

# TRANSPORTATION RESEARCH CIRCULAR

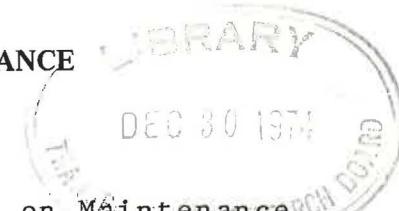
Number 162

c 3

Subject Areas:  
 Personnel Management  
 Maintenance, General

December 1974

## PROGRESS REPORT OF TRB-AASHTO JOINT COMMITTEE ON MAINTENANCE AND OPERATIONS PERSONNEL



Since its formation in 1944, the Joint Committee on Maintenance and Operations Personnel has submitted thirty annual reports. All state highway departments have cooperated in submitting information from which this and the previous reports were compiled.

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.

### SALARIES

During the thirty-year period the average maximum salaries of state maintenance engineers have increased 40%; common laborers, 40%; mechanics, 40%. These classifications, selected at random, give a reasonable cross-section of salary increases and/or adjustments during that period.

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).

### TRANSPORTATION RESEARCH BOARD

NATIONAL RESEARCH COUNCIL NATIONAL ACADEMY OF SCIENCES - NATIONAL ACADEMY OF ENGINEERING  
 2101 CONSTITUTION AVENUE, N.W. WASHINGTON, D.C. 20418

The following are the average monthly salaries of certain positions, by regions, as of July 1, 1974, which gives a reasonable cross-section for the comparison of current salaries in these four regions:

JOB TITLE	AVERAGE SALARY (\$/MO.)				
	: North	: South-	: Mississippi:	:	
	: Atlantic	: eastern	: Valley	: Western	:
	: States	: States	: States	: States	:
State Maint. Engr.	\$ 2136	\$ 1920	\$ 1977	\$ 2077	
District Engr.	2000	1809	1938	2077	
Area Supervisor	1030	829	1024	1286	
Common Laborer	567	446	603	593	
Mechanic	798	656	782	930	
Equip. Oper. I	630	516	600	743	
Equip. Oper. II	661	580	703	850	
Equip. Oper. III	774	645	712	937	

These averages all show an increase over 1973.

#### PERSONNEL POLICIES

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

#### Civil Service or Merit System

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

North Atlantic States . . .	1 state (Pennsylvania) out of the 11 has no such plan.
Southeastern States . . . .	2 states (Arkansas and Tennessee) out of the 11 have no such plan.
Mississippi Valley States .	1 state (North Dakota) out of the 14 has no such plan.
Western States . . . . .	2 states (Montana and Nebraska) out of the 14 have no such plan.

#### Retirement Plan

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

Only four states do not have a compulsory retirement age; the compulsory retirement age is 65 in 23 states; between 65 and 70 in 3 states; 70 in 19 states, and 72 in 1 state. The retirement age is established by statute in 27 states and by policy in 17 states, with 1 state indicating it is governed by both policy and statute.

Forty-four states indicate voluntary retirement is possible at an earlier age after a prescribed number of years. The number of years of service at which voluntary retirement is possible varies from 3½ to 35, and the minimum age varies from 43 up to 65, with five states having no age minimum if a prescribed number of years of service has been met.

#### Vacations and Sick Leave

All 50 states indicated that permanent employees are granted vacation and sick leave. The minimum or starting basis on vacations ranges from 78 to 168 hours per year, and the maximum from 96 to 240 hours per year. Only one state does not allow vacation to be carried over into the ensuing year; of the 49 states where vacation time is cumulative, the maximum that may be carried over into a new year varies from 160 to unlimited, with just 2 states having no limit on the amount of vacation that may be accumulated.

The minimum or starting basis on sick leave ranges from 52 to 240 hours per year, and the maximum from 80 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 192 hours to unlimited, with 29 states having no limit to the amount that may be accumulated.

#### Insurance

Forty-nine states have a partially or wholly state-financed hospitalization plan for their permanent employees, with 15 of these wholly state-financed. The plan is mandatory in 9 states.

Thirty-eight states have a partially or wholly state-financed life insurance plan for their permanent employees, with 17 of these wholly state-financed. The plan is mandatory in 14 states.

In 35 states all or part of the maintenance and operations personnel are protected against lawsuit by a state-financed liability plan.

### Unionization

Forty-three states report partial, complete, or voluntary organization of their maintenance and operations employees in either national unions, local unions, or employee associations, with 7 states indicating no union or employee association organization.

Thirty-nine states have affiliation with local unions or employee associations and twenty-five states have affiliation with national unions. Membership in some type of union is mandatory in 5 states.

### Service Awards

Thirty-nine states have some type of award for years of service.

### Working Hours and Conditions

Thirteen states pay all employees on a monthly or bi-weekly salary basis, with 14 other states paying all permanent field and supervisory employees on a monthly or bi-weekly salary basis. Four states pay all employees on an hourly basis; in 16 other states either all or part of the permanent field employees are paid on an hourly basis.

Forty-three 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 2 states have a more than 40-hour week (one 45-hour week and one 43½). One state reports a 40-hour per week with a 10-hour day.

All states allow either compensatory time, straight time, or time-and-a-half to their permanent field employees. The basis of the overtime allowance is variable in many states, with work on Saturdays, Sundays and holidays paid on a different basis than extra hours on a regular work day. In 21 states supervisory employees do not receive any allowance for overtime work.

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

All states report that they furnish hard hats and safety vests to their employees; 48 states furnish welding goggles and helmets; 42 states furnish some other types of protective clothing, even though minor, to their maintenance employees.

Forty-two states report that they have automatic or automatically recommended salary advances.

Working Hours and Conditions - Continued

Forty-eight states have a formalized job classification plan.

Only five states use convict labor.

Only two 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 7 states, of actual expenses with a maximum in 9 states, and on a per diem basis in 16 states. In 18 states, the basis for meals and lodging differs.

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

Maintenance Responsibility

The Maintenance Division is responsible for all or part of the original placement of highway signs in 20 states, for their replacement and maintenance in 39 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 34 states this is limited to highway department vehicles only, while in 9 states servicing is performed for some other state agencies and in 5 states for all State agencies.

Lane Miles

The average lane miles per man varies from 5.2 to 40.0. Traffic volumes per man (vehicle miles per man) vary from 2.3 million to 29.1 million.

Maintenance Management System

Thirty-four states have changed or are in the process of changing to a maintenance management system or maintenance performance budget method of operation, with 21 of these states indicating 100 percent of their functions and costs are now under this system. Nine states contemplate making this change, while 6 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 16 to 845 according to the answers given.

The travel distance from a gang or section headquarters to their farthest point of work varies from 10 to 58, with 30 states reporting 25 or under.

Forty-four states have special crews for traffic signs, with the lane miles handled by each crew varying from 200 to 4,000.

Forty-eight states have special crews for striping, with the lane miles handled by each crew varying from 270 to 10,740.

The wide variance in the mileage handled by these special signing and striping crews may indicate some misinterpretation; however, the mileage per crew is sufficient to make it evident that travel time being paid does have an effect on production costs.

TRB COMMITTEE A3C03

TRB-AASHTO JOINT COMMITTEE ON MAINTENANCE AND OPERATIONS PERSONNEL

DEFINITIONS OF MAINTENANCE AND OPERATIONS PERSONNEL TITLES

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

MAINTENANCE PERSONNEL TITLES

<u>Title No.</u>	<u>Title &amp; Description</u>
1.	<u>State Maintenance Engineer</u> - One in an executive capacity who supervises all activities of maintenance for the State Highway 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 state called <u>Division Engineer</u> ) - One in an executive capacity who supervises highway activities within a district.

Definitions of Maintenance and Operations Personnel Titles  
(5-30-74)

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

Definitions of Maintenance and Operations Personnel Titles  
(5-30-74)

<u>Title</u>	<u>No.</u>	<u>Title &amp; Description</u>
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.
<u>TRAFFIC OPERATIONS PERSONNEL TITLES</u>		
19.		<u>State Traffic Engineer</u> - One in an executive capacity who supervises all activities related to traffic operations of the State Highway Department.
20.		<u>Assistant State Traffic Engineer</u> - One who assists the State Traffic Engineer in the work of supervising traffic operations.
21.		<u>District Traffic Engineer</u> - One in an executive capacity who supervises traffic operations within a district.
22.		<u>Assistant District Traffic Engineer</u> - One who assists the District Traffic Engineer in the work of supervising traffic operations within a district.
23.		<u>Traffic Supervisor</u> - One who directs the activities of all employees and equipment related to traffic operations within a district.
24.		<u>Sign Supervisor</u> - One who directs the activities of all signing, both fabrication and erection.
25.		<u>Sign Shop Foreman</u> - One who directs a crew of men in the activity of fabricating traffic signs.
26.		<u>Traffic Signal &amp; Lighting Foreman</u> - One who directs a crew of men in activities related to the operation and maintenance of traffic signals and lighting.
27.		<u>Striper Foreman</u> - One who directs a crew of men in activities related to pavement markings.
28.		<u>Sign Erection Foreman</u> - One who directs a crew of men in activities related to the erection and maintenance of all traffic signs.
29.		<u>Sign Fabricator</u> - One who specializes in the fabrication of traffic signs.
30.		<u>Sign Technician</u> - One who operates equipment and supervises laborers for all activities associated with signing, both fabrication and erection.

Definitions of Maintenance and Operations Personnel Titles

(5-30-74)

Page 4

Title No.	<u>Title &amp; Description</u>
31.	<u>Traffic Signal &amp; Lighting Technician</u> - One who works in a technical capacity for operating and maintaining traffic signal equipment and highway lighting.
32.	<u>Striper Technician</u> - One who operates equipment and supervises laborers regarding all activities of pavement markings.

OTHER RELATED PERSONNEL TITLES

33. Chief Engineer - One in an executive capacity who supervises all engineering activities of a State Highway Department.
34. Project Engineer - One who has charge in the field of one or more highway construction projects under the general supervision of a Division Construction Engineer or a Division Engineer.
35. Clerk or Timekeeper - One who keeps the time records of employees, hours of equipment usage, quantities of materials received, used, and on hand; maintenance cost records, etc.

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 Operations."

## MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL TITLES USED BY STATE HIGHWAY DEPARTMENTS (as of JULY 1, 1974)

MAINTENANCE PERSONNEL:		(1)	(2)	(3)	(4)
State		State Maintenance Engineer	Assistant State Maintenance Engineer	District Engineer	District Maintenance Engineer
Alabama	State Maint. Engr.	Asst. St. Maint. Engr.	Division Engineer	Asst. Div. Engr.-Maint.	
Alaska	State Maint. Engr.	Asst. St. Maint. Engr.	District Engineer	Dist. Maint. Engr.	
Arizona	Asst. State Engr.-Maint.	Maint. Oper. Engr.	District Engineer	Dist. Maint. Engr.	
Arkansas	Engr. of Maint. Division	Highway Civil Engr. V	District Engineer	Hwy. Dist. Maint. Supt. II	
California	Chief, Branch	Chief Section	Dist. Dir. of Transp.	Chief, Branch	
Colorado	Staff Maint. Supt.	-	District Engineer	Maint. Supt.	
Connecticut	Dir. of Maintenance	Maint. Manager II	-	Maint. Manager I	
Delaware	Chief, Maintenance	-	District Engineer	Dist. Engineer	
Florida	State Maint. Engr.	Deputy St. Maint. Engr.	District Engineer	Dist. Maint. Engr.	
Georgia	Civil Engineer VII	Civil Engineer V Asst. Chief	Civil Engineer VI	Civil Engineer IV	
Hawaii	Chief, Highways Division	Constr. & Maint.	District Engineer	Dist. Maint. Engr.	
Idaho	Maintenance Engineer	Asst. Maint. Engr.	District Engineer	Dist. Maint. Engr. Supt.	
Illinois	Engr. of Maintenance	Maint. Section Chief Asst. Chief	District Engineer	Dist. Maint. Engr.	
Indiana	Chief, Div. of Maint.	Div. of Maint.	District Engineer	Dist. Maint. Engr.	
Iowa	Maintenance Engr.	Asst. Maint. Engr.	District Engineer	Dist. Maint. Engr.	
Kansas	Engr. of Maint.	Asst. Engr. of Maint. Asst. Dir.,	Division Engineer	Div. Maint. Engr.	
Kentucky	Dir., Div. of Maint.	Div. of Maint.	District Engineer	Asst. Dist. Engr. Oper.	
Louisiana	Chief Maint. & Oper. Engr.	Road Maint. Engr. Bridge Maint. Engr.	District Engineer	Asst. Dist. Engr.-Maint.	
Maine	Engr. of Maint. & Operations	Highway Maint. Engr. Chief, Bureau of	Division Engineer	Division Supervisor	
Maryland	Asst. Chief Engr.-Maint.	Highway Maint.	District Engineer	Asst. Dist. Engr.-Maint.	
Massachusetts	Maintenance Engineer	Asst. Maint. Engr. Asst. Engr. of	Dist. Hwy. Engr.	Dist. Maint. Engr.	
Michigan	Engr. of Maint.	Maint. Operations	-	Dist. Maint. Engr.	
Minnesota	St. Maint. & Eq. Engr.	Maint. Admin. Engr.	District Engineer	Area Maint. Engr.	
Mississippi	Maint. Engr.	Asst. Maint. Engr.	District Engineer	Dist. Maint. Engr.	
Missouri	Div. Engr. Maint. & Traffic	Asst. Div. Engr.-Maint.	District Engineer	Dist. Maint. & Traf. Engr.	
Montana	Administrator-Maint.	Asst. Admin.-Maint.	-	Chief - Field Maint.	
Nebraska	Engineer VII	Maint. Ops. Manager	Dist. Hwy. Engr. I, II, III	Dist. Hwy. Maint. Supt.	
Nevada	Chief Maint. Engr.	Asst. Maint. Engr.	District Engineer	-	
New Hampshire	Maint. Engr. Chief Engr.	Asst. Maint. Engr.	Division Engineer	-	
New Jersey	Constr. & Maint.	Chief, Bur. of Maint.	Regional Engr.-Transp.	District Supt.	
New Mexico	Engr. of Maint.	Maint. Engr.	Engineer V Regional Director	Engineer III Regional Hwy. Maint.	
New York	Dir. of Transp. Maint.	Dir. of Hwy. Maint.	of Transportation	Engr. A, B, C. Dist. Engr. &	
North Carolina	Head of Maint.	Area Maint. Engr.	Division Engr.	Bridge Maint. Engr.	
North Dakota	Maint. Engr.	Asst. Maint. Engr.	District Engr.	-	
Ohio	Maint. Engr.	Asst. Maint. Engr.	District Deputy Dir. of Transportation	Dist. Oper. Engr.	
Oklahoma	State Maint. Engr.	Asst. St. Maint. Engr.	Division Engr.	Asst. Div. Engr. for Main	
Oregon	Asst. St. Hwy. Engr.-Ops.	-	Regional Engr.	-	
Pennsylvania	Civil Engr. VI	Civil Engr. V	Hwy. Dist. Engr. II or III Adm. Officer VorHMS VI		
Rhode Island	Maint. Engr.	Chief Maint. Oper.	Sr. Civil Engr.	-	
South Carolina	Maint. Engr.	Asst. Maint. Engr. Engr. of Maint. Planning	District Engr.	Dist. Maint. Engr.	
South Dakota	Engr. of Maint.	Engr. of Maint. Oper.	District Engr.	Dist. Maint. Engr.	
Tennessee	State Maint. Engr.	Asst. St. Maint. Engr.	REgional Engr.	Regional Maint. Engr.	
Texas	Chief Engineer Maint. & Operations	-	District Engr.	Dist. Maint. Engr. Supv. Maint. Engr.	
Utah	Engr. for Maint.	Maint. Engr.	Dist. Maint. Engr.	Dist. Maint. Engr.	
Vermont	State Maint. Engr.	Asst. St. Maint. Engr.	District Engr.	Asst. Dist. Engr.	
Virginia	State Hwy. Maint. Engr.	St. Hwy. Asst. Maint. Engr.	Hwy. Dist. Engr.	Hwy. Asst. Dist. Engr.	
Washington	Asst. Dir. of Hwys. for Maint.	Asst. Maint. Engr.	District Engr.	Dist. Maint. Engr.	
West Virginia	Chief Engr. - Maint.	Asst. Dir. - Maint.	District Engr.	Asst. Dist. Engr.-Maint.	
Wisconsin	Chief Maint. Engr. State Constr. & Maintenance Engr.	Asst. Chief Maint. Engr.	District Engr.	Dist. Chief Maint. Engr.	
Wyoming	-	-	District Engr.	Dist. Maint. Engr.	

