

# HIGHWAY RESEARCH

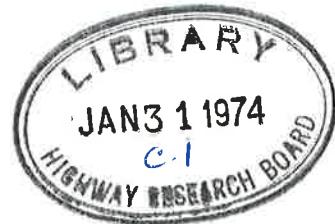
## CIRCULAR

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December 1973

PROGRESS REPORT OF AN  
HRB-AASHTO JOINT STUDY OF  
MAINTENANCE AND OPERATIONS PERSONNEL



Since its formation in 1944, the HRB Maintenance and Operations Personnel Committee, in cooperation with the AASHO (now AASHTO) Operating subcommittee on Maintenance has submitted twenty-nine 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 this twenty-nine year period the average maximum salaries of state maintenance engineers have increased 370%; common laborers, 363%; mechanics, 367%. 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).

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The following are the average monthly salaries of certain positions, by regions, as of July 1, 1973, which gives a reasonable cross-section for the comparison of current salaries in these four regions:

Job Title	Average Salary (\$/mo.)			
	North Atlantic States	South- eastern States	Mississippi Valley States	Western States
State Maint. Engr.	\$1936	\$1827	\$1877	\$1944
District Engr.	1950	1747	1757	1916
Area Supervisor	959	799	926	1152
Common Laborer	506	400	521	564
Mechanic	725	597	727	832
Equip. Oper. I	562	464	587	645
Equip. Oper. II	609	519	596	741
Equip. Oper. III	729	613	663	812

These averages all show an increase over 1972 with the exception of Equipment Operator II in the Mississippi Valley States.

In 19 states the average salaries of the District Engineers are equal to or more than those of the State Maintenance Engineer.

#### 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 Wyoming) out of the 14 have no such plan.

#### Retirement Plan

Forty-nine 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 one state does not have its employees covered by either a state-sponsored retirement plan or Federal Social Security.

Only four states do not have a compulsory retirement age; the compulsory retirement age is 65 in 21 states, between 65 and 70 in 6 states, 70 in 17 states, and 72 in 1 state. The retirement age is established by statute in 24 states and by policy in 20 states, with 2 states indicating it is governed by both policy and statute.

Forty-six 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 4 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

One state indicated that only part of its employees are granted vacation and sick leave; the other 49 states grant vacation and sick leave to all permanent employees. The minimum or starting basis on vacations ranges from 78 to 168 hours per year, and the maximum from 96 to 225 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 158 to unlimited, with just 2 states having no limit on the amount of vacation they 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. Only one state does not allow sick leave to be carried over into the ensuing year; of the 49 states where sick leave is cumulative, 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 13 of these wholly state-financed. The plan is mandatory in 7 states.

Thirty-four states have a partially or wholly state-financed life insurance plan for their permanent employees, with 15 of these wholly state-financed. The plan is mandatory in 12 states.

In 31 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.

Twenty-four states have affiliation with a national union; membership is mandatory in two of these states. Thirty-seven states have local unions or employee associations; membership is mandatory in three of these states.

Service Awards

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

Working Hours and Conditions

Twelve states pay all employees on a monthly salary basis, with 16 other states paying all permanent field and supervisory employees on a monthly or bi-weekly salary basis. Six states pay all employees on an hourly basis; in 14 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 three states have a more than 40-hour week (a 45-hour week).

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 16 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, 44 pay those employees portal to portal, and 3 states report they do not allow any travel pay.

All states report that they furnish hard hats and safety vests to their employees; 47 states furnish welding goggles and helmets; 43 states furnish some other types of protective clothing, even though minor, to their maintenance employees.

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

Forty-eight states have a formalized job classification plan.

Only six states use convict labor.

Only one state does 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 6 states, of actual expenses with a maximum in 10 states, and on a per diem basis in 19 states. In 14 states, the basis for meals and lodging differs.

Thirty-nine 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 26 states, for their replacement and maintenance in 42 states, and for pavement marking in 36 states.

In 47 states garage or shop operations for vehicle maintenance are under the jurisdiction of the highway department; in 29 states this is limited to highway department vehicles only, while in 14 states servicing is performed for some other state agencies and in 3 states for all State agencies.

Lane Miles

The average lane miles per man varies from 4.7 to 37.7. Traffic volumes per man (vehicle miles per man) vary from 2.9 million to 31.9 million.

It is realized that traffic volumes would have an effect on the lane-miles per man, and therefore a comparison between states of lane miles per man (Column 30) should be considered in relation to the traffic volumes per man (Column 32A). Hopefully, on future reports a factor between the two may be included in the report.

Maintenance Management System

Twenty-nine states have changed or are in the process of changing to a maintenance management system or maintenance performance budget method of operation, with 12 of these states indicating 100 percent of their functions and costs are now under this system. Thirteen states contemplate making this change, while 8 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 1,560 according to the answers given, indicating some misinterpretation in answering this question.

The travel distance from a gang or section headquarters to their farthest point of work varies from 10 to 58, and averages 26.3 for the states replying.

Forty-three states have special crews for traffic signs, with the lane miles handled by each crew varying from 146 to 5,866.

Forty-seven states have special crews for striping, with the lane miles handled by each crew varying from 494 to 10,740.

Two states indicate the same special crews handle both marking and striping.

The wide variance in the mileage handled by these special marking and striping crews indicates 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.

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

Definitions of Maintenance and Operations Personnel Titles  
(6-7-71)

Title No.	<u>Title &amp; Description</u>
14.	<u>Mechanic</u> - One who, under direct supervision, maintains and repairs all types of automotive equipment.
15.	<u>Mechanic Helper</u> - One who assists the mechanic in the maintenance and repair of all automotive equipment.
16.	<u>Equipment Operator I</u> - Operators of light trucks, mowers, patching rollers, etc.
17.	<u>Equipment Operator II</u> - Operators of heavy trucks, light graders and rollers used on resurfacing projects.
18.	<u>Equipment Operator III</u> - Operators of specialized equipment such as cranes, shovels, heavy graders, paving machines, etc.

TRAFFIC OPERATIONS PERSONNEL TITLES

19. State Traffic Engineer - One in an executive capacity who supervises all activities related to traffic operations of the State Highway Department.
20. Assistant State Traffic Engineer - One who assists the State Traffic Engineer in the work of supervising traffic operations.
21. District Traffic Engineer - One in an executive capacity who supervises traffic operations within a district.
22. Assistant District Traffic Engineer - One who assists the District Traffic Engineer in the work of supervising traffic operations within a district.
23. Traffic Supervisor - One who directs the activities of all employees and equipment related to traffic operations within a district.
24. Sign Supervisor - One who directs the activities of all signing, both fabrication and erection.
25. Sign Shop Foreman - One who directs a crew of men in the activity of fabricating traffic signs.
26. Traffic Signal & Lighting Foreman - One who directs a crew of men in activities related to the operation and maintenance of traffic signals and lighting.
27. Striper Foreman - One who directs a crew of men in activities related to pavement markings.
28. Sign Erection Foreman - One who directs a crew of men in activities related to the erection and maintenance of all traffic signs.
29. Sign Fabricator - One who specializes in the fabrication of traffic signs.
30. Sign Technician - One who operates equipment and laborers for all activities associated with signing, both fabrication and erection.

Definitions of Maintenance and Operations Personnel Titles  
(6-7-71)

<u>Title</u>	<u>No.</u>	<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 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.

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GENERAL DEFINITIONS

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

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

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

## MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL TITLES USED BY STATE HIGHWAY DEPARTMENTS (AS OF JULY 1, 1973)

State	MAINTENANCE PERSONNEL:			
	<u>State Maintenance Engineer</u>	<u>(1) Assistant State Maintenance Engineer</u>	<u>(2) District Engineer</u>	<u>(4) District Maintenance Engineer</u>
Alabama	State Maint. Engr.	Asst. State Maint. Engr.	Division Engineer	Asst. Div. Engr. (Maint.)
Alaska	State Maint. Engr.	Asst. State Maint. Engr.	District Engineer	Dist. Maint. Engr.
Arizona	Asst. State Engr., Maint.	Maint. Oper. Engr. Maint. Planning Engr., et al	District Engineer	Dist. Maint. Engr., et al
Arkansas	Engr. of Maint. Div.	Hwy. Civil Engr. IV	District Engineer	Hwy. Dist. Maint. Supt. II
California	Chief Branch	Chief Section	Chief Transportation Dist.	Chief Branch
Colorado	Staff Maint. Supt.	-	Principal Hwy. Engr.	Hwy. Maint. Supt.
Connecticut	Director of Maint.	Maint. Manager II	-	Maint. Manager I
Delaware	State Maint. Engr.	-	District Engineer	Dist. Maint. Engr.
Florida	State Maint. Engr.	Deputy State Maint. Engr.	District Engineer	Civil Engr. IV
Georgia	Civil Engr. VII	Civil Engr. V	Civil Engr. VI	Dist. Maint. Engr.
Hawaii	Chief, Hwys. Div.	Asst. Chief, Const. & Maint.	District Engineer	Dist. Maint. Engr./Supt.
Idaho	Maint. Engr.	Asst. Maint. Engr.	District Engineer	Dist. Maint. Engr.
Illinois	Engr. of Maint.	Asst. Engr. of Maint.	District Engineer	Dist. Maint. Engr.
Indiana	Chief, Div. of Maint.	Asst. Chief, Div. of Maint.	District Engineer	Dist. Maint. Engr.
Iowa	Maint. Engr.	Asst. Maint. Engr.	District Engineer	Div. Maint. Engr.
Kansas	Engr. of Maint.	Asst. Engr. of Maint.	Division Engineer	Asst. Dist. Engr., Oper.
Kentucky	Dir., Div. of Maint.	Asst. Dir., Div. of Maint.	District Engineer	Asst. Dist. Engr.
Louisiana	Chief Maint. & Opers. Engr.	Road Maint. Engr. Bridge Maint. Engr., et al	District Engineer	Div. Supr.
Maine	Engr. of Maint. & State Aid	Hwy. Maint. Engr.	Division Engineer	Asst. Dist. Engr., Maint.
Maryland	Asst. Chief Engr., Maint.	Chief, Bureau Hwy. Maint.	District Engineer	Dist. Maint. Engr.
Massachusetts	Maint. Engr.	Asst. Maint. Engr.	Dist. Hwy. Engr.	Dist. Maint. Engr.
Michigan	Engr. of Maint.	Asst. Engr. of Maint. Opers.	-	Dist. Maint. Engr.
Minnesota	Asst. Comp., Maint. & Const. Opers.	State Maint. Opers. Engr.	District Engineer	Dist. Maint. Engr.
Mississippi	Maint. Engr.	Asst. Maint. Engr.	District Engineer	Dist. Maint. & Traffic Engr.
Missouri	Div. Engr., Maint. & Traffic	Asst. Div. Engr., Maint.	District Engineer	Chief, Field Maint. Bureau
Montana	Administrator, Maint.	Asst. Admin., Maint. Maint. Opers. Engg.; Maint. Bridge Engr.; Equip. Engr.	-	Dist. Hwy. Maint. Supt.
Nebraska	Maint. Engr.	Asst. Maint. Engr.	Hwy. Dist. Engr.	-
Nevada	Chief Maint. Engr.	Asst. Maint. Engr.	District Engineer	-
New Hampshire	Maint. Engr.	Asst. Maint. Engr.	Division Engineer	-
New Jersey	Chief, Bureau of Maint.	-	Regional Engr., Trans.	Dist. Supt.
New Mexico	Civil Engr. V	Civil Engr. IV	Civil Engr. V	Civil Engr. III
New York	Dir. of Trans. Maint.	Dir. of Hwy. Maint.	Reg. Dir. of Trans.	Reg. Hwy. Maint. Engr. A-B-C
North Carolina	State Maint. Engr.	Aren. Maint. Engr.	Division Engineer	Dist. Engr.
North Dakota	Maint. Engr.	Asst. Maint. Engr.	District Engineer	Bridge Maint. Supt.
Ohio	Deputy Dir. of Opers.	Engr. of Maint.	Dist. Deputy Dir.	Dist. Oper. Engr.
Oklahoma	State Maint. Engr.	Asst. State Maint. Engr.	Division Engineer	Asst. Div. Engr. for Maint.
Oregon	Asst. State Hwy. Engr. for Opers.	-	Regional Engineer	-
Pennsylvania	Civil Engr. VI	Civil Engr. V	Hwy. Dist. Engr. II & III	Admin. Officer V
Rhode Island	Maint. Engr.	Chief, Maint. Oper., et al	-	-
South Carolina	Maint. Engr.	Asst. Maint. Engr.	District Engineer	Dist. Maint. Engr.
South Dakota	Engr. of Maint.	Various	District Engineer	Dist. Maint. Engr.
Tennessee	State Maint. Engr.	Asst. State Maint. Engr.	Regional Engineer	Reg. Maint. Engr.
Texas	Chief Engr., Maint. & Opers.	-	District Engineer	Dist. Maint. Engr.
Utah	Engr. for Maint.	Maint. Planning Engr.	District Engineer	Dist. Maint. Engr.
Vermont	State Maint. Engr.	Asst. State Maint. Engr.	District Engineer	Dist. Maint. Engr.
Virginia	State Hwy. Maint. Engr.	State Hwy. Asst. Maint. Engr.	Hwy. Dist. Engr.	Hwy. Asst. Dist. Engr.
Washington	Asst. Dir. of Hwys., Maint.	Asst. Maint. Engr.	District Engineer	Dist. Maint. Engr.
West Virginia	Chief Engr., Maint.	Asst. Dir., Maint.	District Engineer	Asst. Dist. Engr., Maint.
Wisconsin	Chief Maint. Engr.	Asst. Chief Maint. Engr.	District Engineer	Dist. Chief Maint. Engr.
Wyoming	State Const. & Maint. Engr.	-	District Engineer	Dist. Maint. Engr.

