	830	996	-	35	679	790	-	Massachusetts	
48	878	1087	982	373	972	1129	1050	-	-	-	-	22	929	1082	1005	Michigan	
-	-	-	-	13	1235	1272	1272	-	-	-	-	-	-	-	-	Minnesota	
219	460	655	574	242	520	790	671	85	560	870	738	46	470	720	567	Mississippi	
2057	639	862	758	900	710	958	913	7	795	1071	975	22	699	947	857	Missouri	
47	1150	1193	1180	35	1206	1244	1242	-	-	-	-	12	1162	1489	1243	Montana	
267	633	853	682	-	-	-	-	519	705	954	802	28	539	721	633	Nebraska	
-	-	-	-	-	-	-	-	74	890	1217	1184	6	972	1333	1321	Nevada	
145	591	689	655	53	632	730	706	-	-	-	-	6	612	710	710	New Hampshire	
433	744	909	842	144	742	1001	872	39	902	1218	1060	-	7	674	796	735	New Jersey
262	560	787	637	404	617	868	770	118	714	1005	891	32	508	714	611	New Mexico	
1179	717	817	782	376	752	867	812	102	914	1067	998	149	607	895	737	New York	
842	580	787	684	390	634	858	746	1152	661	1023	842	104	557	858	708	North Carolina	
26	673	902	711	210	859	1151	907	-	-	-	-	7	610	818	748	North Dakota	
656	787	862	800	123	842	888	865	68	901	997	940	134	752	862	800	Ohio	
510	580	895	717	209	660	1030	815	69	720	1135	898	101	580	895	725	Oklahoma	
672	924	1068	1060	266	1020	1122	1115	36	1068	1179	1175	-	-	-	-	Oregon	
602	794	989	882	1946	851	1077	947	279	912	1177	1032	67	742	913	823	Pennsylvania	
127	703	810	775	17	672	845	835	22	721	952	930	3	609	703	706	Rhode Island	
-	-	-	-	-	-	-	-	-	-	-	-	128	476	917	725	South Carolina	
33	609	861	672	314	713	1034	844	112	772	1132	991	5	1020	1539	1187	South Dakota	
242	560	841	734	73	591	880	806	-	-	-	-	68	794	1171	882	Tennessee	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Texas	
122	839	1125	921	174	886	1188	1113	99	946	1267	1445	-	-	-	-	Utah	
-	-	-	-	1	582	882	-	39	686	1034	-	9	652	984	-	Vermont	
2858	612	764	670	896	670	836	732	85	732	956	836	209	640	800	700	Virginia	
134	887	1133	1004	444	980	1250	1106	100	1079	1378	1219	36	750	958	846	Washington	
434	664	704	678	1099	740	778	753	488	816	856	833	107	664	723	681	West Virginia	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Wisconsin	
64	777	1042	860	149	901	1208	1060	40	992	1331	1180	-	-	-	-	Wyoming	
	891	799		1009	937			1096	1013			926	809			1978 Average	
													142			1944 Average	
													522			% Increase 1944-78	
		7.1			7.7				6.3				5.4			% Increase 1977-78	

MONTHLY SALARIES OF HIGHWAY PERSONNEL (as of July 1, 1978)

TRAFFIC OPERATIONS PERSONNEL

State	(20)				(21)				(22)				(23)				(24)			
	State Traffic Engineer				Assistant State Traffic Engineer				State Traffic Maintenance Engineer				District Traffic Engineer				Assistant District Traffic Engineer			
	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.
Alabama	1	1709	2219	2118	1	1397	1783	1783	-	-	-	-	9	1062	1636	1349	-	-	-	-
Alaska	-	-	-	-	-	-	-	-	-	-	-	-	3	2434	3392	2900	5	2102	2928	2700
Arizona	1	2175	2953	2953	1	1984	2694	2533	-	-	-	-	3	1396	2250	2112	-	-	-	-
Arkansas	1	1555	2266	2266	1	1984	2694	2612	-	-	-	-	-	-	-	-	-	-	-	-
California	1	2559	3310	3009	2	2160	2870	2608	-	-	-	-	16	1876	2608	2374	52	1630	2265	1967
Colorado	1	2344	3141	3141	1	1929	2584	2584	-	-	-	-	5	1478	1982	1950	-	-	-	-
Connecticut	1	1931	2381	2156	1	1750	2144	1947	5	1733	2090	1912	5	1301	1587	1444	4	1266	1507	1387
Delaware	1	1794	2504	2454	-	-	-	-	-	-	-	-	2	1464	2020	1834	2	1340	1835	1383
Florida	1	1840	2493	2435	3	1616	2190	1824	1	1616	2190	2118	5	1616	2190	1855	-	1423	1927	1675
Georgia	1	1831	2733	2733	2	1531	2286	2286	-	-	-	-	7	1283	1915	1752	7	1035	1531	1465
Hawaii	1	1561	2496	2496	1	1424	2271	2072	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	1	1822	2692	2325	1	1652	2441	2109	-	-	-	-	4	1499	2214	1827	-	-	-	-
Illinois	1	2135	3105	2900	1	1860	2880	2565	-	-	-	-	9	1635	2880	2225	16	1290	2180	1775
Indiana	1	2067	2762	2762	1	1811	2398	2281	1	1670	2175	2281	6	1540	1974	1664	6	1365	1740	1361
Iowa	-	-	-	-	-	-	-	-	1	1536	2158	2158	-	-	-	-	-	-	-	-
Kansas	1	1543	2321	2321	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky	1	1882	2915	2518	2	1707	2776	2465	6	1549	2518	2127	11	1405	2285	2224	7	1155	1882	1360
Louisiana	1	1611	2407	2408	1	1611	2407	2195	-	-	-	-	9	1402	2025	1834	-	-	-	-
Maine	1	1436	1909	1909	1	1327	1764	1764	-	-	-	-	5	1193	1585	1312	-	-	-	-
Maryland	1	1942	2552	2492	1	1665	2188	2188	1	1665	2188	2188	5	1431	1880	1858	7	1233	1620	1615
Massachusetts	1	1936	2432	-	1	1784	2243	-	1	1646	2059	-	8	1422	1779	-	8	1162	1438	-
Michigan	1	2434	2973	2702	1	2244	2743	2493	1	2025	2531	2279	9	1759	2185	1971	5	1529	1879	1703
Minnesota	1	2085	2840	2742	3	1933	2528	2322	-	-	-	-	9	1792	2434	2228	-	-	-	-
Mississippi	1	1675	2670	2240	1	1375	2195	2035	-	-	-	-	-	-	-	-	-	-	-	-
Missouri	-	-	-	-	1	1767	2239	2239	-	-	-	-	3	1418	1952	1890	14	1240	1694	1586
Montana	1	1649	2013	1784	1	1510	1867	1639	-	-	-	-	5	1162	1489	1271	-	-	-	-
Nebraska	1	1598	2229	2038	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nevada	1	1674	2331	2331	1	1602	2223	2223	-	-	-	-	2	1217	1679	1679	-	-	-	-
New Hampshire	1	1396	1725	1725	1	1240	1519	1519	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey	1	2639	3562	3100	1	2068	2791	2430	1	1701	2297	1999	8	1399	1889	1644	21	1151	1554	1353
New Mexico	1	1805	2540	2442	1	1348	1896	1574	-	-	-	-	5	1485	2089	1962	-	-	-	-
New York	1	3122	3512	3317	1	2816	3183	3000	-	-	-	-	10	2058	2359	2208	-	-	-	-
North Carolina	1	1866	2603	2603	2	1617	2255	2255	-	-	-	-	14	1283	1779	1531	-	-	-	-
North Dakota	1	1968	2637	2490	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio	1	1938	2467	2467	-	-	-	-	-	-	-	-	12	1324	1680	1550	12	1205	1456	1400
Oklahoma	1	1730	2700	2100	1	1575	2500	1730	-	-	-	-	8	1305	2100	1586	-	-	-	-
Oregon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania	1	2173	2854	2489	2	1596	2082	1821	1	1904	2489	2173	11	1596	2082	1821	40	1397	1821	1596
Rhode Island	-	-	-	-	-	-	-	-	1	989	1167	1152	-	-	-	-	-	-	-	-
South Carolina	1	1803	2578	2303	1	1560	2218	2019	-	-	-	-	4	1151	1944	1749	-	-	-	-
South Dakota	1	1425	2215	1945	1	1311	2023	1787	2	1206	1847	1314	5	1311	2023	1570	-	-	-	-
Tennessee	1	1636	2370	1876	2	1492	2158	1564	1	1109	1686	1161	4	1363	1967	1492	-	-	-	-
Texas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah	1	1999	2918	2543	1	1805	2635	2376	1	1805	2635	2635	6	1321	2379	1858	-	-	-	-
Vermont	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia	1	1886	2441	2441	3	1491	1950	1950	-	-	-	-	8	1306	1708	1633	16	1194	1558	1366
Washington	1	2060	2629	2345	-	-	-	-	-	-	-	-	5	2060	2629	2345	6	1359	1735	1547
West Virginia	1	1869	2760	2385	1	1614	2385	2060	-	-	-	-	3	1328	1962	1570	1	1093	1614	1148
Wisconsin	1	2026	2837	2721	3	1970	2759	2340	-	-	-	-	6	1721	2759	2250	8	1721	2267	2073
Wyoming	1	1874	2510	2277	1	1699	2277	1874	-	-	-	-	5	1541	2066	1699	-	-	-	-
1978 Average		2616	2448			2328	2124			2133	1928			2092	1848			1822	1603	
1944 Average		-	-			-	-			-	-			-	-			-	-	
% Increase 1944-78		-	-			-	-			-	-			-	-			-	-	
% Increase 1977-78			7.3				9.6				8.2				6.0				3.2	