(5) Assistant District Maintenance Engineer	(6) Resident Maintenance Engineer	(7) Area Supervisor	(8) Gang Foreman	(9) Sectionman	State
-	District Engineer	Hwy. Supt. I & II	Highway Foreman	Highway Camp Guard	Alabama
Asst. Dist. Maint. Engr.	-	Area Foreman	Maint. Foreman	Lead Foreman	Alaska
-	-	Hwy. Maint. Foreman	-	-	Arizona
Hwy. Dist. Maint. Supt. I	Hwy. Spec. Maint. Supervisor	Hwy. Area. Maint. Supv.	-	Crew Leader	Arkansas
Chief, Section	-	Highway Superintendent	Hwy. Maint. Supv.	Hwy. Maint. Worker III	California
Asst. Maint. Supt.	-	Sr. Hwy. Foreman	Highway Foreman	Sr. Hwy. Maint.	Colorado
Maint. Operations Supt.	-	Maint. Gen. Foreman	Maint. Foreman	Maint. Crew Leader	Connecticut
Asst. Dist. Maint. Engr.	Hwy. Maint. Oper. Manager	Hwy. Maint. Supt.	Hwy. Maint. Supv.	Labor Foreman I,II,III	Delaware
Asst. Dist. Maint. Engr.	Maint. Engineer	Hwy. Maint. Foreman II	Hwy. Maint. Foreman I	Hwy. Maint. Tech. III	Florida
Civil Engr. II & III	Hwy. Maint. Engr.	Hwy. Maint. Supt.	Hwy. Maint. Foreman II	Hwy. Maint. Foreman I	Georgia
-	-	Hwy. Const. & Maint. Supt.	Hwy. Const. Maint. Forem. Bridge Maint. Forem. et al	Hwy. Labor Foreman Hwy. Maint. Foreman et al	Hawaii
-	-	-	Spec. Hwy. Maint. Foreman	Hwy. Maint. Foreman	Idaho
-	Maint. Field Engr.	-	Lead Worker	Hwy. Maint. Man	Illinois
Asst. Dist. Maint. Engr.	-	Sub-dist. Supt.	Highway Foreman	Unit Foreman	Indiana
-	Res. Maint. Engr.	Hwy. Maint. Supv.	Hwy. Maint. Foreman 2&3	Hwy. Maint. Foreman I	Iowa
Division Supt.	-	District Supt.	Dist. & Div. Foreman	Sub-dist. Foreman	Kansas
Dist. Maint. Engr.	-	Maint. Supv.	Highway Foreman	-	Kentucky
Asst. Dist. Maint. Engr.	Res. Maint. Engr.	Superintendent	Foreman I,II,III et al	-	Louisiana
Asst. Div. Engr.	-	Hwy. Dist. Supervisor	Highway Foreman	Crew Leader	Maine
-	Res. Maint. Engr.	Hwy. Maint. Supervisor	Road Foreman	-	Maryland
Asst. Dist. Maint. Engr.	-	Hwy. Maint. Foreman	Hwy. Repair Foreman	Hwy. Repair Working Forem	Massachusetts
Asst. Dist. Maint. Engr.	Dist. Maint. Supt.	Area or Co. Maint. Supt.	Maint. Foreman	-	Michigan
Maint. Oper. Engr.	Included in No. 4	Area Maint. Supt.	Sub-area Maint. Forem.	Hwy. Maint. Worker	Minnesota
-	-	Superintendent II	Foreman I	Hourly Laborers	Mississippi
Maint. Supt.	-	Maint. Area Supv.	Spec. Maint. Foreman	Hwy. Maint. Foreman	Missouri
-	-	Maint. Foreman	-	Maint. Supv. I	Montana
-	-	Hwy. Maint. Supt.	Hwy. Maint. Foreman II	Hwy. Maint. Foreman I	Nebraska
Asst. Dist. Engr. Maint.	-	Hwy. Maint. Supt.	Sr. Hwy. Maint. Foreman	Hwy. Maint. Foreman	Nevada
Asst. Div. Engr.	Maint. Supervisor	Constr. Supt.	Constr. Foreman	Hwy Patrolman	New Hampshire
Asst. Dist. Supt.	Dist. Maint. Supv.	Area Supervisor	Foreman, Hwy. Maint.	Asst. Forem. Hwy. Maint.	New Jersey
-	-	Hwy. Maint. Supt.	Hwy. Maint. Forem. 2 Hwy. Gen. Maint. Foreman Bridge Repair Foreman	Hwy. Maint. Forem. 1	New Mexico
Sr. C. E. Asst. C. E.	Resident Engr. A-B	-	-	Hwy. Light Maint. Forem.	New York
Asst. Dist. Engr.	Road Maint. Supv.	Maint. Foreman IV	Maint. Foreman II, III	Maint. Foreman I	North Carolina
Asst. Dist. Engr.	-	Maint. Supervisor	Foreman	Leadman	North Dakota
Dist. Maint. Engr.	Field Engr.	Hwy. Maint. Supt. 3	Hwy. Worker 4	Hwy. Worker 3	Ohio
Area Maint. Engr.	-	Dist. Foreman	Constr. Supt. I & II	-	Oklahoma
Region Maint. Engr.	District Engr.	-	Hwy. Maint. Fore. 1,2,3,4	Hwy. Maint. Foreman I	Oregon
Civil Engr. III or Hwy.	Hwy. Maint. Supt. III,	-	-	-	Pennsylvania
Maint. Supt. IV or V	IV or V	Hwy. Maint. Supt. II	Highway Foreman	Highway Foreman	-
-	-	Hwy. Maint. Supv.	Road Maint. Foreman Hwy. Maint. Crew Supv. I-III	Laborer	Rhode Island
-	Res. Maint. Engr.	-	-	-	South Carolina
-	-	Maint. Supt.	Hwy. Maint. Forem. I & II	Hwy. Maint. Forem. I&II	South Dakota
Asst. Reg. Maint. Engr.	Dist. Maint. Engr.	Co. Maint. Supv. Maint. Const. Supv. I&II	Reg. Maint. Supt.	Foreman	Tennessee
Asst. Dist. Maint. Engr.	-	Sr. Marine Supv.	Maint. Const. Fore. II&III	Maint. Const. Forem. I	Texas
-	-	Dist. Maint. Oper. Supv.	Hwy. Foreman 11F	Station Foreman 11F	Utah
Asst. Dist. Maint. Engr.	-	Hwy. Maint. Gen. Foreman	Hwy. Maint. Man C	Hwy. Maint. Man B	Vermont
-	Hwy. Res. Engr.	Hwy. Maint. Supt. B	Hwy. Foreman	-	Virginia
Asst. Dist. Maint. Engr.	Hwy. Maint. Supt.	-	Maint. Asst. Supt. Maint. Supervisor	Maint. Tech. I&II Maint. Lead Tech.	Washington
-	-	Co. Maint. Supv.	Asst. Co. Maint. Supv.	Foreman	West Virginia
Area Maint. Supv.	-	Asst. Area Supv.	County Employees	County Employees	Wisconsin
Admin. Assistant	Included in No. 7	Hwy. Foreman II	Hwy. Foreman I	Sr. Hwy Maint. Man	Wyoming

## MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL TITLES USED BY STATE HIGHWAY DEPARTMENTS (as of JULY 1, 1974) - Page 2

State	:MAINTENANCE PERSONNEL (cont'd):			
	(10)	(11)	(12)	(13)
	Common Laborer	Skilled Laborer	Shop Superintendent	Garage or Shop Foreman
Alabama	Laborer	Welders, Carpenters	Equip. Maint. Dir.	Equip. Maint. Supt.
Alaska	-	Skilled Laborer	-	Garage or Shop Foreman
Arizona	Laborer	-	Equip. Service Manager	Equip. Shop Supv. Equip. Mech. Foreman
Arkansas	Laborer I & II	Carpenter, Welder	Hwy. Dist. Equip. Supv.	Auto/Diesel Mech. Supt.
California	Hwy. Maint. Worker I	Skilled Laborer	Hwy. Equip. Supt. I or II	Hwy. Mech. Supv. I or II
Colorado	Utility Worker	-	Sr. Auto Shop Foreman	Auto Shop Foreman
Connecticut	Dept. of Trans. Maintainer	Trades Journeyman	-	Hwy. Garage Foreman
Delaware	Laborer I	Laborer II	Hwy. Equip. Supt.	Auto Supervisor
Florida	Hwy. Maint. Tech. I	Hwy. Maint. Tech. II	Shop Foreman	Mechanic II
Georgia	Laborer I & II	Skilled Laborer H.M.	Maint. Shop Admin.	Dist. Mechanic Asst. Dist. Mechanic
Hawaii	General Laborers, Trade Helpers	Bridge Maint. Man. Carpenters	Auto Mech. Foreman	Auto Mech. II
Idaho	Laborer	Maint. Carpenter	-	Shop Foreman
Illinois	Hwy. Maint. Worker	-	-	-
Indiana	Laborer	Sign Equip. Painter	Shop Foreman	General Mechanic
Iowa	Custodial Worker Maint. Worker I	-	Auto Shop Supv.	Auto Mech. Foreman
Kansas	Laborer I	Laborer II	Shop Supt.	Auto Mech. II
Kentucky	Laborer A	Carpenters, Painters, Plumbers	Garage Foreman	-
Louisiana	Laborer, Utility Bridgeman	Welder, Painter, et al	Shop Supt. I & II	-
Maine	Hwy. Maintenance I	Carpenter, Painter	Equip. Supt.	Auto Mech. Foreman
Maryland	Hwy. Worker I	Hwy. Worker II	Dist. Equip. Supv.	Shop Foreman
Massachusetts	Laborer	Skilled Laborer	Supt. Shop & Equip.	Dist. Hwy. Eq. Foreman
Michigan	Worker 05-06	Electrician 06-07	-	Hwy. Stru. Maint. For. 07
Minnesota	Laborer I	Bridge Worker	Shop Supervisor	Chief Shop Foreman
Mississippi	General Laborer I	General Laborer II	Shop Foreman III	Shop Foreman I
Missouri	-	-	Dist. Garage Foreman	Chief Shop Mechanic
Montana	Maintenanceman I	Maintenanceman II	Maintenanceman VI	Shop Foreman
Nebraska	-	-	Auto Equip. Repair Supt.	Auto Equip. Repair Supt.
Nevada	Hwy. Maint. Laborer	Hwy. Maintenance	Hwy. Equip. Opr. Supv.	Supv. Equip. Mech. 2
New Hampshire	Hwy. Maintainer I	Hwy. Patrolman Asst.	Equip. Engr.	Garage Foreman
New Jersey	Maint. Worker I	Bridge Repair I & II Const. Repair I & II	Master Mechanic	Garage Sub-Foreman
New Mexico	Utility Work. 1	Utility Work 2	Auto Shop Foreman 2	Foreman Mechanic M/W
New York	Laborer	Maint. Man, Tree Pruner Bridge Repairman	Motor Equip. Manager	Auto Shop Foreman 1
North Carolina	Gen. Utility Man Laborer	Maint. Mechanic Skilled Bridgeman	Equip. Supt.	Mechanic Foreman I & II
North Dakota	-	Tradesman, Trades Helper	Shop Foreman	-
Ohio	Hwy. Worker I	Carpenter, Electrician	Executive 5	Hwy. Maint. Supt. 2
Oklahoma	-	Hwy. Maintenanceman II	Auto Shop Supervisor	Shop Foreman
Oregon	Laborer	-	Hwy. Shop. Supt.	Hwy. Shop Foreman
Pennsylvania	Hwy. Maint. Worker Semi-Skill Laborer	Welder, Carpenter, Mason Painter	-	Auto. Eq. Foreman
Rhode Island	Semi-Skilled Lab.	-	-	-
South Carolina	Hwy. Maint. Worker I	Hwy. Maint. Worker II, IV	-	Trades Worker Supv.
South Dakota	-	Mechanic I I	Equip. Shop Foreman I & II	-
Tennessee	Utilityman	Electrician, Welder, Carpenter	Reg. Garage Supt.	Dist. Chief Mechanic
Texas	Maint. Tech. I	Maint. Tech. II & III	Shop Foreman IV	Shop Foreman II & III
Utah	Maintenance Worker	Carpenter, Painter	Shop Supervisor	Shop Foreman II F
Vermont	Hwy. Maintenance Man A	Electrician	Supt. Hwy. Garage	Garage or Shop Fore.
Virginia	Hwy. Maint. Helper	Skilled Laborer	Hwy. Dist. Equip. Supt.	Hwy. Eq. Repair Foreman
Washington	Laborer	Hwy. Maint. Specialist	Hwy. Equip. Supt.	Equip. Supv. - Hwys.
West Virginia	Laborer	Craftsman III	Dist. Equip. Supv.	Dist. Shop Foreman
Wisconsin	-	Hwy. Maintenance	Dist. Shop Foreman	Shop Foreman I & II
Wyoming	Laborer	-	-	-