(5) Assistant District Maintenance Engineer	(6) Resident Maintenance Engineer	(7) Area Supervisor	(8) Gang Foreman	(9) Sectionman	State
-	District Engineer	Hwy. Sup. I & II Hwy. Maint. Foremen III Area Foreman Hwy. Maint. Foreman	Highway Foreman Hwy. Maint. Foreman II	Highway Camp Guard Hwy. Maint. Foreman I (Incl. in 16, 17, 18)	Alabama
Dist. Maint. Supr.		Hwy. Spec. Maint. Supr.	Hwy. Foreman	Hwy. Maint. Man III	Alaska
Hwy. Dist. Maint. Supt. I Chief Section		Hwy. Supt.	Hwy. Foreman	Sr. Hwy. Maint.	Arizona
Asst. Hwy. Maint. Supt.		Sr. Hwy. Foreman	Hwy. Foreman	Maint. Crew Leader	Arkansas
Maint. Opsra. Supt.		Maint. General Foreman	Hwy. Maint. Supr.	Labor Foreman I, II, III	California
Asst. Dist. Maint. Engr.	Hwy. Maint. Operator Mgr.	Hwy. Maint. Supt.	Hwy. Maint. Foreman II	Hwy. Maint. Foreman	Colorado
Asst. Dist. Maint. Engr.	Res. Maint. Engineer	Hwy. Maint. Supr. II	Hwy. Maint. Foreman II	Hwy. Maint. Foreman I	Connecticut
Civil Engr. II & III		Hwy. Maint. Supt.	Hwy. Const. & Maint. Supt.	General Labor Foreman	Delaware
-				General Laborer III, et al	Florida
-				Spec. Maint. Foreman	Georgia
Asst. Dist. Maint. Engr.	Maint. Field Engr.	Hwy. Maint. Section Supr.	Hwy. Maint. Labor Foreman	Maint. Foreman	Hawaii
-		Sub-District Supt.	Hwy. Foreman	Hwy. Maint. Man	Idaho
-	Res. Maint. Engr.	Hwy. Maint. Supr.	Hwy. Maint. Foreman 2 & 3	Unit Foreman	Illinois
Div. Supt.		Hwy. Supt.	Dist. Supt.	Sub-District Foreman	Indiana
Dist. Maint. Engr.		Maint. Supt.	Hwy. Foreman	Hwy. Maint. Foreman I	Iowa
Asst. Dist. Maint. Engr.	Res. Maint. Engr.	Superintendent	Foreman I	-	Kansas
Asst. Div. Engr.		Hwy. Dist. Supr.	Hwy. Foreman	Crew Leader	Kentucky
-	Res. Maint. Engr.	Hwy. Maint. Supr.	Hwy. Foreman	-	Louisiana
Asst. Dist. Maint. Engr.	Hwy. Maint. Foreman	Hwy. Repair Foreman	Hwy. Repair Working Foreman	Maint. Foreman	Maine
Asst. Dist. Maint. Engr.	Dist. Maint. Supt.	Hwy. Struct. Maint. Supt.	Hwy. Struct. Maint. Supt.	Hwy. Maint. Worker	Maryland
Opsrs. & Pre-Oper. Engr.	Bridge Insp. Engr.	Hwy. Maint. Supt.	Hwy. Maint. Foreman	Hwy. Maint. Worker Sr.	Massachusetts
Proj. Hwy. Tech.	(Incl. in 4)	Supt. II	Foreman I	Hourly Laborers	Michigan
Maint. Supt.		Maint. Area Supr.	Spec. Maint. Foreman	Hwy. Maint. Foreman	Minnesota
-		Maint. Foreman	-	Maint. Supr. I	Mississippi
-		Hwy. Maint. Supt.	Hwy. Maint. Foreman II	Hwy. Maint. Foreman I	Missouri
Asst. Dist. Engr., Maint.		Hwy. Maint. Supt.	Gr. Hwy. Maint. Foreman	Gr. Hwy. Maint. Foreman	Montana
Asst. Div. Engr.	Maint. Supr.	Const. Supt.	Const. Foreman	Hwy. Patrolman	Nebraska
Asst. Dist. Supt.		Aren. Supr.	Dist. Supr.	Asst. Foreman, Hwy. Maint.	New Hampshire
Senior Civil Engr.		Hwy. Maint. Supt.	Hwy. Maint. Foreman I	Patrol Foreman	New Jersey
Asst. Civil Engr.	Res. Engr. A-B	-	Hwy. Gen. Maint. Foreman	Hwy. Light Maint. Foreman	New Mexico
Asst. Dist. Engr.	Road Maint. Supr.	Maint. Foreman IV	Hwy. Maint. Foreman II, III, et al	Maint. Foreman I	New York
Asst. Dist. Maint. Engr.		Maint. Supt.	Foreman	Ledmen	North Carolina
Maint. &/or Traffic Engr.	Hwy. Maint. Supt. II, III	Aren. Supr.	Hwy. Worker IV	Hwy. Worker III	North Dakota
Area Maint. Engr.		Hwy. Maint. Supt. I	Dist. Foreman	Hwy. Maint. Supt. I	Ohio
Reg. Maint. Engr.	Dist. Engr.	Hwy. Maint. Supt. II, III	Const. Supt.	-	Oklahoma
Civil Engr. II		Hwy. Maint. Supt. II, III	Hwy. Maint. Foreman 1, 2, 3, 4	Hwy. Maint. Foreman I	Oregon
Hwy. Maint. Supt. IV		& IV	Hwy. Foreman I, II, III	-	Pennsylvania
-		Hwy. Maint. Supr.	Road Maint. Foreman	Labor Foreman	Rhode Island
-	Res. Maint. Engr., et al	-	Hwy. Maint. Foreman I-III	-	South Carolina
-		Hwy. Maint. Supr.	Foreman I & II	-	South Dakota
Asst. Reg. Maint. Engr.	Dist. Maint. Engr.	County Maint. Supr.	Reg. Maint. Supt.	Foreman	Tennessee
Asst. Dist. Maint. Engr.		Maint. Const. Supr. I & II	Maint. Const. Foreman I	-	Texas
-		Sr. Marine Supt.	Maint. Const. Foreman II, III	Maint. Const. Foreman I	Utah
Asst. Dist. Maint. Engr.		Dist. Maint. Oper. Supr.	Hwy. Foreman	Station Foreman	Vermont
-		Hwy. Maint. Gen. Foreman	Hwy. Maint. Man C	Hwy. Maint. Man B	Virginia
Asst. Dist. Maint. Engr.	Hwy. Res. Engr.	Hwy. Maint. Supt. B	Hwy. Foreman	Hwy. Maint. Man I & II	Washington
-		-	Hwy. Maint. Foreman	Hwy. Maint. Leedmen	West Virginia
Asst. Dist. Maint. Engr.	Hwy. Maint. Supt.	County Maint. Supt.	Spec. Hwy. Maint. Foreman	County Employees	Wisconsin
Area Maint. Supr.		Asst. Area Supr.	Asst. County Maint. Supt.	Foremen	Wyoming
-		-	County Employees	Hwy. Maint. Foreman	
			Sr. Hwy. Maint. Foreman		

## MAINTENANCE PERSONNEL (Cont'd):

<u>State</u>	<u>Common Laborer</u>	<u>Skilled Laborer</u>	<u>Shop Superintendent</u>	<u>Garage or Shop Foremen</u>
Alabama	Laborer	Welder, Carpenter, et al	Asst. Equip. Maint. Dir.	Mechanic Foreman
Alaska	Laborer	Bridge Painter	Dist. Equip. Mgr.	Auto. Shop Foremen
Arizona	Laborer, et al	-	Equip. Div. Mgr.	Equip. Shop Supr. 1 Equip. Mechanic Foreman
Arkansas	Laborer I & II, et al	Carpenter, Welder, et al	Hwy. Dist. Equip. Supr.	-
California	Hwy. Maint. Man I	-	Hwy. Equip. Supt. I & II	Hwy. Mechanic Foreman
Colorado	Utility Worker	-	Sr. Auto Shop Foreman	Auto Shop Foreman
Connecticut	D.O.T. Maintainer II	Trades Journeyman	-	Hwy. Garage Foreman
Delaware	Laborer I	Trades Helper	Hwy. Equip. Supt.	Auto Supervisor
Florida	Laborer	Semi-Skilled Laborer	-	Shop Foreman I
Georgia	Utility Worker I	Skilled Laborer, Hwy. Maint.	Dist. Mechanic	Asst. Dist. Mechanic
Hawaii	General Laborer	Various	Auto Mechanic Foreman	Auto Mechanic II
Idaho	Hwy. Maint. Worker	-	-	Shop Foreman
Illinois	Hwy. Maint. Laborer	-	-	-
Indiana	Laborer	Sign & Equip. Painter	Shop Foreman	General Mechanic
Iowa	Auto. Serviceman	-	Repairshop Supr.	Auto. Mechanic Foreman
Kansas	Laborer I	Laborer II	Shop Supt.	Auto. Mechanic II
Kentucky	Laborer A	Carpenter, Painter, Plumber	Garage Foreman	-
Louisiana	Laborer Utility	Welder, Painter, et al	Shop Supt.	Shop Foreman
Maine	Hwy. Maint. Man I	Carpenter, Painter, et al	Equip. Supt.	Auto. Mechanic Foreman
Maryland	Laborer	Laborer, S.S.	Dist. Equip. Supr.	Shop Foreman
Massachusetts	Laborer	Skilled Laborer	Supt. of Shop & Equip.	Dist. Hwy. Equip. Foreman
Michigan	Laborer, Bridge Maint. Mech., Worker, Tree Trimmer	Electrician, Welder, Maint. Mech.	-	-
Minnesota	Hourly Laborer	Laborer II	Heavy Equip. Supr.	Heavy Equip. Mech. Foreman
Mississippi	General Laborer I	General Laborer II	Shop Foreman II	Shop Foreman I
Missouri	-	-	Dist. Garage Foreman	Chief Shop Mechanic
Montana	Maint. Man I	Maint. Man II	Maint. Man VI	Shop Foreman
Nebraska	-	-	Auto Equip. Repair Supt.	Hwy. Dist. Mechanic
Nevada	Hwy. Maint. Labor	Hwy. Maintainer	Hwy. Equip. Oper. Supr.	Supv. Equip. Mech. 2
New Hampshire	Hwy. Maintainer I	Hwy. Painter, etc. Bridge Repairsman I & II	Equip. Mgr.	Garage Foreman Garage Sub Foreman
New Jersey	Maint. Worker I & II	Constr. Repairman I & II	Master Mechanic	Foreman, Mechanic
New Mexico	Utility Worker I	Utility Worker II	Shop Foreman II	Shop Foreman I
New York	Laborer	Maint. Man	Motor Equip. Maint. Opr.	Motor Equip. Maint. Foreman
North Carolina	Laborer	Tree Painter, et al	Equip. Supt.	Mechanic Foreman I & II
North Dakota	General Utility Man, et al	Skilled Electrician, et al	Shop Foreman	-
Ohio	Hwy. Worker I & II	Trades Helper	Equip. Supt. II	Equip. Supt. I
Oklahoma	Hwy. Maint. Man I	Carpenter, Electrician, et al	Auto Shop Supt.	Shop Foreman
Oregon	Laborer I	Electrician	Hwy. Shop Supt.	Garage Supt.
Pennsylvania	Hwy. Maint. Worker	Welder, Carpenter, Mason, Painter	-	Hwy. Shop Foreman
Rhode Island	Semi-Skilled Laborer	Semi-skilled Laborer	-	Auto. Equip. Foreman
South Carolina	Laborer	-	-	-
South Dakota	Hwy. Maint. Laborer, et al	Hwy. Maint. Man II-IV	Shop Foreman IV	Shop Foreman
Tennessee	(Incl. in 16)	(Incl. in 1b)	Sign Shop Supr.	Hwy. Shop Foreman
Texas	Utility Man	Carpenter, et al	Regional Garage Supt.	Dist. Chief Mechanic
Utah	Maint. Man	Maint. Tech. I & II	Shop Foremen IV	Shop Foremen III
Vermont	Maint. Worker	Welder, Carpenter, Painter, Electrician	Shop Supr.	Shop Foreman
Virginia	Hwy. Maint. Man A	Bridge Maint. Mechanic	Supt., Hwy. Garage	Garage or Shop Foreman
Washington	Hwy. Maint. Helper	Skilled Laborer	Hwy. Dist. Equip. Supt.	Hwy. Equip. Rep. Foreman A
West Virginia	Hwy. Laborer	Hwy. Maint. Specialist	Hwy. Equip. Supt.	Hwy. Equip. Foreman
Wisconsin	Laborer	Craftsman III	Dist. Equip. Supr.	Dist. Shop Foreman
Wyoming	-	-	Dist. Shop Foreman	Shop Foreman

(14)	(15)	(16)	(17)	(18)	
Mechanic	Mechanic Helper	Equipment Operator I	Equipment Operator II	Equipment Operator III	State
Auto Mechanic					
Heavy Equip. Mechanic	Assistant Mechanic	Equip. Oper. I	Equip. Oper. II	Equip. Oper. III	Alabama
Auto. Mech. II, III	Auto. Mech. Helper	Auto. Equip. Oper. I	Auto. Equip. Oper. II	Auto. Equip. Oper. III	Alaska
Equip. Mechanic 2	Equip. Mechanic I	Hwy. Maint. Man. I	Hwy. Maint. Man II	Hwy. Maint. Man III	Arizona
Auto/Diesel Mechanic	Maint. Repairman I	Equip. Oper. I	Equip. Oper. II	Equip. Oper. III	Arkansas
Heavy Equip. Mechanic	Mechanic Helper	Hwy. Maint. Man I	Hwy. Maint. Man II	-	California
Auto & Equip. Mechanic	Auto Maint. Men	Hwy. Maint. Man	Equip. Oper.	Heavy Equip. Oper.	Colorado
Trade Journeyman (Auto Mechanic)	D.O.T. Maintainer III & IV (Incl. in 10)		D.O.T. Maintainer III & IV	D.O.T. Maintainer V	Connecticut
Auto Mech. I, II, III	Auto Servicemen	Equip. Oper. I	Equip. Oper. II	Equip. Oper. III	Delaware
Auto Equip. Mech. II	Utility Worker II	Motor Vehicle Oper. I	Motor Vehicle Oper. II	Heavy Equip. Oper.	Florida
Hwy. Maint. Mech. I & II	Auto. Mechanic Helper	Laborer II	Equip. Oper. I	Hwy. Maint. Equip. Oper.	Georgia
Auto Mechanic I	Automotive Serviceman	Poxy Cover Oper. et al	Truck Driver, et al	Power Shovel Oper. et al	Hawaii
Mechanic	Mechanic Helper	Hwy. Maint. Oper. I	Hwy. Maint. Oper. II	Hwy. Maint. Oper. III	Idaho
Auto. Mechanic	Auto. Mechanic Helper	Hwy. Maint. Equip. Oper.	Hwy. Const. Equip. Oper.	Power Shovel Oper.	Illinois
Mechanic	Mechanic Helper	Equip. Oper. I	Equip. Oper. II	Equip. Oper. III	Indiana
Auto. Mechanic	Auto. Mechanic Helper	Hwy. Maint. Man I	Hwy. Maint. Man 2	Hwy. Maint. Man 3	Iowa
Auto. Mechanic I	Auto. Mechanic Helper	Equip. Oper. I	Equip. Oper. II	Equip. Oper. III	Kansas
Mechanic	Mechanic Helper	Light Equip. Oper.	Heavy Equip. Oper.	Special Equip. Oper.	Kentucky
Mechanic I, II, III	Trades Helper	Equip. Oper. I	Equip. Oper. II	Equip. Oper. III	Louisiana
Auto. Mechanic	Laborer II	Hwy. Maint. Man II & IIA	Hwy. Maint. Man III	Hwy. Maint. Man IV	Maine
Auto. Mechanic I & 2	Skilled Laborer	Motor Equip. Oper. I	Motor Equip. Oper. 2	Motor Equip. Oper. 3	Maryland
Motor Equip. Repairman	Mechanical Handyman	-	-	Maint. Equip. Oper.	Massachusetts
Auto Repairin. Em.	Auto Mech.	Hwy. Equip. Oper. 05	Hwy. Equip. Oper. 06	-	Michigan
Heavy Equip. Mechanic	Heavy Equip. Mech. Apar.	Heavy Equip. Oper.	Equip. Oper. II	Equip. Oper. III	Minnesota
Equip. Mechanic II	Equip. Mechanic I	Equip. Oper. I	Maint. Crew Leader	Dragline Oper.	Mississippi
Shop Mechanic	Mechanic Helper	Maint. Man	Maint. Man IV	Maint. Man V	Missouri
Maint. Man V	Maint. Man III	Maint. Man III	Hwy. Maint. Man II	Hwy. Maint. Man III	Montana
Auto Mechanic II	Auto Mechanic I	Hwy. Maint. Man I	-	Spec. Equip. Oper.	Nebraska
Equip. Mechanic 2	-	-	Hwy. Maintainer III	Hwy. Maintainer III	Nevada
Heavy Equip. Mechanic	Trades Helper	Hwy. Maintainer II	Equip. Oper.	Heavy Equip. Oper.	New Hampshire
Auto Mechanic	Mechanic Helper	Truck Driver	Equip. Oper. II	Equip. Oper. III	New Jersey
Mechanic	Mechanic	Equip. Oper. I	Const. Equip. Oper.	Crane & Shovel Oper.	New Mexico
Auto Mechanic	Mechanic	Hwy. Equip. Oper.	Machine Oper. II & III	Machine Oper. IV & V	New York
Motor Equip. Repairman	Trades Helper	Truck Driver	Equip. Oper.	Equip. Oper.	North Carolina
Mechanic I & II	Apprentice B	Mechanic Oper. I	Equip. Oper. I & II	Equip. Oper. IV	North Dakota
Mechanic A & B	Auto Mechanic I	Hwy. Equip. Oper.	Equip. Oper. I	Equip. Oper. III	Ohio
Auto Mech. II, III, IV	Auto Mechanic I	Hwy. Maint. Man 1 & 2	Hwy. Maint. Man 3	Hwy. Maint. Man 4	Oklahoma
Auto Mechanic II & III	Auto Mechanic I	Equip. Oper. I & II	Equip. Oper. III	Equip. Oper. IV	Oregon
Heavy Equip. Mech. I, 2	Mechanical Trades Helper	Mechanic Helper	Heavy Motor Equip. Oper.	Motor Equip. Oper.	Pennsylvania
Auto. Mechanic I & II	Tradesmen Helper	Hwy. Maint. Man 1 & 2	(Incl. in 11)	(Incl. in 11)	Rhode Island
Diesel Mechanic	Mechanic Helper	Equip. Oper. I & II	(Incl. in 11)	(Incl. in 11)	South Carolina
-	Auto Maint. Helper	Hwy. Maint. Man 3	Hwy. Maint. Worker I	Hwy. Maint. Worker II	South Dakota
Auto. Mechanic	Mechanic I	Equip. Oper. I	Hwy. Maint. Worker I	Hwy. Maint. Worker III	Tennessee
Mechanic II	-	(Incl. in 11)	Hwy. Maint. Worker II	Hwy. Maint. Worker III	Texas
Mechanic	-	Hwy. Maint. Worker I	Hwy. Maint. Worker II	-	Utah
-	-	Hwy. Maint. Worker I	Hwy. Maint. Worker II	-	Vermont
H. D. Mechanic	-	Hwy. Maint. Worker I	Hwy. Maint. Worker II	-	Virginia
Motor Equip. Repair C	Motor Equip. Repair B	Hwy. Oper. Specialist BW	Hwy. Oper. Specialist 10W	Hwy. Oper. Specialist 11W	Washington
Hwy. Equip. Mech. A & B	Hwy. Equip. Mech. Helper	-	Equip. Oper. B	Equip. Oper. C	West Virginia
Hwy. Equip. Mech. I & II	Shop Asst.	Hwy. Equip. Oper. A	Hwy. Equip. Oper. B	Hwy. Equip. Oper. C	Wisconsin
Mechanic	Equip. Serviceman	-	Hwy. Equip. Oper. II	Hwy. Equip. Oper. III	Wyoming
County Employees	-	Equip. Oper. I	Equip. Oper. II	Equip. Oper. III	
Mechanic	-	-	Hwy. Maint. Man	Sr. Hwy. Maint. Man	