(25)				(26)				(27)				(28)				(29)				State
Traffic Supervisor				Sign Supervisor				Sign Shop Foreman				Traffic Signal & Lighting Foreman				Striper Foreman				
No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	
-	-	-	-	1	1286	1636	1636	1	993	1191	1092	1	1286	1636	1575	-	-	-	-	Alabama
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	2102	2928	2500	Alaska
7	1101	1450	1369	1	1190	1565	1565	1	1101	1450	1410	17	1190	2047	1593	10	1029	1319	1290	Arizona
-	-	-	-	1	1329	1935	1935	1	951	1382	1382	-	-	-	-	2	951	1382	1312	Arkansas
-	-	-	-	9	1235	1485	1418	-	-	-	-	23	1418	1708	1630	18	1235	1485	1418	California
8	1341	1798	1798	-	-	-	-	1	1552	2081	2081	4	1341	1798	1712	-	-	-	-	Colorado
-	-	-	-	1	1362	1660	1511	1	1042	1259	1150	-	-	-	-	-	-	-	-	Connecticut
2	1340	1835	1503	-	-	-	-	1	866	1182	935	-	-	-	-	-	-	-	-	Delaware
-	1259	1694	1477	-	-	-	-	1	1054	1405	1215	-	-	-	-	10	862	1110	976	Florida
-	-	-	-	1	1402	2091	2002	1	951	1402	1177	1	1177	1751	1531	9	841	1228	1055	Georgia
-	-	-	-	3	1008	1267	1178	-	-	-	-	1	1240	1566	1566	1	856	1077	1058	Hawaii
-	-	-	-	-	-	-	-	1	1065	1574	1360	1	1295	1913	1574	3	1118	1652	1297	Idaho
24	1045	1700	1390	-	-	-	-	8	993	1700	1256	-	-	-	-	19	1275	1525	1300	Illinois
-	-	-	-	7	964	1540	1256	6	849	1106	884	6	1010	1540	1063	10	849	1106	884	Indiana
1	1192	1610	1354	1	1293	1775	1692	1	871	1192	1192	1	1001	1354	1354	6	1049	1417	1250	Iowa
-	-	-	-	-	-	-	-	1	810	1248	1248	-	-	-	-	6	847	1282	1219	Kansas
11	710	1155	1056	11	643	1048	862	8	530	862	745	34	457	1274	782	10	643	1048	782	Kentucky
8	646	966	955	28	583	903	774	5	583	903	894	2	720	1111	1084	9	694	1085	1067	Louisiana
-	-	-	-	-	-	-	-	1	786	1037	990	1	820	1085	942	1	786	1037	990	Maine
7	1145	1504	1374	1	1145	1504	1502	1	804	1048	1048	1	1063	1396	1396	7	804	1048	1048	Maryland
8	1036	1271	-	1	1220	1519	-	1	979	1195	-	1	979	1195	-	33	927	1111	-	Massachusetts
1	1606	1969	1786	33	927	1111	-	11	1386	1670	1529	11	1529	1879	1703	14	1153	1320	1247	Michigan
5	1171	2170	1742	16	1094	1933	1393	-	-	-	-	1	1322	1792	1599	-	-	-	-	Minnesota
-	-	-	-	-	-	-	-	1	805	1285	1123	1	805	1285	1190	6	670	1055	-	Mississippi
-	-	-	-	-	-	-	-	1	991	1343	1162	4	936	1266	1240	-	-	-	-	Missouri
-	-	-	-	-	-	-	-	1	1263	1354	1354	-	-	-	-	-	-	-	-	Montana
-	-	-	-	1	995	1367	1105	1	748	1015	960	1	1338	1854	1397	-	-	-	-	Nebraska
-	-	-	-	1	1217	1679	1629	-	-	-	-	-	-	-	-	7	972	1332	1332	Nevada
1	845	1025	1025	-	-	-	-	1	703	840	840	1	821	995	995	8	703	840	840	New Hampshire
-	-	-	-	1	1151	1554	1353	1	1044	1409	1227	28	1044	1409	1227	6	994	1342	1168	New Jersey
6	787	1221	1000	-	-	-	-	1	680	966	966	2	1109	1559	1297	-	-	-	-	New Mexico
10	869	1923	1446	1	1281	1469	1384	1	1024	1199	1109	11	1024	1196	1109	20	787	907	847	New York
14	978	1341	1160	28	787	1070	929	-	-	-	-	14	897	1227	1062	28	787	1070	929	North Carolina
-	-	-	-	-	-	-	-	8	947	1269	1090	-	-	-	-	-	-	-	-	North Dakota
12	908	1096	1000	1	1096	1324	1275	1	901	997	997	16	997	1205	1205	31	842	888	860	Ohio
5	895	1430	1147	-	-	-	-	-	-	-	-	-	-	-	-	6	750	1190	950	Oklahoma
-	-	-	-	-	-	-	-	1	1238	1580	1503	2	1580	1743	1725	8	1122	1300	1285	Oregon
-	-	-	-	11	1177	1527	1340	1	947	1224	1077	11	1224	1596	1397	21	912	1177	1032	Pennsylvania
2	990	1406	1406	-	-	-	-	-	-	-	-	1	845	912	1181	1	749	805	954	Rhode Island
-	-	-	-	-	-	-	-	7	637	1143	912	6	828	1143	965	8	637	1143	912	South Carolina
-	-	-	-	1	904	1359	1253	1	835	1241	1131	-	-	-	-	2	713	1034	844	South Dakota
1	1261	1722	1613	5	880	1216	1040	-	-	-	-	-	-	-	-	5	772	1132	991	Tennessee
-	-	-	-	2	1168	1535	1359	-	-	-	-	-	-	-	-	-	-	-	-	Texas
1	1466	2139	1998	1	1321	1928	1928	1	1077	1442	1408	4	1170	1709	1637	6	1147	1537	1454	Utah
-	-	-	-	1	962	1441	-	-	-	-	-	1	853	1274	-	7	721	1086	-	Vermont
44	1044	1366	1250	8	800	1000	916	9	800	1000	916	8	916	1250	1144	8	800	1000	916	Virginia
-	-	-	-	-	-	-	-	-	-	-	-	4	1313	1674	1855	-	-	-	-	Washington
-	-	-	-	-	-	-	-	1	899	1328	991	1	1093	1614	1537	8	739	1093	962	West Virginia
3	1389	1826	1498	1	1447	1904	1745	11	1234	1620	1364	1	1447	1904	1828	17	1006	1253	1160	Wisconsin
-	-	-	-	-	-	-	-	1	1094	1468	1468	1	1541	2066	1784	5	1094	1468	1235	Wyoming
1549			1379	1500			1389	1274		1161	1498			1379	1232		1125	1978 Average		
-			-	-			-	-		-	-			-	-		-	1944 Average		
-			-	-			-	-		-	-			-	-		-	% Increase 1944-78		
4.7			-	14.7			-	8.3		-	7.3			-	10.0		-	% Increase 1977-78		

