

1969 ANNUAL REPORT

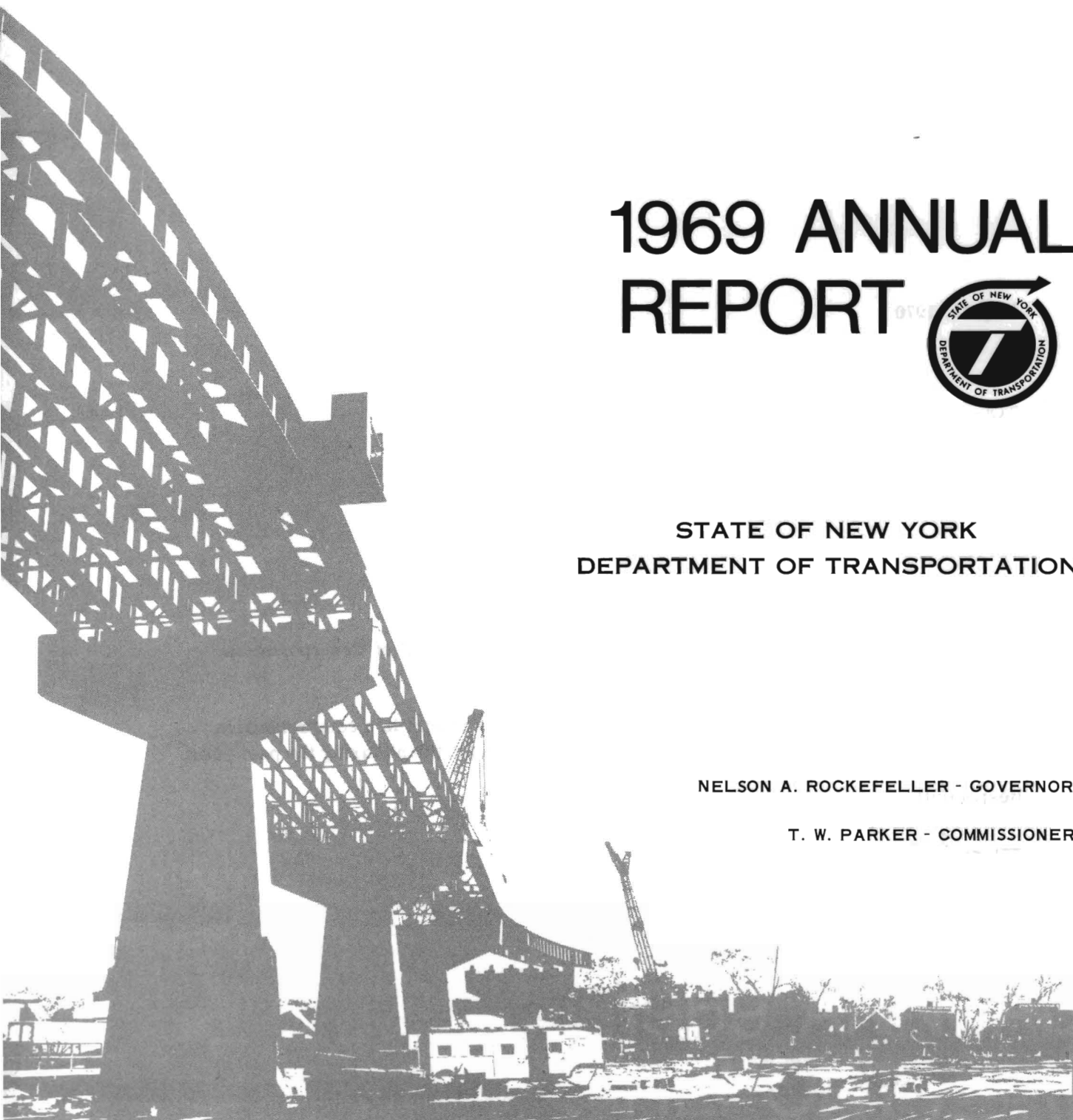
1969 ANNUAL REPORT



STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

NELSON A. ROCKEFELLER - GOVERNOR

T. W. PARKER - COMMISSIONER



May 15, 1970

TO: His Excellency, Nelson A. Rockefeller, Governor, and
the Members of the Legislature of the State of New York

It is my pleasure to submit this Annual Report of the Department of Transportation
for the calendar year 1969.