TRAFFIC OPERATIONS PERSONNEL:				
State	(19)		(20)	
	<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	-	Division Traffic Engineer	Asst. Div. Traffic Engr.
Alaska	State Traffic Engineer	Asst. State Traffic Engr.	District Traffic Engineer	Asst. Dist. Traffic Engr.
Arizona	Asst. State Engr., Traffic	Traffic Engr., Operations	District Traffic Engineer	-
Arkansas	Chief Traffic Div.	Asst. Chief Traffic Div.	-	-
California	Traffic Engineer	Asst. Traffic Engr.	District Traffic Engineer	Asst. Dist. Traffic Engr.
Colorado	Asst. Fin. Hwy. Engr.	Supr. Hwy. Engr.	Sr. Hwy. Engr.	-
Connecticut	Manager of Traffic	Chief of Traffic Engineering	Dist. Spec. Services Engr.	-
Delaware	State Traffic Engineer	Asst. State Traffic Engr.	District Traffic Engineer	Asst. Dist. Traffic Engr.
Florida	State Traffic Oper. Engr.	Deputy State Traffic Oper. Engr.	Dist. Traf. Oper. Engr.	Asst. Dist. Traffic Oper. Engr.
Georgia	State Hwy. Traffic & Safety Engr.	Asst. State Hwy. Traffic & Safety Engr.	District Traffic Engineer	Traffic Survey Engr., Civil Engr. II
Hawaii	Traffic Engineer	Asst. Traffic Engr.	-	-
Idaho	Traffic Engineer	Asst. Traffic Engr.	District Traffic Engineer	-
Illinois	Engineer of Traffic	Asst. Engr. of Traffic	District Traffic Engineer	Asst. Dist. Traffic Engr.
Indiana	Chief, Div. of Traffic	Asst. Chief, Div. of Traffic	District Traffic Engineer	-
Iowa	Traffic & Safety Engr.	Traffic Engr.	-	-
Kansas	Hwy. Marking Engr.	-	-	-
Kentucky	Director, Div. of Traffic	Asst. Dir., Div. of Traffic	District Traffic Engineer	Asst. Dist. Traffic Engr.
Louisiana	Traffic & Planning Engr.	Asst. Traf. & Planning Engr.	District Traffic Engineer	-
Maine	Traffic Engineer	-	District Traffic Engineer	-
Maryland	Asst. Chief Engr., Traffic Oper.	-	-	-
Massachusetts	Traffic Engineer	Asst. Traffic Engr., Asst. Engr. of Traffic & Safety	District Traffic Engineer	Asst. Dist. Traffic Engr.
Michigan	Engr. of Traffic & Safety	-	Dist. Traf. & Safety Engr.	Asst. Dist. Traffic & Safety Engr.
Minnesota	State Traffic Engineer	Asst. State Traffic Engr.	District Traffic Engineer	Asst. Dist. Traffic Engr.
Mississippi	Traf. Control & Safety Engr.	Asst. Traffic Control & Safety Engr.	-	-
Missouri	(Incl. in 1)	Asst. Div. Engr., Traffic	Traffic Engineer	Dist. Traffic Studies Engr.
Montana	Mgr., Traffic Design Unit	Asst. Mgr., Traf. Design Unit	-	Div. Traffic Engr.
Nebraska	Traffic Engineer	Asst. Traffic Engr.	-	-
Nevada	Chief Traffic Engr.	Hwy. Engr. 4, Traffic	Hwy. Engr. 2, Traffic	-
New Hampshire	Traffic Engr.	-	-	-
New Jersey	Chief, Bureau of Traf. Engr.	-	-	-
New Mexico	Civil Engr. IV	Civil Engr. III	Civil Engr. I	-
New York	Director, Div. of Traffic & Safety	Bureau Director	Regional Traffic Engr.	Asst. Regional Traf. Engr.
North Carolina	State Traffic Engineer	Asst. State Traffic Engr.	(Incl. in 3)	Asst. Div. Engr.
North Dakota	Traffic Engineer	-	-	-
Ohio	State Traffic Engineer	Asst. State Traffic Engr.	District Traffic Engineer	Asst. Dist. Traffic Engr.
Oklahoma	Chief Traffic Engineer	-	Division Traffic Engineer	-
Oregon	Traffic operations under direction of Regional Engineers	-	-	-
Pennsylvania	Civil Engr. VI	Civil Engr. V	Civil Engr. IV	Civil Engr. III
Rhode Island	State traffic Engineer	-	-	-
South Carolina	Traffic & Planning Engr.	Asst. Traf. & Planning Engr.	Dist. Traf. & Planning Engr.	-
South Dakota	Urban & Traffic Engr.	Urban Engineer	District Traffic Engineer	-
Tennessee	State Traffic Engineer	Asst. State Traffic Engr.	Regional Traffic Engineer	-
Texas	-	-	(Incl. in 4 & 5)	-
Utah	Chief Traffic Engineer	Traffic Engineer	-	-
Vermont	State Traffic Engineer	Asst. State Traffic Engr.	-	-
Virginia	State Traf. & Safety Engr.	Asst. State Traffic & Safety Engr.	Hwy. Dist. Traffic Engr.	Hwy. Traffic Tech. Supr.
Washington	Traffic Engineer	Traffic Oper. Engr.	District Traffic Engineer	Hwy. Traffic Tech. C
West Virginia	Dir., Traffic Engr. Div.	Asst. Dir. Traffic Engr.	Regional Traffic Engineer	Asst. Dist. Traffic Engr.
Wisconsin	Chief Traffic Engineer	Asst. Chief Traffic Engr.	Dist. Chief Traffic Engr.	Asst. Regional Traffic Engr.
Wyoming	State Traf. Engr., Oper.	-	District Traffic Engineer	Asst. Dist. Traffic Engr.

(23)	(24)	(25)	(26)	(27)	
<u>Traffic Supervisor</u>	<u>Sign Supervisor</u>	<u>Sign Shop Foreman</u>	<u>Traffic Signal &amp; Lighting Foreman</u>	<u>Striper Foreman</u>	<u>State</u>
-	-	Sign Shop Foreman	Traffic Control Spec.	Striper Foreman	Alabama
-	-	Sign Shop Foreman	Traf. Signal & Ltg. Foreman	Hwy. Marking Foremen	Alaska
Hwy. Marking Supt.	Hwy. Maint. Supr.	Sign Shop Foreman	Traf. Signal Supt., et al	Hwy. Sign Man II	Arizona
-	Hwy. Sign Supr.	Hwy. Foreman	Hwy. Foreman	Hwy. Foreman	Arkansas
-	Hwy. Supt., Sp. Crews	Traffic Shop Foreman	Sr. Traffic Signal Tech.	-	California
Traffic Foreman	-	Supt., Portland Plant	Distr. Electrical Supr.	Signs & Marking Foreman	Colorado
District Traffic Engineer	Signs & Marking Coordinator	Sign Supr.	Labor Foreman III	Labor Foreman I & II	Connecticut
Hwy. Maint. Supt.	-	Hwy. Maint. Supr.	-	Hwy. Maint. Supr. I	Delaware
-	-	Sign Shop Supt.	Traffic Signal & Hwy. Lighting Foreman	Hwy. Maint. Foreman II	Florida
Traffic Engr. Tech.	Civil Engr. IV	Hwy. Maint. Supt.	Traffic Signal Supt.	Traffic Marking Foreman	Georgia
-	Traf. Sign & Marking Foreman	-	(Incl. in 13)	(Incl. in 13)	Hawaii
-	Engr. Tech. VIII	Sign Shop Supt.	-	Hwy. Maint. Labor Foreman	Idaho
Traffic Operations Engr.	Sign Shop Foreman	Silk Screen Oper.	Engr. Asst. IV & V	Engr. Asst. IV & V	Illinois
Traffic Supr.	Hwy. Foreman	Engr. Asst. II & III	Traffic Signal Tech. II	Hwy. Maint. Foreman 2	Indiana
-	Sign Shop Supt.	Sign Shop Foreman	-	Striper Foreman	Iowa
-	-	Sign Shop Foreman	Traf. Signal Repairman, Fr.	Striper Crew Foreman	Kansas
Traffic Supr.	Traffic Foreman	Sign Painter, Sr.	Electrical Foreman	Striping Gang Foreman	Kentucky
Sign & Traffic Supt.	Sign Foreman	Sign Shop Foreman	Electrician Foreman	Hwy. Maint. Man IV	Louisiana
-	-	Sign Shop Foreman	Traffic Signal Tech.	Traffic Painter Working Fm.	Maine
Traffic Maint. Engr.	Supr. of Traffic Equip.	Sign Shop Foreman	Traffic Electrician Foreman	Spray Painter Working Fm.	Maryland
District Traffic Engr.	Hwy. Sign Supr.	Hwy. Sign Foreman	Hwy. Signal Supt.	Hwy. Sign Supt.	Massachusetts
←	Sign Supt.	Sign Shop Hwy. Maint. Fm.	Hwy. Signal Tech. II	(Incl. in 24 & 25)	Michigan
Engr. Aid VI	Supt. I	-	Supt. I	Foreman I	Minnesota
-	-	Sign Shop Foreman	Signal & Lighting Foreman	Special Maint. Foreman	Mississippi
-	-	Maint. Supr. I	-	Maint. Man V	Missouri
-	-	Sign Shop Supt.	-	-	Montana
Traffic Maint. Supr.	Sign Shop Supr.	Sign Shop Foreman	Traffic Signal Foreman	Hwy. Maint. Foreman	Nebraska
-	-	Foreman, Sign Shop	Electrical Foreman	Pavement Marking Foreman	New Hampshire
Traffic Supr. I	Sign Shop Foreman	-	Traffic Elec. Supr.	Foreman, Hwy. Marking	New Jersey
-	-	Sign Shop Supr.	Electrician Foreman	Hwy. Traffic Marking Supr.	New Mexico
Traffic Service Supr.	←	Traffic Sign Shop Foreman	Traffic Control Tech. II	Labor Foreman	New York
-	Sign Foreman	-	(Incl. in 26)	Leadman	North Carolina
Hwy. Maint. Supt. III	Sign Supr.	Sign Shop Foreman	Traffic Signal Foreman	Painter Foreman	North Dakota
Traffic Supt.	-	-	-	Hwy. Traf. Marking Foreman	Ohio
Traffic Control Supr.	Hwy. Shop Foreman	Hwy. Maint. Foreman 3	(Incl. in 11)	Hwy. Maint. Foremen 2	Oklahoma
Chief Traffic Maint. Supr.	Traffic Control Spec. I	Traffic Control Spec. I	Civil Engt. II	Hwy. Maint. Foreman II	Oregon
-	Traffic Maint. Supr.	-	Traffic Control Spec. I	Hwy. Maint. Supr., Traffic	Pennsylvania
-	-	Hwy. Maint. Foreman II-III	Electrical Foreman	Foreman I-III	Rhode Island
Signing & Marking Coord.	Sign & Marking Supt.	Sign Shop Foreman	Electrical Foreman	Hwy. Maint. Worker III	South Carolina
-	Sign Supt.	(Incl. in 8)	-	(Incl. in 8)	South Dakota
(Incl. in 20)	Sign Supr.	Lead, Hwy. Sign Spec.	Signal Supr.	-	Tennessee
-	-	Sign Shop Foreman	-	Marking Crew Leader	Texas
-	Hwy. Foreman	Hwy. Maint. Supt. B	Hwy. Eq. Elec. Foreman A & B	Hwy. Foreman	Utah
-	-	-	Traffic Signal Foreman	Hwy. Maint. Foreman	Vermont
-	Traffic Tech. V	Traffic Tech. III	Traf. Electronics Tech. III	Signman - Shop Supr.	Virginia
Traffic Supr.	Sign Supr.	Sign Shop Foreman	Traf. Signal & Ltg. Foreman	Striper Foreman	Washington
-	-	Engr. Tech. III	-	Hwy. Striping Foreman	West Virginia

TRAFFIC OPERATIONS PERSONNEL (Cont'd):			
State	(28)	(29)	(30)
Alabama	-	Sign Painter	Sign Technician
Alaska	-	Hwy. Maint. Man II, et al	Hwy. Maint. Man I
Arizona	(Incl. in 27)	(Incl. in 24)	(Incl. in 24)
Arkansas	(Incl. in 27)	Maint. Man II & III	Traffic Sign Fabricator
California	Hwy. Foreman	Portland Plant Worker	Laborer II, Trades Helper, Equip. Oper. I, II, III
Colorado	-	Sign Fabricator I & II	Skilled Laborer, Hwy. Maint.
Connecticut	(Incl. in 27)	Sign Technician	Painter
Delaware	(Incl. in 27)	Skilled Laborer, Hwy. Maint.	(Incl. in 17 & 18)
Florida	Sign Erector Foreman	Sign Painter	Painter
Georgia	Hwy. Maint. Foreman II	Hwy. Maint. Equip. Oper.	Lineman
Hawaii	-	Engineer Asst. IV & V	Electrician
Idaho	Sign Foreman	Sign Hangers	Traffic Signal Tech. II
Illinois	(Incl. in 30)	Sign Shop Worker 1, 2 & 3	-
Indiana	Engineer Asst. IV & V	Sign Shop Worker	Traffic Sign Tech. I, II, III
Iowa	-	Sign Painter	Traffic Signal Tech. I
Kansas	-	Sign Painter	Traffic Signal Repairman Sr. & Jr.
Kentucky	(Incl. in 24)	Sign Painter	Statewide Signal Tradesman
Louisiana	Statewide Sign Foreman	Sign Tradesman	Electrician
Maine	Hwy. Foremen	Sign Painter	Traffic Control Elec.
Maryland	Sign Foreman	Sign Fabricator	Traffic Electrician Foreman
Massachusetts	Spray Painter Working Foreman	Sign Painter & Letterer	Hwy. Signal Electrician
Michigan	Hwy. Sign Jumper	Sign Layout Foreman	Hwy. Signal Tech. I
Minnesota	(Incl. in 24 & 25)	Hwy. Sign Worker	Electronics Tech.
Mississippi	Foreman I	Hwy. Maint. Wkr. Sr. (Signs)	Hwy. Signal Mechanic
Missouri	Special Maint. Foreman	Painter	Welder
Montana	-	Silk Screen Oper.	Sign Painter
Nebraska	-	Maint. Man V	-
Nevada	Hwy. Maint. Foreman	Sign Painter	Engineer II
New Hampshire	District Sign Supr.	Sign Fabricator	Intricate Repairs
New Jersey	Heavy Sign Maint. Foreman	Sign Letterer	Electrical Maintenance I
New Mexico	(Incl. in 27)	Sign Fabricator	Civil Engr. II
New York	Sign Foreman	Sign Technician I	Electrician
North Carolina	Labor Foreman	Sign Shop Worker	Traffic Control Tech. I
North Dakota	Traffic Service Foreman	Traffic Sign Painter	Traffic Sign Erector
Ohio	-	(Incl. in 11)	(Incl. in 11)
Oklahoma	Traffic Control Foreman	Sheet Metal Worker	Sheet Metal Foreman
Oregon	Traffic Control Spec.	-	Sign Marker I & II
Pennsylvania	Hwy. Maint. Foreman I	(Incl. in 16 & 17)	-
Rhode Island	Hwy. Foreman II	Sign Technician III	Sign Technician I & II
South Carolina	-	Sign Painter	Various
South Dakota	(Incl. in 5)	(Incl. in 10 & 11)	-
Tennessee	-	Traffic Sign Fabricator	-
Texas	-	-	-
Utah	-	Hwy. Sign Specialist	-
Vermont	Sign Crew Leader	Sign Painter	Electrician & Field Tech.
Virginia	Hwy. Foreman	Hwy. Sign Fabricator	Traf. Signal & Ltg. Tech.
Washington	Hwy. Maint. Foreman	Sign Fabricator, Hwy.	Hwy. Equip. Electrician
West Virginia	(Incl. in 27)	-	Traffic Signal Tech. I & II
Wisconsin	Sign Erection Foreman	Sign Fabricator	Traffic Electronics Tech. II
Wyoming	Traffic Signing Spec.	Sign Fabricator	Traf. Signal & Ltg. Tech.
			Traffic Signal Servicemen