(14)	(15)	(16)	(17)	(18)	
Mechanic	Mechanic Helper	Equipment Operator I	Equipment Operator II	Equipment Operator III	State
Auto Mechanic Mech.	Asst. Mechanic	Equipment Operator I	Equipment Operator II	Equipment Operator III	Alabama
Mechanic	Mechanic Helper	Light Duty Mechanic	Equipment Operator II	Equipment Operator III	Alaska
Equipment Mechanic 2	Equip. Mech. 1	Hwy. Maintenanceman 1	Hwy. Maintenanceman 2	Hwy. Maintenanceman 3	Arizona
Auto/Diesel Mech.	Auto Serviceman 1&2	Equipment Operator I	Equipment Operator II	Equipment Operator III	Arkansas
Heavy Equip. Mech.	Mechanic Helper	Hwy. Maint. Worker I	Hwy. Maint. Worker II	-	California
Auto & Equip. Mech.	Auto Maint. Man	Hwy. Maint. Man	Equipment Operator	Heavy Equip. Oper	Colorado
Trade Journeyman	DOT Maintainer 3&4	Included in No. 10	DOT Maintainer 2	DOT Maintainer 3	Connecticut
Auto Mechanic I,II, III	Auto Serviceman	Equipment Oper. I	Equipment Operator II	Equipment Operator III	Delaware
Mechanic II	Mechanic I	Hwy. Maint. Tech. I	Heavy Equip. Oper. I	Heavy Equip. Oper. II	Florida
Hwy. Maint. Mech. I&II	Laborer II	Equip. Oper. I	Hwy. Maint. Equip. Oper. I	Hwy. Maint. Equip. Opr. II	Georgia
Auto Mech. I, Machinist	Auto Mech. Helper & Auto Serviceman	Tractor Opr., Equip. Opr. I	Heavy Truck Drive Truck Driver	Equip. Opr. IV Grader Operator	Hawaii
Mechanic	Mechanic Helper	Hwy. Maint. Opr. I	Hwy. Maint. Opr. II	Hwy. Maint. Opr. III	Idaho
Auto Mechanic	Auto Mech. Helper	Hwy. Maint. Eq. Opr.	Hwy. Const. Eq. Opr.	Power Shovel Opr.	Illinois
Mechanic	Mechanic Helper	Equip. Opr. I	Equipment Operator II	Equipment Operator III	Indiana
Auto Mechanic	Auto Mech. Helper	Hwy. Maint. Man. 1	Hwy. Maint. Man 2	Hwy. Maint. Man 3	Iowa
Auto Mech. I	Auto Mech. Helper	Equip. Opr. I	Equipment Operator II	Equipment Operator III	Kansas
Mechanic	Mechanic Helper	Lt. Equip. Oper.	Heavy Equip. Operator	Spec. Equip. Operator	Kentucky
Mechanic I,II,III	Trades Helper Mech. Apprentice	Equipment Operator I	Equipment Operator II	Equipment Operator III	Louisiana
Auto Mechanic	Laborer II	Hwy. Maintenanceman II, IIIa	Hwy. Maintenanceman III	Hwy. Maintenanceman IV	Maine
Auto Electrician					
Auto Service Mech.	Auto Service Helper	Motor Equip. Opr. I	Motor Equip. Opr. II	Motor Equip. Opr. III	Maryland
Motor Eq. Repairman	Mech. Handyman Skilled Lab.	-	-	Maint. Equip. Opr.	Massachusetts
Auto Repair Foreman	-	Hwy. Equip. Opr. 05	Hwy. Equip. Opr. 06	-	Michigan
Heavy Eq. Mechanic	Heavy Eq. Mech. Apprentice	Included in No. 9	Heavy Eq. Opr.	Included in No. 17	Minnesota
Equip. Mechanic II	Equip. Mech. I	Equip. Opr. I	Equip. Opr. II	Equip. Opr. III	Mississippi
Shop Mechanic	Mechanic Helper	Maintenance man	Maint. Crew Leader	Dragline Opr.	Missouri
Maintenanceman V	Maintenanceman III	Maintenanceman III	Maintenanceman IV	Maintenanceman V	Montana
Auto Mechanic II	Auto Mechanic I	Hwy. Maintenanceman I	Hwy. Maintenanceman II	Hwy. Maintenanceman III	Nebraska
Equip. Mech. 2	-	-	-	Spec. Eq. Opr.	Nevada
Heavy Equip. Mech.					
Auto Mechanic	Trades Helper	Hwy. Maintainer II	Hwy. Maintainer III	-	New Hampshire
Mechanic	Mechanic Helper	Truck Driver	Equip. Operator	Heavy Eq. Operator	New Jersey
Auto Mechanic	-	Equip. Operator I	Equip. Operator 2	Equip. Operator 3	New Mexico
Motor Eq. Repairman	Maint. Man Mech.	Hwy. Equip. Opr.	Const. Equip. Opr.	Cranes & Shovel Opr.	New York
Mechanic I & II	Trades Helper	Truck Dr. & Mach. Opr. I	Machine Opr. II & III	Machine Opr. IV&V	North Carolina
Mechanic A & B	Apprentice B	Included in No. 17	Equip. Operator	Included in No. 17	North Dakota
Auto Mechanic 3	Auto Mech. I	Equip. Opr. 2 Highway Worker 1	Equip. Opr. 3 Hwy. Worker 2	Equip. Opr. 4 Hwy. Worker 4	Ohio
Auto Mechanic I&II	Auto Mech. I	Equip. Operator I	Equipment Operator II	Equip. Operator III	Oklahoma
Heavy Equip. Mech.	-	Hwy. Maint. Man 1 & 2	Hwy. Maint. Man 3	Hwy. Maint. Man 4	Oregon
Auto Mech. I & II	Tradesman Helper	Equip. Opr. I & II	Equip. Opr. III	Equip. Opr. IV	Pennsylvania
Diesel Mechanic	-				
	Mechanic Helper	Heavy Motor Eq. Opr.	Motor Eq. Opr.	-	Rhode Island
Auto Mechanic	Trades Helper	Included in No. 11	Included in No. 11	Included in No. 11	South Carolina
Mechanic I & II	Eq. Service Worker I&II	Hwy. Maint. Worker I	Hwy. Maint. Worker II	Hwy. Maint. Worker III	South Dakota
Mechanic	-	Dist. Heavy Eq. Opr.	Reg. Heavy Eq. Opr.	-	Tennessee
-	-	-	-	-	Texas
Mechanic 10W	Auto Serviceman	Highway 8W Operations Specialist	Highway 10W Operations Specialist	Highway 11W Operations Specialist	Utah
Mechanic 11W					
Motor Eq. Repairman C	Motor Eq. Repairman B	-	Equip. Operator B	Equip. Operator C	Vermont
Hwy. Equip. Mech. A-B	Hwy. Eq. Mech. Helper	Hwy. Eq. Opr. A	Hwy. Equip. Opr. B	Hwy. Equip. Opr. C	Virginia
Hwy. Eq. Mechan. I&II	Shop Asst. Service	-	Equip. Opr. II - Hwys.	Equip. Opr. III-Hwys.	Washington
Mechanic	-	Equip. Opr. I	Equip. Opr. II	Equip. Opr. III	West Virginia
COUNTY EMPLOYEES					→ Wisconsin
Mechanic II	Mechanic I	Equipment Operator	Heavy Eq. Operator	Included in No. 17	Wyoming

## MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL TITLES USED BY STATE HIGHWAY DEPARTMENTS (AS OF JULY 1, 1974) - Page 3

<u>TRAFFIC OPERATIONS PERSONNEL:(19)</u>		<u>(20)</u>	<u>(21)</u>	<u>(22)</u>
<u>State</u>	<u>: State Traffic Engineer</u>	<u>Assistant State Traffic Engineer</u>	<u>District Traffic Engineer</u>	<u>Assistant District Traffic Engineer</u>
Alabama	Traffic Engineer	-	Div. Traffic Engr.	Asst.Div.Traf. Engr.
Alaska	St.Traf.& Planning Engr.	Asst.St.Traf.Engr.	Dist.Traf. Engr.	Asst.Dist.Traf.Engr.
Arizona	Asst.St.Engr.-Traffic	Traf.Engr.Operations	Dist. Traf. Engr.	-
Arkansas	Chief Traf. Div.	Asst. Chief Traf.Div.	-	-
California	Chief, Branch	Chief, Section	Chief, Branch	Chief, Section
Colorado	Traffic Engr.	Asst. Traf. Engr. Chief of Traffic Engineering	Traf. & Safety Engr.	-
Connecticut	Manager of Traffic	Deputy St. Traf. Oper. Engr.	Admin. Section Chief	-
Delaware	Chief, Bur. of Traf. State Traf.	-	Dist.Traf.Oper.Engr.	Asst.Dist.Tr.Op.Engr.
Florida	Operations Engr.	Civil Engr. VII	Dist.Traf.Oper.Engr.	Asst.Dist.Tr.Op.Engr.
Georgia	Civil Engr. VII	Civil Engr. V& VI	Civil Engr.II & III	Traf.Survey Engr.CE II
Hawaii	Traffic Engr.	Asst. Traf. Engr.	-	-
Idaho	Traffic Engr.	Asst. Traf. Engr. Operations	Dist.Traf.Engr./Supt.	-
Illinois	Engr. of Traffic	Section Chief	Dist. Traf. Engr.	Traf. Oper. Engr.
Indiana	Chief,Div. of Traf.	Asst. Chief	Dist. Traf. Engr.	Asst. Chief, Dist. Traf. Engr.
Iowa	Safety & Traf.Engr.	Traf. Engr.	Dit. Traf. Engr.	-
Kansas	Hwy. Marking Engr. Director,	-	-	-
Kentucky	Div. of Traffic	Asst.Dist. Div.of Traf.	Dist. Traf. Engr.	Asst.Dist. Traf. Engr.
Louisiana	Traf. & Planning Engr.	Asst.Traf.& Plan.Engr.	Dist. Traf. Engr.	-
Maine	Traffic Engr.	Asst. Traf. Engr.	Distr. Traf. Engr. Regional Traf.	-
Maryland	Asst.Chief Engr.-Traf.	Asst.Chief-Traf. Div.	Engr. TE V	Traf. Engr. TE IV
Massachusetts	Traffic Engineer	Asst. Traf. Engr. Asst.Engr. of Traf.& Safety	Dist. Traf. Engr.	Asst.Dist.Traf.Engr.
Michigan	Engr.Official & Safety	Asst. Engr. of Traf.& Safety	Dist. Traf. & Safety	Asst.Dist.Traf.& Sat. Engr.
Minnesota	State Traffic Engineer	Traf.Control Engr.	Dist.Traf. Engr.	Asst.Dist.Traf. Engr.
Mississippi	Traffic Control	Asst. Traf. Control	-	-
Missouri	& Safety Engr.	& Safety Engr.	-	-
Missouri	Div. Engr.Maint.& Traf.	Asst.Div. Engr. Traf.	Traffic Engr.	Dist. Traffic Studies Engr.
Montana	Manager Traf. Design	Asst. Manager Traf. Design	Field Traf. Engr.	-
Nebraska	Engineer VI	-	-	-
Nevada	Chief Traf. Engr.	Hwy. Engr. 4 - Traf.	Hwy. Engr. 2 -Traf.	-
New Hampshire	Traffic Engr.	-	-	-
New Jersey	Chief, Bureau of Electrical	Supt.Electrical, Const.Maint.& Opers.	Dist. Supv.Electrical	Asst. Dist.Supv. Electrical
New Mexico	Engineer IV Director,	Engineer I Chief, Safety Stds.	Engineer II	-
New York	Traffic and Safety	& Systems Bureau	Reg. Traf. Engr.	Sr.Civil Engr.-Traf.
North Carolina	Manager of Traffic Engineering	Asst. Manager of Traffic Engineering	Included in No. 3	Asst.Div. Engr.-Maint.
North Dakota	Traffic Engr.	-	-	-
Ohio	Traffic Engr.	Asst. Traf. Engr.	Dist. Traf. Engr.	Asst.Dist.Traf.Engr.
Oklahoma	Chief Traf. Engr.	-	Div. Traf. Engr.	-
Oregon	TRAFFIC OPERATIONS UNDER DIRECTION OF REGIONAL ENGINEERS Incl. in No. 5			
Pennsylvania	Civil Engineer VI	Civil Engr. V	Civil Engr. IV or III Traf.Control Specialist	Civil Engr. III
Rhode Island	State Traf. Engr.	-	-	-
South Carolina	Traf. & Planning Engr.	Asst. Traf. & Planning Engr.	Dist. Traf. & Planning Engr.	-
South Dakota	Traffic Engr.	Traf. Oper. Engr. Traf. Design Engr.	Dist. Traf. Engr.	Traf. Engr. Asst.
Tennessee	State Traf. Engr.	Asst.St.Traf.Engr.	Regional Traf.Engr.	-
Texas	-	-	Included in Nos.4 & 5	-
Utah	Engineer for Traf. & Safety	Traf.Design-Traf.Safety Traf.Oper.-Office Mgr.	Dist. Traf. Engr.	Traffic Engr.
Vermont	State Traffic Engr.	Asst.St.Traf.Engr.	-	-
Virginia	State Traffic & Safety Engineer	Asst. Traf. & Safety Engr.	Hwy.Dist.Traf.Engr.	Hwy.Traf. Engr.A
Washington	Traffic Engr. Director,	Traf.Operations Engr.	Dist. Traf. Engr.	Asst.Dist.Traf.Engr.
West Virginia	Traffic Engr. Div.	Asst.Dir.,Traf. Engr.	Regional Traf.Engr.	Asst.Reg.Traf.Engr.
Wisconsin	Chief, Traffic Engr.	Asst.Chief Traf.Engr.	Dist.Chief Traf.Engr.	Asst.Dist.Traf.Engr.
Wyoming	St.Traffic Engr.Opers.	Section Supervisor	Dist. Traf. Engr.	-

(23)	(24)	(25)	(26)	(27)	
Traffic Supervisor:	Sign Supervisor	: Sign Shop Foreman	: Traffic Signal & Lighting Foreman	: Striper Foreman	: State
-	-	Sign Shop Foreman	-	-	Alabama
-	-	Sign Shop Foreman	-	Striper Foreman	Alaska
Hwy. Marking Supt.	Hwy. Maint. Supv.	Sign Shop Foreman	Traffic Sig.Supt. Traf.Sign& Lt.Foreman	Hwy.Marking Foreman	Arizona
-	Hwy. Sign Supv.	Hwy. Sign Supv.	-	Hwy. Sign Man II	Arkansas
-	Hwy.Supt.Spec.Crews	Hwy. Maint. Supv.	Hwy. Maint. Supv.	Hwy. Maint. Supv.	California
Traffic Foreman	-	Traf. Shop Foreman	Sr.Traf.Sig. Tech.	-	Colorado
Dist. Traf.Engr.	Signs & Markings Coordinator	Supt. Portland Plant	Dist. Elec. Supv.	Signs & Marking Foreman	Connecticut
Hwy. Maint. Supt.	Dist. Supv.	Sign Shop Supv.	Labor Foreman III Traffic Signal & Lighting Supv.	Labor Foreman I&II (C. L. Painting) Hwy.Maint.Foreman II	Delaware
Supervisor of Opers.	Sign Shop Supt.	Asst.Sign Shop Supt.			Florida
Traffic Survey Engr.	Civil Engineer IV Traffic Sign & Marking Foreman	Hwy. Maint.Foreman I	Elec.Facilities Engr. Traffic Signal & Hwy.Lighting Foreman	Hwy.Maint.Foreman II Traffic Marking Foreman Hwy. Maint. Foreman(Striping)	Georgia Hawaii
-	-	Sign Shop Supt.	Traf.Signal Supt.	Lead Worker	Idaho
-	Silk Screen Operat.	Sign Shop Foreman	-		Illinois
Engr. Asst. V	Engineer Aset.IV	Highway Foreman	Engineer Asst. IV	Engineer Aest.IV	Indiana
-	Sign Shop Supt.	Sign Shop Foreman	-	Hwy.Maint.Foreman 2	Iowa
-	-	Sign Shop Foreman	-	Striper Foreman	Kansas
Traffic Supervisor	Traffic Foreman	Sign Painter,Sr.	Traf.Signal Repairman,Pr.Striper Crew Foreman		Kentucky
Sign & Traf. Supt.	Sign Foreman	Shop Sign Foreman	Electrical Foreman	Striping Gang Foreman	Louisiana
-	-	Sign Shop Foreman	Electrical Foreman	Hwy.Maint.Man. IV	Maine
Traf. Engr. TE III	-	Sign Shop Foreman	Traf. Signal Tech.	Hwy. Markings Spray Painter Working Foreman	Maryland
Traf.Maint.Foreman	Supt. of Traf.Equip.	Sign Shop Foreman	Traf.Elec.Foreman		Massachusetts
Hwy.Traf.Engr.	Hwy.Sign Supv.	Hwy.Sign Foreman	Electrical Engr. Signal & Lighting Supv.	Hwy.Traf.Engr.	Michigan
Proj. Hwy. Tech	Signing Supv.	Shop Signman Foreman		Included in No.23	Minnesota
Engr. Aide VII	Supt. II	-	Supt. II Signal & Lighting Foreman	Foreman I	Mississippi
-	-	Sign Shop Foreman	-	Included in No.8	Missouri
-	-	Maint. Supv. I	-	-	Montana
-	-	Sign Shop Foreman	Signal Maint. Supt.	Hwy.Maint.Foreman II	Nebraska
-	Sign Shop Supv.	-	-	Hwy.Maint.Foreman Pavement Marking Foreman	Nevada
Traf.Maint.Supv. Supv. Traffic Investigation	Supv. of Signs & Traffic Lines	Sign Shop Foreman Foreman Sign Shop	Traf.Signal Foreman Electrical Foreman	Foreman Hwy.Marking Hwy. Traf. Marking Supv.	New Hampshire New Jersey
Traf. Supv. I Engineer in Charge, of Crews	Sign Shop Foreman	-	Traf. Elec. Supv.	Laborer Foreman	New Mexico
Sign Shop Supv.	Sign Shop Supv.	Sign Shop Foreman	Elec. Foreman		New York
Traf.Services Supv.	Included in No.23	Traf.Sign Shop Foreman	Traf.Control Tech.II	Included in No. 28	North Carolina
-	Sign Foreman	Included in No.24 Sheet Metal Worker Foreman	-	Leadman	North Dakota
Traffic Control Spec.	Executive 5	Worker Foreman	Signal Electrician 3	Painter Foreman Hwy.Traf. Marking Foreman	Ohio
Traffic Supt.	-	-	-	Marking Foreman Striping or Legend Crew Foreman	Oklahoma
Included in No. 5	-	Sign Shop Foreman	Elec. Crew Foreman C. E. II or Traf.Control Spec.I	Crew Foreman	Oregon
Traf.Control Supv. Chief, Traf.Maint. Supv.	Traf.Control Spec.I	Traf.Control Spec.	Traf.Control Spec.I	Hwy. Foreman II	Pennsylvania
-	Traf.Maint.Supv.	-	Elec. Foreman	Traf.Maint.Supv. Hwy. Maint.Crew	Rhode Island
-	-	Hwy. Maint.Crew Supv. I - III	Trades Worker Supv.	Supv. I - III Hwy. Maint.	South Carolina
-	Sign Supv.	Sign Shop Foreman	-	Worker II & III	South Dakota
Signing & Marking Coor.	Hwy. Marking Supt.	Included in No. 8	-	Included in No. 8	Tennessee
-	Sign Supv.	-	-	-	Texas
-	Sign Supv. 21	Lead Highway Sign. Spec. 10L	Signal Supv. 23	-	Utah
-	-	Traf. Shop Foreman	-	Marking Crew Leader	Vermont
Hwy.Traf.Tech.Supv.	Sign Foreman	Hwy. Foreman	Hwy.Equip. Electrician ForemanA-B	Hwy. Foreman	Virginia
-	-	-	Traf.Signal Supv.	Maint.Aset.Supt.	Washington
-	Traf.Tech. V	Traf.Tech. III	Traf.Elec.Tech. III Traf. Signal & Lighting Foreman	Signman Shop Supv.	West Virginia
Traffic Supv.	Sign Supv.	Sign Shop Foreman		Striper Foreman	Wisconsin
Included in No. 21	Included in No. 25	St.Sign Shop Supv.	Included in No. 20	Dist.Striping Forem.	Wyoming

MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL TITLES USED BY STATE HIGHWAY DEPARTMENTS (AS OF JULY 1, 1974)-Page 4  
 TRAFFIC OPERATIONS PERSONNEL (Cont'd):

State	(28)	(29)	(30)	(31)
	: Sign Erection Foreman	: Sign Fabricator	: Sign Technician	Traffic Signal & Lighting Technician
Alabama	-	-	-	Traf. Signal Tech.
Alaska	Sign Man	Sign Painter	-	-
Arizona	Included in No. 27	Hwy. Maint. Man	Hwy. Maint. Man I & 2	Traf. Signal & Lighting Tech.
Arkansas	Hwy. Sign Man II	Hwy. Sign. Supv.	Hwy. Sign Supv.	-
California	Hwy. Maint. Supv.	Worker II or III Sr. Traf. Sign Fabricator	-	Elec. Engineering Tech. I or II
Colorado	-	Fabricator	-	Signal Tech. Elec. Tech.
Connecticut	Included in No. 27	Portland Plant Worker	Included in No. 29	T. J. (Elec.)
Delaware	Included in No. 27 Hwy. Maint.	Sign Fab. I & II	Equip. Opr. I, II, III Trades Helper	Traf. Sign Repairman I & II
Florida	Foreman I (signs)	Sign Tech. Hwy. Maint. skilled Laborer	-	Traf. Signal & Lighting Supv.
Georgia	-	Sign Painter	-	Electrician Lineman & Electrician
Hawaii	-	& Painter	-	Traf. Signal Tech. II
Idaho	Sign - Hwy. Maint. Foreman	Painter	-	-
Illinois	Included in No. 27	Sign Hangers Equip.	Hwy. Maint. Equip. Opr.	-
Indiana	Unit Foreman	Operator II-III Sign Shop	Sign & Equip. Painter	Traf. Sign Tech. II - III
Iowa	-	Worker I & 2	-	Traf. Signal Tech. 1
Kansas	-	Sign Shop Worker	-	-
Kentucky	Included in No. 24 Statewide	Sign Painter	Included in No. 24	Traf. Signal Repairman Sr. & Jr.
Louisiana	Sign Foreman	Sign Tradesman	Statewide	Statewide Signal Tradesman
Maine	Hwy. Foreman	Sign Painter Sign Fabricator	-	Electrician Traf. Control
Maryland	Sign Foreman	SF II - SF III	-	Electrician I & II
Massachusetts	Spray Painter Working Foreman	Sign Painter & Letterer	-	Traf. Elec. Foreman Electrician & Electronic Tech.
Michigan	Hwy. Sign Supt.	Hwy. Sign Foreman	Hwy. Sign. Mech.	-
Minnesota	Included in No. 24	Included in No. 9 Silk -	Included in No. 23	Electronic Tech. Electronic Equip.
Mississippi	Foreman I	Screen Printer Silk -	-	Tech. II
Missouri	Included in No. 8	Screen Operator	Sign Painter	Signal Electrician
Montana	-	Maint. Man V	-	Designer III
Nebraska	-	Sign Printer II	-	Signal Maint. Tech. II
Nevada	Hwy. Maint. Foreman	Sign Painter	Silk-Screen Oper.	-
New Hampshire	Dist. Sign Supv. Heavy Sign Maint. Foreman	Sign Fabricator Sign Letterer	Trades Helper	Intricate Repairman
New Jersey	-	Sign Fabricator	-	Elec. Mechanic I
New Mexico	Sign Foreman	Sign Tech. 1	Sign Tech. 2	Engineer I Electrician -
New York	Laborer Foreman Traf. Services	Sign Shop Worker	-	Maint. Man Elect. Traf. Control
North Carolina	Foreman	Traf. Sign Painter	Traf. Sign Erector	Tech. I
North Dakota	Included in No. 24	Included in No. 11	-	-
Ohio	Hwy. Worker 4	Sheet Metal Worker	-	Signal Electrician 2
Oklahoma	Sign Foreman	-	Sign Maker I & II	-
Oregon	Sign Foreman	Included in 16 - 18	-	Included in No. 26
Pennsylvania	Hwy. Foreman II	Sign Tech. III	Sign Tech. I & II	Civil Engr. II or Traf. Control Spec. I
Rhode Island	-	Sign Painter	-	Elec. Equip. Mechanic
South Carolina	Included in No. 8 Hwy. Maint.	Included in 10 - 11	-	Electrician
South Dakota	Foreman I & II	Sign Fabricator	-	-
Tennessee	-	-	-	-
Texas	-	-	-	-
Utah	Hwy. Foreman 11 F	Hwy. Sign Spec. 10 W	Hwy. Sign Spec. 10 W	Elect. 12W - El. Spec. El. & El' tronic Forema
Vermont	Sign Crew Leader	Sign Painter	-	Traf. Signal & Lighting Tech.
Virginia	Hwy. Foreman	Hwy. Sign Fabricator	-	Hwy. Equip. Electrician
Washington	Maint. Asset. Supt.	Sign Fabricator, Hwys.	-	Traffic Signal Tech. I & II
West Virginia	Included in No. 27	-	-	Traf. Electronics Tech. I & II
Wisconsin	Sign Erection Foreman	Sign Fabricator	Sign Technician	Traf. Signal & Lighting Tech.
Wyoming	Dist. Sign Foreman	Sign Fabricator	Sign Helper	Signal Technician

OTHER RELATED PERSONNEL:				
(32)	(33)	(34)	(35)	
Striper Technician	Chief Engineer	Project Engineer	Clerk or Timekeeper	State
		Project Engineer	Clerk	Alabama
Equip. Operator	ADOT Asst. Director			Alaska
Hwy. Maint. Man 1,2 & 3	Hwy. Div. & State Engr.	Resident Engineer	Clerk	Arizona
Hwy. Signman I	Chief Engineer	Resident Engineer	Clerk II and III	Arkansas
Hwy. Maint. Worker I-II	State Hwy. Engr.	Resident Engineer	Hwy. Field Office Asst.	California
Sign & Mark. Maintainer	Chief Engineer	Resident Engineer		Colorado
Traf. Signal Repairman	Chief Engineer	Project Engr. Sr.	DOT Maintainer Gen. Foreman Clerk	Connecticut
Included in No. 30	Chief Engineer	Project Engr.	Buyer	Delaware
Hwy. Maint. Foreman I (Pavement Symbols)	St. Trans. Ops. Engr.	Res. Proj. Engr.	Clerk or Timekeeper	Florida
Hwy. Maint. Eq. Oper.	State Hwy. Engr.		Clerk or Storekeeper	Georgia
Traf. Strip. Mach. Opr.	Chief, Highways Div.	Area Engr.	Account Clerk III	Hawaii
	Admin. Div. of Hwys.	Resident Engineer	Maint. Clerk	Idaho
Hwy. Maint. Man	Chief Transp. Engr.	Proj. Engr. or Resident Engr. (CE IV)	Acct. Tech. II	Illinois
Equip. Opr. I - II	Chief Engineer	Project Engr.	Stock Room Clerk	Indiana
Hwy. Maint. Man 1 & 2	Chief Engineer	Res. Const. Engr.		Iowa
	Chief Engineer	Resident Engr.	Hwy. Dist. Clerk	Kansas
Heavy Equip. Opr.	State Hwy. Engr.			Kentucky
Striping Mach. Opr.	Chief Engineer	Project Engr. Asst. Engr. to Civil Engr. II	Clerk II	Louisiana
			Clerk III	Maine
Motor Equip. Operator MEO II	Chief Engineer	Proj. Engr. EA V	Shop Clerk	Maryland
Painter	Chief Engineer	Sr. Civil Engineer	Clerk - Tallyman	Massachusetts
Hwy. Sign Mechanic				Michigan
Included in No. 23	Asst. Comm. Operations	Included in No. 7	Dist. Office Manager Clerk	Minnesota
Equip. Opr. II	Chief Engineer	Project Engr.	Clerk I	Mississippi
Included in No. 17	Chief Engineer	Resident Engr.	Dist. Stock Clerk	Missouri
	Dir. of Highways		Office Manager	Montana
	Dir. State Engr.	Hwy. Proj. Manager II	Hwy. Maint. Clerk Hwy. Dist. Office Manager	Nebraska
Maint. Specialist (Striping & Signs)	State Highway Engr.		Acct. Clerk III	Nevada
Carriage Operator	Deputy Commissioner		Clerk IV	New Hampshire
Trades Helper	& Chief Engineer	Project Engr.		
Hwy. Marker	Director, Engr. Operations	Principal Engr.-Transp.	Head Clerk	New Jersey
Equip. Opr. 2	State Highway Engr.	Engineer I	Engineer Tech. 1	New Mexico
Const. Equip. Opr.	Chief Engineer	Sr. Civil Engr.	Sr. Clerk Transp. Maint. & Typist	New York
Included in NO. 17	Chief Engineer	Resident Engr.	Maint. Yard Foreman	North Carolina
Equip. Opr.	Chief Engineer	Project Engr.	Clerk Typist II	North Dakota
		Senior Engr.	Clerical Supv.	
Painter	Chief Engineer Asst. Director, Traf. Services	Project Engr.	Hwy. Worker 3	Ohio
	Administrator &	Resident Engr.	Field Clerk II	Oklahoma
Included in No. 27	State Hwy. Engr.	Resident Engr.		Oregon
Equip. Opr. I - IV	Chief Hwy. Engr.	Civil Engr. III	Clerk II	Pennsylvania
			Sr. Clerk Typist	Rhode Island
	State Hwy. Engr.	Assoc. Res. Const. Engr.	Clerk I - III & Chief Clerk	South Carolina
	Director and	Res. Const. Engr.		
	State Hwy. Engr.	Resident Engr.	Admin. Asst.	South Dakota
	Dir. Bur. of Hwys.	Civil Engr.	Const. Records Clerk	Tennessee
	State Hwy. Engr.	Resident Engr.		Texas
	State Hwy. Engr. 35	Sr. Res. Engr.	Dist. Maint. Oper. Analyst	Utah
Equip. Opr. B	Chief Engineer	Project Engr. Hwy. Const.	Dist. Office Clerk	Vermont
	Hwy. Chief Engineer	Project Engr.	Hwy. Timekeeper	Virginia
	Dir. of Highways	Project Engr.	Maint. Div. Office Man	Washington
Centerline Paint Mach. Operator	State Hwy. Engineer		Field Clerk	West Virginia
Striper Tech.	State Hwy. Engineer	Project Engr.	COUNTY EMPLOYEE	Wisconsin
Highway Stripper	Supt. & Chief Engr.	Resident Engr.		Wyoming

## MONTHLY SALARIES OF HIGHWAY PERSONNEL (AS OF JULY 1, 1974)

## MAINTENANCE PERSONNEL:

State	(1)			(2)			(3)			(4)			(5)			(6)								
	State	Asst. State	Maintenance	District	Maintenance	Engineer	District	Maintenance	Engineer	Asst. Diet.	Maintenance	Engineer	Resident	Maintenance	Engineer	Engineer								
	Maintenance	Maintenance	Engineer	Maintenance	Engineer	Maintenance	Engineer																	
Alabama	1	1433	1880	1880	2	957	1569	1390	9	1211	1880	1723	9	1109	1569	1481	-	-	-	-	47	865	1319	1255
Alaska	1	2503	3008	2756	1	2241	2694	2468	5	2412	2900	2656	4	1934	2325	2241	5	1669	2007	1838	-	-	-	-
Arizona	1	1756	2384	2241	1	1602	2175	2044	7	1756	2384	2241	7	1116	1653	-	-	-	-	-	-	-	-	
Arkansas	1	1376	1887	1887	1	1265	1735	1611	10	1265	1735	1735	10	905	1253	1253	10	774	1066	1066	46	716	983	964
California	1	2035	2474	2474	5	1846	2245	2035	11	2035	2741	2593	11	1595	2245	1896	31	1377	1939	1588	-	-	-	-
Colorado	1	1667	2232	2232	-	-	-	-	6	1712	2294	2200	9	1440	1929	1929	7	1244	1667	1512	-	-	-	-
Connecticut	1	1591	1966	1779	1	1421	1739	1580	-	-	-	-	4	1285	1580	1433	6	1164	1436	1300	-	-	-	-
Delaware	1	1317	2031	1842	-	-	-	-	3	1317	2031	1842	-	-	-	-	4	1201	1842	1675	3	1080	1674	1203
Florida	1	1612	2246	2205	2	1494	2079	2037	5	1612	2246	2205	5	1376	1920	1886	5	1176	1654	1666	21	1033	1421	1373
Georgia	1	1617	2359	2146	3	1342	1953	1807	7	1473	2146	1953	7	1115	1617	1473	38	929	1473	1144	12	776	1115	1019
Hawaii	1	1531	2376	2264	1	1458	2264	2155	4	1458	2264	2131	1	1321	2052	1955	-	-	-	-	-	-	-	-
Idaho	1	1507	2070	1876	1	1230	1702	1507	6	1507	2070	1816	6	1012	1544	1239	-	-	-	-	-	-	-	-
Illinois	1	1933	2680	2380	3	1660	2299	2195	9	1933	2680	2460	9	1434	1979	1970	-	-	-	-	49	1251	1724	1450
Indiana	1	1722	2195	2089	1	1513	1893	1722	6	1513	1893	1804	6	1356	1659	1509	6	1200	1464	1304	-	-	-	-
Iowa	1	1504	2116	2016	1	1364	1920	1828	6	1432	2016	1874	6	1238	1742	1645	-	-	-	-	24	1124	1580	1460
Kansas	1	1472	2284	2080	1	1272	1973	1875	6	1472	2284	1820	6	1272	1973	1553	6	707	1099	1050	-	-	-	-
Kentucky	1	1549	2074	1812	4	1405	2074	1740	12	1549	2074	1812	12	1155	1583	1369	26	1048	1475	1226	-	-	-	-
Louisiana	1	1234	1656	1572	5	1066	1572	1530	9	1234	1657	1614	9	1066	1488	1445	5	981	1403	1361	1	897	1319	1319
Maine	1	1448	1902	1902	1	1314	1739	1739	7	1314	1739	1739	7	890	1192	1135	7	1192	1590	1590	-	-	-	-
Maryland	1	1744	2291	2202	1	1496	1964	1888	7	1615	2122	2039	7	1385	1819	1748	-	-	-	-	23	1099	1444	1388
Massachusetts	1	1786	2269	2269	2	1638	2085	2085	8	1786	2269	2269	8	1503	1906	1906	8	1284	1632	1516	-	-	-	-
Michigan	1	2286	2524	2524	4	1992	2136	2136	-	-	-	-	9	1830	2133	2015	4	1527	1694	1611	14	1395	1694	1595
Minnesota	1	1643	2249	2000	5	1400	1849	1678	9	1643	2249	2000	15	1520	2000	1868	4	1406	1849	1658	-	-	-	-
Mississippi	1	1430	2013	1917	1	1297	1826	1826	6	1430	2013	1951	6	1297	1826	1702	-	-	-	-	-	-	-	-
Missouri	1	1788	2000	1788	1	1502	1733	1615	10	1700	1933	1711	10	1280	1608	1547	18	1124	1407	1343	-	-	-	-
Montana	1	1616	1925	1685	1	1081	1293	1179	-	-	-	-	11	1179	1411	1295	-	-	-	-	-	-	-	-
Nebraska	1	1398	1957	1614	1	1162	1625	1219	7	1314	1539	2092	6	1093	1528	1146	-	-	-	-	-	-	-	-
Nevada	1	1490	1000	1000	1	1057	1717	1717	6	1490	1000	1808	-	-	-	-	6	1357	1717	1717	-	-	-	-
New Hampshire	1	1569	1935	1935	1	1283	1591	1514	7	1283	1591	1591	-	-	-	-	7	1137	1398	1398	10	868	1057	1057
New Jersey	1	2236	3020	2628	1	1589	2146	1867	4	1932	2608	2207	4	1514	2044	1779	4	1186	1602	1394	4	1130	1525	1327
New Mexico	1	1478	1900	1478	1	1350	1735	1670	5	1450	1880	1880	5	1250	1610	1415	-	-	-	-	-	-	-	-
New York	1	3000	3370	3100	1	2445	2780	2535	10	2850	3200	3090	10	1790	2500	2300	64	1180	1670	1500	65	1600	2050	1860
North Carolina	1	1641	2089	2089	3	1353	1722	1489	14	1641	2089	1806	40	1228	1565	1353	35	1118	1421	1228	82	847	1068	929
North Dakota	1	1640	2030	1750	1	1520	1800	1635	8	1640	2030	1750	-	-	-	-	2	1075	1400	1385	-	-	-	-
Ohio	1	1641	2214	1962	1	1501	2033	1680	12	1803	2402	2122	12	1381	1853	1680	6	1520	1800	1630	5	1381	1853	1680
Oklahoma	1	1410	1905	1480	1	1275	1725	1410	8	1410	1905	1641	8	1275	1725	1527	9	855	1275	1088	-	-	-	-
Oregon	1	1898	2422	2308	-	-	-	-	5	1562	1993	1950	-	-	-	-	5	1348	1721	1700	16	1224	1562	1555
Pennsylvania	1	1805	2299	1897	2	1570	1992	1723	11	1897	2413	2089	11	1495	1897	1645	22	1125	1426	1237	67	1074	1360	1182
Rhode Island	1	1550	1750	1925	1	825	1000	1050	1	1050	1250	1375	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	1	1510	2162	1846	2	1307	1858	1635	7	1307	1858	1707	7	1146	1630	1421	-	-	-	-	48	815	1428	1124
South Dakota	1	1420	1929	1721	3	1231	1661	1510	5	1357	1832	1673	5	1066	1501	1384	-	-	-	-	-	-	-	-
Tennessee	1	1340	1887	1797	1	1216	1710	1630	4	1479	2080	1710	4	1107	1478	1389	8	977	1340	1194	24	896	1194	1107
Texas	1	2000	2000	2000	-	-	-	-	5	2000	2000	2000	21	1958	1958	1958	28	1437	1935	1738	15	1141	1697	1441
Utah	1	1600	2337	1896	4	935	1965	1339	6	1431	2089	1755	4	1115	1786	1610	-	-	-	-	-	-	-	-
Vermont	1	1406	2082	2018	2	1112	1623	1623	9	1252	1840	1756	9	988	1434	1359	9	767	1096	1000	-	-	-	-
Virginia	1	1558	2042	1867	2	1250	1633	1525	8	1429	1867	1867	8	1250	1633	1633	-	-	-	-	46	1094	1429	1429
Washington	1	1792	2282	2282	1	1551	1975	1975	7	1708	2282	2228	7	1409	1792	1708	6	1280	1627	1551	26	1083	1378	1254
West Virginia	1	1655	2215	1915	1	1360	1360	1360	10	1500	2010	1625	10	1235	1655	1296	-	-	-	-	-	-	-	-
Wisconsin	1	1904	2479	2466	4	1603	2087	1979	9	1904	2479	2438	9	1603	2087	2020	29	1350	1762	1697	-	-	-	-
Wyoming	1	1243	1993	1702	-	-	-	-	5	1243	1993	1702	5	1155	1852	1575	5	613	975	788	-	-	-	-
1974 Average		2186	2028			1916	1769			2142	2002			1762	1616			1586	1451			1407	1311	
1944 Average		434				341								292				264						
% Increase 1944-1974		404				462								503				501						
% Increase 1973-1974		7.3%				8.0%								8.1%				8.3%						9.5%