MONTHLY SALARIES OF HIGHWAY PERSONNEL (as of July 1, 1978)

TRAFFIC OPERATIONS PERSONNEL (cont'd)

State	(30)				(31)				(32)				(33)			
	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.
Alabama	-	-	-	-	2	809	993	850	10	582	725	719	23	780	1286	1113
Alaska	-	-	-	-	-	-	-	-	-	-	-	-	15	1542	2252	1850
Arizona	3	1029	1319	1154	7	903	1152	1115	22	843	1077	1005	33	903	1450	1325
Arkansas	1	951	1382	1382	5	488	737	654	2	682	990	888	-	-	-	-
California	-	-	-	-	-	-	-	-	-	-	-	-	161	1294	1556	1418
Colorado	-	-	-	-	5	1000	1341	1158	-	-	-	-	20	1000	1478	1350
Connecticut	-	-	-	-	10	862	1055	959	-	-	-	-	18	903	1102	1002
Delaware	3	947	1295	1190	7	663	1051	826	5	613	814	650	12	691	1419	928
Florida	47	756	991	874	3	718	939	924	10	650	843	747	-	891	1176	1032
Georgia	10	841	1228	1035	15	625	877	751	80	625	877	751	11	720	1035	878
Hawaii	-	-	-	-	5	868	1065	1004	-	-	-	-	7	900	1232	1108
Idaho	6	1118	1652	1411	4	757	1118	972	-	-	-	-	1	920	1360	835
Illinois	-	-	-	-	14	1292	1525	1292	-	-	-	-	6	1045	1925	1475
Indiana	34	707	926	741	-	-	-	-	68	621	776	668	37	849	1311	871
Iowa	-	-	-	-	12	745	1000	828	-	-	-	-	2	871	1192	1074
Kansas	-	-	-	-	5	707	1066	1037	-	-	-	-	-	-	-	-
Kentucky	-	-	-	-	-	-	-	-	163	457	745	589	5	643	1549	918
Louisiana	1	567	887	639	-	-	-	-	11	515	747	519	20	515	747	550
Maine	5	646	851	811	1	646	851	811	-	696	918	729	1	897	1190	1033
Maryland	30	804	1048	1042	9	754	982	812	-	-	-	-	13	804	1048	1003
Massachusetts	33	927	1111	-	5	872	1046	-	1	979	1195	-	16	872	1046	-
Michigan	32	972	1129	1077	13	878	1129	1056	33	927	1111	-	40	972	1129	1077
Minnesota	-	-	-	-	-	-	-	-	-	-	-	-	8	1350	1392	1392
Mississippi	3	805	1285	-	4	560	870	763	-	-	-	-	5	735	1165	923
Missouri	-	-	-	-	2	673	909	866	1	639	862	746	31	885	1193	1042
Montana	-	-	-	-	2	1206	1244	1244	-	-	-	-	7	977	1734	1270
Nebraska	-	-	-	-	5	667	900	722	-	-	-	-	7	837	1143	939
Nevada	2	972	1332	1332	2	1112	1529	1529	1	1017	1395	1395	-	-	-	-
New Hampshire	6	703	840	840	1	654	760	760	7	568	653	653	5	703	922	840
New Jersey	-	-	-	-	11	742	1001	872	37	707	954	831	112	902	1218	1060
New Mexico	-	-	-	-	7	532	827	667	-	-	-	-	6	751	1415	1044
New York	63	787	907	847	16	752	867	807	-	-	-	-	103	752	1070	895
North Carolina	103	634	858	746	-	-	-	-	156	557	754	656	28	754	1023	889
North Dakota	-	-	-	-	15	818	1096	940	-	-	-	-	-	-	-	-
Ohio	31	842	888	860	10	735	804	785	31	842	888	860	10	952	1096	1000
Oklahoma	7	750	1190	967	5	580	985	738	-	-	-	-	-	-	-	-
Oregon	16	1122	1238	1230	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania	67	989	1281	1126	2	794	989	882	10	794	989	882	11	1224	1596	1397
Rhode Island	1	672	727	916	-	722	776	882	-	-	-	-	2	749	805	871
South Carolina	-	-	-	-	-	-	-	-	-	-	-	-	22	535	1031	829
South Dakota	5	1020	1539	1202	3	772	1132	976	-	-	-	-	-	-	-	-
Tennessee	3	772	1132	991	-	-	-	-	-	-	-	-	-	-	-	-
Texas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah	2	1147	1537	1396	5	785	1188	1066	-	-	-	-	17	785	1362	1219
Vermont	4	652	984	-	1	686	1034	-	-	-	-	-	-	-	-	-
Virginia	8	800	1000	916	37	670	836	764	-	-	-	-	33	732	956	876
Washington	-	-	-	-	6	1250	1446	1348	19	1133	1313	1223	16	1313	1518	1416
West Virginia	1	899	1328	1205	-	-	-	-	-	-	-	-	4	899	1464	1139
Wisconsin	39	980	1213	1082	24	964	1189	1120	39	930	1138	1080	10	-	-	1548
Wyoming	5	1042	1398	1268	7	817	1094	1030	4	858	1150	1012	2	992	1331	1290
1978 Average			1150	1047			1037	939			958	842			1288	1100
1944 Average			-	-			-	-			-	-			-	-
% Increase 1944-78			-	-			-	-			-	-			-	-
% Increase 1977-78				4.8				7.2				6.6				9.0

