

way and that the state could acquire the same in condemnation proceedings. The court also held that the legislative power delegated to the commissioner of highways to acquire necessary right-of-way for highway purposes included the right to acquire this property right or easement of an abutting owner. The case was remanded to the lower court for a new trial on the issue of damages only, and was settled before trial for the sum of \$500.

The above outline shows that in Minnesota there is no definite legislative designation of a freeway highway or a system of freeways. However, limitation of access may be acquired along the trunk highway system where, in the opinion of the commissioner of highways, such limitation is reasonable and necessary in laying out and constructing the trunk highway system, and for the proper and safe maintenance thereof.

In Minnesota we can proceed under the authority vested in the commissioner of highways to acquire all lands needed for trunk highway purposes. As it is possible to take possession upon filing a petition with the clerk of court in the county where the lands are located, and to acquire limited access where needed to provide a freeway highway, we are in the fortunate position of being able to carry out the construction of modern roadway designs without the necessity of special enabling legislation.

STATE RIGHT-OF-WAY ORGANIZATION

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**Before the Right-of-Way Clinic,
Committee on Land Acquisition and Control
of Highway Access and Adjacent Areas,
Highway Research Board,
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The acquisition or public control of the right-of-way necessary and desirable for street and highway purposes is gaining increasing recognition as a matter of primary im-

portance. 1/

Many state highway administrators have come to realize:

----- That the right-of-way is perhaps the only element of the highway that is permanent;

-----That the construction of new facilities and the modernization of existing highways may be obstructed, sometimes for years, by an inefficient land acquisition technique;

-----That millions of dollars of public funds are spent each year for highway right-of-way;

-----And that a wise land acquisition policy will facilitate land assembly at the minimum total cost with a maximum of speed.

Yet in spite of this recent recognition, one of the principal barriers to solution of the right-of-way problem has been the inadequacy in some states of the administrative machinery provided to do the job. It is the objective of this short discussion to highlight some data pertinent to right-of-way administration.

Administrative position of right-of-way functions. Investigation of the present administrative position of right-of-way organizations in state highway departments reveals a variety of treatment. In 29 states, the centralized state right-of-way function is placed directly under the chief administrator or his assistant (See Table 1). In many instances, this has the effect of putting right-of-way on a par with design, construction, maintenance, and so on.

In 18 states 2/, the centralized right-of-way activity is not placed directly under the supervision of the chief administrative officer, but is subordinate to a division or department that is often functionally related to right-of-way (See Table 2). For example, in Alabama, North Dakota, and South Carolina, the right-of-way engineer is under the jurisdiction of the surveys and plans department; in Indiana, Pennsylvania, and Wisconsin, the right-of-way function is lodged in the construction department; in Kentucky, Montana, Ohio and Texas, with the design or related departments; in Iowa and Utah, in the administrative or general office division; in Oregon with the office of the chief counsel; in Tennessee, with records and statistics; and so on. This certainly constitutes a variety of treatment for a common function.

It might be mentioned that the New York bureau of rights-of-way and claims is under the jurisdiction of the

1/ For a comprehensive treatment of the right-of-way problem, see *PUBLIC LAND ACQUISITION FOR HIGHWAY PURPOSES, 1943, Public Roads Administration.*

2/ Illinois division of highways apparently does not have a right-of-way division nor a right-of-way engineer.

TABLE 1.
CENTRALIZED STATE RIGHT-OF-WAY ORGANIZATIONS DIRECTLY UNDER CHIEF ADMINISTRATOR, 1946

State	Title of administrative superior	How right-of-way organization identified	Salary range of right-of-way engineer
Arizona	Deputy State Highway Engineer	Right-of-way Division	\$4,980
California	Principal Assistant Engineer	Right-of-way Division	\$6,900 - \$8,340
Connecticut	Deputy Commissioner	Bureau of Highway Boundaries and Rights-of-way	5,040 - 6,240
Delaware	Chief Engineer	Right-of-way Division	3,900 - 4,800
Florida	State Highway Engineer	Division Engineer, Right-of-way	5,400 - 6,600
Georgia	Highway Engineer	Right-of-way Engineer	3,900 - 4,500
Idaho	Director, Bureau of Highways	Right-of-way Engineer	4,200
Kansas	Assistant State Highway Engineer	Right-of-way Engineer	4,485 - 5,385
Louisiana	Chief Engineer	Right-of-way Section	3,300 - 4,200
Maine	Chief Engineer	Right-of-way Engineer	3,640 - 4,680
Maryland	Chief Engineer	Right-of-way Engineer	4,900 - 6,125
Massachusetts	Chief Engineer (Department of Public Works)	Right-of-way Engineer	4,250 - 4,800
Michigan	Deputy Commissioner (Chief Engineer)	Right-of-way Division	4,560 - 5,280
Minnesota	Assistant Commissioner of Highways (Chief Engineer)	Engineer of Lands & Right-of-way	5,184 - 6,024
Mississippi	Chief Engineer	Right-of-way Engineer	4,200 - 5,400
Missouri	State Highway Commission-Chief Engineer	Right-of-way Attorney	2,820
Nebraska	Chief Highway Engineer	Right-of-way Division	3,240 - 3,600
Nevada	Assistant Highway Engineer	Right-of-way Engineer	4,920 - 5,340
New Hampshire	Chief Engineer	State Land Engineer-R/W	4,020 - 4,380
New Jersey	State Highway Engineer	Right-of-way Engineer	4,500 - 5,400
New Mexico	Assistant State Highway Engineer	Right-of-way Engineer	3,600 - 4,200
New York	Deputy Superintendent of Public Works	Bureau of Rights-of-way and Claims	6,700 - 8,200
North Carolina	State Highway Engineer	Right-of-way Division	3,900 - 4,800
Oklahoma	Chief Engineer	Right-of-way Engineer	5,400
Rhode Island	Division of Roads & Bridges (Highway Engineer)	Right-of-way Engineer	3,360 - 4,080
South Dakota	Assistant State Highway Engineer	Right-of-way Agent	4,320
Vermont	Commissioner of Highways	Right-of-way Engineer	2,980 - 3,660
Virginia	State Highway Commissioner	Right-of-way Engineer	6,462 - 7,416
West Virginia	State Road Commissioner	Right-of-way Division	4,500 - 4,980