## OTHER RELATED PERSONNEL:

(32)	(33)	(34)	(35)	
Striper Technician	Chief Engineer	Project Engineer	Clerk or Timekeeper	State
Hwy. Maint. Man II, et al	-	Project Engineer	Clerk I	Alabama
Hwy. Sign Man I	State Const. Engineer	Resident Engineer	Clerk III	Alaska
Maint. Man II & III	State Hwy. Engineer	Resident Engineer	Clerk, et al	Arizona
Signs & Markings Maintainers (Incl. in 30)	Deputy Dir. & Chief Engr.	Resident Engineer	Clerk II & III	Arkansas
Heavy Equip. Oper. Hwy. Maint. Equip. Oper. Traffic Striping Machine Operator	State Hwy. Engineer	Resident Engineer	Hwy. Field Office Asst.	California
Hwy. Maint. Man	Chief Engineer	Sr. Hwy. Engineer	General Foreman's Clerk	Colorado
Equip. Supr. I	Chief Engineer	Project Engineer, Sr.	D.C.T. Maintainer IV	Connecticut
Hwy. Maint. Man 1 & 2	Secretary	Hwy. Engineer	Buyer	Delaware
Heavy Equip. Oper. Striping Machine Oper.	State Hwy. Engineer	Project Engineer	Maint. Clerk I	Florida
Motor Equip. Oper.	Chief Transportation Engr.	Area Engineer	Account Clerk III	Georgia
Painter	Chief Engineer	Resident Engineer	Maint. Clerk	Hawaii
Hwy. Sign Mechanic (Incl. in 29)	Project Engineer	Resident Engineer	Account Technician II	Illinois
Equip. Oper. II	Chief Engineer	Project Engineer	Stock Room Clerk	Indiana
Maint. Crew Leader	Chief Engineer	Resident Constr. Engineer	-	Iowa
Hwy. Sign Mechanic (Incl. in 29)	Chief Engineer	Resident Engineer	District Clerk	Kansas
Spec. Equip. Oper. Carriage Oper.	Chief Engineer	Project Engineer	Clerk II	Kentucky
Hwy. Marker	Asst. Engr. to O.E. II	Project Engineer	Clerk III	Louisiana
Equip. Oper. II	Chief Engineer	Project Engineer	Shop Clerk	Maine
Const. Equip. Oper. (Incl. in 17)	Senior Civil Engineer	Senior Civil Engineer	Clerk Tallyman	Maryland
Equip. Oper.	Chief Engineer	Project Engineer	Acct. Clerk	Massachusetts
Painter	Director of Hwys.	Project Engineer	Clerk II, Sr. Clerk	Michigan
Hwy. Project Manager II	Director, State Engineer	Project Engineer	Clerk Typist; Clerk Steno	Minnesota
Hwy. Dist. Office Manager	Deputy Commissioner	Project Engineer	Clerk I	Mississippi
New Hampshire	Chief Engineer	Project Engineer	District Stock Clerk	Missouri
Hwy. Dist. Office Manager	Chief Engineer	Resident Engineer	Office Manager	Montana
Head Clerk	Director, State Engineer	Resident Engineer	-	Nebraska
Hwy. Project Manager II	Deputy Commissioner & Chief Engineer	Project Engineer	Hwy. Dist. Office Manager	Nevada
Head Clerk	Dir., Engineering Opers.	Project Engineer	Acct. Clerk III	New Hampshire
Hwy. Project Manager II	State Hwy. Engineer	Principal Engr., Transp.	Clerk IV	New Jersey
Hwy. Project Manager II	Civil Engr. I	Civil Engr. I	Hwy. Technician I	New Mexico
Hwy. Project Manager II	Asst. Dir., Traffic Service	Resident Engineer	Maint. Yard Foreman	New York
Oklahoma	State Hwy. Engineer	Hwy. Engineer 4	Maint. Yard Foreman	North Carolina
Oregon	Chief Hwy. Engineer	St. Resident Engineer	Clerk-Typist II	North Dakota
Pennsylvania	State Hwy. Engineer	Civil Engineer III	Clerk-Typist II	Ohio
Rhode Island	Director & State Hwy. Engr.	Assoc. Res. Const. Engr.	Clerk II	Tennessee
South Carolina	Director, Bureau of Hwys.	Res. Const. Engr. et al	Clerk I-III, et al	Texas
South Dakota	State Hwy. Engineer	Civil Engineer	Stores Clerk II	Utah
Tennessee	State Hwy. Engineer	Resident Engineer	Clerk I & II	Vermont
Texas	State Hwy. Engineer	Residential Engineer	Maint. Operations Analyst	Virginia
Utah	State Hwy. Engineer	Project Engineer	District Office Clerk	Washington
West Virginia	Chief Engineer	Resident Engineer	Hwy. Timekeeper	West Virginia
Wisconsin	Hwy. Chief Engineer	Project Engineer	Maint. Div. Office Manager	Wyoming
Wyoming	Director of Hwys.	Project Engineer	Field Clerk	
	State Hwy. Engineer	Project Engineer	County Employee	
	Supt. & Chief Engineer	Resident Engineer	Clerk	

## MONTHLY SALARIES OF HIGHWAY PERSONNEL (AS OF JULY 1, 1973)

MAINTENANCE PERSONNEL:

State	(1) State Maintenance Enginner	(2) Asst. State Maintenance Enginner	(3) District Enginner	(4) District Maintenance Enginner	(5) Asst. Dist. Maintenance Enginner	(6) Resident Maintenance Enginner
	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	1 1320 1706 1513	2 896 1433 1272	6 1109 1706 1546	8 1021 1433 1370	- - - -	44 806 1209 1090
Alaska	1 2199 2618 2155	1 1969 2357 2043	5 2119 2547 2547	4 1699 2043 1829	2 1579 1898 1698	- - - -
Arizona	1 1626 2075 2075	2 1236 1893 1689	7 1826 2075 2075	7 1033 1580 1360	- - - -	- - - -
Arkansas	1 1326 1733 1733	1 1128 1473 1397	10 1217 1590 1590	10 871 1137 1137	10 741 968 968	49 683 893 893
California	1 1810 2201 2095	5 1581 1901 1810	11 1810 2201 2095	18 1349 1641 1564	49 1166 1417 1349	- - - -
Colorado	1 1478 1982 1730	- - - -	6 1588 2126 1857	8 1277 1712 ?	6 1103 1478 1291	- - - -
Connecticut	1 1366 1673 1570	- 1366 1673 -	- - - -	4 1119 1381 1337	4 1077 1295 1240	- - - -
Delaware	1 1407 1995 1901	- - - -	3 1281 1806 1694	-	3 1166 1638 1295	3 1061 1481 1131
Florida	1 1571 2205 2568	1 1453 2038 2367	5 1571 2205 2203	5 1335 1879 1827	5 1225 1738 1712	19 1062 1496 1395
Georgia	1 1617 2359 2146	3 1342 1953 1807	7 1473 2146 1941	7 1115 1617 1445	54 929 1473 1192	- - - -
Hawaii	1 1486 2307 2198	1 1416 2198 2092	4 1416 2198 2068	1 1283 1992 1898	- - - -	- - - -
Idaho	1 1406 1931 1710	1 1149 1590 1340	6 1106 1931 1710	2 1042 1441 1206	- - - -	- - - -
Illinois	1 1780 2579 2290	- 1529 2213 -	9 1780 2579 2380	9 1380 1905 1860	9 1204 1659 1550	49 1004 1659 1375
Indiana	1 1600 2041 1850	1 1421 1761 1540	6 1421 1761 1601	6 1261 1540 1360	- - - -	- - - -
Iowa	1 1332 1874 1785	1 1209 1700 1619	6 1269 1785 1660	6 1096 1542 1435	- - - -	24 994 1399 1288
Kansas	1 1329 2052 1696	1 1149 1781 1538	6 1329 2052 1556	6 1149 1781 1479	6 638 992 931	- - - -
Kentucky	1 1519 2074 1626	6 1405 1882 1549	12 1519 2074 1626	12 1155 1583 1405	26 1048 1475 1181	- - - -
Louisiana	1 1170 1570 1570	6 930 1490 1400	9 1170 1570 1520	9 1010 1410 1390	7 930 1330 1330	1 850 1250 1250
Maine	1 1380 1830 1830	1 1252 1657 1667	7 1252 1667 1667	7 848 1136 1090	7 1136 1518 1493	- - - -
Maryland	1 1633 2145 2060	1 1400 1839 1720	7 1512 1986 1986	7 1296 1706 1706	- - - -	23 1029 1352 1352
Massachusetts	1 1541 1962 1962	2 1481 1792 1792	8 1541 1962 1962	8 1275 1625 1625	8 1149 1453 1453	14 1304 1461 1382
Michigan	1 2287 2525 2468	2 2102 2213 2323	- - - -	9 1779 1987 1882	5 1521 1602 1683	(Incl. in 4)
Minnesota	1 1744 2294 2206	1 1550 2122 1550	9 1550 2122 1954	15 1434 1886 1790	12 1008 1744 1395	- - - -
Mississippi	1 1430 2013 1826	1 1297 1826 1826	6 1430 2013 1861	6 1297 1826 1605	- - - -	- - - -
Missouri	1 1625 1625 1625	1 1374 1538 1538	10 1548 1584 1558	10 1219 1458 1446	18 1070 1276 1262	- - - -
Montana	1 1555 1858 1622	1 1030 1238 1078	- - - -	11 1126 1354 1240	- - - -	- - - -
Nebraska	1 1373 1840 1514	3 1068 1524 1145	7 1289 1727 1421	6 941 1037 1261	- - - -	- - - -
Nevada	1 1419 1799 1799	1 1293 1636 1560	6 1419 1799 1799	-	6 1233 1636 1536	- - - -
New Hampshire	1 1468 1820 1820	1 1145 1468 1468	7 1145 1468 1488	-	7 1053 1403 1303	10 729 941 941
New Jersey	1 1499 2024 1702	-	4 1623 1846 1846	4 1465 1526 1676	4 1115 1511 1515	- - - -
New Mexico	1 1350 1735 1661	1 1250 1610 1450	5 1350 1735 1661	5 1160 1500 1310	- - - -	- - - -
New York	1 2847 3194 2847	1 2318 2635 2318	10 2704 3016 2890	10 1703 2379 2123	51 1118 1590 1430	65 1534 1950 1759
North Carolina	1 1528 1913 1850	3 1258 1601 1501	14 1526 1913 1943	40 1142 1455 1321	35 948 1199 1089	80 787 993 948
North Dakota	1 1550 1933 1767	2 1434 1875 1494	8 1550 1933 1655	4 1434 1875 1517	- - - -	- - - -
Ohio	1 1668 2470 2011	1 1563 2107 1792	12 1716 2279 1866	12 1315 1764 1497	20 1201 1614 1373	67 707 1007 844
Oklahoma	1 1375 1870 1525	1 1240 1690 1375	8 1375 1870 1596	8 1240 1690 1420	9 820 1240 1125	- - - -
Oregon	1 1810 2310 2310	- - - -	5 1190 1901 1901	-	5 1286 1641 1641	16 1167 1490 1490
Pennsylvania	1 1821 2330 2009	2 1580 2009 1733	11 1850 2350 2015	11 1380 1740 1520	22 1026 1320 1140	- - - -
Rhode Island	1 1400 1750 1500	1 750 1000 875	-	-	-	- - - -
South Carolina	1 1353 1887 1710	2 1160 1612 1458	7 1160 1612 1568	7 1074 1493 1376	-	47 748 1282 1009
South Dakota	1 1425 1937 1681	3 1235 1667 1451	5 1362 1839 1601	5 1124 1507 1315	-	- - - -
Tennessee	1 1298 1739 1656	1 1176 1576 1502	4 1431 1917 ?	4 1060 1370 ?	8 940 1235 ?	24 860 1100 ?
Texas	1 1917 1917 1917	- - - -	26 1875 1917 1883	29 1302 1753 1583	15 1034 1535 1319	- - - -
Utah	1 1490 2176 1896	1 1251 1828 1387	6 1338 1945 1696	5 1038 1516 1257	- - - -	- - - -
Vermont	- 1406 1982 -	2 1111 1544 1454	9 1252 1752 1710	9 988 1365 1292	9 767 1044 971	- - - -
Virginia	1 1366 1783 1783	2 1194 1558 1491	8 1366 1783 1783	15 1194 1558 1306	-	43 1044 1366 1144
Washington	1 1703 2164 2064	1 1478 1875 1875	7 1624 2164 1921	7 1344 1703 1549	6 1222 1549 1409	27 1012 1281 1166
West Virginia	1 1360 1825 1740	1 1235 1655 1575	10 1235 1655 1509	10 1120 1500 1177	-	- - - -
Wisconsin	1 1813 2361 2294	4 1527 1988 1841	9 1813 2361 2268	9 1527 1988 1879	29 1286 1678 1579	- - - -
Wyoming	1 1713 1963 1690	- - - -	5 1213 1963 1690	5 1044 1689 1440	- - - -	- - - -
1973 Average	2040 1897	1774 1615	1981 1839	1626 1490	1466 1360	1312 1203
1974 Average	434	341	-	292	264	-
% Increase, 1973/1974	370%	420%	-	457%	455%	-
% Increase, 1973/1972	4.8%	3.7%	3.9%	4.3%	3.2%	3.2%

(7)	(8)	(9)	(10)	(11)	(12)	
Aren Supervisor	Gang Foreman	Sectionman	Common Laborer	Skilld Laborer	Shop Superintendent	
No. Min. Max. Aver.	State					
77 573 836 730	131 430 573 543	78 389 525 502	1799 300 335 267	82 502 657 615	1 958 1211 982	Alabama
7 1266 1521 1466	33 1092 1313 1313	38 1015 1220 1220	16 702 844 793	5 876 1133 978	4 1466 1763 1521	Alaska
45 815 1015 989	- - - -	(Incl. in 16,17,18)	39 513 624 592	- - - -	1 1353 1727 1529	Arizona
99 615 762 762	- - - -	- - - -	367 373 567 414	84 493 690 597	11 683 893 893	Arkansas
75 1111 1349 1285	342 849 1031 983	455 810 937 893	626 666 734 700	- - - -	24 1196 1603 1450	California
34 907 1216 1062	32 784 1050 917	356 - - -	29 - - -	- - - -	8 823 1103 963	Colorado
18 939 1070 1020	48 817 972 934	168 660 802 792	580 484 582 538	40 657 744 728	- - - -	Connecticut
4 859 1218 940	18 644 912 873	80 457 823 696	29 359 479 471	55 375 583 499	3 787 1113 991	Delaware
9 699 960 783	95 567 761 697	210 496 666 629	559 407 527 454	334 602 814 571	- - - -	Florida
16 650 929 780	144 595 849 700	256 501 710 585	1236 395 415 397	163 460 650 513	7 776 1115 886	Georgia
4 1165 1807 1395	19 838 1197 994	16 506 838 704	101 452 642 487	24 672 986 829	4 844 1112 982	Hawaii
- - - -	7 706 968 817	49 706 968 817	- - - -	- - - -	- - - -	Idaho
- - - -	285 - - 897	1771 - - 847	207 - - 786	- - - -	- - - -	Illinois
36 752 940 820	38 576 670 630	139 522 608 587	439 430 500 452	26 466 537 510	38 550 642 575	Indiana
2 792 1096 948	117 689 998 839	23 628 859 763	5 458 628 512	- - - -	1 818 1151 947	Iowa
28 638 992 931	43 551 856 779	114 551 856 779	1 337 525 337	- 391 608 -	6 670 1042 993	Kansas
26 583 821 647	214 457 821 549	- - - -	1550 308 436 354	55 445 676 551	31 480 906 628	Kentucky
62 565 815 710	280 420 620 580	- - - -	350 335 485 365	35 440 700 670	15 540 790 700	Louisiana
41 733 1030 988	177 669 890 808	50 485 640 621	555 388 508 406	13 532 700 610	6 733 981 934	Maine
31 817 1073 1073	161 600 787 752	- - - -	344 387 495 473	526 408 536 516	7 700 920 920	Maryland
32 802 999 999	94 703 863 863	93 630 771 771	576 522 626 626	816 544 657 657	1 1347 1707 1707	Massachusetts
14 1194 1329 1261	38 1022 1129 1075	60 863 1129 1075	190 629 827 807	11 863 1129 1075	- - - -	Michigan
16 1008 1379 1219	87 861 1179 1019	1425 642 788 750	499 548 598 548	7 757 788 779	4 969 1326 1226	Minnesota
24 758 1067 928	74 513 722 608	- - - -	125 302 423 381	502 333 466 412	2 624 878 777	Mississippi
97 838 989 973	38 747 879 865	358 667 785 770	- - - -	- - - -	9 888 1048 1015	Missouri
22 830 988 909	- - - -	137 905 905 905	20 704 704 704	200 725 725 725	11 864 864 864	Montana
28 772 1044 847	64 606 812 660	28 569 763 618	- - - -	- - - -	1 830 1112 871	Nebraska
6 979 1234 1234	27 816 1025 1025	48 746 935 920	- 549 682 -	260 625 780 750	1 1025 1293 1293	Nevada
6 698 859 859	14 570 693 693	113 570 693 693	284 432 506 468	115 525 621 591	1 1019 1265 1265	New Hampshire
23 920 1439 1111	103 794 1073 933	117 721 974 847	584 465 692 590	111 565 974 741	1 1065 1439 1252	New Jersey
7 690 940 924	94 500 690 628	6 480 660 613	546 347 480 354	49 380 525 493	5 575 785 717	New Mexico
- - - -	227 845 1100 914	647 637 750 693	2856 537 637 585	377 602 884 680	10 1049 1217 1133	New York
154 657 825 787	766 600 752 719	90 500 628 574	989 437 548 500	290 600 752 719	16 993 1258 1199	North Carolina
9 901 1092 982	7 658 867 808	72 442 815 695	- - - -	14 459 754 596	9 719 875 794	North Dakota
88 655 851 735	204 567 800 670	865 567 851 707	2147 490 628 567	79 608 800 698	2 698 900 773	Ohio
88 600 820 702	34 630 960 780	- - - -	63 350 485 330	293 370 510 424	1 740 1010 780	Oklahoma
- - - -	170 751 959 913	117 751 829 829	38 534 588 588	6 870 959 959	4 829 1056 1056	Oregon
67 890 1140 980	1055 560 700 610	3780 420 560 470	- - - -	240 610 780 680	- - - -	Pennsylvania
9 650 760 725	24 560 680 615	2 515 620 565	315 420 495 460	19 460 550 500	- - - -	Rhode Island
- - - -	273 491 880 670	- - - -	1225 351 455 429	1285 367 568 485	- - - -	South Carolina
12 730 934 832	90 664 889 792	- - - -	(Incl. in 16)	(Incl. in 16)	1 730 934 832	South Dakota
95 500 685 7	9 685 900 7	332 420 560 7	1983 350 470 7	36 350 470 7	4 590 790 7	Tennessee
34 968 1302 1190	119 713 1068 880	2 590 743 613	1344 300 457 388	676 420 770 619	27 906 1141 996	Texas
4 832 1173 1067	24 818 994 892	73 818 994 869	15 506 615 536	32 594 722 725	1 758 1068 997	Utah
9 767 1044 891	40 565 756 727	123 474 626 588	255 422 550 482	13 535 712 608	1 1046 1154 1190	Vermont
272 732 1000 876	545 586 732 640	- - - -	525 376 430 392	- - - -	8 1000 1306 1094	Virginia
- - - -	86 802 1112 957	734 699 880 779	- 609 667 -	43 756 841 802	6 1212 1281 1166	Washington
55 635 1235 807	55 485 965 623	239 447 544 507	956 399 399 399	166 510 544 531	10 5140 1066 792	West Virginia
39 856 1418 1140	- - - -	County Employees	- - - -	- - - -	- - - -	Wisconsin
- - - -	24 615 997 945	28 583 945 890	- - - -	- - - -	5 718 1162 1050	Wyoming
1070 960	899 803	796 743	560 496	718 652	1130 1019	1973 Average
- -	141	152	121	155	-	1944 Average
- -	538%	424%	363%	363%	-	% Increase, 1973/1944
5.0%	3.7%	5.6%	3.9%	3.6%	3.0%	% Increase, 1973/1972