				OTHER RELATED PERSONNEL								
(34)				(35)				(36)				
Striper Technician				Chief Engineer				Project Engineer				
No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	State
-	-	-	-	1	2022	2679	2679	150	1057	1636	1421	Alabama
7	1208	1981	1650	-	-	-	-	-	-	-	-	Alaska
17	903	1152	1027	1	2863	3889	3655	27	1396	2250	1960	Arizona
3	504	736	736	1	-	-	2905	35	1252	1935	1896	Arkansas
90	1126	1352	1235	1	2952	3310	3310	200	1630	1967	1876	California
-	-	-	-	1	2409	3227	3227	77	1667	2232	2190	Colorado
-	-	-	-	1	2477	2742	3006	-	-	-	-	Connecticut
-	-	-	-	1	2174	3012	3012	-	-	-	-	Delaware
-	756	991	874	-	-	-	-	-	-	-	-	Florida
21	720	1035	881	1	2091	3475	3475	308	1035	1531	1465	Georgia
4	743	914	869	1	1797	2883	2883	6	1424	2384	2126	Hawaii
9	795	1174	951	1	-	3151	-	49	1233	1822	1434	Idaho
-	-	-	-	1	2865	3925	3410	-	1450	2180	1950	Illinois
-	-	-	-	1	2762	3687	3186	90	1365	1740	1548	Indiana
15	787	1086	956	3	2266	3183	2989	18	1417	1957	1917	Iowa
-	-	-	-	1	-	-	3100	28	1343	2030	2000	Kansas
24	530	862	705	1	-	-	3000	74	1048	1707	1626	Kentucky
25	551	924	756	1	1888	2684	2472	21	1224	2296	1885	Louisiana
-	897	1190	1083	-	-	-	-	-	-	-	-	Maine
7	663	856	851	1	2950	2950	2950	60	1145	1504	1502	Maryland
18	872	1046	-	1	2362	2972	-	89	1285	1606	-	Massachusetts
22	972	1129	1077	-	-	-	-	-	-	-	-	Michigan
-	-	-	-	1	-	-	3075	-	-	-	-	Minnesota
6	470	720	-	1	2035	3250	2595	40	1245	1995	1808	Mississippi
-	-	-	-	1	3333	3333	3333	56	1329	1826	1780	Missouri
-	-	-	-	1	2815	2815	2815	-	-	-	-	Montana
-	-	-	-	2	2061	2877	2292	64	995	1638	1342	Nebraska
6	890	1217	1198	1	3080	3080	3080	11	1395	1930	1930	Nevada
5	632	730	706	1	-	2598	2598	80	1270	1519	1325	New Hampshire
6	568	653	653	1	3208	4330	3769	25	1620	2187	1904	New Jersey
-	-	-	-	1	3333	-	3333	-	-	-	-	New Mexico
54	752	867	812	1	-	-	3691	-	1667	1923	1795	New York
-	-	-	-	1	2255	3005	3005	61	1404	1956	1680	North Carolina
1	673	902	707	1	2391	3205	2890	34	1469	1968	1780	North Dakota
80	735	804	785	-	-	-	-	10	1700	2277	2054	Ohio
-	-	-	-	1	1905	2900	2500	20	1205	1456	1350	Oklahoma
-	-	-	-	1	-	-	-	25	1430	2300	1789	Oregon
123	851	1077	947	1	2725	3332	3117	55	1367	2018	1975	Pennsylvania
7	696	747	931	-	-	-	-	308	1397	1821	1596	Rhode Island
-	-	-	-	1	3291	3291	3291	-	-	-	-	South Carolina
-	-	-	-	1	-	-	2232	68	873	1704	1452	South Dakota
-	-	-	-	1	2158	3141	2996	24	1311	2023	1612	Tennessee
-	-	-	-	1	3641	3641	3641	125	1216	1613	1508	Texas
-	-	-	-	1	2504	3655	3079	178	2155	2260	2211	Texas
6	613	925	-	1	1891	2984	-	70	2312	2434	2376	Utah
-	-	-	-	1	2333	3033	3033	26	1466	2139	1979	Vermont
-	-	-	-	1	3357	4284	3792	30	803	1841	-	Virginia
10	817	856	837	1	2629	3884	2760	39	1094	1429	1306	Washington
40	930	1138	1057	-	-	-	-	52	1651	2107	1879	West Virginia
19	817	1268	970	1	2905	3892	3203	-	-	-	-	Wisconsin
-	-	-	-	1	2905	3892	3203	185	1447	2267	1745	Wyoming
-	-	-	-	1	2905	3892	3203	29	1699	2277	1874	Wyoming
1012 930				3266 3061				1944 1765				1978 Average
-				-				-				1944 Average
-				-				-				% Increase 1944-78
4.8				8.3				5.6				% Increase 1977-78

MAINTENANCE QUESTIONNAIRE ON POLICIES AFFECTING MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL (as of July 1, 1978)

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	Fed.	Compulsory	Voluntary Retirement	(5a)	(5b)	Annual Vacation Schedule		(6)	(7)	Cumulative	Maximum			
					Plan	Sec.	Retirement	Min. Yrs.			Minimum Age	Hrs.					Yrs. of	Hrs.	Yrs. of
(2)	(3)	(4)	(4a)	(4b)	(5)	(5a)	(5b)	(6)	(7)	(8)									
Alabama	x				Yes	Yes	Yes	Statute	70	Yes	30	55	Yes	104	1 to 5	234	25+	Yes	480
Alaska			x		Yes	Yes	No	-	-	Yes	5	50	Yes	75	1 to 2	225	10+	Yes	450