In accordance with Section 164 of the Executive Law, this report is a comprehensive
summary of the activities and accomplishments of the Department during the past year.

Respectfully,



T. W. PARKER
Commissioner of Transportation

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A Change in Leadership

The Department of Transportation was given new leadership in 1969 with the appointment as Commissioner of General T. W. Parker, former Chief of Staff of Supreme Headquarters, Allied Powers Europe. He succeeded J. Burch McMorrان, who left the Department July 31 after reaching mandatory retirement age. Appointed by Governor Rockefeller, Commissioner Parker assumed his new duties September 2.

A 1931 graduate of the U. S. Military Academy at West Point, General Parker retired from the Army February 1, 1969 after a distinguished career.

In addition to his six years at SHAPE headquarters, he had served as Deputy Chief of Staff for Military Operations for the Army, in the political-military field in Washington in various capacities, and in Paris with the North Atlantic Council dealing with senior representatives to NATO, the North Atlantic Treaty Organization. He also had carried out Division, Corps and Army artillery command assignments in Korea, and served in Europe during World War II.

Commissioner McMorrان's retirement ended almost five decades of service to the State. He had been Commissioner of the Department of Transportation since its creation in 1967, and prior to then had served in a number of other important State posts, including Superintendent of Public Works.

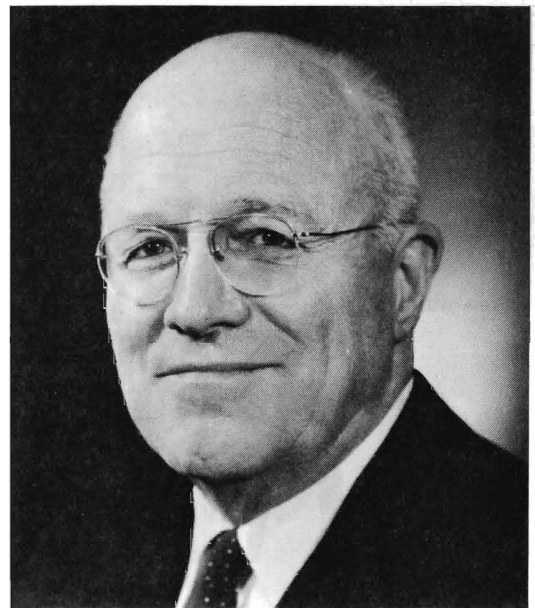
In a letter of farewell to Commissioner McMorrان, Governor Rockefeller wrote, "Mere words of praise cannot do justice to the great task you have performed."



General T. W. Parker, right, being sworn in as Commissioner of Transportation by Walter Baker, left, Deputy Secretary of State. Watching the ceremony are Lt. Governor Malcolm Wilson and Governor Rockefeller.

He added that all residents of the State are indebted to Mr. McMorrان "as the man who devoted a lifetime to making New York a better place to live by making it a better place to travel."

In addition to Commissioner McMorrان, the Department lost other executives through retirement in 1969. These included Joseph P. Ronan, Assistant Commissioner for Manpower and Employee Relations; Robert W. Sweet, Chief Engineer, and Paul Baldwin, Director of the Division of Real Property. Promotions to fill these vacancies reflected a trend of recent years in which younger men have had increased opportunities to move up in Department management.



J. BURCH MCMORRAN



Bridge approach construction for Albany's arterial highway system.

Moving Ahead

In 1969, the third year of its existence, the Department of Transportation was enlarging its capabilities and initiating new techniques and procedures to carry out the broadened State transportation program mandated by Governor Rockefeller and the Legislature. It was a year of innovation and accomplishment.

Highlights of the Department's activities included:

- Reorganization of field forces. District Engineers were reclassified as Regional Directors of Transportation responsible for implementing all Department policies and programs in their regions.

- Creation of a new position, Assistant Commissioner for Transportation Operations, to coordinate direction of Department operational forces: the Divisions of Design and Construction, Maintenance, Real Property and Traffic Engineering and Safety. Plans were developed for a 1970 reorganization of the Real Property Division.