(7)				(8)				(9)				(10)				(11)				(12)				
Area Supervisor				Gang Foreman				Sectionman				Common Laborer				Skilled Laborer				Superintendent				
No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	State
77	627	895	836	115	477	627	608	59	430	573	537	1811	334	388	377	84	501	836	682	1	1109	1433	1271	Alabama
7	1441	1732	1586	68	1544	1739	1642		1450	1625	1538	-	-	-	-	10	1004	1120	1062	-	-	-	-	Alaska
43	951	1251	1185	-	-	-	-	-	-	-	-	39	554	708	619	-	-	-	-	1	1461	1984	1756	Arizona
96	648	840	824	-	-	-	-	103	561	783	682	312	402	624	464	90	561	783	665	11	716	983	978	Arkansas
75	1377	1674	1674	324	1027	1249	1133	438	978	1133	1079	556	806	888	845	2	888	978	933	20	1412	1892	1605	California
23	1023	1372	1275	36	884	1185	1075	356	802	1075	950	30	543	727	627	-	-	-	-	8	975	1306	1306	Colorado
18	917	1123	1020	48	826	1021	924	168	746	930	838	580	554	657	606	40	674	819	746	-	-	-	-	Connecticut
4	919	1394	1191	17	693	1058	920	78	517	1011	764	22	424	622	523	37	442	650	546	4	839	1268	1047	Delaware
109	675	901	703	109	609	809	639	310	581	770	610	622	480	621	504	605	537	708	564	26	708	950	911	Florida
29	710	1017	883	159	650	929	728	257	546	776	664	1936	394	505	422	184	501	710	551	8	849	1223	989	Georgia
4	1200	1861	1524	18	863	1233	1025	16	542	863	704	91	488	678	523	24	708	1022	867	4	869	1145	1011	Hawaii
-	-	-	-	6	833	1143	1051	45	833	1143	964	-	450	604	503	9	757	1037	866	-	-	-	-	Idaho
-	-	-	-	291	-	-	957	1596	-	-	907	11	68	846	846	-	-	-	-	-	-	-	Illinois	
36	810	1012	906	36	636	734	700	150	577	669	638	455	475	676	499	27	513	593	537	40	598	703	671	Indiana
2	852	1178	1074	121	778	1072	920	24	708	934	828	6	450	676	574	-	-	-	-	1	894	1238	1066	Iowa
29	707	1099	1050	44	611	948	919	114	611	948	919	-	384	581	-	1	441	673	475	6	743	1154	1100	Kansas
33	643	998	821	214	457	821	639	-	-	-	-	1211	340	530	435	50	415	643	529	27	530	782	656	Kentucky
63	596	860	807	288	443	834	591	-	-	-	-	606	353	528	464	127	485	739	675	18	570	886	834	Louisiana
41	770	1030	1030	170	644	848	848	52	520	674	644	493	422	542	459	20	566	735	676	7	770	1030	1030	Maine
31	873	1146	1102	197	647	850	817	-	-	-	-	420	455	598	574	463	487	640	615	7	748	983	945	Maryland
35	852	1062	992	94	747	917	860	93	670	819	769	575	556	665	628	830	578	698	658	1	1376	1814	1686	Massachusetts
13	1275	1475	1375	37	1089	1211	1150	-	-	-	-	170	640	857	819	31	913	995	954	-	-	-	-	Michigan
21	1068	1462	1300	104	913	1155	1068	1513	690	840	800	217	-	-	600	105	936	974	974	5	1027	1406	1300	Minnesota
26	758	1067	959	54	566	796	628	-	-	-	-	130	302	423	408	472	333	466	435	1	758	1067	878	Mississippi
97	880	1090	1028	39	784	969	917	362	700	865	812	-	-	-	-	-	-	-	-	9	932	1155	1085	Missouri
22	877	1038	1038	-	-	-	-	137	962	962	962	10	755	755	755	153	777	777	777	10	921	921	921	Montana
27	804	1121	905	71	631	878	715	27	594	826	635	-	-	-	-	-	-	-	-	8	631	878	727	Nebraska
6	1028	1296	1296	26	857	1076	1076	46	783	982	962	2	576	716	601	212	656	819	775	1	1076	1357	1357	Nevada
6	834	1022	1022	20	723	879	801	106	723	879	801	275	493	569	549	114	608	723	694	1	1103	1358	1358	New Hampshire
19	976	1318	1147	103	843	1131	987	117	765	1032	898	584	543	733	638	I-47 II-64	765	1032	898	1	1130	1525	1327	New Jersey
8	820	1115	1115	30	575	785	735	100	525	720	676	501	400	550	418	33	420	575	548	6	630	860	853	New Mexico
-	-	-	-	205	890	1160	970	660	670	790	730	2793	560	670	620	535	635	930	720	10	1452	1677	1565	New York
156	707	887	773	751	698	876	764	88	538	676	590	1097	470	590	514	292	613	768	671	16	1068	1353	1171	North Carolina
9	950	1160	1070	6	700	910	835	74	475	865	750	-	-	-	-	23	625	805	710	8	760	925	875	North Dakota
88	816	1057	959	120	652	835	750	360	610	770	698	420	534	673	610	157	652	835	750	1	1120	1553	1390	Ohio
89	700	950	756	33	665	990	825	-	-	-	-	58	425	575	440	283	450	605	460	1	775	1045	775	Oklahoma
-	-	-	-	161	787	1006	915	91	787	869	860	21	560	617	610	-	-	-	-	4	869	1107	1107	Oregon
67	885	1105	967	1055	708	892	777		708	892	777	3780	492	616	538	240	538	675	591	-	-	-	-	Pennsylvania
9	700	800	850	25	600	675	760	278	460	500	550	19	500	550	600	-	-	-	-	-	-	-	Rhode Island	
-	-	-	-	290	535	958	719	-	-	-	-	1009	353	516	467	1361	360	610	522	-	-	-	-	South Carolina
10	801	1033	848	14	664	889	766	92	664	889	755	-	-	-	-	21	695	889	710	9	664	934	794	South Dakota
95	510	744	673	10	706	977	896	326	429	608	543	1793	359	510	456	45	359	510	456	4	608	858	782	Tennessee
37	1068	1437	1278	98	794	1000	804	1	651	820	651	1395	331	500	430	6542	460	815	757	28	1000	1259	1068	Texas
4	894	1260	1097	21	879	1068	969	71	879	1068	969	13	483	661	570	8	677	824	722	1	894	1260	1095	Utah
9	767	1096	974	41	566	793	766	123	475	657	621	255	423	579	500	13	535	748	647	1	1047	1532	1222	Vermont
286	764	1044	1000	515	612	764	700	-	-	-	-	500	392	450	430	264	378	735	515	8	1044	1367	1306	Virginia
-	-	-	-	87	812	1133	983	720	704	937	826	16	626	722	688	42	814	938	896	6	1083	1378	1313	Washington
55	635	1235	831	50	485	965	628	222	447	544	516	700	399	399	399	148	510	544	530	10	540	1065	836	West Virginia
39	891	1500	1226		COUNTY EMPLOYEES												Wisconsin				Wyoming			
26	697	1109	1075	31	645	1027	950	200	527	835	700	13	453	715	520	62	501	793	550	5	718	1162	1053	

1048 1000 887 880 778 613 557 772 677 1213 1099

— 141 — 152 — 121 — 155 —

609                  466                  407                  398                  -

## MAINTENANCE PERSONNEL (Con'd):

State	: (13)				: (14)				: (15)				: (16)				: (17)				: (18)				
	: Garage or Shop				: Mechanic				: Mechanic Helper				: Equipment Operator I				: Equipment Operator II				: Equipment Operator III				
	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	
Alabama	9	836	1020	961	194	573	776	714	7	453	596	532	134	388	525	531	272	477	627	577	365	596	776	735	
Alaska	11	1544	1739	1642	78	1337	1511	1424	6	1010	1120	1065	38	1239	1397	1318	90	1239	1397	1318	163	1337	1511	1424	
Arizona	6	951	1251	1163	96	819	1049	980	21	554	917	760	273	625	799	720	174	718	917	865	111	766	980	930	
Arkansas	11	880	1159	1096	96	819	1049	980	21	554	917	760	273	625	799	720	174	718	917	865	111	766	980	930	
Arkansas	10	605	784	775	108	561	783	655	10	461	624	495	432	461	624	480	857	461	624	542	200	561	783	662	
California	49	1162	1412	1277	308	1054	1162	1106	12	826	911	866	Included in No. 10	1476	933	1027	978	-	-	-	33	802	1075	1075	
Colorado	8	884	1185	1128	79	802	1075	1000	11	628	842	775	752	727	975	853	3	764	1023	1023	33	802	1075	1075	
Connecticut	13	826	1021	924	97	674	819	746	36	650	789	719	Included in No. 10	848	626	759	692	80	650	789	719	111	590	882	736
Delaware	3	697	1058	933	55	540	1011	776	10	496	736	618	157	481	710	595	45	517	770	644	55	590	882	736	
Florida	39	643	856	819	73	643	856	718	22	560	739	623	878	480	621	504	123	560	739	588	151	581	770	610	
Georgia	11	650	1115	810	159	501	849	638	29	394	505	422	625	434	530	482	128	546	776	570	148	595	849	617	
Hawaii	3	809	977	838	17	740	933	838	7	565	678	618	65	495	678	578	59	598	855	708	16	708	936	873	
Idaho	6	919	1261	1056	54	757	1037	888	7	577	784	629	78	577	784	616	299	631	858	742	37	691	941	862	
Illinois	-	-	-	-	18	-	-	1117	10	-	-	993	439	-	-	907	68	-	-	1111	11	-	-	921	
Indiana	58	577	669	607	98	556	645	583	38	513	593	537	1007	513	593	537	314	556	645	583	71	577	669	638	
Iowa	1	894	978	978	143	778	852	846	24	676	742	719	1001	590	742	660	246	646	814	718	121	676	852	755	
Kansas	7	673	1047	955	89	581	903	851	31	441	673	548	844	441	673	555	447	484	743	678	179	530	819	756	
Kentucky	-	-	-	-	244	358	821	589	16	324	457	390	1262	340	530	435	991	415	643	529	70	457	710	584	
Louisiana	-	-	-	-	166	443	739	633	55	369	528	512	876	369	528	496	591	422	633	612	190	485	696	675	
Maine	11	644	848	707	135	566	735	674	16	499	644	623	670	459	623	566	243	520	674	623	83	566	735	735	
Maryland	28	696	914	879	73	647	850	817	2	522	684	658	322	522	684	658	147	561	736	707	23	602	791	760	
Massachusetts	8	801	981	921	14	747	917	860	46	578	698	658	-	-	-	-	-	-	-	-	142	670	819	769	
Michigan	90	955	995	975	77	955	1061	1008	-	-	-	-	57	678	805	772	333	723	857	827	30	652	791	747	
Minnesota	11	981	1740	1250	180	933	1009	900	10	730	910	748	Included in No. 9	70	915	974	974	Included in No. 1	-	-	-	-	-	-	-
Mississippi	3	566	796	758	18	466	655	569	10	384	539	497	305	384	539	497	231	466	655	567	48	513	722	593	
Missouri	10	784	969	922	46	662	816	764	24	557	689	676	2016	527	652	594	892	589	727	691	7	662	816	745	
Montana	12	877	1038	1038	53	885	885	885	11	812	812	812	125	812	812	812	75	848	848	848	74	885	885	885	
Nebraska	Included in No. 12				72	594	826	652	35	526	730	650	554	469	650	520	241	526	730	585	75	559	776	639	
Nevada	8	938	1181	1181	68	819	1028	1028	-	-	-	-	-	-	-	-	-	-	-	-	70	717	897	872	
New Hampshire	8	746	908	908	15	635	764	764	5	509	588	568	136	531	623	600	51	569	661	638	-	-	-	-	
New Jersey	18	885	1194	1040	95	765	1032	898	52	518	699	609	390	571	770	670	158	629	849	739	39	765	1032	891	
New Mexico	10	575	785	750	27	525	720	602	-	-	-	-	437	420	575	459	378	460	630	548	109	525	720	655	
New York	47	1178	1370	1243	311	796	933	864	116	635	750	690	1346	600	700	650	430	635	750	690	110	795	930	866	
North Carolina	152	809	1020	887	451	676	847	739	7	538	676	590	1776	481	604	526	929	551	692	604	1061	632	791	699	
North Dakota	-	-	-	-	7	555	745	625	4	510	590	555	-	-	-	-	226	445	830	625	Included in No. 1				
Ohio	88	750	960	887	312	652	835	750	41	568	720	652	57	534	673	610	1021	568	720	652	95	652	835	755	
Oklahoma	7	700	950	862	65	575	855	640	2	495	665	440	547	470	635	515	238	545	740	589	86	605	815	633	
Oregon	5	912	1006	1006	103	617	957	875	-	-	-	-	666	648	751	738	264	715	787	785	40	751	827	820	
Pennsylvania	67	846	1105	967	473	679	846	742	130	549	679	598	1400	598	742	651	2070	650	810	709	350	709	885	777	
Rhode Island	-	-	-	-	-	-	-	-	1	500	550	600	24	550	600	650	115	500	550	600	-	-	-	-	
South Carolina	47	694	959	849	93	592	817	702	52	448	610	520	Included in No. 11	Included in No. 11	Included in No. 11	Included in No. 1	-	-	-	-	-	-	-	-	
South Dakota	-	-	-	-	36	605	889	670	21	478	725	541	76	478	593	498	285	576	725	578	113	664	844	666	
Tennessee	31	608	855	782	154	483	706	641	-	-	-	-	242	456	673	608	73	483	706	608	-	-	-	-	
Texas	15	876	1104	956	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Utah	12	879	1068	969	69	677	879	759	5	483	661	543	123	603	731	633	165	577	824	711	112	879	1069	920	
Vermont	1	767	1096	857	13	566	793	790	13	535	748	637	-	-	-	-	9	449	620	570	40	535	748	700	
Virginia	78	700	916	876	311	560	800	700	70	450	586	512	2564	470	586	536	887	512	640	612	47	560	732	700	
Washington	6	873	1108	1007	131	854	1033	961	39	673	854	777	-	-	-	-	112	812	937	893	14	893	1030	980	
West Virginia	10	460	705	653	400	413	544	510	-	-	-	-	346	413	458	437	993	510	544	522	461	510	544	522	
Wisconsin	COUNTY EMPLOYEES-												-												
Wyoming	17	615	1079	851	38	553	896	750	24	497	805	638	25	554	879	700	21	613	975	780	-	-	-	-	
1974 Average		1034	949			876	792			704	632			686	620			774	706			848	773		
1944 Average</td																									