MONTHLY SALARIES OF HIGHWAY PERSONNEL (AS OF JULY 1, 1973) - PAGE 2

## TRAFFIC OPERATIONS PERSONNEL:

(19)	(20)	(21)	(22)	(23)	(24)	
State Traffic Engineer	Asst. State Traffic Engineer	District Traffic Engineer	Asst. District Traffic Engineer	Traffic Supervisor	Sign Supervisor	State
No. Min. Max. Aver.	No. Min. Max. Aver.	No. Min. Max. Aver.	No. Min. Max. Aver.	No. Min. Max. Aver.	No. Min. Max. Aver.	
1 1021 1320 1109	- - -	8 806 1109 944	2 746 927 896	- - -	- - -	Alabama
1 1699 2043 1829	1 1466 1763 1579	2 1466 1763 1579	2 1362 1638 1413	- - -	- - -	Alaska
1 1626 2075 2075	1 1353 1727 1727	3 1236 1580 1580	- - -	1 954 1186 1186	2 881 1096 1096	Arizona
1 1217 1590 1590	1 1127 1473 1473	- - -	- - -	- - -	4 458 567 483	Arkansas
1 1810 2201 2201	3 1166 1901 1589	14 1349 1901 1696	126 1349 1641 1443	- - -	11 1111 1349 1285	California
1 1410 1929 1685	1 1305 1750 1582	2 1185 1588 1387	- - -	8 784 1050 917	- - -	Colorado
1 1515 1842 1842	1 1366 1672 1672	4 1119 1381 1381	- - -	4 954 1025 988	- 970 1177 -	Connecticut
1 1407 1995 1806	1 1061 1481 1344	3 1061 1481 1267	2 869 1218 1008	2 869 1218 1012	1 712 1008 912	Delaware
1 1453 2038 1973	1 1335 1879 1744	5 1225 1738 1470	5 1061 1496 1186	- - -	- - -	Florida
1 1617 2359 2146	2 1342 1953 1736	7 929 1473 1180	8 776 1223 1000	11 710 1017 820	1 1115 1617 1281	Georgia
1 1283 1992 1898	1 1165 1807 1639	- - -	- - -	- - -	3 806 979 933	Hawaii
1 1267 1752 1477	1 1149 1590 1540	5 1042 1441 1206	- - -	- - -	10 779 1068 901	Idaho
1 1780 2579 2290	- 1529 2213 -	9 1380 1905 1895	9 1204 1659 1650	9 1004 1380 1295	10 - - 953	Illinois
1 1601 2041 1920	1 1421 1761 1601	6 1107 1360 1225	- - -	2 1261 1540 1335	12 ? ? ?	Indiana
1 1209 1700 1700	1 1096 1542 1399	- - -	- - -	- - -	1 722 994 859	Iowa
1 992 1538 1329	- - -	- - -	- - -	- - -	- - -	Kansas
1 1549 2074 1626	2 1405 1882 1549	14 1048 1475 1213	2 782 1213 845	13 583 821 676	11 530 745 607	Kentucky
1 1170 1570 1570	11 1050 1490 1350	8 930 1330 1330	- - -	9 500 700 700	35 420 620 590	Louisiana
1 1252 1667 1667	- - -	3 981 1314 1201	- - -	- - -	- - -	Maine
1 1633 2145 2145	- - -	- - -	- - -	- - -	- - -	Maryland
1 1541 1962 1962	1 1481 1792 1792	8 1275 1625 1625	8 1149 1453 1453	8 1149 1453 1453	1 970 1223 1223	Massachusetts
1 2287 2525 2066	1 1909 2133 2021	9 1636 1822 1728	5 1394 1546 1521	9 1439 1607 1583	1 1194 1329 1261	Michigan
1 1550 2122 1886	4 1434 1886 1713	9 1326 1744 1434	5 1179 1550 1226	15 797 1008 910	2 688 968 758	Minnesota
1 1287 1826 1656	1 1176 1656 1577	- - -	- - -	1 758 1067 878	2 688 968 758	Mississippi
(Incl. in 1)	1 1374 1538 1538	3 1143 1366 1366	13 996 1183 1152	- - -	- - -	Missouri
1 1126 1354 1238	1 945 1126 1126	- - -	5 830 980 988	- - -	- - -	Montana
1 1289 1727 1553	1 1137 1524 1160	- - -	- - -	1 830 1112 915	- - -	Nebraska
1 1293 1636 1636	1 1178 1488 1488	2 935 1178 1178	- - -	- - -	1 936 1178 1178	Nevada
1 1193 1488 1488	- - -	- - -	- - -	1 698 859 859	- - -	New Hampshire
1 1574 2126 1850	- - -	- - -	- - -	- - -	1 920 1242 1081	New Jersey
1 1250 1610 1440	1 1160 1500 1310	2 980 1300 1025	- - -	3 600 820 692	1 550 750 750	New Mexico
1 2578 2903 2740	2 2093 2379 2300	10 1700 1950 1825	10 1374 1586 1460	- - -	- - -	New York
1 1526 1943 1943	1 1321 1680 1680	- - -	14 1321 1680 1526	14 787 993 905	8 641 832 733	North Carolina
1 1550 1933 1642	- - -	- - -	- - -	- - -	1 982 1217 1026	Ohio
1 1563 2107 1792	1 1430 1936 1716	12 1104 1612 1242	12 844 1478 1064	12 773 1007 844	- - -	Oklahoma
1 1375 1870 1735	- - -	6 820 1525 1170	- - -	5 665 925 812	1 870 959 959	Oregon
Traffic operations under direction of Regional Engineers						
1 1821 2310 2009	2 1580 2009 1733	11 1200 1550 1330	40 1026 1320 1140	11 640 815 710	11 850 1030 900	Pennsylvania
1 1100 1550 1350	- - -	- - -	- - -	1 750 1000 900	1 650 760 725	Rhode Island
1 1353 1887 1726	1 1160 1612 1587	2 864 1493 1223	- - -	- - -	- - -	South Carolina
1 1235 1667 1451	2 1124 1507 1315	5 1124 1507 1315	- - -	- - -	- - -	South Dakota
1 1298 1739 ?	1 1176 1576 ?	4 1060 1370 ?	- - -	1 1060 1370 ?	5 650 860 ?	Tennessee
- - -	(Incl. in 4 & 5)	- - -	- - -	- - -	3 719 906 876	Texas
1 1332 1945 1638	8 914 1828 1161	- - -	- - -	(Incl. in 20)	1 832 1173 1185	Utah
1 1252 1752 1641	7 1111 1544 1435	- - -	- - -	- - -	- - -	Vermont
1 1491 1950 1950	2 1194 1538 1558	8 1044 1366 1144	9 700 1094 798	- - -	8 586 732 640	Virginia
1 1624 2064 2064	1 1344 1703 1703	7 1166 1549 1469	6 923 1156 1061	- - -	- - -	Washington
1 1360 1825 1500	- 1235 1655 -	3 745 1360 995	2 745 1120 630	- - -	1 745 1120 965	West Virginia
1 1813 2361 2280	4 1527 1988 1851	6 1527 1988 1593	6 1286 1678 1534	3 1001 1303 1141	1 1089 1418 1316	Wisconsin
1 1125 1822 1550	- - -	5 667 1079 900	- - -	- - -	- - -	Wyoming
1925 1771	1723 1572	1522 1351	1374 1201	1103 979	1032 942	1973 Average
-	-	-	-	-	-	1944 Average
5.4%	5.5%	3.9%	5.5%	4.5%	5.8%	% Increase, 1973/1944
						% Increase, 1973/1972

## MONTHLY SALARIES OF HIGHWAY PERSONNEL (AS OF JULY 1, 1973) - PAGE 3

## TRAFFIC OPERATIONS PERSONNEL (Cont'd):

State	(25)				(26)				(27)				(28)				(29)				(30)					
	<u>Sign Shop Foreman</u> No. Min. Max. Aver.				<u>Traffic Signal &amp; Lighting Foreman</u> No. Min. Max. Aver.				<u>Striper Foreman</u> No. Min. Max. Aver.				<u>Sign Erection Foreman</u> No. Min. Max. Aver.				<u>Sign Fabricator</u> No. Min. Max. Aver.				<u>Sign Technician</u> No. Min. Max. Aver.					
Alabama	7	597	777	768	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Alaska	1	943	1133	1092	1	1266	1521	1413	2	943	1133	1092	-	-	-	-	2	876	1053	978	2	876	1053	978		
Arizona	1	758	924	924	9	815	1438	1106	7	758	924	911	←	21	665	808	774	34	579	704	657	(Incl. in 24)	(Incl. in 24)	(Incl. in 24)	(Incl. in 24)	
Arkansas	-	-	-	-	-	-	-	-	5	394	488	479	←	-	-	-	-	-	-	-	-	-	-	-		
California	11	849	1031	983	27	849	1031	983	15	849	1031	983	12	849	1031	983	12	772	937	855	-	-	-	-		
Colorado	1	907	1216	1062	5	784	1050	917	-	-	-	-	-	-	-	-	5	677	907	792	-	-	-	-		
Connecticut	1	828	1019	1019	4	873	1070	1070	4	787	972	972	←	18	562	802	694	5	479	781	574	20	375	709	485	
Delaware	1	644	912	827	5	613	823	784	11	457	709	564	←	-	-	-	-	-	-	-	-	-	-	-		
Florida	1	774	1065	1095	-	-	-	-	10	633	860	804	38	567	767	686	7	219	292	256	-	-	-	-		
Georgia	-	-	-	-	-	-	-	-	8	595	849	708	8	595	849	670	19	460	650	493	18	460	650	480		
Idaho	-	-	-	-	1	1005	1223	1223	1	675	820	820	-	-	-	-	6	672	819	731	-	-	-	-		
Illinois	16	-	-	914	1	779	1068	901	(Incl. in 13)	6	641	879	742	-	-	-	-	-	-	-	-	(Incl. in 17 & 18)	(Incl. in 17 & 18)			
Indiana	6	576	691	600	6	821	1027	860	6	821	1027	895	7	821	1027	875	12	576	691	600	6	600	752	790		
Iowa	1	628	859	792	1	722	998	902	6	689	947	838	←	10	479	792	629	-	-	-	-	-	-	-		
Kansas	1	608	944	944	-	-	-	-	6	551	856	779	-	-	-	-	5	525	815	695	-	-	-	-		
Kentucky	8	415	583	496	13	530	745	588	13	457	643	555	(Incl. in 24)	3	340	480	416	(Incl. in 24)	-	-	-	-	-	-	-	
Louisiana	9	440	640	630	11	565	815	805	7	540	790	680	3	420	620	500	22	350	500	475	9	350	500	405		
Maine	1	582	770	733	1	640	848	770	2	532	700	669	1	669	890	808	2	508	669	610	-	-	-	-		
Maryland	2	882	1159	1159	1	817	1073	1073	5	600	788	758	27	600	788	761	7	408	788	729	-	-	-	-		
Massachusetts	1	755	923	923	1	755	923	923	2	663	815	815	8	1091	1199	1145	7	663	815	815	-	-	-	-		
Michigan	1	1022	1129	1075	1	1295	1429	1362	8	1091	1199	1145	8	997	1049	1022	30	187	827	807	-	-	-	-		
Minnesota	6	861	1090	1008	1	997	1037	1037	(Incl. in 24 & 25)	(Incl. in 24 & 25)	48	668	788	775	-	-	-	-	2	423	594	594	2	423	594	594
Mississippi	-	-	-	-	2	688	968	779	(Incl. in 8)	11	513	722	617	3	423	594	494	3	502	591	591	-	-	-	-	
Missouri	1	792	932	932	3	747	879	879	12	747	879	865	10	747	879	865	2	530	625	625	2	530	625	625		
Montana	1	905	905	905	-	-	-	-	11	830	830	830	7	830	830	830	-	-	-	-	-	-	-			
Nebraska	1	732	981	890	5	569	981	685	-	-	-	-	4	418	560	455	-	-	-	-	-	-	-			
Nevada	-	-	-	-	-	-	-	-	6	746	935	935	2	746	935	935	2	854	1074	1074	1	780	979	979		
New Hampshire	1	570	693	693	1	676	830	830	8	570	693	693	5	595	693	693	8	544	594	594	9	593	801	691		
New Jersey	1	835	1127	981	27	835	1127	981	6	795	1073	934	5	593	801	691	1	420	575	460	3	460	630	583		
New Mexico	-	-	-	-	1	860	1160	900	1	720	980	940	7	460	630	594	13	601	711	680	-	-	-	-		
New York	1	1057	1230	1140	10	845	988	915	80	632	760	720	63	632	760	720	11	500	628	574	99	500	628	574		
North Carolina	13	548	687	600	16	719	905	787	28	600	752	687	(Incl. in 11)	(Incl. in 11)	(Incl. in 11)	-	(Incl. in 11)	(Incl. in 11)	(Incl. in 11)	-	-	-	-			
North Dakota	-	-	-	-	(Incl. in 24)	2	442	815	714	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Ohio	1	707	960	800	1	844	1085	982	25	698	894	773	17	567	816	655	5	608	800	707	1	698	894	825		
Oklahoma	-	-	-	-	-	-	-	-	6	540	740	640	7	540	740	657	-	-	-	-	6	390	600	510		
Oregon	2	829	913	913	(Incl. in 11)	10	789	870	870	16	751	829	829	(Incl. in 16 & 17)	(Incl. in 16 & 17)	(Incl. in 16 & 17)	-	-	-	-	-	-	-	-		
Pennsylvania	1	680	740	860	11	850	1030	900	20	560	700	610	67	560	700	610	2	580	740	640	15	530	680	580		
Rhode Island	-	-	-	-	1	600	800	675	1	750	1000	900	-	-	-	-	5	456	645	500	21	375	565	439		
South Carolina	6	563	880	749	1	641	880	749	10	491	880	668	(Incl. in 8)	(Incl. in 10 & 11)	(Incl. in 10 & 11)	-	-	-	-	-	-	-	-			
South Dakota	1	664	844	754	-	-	-	-	10	664	844	754	-	-	-	-	2	575	725	650	-	-	-	-		
Tennessee	-	-	-	-	(Incl. in 8)	-	-	-	(Incl. in 8)	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Texas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Utah	1	695	845	805	1	914	1289	1203	-	-	-	-	-	-	-	5	630	767	644	-	-	-	-			
Vermont	7	767	1044	767	-	-	-	-	7	504	671	547	7	448	529	446	7	504	671	610	-	-	-	-		
Virginia	9	732	1000	876	7	700	956	800	8	586	732	640	8	586	732	640	18	490	612	560	8	700	916	800		
Washington	-	-	-	-	4	880	1112	1012	7	880	1112	1012	7	880	1112	1012	5	802	880	841	-	-	-	-		
West Virginia	1	570	870	705	10	705	1065	1015	10	485	745	644	39	697	883	722	25	607	766	632	39	607	766	632		
Wisconsin	6	741	944	771	1	1089	1418	1418	11	741	944	771	5	563	945	750	5	497	896	700	6	471	896	750		
Wyoming	1	667	1079	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
1973 Average		933	867		1047	947			861	790			828	745			744	667			714	654				
1974 Average		-	-		-	-			-	-			-	-			-	-		-	-	-				
% Increase, 1973/1974		-	-		-	-			-	-			-	-			-	-		-	-	-				
% Increase, 1973/1972		5.9%			8.5%				7.2%				3.8%				(0.5%)				7.2%					