- Recruiting that filled a number of highly professional and technical positions, including that of Director of the Division of Planning. Promotions filled a number of vacancies created by retirements.

- Strengthening management improvement operations by authorization of additional personnel and reorganization of the Management Improvement Bureau. A study was launched to create a management development program to prepare personnel for executive positions.

- Expansion of Department training programs.

- Development of plans for organization of a new unit for employee relations in connection with the Public Employees' Fair Employment Act.

- Appointment of an Equal Employment Opportunity Coordinator to ensure compliance by contractors carrying out Department projects.

- Processing 43 new aviation and mass transit capital grants approved by the Governor and the 1969 Legislature. These involve a total expenditure of \$1.126 billion, including \$654 million in State funds from the Transportation Bond Issue. Included were 20 aviation projects and 23 for mass transit, the latter embracing purchase of new buses in communities throughout the State and construction to expand the New York City subway system. The 1969 program, for the first time, provided assistance to private bus carriers through grants in which municipal corporations were the contracting agency with the State.

- Review of construction plans for projects to be launched with approved transportation grants and inspection of grant projects under way or completed to determine contract compliance. Included were the first airport completed with grant funds, Damon Field at Potsdam, and the start of construction of the \$75 million 63rd Street subway and railroad tunnel being built in New York City by the Metropolitan Transportation Authority.

- Provision of technical assistance to communities and public authorities including funding of feasibility studies for mass transit or aviation programs. Subjects ranged from bus transit and aviation improvement to location of transportation centers and design of a self-powered railroad car.

- Advancement of statewide transportation planning, within the guidelines established in 1968, involving all modes of transportation and including a study of possible high-speed rail service between urban centers.

- Initiation within the Department of a program to protect the public interest in matters involving transportation rates, service and safety. This included studies and testimony before regulatory bodies concerning air and rail service, and promulgation of

improved standards for commuter rail service in connection with the administration of railroad tax relief laws.

-Introduction of new procedures in highway planning under the new two-hearing process now mandatory for Federal-aid projects. This requires planning and presentation of alternate highway locations at a corridor public hearing for new highway development, and conduct of a design public hearing later. Emphasized is the coordination of highway plans with other public agencies, broader public participation in the planning and more detailed consideration of social, economic and environmental factors.

-Award of \$462.2 million in contracts for highway or parkway construction or improvement and railroad grade crossing elimination. Among the awards was a record \$67.8 million contract for a Bruckner Expressway interchange in New York City. Highway contracts in force at the end of the year amounted to \$1.3 billion.

-Completion of highway and related projects with a cost of \$440.3 million, a record. Outstanding among the completed projects were the final section of the Eastern Expressway at Rochester, the Patroon Island Bridge and a connecting section of Interstate Route 90 at Albany, sections of the Long Island and Southern Tier Expressways and a portion of the Aurora Expressway near Buffalo.

-Continued Department efforts to preserve esthetic values in highway and bridge design and construction. In this field, Department entries in the 1969 Federal Highway Beauty Awards Competition won a first prize and three honorable mentions.

-Completion of a computerized bridge design system developed under the Federally-authorized BEST study. This permits design of a complete bridge in the time usually required to design one element under previous methods. Highway design efforts were facilitated by the addition of an Aerial Survey and Photogrammetry Section to the Electronic Data Processing Bureau.

-Continuation of the roadside safety program by specifying in highway contracts that

dangerous objects such as sign standards and other obstructions be placed more than 30 feet from the edge of the highway or be protected by guiderail or other devices. The program, which uses break-away type sign supports in areas where they must be installed close to the road, also was advanced by special safety contracts.

-Conduct of research and testing programs to improve highway safety and to ensure economy and efficiency in department construction projects. Initiated in 1969 were projects to benefit airport as well as highway construction. Accomplishments included identification of highway construction practices which create roughness in concrete pavement surface and completion of a testing and specification program for skid-resistant aggregates in bituminous pavement.

-Operation and maintenance of 13,965 miles of State highways including expressways of the Interstate System. As the year ended, New York State had almost 1,100 miles -- a little more than 81 per cent -- of its allocated 1,355 miles of Interstate highways in service.