deputy superintendent of public works, and its functions include the acquisition of lands for public roads as well as for other public purposes.

Size of right-of-way departments. The size of right-of-way departments obviously varies from state to state, and with the magnitude of the highway program projected at a particular time. The average normal number of employees in the right-of-way division of 27 states for which data is available is

TABLE 2

CENTRALIZED STATE RIGHT-OF-WAY ORGANIZATIONS INDIRECTLY UNDER CHIEF ADMINISTRATOR, 1946

State	Title of administrative superior	How right-of-way organization identified	Salary range of right-of-way engineers.
Alabama	Bureau of Surveys & Plans	Right-of-way Engineer	\$3,300 - \$3,900
Arkansas	Chief Engineer (over technical engineering divisions & bridge engineers).	Right-of-way Engineer	3,000
Colorado	Engineering Division	Right-of-way Engineer	3,600 - 4,200
Illinois	---	---	---
Indiana	Division of Construction	Right-of-way Engineer	3,900 - 4,140
Iowa	Administration Department	Right-of-way	3,200 - 4,400
Kentucky	Division of Design	Right-of-way	3,060 - 3,780
Montana	Division of Engineering, Road Program & Design Section	Right-of-way Engineer	3,600 - 4,500
North Dakota	Surveys & Plans Engineer	Right-of-way Engineer	3,300
Ohio	Bureau of Location & Design	Right-of-way Engineer	5,100
Oregon	Chief Counsel	Right-of-way	3,900
Pennsylvania	Chief Construction Engineer	Right-of-way Engineer	3,750 - 4,200
South Carolina	Surveys & Plans	Right-of-way Engineer	3,120 - 4,320
Tennessee	Records & Statistics	Right-of-way	4,404 - 4,980
Texas	Engineer of Road Design	Right-of-way Engineer	4,200
Utah	General Office	Senior Engineer	3,000 - 3,300
Washington	Division of Engineering	Right-of-way Section	6,120 - 6,720
Wisconsin	Construction Department	Plans & Survey & Right-of-way	3,420 - 4,320
Wyoming	Engineering Division	---	3,960

22 (See Table 3). In six of these states -- California, Connecticut, Louisiana, Michigan, Minnesota, and Missouri, the normal staff is in excess of 40. In nine states -- Alabama, Delaware, Kentucky, Montana, Nevada, New Hampshire, New Jersey, Rhode Island, and South Dakota, the right-of-way department normally has less than ten employees. In the remaining 12 states, the number is somewhere between these two extremes.

Compensation of right-of-way engineers. Experience indicates that the acquisition of lands for public highways is a rather complex undertaking today, requiring trained and expert personnel. For this reason, the salaries assigned to the position of right-of-way engineer or its equivalent in the various states command more than usual interest.

The range for 47 states is from \$2,580 to \$8,340. The lowest salary for right-of-way engineer is found in Vermont, where the starting salary is \$2,580, and the ceiling is \$3,660. The highest recorded compensation is found in California, where the range is \$6,900 to \$8,340.

TABLE 3.
NORMAL SIZE OF RIGHT-OF-WAY DEPARTMENTS
IN DESIGNATED STATES, 1946

State	Normal Number of Employees in R/W Department	State	Normal Number of Employees in R/W Department
Alabama	4	Montana	3
California	55	Nebraska	23
Connecticut	45	Nevada	9
Delaware	5	New Hampshire	7
Florida	13	New Jersey	9
Indiana	30	Ohio	27
Kansas	15	Oklahoma	21
Kentucky	8	Oregon	13
Louisiana	50	Rhode Island	7
Maryland	13	South Dakota	5
Michigan	55	Virginia	23
Minnesota	76	Washington	11
Mississippi	12	West Virginia	15
Missouri	43		

The average range for 47 states is \$3,768 to \$4,816. The average salary, taken at the mid-point of the range for each state, is \$4,505. The median of such averages is only \$4,200.