4.7%

5.7%

5.5%

5.9%

5,8%

7.4%

## MONTHLY SALARIES OF HIGHWAY PERSONNEL (AS OF JULY 1, 1974) - PAGE 3

## TRAFFIC OPERATIONS PERSONNEL (Cont'd):

State	(25)				(26)				(27)				(28)				(29)				(30)					
	Sign Shop Foreman				Traffic Signal & Lighting Foreman				Striper Foreman				Sign Erection Foreman				Sign Fabricator				Sign Technician					
	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.		
Alabama	7	656	836	836	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Alaska	1	1445	1684	1554	-	-	-	-	3	1445	1786	1624	1	1254	1456	1343	2	1001	1198	1113	-	-	-	-	-	
Arizona	1	819	1049	998	17	1216	1653	1553	7	819	1049	998	Included in No. 27	13	586	917	809	24	625	980	708	-	-	-	-	
Arkansas	Included in No. 24				-	-	-	-	6	427	571	546	Included in No. 27	Included in No. 24				Included in No. 24				Included in No. 24				
California	11	1027	1249	1133	27	1027	1249	1133	15	1027	1249	1133	12	1027	1249	1133	12	933	1133	1056	-	-	-	-	-	
Colorado	1	975	1306	1306	5	842	1128	1128	-	-	-	-	-	-	-	-	5	727	975	928	-	-	-	-	-	
Connecticut	1	870	1071	971	4	917	1123	1020	4	826	1021	924	Included in No. 27	18	674	819	746	Included in No. 29	Included in No. 29				Included in No. 29			
Delaware	1	762	1058	910	5	673	922	797	10	517	881	699	Included in No. 27	5	591	808	699	21	512	696	604	-	-	-	-	-
Florida	1	708	950	909	10	815	1127	971	10	675	901	713	41	609	809	649	8	518	676	585	-	-	-	-	-	
Georgia	7	546	776	758	1	929	1342	1115	9	650	929	737	-	-	-	-	11	501	710	577	-	-	-	-	-	
Hawaii	-	-	-	-	1	1035	1260	1260	1	695	845	695	-	-	-	-	6	708	855	773	-	-	-	-	-	
Idaho	1	919	1261	1063	1	833	1143	1012	3	833	1143	964	6	833	1143	1033	1	757	1037	919	-	-	-	-	-	
Illinois	10	-	-	1013	-	-	-	-	12	-	-	957	Included in No. 27	35	-	-	1065	112	-	-	907	-	-	-	-	
Indiana	7	636	734	700	6	810	1200	810	9	810	1200	810	7	577	669	638	43	513	669	612	25	513	593	537	-	
Iowa	1	676	934	805	-	-	-	-	6	742	1024	941	-	-	-	-	5	516	708	612	-	-	-	-	-	
Kansas	1	641	996	996	-	-	-	-	6	611	948	919	-	-	-	-	6	564	778	671	-	-	-	-	-	
Kentucky	9	415	583	513	12	530	745	610	13	480	676	578	Included in No. 24	2	376	530	415	Included in No. 24	Included in No. 24				Included in No. 24			
Louisiana	9	464	675	654	11	596	860	807	7	570	834	807	3	422	633	591	22	369	528	517	9	369	528	496	-	
Maine	1	623	808	808	1	674	890	848	2	566	735	735	2	644	848	848	1	542	703	644	-	-	-	-	-	
Maryland	2	696	914	879	1	873	1146	1102	5	647	850	817	28	647	850	817	7	602	791	760	-	-	-	-	-	
Massachusetts	1	801	981	921	1	801	981	921	2	705	867	813	2	705	867	813	7	705	867	813	-	-	-	-	-	
Michigan	2	929	1141	1035	1	1611	1694	1653	1	1305	1442	1442	9	1049	1211	1130	1	913	995	954	36	723	857	790	-	
Minnesota	6	913	1155	1068	1	1049	1089	1069	Included in No. 23	Included in No. 24				Included in No. 24				Included in No. 9				Included in No. 2				
Mississippi	-	-	-	-	2	158	1067	837	Included in No. 8	Included in No. 8				Included in No. 8				Included in No. 8				Included in No. 8				
Missouri	1	832	1028	979	3	784	969	940	Included in No. 8	Included in No. 8				Included in No. 8				Included in No. 8				Included in No. 8				
Montana	1	962	962	962	-	-	-	-	-	-	-	-	-	-	-	-	1	885	885	885	-	-	-	-	-	
Nebraska	1	594	826	717	1	757	1055	832	71	Incl. in No. 8	-	-	-	4	497	689	545	-	-	-	-	-	-	-	-	
Nevada	-	-	-	-	-	-	-	-	6	783	982	982	2	783	982	982	2	897	1128	1128	1	819	1027	1027	-	
New Hampshire	1	635	764	764	1	746	908	908	8	635	764	764	5	589	764	764	1	589	764	764	8	509	588	581	-	
New Jersey	1	885	1194	1040	31	885	1194	1040	7	843	1140	991	-	-	-	-	9	629	849	739	-	-	-	-	-	
New Mexico	-	-	-	-	1	060	1160	940	1	750	1025	1025	1	575	785	785	2	440	600	450	4	480	660	601	-	
New York	1	893	1046	968	10	893	1043	968	20	670	790	731	65	670	790	731	19	635	750	690	-	-	-	-	-	
North Carolina	13	590	739	646	17	773	973	847	Included in No. 28	Included in No. 28				Included in No. 24				Included in No. 11				Included in No. 11				
North Dakota	Included in No. 24				-	-	-	-	2	475	865	750	Included in No. 24	Included in No. 24				Included in No. 11				Included in No. 11				
Ohio	1	724	950	858	12	724	950	858	20	724	950	858	12	652	835	750	6	652	835	750	-	-	-	-	-	
Oklahoma	-	-	-	-	-	-	-	-	5	635	855	685	5	635	855	724	-	-	-	-	8	450	665	513	-	
Oregon	1	869	1107	1107	14	913	1056	1000	10	787	912	890	16	787	869	869	Incl. in Nos. 16 & 18	Incl. in Nos. 16 & 18				Incl. in Nos. 16 & 18				
Pennsylvania	1	933	1182	1027	11	979	1237	1074	20	709	885	775	67	709	885	775	2	810	1012	885	15	679	846	742	-	
Rhode Island	-	-	-	-	1	660	740	880	1	700	800	850	-	-	-	-	5	500	550	700	-	-	-	-	-	
South Carolina	6	535	958	805	7	694	958	756	10	535	958	740	Included in No. 8	Included in No. 8				Included in No. 10611				Included in No. 10611				
South Dakota	1	664	844	770	-	-	-	-	7	576	844	621	10	664	889	755	4	576	725	677	-	-	-	-	-	
Tennessee	Included in No. 8				-	-	-	-	Included in No. 8				Included in No. 8				Included in No. 8				Included in No. 8					
Texas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Utah	1	746	908	865	1	982	1384	1248	-	-	-	-	Included in No. 8	Included in No. 8				5	517	628	746	Included in No.	Included in No.			
Vermont	1	767	1096	852	-	-	-	-	7	505	706	602	3	449	620	485	1	505	706	679	-	-	-	-	-	
Virginia	9	612	764	670	10	732	1000	876	8	612	764	700	47	612	764	700	28	512	640	560	-	-	-	-	-	
Washington	-	-	-	-	2	915	1162	1162	7	893	1133	1030	7	893	1133	1030	7	054	905	930	-	-	-	-	-	
West Virginia	1	570	870	745	1	705	1065	1065	10	485	745	672	Included in No. 27	-	-	-	-	-	-	-	-	-	-	-	-	
Wisconsin	6	768	991	829	1	1152	1500	1300	11	768	991	829	39	/19	924	776	25	668	859	679	39	668	859	679	-	
Wyoming	1	697	1109	1053	Included in No. 20	5	645	1027	900	5	613	975	850	6	501	879	750	5	501	879	700	750	750	674	-	
1974 Average		987	910			1121	1020		950	852																

OTHER RELATED PERSONNEL																									
(31)			(32)			(33)			(34)			(35)													
Traffic Signal & Lighting Technician			Striper Technician			Chief Engineer			Project Engineer			Clerk or Timekeeper													
No.	Min.	Max.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	No.	Min.	Max.	Aver.	State						
20	549	957	692	-	-	-	-	-	-	-	294	806	1319	1000	106	370	895	547	Alabama						
-	-	-	-	8	1331	1705	1543	-	-	-	-	-	-	-	-	-	-	-	Alaska						
47	586	1159	926	43	625	980	809	1	2311	3139	2951	48	1030	1984	1461	26	492	708	679	Arizona					
-	-	-	-	16	419	551	469	1	1593	2150	2150	34	982	1611	1326	21	402	551	505	Arkansas					
68	933	1311	1107	Incl.in 9&17	933	1133	1056	1	2598	2878	2727	302	1377	1939	1522	84	749	911	826	California					
4	727	975	884	-	-	-	-	1	2081	2788	2788	56	1277	1712	1552	-	-	-	-	Colorado					
35	674	819	746	75	650	789	719	1	2127	2581	2354	28	1074	1297	1186	18	604	731	667	Connecticut					
6	569	777	673	Included in No.	30	1	1750	2692	2451	8	1201	1842	1542	3	643	966	882	Delaware							
10	696	956	826	35	609	809	651	1	1891	2563	2520	32	1033	1421	1324	39	448	708	660	Florida					
1	546	776	570	16	546	776	602	1	2146	3126	2843	-	-	-	-	65	390	929	536	Georgia					
6	740	1022	887	3	598	719	603	1	1531	2376	2264	6	1200	1861	1540	4	607	940	792	Hawaii					
4	691	941	812	-	-	-	-	1	-	-	2339	11	1116	1544	1324	6	577	784	686	Idaho					
-	-	-	-	90	-	-	907	1	2902	4054	3100	1251	1742	1500	-	694	947	863	Illinois						
18	568	955	646	43	513	645	566	1	2195	2782	2314	134	971	1802	1192	37	513	593	537	Indiana					
3	676	934	805	18	590	814	745	1	1828	2570	2448	22	1124	1580	1485	-	-	-	-	Iowa					
-	-	-	-	-	-	-	-	1	-	-	2518	42	948	1472	1350	29	484	743	669	Kansas					
22	376	643	455	29	415	583	480	1	1882	2074	-	-	-	-	-	-	-	-	Kentucky						
25	369	528	528	21	485	696	612	1	1530	2057	2057	66	897	1403	1361	63	401	612	591	Louisiana					
2	566	735	674	-	-	-	-	-	-	-	107	808	1379	1135	8	520	674	674	Maine						
17	696	914	879	15	561	791	760	1	2500	2500	2500	108	942	1238	1190	39	602	791	760	Maryland					
1	801	981	921	5	670	819	769	1	2201	2796	2796	89	1151	1464	1360	1	554	665	595	Massachusetts					
23	894	995	944	16	699	805	752	-	-	-	-	-	-	-	-	-	-	-	Michigan						
22	710	1009	882	Included in No.	23	1	1849	2432	2200	Included in No.	7	19	780	1352	1086	158	492	732	556	Minnesota					
4	688	968	740	Included in No.	17	1	1577	2157	2157	35	1067	1502	1425	30	366	513	411	Mississippi							
27	740	912	851	Included in No.	17	1	2500	-	2500	59	1124	1407	1354	22	580	719	676	Missouri							
6	953	1130	1041	-	-	-	-	1	2112	2112	2112	-	-	-	-	12	841	994	940	Montana					
3	670	933	712	-	-	-	-	1	2083	-	-	60	966	1349	1000	24	469	650	525	Nebraska					
-	-	-	-	6	717	897	897	1	2387	2387	2387	-	-	-	-	4	784	982	982	Nevada					
5	569	798	798	5	509	661	661	1	2061	2311	2311	80	746	1398	1072	6	550	642	642	New Hampshire					
90	765	1062	914	27	599	809	699	1	-	3541	-	209	1186	1602	1394	9	728	983	855	New Jersey					
1	1070	1400	1205	16	460	630	548	1	2000	2434	2340	10	1070	1400	1184	33	600	820	676	New Mexico					
104	635	933	778	195	635	750	690	1	-	-	3380	-	1454	1677	1566	130	490	778	614	New York					
15	646	809	707	Included in No.	17	1	-	-	2504	66	1228	1565	1353	95	538	676	590	North Carolina							
-	-	-	-	1	445	830	625	1	2000	2410	2167	21	940	1320	1100	8	400	510	440	North Dakota					
24	673	860	780	24	652	835	750	1	1962	2601	2302	120	1120	1553	1390	88	610	770	698	Ohio					
-	-	-	-	-	-	-	-	1	1560	2100	1690	27	1150	1560	1327	103	470	605	506	Oklahoma					
Included in No.	26	Included in No.	27	1	-	-	-	2675	65	1006	1487	1460	-	-	-	-	-	-	-	Oregon					
11	979	1237	1074	100	651	810	709	1	2299	2928	2656	120	1125	1426	1237	67	549	679	598	Pennsylvania					
1	650	700	725	-	-	-	-	-	-	-	-	-	-	-	-	450	500	550	Rhode Island						
21	625	863	600	-	-	-	-	1	-	-	2306	67	732	1630	1123	146	379	768	542	South Carolina					
-	-	-	-	-	-	-	-	1	1420	1929	1866	28	1021	1501	1188	5	766	1005	876	South Dakota					
-	-	-	-	-	-	-	-	1	1630	2292	2184	125	858	1194	1020	68	673	934	800	Tennessee					
5-3	779	946	779	-	-	-	-	1	2708	2708	2708	66	1259	1587	1310	-	-	-	-	Texas					
2	946	1150	993	-	-	-	-	1	1726	2520	2049	38	1115	1786	1419	6	741	1047	944	Utah					
1	633	895	895	7	449	620	498	1	1677	2516	2477	48	988	1434	1328	9	566	793	758	Vermont					
20	586	764	670	-	-	-	-	1	1050	2550	2550	40	916	1194	1144	160	490	612	560	Virginia					
22	722	1033	889	-	-	-	-	1	2958	2958	2958	62	1162	1478	1409	33	656	832	794	Washington					
6	485	915	607	10	458	489	460	1	2010	2690	2110	-	-	-	-	158	433	489	454	West Virginia					
10	Hourly			44	668	859	679	1	2263	2946	2725	195	1152	1500	1410	County Employee	Wisconsin								
3	501	1027	870	25	501	879	750	1	2000	-	-	19	928	1484	1336	-	-	-	-	Wyoming					

942 807      803 715      2601 2450      1597 1385      829 729

142

484

3.9%

12.2%

6.0%

12.7%

10.8%

**MAINTENANCE QUESTIONNAIRE ON POLICIES AFFECTING MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL AS OF JULY 1, 1974**

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

**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?
4. Do you have a mandatory retirement age?
  - a. If answer is "Yes," indicate the following:
    - a. Is it established by Policy or Statute?
    - b. Compulsory Retirement Age?
  - b. Is voluntary retirement possible after a prescribed number of years?
5. 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?