-Operation and maintenance of the 524-mile State Canal System which transported 3,248,440 tons of freight in 1969. An innovation was the regular use of the canals by a commercial pleasure cruise vessel.

-Improvement of highway maintenance and operation procedures, including introduction of heated paint for increased speed and efficiency in pavement marking.

-Issuance of 2,155 traffic orders and permits to improve safety on State highways and 145 orders for speed limits on town and county roads. A broadened traffic safety program was advanced, including initial steps to carry out the Federally-aided TOPICS program in urban areas. That program seeks to increase capacity of existing streets without major reconstruction.

-Broadening and improving procedures for reimbursing moving expenses to those displaced by Department projects. Relocation assistance was expanded to assure availability of housing for those displaced and new financial benefits were offered.

Planning & Development

Department activities in transportation planning and in aviation and mass transit development were broadened and intensified in 1969 through the operations of the Office of Planning and Development. Implemented by Divisions of Planning and Development, these included administration of capital grants for aviation and mass transit projects with funds from the State Transportation Bond Issue and continuation of Statewide, urban and other transportation studies and planning.

Aviation and Mass Transit Grants

During the year, the second year for the Department's capital grant program, 43 aviation and mass transit projects affecting 21 communities were approved by the Governor and the Legislature for administration by the Department. For these projects, and for cost adjustments connected with 1968 projects, the Legislature approved a total expenditure of \$1,126,000,000 involving \$654 million in State funds. Other financing is provided by Federal and local participation.

There were 20 aviation projects approved for capital grants from the State budget. They provided for runway extensions, airport apron and taxiway additions and lighting improvements. The new mass transit funds covered grants to finance purchases of 352 buses for use in eight communities, as well as for construction to expand the New York City subway system.

For the first time, the State program included assistance to private bus carriers through municipal corporations which acted as sponsors for the projects. Under legislation adopted in 1967 and 1968, the private carriers may provide the local share of matching funds for municipal corporations that act as sponsors. Seven of these projects were launched in 1969.

Projects financed with mass transit or aviation grants approved by the Legislature in 1968 were well under way in 1969, and in some instances completed. The first new airport to be placed in operation under the program was Damon Field at Potsdam, dedicated at ceremonies at which Commissioner T.W. Parker was the principal speaker.

A major event in the mass transit field was the ground breaking ceremony for the 63rd Street Tunnel in New York City on November 27. Governor Rockefeller took part in the event. The tunnel is part of the New York City subway expansion and also will serve Long Island Rail Road commuters. Other advances under the capital grant program included delivery of 105 buses purchased by five communities with the aid of grants and further progress in the extension of the Long Island Rail Road electrification between Mineola and Huntington. At the year-end, work on the latter project had reached the half-way mark.

Demonstration Project

The third year of the \$2.2 million mass transit demonstration project in Nassau and Suffolk Counties resulted in 647 persons being placed in jobs. Objective is to test the value of improved public transportation to employment sites in reducing unemployment and raising income among low income families. Since it was started in May, 1967, the project resulted in the establishment of 21 new bus routes. Seven routes still are being operated under project sponsorship, nine were successful enough to pass to private carrier operation, three were consolidated with other routes, and two were discontinued. The project is financed with Federal aid and is being conducted by the Department in cooperation with the Tri-State Transportation Commission.

Technical Assistance

The Department in 1969 continued a broad program of technical assistance to communities in connection with mass transit and aviation problems. The funding of feasibility studies has been a major aid in this program.

Since the program's start, ten mass transit studies have been funded and four finished. Those completed were studies for bus transit systems for the communities of Schenectady, Elmira and Glens Falls and location studies for a transportation center at Buffalo. A bus transit system study was launched at Newburgh during the year and transportation center studies launched in 1968 were continued in Westchester and Rockland Counties. Also under way were studies for the design of a gas turbine-electric rail car and for the high speed rail system mentioned earlier in this report.

At year-end nine studies were under way to determine the aviation needs of 24 counties. Four of these will consider need and possible sites for airports in multi-county regions. The other five are directed at determining improvement for specific airports serving both commercial and general aviation. The findings are expected to provide the basis for future capital grants.