Arizona	x				Yes	Yes	Yes	Statute	70	Yes	10	60	Yes	96	0 to 3	168	15+	Yes	240
Arkansas				x	Yes	Yes	Yes	Policy	67	Yes	10	65	Yes	96	1 to 3	176	20+	Yes	216
California	x				Yes	Yes	No	-	-	Yes	5	50	Yes	80	0 to 3	160	24+	Yes	320
Colorado		x			Yes	No	Yes	Policy	65	Yes	20	55	Yes	96	1 to 5	168	15+	Yes	336
Connecticut	x				Yes	Yes	Yes	Statute	70	Yes	10	55	Yes	70	0 to 5	140	20+	Yes	280
Delaware		x			Yes	Yes	Yes	Statute	70	Yes	30	Any Age	Yes	112½	0 to 10	157½	15+	Yes	315
Florida		x			Yes	Yes	No	-	-	Yes	10	60	Yes	104	0 to 5	156	10+	Yes	240
Georgia			x		Yes	Yes	Yes	Policy	65	Yes	34	Any Age	Yes	120	1 to 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	Yes	Statute	65	Yes	30	60	Yes	96	0 to 5	168	15+	Yes	336
Illinois		x			Yes	Yes	No	-	-	Yes	8	60	Yes	80	1 to 7	160	15+	Yes	160
Indiana			x		Yes	Yes	Yes	Policy	70	Yes	15	50	Yes	96	1 to 10	160	20+	Yes	Unlimited
Iowa	x				Yes	Yes	Yes	Policy	65	Yes	-	55	Yes	80	0 to 5	200	25+	Yes	400
Kansas		x			Yes	Yes	Yes	Policy	70	No	-	-	Yes	96	0 to 5	144	13+	Yes	192
Kentucky		x			Yes	Yes	No	-	-	Yes	30	Any Age	Yes	96	1 to 5	168	15+	Yes	450
Louisiana		x			Yes	No	Yes	Policy	65	Yes	30	55	Yes	96	1 to 3	192	15+	Yes	Unlimited
Maine	x				Yes	No	No	-	-	Yes	10	50	Yes	96	0 to 5	192	20+	Yes	240
Maryland		x			Yes	Yes	Yes	Statute	70	Yes	25	Any Age	Yes	80	1 to 5	200	20+	Yes	280
Massachusetts	x				Yes	No	No	-	-	Yes	20	55	Yes	80	1 to 5	160	10+	Yes	160
Michigan	x				Yes	Yes	Yes	Statute	70	Yes	10	60	Yes	104	0 to 1	248	30+	Yes	240
Minnesota	x				Yes	Yes	Yes	Statute	70	Yes	10	55	Yes	104	0 to 5	208	25+	Yes	224
Mississippi	x				Yes	Yes	Yes	Statute	65	Yes	30	-	Yes	120	1 to 5	144	5+	Yes	360
Missouri	x				Yes	Yes	Yes	Statute	70	Yes	15	55	Yes	120	0 to 10	168	15+	Yes	336
Montana	x				Yes	Yes	No	-	-	Yes	5	55	Yes	120	0 to 10	192	20+	Yes	384
Nebraska	x				Yes	Yes	Yes	Statute	65	Yes	20	60	Yes	96	1 to 5	200	16+	Yes	200
Nevada	x				Yes	No	No	-	-	Yes	10	55	Yes	120	½ to 10	168	15+	Yes	240
New Hampshire	x				Yes	Yes	Yes	Statute	70	Yes	30	60	Yes	120	½ to 17	144	17+	Yes	288
New Jersey	x				Yes	Yes	Yes	Policy	70	Yes	25	Any Age	Yes	96	0 to 1	200	20+	Yes	200
New Mexico	x				Yes	Yes	No	-	-	Yes	30	Any Age	Yes	120	1 to Any	120	1+	Yes	240
New York	x				Yes	Yes	Yes	Statute	70	Yes	10	55	Yes	104	1 to 7	160	8+	Yes	320
North Carolina				x	Yes	Yes	Yes	Statute	70	Yes	20	50	Yes	80	1 to 2	192	20+	Yes	240
North Dakota				x	Yes	Yes	No	-	-	Yes	10	55	Yes	96	1 to 3	192	19+	Yes	240
Ohio	x				Yes	No	Yes	Statute	70	Yes	5	60	Yes	80	1 to 7	200	25+	Yes	600
Oklahoma		x			Yes	Yes	Yes	Policy	65	Yes	10	62	Yes	120	1 to 5	144	5+	Yes	384
Oregon		x			Yes	Yes	Yes	Statute	65	Yes	30	60	Yes	96	0 to 5	192	20+	Yes	250
Pennsylvania				x	Yes	Yes	No	-	-	Yes	10	-	Yes	112½	2 to 15	150	15+	Yes	337½
Rhode Island		x			Yes	Yes	Yes	Statute	70	Yes	10	55	Yes	56	0 to ½	176	20+	Yes	176
South Carolina	x				Yes	Yes	Yes	Statute	72	Yes	30	60	Yes	120	1 to 10	240	22+	Yes	360
South Dakota		x			Yes	Yes	Yes	Policy	70	Yes	5	55	Yes	120	1 to 15	160	15+	Yes	320
Tennessee	x				Yes	Yes	Yes	Policy	65	Yes	30	60	Yes	96	0 to 5	192	20+	Yes	336
Texas			x		Yes	Yes	Yes	Policy	70	Yes	10	50	Yes	84	0 to 2	168	20+	Yes	336
Utah	x				Yes	Yes	Yes	Statute	70	Yes	30	-	Yes	96	1 to 4	144	10+	Yes	240
Vermont		x			Yes	Yes	Yes	Statute	70	Yes	10	55	Yes	96	0 to 5	168	20+	Yes	360
Virginia		x			Yes	Yes	Yes	Statute	70	Yes	5	55	Yes	96	0 to 5	168	20+	Yes	336
Washington		x			Yes	No	Yes	Policy	70	Yes	5	-	Yes	96	0 to 1	176	26+	Yes	247
West Virginia			x		Yes	Yes	No	-	-	Yes	5	60	Yes	120	0 to 5	192	15+	Yes	240
Wisconsin	x				Yes	Yes	No	-	-	Yes	-	55	Yes	80	1 to 5	200	25+	No	-
Wyoming	x				Yes	Yes	Yes	Policy	70	Yes	4	50	Yes	96	0 to 4	192	19+	Yes	240