**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)?
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. Are your sick leaves cumulative?
  - If answer is "Yes," what is the maximum?

State	RETIREMENT PLAN										VACATION										SICK LEAVE									
	CIVIL SERVICE		State		Sec. Compulsory		Voluntary Retirement		Min.Yrs. Minimum		Annual Vacation Schedule		Annual Sick Leave Schedule		Annual Vacation Schedule		Annual Sick Leave Schedule		Annual Vacation Schedule		Annual Sick Leave Schedule		Annual Vacation Schedule		Annual Sick Leave Schedule					
	Plan	Sec.	Plan	Sec.	Retirement	Age	Service	Age	Min.Yrs.	Maxim.	Hrs. Yrs. of	Hrs. Yrs. of	Hrs. Yrs. of	Hrs. Yrs. of	Min.Yrs.	Maxim.	Hrs. Yrs. of	Hrs. Yrs. of	Min.Yrs.	Maxim.	Hrs. Yrs. of	Hrs. Yrs. of	Min.Yrs.	Maxim.	Hrs. Yrs. of	Hrs. Yrs. of				
Alabama	-	*	-	-	Yes	Yes	Yes	Statute	70	Yes	10 Yrs.	Age 60	Yes	104	0 to 5	234	25	Yes	480	Yes	104	0 to any	104	Any						
Alaska	*	-	-	-	Yes	Yes	No	-	-	Yes	3.5 Yrs.	Age 55/30 Yrs.	Yes	113	0 to 2	225	10+	Yes	450	Yes	113	0 to 2	113	2+						
Arizona	*	-	-	-	Yes	Yes	Yes	Statute	70	No	-	Age 65	Yes	96	0 to 3	168	15+	Yes	240	Yes	96	0 to any	96	Any						
Arkansas	-	*	-	*	Yes	Yes	Yes	Policy	67	Yes	10 Yrs.	Age 55/35 Yrs.	Yes	96	1 to 3	176	20+	Yes	216	Yes	96	1 to any	96	Any						
California	*	-	-	-	Yes	Yes	Yes	Statute	67	Yes	5 Yrs.	Age 55	Yes	80	0 to 3	160	24+	Yes	320	Yes	96	0 to any	96	Any						
Colorado	-	*	-	-	Yes	No	Yes	Policy	65	Yes	20 Yrs.	Age 55	Yes	96	1 to 5	168	15+	Yes	336	Yes	120	1 to any	120	Any						
Connecticut	-	*	-	-	Yes	Yes	Yes	Statute	70	Yes	10 Yrs.	Female 50	Yes	105	0.5 to 20	140	25+	Yes	840	Yes	105	0.5 to 20	105	25+						
Delaware	*	-	-	-	Yes	Yes	Yes	Statute	65	Yes	Any Age	Age 60/15 Yrs.	Yes	1124	0 to 10	150	15+	Yes	316	Yes	1124	0 to any	1124	Any						
Florida	*	-	-	-	Yes	Yes	Yes	Statute	65	Yes	10 Yrs.	Any Age	Yes	104	0 to 5	156	10+	Yes	240	Yes	104	0 to any	104	Any						
Georgia	*	-	-	-	Yes	Yes	Yes	Policy	65	Yes	5 Yrs.	Age 60	Yes	120	1 to 5	168	10+	Yes	360	Yes	120	-	-	-						
Hawaii	*	-	-	-	Yes	Yes	Yes	Statute	70	Yes	5 Yrs.	Age 55	Yes	168	0 to any	168	Any	Yes	720	Yes	168	0 to any	168	Any						
Idaho	*	-	-	-	Yes	Yes	Yes	Statute	70	Yes	5 Yrs.	Age 55	Yes	96	0 to 5	168	15+	Yes	240	Yes	96	0 to any	96	Any						
Illinois	*	-	-	-	Yes	No	Yes	-	-	Yes	8 Yrs.	Age 60	Yes	84	1 to 5	160	15+	Yes	1176	Yes	96	1 to any	96	Any						
Indiana	*	-	-	-	Yes	Yes	Yes	Policy	65	Yes	10 Yrs.	Age 50	Yes	96	1 to 10	160	20+	Yes	No limit	Yes	96	0 to 1	96	1+						
Iowa	*	-	-	-	Yes	No	Yes	Statute	70	No	-	-	Yes	80	0 to 4	160	12+	Yes	160	Yes	240	0 to any	240	Any						
Kansas	*	-	-	-	Yes	Yes	Yes	Policy	65	No	-	-	Yes	96	0 to 5	144	15+	Yes	192	Yes	96	0 to 5	96	5+						
Kentucky	*	-	-	-	Yes	Yes	Yes	Both	70	Yes	30 Yrs.	Age 55	Yes	96	0 to 5	168	15+	Yes	240	Yes	96	0 to any	96	Any						
Louisiana	*	-	-	-	Yes	No	Yes	Policy	65	Yes	30 Yrs.	Age 55	Yes	96	1 to 3	192	15+	Yes	No limit	Yes	96	1 to 3	192	15+						
Maine	*	-	-	-	Yes	No	Yes	Statute	70	Yes	25 Yrs.	Age 43	Yes	96	0 to 5	192	20+	Yes	240	Yes	96	0 to any	-	-						
Maryland	*	-	-	-	Yes	Yes	Yes	Statute	70	Yes	25 Yrs.	Age 60	Yes	80	1 to 5	200	20+	Yes	240	Yes	120	0 to any	120	Any						
Massachusetts	*	-	-	-	Yes	No	Yes	Statute	70	Yes	20 Yrs.	Age 55	Yes	80	1 to 5	160	10+	Yes	160	Yes	120	1 to any	120	Any						
Michigan	*	-	-	-	Yes	Yes	Yes	Statute	70	Yes	15 Yrs.	Age 50	Yes	120	1 to 5	184	20+	Yes	240	Yes	104	0 to 1	-	-						
Minnesota	*	-	-	-	Yes	Yes	Yes	Statute	68	Yes	30 Yrs.	Age 62	Yes	18	0 to 2	208	25+	Yes	192	Yes	52	0 to 1	104	2+						
Mississippi	*	-	-	-	Yes	Yes	Yes	Policy	65	Yes	30 Hrs.	Age 55	Yes	96	0 to 1	96	1+	Yes	296	Yes	96	0 to any	96	Any						
Missouri	*	-	-	-	Yes	Yes	Yes	Statute	70	Yes	20 Yrs.	Age 60	Yes	120	0 to 15	168	20+	Yes	336	Yes	120	0 to any	120	Any						
Montana	*	-	*	-	Yes	Yes	Yes	Policy	65	Yes	10 Yrs.	Age 55/30 Yrs.	Yes	120	1 to 10	192	20+	Yes	384	Yes	96	0 to 1	96	Any						
Nebraska	*	-	*	-	Yes	Yes	Yes	Statute	65	Yes	-	Age 60	Yes	96	1 to 5	200	16+	Yes	200	Yes	96	1 to 5	240	19+						
Nevada	*	-	-	-	Yes	No	Yes	Statute	65	Yes	10 Hrs.	Age 55	Yes	120	1 to 10	168	15+	Yes	240	Yes	120	0 to any	120	Any						
New Hampshire	*	-	-	-	Yes	Yes	Yes	Statute	70	Yes	30 Yrs.	Age 60	Yes	120	1 to any	120	Any	Yes	240	Yes	120	1 to any	120	Any						
New Jersey	*	-	-	-	Yes	Yes	Yes	Policy	70	Yes	25 Yrs.	Age 55/25 Yrs. (4 Pay)	Yes	96	0 to 10	160	20+	Yes	160	Yes	96	0 to 1	120	1+						
New Mexico	*	-	-	-	Yes	Yes	Yes	Policy	65	Yes	7 Yrs.	Age 60	Yes	120	0 to 1	120	Any	Yes	240	Yes	96	0 to any	96	Any						
New York	*	-	-	-	Yes	Yes	Yes	Statute	70	Yes	10 Yrs.	Age 55	Yes	104	1 to 7	160	84	Yes	320	Yes	104	0 to any	104	Any						
North Carolina	*	-	-	-	Yes	Yes	Yes	Policy	65	Yes	20 Yrs.	Age 50	Yes	80	0 to 2	192	20+	Yes	240	Yes	80	0 to any	80	Any						
North Dakota	*	-	-	-	Yes	No	Yes	Statute	70	Yes	-	Any age/ 32 yrs.	Yes	96	0 to 3	192	19+	Yes	240	Yes	96	0 to any	96	Any						
Ohio	*	-	-	-	Yes	No	Yes	Statute	70	Yes	5 Yrs.	Age 60	Yes	80	1 to 7	200	25+	Yes	600	Yes	120	0 to any	120	Any						
Oklahoma	*	-	-	-	Yes	Yes	Yes	Policy	65	No	-	Age 62	Yes	120	1 to 5	144	5+	Yes	384	Yes	120	1 to any	120	Any						
Oregon	*	-	-	-	Yes	Yes	Yes	Statute	65	Yes	30 Yrs.	Age 60	Yes	88	0 to 5	168	20+	Yes	250	Yes	96	0 to any	96	Any						
Pennsylvania	*	-	-	-	Yes	Yes	No	-	-	Yes	20 Yrs.	-	Yes	1124	2 to 15	150	15+	Yes	225	Yes	1124	0 to any	1124	Any						
Rhode Island	*	-	-	-	Yes	Yes	Yes	Statute	70	Yes	10 Yrs.	Age 55	Yes	170	1 to 10	176	201	Yes	176	Yes	180	0 to any	180	Avg						
South Carolina	*	-	-	-	Yes	Yes	Yes	Statute	72	Yes	20 Yrs.	Age 60	Yes	120	1 to 10	240	22+	Yes	360	Yes	120	0 to any	120	Any						
South Dakota	*	-	-	-	Yes	Yes	Yes	Statute	65	Yes	5 Yrs.	Age 55	Yes	120	1 to 13	180	13+	Yes	320	Yes	112	0 to any	112	Any						
Tennessee	*	-	-	-	Yes	Yes	Yes	Policy	65	Yes	35 Yrs.	Age 53	Yes	96	1 to 6	192	20+	Yes	336	Yes	96	0 to any	96	Any						
Texas	*	-	-	-	Yes	Yes	Yes	Policy	65	Yes	20 Yrs.	Age 55	Yes	80	0 to 15	168	20+	Yes	336	Yes	96	0 to any	96	Any						
Utah	*	-	-	-	Yes	Yes	Yes	Statute	65	No	-	-	Yes	96	0 to 5	144	10+	Yes	240	Yes	96	0 to 47	96	Any						
Vermont	*	-	-	-	Yes	Yes	Yes	Statute	65	Yes	JU Yrs.	Age 62	Yes	96	1 to 5	168	20+	Yes	320	Yes	96	0 to 5	108	20+						
Virginia	*	-	-	-	Yes	Yes	Yes	Policy	70	Yes	30 Yrs.	Age 60	Yes	96	1 to 5	144	10+	Yes	288	Yes	120	0 to any	120	Any						
Washington	*	-	-	-	Yes																									

## INSURANCE

12. Are your maintenance and operations employees protected by a wholly or partially state-financed hospitalization plan?

12a. If answer is "Yes," indicate whether plan is wholly state-financed or partially state-financed.

12b. 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?

13a. If answer is "Yes," indicate whether plan is wholly state-financed or partially state-financed.

13b. Is participation optional or mandatory with employee?

14. Are your maintenance and operations employees protected against lawsuit by a state financed public liability plan?

14a. All

14b. All but Temporary

14c. Supervisory Only

14d. None

## UNTONIZATION

15. Are your maintenance and operations employees organized by the following, and if so, is membership mandatory or voluntary?