OTHER RELATED PERSONNEL:					
(31)	(32)	(33)	(34)	(35)	
Traffic Signal & Lighting Technician No. Min. Max. Aver.	Striper Technician No. Min. Max. Aver.	Chief Engineer No. Min. Max. Aver.	Project Engineer No. Min. Max. Aver.	Clerk or Timekeeper No. Min. Max. Aver.	State
18 502 896 540	- - - - -	- - - - -	250 746 988 901	105 335 836 517	Alabama
1 876 1053 978	- - - - -	1 2199 2646 2648	7 1466 1763 1638	7 606 729 677	Alaska
21 665 924 848	21 665 808 774	1 2140 2732 2732	15 1126 1438 1307	35 456 553 501	Arizona
- - - - -	21 386 478 407	1 1543 2017 2017	32 944 1473 1281	25 386 510 453	Arkansas
157 791 1111 951	? 791 1111 951	1 2288 2478 2383	330 1166 1417 1349	85 651 791 721	California
5 677 907 792	- - - - -	1 1929 2461 2195	75 1185 1588 1387	- - - - -	Colorado
35 657 856 734	75 569 716 676	- 2045 2182 -	28 1093 1235 1219	18 590 716 678	Connecticut
6 503 784 599	(Incl. in 30)	1 1722 2415 2195	8 1061 1638 1438	4 583 784 755	Delaware
- - - - -	20 539 729 678	1 1850 1850 1850	136 1061 1496 1161	29 539 729 699	Florida
- - - - -	21 501 710 561	1 2146 3126 2711	- - - - -	- - - - -	Georgia
6 704 986 851	3 562 683 610	1 1486 2307 2198	6 1165 1807 1588	4 589 913 850	Hawaii
4 641 879 742	- - - - -	1 - 2184	12 1012 1441 1206	7 478 657 553	Idaho
- - - - -	98 - - 847	1 2793 3902 3500	7 1152 1659 1450	7 668 911 820	Illinois
26 600 752 821	1 660 821 786	1 2041 2587 2140	72 981 1210 1027	25 466 537 510	Indiana
2 628 859 830	20 548 756 668	1 1700 2391 2277	23 994 1399 1297	- - - - -	Iowa
- - - - -	- - - - -	1 - 2273	43 856 1329 1300	28 432 670 614	Kansas
19 376 643 485	23 376 530 450	1 1882 2286 ?	- - - - -	- - - - -	Kentucky
25 350 500 430	21 460 660 550	1 1450 1950 1800	66 930 1330 1330	62 380 580 570	Louisiana
2 532 770 640	- - - - -	- - - - -	121 770 1314 1028	8 485 640 610	Maine
15 600 852 812	13 476 730 654	1 2375 2375 2375	109 882 1251 1130	38 556 730 681	Maryland
1 755 923 923	5 630 771 771	1 1909 2427 2427	89 1083 1368 1368	1 522 626 626	Massachusetts
24 771 811 791	10 787 829 807	- - - - -	- - - - -	25 627 753 731	Michigan
14 650 957 820	(Incl. in 29)	1 1744 2294 2666	33 1179 1550 1326	270 400 680 496	Minnesota
4 566 796 649	(Incl. in 17)	1 1577 2157 2013	39 1067 1502 1421	47 366 513 405	Mississippi
25 705 828 810	31 561 659 656	1 2125 ? 2125	60 1070 1276 1272	19 552 652 651	Missouri
- - - - -	- - - - -	1 2041 2041 2041	- - - - -	12 795 945 900	Montana
1 830 1112 1009	- - - - -	1 - 1917	21 941 1261 950	- - - - -	Nebraska
- - - - -	6 682 854 854	1 2387 2387 2387	- - - - -	4 746 935 935	Nevada
5 506 726 726	12 418 594 594	1 2061 2311 2311	70 941 1303 1122	7 488 654 587	New Hampshire
90 721 974 847	27 565 763 664	1 ? 2824 ?	209 1119 1511 1315	9 687 927 807	New Jersey
1 1070 1400 1160	1 420 575 413	1 2000 2250 2250	32 980 1300 1074	7 575 785 634	New Mexico
52 754 884 820	60 602 710 680	- - - - -	- - - - -	- - - - -	New York
13 600 752 657	(Incl. in 17)	1 - - 2228	69 1142 1455 1385	96 500 628 574	North Carolina
- - - - -	1 407 780 520	1 1917 2275 1967	57 892 1542 1200	8 375 680 552	North Dakota
45 587 1007 735	22 608 800 735	1 1945 2408 2193	201 1104 1612 1242	88 567 724 630	Ohio
- - - - -	- - - - -	1 1525 2065 1690	27 1115 1525 1268	102 415 570 455	Oklahoma
(Incl. in 11)	(Incl. in 16 & 17)	1 2096 2675 2675	71 1110 1418 1418	(Incl. in 16)	Oregon
11 900 1140 1000	100 580 730 685	1 2150 2800 2000	120 1026 1320 1140	67 512 654 565	Pennsylvania
3 600 665 625	5 456 550 500	- - - - -	- - - - -	4 400 500 460	Rhode Island
19 411 618 559	- - - - -	1 - - 2333	73 748 1282 1013	112 347 710 492	South Carolina
- - - - -	- - - - -	1 1641 2250 1945	20 846 1117 981	7 456 585 520	South Dakota
- - - - -	- - - - -	1 1576 2112 ?	87 ? ? ?	99 350 560 ?	Tennessee
- - - - -	- - - - -	1 2625 2625 2625	352 1141 1535 1343	- - - - -	Texas
9 607 1068 778	- - - - -	1 1607 2346 1908	35 1038 1663 1301	6 690 975 903	Utah
1 632 851 827	7 448 592 446	1 1677 2396 2325	47 988 1365 1165	9 565 756 695	Vermont
21 560 732 640	- - - - -	1 1866 2441 2441	33 876 1144 1000	132 450 560 512	Virginia
34 841 1061 967	- - - - -	1 2918 2918 2918	70 1112 1409 1281	32 637 766 732	Washington
2 600 915 770	10 458 489 454	1 1825 2440 2010	- - - - -	151 433 489 455	West Virginia
10 1104 1368 ?	44 607 766 632	1 2155 2806 2535	195 1089 1418 1312	County Employee	Wisconsin
2 471 997 750	25 471 849 600	1 - - 2000	36 898 1454 1250	5 360 723 450	Wyoming
907 775	716 642	2454 2278	1417 1248	698 624	1973 Average
- -	- -	- -	- -	142	1944 Average
5.2%	2.6%	6.9%	7.6%	7.6%	% Increase, 1973/1944

MAINTENANCE QUESTIONNAIRE ON POLICIES AFFECTING MAINTENANCE AND TRAFFIC OPERATIONS PERSONNEL AS OF JULY 1, 1973

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 compulsory retirement age?
 

If answer is "Yes," indicate the following:

  - a. Is it established by Policy or Statute?
  - b. Compulsory Retirement Age?
- 4A. Is voluntary retirement possible after a prescribed number of years?
 

If answer is "Yes," indicate the following:

  - a. Minimum years of service at which voluntary retirement is possible?
  - b. Minimum age at which voluntary retirement is possible (predicated on years of service where applicable)?

VACATIONS

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

If answer is "Yes," what is the maximum amount of vacation that may be carried over into a new year? (Do not include any unearned vacation.)

SICK LEAVE

8. Do you grant sick leave with pay to maintenance and operations employees?
9. What is your annual sick leave schedule, minimum and maximum, for maintenance and operations personnel (working hours per year per years of service)?
 

If answer is "Yes," what is the maximum amount of sick leave?
10. Is your sick leave cumulative?
 

If answer is "Yes," what is the maximum?

State	CIVIL SERVICE OR MERIT SYSTEM	State Plan	Fed. Soc. Sec. Plan	Compulsory Retirement	RETIREMENT PLAN		VACATIONS			SICK LEAVE															
					1a	1b	1c	1d	2	3	4a	4b	5a	5b											
					Min. Yrs. of Serv.	Minimum Age				Hrs. Yrs. of Service	Hrs. Yrs. of Service	Cumulative	Maximun												
										/Yr.	/Yr.														
Alabama	-	x	-	-	Yes	Yes	Yes	Statute	70	Yes	10 Yrs.	Age 60	Pt.	104	0 to 10	156	10+	Yes	240	Pt.	104	0 to any	104	Any	
Alaska	x	-	-	-	Yes	Yes	Yes	Policy	65	Yes	8 Yrs.	Age 60	Yes	112 $\frac{1}{2}$	0 to 2	225	10+	Yes	450	Yes	112 $\frac{1}{2}$	0 to any	112 $\frac{1}{2}$	Any	
Arizona	x	-	-	-	Yes	Yes	Yes	Statute	70	Yes	-	Age 65	Yes	96	0 to 3	168	15+	Yes	240	Yes	96	0 to any	96	Any	
Arkansas	-	-	-	x	Yes	Yes	Yes	Policy	61	Yes	10 Yrs., if Age 65	Any Age/35 Yrs.	Yes	96	1 to 10	144	15+	Yes	184	Yes	96	1 to any	96	Any	
California	x	-	-	-	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	-	x	-	-	Yes	No	Yes	Policy	66	Yes	20 Yrs., if Age 60	Age 55	Yes	96	1 to 5	168	15+	Yes	336	Yes	120	1 to any	120	Any	
Connecticut	-	x	-	-	Yes	Yes	Yes	Statute	70	Yes	25 Yrs.	Age 55	Yes	105	1 to 20	140	25+	Yes	840	Yes	105	1 to any	105	Any	
Delaware	-	x	-	-	Yes	Yes	Yes	Statute	57	Yes	30 Yrs.	Age 60	Yes	112 $\frac{1}{2}$	0 to 10	158	15+	Yes	1 Yr's.	Yes	112 $\frac{1}{2}$	0 to any	112 $\frac{1}{2}$	Any	
Florida	-	x	-	-	Yes	Yes	Yes	Both	70	Yes	10 Yrs.	-	Yes	104	0 to 5	156	10+	Yes	240	Yes	104	0 to any	104	Any	
Georgia	-	x	x	-	Yes	Yes	Yes	Policy	65	Yes	5 Yrs.	Any Age/35 Yrs.	Yes	120	1 to 5	168	10+	Yes	360	Yes	120	?	?	?	
Hawaii	x	-	-	-	Yes	Yes	No	Statute	70	Yes	25 Yrs.	Age 55	Yes	156	0 to any	168	Any	720	Yes	168	0 to any	168	Any		
Idaho	-	x	-	-	Yes	Yes	Yes	Statute	70	Yes	5 Yrs.	Age 60	Yes	96	0 to 5	168	15+	Yes	240	Yes	96	0 to any	96	Any	
Illinois	-	x	-	-	Yes	Yes	No	-	-	Yes	8 Yrs.	Age 55	Yes	80	1 to 7	160	15+	Yes	1 Yr's.	Yes	96	1 to any	96	Any	
Indiana	-	-	x	-	Yes	Yes	Yes	Policy	65	Yes	10 Yrs.	Age 55	Yes	96	1 to 10	160	15+	Yes	No Limit	Yes	96	1 to 10	?	?	
Iowa	x	-	-	-	Yes	Yes	No	-	-	Yes	-	Age 55	Yes	80	0 to 4	160	11+	Yes	160	Yes	240	0 to any	240	Any	
Kansas	-	x	-	-	Yes	Yes	Yes	Policy	65	Yes	-	Age 62	Yes	96	0 to 10	144	15+	Yes	192	Yes	96	0 to any	96	Any	
Kentucky	-	Pt.	-	-	Yes	Yes	Yes	Policy	65	Yes	30 Yrs.	Age 55	Yes	90	0 to 5	158	15+	Yes	225	Yes	90	0 to any	90	Any	
Louisiana	x	-	-	-	Yes	Pt.	Yes	Policy	65	Yes	30 Yrs., Any Age	Age 55/25 Yrs.	Yes	96	0 to 3	192	15+	Yes	No Limit	Yes	96	?	192	?	
Maine	x	-	-	-	Yes	No	Yes	Statute	70	Yes	25 Yrs.	Age 43	Yes	108	0 to 5	216	20+	Yes	270	Yes	108	0 to any	108	Any	
Maryland	-	x	-	-	Yes	Yes	Yes	Statute	70	Yes	25 Yrs., Any Age	No Minimum	Yes	80	1 to 5	200	20+	Yes	240	Yes	240	0 to any	240	Any	
Massachusetts	x	-	-	-	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	x	-	-	-	Yes	Yes	Yes	Statute	70	Yes	10 Yrs., 11 Age 60	Age 55/15 Yrs.	Yes	120	1 to 5	168	10+	Yes	210	Yes	104	0 to 1	?	?	
Minnesota	-	x	-	-	Yes	Yes	Yes	Statute	68	Yes	10 Yrs.	Age 62/30 Yrs.	Yes	78	1 to 2	208	26+	Yes	208	Yes	52	0 to 1	104	2+	
Mississippi	-	x	-	-	Yes	Yes	Yes	Policy	65	Yes	10 Yrs.	Age 60	Yes	96	0 to any	96	Any	296	Yes	96	0 to any	96	Any		
Missouri	x	-	-	-	Yes	Yes	Yes	Statute	7	Yes	20 Yrs.	Age 60	Yes	120	0 to 5	168	20+	Yes	336	Yes	120	0 to any	120	Any	
Montana	-	-	x	-	Yes	Yes	Yes	Policy	65	Yes	10 Yrs., if Age 55	Any Age/30 Yrs.	Yes	120	1 to 10	192	21+	Yes	240	Yes	96	1 to any	96	Any	
Nebraska	x	-	-	-	Yes	Yes	Yes	Statute	65	Yes	No	-	Yes	96	0 to 5	200	16+	Yes	200	Yes	96	0 to 5	240	19+	
Nevada	x	-	-	-	Yes	No	Yes	Statute	65	Yes	10 Yrs., if Age 60	Age 55/30 Yrs.	Yes	120	1 to 10	168	15+	Yes	240	Yes	120	0 to any	120	Any	
New Hampshire	x	-	-	-	Yes	Yes	Yes	Statute	70	Yes	15 Yrs.	Age 60	Yes	120	1 to 5	120	Any	240	Yes	120	1 to any	120	Any		
New Jersey	x	-	-	-	Yes	Yes	Yes	Policy	70	Yes	25 Yrs.	Age 55/25 Yrs.	Yes	96	0 to 10	160	20+	Yes	160	Yes	96	0 to 1	120	1+	
New Mexico	x	-	-	-	Yes	Yes	Yes	Policy	55	Yes	20 Yrs.	Age 60	Yes	120	0 to any	120	Any	240	Yes	120	0 to any	120	Any		
New York	x	-	-	-	Yes	Yes	Yes	Statute	70	Yes	10 Yrs.	Age 55	Yes	104	1 to 7	160	8+	Yes	240	Yes	104	0 to any	104	Any	
North Carolina	-	x	-	-	Yes	Yes	Yes	Policy	65	Yes	30 Yrs.	-	Yes	80	0 to 2	192	20+	Yes	240	Yes	80	0 to any	80	Any	
North Dakota	-	-	x	-	Yes	Yes	Yes	Policy	65	Yes	-	Age 55	Yes	96	0 to 3	192	19+	Yes	240	Yes	96	0 to any	96	Any	
Ohio	-	x	-	-	Yes	No	Yes	Statute	70	Yes	32 Yrs.	Age 60	Yes	80	1 to 9	160	20+	Yes	320	Yes	120	0 to any	120	Any	
Oklahoma	-	x	-	-	Yes	Yes	Yes	Policy	65	Yes	-	Age 62	Yes	120	1 to 5	144	5+	Yes	384	Yes	120	1 to any	120	Any	
Oregon	-	x	-	-	Yes	Yes	Yes	Statute	65	Yes	25 Yrs.	Age 60	Yes	88	1 to 5	168	20+	Yes	250	Yes	96	0 to any	96	Any	
Pennsylvania	-	-	x	-	Yes	Yes	No	-	-	Yes	25 Yrs.	Age 60	Yes	112 $\frac{1}{2}$	2 to 15	150	15+	Yes	900	Yes	112 $\frac{1}{2}$	0 to any	112 $\frac{1}{2}$	Any	
Rhode Island	-	x	-	-	Yes	Yes	Yes	Statute	70	Yes	10 Yrs.	-	Yes	120	1 to 2	176	20+	Yes	384	Yes	120	1 to any	120	Any	
South Carolina	-	-	x	-	Yes	Yes	Yes	Statute	72	Yes	35 Yrs.	Age 60	Yes	120	-	-	-	Yes	360	Yes	120	0 to any	120	Any	
South Dakota	x	-	-	-	Yes	Yes	Yes	Both	67	Yes	20 Yrs.	Age 55	Yes	120	0 to 15	160	15+	Yes	320	Yes	112	0 to any	112	Any	
Tennessee	-	-	x	-	Yes	Yes	Yes	Policy	65	Yes	30 Yrs.	Age 48	Yes	96	1 to 6	192	20+	Yes	336	Yes	96	0 to any	96	Any	
Texas	-	-	x	-	Yes	Yes	Yes	Policy	65	Yes	-	-	Yes	80	0 to 15	160	20+	Yes	320	Yes	96	0 to any	96	Any	
Utah	-	x	-	-	Yes	Yes	Yes	Statute	65	Yes	No	-	Yes	96	0 to 5	144	10+	Yes	240	Yes	96	0 to any	96	Any	
Vermont	-	x	-	-	Yes	Yes	Yes	Statute	65	Yes	30 Yrs.	Age 60	Yes	96	0 to 5	144	10+	Yes	240	Yes	96	0 to 5	144	Any	
Virginia	-	x	-	-	-	-	-	Yes	Policy	70	No	-	-	Yes	96	1 to 5	144	10+	Yes	288	Yes	120	0 to any	120	Any
Washington	-	x	-	-	Yes	Yes	Yes	Statute	70	Yes	5 Yrs., if Age 60	Age 48/30 Yrs.	Yes	96	1 to 2	176	26+	Yes	240	Yes	96	0 to any	96	Any	
West Virginia	-	-	x	-	Yes	Yes	No	-	-	Yes	5 Yrs.	Age 60	Yes	120	0 to 5	192	15+	Yes	240	Yes	144	0 to any	144	Any	
Wisconsin	-	-	-	x	Yes	Yes	Yes	Policy	65	Yes	-	Age 55	Yes	80	1 to 5	200	25+	No	-	Yes	104	0 to any	104	Any	
Wyoming	-	-	x	-	Yes	Yes	Yes	Policy	65	Yes	4 Yrs., if Age 60	Any Age/25 Yrs.	Yes	96	1 to 9	144	20+	Yes	160	Yes	96	1 to any	96	Any	