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)	(10)		(11)		Cumulative	Maximum	
Yes	Minimum	Maximum	Hrs. Yrs. of	Hrs. Yrs. of			
Yes	/Yrs. Service	/Yrs. Service	/Yrs. Service	/Yrs. Service			
Yes	104	1 to Any	104	1+	Yes	1200	Alabama
Yes	75	1 to Any	75	1+	Yes	Unlimited	Alaska
Yes	96	1 to Any	96	Any	Yes	Unlimited	Arizona
Yes	96	-	96	-	Yes	720	Arkansas
Yes	96	-	96	-	Yes	Unlimited	California
Yes	120	1 to Any	120	1+	Yes	Unlimited	Colorado
Yes	105	-	105	-	Yes	Unlimited	Connecticut
Yes	112½	0 to Any	135	-	Yes	675	Delaware
Yes	104	0 to Any	104	Any	Yes	Unlimited	Florida
Yes	120	-	120	-	Yes	720	Georgia
Yes	168	0 to Any	168	Any	Yes	Unlimited	Hawaii
Yes	96	0 to Any	96	Any	Yes	Unlimited	Idaho
Yes	96	1 to Any	96	1+	Yes	Unlimited	Illinois
Yes	96	1 to 5	96	1+	Yes	Unlimited	Indiana
Yes	240	0 to Any	240	Any	Yes	720	Iowa
Yes	96	0 to 5	96	5+	Yes	Unlimited	Kansas
Yes	96	0 to Any	96	Any	Yes	Unlimited	Kentucky
Yes	96	1 to 3	192	15+	Yes	Unlimited	Louisiana
Yes	96	0 to Any	96	-	Yes	720	Maine
Yes	120	0 to Any	120	Any	Yes	Unlimited	Maryland
Yes	120	0 to Any	120	Any	Yes	Unlimited	Massachusetts
Yes	104	0 to Any	104	Any	Yes	Unlimited	Michigan
Yes	104	0 to 1	104	1+	Yes	900	Minnesota
Yes	120	1 to Any	120	Any	Yes	960	Mississippi
Yes	120	0 to Any	120	Any	Yes	Unlimited	Missouri
Yes	96	1 to Any	96	1+	Yes	Unlimited	Montana
Yes	96	1 to 5	240	19+	Yes	1440	Nebraska
Yes	120	-	-	-	Yes	Unlimited	Nevada
Yes	120	½ to Any	120	Any	Yes	900	New Hampshire
Yes	96	0 to 1	120	1+	Yes	Unlimited	New Jersey
Yes	96	1 to Any	96	1+	Yes	Unlimited	New Mexico
Yes	104	-	104	-	Yes	1350	New York
Yes	80	1 to Any	80	1+	Yes	Unlimited	North Carolina
Yes	96	0 to Any	96	Any	Yes	Unlimited	North Dakota
Yes	120	1 to Any	-	-	Yes	Unlimited	Ohio
Yes	-	-	120	½+	Yes	360	Oklahoma
Yes	96	1 to Any	-	-	Yes	Unlimited	Oregon
Yes	-	-	112½	1+	Yes	1500	Pennsylvania
Yes	120	0 to Any	120	Any	Yes	960	Rhode Island
Yes	120	-	120	-	Yes	720	South Carolina
Yes	112	-	112	-	Yes	Unlimited	South Dakota
Yes	96	0 to Any	96	Any	Yes	Unlimited	Tennessee
Yes	96	0 to Any	96	Any	Yes	Unlimited	Texas
Yes	96	0 to Any	96	Any	Yes	Unlimited	Utah
Yes	96	0 to 5	168	20+	Yes	Unlimited	Vermont
Yes	120	0 to Any	120	Any	Yes	Unlimited	Virginia
Yes	96	0 to Any	96	Any	Yes	Unlimited	Washington
Yes	144	0 to Any	144	Any	Yes	Unlimited	West Virginia
Yes	104	½ to Any	104	½+	Yes	Unlimited	Wisconsin
Yes	96	0 to Any	96	Any	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?
 #. 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? Supervisory and Non-Supervisory
16. Are your maintenance and operations employees organized by the following; and if so, is membership mandatory or voluntary?
 Supervisory or Non-Supervisory
 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				Supervisory	Non-Supervisory	National Union		Local Union	
	(12)	(12a)	(12b)	(13)	(13a)	(13b)	(14a)	(14b)	(14c)	(14d)			(15)	(16a)		(16b)
Alabama	Yes	Wholly	Mandatory	No	-	-	-	-	-	x	No	No	No	-	No	-
Alaska	Yes	Wholly	Mandatory	Yes	Wholly	Mandatory	x	-	-	-	Yes	Yes	-	-	Yes	Mandatory
Arizona	Yes	Wholly	Optional	Yes	Wholly	Optional	-	-	-	x	No	No	-	-	Yes	Voluntary
Arkansas	Yes	Partially	Optional	Yes	Partially	Optional	-	-	-	x	No	No	No	-	No	-
California	Yes	Partially	Optional	Yes	Wholly	Mandatory	x	-	-	-	No	Yes	-	-	Yes	Voluntary
Colorado	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	-	No	-	No	-	Yes	Voluntary
Connecticut	Yes	Wholly	Optional	Yes	Partially	Optional	x	-	-	-	Yes	Yes	No	-	Yes	Voluntary
Delaware	Yes	Partially	Optional	No	-	-	-	-	-	x	Yes	Yes	Yes	Mandatory	No	-
Florida	Yes	Partially	Optional	Yes	Partially	Optional	-	x	-	-	Yes	Yes	Yes	Mandatory	No	-
Georgia	Yes	Partially	Optional	Yes	Partially	Mandatory	x	-	-	-	No	No	No	-	No	-
Hawaii	Yes	Partially	Optional	Yes	Wholly	Optional	-	-	-	x	Yes	Yes	No	-	Yes	Voluntary
Idaho	Yes	Partially	Mandatory	Yes	Wholly	Mandatory	x	-	-	-	No	No	No	-	No	-
Illinois	Yes	Wholly	Mandatory	Yes	Wholly	Mandatory	x	-	-	-	No	Yes	No	-	No	-
Indiana	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	-	No	No	No	-	Yes	Voluntary
Iowa	Yes	Wholly	Optional	Yes	Wholly	Mandatory	x	-	-	-	No	Yes	No	-	No	-
Kansas	Yes	Partially	Optional	Yes	Wholly	Mandatory	x	-	-	-	No	Yes	No	-	No	-
Kentucky	Yes	Both	Mandatory	Yes	Wholly	Mandatory	-	-	-	x	No	No	No	-	No	-
Louisiana	Yes	Partially	Optional	Yes	Partially	Optional	-	-	-	x	No	Yes	No	-	No	-
Maine	Yes	Wholly	Optional	No	-	-	-	-	-	x	Yes	Yes	No	-	Yes	Voluntary
Maryland	Yes	Partially	Optional	No	-	-	-	-	-	x	No	No	Yes	Voluntary	Yes	Voluntary
Massachusetts	Yes	Partially	Optional	Yes	Partially	Optional	-	-	-	x	Yes	Yes	Yes	Mandatory	-	-
Michigan	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	-	No	No	No	-	Yes	Voluntary
Minnesota	Yes	Wholly	Optional	Yes	Wholly	Optional	-	-	-	x	No	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	Optional	Yes	Partially	Optional	x	-	-	-	Yes	Yes	No	-	Yes	Mandatory
Nebraska	Yes	Partially	Optional	Yes	Wholly	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	Optional	-	-	-	x	Yes	Yes	Yes	Voluntary	Yes	Voluntary
New Jersey	Yes	Wholly	Optional	Yes	Both	Mandatory	-	-	-	-	Yes	Yes	Yes	Voluntary	Yes	Voluntary
New Mexico	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	-	No	Yes	No	-	No	-
New York	Yes	Partially	Optional	No	-	-	x	-	-	-	Yes	Yes	No	-	Yes	Voluntary
North Carolina	Yes	Wholly	Optional	Yes	Wholly	Mandatory	x	-	-	-	No	No	No	-	Yes	Voluntary
North Dakota	Yes	Partially	Optional	Yes	Wholly	Mandatory	-	-	-	x	No	Yes	No	-	No	-
Ohio	Yes	Partially	Optional	Yes	Wholly	Mandatory	x	-	-	-	No	No	Yes	Voluntary	Yes	Voluntary
Oklahoma	Yes	Wholly	Mandatory	Yes	Wholly	Mandatory	-	-	-	x	No	No	No	-	No	-
Oregon	Yes	Partially	Optional	No	-	-	x	-	-	-	No	Yes	No	-	Yes	Voluntary
Pennsylvania	Yes	Wholly	Optional	Yes	Wholly	Mandatory	x	-	-	-	Yes	Yes	No	-	Yes	Voluntary
Rhode Island	Yes	Partially	Optional	Yes	Wholly	Optional	-	-	-	x	Yes	Yes	Yes	Mandatory	No	-
South Carolina	Yes	Wholly	Mandatory	Yes	Wholly	Mandatory	-	-	-	x	No	No	No	-	Yes	Voluntary
South Dakota	Yes	Wholly	Mandatory	No	-	-	x	-	-	-	-	Yes	No	-	Yes	Voluntary
Tennessee	Yes	Partially	Optional	Yes	Partially	Optional	-	-	-	x	No	No	No	-	No	-
Texas	Yes	Wholly	Optional	Yes	Wholly	Optional	-	x	-	-	No	No	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	-	No	-
Washington	Yes	Wholly	Optional	Yes	Partially	Optional	x	-	-	-	No	Yes	No	-	No	-
West Virginia	Yes	Both	Optional	Yes	Both	Optional	x	-	-	-	No	No	No	-	No	-
Wisconsin	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	-	No	Yes	No	-	No	-
Wyoming	Yes	Wholly	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.