The highest salaries for right-of-way engineers are found in five states, namely, California, Connecticut, New York, Virginia and Washington. The lowest occur in six states, to wit: Arkansas, Kentucky, Missouri, Nebraska, Vermont, and Utah.

Salaries of \$5,000 or more are possible in fifteen states, namely, California, Connecticut, Florida, Kansas, Maryland, Michigan, Minnesota, Mississippi, Nevada, New Jersey, New York, Ohio, Oklahoma, Virginia, and Washington. In all but two of these states, the right-of-way engineer is directly responsible to the chief administrative officer of the department.

Salaries of \$3,500 or under prevail in twelve states, to wit: Alabama, Arkansas, Iowa, Kentucky, Louisiana, Missouri, Nebraska, North Dakota, Rhode Island, Utah, Vermont, and Wisconsin. Over half of these involve right-of-way sections that function under the administrative jurisdiction of some other division of the department.

Salaries of assistant right-of-way engineers. The compensation paid assistant right-of-way engineers follows the same approximate pattern. The range for 36 states for which data are available is \$1,560 to \$6,000. The lowest salary is indicated for the state of Tennessee where the starting salary is \$1,560, and the ceiling is \$1,920. The highest recorded compensation is found to exist in New York at \$6,000 (See Table 4).

The average range for the 36 states is \$2,664 to \$3,473. The median range is \$2,400 to \$3,420.

Bureau of Highway Boundaries and Rights-of-Way in Connecticut. The organization of the New York and Texas right-of-way departments has already been sketched for you in some detail. A right-of-way department worthy of note organized on a somewhat different basis is the bureau of highway boundaries and rights-of-way in Connecticut, headed by an engineer of rights-of-way. The bureau has three divisions.

The first of these, the division of titles and records, is headed by a chief examiner of titles and records, and the following are to be found among the established positions: a senior title examiner, a senior highway engineer, title examiners, a senior engineering aid, clerks, stenographers, and typists.

The administrative head of the second division, division of rights-of-way purchases, is a supervisor of right-of-way purchasers. The established positions include: a senior valuation engineer, a senior highway engineer, a number of right-of-way purchasers, several senior engineering aids, and a junior engineering aid.

The third division of the bureau is identified as a division of boundary surveys, directed by an associate highway boundary engineer. The division has four geographic sections, namely, (1) the Hartford section; (2) the New Milford

TABLE 4
ANNUAL SALARIES
OF ASSISTANT STATE RIGHT-OF-WAY ENGINEERS, 1946 3/

State	Salary Range	State	Salary Range
Alabama	\$1,800 - \$2,400	Nebraska	\$1,920 - \$2,400
Arizona	\$3,780	Nevada	2,520 - 2,940
Arkansas	2,400	New Hampshire	2,580 - 2,820
California	2,940 - 3,660	New Jersey	3,600 - 4,200
Delaware	3,000 - 3,900	New Mexico	2,100 - 2,400
Florida	2,100 - 3,600	New York	6,000
Indiana	2,100	North Carolina	2,400 - 3,900
Iowa	2,960 - 3,200	Ohio	2,400 - 3,200
Kansas	2,340 - 3,516	Oklahoma	3,960 - 4,200
Kentucky	2,640 - 3,360	Oregon	3,420 - 4,020
Louisiana	2,100 - 3,000	Pennsylvania	3,000 - 3,750
Maine	2,496 - 3,744	Rhode Island	2,040 - 2,520
Maryland	1,800 - 3,125	South Carolina	1,800 - 3,480
Michigan	4,320 - 5,040	Tennessee	1,560 - 1,920
Minnesota	3,972 - 4,692	Utah	2,400 - 3,300
Mississippi	1,800 - 3,300	Vermont	2,280
Missouri	2,160 - 2,700	Virginia	3,650 - 4,370
Montana	2,400 - 3,000	Wisconsin	3,300 - 4,200

3/ Source: Iowa State Highway Commission salary studies, 1946.

section; (3) the Norwich section; and (4) the New Haven section. Though these sections are not staffed identically, the typical established positions include a senior highway engineer, an assistant highway engineer, several senior engineering aids, junior highway engineers and junior engineering aids, an engineering helper, and a highway foreman paid by the hour. This third division also includes a small geodetic survey unit.

Conclusion. State land acquisition activity involving public roads presents both an opportunity and a responsibility. Examination of the varied array of present state right-of-way organizations reveals that the present administrative structure can be materially improved in many states. With land acquisition activities at unprecedented high levels, the states possess the opportunity of remedying the land acquisition inefficiencies of the past. There is the responsibility of erecting the legal and administrative machinery that will be adequate to deal with the right-of-way problem. Only by doing so can there be a reasonable assurance that the roads they build will meet the needs of the future.