  - a. National Union
  - b. Local Union or Employee Association

**SERVICE AWARDS**

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

Cumulative Maximum (11)	INSURANCE										UNIONIZATION				SERVICE AWARDS		
	Hospitalization			Life Insurance*			Public Liability				National Union		Local Union		(16)		
	(12)	(12A)	(12B)	(13)	(13A)	(13B)	(14A)	(14B)	(14C)	(14D)	(15A)	(15B)	(15C)	(15D)		State	
Yes 1,200	Yes	Partially	Optional	No	-	-	-	-	-	-	Yes	Voluntary	Yes	Voluntary	Yes	Alabama	
Yes No limit	Yes	Wholly	Mandatory	Yes	Both	Optional	X	-	-	-	No	-	Yes	Mandatory	Yes	Alaska	
Yes No limit	Yes	Partially	Optional	No	-	-	X	-	-	-	No	-	Yes	Voluntary	Yes	Arizona	
Yes 720	Yes	Partially	Optional	No	-	-	-	-	-	-	No	-	Yes	Voluntary	Yes	Arkansas	
Yes No limit	Yes	Partially	Optional	Yes	Wholly	Mandatory	X	-	-	-	No	-	Yes	Voluntary	Yes	California	
Yes No limit	Yes	Partially	Optional	Yes	Partially	Optional	X	-	-	-	No	-	Yes	Voluntary	Yes	Colorado	
Yes No limit	Yes	Wholly	Optional	Yes	Partially	Optional	-	-	-	-	Yes	Voluntary	Yes	Voluntary	No	Connecticut	
Yes 675	Yes	Partially	Optional	Yes	Partially	Optional	-	-	-	-	Yes	Mandatory	Yes	Mandatory	Yes	Delaware	
Yes No limit	Yes	Partially	Mandatory	No	Wholly	Mandatory	X	-	-	-	Yes	Voluntary	-	-	No	Florida	
Yes 720	Yes	Partially	Mandatory	Yes	Partially	Mandatory	X	-	-	-	No	-	No	-	Yes	Georgia	
Yes No limit	Yes	Partially	Optional	Yes	Wholly	Optional	-	-	-	-	No	-	Yes	Voluntary	Yes	Hawaii	
Yes No limit	Yes	Partially	Optional	Yes	Wholly	Mandatory	X	-	-	-	No	-	Yes	Voluntary	Yes	Idaho	
Yes No limit	Yes	Wholly	Mandatory	Yes	Wholly	Mandatory	X	-	-	-	Yes	Voluntary	Yes	Voluntary	No	Illinois	
Yes No limit	Yes	Partially	Optional	Yes	Partially	Optional	-	-	-	-	Yes	Voluntary	Yes	Voluntary	Yes	Indiana	
Yes 720	Yes	Partially	Optional	Yes	Wholly	Mandatory	X	-	-	-	No	-	Yes	Voluntary	Yes	Iowa	
Yes No limit	Yes	Partially	Optional	Yes	Partially	Mandatory	X	-	-	-	Yes	Voluntary	Yes	Voluntary	Yes	Kansas	
Yes No limit	Yes	Wholly	Optional	Yes	Wholly	Mandatory	-	-	-	-	No	-	No	-	Yes	Kentucky	
Yes No limit	Yes	Partially	Optional	Yes	Partially	Optional	-	-	-	-	Yes	Voluntary	Yes	Voluntary	Yes	Louisiana	
Yes 720	Yes	Partially	Optional	No	-	-	X	-	-	-	Yes	Voluntary	Yes	Voluntary	No	Maine	
Yes 800	Yes	Partially	Optional	No	-	-	X	-	-	-	Yes	Voluntary	Yes	Voluntary	Yes	Maryland	
Yes No limit	Yes	Partially	Optional	Yes	Partially	Optional	-	-	-	-	Yes	Voluntary	No	-	No	Massachusetts	
Yes No limit	Yes	Partially	Optional	Yes	Partially	Optional	-	-	-	-	Yes	Voluntary	Yes	Voluntary	Yes	Michigan	
Yes 800	Yes	Wholly	Optional	Yes	Wholly	Optional	-	Pt	-	-	Yes	Voluntary	Yes	Voluntary	Yes	Minnesota	
Yes No limit	Yes	Partially	Optional	Yes	Partially	Optional	-	-	-	-	No	-	No	-	Yes	Mississippi	
Yes No limit	No	-	-	No	-	-	X	-	-	-	Yes	Voluntary	Yes	Voluntary	Yes	Missouri	
Yes No limit	Yes	Partially	Optional	Yes	Partially	Optional	-	-	-	-	Yes	Mandatory	No	-	Yes	Montana	
Yes 1,440	Yes	Partially	Optional	Yes	Wholly	Mandatory	-	-	-	-	Yes	Voluntary	Yes	Voluntary	Yes	Nebraska	
Yes No limit	Yes	Wholly	Optional	Yes	Wholly	Optional	X	-	-	-	No	-	Yes	Voluntary	Yes	Nevada	
Yes 720	Yes	Wholly	Optional	Yes	Partially	Optional	-	-	-	-	Yes	Voluntary	Yes	Voluntary	Yes	New Hampshire	
Yes No limit	Yes	Wholly	Mandatory	Yes	Wholly	Mandatory	-	-	-	-	Yes	Voluntary	Yes	Voluntary	Yes	New Jersey	
Yes No limit	Yes	Partially	Optional	Yes	Partially	Optional	-	-	-	-	Yes	Voluntary	Yes	Voluntary	Yes	New Mexico	
Yes 1,350	Yes	Partially	Optional	No	-	-	-	-	-	-	No	-	Yes	Voluntary	No	New York	
Yes No limit	Yes	Wholly	Optional	No	-	-	X	-	-	-	No	-	Yes	Voluntary	Yes	North Carolina	
Yes No limit	Yes	Both	Optional	Yes	Wholly	Optional	-	-	-	-	Yes	Voluntary	Yes	Voluntary	Yes	North Dakota	
Yes No limit	Yes	Partially	Optional	Yes	Wholly	Mandatory	-	-	-	-	Yes	Voluntary	Yes	Voluntary	No	Ohio	
Yes 360	Yes	Wholly	Mandatory	Yes	Wholly	Mandatory	-	-	-	-	No	-	No	-	Yes	Oklahoma	
Yes No limit	Yes	Partially	Optional	No	-	-	X	-	-	-	No	-	Yes	Voluntary	Yes	Oregon	
Yes 675	Yes	Wholly	Optional	Yes	Wholly	Optional	-	-	-	-	Yes	Voluntary	No	-	Yes	Pennsylvania	
Yes 960	Yes	Partially	Optional	Yes	Partially	Optional	-	-	-	-	X	Yes	Mandatory	Yes	Mandatory	Rhode Island	
Yes 720	Yes	Wholly	Mandatory	Yes	Wholly	Mandatory	-	-	-	-	No	-	Yes	Voluntary	Yes	South Carolina	
Yes 672	Yes	Partially	Mandatory	No	-	-	X	-	-	-	Yes	Voluntary	Yes	Voluntary	Yes	South Dakota	
Yes 960	Yes	Partially	Optional	Yes	Partially	Optional	-	-	-	-	No	-	No	-	Yes	Tennessee	
Yes 192	Yes	Partially	Optional	Yes	Partially	Optional	-	X	-	-	No	-	Yes	Voluntary	Yes	Texas	
Yes 4,512	Yes	Wholly	Mandatory	Yes	Partially	Optional	-	-	-	-	X	-	-	Yes	Voluntary	Yes	Utah
Yes No limit	Yes	Partially	Optional	Yes	Partially	Optional	-	-	-	-	X	No	-	Yes	Voluntary	Vermont	
Yes No limit	Yes	Wholly	Optional	Yes	Partially	Mandatory	X	-	-	-	No	-	No	-	Yes	Virginia	
Yes No limit	Yes	Partially	Optional	Yes	Partially	Optional	X	-	-	-	Yes	Mandatory	Yes	Mandatory	Yes	Washington	
Yes 720	Yes	Wholly	Optional	Yes	Wholly	Optional	X	-	-	-	No	-	No	-	-	West Virginia	
Yes No limit	Yes	Partially	Optional	Yes	Partially	Optional	X	-	-	-	No	-	Yes	Voluntary	No	Wisconsin	
Yes 960	Yes	Partially	Optional	No	-	-	X	-	-	-	X	No	-	Yes	Voluntary	Yes	Wyoming

MAINTENANCE QUESTIONNAIRE ON POLICIES AFFECTING MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL AS OF JULY 1, 1976 - PAGE 2

**WORKING CONDITIONS:**

17. Are all or some of your maintenance and operations field employees are paid on a monthly salaried basis and which are paid on an hourly basis?
  - a. Permanent Field Employee (exclusive of Supervisory)
  - b. Supervisor
  - c. Temporary
18. Standard number of hours worked by each permanent field employee per day and per week.
19. Is any allowance of payment 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. Supervisor
  - c. Temporary
20. Are your field employees required to report at an assembly point, such as a headquarters garage or shop, preparatory to their day's work?
21. Is there a question 20 is "Yes," are they paid from the time they leave this assembly point until they return at the close of the day's work (per diem to portal)?

**WORKING CONDITIONS (Continued):**

21. Are maintenance and operations employees furnished any type of protective clothing as indicated below?
  - a. Hard Hats and Safety Vests
  - b. Reflecting Apparel
  - c. Other Protective Clothing for Specialized Operations
  - d. Normal Operations (e.g., Police, Fire, Hazardous Undergarments, etc.)
22. Do you use automatic or automatic recommends salary advancements?
23. Do you by law or policy require a formalized job classification plan?
24. Do you use convict labor?
25. Do you furnish meals and lodgings 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):**

26. Does your state provide reimbursement of expenses incurred when an employee or operations employee is required to change residence which necessitates his moving his family and furniture?
  - a. Total
  - b. Partial
  - c. None
- MAINTENANCE RESPONSIBILITY:**
27. Is the physical placement and maintenance of signing and marking the responsibility of the Maintenance Division?
  - a. Highway Signs
  - b. Replacement and Maintenance of Highway Signs
  - c. Pavement Marking
28. Are maintenance and operations for vehicle maintenance under the jurisdiction of the Highway Department?
  - a. State Roads Only
  - b. Vehicles for several State Agencies
  - c. Vehicles for all State Agencies

State	WORKING CONDITIONS												WORKING CONDITIONS (Continued)															
	(17A)	(17B)	(17C)	(17D)	(18A)	(18B)	(18C)	(18D)	(18E)	(18F)	(18G)	(18H)	(18I)	(18J)	(18K)	(18L)	(18M)	(18N)	(18O)	(18P)	(18Q)	(18R)	(18S)	(18T)	(18U)	(18V)	(18W)	(18X)
Alabama	-	Both	Monthly	Hourly	\$ 8.00	Yes	Str. or Comp.	Str. or Comp.	Str. or Comp.	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Alaska	-	Hourly	Monthly	Hourly	7½ 37½	Yes	14	-	-	Yes	14	14	14	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	-	-	-	-	-	
Arizona	Monthly	-	-	-	\$ 8.40	Yes	14	-	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	No	Yes	-	-	-	-	-		
Arkansas	-	Hourly	Monthly	Hourly	\$ 8.40	Yes	14	-	-	Yes	14	14	14	Yes	-	-	-	-	-									
California	-	Monthly	Monthly	Both	\$ 8.40	Yes	14	-	-	Str. or Comp.	14	14	14	Yes	-	-	-	-	-									
Colorado	-	Monthly	Monthly	Hourly	\$ 8.40	Yes	14	-	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Connecticut	-	Hourly	Monthly	Hourly	\$ 7.35	Yes	14	-	-	Yes	14	14	14	Yes	No	Yes	-	-	-	-	-							
Delaware	-	Hourly	Monthly	Hourly	7½ 37½	Yes	14	Straight	-	Yes	14	14	14	Yes	No	Yes	-	-	-	-	-							
Florida	Bi-Wkly.	-	-	-	\$ 10.40	Yes	14	Comp.	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	-	-	-	-	-	
Georgia	Monthly	-	-	-	\$ 8.40	Yes	14	Comp.	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Hawaii	Monthly	-	-	-	\$ 8.40	Yes	14	-	-	Yes	14	14	14	Yes	-	-	-	-	-									
Idaho	-	Monthly	Monthly	Hourly	\$ 8.40	Yes	14	Comp.	-	Yes	14	14	14	Yes	No	Yes	-	-	-	-	-							
Illinois	-	Monthly	Monthly	Hourly	\$ 8.40	Yes	14	14	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Indiana	-	Hourly	Monthly	Hourly	\$ 8.40	Yes	Straight	Straight	Straight	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Iowa	Monthly	-	-	-	\$ 8.40	Yes	14	-	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Kansas	-	Monthly	Monthly	Hourly	\$ 8.40	Yes	14	-	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Kentucky	-	Hourly	Monthly	Hourly	\$ 8.40	Yes	14	Comp.	-	Yes	14	14	14	Yes	No	Yes	-	-	-	-	-							
Louisiana	Monthly	-	-	Hourly	\$ 8.40	Yes	14	Comp.	-	Yes	14	14	14	Yes	No	Yes	-	-	-	-	-							
Maine	-	Hourly	-	Hourly	\$ 9.43½	Yes	14	-	-	Yes	14	14	14	Yes	No	Yes	-	-	-	-	-							
Maryland	-	Bi-Wkly.	Bi-Wkly.	Hourly	\$ 8.40	Yes	14	Comp.	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Massachusetts	Hourly	-	-	-	\$ 8.40	Yes	14	14	-	Yes	14	14	14	Yes	No	Yes	-	-	-	-	-							
Michigan	Hourly	-	-	-	\$ 8.40	Yes	14	-	-	Yes	14	14	14	Yes	No	Yes	-	-	-	-	-							
Minnesota	-	Monthly	Monthly	Hourly	\$ 8.40	Yes	14	14	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Mississippi	-	Monthly	Monthly	Both	\$ 8.40	Yes	Comp.	-	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Missouri	-	Monthly	Monthly	Hourly	\$ 8.40	Yes	14	Straight	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Montana	Monthly	-	-	-	\$ 8.40	Yes	14	-	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Nebraska	Hourly	-	-	-	\$ 8.40	Yes	14	Straight	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Nevada	Monthly	-	-	-	\$ 8.40	Yes	14	Straight	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
New Hampshire	-	Hourly	Both	Hourly	\$ 8.40	Yes	14	Straight	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
New Jersey	Monthly	-	-	-	\$ 8.40	Yes	14	14	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
New Mexico	Both	-	-	-	\$ 8.40	Yes	14	Comp.	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
New York	Monthly	-	-	-	\$ 8.40	Yes	14	14	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
North Carolina	-	Monthly	Monthly	Hourly	\$ 8.40	Yes	14	14	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
North Dakota	-	Hourly	Monthly	Hourly	\$ 8.40	Yes	14	-	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Ohio	Hourly	-	-	-	\$ 8.40	Yes	14	Comp.	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Oklahoma	Monthly	-	-	-	\$ 8.40	Yes	14	Comp.	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Oregon	Monthly	-	-	-	\$ 8.40	Yes	14	14	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Pennsylvania	-	Monthly	Monthly	Hourly	7½ 37½	Yes	14	14	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Rhode Island	-	Hourly	Monthly	Hourly	\$ 8.40	Yes	14	14	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
South Carolina	-	Hourly	Weekly	Hourly	\$ 8.40	Yes	14	Straight	-	Comp.	14	14	14	Yes	No	Yes	-	-	-									
South Dakota	-	Hourly	Monthly	Hourly	\$ 8.40	Yes	14	14	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Tennessee	Monthly	-	-	-	\$ 8.40	Yes	14	-	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Texas	-	Hourly	Monthly	Hourly	\$ 8.40	Yes	14	-	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Utah	Monthly	-	-	-	\$ 8.40	Yes	14	-	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Vermont	-	Hourly	Monthly	-	\$ 9.45	Yes	Straight	-	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Virginia	-	Hourly	Monthly	Hourly	\$ 8.40	Yes	14	14	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Washington	-	Monthly	Monthly	Hourly	\$ 8.40	Yes	14	14	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
West Virginia	-	Hourly	Monthly	Hourly	\$ 8.40	Yes	14	Comp.	-	Comp.	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Wisconsin	-	Both	Monthly	Hourly	\$ 8.40	Yes	14	Comp.	-	Comp.	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	
Wyoming	-	Monthly	Monthly	Hourly	\$ 8.40	Yes	14	-	-	Yes	14	14	14	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	-	-	-	



TRANSPORTATION RESEARCH BOARD  
GROUP 3, OPERATION AND MAINTENANCE OF TRANSPORTATION FACILITIES

L. Gary Byrd, Chairman  
Group 3 Council  
Byrd, Tallamy, McDonald and Lewis, Consulting Engineers,  
Falls Church, Virginia

COMMITTEE A3C03, JOINT TRB-AASHTO PROJECT COMMITTEE ON  
MAINTENANCE AND OPERATIONS PERSONNEL

---

---

C. O. Leigh, Chairman  
Maintenance Engineer  
Virginia State Highway Department & Transportation  
Richmond, Virginia

Adrian G. Clary, Staff Engineer  
Transportation Research Board  
Washington, D. C.

Clyde A. Burke, Secretary  
Senior Associate  
Roy Jorgensen Associates, Inc.  
Gaithersburg, Maryland

George M. Briggs, Director of Highway Maintenance, New York State  
Department of Transportation, Albany, New York 12226  
P. E. Cunningham, Maintenance Management Systems Specialist,  
Federal Highway Administration, Washington, D. C. 20590  
LaRue Delp, Engineer of Maintenance, State Highway Commission of  
Kansas, Topeka, Kansas 66612  
Milton S. Greitzer, Chief, Bureau of Maintenance, New Jersey  
Department of Transportation, Trenton, New Jersey 08625  
Donald D. Gruel, Maintenance Engineer, Montana State Highway  
Commission, Helena, Montana 59601  
Patrick W. Hawley, Street & Sewer Maintenance Supervisor, City  
of Milwaukee, Milwaukee, Wisconsin 53202  
Dr. Allen J. Henderson, Assistant Professor, Department of  
Industrial Engineering, Fargo, North Dakota 58102  
Roy W. Jump, State Maintenance Engineer, Idaho Department of  
Highways, Boise, Idaho 83707  
Edward J. Kehl, Engineer of Maintenance, Illinois Department of  
Transportation, Springfield, Illinois 62706  
Robert L. Keller, District Engineer, Pennsylvania Department of  
Transportation, Harrisburg, Pennsylvania 17120  
James F. Kelley, Maintenance Engineer, Massachusetts Department of  
Public Works, Boston, Massachusetts 02114  
John M. Kirtland, Chief, Maintenance Section, Hennepin County  
Public Works, Hopkins, Minnesota 55343

Samuel F. Lanford, Assistant State Engineer, Maintenance,  
Arizona Highway Department, Phoenix, Arizona 85007

Alfred F. Miller, Training Officer, National Highway Institute-  
HHI-3, Alexandria, Virginia 22304

William G. Mortensen, Potomac, Maryland 20854

Robert W. Patton, Staff Maintenance Superintendent, Colorado  
Department of Highways, Denver, Colorado 80222

Martin C. Rissel, Engineer of Maintenance and State Aid, Maine  
Department of Transportation, Augusta, Maine 04330

A. R. Romine, Director, Division of Maintenance, Kentucky  
Department of Transportation, Frankfort, Kentucky 40601

Bert Rownd, State Maintenance Engineer, Arkansas State Highway  
Department, Little Rock, Arkansas 72203

George M. Shrieves, Assistant State Programs Officers, National  
Highway Institute, Federal Highway Administration, U. S.  
Department of Transportation, Washington, D. C. 20590

Earle L. Tyre, State Highway Maintenance Engineer, Georgia  
Department of Transportation, Atlanta, Georgia 30334