Non-Supervisory		SERVICE AWARDS		WORKING CONDITIONS					Working Hrs.		State
National Union	Local Union	(17)	(18a)	(18b)	(18c)	(18d)	(19)	per Day	per Week		
(16a)	(16b)										
No	-	No	-	Yes	-	Salaried	Salaried	Hourly	8	40	Alabama
-	-	Yes	Mandatory	Yes	-	Hourly	Hourly	Hourly	7½	37½	Alaska
No	-	Yes	Voluntary	Yes	Salaried	-	-	-	8	40	Arizona
No	-	Yes	Voluntary	Yes	Salaried	-	-	-	8	40	Arkansas
No	-	Yes	Voluntary	Yes	Salaried	-	-	Hourly	8	40	California
No	-	Yes	Voluntary	Yes	-	Salaried	Salaried	Hourly	8	40	Colorado
No	-	Yes	Voluntary	No	-	Hourly	Salaried	Hourly	7	35	Connecticut
Yes	Mandatory	No	-	Yes	-	Hourly	Salaried	Hourly	7½	37½	Delaware
Yes	Voluntary	No	-	Yes	-	Salaried	Salaried	Hourly	8	40	Florida
No	-	No	-	Yes	Salaried	-	-	-	8	40	Georgia
No	-	Yes	Voluntary	Yes	Salaried	-	-	-	8	40	Hawaii
No	-	No	-	Yes	-	Salaried	Salaried	Hourly	8	40	Idaho
Yes	Voluntary	-	-	Yes	-	Salaried	Salaried	Both	8	40	Illinois
No	-	Yes	Voluntary	Yes	-	Hourly	Salaried	Hourly	8	40	Indiana
Yes	Voluntary	-	-	Yes	-	Salaried	Salaried	Hourly	8	40	Iowa
Yes	Voluntary	Yes	Voluntary	Yes	-	Salaried	Salaried	Hourly	8	40	Kansas
No	-	No	-	Yes	-	Hourly	Salaried	Salaried	8	40	Kentucky
Yes	Voluntary	Yes	Voluntary	Yes	-	Salaried	Salaried	Hourly	8	40	Louisiana
No	-	Yes	Voluntary	Yes	-	Hourly	Salaried	Hourly	9	43½	Maine
Yes	Voluntary	Yes	Voluntary	Yes	-	Salaried	Salaried	Hourly	8	40	Maryland
Yes	Mandatory	Yes	Mandatory	No	Hourly	-	-	-	8	40	Massachusetts
No	-	Yes	Voluntary	Yes	Hourly	Hourly	Hourly	Hourly	8	40	Michigan
Yes	Voluntary	Yes	Voluntary	Yes	-	Salaried	Salaried	Hourly	8	40	Minnesota
No	-	Yes	Voluntary	Yes	Salaried	Salaried	Salaried	Hourly	8	40	Mississippi
Yes	Voluntary	Yes	Voluntary	Yes	-	Salaried	Salaried	Hourly	8	40	Missouri
Yes	Mandatory	-	-	Yes	Salaried	-	-	-	8	40	Montana
No	-	Yes	Voluntary	Yes	Hourly	Hourly	Hourly	Hourly	8	40	Nebraska
No	-	Yes	Voluntary	Yes	Salaried	Salaried	Salaried	Salaried	8	40	Nevada
Yes	Voluntary	Yes	Voluntary	Yes	Hourly	Hourly	Both	Hourly	8	40	New Hampshire
Yes	Voluntary	Yes	Voluntary	Yes	Salaried	-	-	-	8	40	New Jersey
Yes	Voluntary	-	-	Yes	Salaried	Salaried	Salaried	Hourly	8	40	New Mexico
No	-	Yes	Voluntary	No	Salaried	-	-	-	8	40	New York
No	-	Yes	Voluntary	Yes	-	Salaried	Salaried	Hourly	8	40	North Carolina
Yes	Voluntary	-	-	Yes	Salaried	-	-	-	8	40	North Dakota
Yes	Voluntary	Yes	Voluntary	No	Hourly	-	-	-	8	40	Ohio
No	-	No	-	Yes	Salaried	-	-	-	8	40	Oklahoma
No	-	Yes	Voluntary	Yes	Salaried	-	-	-	8	40	Oregon
No	-	Yes	Voluntary	Yes	-	Salaried	Salaried	Hourly	7½	37½	Pennsylvania
Yes	Mandatory	No	-	Yes	Hourly	-	-	-	8	40	Rhode Island
No	-	Yes	Voluntary	Yes	-	Hourly	Salaried	Hourly	8	40	South Carolina
Yes	Voluntary	Yes	Voluntary	Yes	-	Hourly	Salaried	Hourly	8	40	South Dakota
No	-	No	-	Yes	Salaried	-	-	-	8	40	Tennessee
No	-	Yes	Voluntary	Yes	-	Hourly	Salaried	Hourly	8	40	Texas
No	-	Yes	Voluntary	Yes	Salaried	-	-	-	8	40	Utah
No	-	Yes	Voluntary	Yes	Salaried	-	-	-	8	40	Vermont
No	-	No	-	Yes	-	Salaried	Salaried	Hourly	8	40	Virginia
Yes	Mandatory	No	-	Yes	Salaried	Salaried	Salaried	Hourly	8	40	Washington
No	-	No	-	No	-	Hourly	Salaried	Hourly	8	40	West Virginia
No	-	Yes	Voluntary	Yes	Hourly	-	-	-	8	40	Wisconsin
No	-	Yes	Voluntary	Yes	-	Salaried	Salaried	Hourly	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 type 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 over night? 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			Lodging			Moving Expense						
	(20)	(20a)	(20b)	(20c)	(21)	(21a)	(22a)	(22b)	(22c)	(22d)	(23)	(24)	(25)	(26)	(26a)	(26b)	(26c)	(27a)	(27b)	(27c)		
Alabama	Yes	1½	Comp.	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	x	-	-	x	-	x	-
Alaska	Yes	1½	1½	1½	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x	x	-
Arizona	Yes	1½	-	1½	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	-	x	-	-	x	-	-	x
Arkansas	Yes	1½	1½	1½	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	-	x	-	-	x	-	-	x
California	Yes	1½	1½	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	-	x	-	-	x	-	x
Colorado	Yes	1½	-	1½	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x	-	x
Connecticut	Yes	1½	1½	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	-	-	-	-	-	-	-	x
Delaware	Yes	1½	1½	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x
Florida	Yes	1½	-	-	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	-	x	x	-	x	x	x	-
Georgia	Yes	1½	Comp.	-	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	x	-	-	-	x	-	-	-	x
Hawaii	Yes	1½	1½	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	-	x	-	-	x	-	x
Idaho	Yes	1½	Str.	1½	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	x	-	-	-	x
Illinois	Yes	1½	1½	1½	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	-	-	x	-	-	x	-	x
Indiana	Yes	1½	Str.	1½	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x	-	x
Iowa	Yes	1½	-	1½	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x
Kansas	Yes	1½	-	1½	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	-	-	x	-	-	x	x	-
Kentucky	Yes	1½	Comp.	-	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	-	-	x	-	-	x	-	x
Louisiana	Yes	1½	Comp.	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x
Maine	Yes	1½	-	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x
Maryland	Yes	1½	Comp.	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	x	-	-	x	-	-	x
Massachusetts	Yes	1½	1½	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x
Michigan	Yes	1½	1½	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	x	x	-	-	x	-	x
Minnesota	Yes	1½	Str.	1½	Yes	Yes	Yes	Yes	No	No	No	Yes	No	Yes	-	-	x	-	-	x	-	x
Mississippi	No	-	-	-	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x
Missouri	Yes	1½	Str.	1½	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	x	-	-	-	x	-	-	x
Montana	Yes	1½	-	1½	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	-	-	x	-	-	x	-	x
Nebraska	Yes	1½	Str.	1½	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x
Nevada	Yes	1½	1½	1½	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x	-	x
New Hampshire	Yes	1½	Str.	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	x	-	-	-	x	-	x
New Jersey	Yes	1½	Comp.	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x
New Mexico	Yes	1½	Str.	1½	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	-	-	x	-	-	x	-	x
New York	Yes	1½	1½	1½	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x	-	x
North Carolina	Yes	1½	-	1½	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	-	-	x	-	-	x	-	x
North Dakota	Yes	-	-	-	Yes	Yes	Yes	Yes	No	No	No	Yes	No	Yes	-	-	x	-	-	x	-	x
Ohio	Yes	1½	Comp.	-	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x
Oklahoma	Yes	1½	-	1½	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	-	-	x	-	-	x	-	x
Oregon	Yes	1½	-	1½	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x	-	x
Pennsylvania	Yes	1½	-	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	-	x	-	-	x	-	x
Rhode Island	Yes	1½	1½	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	x	-	-	-	x	-	-	x
South Carolina	Yes	1½	Comp.	1½	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x
South Dakota	Yes	1½	Comp.	1½	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x	-	x
Tennessee	Yes	1½	-	-	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	-	-	-	-	-	-	-	x
Texas	Yes	Comp.	-	Comp.	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	-	-	x	-	-	x	-	x
Utah	Yes	1½	Comp.	1½	Yes	Yes	Yes	No	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x	-	x
Vermont	Yes	1½	Str.	-	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x
Virginia	Yes	1½	1½	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	x	-	-	-	x	-	-	x
Washington	Yes	1½	1½	1½	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	-	-	x	-	-	x	-	x
West Virginia	Yes	1½	Str.	1½	No	-	Yes	Yes	Yes	Yes	No	No	No	Yes	-	x	-	-	x	-	-	x
Wisconsin	Yes	Str.	Comp.	1½	No	-	Yes	Yes	No	No	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x
Wyoming	Yes	1½	-	1½	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	x	-	-	-	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?
 a. Total b. Limited c. 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?
 a. Highway Department Vehicles only
 b. Vehicles for Several State Agencies
 c. Vehicles for all State Agencies