**INSURANCE**

11. Are your maintenance and operations employees protected by a wholly or partially state-financed hospitalization plan?  
 11A. If answer is "Yes," indicate whether plan is wholly state financed or partially state financed.  
 11B. Is participation optional or mandatory with employee?
12. Are your maintenance and operations employees protected by a wholly or partially state-financed life insurance 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 against lawsuit by a state financed public liability plan?  
 a. All  
 b. All but Temporary  
 c. Supervisory Only  
 d. None

**UNIONIZATION**

14. 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**

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

**WORKING CONDITIONS**

16. Check which of your maintenance and operations field employees are paid on a monthly salaried basis and which are paid on an hourly basis.

- a. All  
 b. Permanent Field Employees (exclusive of Supervisory)  
 c. Supervisory  
 d. Temporary

17. Standard number of hours worked by each permanent field employee per day and per week.

("Working Conditions" continued on next page)

Cumulative 10 Maximum	INSURANCE												UNIONIZATION				SERVICE AWARDS 15	WORKING CONDITIONS				State
	Hospitalization		Life Insurance			Public Liability			National Union		Local Union		Salary Basis					Working Hrs. per Day per Week 17				
	11a	11b	12	12a	12b	13a	13b	13c	13d	14a	14b	16a	16b	16c	16d	Working Hrs. per Day per Week 17						
Yes No Limit	Yes	Partially	Optional	No	-	-	-	x	-	-	No	-	Yes	Voluntary	Yes	-	Both	Monthly	Hourly	8	40	Alabama
Yes No Limit	Yes	Wholly	Mandatory	Yes	Wholly	Mandatory	x	-	-	No	-	Yes	Mandatory	Yes	-	Monthly	Monthly	Hourly	7½	37½	Alaska	
Yes No Limit	Yes	Partially	Optional	No	-	-	x	-	-	No	-	Yes	Voluntary	Yes	Monthly	-	-	-	8	40	Arizona	
Yes 720	Yes	Partially	Optional	Yes	Partially	Optional	-	-	x	-	-	Yes	Voluntary	Yes	-	Hourly	Monthly	Hourly	8	40	Arkansas	
Yes No Limit	Yes	Partially	Optional	No	-	-	x	-	-	No	-	Yes	Voluntary	Yes	-	Monthly	Monthly	Both	8	40	California	
Yes No Limit	Yes	Partially	Optional	No	-	-	x	-	-	No	-	Yes	Voluntary	Yes	-	Monthly	Monthly	Hourly	8	40	Colorado	
Yes No Limit	Yes	Wholly	Optional	Yes	Partially	Optional	x	-	-	Yes	Voluntary	Yes	Voluntary	No	-	Hourly	Monthly	Hourly	7	35	Connecticut	
Yes 675	Yes	Partially	Optional	Yes	Partially	Optional	-	x	-	Yes	Voluntary	Yes	Voluntary	Yes	-	Hourly	Monthly	Hourly	7½	37½	Delaware	
Yes No Limit	Yes	Partially	Optional	No	-	-	-	-	x	Yes	Voluntary	Yes	Voluntary	No	-	Bi-Weekly	Bi-Weekly	Hourly	8	40	Florida	
Yes 720	Yes	Partially	Mandatory	Yes	Partially	Mandatory	x	-	-	No	-	No	-	Yes	Monthly	-	-	-	8	40	Georgia	
Yes No Limit	Yes	Partially	Optional	Yes	Wholly	Optional	-	-	x	No	-	Yes	Voluntary	Yes	Monthly	-	-	-	8	40	Hawaii	
Yes No Limit	Yes	Partially	Optional	Yes	Wholly	Mandatory	x	-	-	No	-	Yes	Voluntary	Yes	-	Monthly	Monthly	Hourly	8	40	Idaho	
Yes No Limit	Yes	Wholly	Mandatory	Yes	Wholly	Mandatory	x	-	-	Yes	Voluntary	Yes	Voluntary	No	-	Monthly	Monthly	Hourly	8	40	Illinois	
Yes No Limit	Yes	Partially	Optional	No	-	-	x	-	-	Yes	Voluntary	Yes	Voluntary	Yes	?	?	?	?	8	40	Indiana	
Yes 720	Yes	Partially	Optional	Yes	Wholly		x	-	-	No	-	Yes	Voluntary	Yes	Monthly	-	-	-	8	40	Iowa	
Yes No Limit	Yes	Partially	Optional	No	-	-	-	x	-	Yes	Voluntary	Yes	Voluntary	No	-	Monthly	Monthly	Hourly	8	40	Kansas	
Yes 900	Yes	Wholly	Mandatory	Yes	Wholly	Mandatory	-	-	x	No	-	Yes	Voluntary	Yes	-	Hourly	Monthly	Both	8	40	Kentucky	
Yes No Limit	Yes	Partially	Optional	Yes	Partially	Optional	-	-	x	Yes	Voluntary	Yes	Voluntary	Yes	Monthly	-	-	-	8	40	Louisiana	
Yes 810	Yes	Partially	Optional	No	-	-	x	-	-	Yes	Voluntary	Yes	Voluntary	No	-	Hourly	Weekly	Hourly	9	45	Maine	
Yes 800	Yes	Partially	Optional	No	-	-	Pt.	-	-	Yes	Voluntary	Yes	Voluntary	Yes	-	Bi-Weekly	Bi-Weekly	Hourly	8	40	Maryland	
Yes No Limit	Yes	Partially	Optional	Yes	Partially	Optional	-	-	x	Yes	Voluntary	Yes	Voluntary	No	Hourly	-	-	-	8	40	Massachusetts	
Yes No Limit	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	Yes	Voluntary	Yes	Voluntary	Yes	Hourly	-	-	-	8	40	Michigan	
Yes 800	Yes	Wholly	Mandatory	Yes	Wholly	Mandatory	-	x	-	Yes	Voluntary	Yes	Voluntary	Yes	Hourly	-	-	-	8	40	Minnesota	
Yes No Limit	Yes	Partially	Optional	Yes	Partially	Optional	-	-	x	No	-	No	-	Yes	Monthly	Monthly	Both	8	40	Mississippi		
Yes No Limit	No	-	-	No	-	-	x	-	-	Yes	Voluntary	Yes	Voluntary	Yes	-	Monthly	Monthly	Hourly	8	40	Missouri	
Yes No Limit	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	Yes	Mandatory	-	-	Yes	Monthly	-	-	-	8	40	Montana	
Yes 1440	Yes	Wholly	Optional	Yes	Wholly	Mandatory	-	-	x	Yes	Voluntary	Yes	Voluntary	Yes	Hourly	-	-	-	8	40	Nebraska	
Yes No Limit	Yes	Wholly	Optional	Yes	Wholly	Optional	x	-	-	Yes	Voluntary	Yes	Voluntary	Yes	Monthly	-	-	-	8	40	Nevada	
Yes 720	Yes	Wholly	Optional	Yes	Partially	Optional	-	-	x	Yes	Voluntary	Yes	Voluntary	Yes	Hourly	-	Both	Hourly	8	40	New Hampshire	
Yes No Limit	Yes	Wholly	Optional	Yes	Wholly	Mandatory	-	-	x	Yes	Voluntary	Yes	Voluntary	Yes	?	?	?	?	8	40	New Jersey	
Yes 1350	Yes	Partially	Optional	Yes	Partially	Optional	-	-	x	No	-	Yes	Voluntary	No	Monthly	-	-	-	8	40	New Mexico	
Yes No Limit	Yes	Partially	Optional	No	-	-	-	-	x	No	-	No	-	Yes	Monthly	Monthly	Hourly	8	40	New York		
Yes No Limit	Yes	Wholly	Optional	Yes	Wholly	Optional	x	-	-	Yes	Voluntary	Yes	Voluntary	Yes	Hourly	-	-	-	8	40	North Carolina	
Yes 960	Yes	Partially	Optional	Yes	Wholly	Optional	-	-	x	Yes	Voluntary	Yes	Voluntary	Yes	Hourly	-	-	-	8	40	North Dakota	
Yes 360	Yes	Wholly	Mandatory	Yes	Wholly	Mandatory	-	-	x	No	-	No	-	Yes	Monthly	-	-	-	8	40	Ohio	
Yes No Limit	Yes	Partially	Optional	No	-	-	-	-	x	No	-	No	-	Yes	Monthly	Monthly	Hourly	8	40	Oklahoma		
Yes 675	Yes	Wholly	Optional	Yes	Wholly	Optional	x	-	-	Yes	Voluntary	No	-	Yes	Monthly	-	-	-	8	40	Oregon	
Yes 960	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	Yes	Voluntary	No	-	Yes	Monthly	Monthly	Hourly	7½	37½	Pennsylvania		
Yes 720	Yes	Partially	Mandatory	Yes	Wholly		-	-	x	No	-	Yes	Mandatory	Yes	Hourly	-	-	-	8	40	Rhode Island	
- - Yes	Yes	Partially	Optional	No	-	-	x	-	-	Yes	Voluntary	-	-	No	-	Both	Monthly	Hourly	9	45	South Carolina	
Yes 960	Yes	Partially	Optional	Yes	Partially	Optional	-	-	x	No	-	No	-	Yes	Monthly	-	-	-	8	40	South Dakota	
Yes 192	Yes	Partially	Optional	Yes	Partially	Optional	-	x	-	No	-	Yes	Voluntary	Yes	-	Hourly	Monthly	Hourly	8	40	Tennessee	
Yes No Limit	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	No	-	Yes	Voluntary	Yes	Monthly	-	-	-	8	40	Texas	
Yes No Limit	Yes	Partially	Optional	Yes	Partially	Optional	-	-	x	No	-	Yes	Mandatory	Yes	Monthly	-	-	-	8	40	Utah	
Yes No Limit	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	No	-	Yes	Voluntary	Yes	-	Hourly	Monthly	Hourly	9	45	Vermont	
Yes No Limit	Yes	Wholly	Optional	Yes	Partially	Mandatory	x	-	-	No	-	No	-	Yes	-	Monthly	Monthly	Hourly	8	40	Virginia	
Yes No Limit	Yes	Partially	Optional	No	-	-	-	-	x	Yes	?	Yes	Mandatory	Yes	-	Monthly	Monthly	Hourly	8	40	Washington	
Yes 120	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	No	-	No	-	No	-	Hourly	Monthly	Hourly	8	40	West Virginia	
Yes No Limit	Yes	Partially	Optional	Yes	Partially	Optional	x	-	-	No	-	Yes	Voluntary	No	-	Both	Monthly	?	8	40	Wisconsin	
Yes 960	Yes	Partially	Optional	No	-	-	-	-	x	No	-	Yes	Voluntary	Yes	-	Monthly	Monthly	Hourly	8	40	Wyoming	

WORKING CONDITIONS (Continued)

18. Is any allowance or adjustment made for overtime work?  
 If answer is "Yes," indicate basis of payment for overtime (straight time, time and a half, compensatory time, none) for:  
 a. Permanent Field Employees (exclusive of Supervisory)  
 b. Supervisory  
 c. Temporary
19. Are your field employees required to report at an assembly point, such as a headquarters garage or shop, preparatory to their day's work?  
 If answer is "Yes," are they paid from the time they leave this assembly point until they return at the close of the day's work (portal to portal)?
20. Are maintenance and operations employees furnished any type of protective clothing as indicated below:  
 a. Hard Hats and Safety Vests  
 b. Welding Goggles and Helmets  
 c. Other Protective Clothing for Specialized Operations (Bituminous Work, Shop Mechanics, etc.)  
 d. Normal Operations (Rain Outfits, Insulated Undergarments, etc.)
21. Do you have automatic or automatic recommended salary advancements?
22. Do you by law or policy require a formalized job classification plan?
23. Do you use convict labor?