MAINTENANCE RESPONSIBILITY

28. Is the physical placement and maintenance of signing and marking the responsibility of the Maintenance Division?
 a. Original Placement of Highway Signs
 b. Replacement and Maintenance of Highway Signs
 c. Pavement Marking

MAINTENANCE RESPONSIBILITY

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

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. Have you changed or do you contemplate changing to a maintenance management system or maintenance performance budget method of operations?
 a. Contemplate changing
 b. Have changed
 c. Are in the process of changing
 d. Not under consideration
34. If answer to Question 33 is (b) or (c), for what percentage of your total maintenance work functions has this change been made?
35. If answer to Question 33 is (b) or (c), what percentage of your maintenance work cost is based on the use of a maintenance management system or maintenance performance budget?

RELATIONSHIP, MILES TO NUMBER OF EMPLOYEES

State	Lane Miles			Average Number of Employees			(32)	Maintenance Management System						
	(30a)	(30b)	(30c)	(30d)	(31a)	(31b)		(31c)	(33a)	(33b)	(33c)	(33d)	(34)	(35)
Alabama	3,463	23,460	21,946	48,870	1,755	100	1,855	30.0	-	-	-	x	-	-
Alaska	-	-	-	10,444	530	60	590	17.7	x	-	-	-	-	-
Arizona	4,888	9,958	1,073	15,919	862	11	873	18.2	-	x	-	-	100%	94%
Arkansas	3,006	31,235	-	34,241	2,238	41	2,279	15.0	-	x	-	-	80%	80%
California	23,525	23,664	-	47,189	5,350	312	5,662	8.3	-	x	-	-	100%	100%
Colorado	7,490	17,488	-	24,978	1,351	50	1,401	18.2	-	x	-	-	95%	88%
Connecticut	3,026	7,056	-	10,082	1,730	-	1,730	5.8	-	-	x	-	100%	-
Delaware	224	2,576	6,913	9,713	401	12	413	23.5	-	x	-	-	100%	100%
Florida	6,803	27,562	-	34,365	2,827	-	2,827	-	-	x	-	-	100%	-
Georgia	4,900	34,465	367	39,732	3,047	200	3,247	12.2	-	x	-	-	95%	95%
Hawaii	796	1,893	-	2,189	341	-	341	6.4	x	-	-	-	-	-
Idaho	2,206	9,193	-	11,399	526	100	626	18.0	-	x	-	-	90%	95%
Illinois	6,857	31,585	1,254	39,697	2,994	20	3,014	13.2	x	-	-	-	-	-
Indiana	4,763	28,856	-	29,619	2,367	447	2,814	10.5	-	x	-	-	100%	100%
Iowa	3,507	21,160	-	24,667	1,450	81	1,531	16.1	-	x	-	-	100%	100%
Kansas	2,467	20,087	-	22,549	1,666	68	1,734	13.0	-	-	x	-	100%	100%
Kentucky	4,987	23,190	25,267	53,444	4,041	335	4,376	12.2	-	x	-	-	100%	100%
Louisiana	3,051	19,150	15,358	37,559	3,765	-	3,765	10.0	-	x	-	-	100%	100%
Maine	971	7,006	13,613	21,590	1,335	75	1,410	15.2	-	-	x	-	100%	100%
Maryland	1,941	12,596	4,288	18,825	1,666	55	1,721	10.9	-	x	-	-	100%	100%
Massachusetts	2,921	8,036	481	11,438	1,979	-	1,979	-	-	-	x	-	100%	100%
Michigan	2,496	4,394	-	6,890	829	19	848	8.3	-	x	-	-	38%	44%
Minnesota	3,524	24,931	-	28,455	1,784	28	1,812	15.7	x	-	-	-	-	-
Mississippi	2,537	19,747	352	22,637	1,800	25	1,825	12.4	-	-	x	-	80%	80%
Missouri	5,073	64,006	3,215	72,294	3,495	78	3,573	20.1	-	-	-	x	-	-
Montana	3,905	14,188	-	18,094	520	30	550	33.3	-	-	-	x	-	-
Nebraska	2,540	19,167	-	21,707	942	24	966	22.5	-	x	-	-	100%	100%
Nevada	2,845	9,140	285	12,270	391	80	471	-	-	x	-	-	100%	100%
New Hampshire	883	7,852	413	9,148	735	93	828	10.9	x	-	-	-	-	-
New Jersey	2,330	7,805	862	10,997	1,654	10	1,664	6.1	-	x	-	-	100%	100%
New Mexico	4,065	16,296	7,440	27,801	1,167	8	1,175	23.7	-	x	-	-	99%	99%
New York	3,688	34,343	1,428	39,459	5,356	36	5,392	7.3	-	-	x	-	100%	90%
North Carolina	2,445	143,524	11,102	157,071	7,100	267	7,367	21.3	-	x	-	-	100%	95%
North Dakota	2,220	13,238	-	15,457	362	45	407	38.0	-	x	-	-	100%	100%
Ohio	6,324	35,707	-	42,031	2,339	-	2,339	17.9	-	x	-	-	100%	100%
Oklahoma	2,699	23,733	-	26,432	1,510	25	1,535	17.3	-	x	-	-	100%	100%
Oregon	3,600	15,600	-	19,200	1,250	5	1,255	15.0	-	x	-	-	A11	98%
Pennsylvania	5,400	63,000	-	68,400	7,351	227	7,578	9.0	-	x	-	-	100%	75%
Rhode Island	434	2,600	-	3,034	-	-	-	-	-	-	x	-	75%	60%
South Carolina	2,807	79,191	-	81,908	2,768	-	2,768	29.6	x	-	-	-	-	-
South Dakota	3,024	15,058	-	18,082	609	15	624	29.0	-	x	-	-	100%	100%
Tennessee	4,624	19,829	-	24,453	2,683	-	2,683	9.1	-	x	-	-	100%	100%
Texas	70,578	150,152	-	170,730	7,792	202	7,994	21.4	x	-	-	-	-	-
Utah	3,496	10,238	-	13,734	715	41	756	18.2	-	x	-	-	100%	100%
Vermont	1,434	4,389	-	5,823	509	39	548	10.6	-	-	x	-	25%	25%
Virginia	11,542	99,370	-	110,912	5,565	553	6,018	18.4	-	x	-	-	100%	100%
Washington	4,966	11,710	-	16,676	1,208	62	1,270	13.1	-	x	-	-	A11	A11
West Virginia	2,800	65,000	-	67,800	3,329	-	3,329	20.4	-	x	-	-	90%	80%
Wisconsin	2,580	23,810	-	26,390	68	-	68	388.0	-	-	-	x	-	-
Wyoming	3,643	10,811	700	15,154	400	50	450	33.0	-	x	-	-	80%	95%

36. Average lane miles covered by each general maintenance crew working out of one location (gang or section headquarters)?
37. Average travel distance for each general maintenance crew from gang or section headquarters to farthest point of work?
38. Do you have special crews for traffic signs and striping; and if so, what are the lane miles handled by each crew?
- Same Crew Handles Traffic Signs and Striping
 - Traffic Signs
 - Striping

BASIS OF OPERATIONS

Basis of Crew Operations								:
(36):	(37)	:	(38a)	(38b)	(38c)	:	State	
1,020	20	No	-	Yes 1,020	Yes 5,430		Alabama	
200	-	Yes	4,000	Yes 4,000	-		Alaska	
346	54	No	-	Yes 1,602	Yes 5,306		Arizona	
400	30	No	-	Yes 2,290	Yes 6,870		Arkansas	
98	30	No	-	Yes 4,000	Yes 3,000		California	
65	20	Yes	3,122	-	-	-	Colorado	
74	15	No	-	Yes 2,500	Yes 2,500		Connecticut	
400	40	No	-	Yes 1,022	Yes Contr.		Delaware	
-	30	No	-	Yes -	Yes -		Florida	
235	35	No	-	Yes 880	Yes 4,960		Georgia	
-	28	Yes	416	Yes 508	Yes 508		Hawaii	
141	23	No	-	Yes 1,900	Yes 3,800		Idaho	
300	20	Yes	4,000	Yes 1,800	Yes 4,000		Illinois	
267	30	No	-	Yes 1,667	Yes 3,000		Indiana	
170	20	No	-	No -	Yes 4,111		Iowa	
200	20	No	-	No -	Yes 3,758		Kansas	
450	15	No	4,454	Yes 4,454	Yes 4,454		Kentucky	
606	40	No	-	Yes 3,756	Yes 4,695		Louisiana	
300	18	No	-	Yes 1,000	Yes 3,500		Maine	
110	-	No	-	Yes 600	Yes 2,700		Maryland	
123	20	Yes	270	-	-	-	Massachusetts	
206	25	No	-	Yes 710	Yes 1,950		Michigan	
45	23	No	-	Yes 1,700	Yes 3,400		Minnesota	
250	25	No	-	Yes 250	Yes 3,600		Mississippi	
200	-	No	-	No -	Yes 4,104		Missouri	
129	30	-	-	-	Yes 4,000		Montana	
165	25	No	-	Yes Varies	Yes 3,500		Nebraska	
150	27	Yes	950	Yes 950	Yes 950		Nevada	
92	12+	No	-	Yes 1,501	Yes 1,802		New Hampshire	
133	12	-	-	-	Yes 2,068		New Jersey	
327	42	No	-	Yes 5,560	Yes 6,950		New Mexico	
250	20	No	-	Yes 1,000	Yes 3,000		New York	
350	15	No	-	Yes 1,600	Yes 11,200		North Carolina	
197	30	No	-	Yes 1,932	Yes 7,729		North Dakota	
478	20	Yes	3,503	Yes 3,503	Yes 2,335		Ohio	
300	30	No	-	Yes 3,200	Yes 3,200		Oklahoma	
220	30	No	-	Yes 1,200	Yes 3,800		Oregon	
150	30	No	-	Yes 1,128	Yes 3,148		Pennsylvania	
187	6	No	-	Yes 750	Yes 1,500		Rhode Island	
-	20	No	-	Yes -	Yes -		South Carolina	
204	45	Yes	2,000	-	-	-	South Dakota	
250	25	Yes	3,800	-	-	-	Tennessee	
26	25	No	-	Yes -	Yes -		Texas	
200	40	Yes	2,200	-	-	-	Utah	
156	25	No	-	Yes 1,941	Yes 1,456		Vermont	
460	18	No	-	Yes 1,800	Yes 4,500		Virginia	
124	25	No	-	Yes 600	Yes 2,285		Washington	
-	300	Yes	2,000	-	-	-	West Virginia	
55	10	Yes	1,500	Yes 2,000	No -		Wisconsin	
44	50	No	-	Yes 3,000	Yes 3,000		Wyoming	