WORKING CONDITIONS (Continued)

24. Do you pay any travel expenses for maintenance and operations employees when they are away from the home station over night?  
 If answer is "Yes," is payment for meals and lodging respectively based on:  
 a. Actual  
 b. Actual with a Maximum  
 c. Per Diem
25. Does your policy provide reimbursement of expenses incurred when a maintenance or operations employee is required to change residence which necessitated his moving his family and furniture?  
 a. Total  
 b. Limited  
 c. None

MAINTENANCE RESPONSIBILITY

26. Is the physical placement and maintenance of signing and marking the responsibility of the Maintenance Division?  
 a. Original Placement of Highway Signs  
 b. Replacement and Maintenance of Highway Signs  
 c. Pavement Marking
27. Are garage or shop operations for vehicle maintenance under the jurisdiction of the Highway Department?  
 If answer is "Yes," which of the following do you maintain?  
 a. Highway Department Vehicles Only  
 b. Vehicles for Several State Agencies  
 c. Vehicles for All State Agencies

State	WORKING CONDITIONS (Continued)												MAINTENANCE RESPONSIBILITY																
	Adjustment for Overtime				Travel Time				Protective Clothing				Travel Expenses				Moving Expenses				Signaling & Marking Responsibility				Vehicle Maintenance				
	18	18a	18b	18c	19	19a	20a	20b	20c	20d	21	22	23	24	24a	24b	24c	24a	24b	24c	25a	25b	25c	26a	26b	26c	27	27a	27b
Alabama	Yes	Str. or Comp.	Str. or Comp.	Str. or Comp.	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	-	-	x	-	-	x	-	-	x	-	Yes	-	x	-	
Alaska	Yes	1½	None	Straight	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	Some	Yes	Yes	Yes	
Arizona	Yes	1½	None	1½	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	-	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes	
Arkansas	Yes	1½	?	1½	Yes	Yes	Yes	No	No	No	No	Yes	No	Yes	-	x	-	-	x	-	-	x	-	No	No	No	Yes		
California	Yes	1½	Str. or Comp.	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	No	Yes	Yes	Yes		
Colorado	Yes	1½	Comp.	None	None	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes		
Connecticut	Yes	Str. or 1½	Str. or 1½	Str. or 1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	10%	Yes	Yes	Yes	
Delaware	Yes	1½	Straight	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	x	-	-	x	-	-	x	-	No	No	No	Yes		
Florida	Yes	1½	Comp.	1½	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	-	x	or	x	-	x	or	x	-	x	-	Yes	Yes	Yes	Yes	
Georgia	Yes	Straight	?	?	Yes	No	Yes	Yes	Yes	No	Yes	No	Yes	-	x	-	-	x	-	-	x	-	No	Yes	Yes	Yes			
Hawaii	Yes	1½	1½	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	No	Yes	Yes	Yes		
Idaho	Yes	Str. or Comp.	Comp.	Straight	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	No	Yes	No	Yes		
Illinois	Yes	Straight	Straight	Straight	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	No	No	No	No	
Indiana	Yes	Straight	Straight	Straight	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes		
Iowa	Yes	Straight	None	Straight	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes			
Kansas	Yes	Str. or Comp.	None	Straight	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	No	Yes	Yes	Yes		
Kentucky	Yes	Str. or Comp.	Comp.	Comp.	Yes	No	Yes	Yes	No	Yes	No	Yes	No	Yes	-	x	-	-	x	-	-	x	-	No	No	No	No		
Louisiana	Yes	1½	1½	?	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes		
Maine	Yes	Straight	Straight	Straight	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes	
Maryland	Yes	1½	Comp.	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes			
Massachusetts	Yes	1½	1½	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x	-	No	No	No	Yes			
Michigan	Yes	1½	?	?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x	-	No	No	No	Yes			
Minnesota	Yes	1½	Str. or 1½	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x	-	No	Yes	Yes	Yes			
Mississippi	Yes	Comp.	-	-	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	-	x	-	-	x	-	-	x	-	No	No	No	Yes			
Missouri	Yes	Straight	Straight	Straight	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes			
Montana	Yes	1½	None	1½	Yes	Yes	Yes	No	No	Yes	No	Yes	-	x	-	-	x	-	-	x	-	No	Yes	Yes	Yes				
Nebraska	Yes	Straight	?	?	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes			
Nevada	Yes	1½	Straight	1½	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	Some	Yes	Yes	Yes		
New Hampshire	Yes	Str. or 1½	Straight	Str. or 1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	No	No	No	Yes		
New Jersey	Yes	1½	1½	Straight	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes		
New Mexico	Yes	Straight	Straight	Straight	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	No	Yes	Yes	Yes		
New York	Yes	1½	1½	1½	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes		
North Carolina	Yes	1½	None	1½	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x	-	No	Yes	Yes	Yes			
North Dakota	Yes	Comp. or 1½	None	Straight	Yes	Yes	Yes	Yes	No	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes			
Ohio	Yes	1½	Comp.	None	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes			
Oklahoma	Yes	Comp.	Comp.	Comp.	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes			
Oregon	Yes	1½	None	1½	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes			
Pennsylvania	Yes	1½	None	1½	No	-	Yes	Yes	Yes	Yes	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes		
Rhode Island	Yes	1½	1½	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes		
South Carolina	Yes	Straight	Comp.	Straight	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	-	x	-	-	x	-	-	x	-	?	?	?	?			
South Dakota	Yes	1½	None	1½	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	-	x	-	-	x	-	-	x	-	Some	Yes	Yes	Yes			
Tennessee	Yes	Straight	?	?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	No	Yes	Yes	Yes		
Texas	Yes	Comp.	Comp.	Comp.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes		
Utah	Yes	1½	None	1½	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	-	x	-	-	x	-	-	x	-	No	Yes	Yes	Yes			
Vermont	Yes	1½	None	1½	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	-	x	-	-	x	-	-	x	-	Yes	Yes	Yes	Yes			
Virginia	Yes	1½	1½	1½	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	-	x	-	-	x	-	-	x	-	No	Yes	Yes	Yes			
Washington	Yes	1½	None	1½	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	-	x	-	-	x	-	-	x	-	No	Yes	Yes	Yes			
West Virginia	Yes	Str. or 1½	Comp.	?	No	-	Yes	Yes	Yes	No	No	No	Yes	-	x	-	-	x	-	-	x	-	No	No	No	No			
Wisconsin	Yes	1½	Comp.	1½	No	-	Yes	?	Yes	No	Yes	No	Yes	-	x	-	-	x	-	-	x	-	No	No	No	No			
Wyoming	Yes	Comp.	None	Straight	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	-	x	-	-	x	-	-	x	-	No	Yes	No	Yes			

**RELATIONSHIP, MILES TO NUMBER OF EMPLOYEES**

28. Number of lane miles maintained by State forces on the following systems, a lane mile being defined as any single driving lane:
- Interstate and Freeways
  - Primary and Secondary
  - County, Township, Municipal, and Service Roads
  - Total Lane Miles
29. What is your average number of maintenance and traffic operations field employees?
- Permanent
  - Temporary
  - Total

NOTE: The above would include permanent and temporary employees in the following titles on the Personnel Questionnaire:

**Maintenance Personnel:**

"Area Supervisor" through "Skilled Laborer" and "Equipment Operator I" through "Equipment Operator III"

**Traffic Operations Personnel:**

"Traffic Supervisor" through "Striper Technician"

This does NOT include garage or equipment shop personnel.

The number of temporary employees included should be computed to the monthly average for the year, **NOT** the number as of July 1.

30. Average lane miles per man, using information from Questions 28 and 29?

31. Annual vehicle miles of travel on highways included in Question 28?

32. Average annual vehicle miles per lane mile?

32A. Average annual vehicle miles per man, using information from Questions 29 and 31?

**BASIS OF OPERATIONS**

**Maintenance Management System:**

33. Have you changed or do you contemplate changing to a maintenance management system or maintenance performance budget method of operation?
- Contemplate changing
  - Have changed
  - Are in the process of changing
  - Not under consideration

34. If answer to Question 33 is (b) or (c), for what percentage of your total maintenance work functions has this change been made?

35. If answer to Question 33 is (b) or (c), what percentage of your maintenance work function cost is based on the use of a maintenance management system or maintenance performance budget?

**Basis of Crew Operations:**

36. Average lane miles covered by each general maintenance crew working out of one location (gang or section headquarters)?

37. Average travel distance for each general maintenance crew from gang or section headquarters to farthest point of work?

38. Do you have special crews for traffic signs and striping, and if so, what is the average number of lane miles handled by each crew?

- a. Traffic Signs

- b. Striping

RELATIONSHIP, MILES TO NUMBER OF EMPLOYEES										BASIS OF OPERATIONS																	
Lane Miles	28a	28b	28c	28d	Aver. No. of Employees	29a	29b	29c	30	Annual Vehicle Mile Basis			31	32	32A	Maintenance Management System											
										33a	33b	33c	33d	34	35	36	37	38a	38b								
3,057	23,137	21,282	47,476	2,982	250	3,232	14.7	19.0	Billion	0.4	Million	5.9	Million	-	x	-	-	100%	100%	750	22	Yes	750	Yes	5,934	Alabama	
-	10,000	*	10,000	280	150	430	23.0	1.7	Billion	0.2	Million	3.9	Million	-	x	-	-	100%	100%	150	25	Yes	500	Yes	3,000	Alaska	
4,434	10,477	*	14,911	831	2	833	17.9	13.2	Billion	0.9	Million	15.9	Million	-	x	-	-	93%	97%	365	40	Yes	?	Yes	?	Arizona	
2,030	30,093	*	32,123	1,590	-	1,590	20.2	9.7	Billion	0.3	Million	6.1	Million	-	x	-	-	95%	100%	400	20	Yes	1,428	Yes	3,000	Arkansas	
21,601	22,541	*	44,142	3,088	125	3,213	13.7	-	-	-	-	-	-	-	x	-	-	90%	100%	70	25	Yes	4,000	Yes	3,000	California	
4,960	24,022	28,922	49,904	1,243	115	1,358	36.7	-	-	-	-	-	-	-	-	-	-	-	-	60	45	Yes	2,400	Yes	2,400	Colorado	
1,495	8,289	*	9,784	2,076	20	2,096	4.7	11.6	Billion	1.2	Million	5.6	Million	-	-	x	-	80%	80%	191	20	Yes	1,630	Yes	1,630	Connecticut	
164	4,713	4,406	9,283	578	-	578	16.1	3.4	Billion	0.4	Million	5.9	Million	-	x	-	-	75%	75%	200	58	Yes	844	Yes	4,641	Delaware	
3,710	34,094	*	39,378	5,138	-	5,138	7.7	29.7	Billion	0.8	Million	5.8	Million	-	x	-	-	86%	95%	45	24	Yes	984	Yes	3,940	Florida	
3,508	34,510	*	38,018	3,765	-	3,765	10.1	-	-	-	-	-	-	-	x	-	-	100%	100%	170	20	Yes	4,750	Yes	4,750	Georgia	
133	1,843	*	1,976	364	-	364	5.4	3.8	Billion	1.9	Million	10.3	Million	x	-	-	-	-	-	110	34	Yes	494	Yes	494	Hawaii	
2,071	9,258	*	11,329	514	78	592	19.1	3.4	Billion	0.3	Million	5.8	Million	-	x	-	-	-	-	258	30	Yes	1,888	Yes	3,776	Idaho	
5,697	31,172	1,289	38,158	3,285	125	3,410	11.2	36.9	Billion	1.0	Million	10.8	Million	x	-	-	-	-	-	300	20	Yes	850	Yes	1,450	Illinois	
4,024	25,053	*	29,077	2,550	190	2,740	10.6	-	-	-	-	-	-	-	x	-	-	100%	100%	200	30	Yes	800	Yes	1,500	Indiana	
2,684	18,518	815	22,017	1,691	100	1,791	12.3	6.8	Billion	0.3	Million	3.8	Million	-	x	-	-	100%	100%	100	20	No	-	Yes	3,700	Iowa	
4,760	47,463	37,808	90,031	4,550	75	4,625	19.5	-	-	-	-	-	-	-	-	x	-	?	?	795	20	Yes	4,800	Yes	4,430	Kansas	
2,128	20,215	14,158	36,501	2,822	-	2,822	12.9	13.6	Billion	0.4	Million	4.8	Million	-	x	-	-	100%	100%	589	40	Yes	146	Yes	4,563	Kentucky	
810	6,964	13,683	21,457	1,370	85	1,455	14.7	4.2	Billion	0.2	Million	2.9	Million	-	-	x	-	-	-	325	20	Yes	3,000	Yes	5,000	Louisiana	
1,300	11,500	1,200	14,000	1,548	30	1,578	8.9	14.5	Billion	1.0	Million	9.2	Million	x	-	-	-	-	-	87	-	Yes	467	Yes	2,800	Maine	
1,861	7,574	*	9,435	1,692	28	1,720	5.5	10.5	Billion	1.1	Million	6.1	Million	-	-	x	-	-	-	90	15	Yes	270	←	Massachusetts		
8,858	?	?	?	846	52	898	?	26.8	Billion	?	-	29.9	Million	-	x	-	-	100%	100%	217	24	Yes	?	Yes	?	Michigan	
2,713	25,030	45	27,788	1,596	200	1,796	15.5	37.0	Billion	1.3	Million	20.6	Million	x	-	-	-	-	-	128	23	Yes	958	Yes	2,315	Minnesota	
2,516	18,836	*	21,352	1,352	4	1,356	15.7	8.7	Billion	0.4	Million	6.4	Million	x	-	-	-	-	-	125	12	Yes	?	Yes	?	Mississippi	
4,230	63,593	2,828	70,651	3,479	158	3,637	19.4	21.0	Billion	0.3	Million	5.8	Million	-	x	-	-	?	?	195	-	No	-	Yes	3,509	Missouri	
3,148	12,693	737	16,578	527	50	577	28.7	3.0	Billion	0.2	Million	5.3	Million	x	-	-	-	-	-	100	25	No	-	Yes	-	Montana	
1,734	18,932	*	20,666	1,195	130	1,385	15.6	5.9	Billion	0.3	Million	4.4	Million	x	-	-	-	-	-	217	24	No	-	Yes	4,914	Nebraska	
2,625	9,032	*	11,657	410	-	410	28.4	3.0	Billion	0.3	Million	7.2	Million	-	x	-	-	100%	100%	29	27	Yes	950	Yes	950	Nevada	
1,130	7,796	*	8,926	734	93	827	10.8	3.8	Billion	0.4	Million	4.6	Million	x	-	-	-	-	-	85	10	Yes	1,800	Yes	2,000	New Hampshire	
8,660	8,660	1,432	2,434	6	6	45.8	6.0	45.8	Billion	5.3	Million	31.9	Million	x	-	-	-	-	-	101	20	Yes	?	Yes	?	New Jersey	
3,600	18,300	5,400	27,300	1,430	85	1,515	18.0	4.5	Billion	0.2	Million	3.0	Million	x	-	-	-	-	-	329	42	Yes	273	Yes	9,100	New Mexico	
3,564	33,556	-	37,120	6,223	10	6,233	6.0	-	-	-	-	-	-	-	x	-	-	100%	92%	225	1	Yes	400	Yes	2,200	New York	
2,372	142,546	8,400	153,318	7,240	1,480	8,720	17.6	31.2	Billion	0.2	Million	3.6	Million	-	-	x	-	29%	29%	1560	20	Yes	2,005	Yes	10,740	North Carolina	
1,943	12,773	270	14,986	356	41	397	37.7	1.9	Billion	0.1	Million	4.9	Million	-	x	-	-	35%	54%	194	39	Yes	1,868	Yes	7,470	North Dakota	
5,096	35,093	-	40,189	3,600	100	3,700	10.9	30.7	Billion	0.8	Million	8.3	Million	-	-	x	-	-	-	456	20	Yes	3,350	←	Ohio		
2,792	23,074	*	25,866	1,516	22	1,518	16.8	-	-	-	-	-	-	-	x	-	-	100%	100%	290	30	Yes	2,890	Yes	7,700	Oklahoma	
3,551	15,606	*	19,157	?	?	1,280	15.0	9.2	Billion	0.5	Million	7.2	Million	x	-	-	-	-	-	200	50	Yes	1,200	Yes	3,800	Oregon	
8,034	86,756	*	94,790	8,920	312	9,232	10.3	?	?	?	?	?	?	-	-	x	-	?	75%	120	30	Yes	?	Yes	?	Pennsylvania	
575	2,366	*	2,941	568	62	630	4.7	5.4	Billion	1.8	Million	8.6	Million	-	-	x	-	-	-	16	10	Yes	573	Yes	861	Rhode Island	
2,747	63,371	10,468	76,586	?	?	2,825	27.1	19.5	Billion	0.3	Million	6.9	Million	-	-	x	-	-	-	675	25	Yes	547	Yes	1,275	South Carolina	
1,285	6,920	240	8,445	597	31	628	13.4	3.3	Billion	0.4	Million	5.3	Million	-	x	-	-	85%	100%	100	35	Yes	850	Yes	1,200	South Dakota	
3,952	19,175	*	23,127	2,600	-	2,600	8.9	-	-	-	-	-	-	-	x	-	-	100%	100%	243	25	Yes	3,854	Yes	3,854	Tennessee	
24,920	139,220	*	164,140	8,275	250	8,585	19.3	78.7	Billion	0.5	Million	9.2	Million	-	-	x	-	-	-	500	25	Yes	500	Yes	5,000	Texas	
2,452	9,647	108	12,207	545	58	603	20.2	5.3	Billion	0.4	Million	8.8	Million	-	-	x	-	-	100%	100%	167	38	Yes	2,035	Yes	2,035	Utah
1,191	4,386	12,020	17,597	594	102	696	25.3	2.7	Billion	0.2	Million	3.9	Million	-	-	x	-	-	100%	10%	96	25	Yes	5,866	Yes	1,3	

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