Technical assistance also was provided through the Department's advisory program on air safety. A revised "Safety Refresher Ground School Study Guide" for the private pilot was published in 1969. The Department sponsored seven safety ground school courses during the year which were attended by more than 200 pilots and instructors. The "Digest of New York State Laws Affecting Aviation" was updated for the benefit of the aviation industry.

General aviation planes at Rochester-Monroe County Airport which is being improved with transportation grants.



Regulatory Activities

In keeping with the mandated State policy to plan and develop adequate, safe and efficient transportation facilities at reasonable cost, the Department embarked on a vigorous program to protect the public interest. In cooperation with the Attorney General and the Department of Agriculture and Markets, proposed freight rate increases were examined for their effect on the competitive position of New York State, and new route proposals were examined to make sure that existing service is not adversely affected.

In testimony before the Public Service Commission, the Department urged the establishment of reduced off-peak fares and the restructuring of other fares to permit more efficient service on commuter railroads. Many of these recommendations were acted upon and are in effect; others are awaiting a Commission ruling. In proceedings before the Civil Aeronautics Boards, the Department has sought assurances of an adequate and safe level of service, particularly in those communities served by third level carriers.

In conjunction with the administration of the railroad tax relief laws, the Department promulgated 1970 standards of service for the privately owned commuter railroads in the State. In response to numerous complaints, the Department is exerting strong efforts to assure upgraded service on these rail lines. Tax relief, estimated at \$15 million annually, is contingent on compliance with these standards.

Statewide Planning

Continuing the statewide transportation program begun in 1967, the Department in 1969 further detailed the general policies and plans presented in its first statewide report, which was completed in 1968.

The 1969 activity included development of a detailed work program for specific studies in various modal and intermodal areas. Efforts also were directed toward further improvement of analysis, forecast and evaluation techniques for statewide and regional transportation planning.

Significant progress was made in several

areas of the statewide program as follows:

Highways -- Computer coding of the routes of a statewide highway network was completed to facilitate planning analysis. Placed under development were new criteria for planning future expressway locations.

Rail -- A study of possible high-speed rail service between large urban centers of the State was conducted as a preliminary to feasibility studies to consider market and engineering factors in the most promising corridors.

Air -- Studies for carrier airport or general aviation improvements or development were advanced in various areas of the State.

Appalachia -- The Department advanced an Appalachia transportation resource plan for the Appalachia Regional Commission in conjunction with studies of the area being conducted by the State Office of Planning Coordination. A study was completed and submitted to the Commission indicating the need for four additional express route corridors in the regional development plan.

Urban Area Planning

Final reports on comprehensive transportation plans were published for the Rochester, Binghamton and the Herkimer-Oneida Counties metropolitan area transportation studies. The Capital District and Syracuse metropolitan transportation studies were advanced toward completion in 1970. Field collection of travel data marked the initiation of a study for the Dunkirk-Fredonia area.

Transportation projects proposed for urban areas were reviewed to ensure compatibility with other plans, programs and developments. Plans also were coordinated with Model Cities groups.

New Highway Procedure

New procedures in the highway planning process implemented in 1969 involve the presentation of alternate location proposals at highway corridor public hearings. These procedures are part of the new Federally-mandated two-hearing process. Under these

regulations Federal aid highway projects in many cases require a corridor as well as a design public hearing. Emphasized is the coordination of highway plans with other government agencies at all levels, broader public participation and more detailed consideration of social, economic and environmental factors.

Mapping

The Mapping Unit started work on a new statewide map on the scale of one inch to approximately four miles. Progress in preparation of the planimetric map series on the scale of one inch equals 2,000 feet advanced to the point where completion could be expected in 1970. The new maps, which will cover the entire state in four sheets, will provide the first precision statewide base for display of data by the Department and other State agencies.

Planning Research

Improved methods for determining the annual average daily traffic volume for sections of the State Highway system were developed during the year through statistical analyses. These increase the capability of counting crews without sacrifice of accuracy.

Governor Rockefeller, center, at groundbreaking for the 63rd Street subway and railroad tunnel in New York City. New York's Mayor Lindsay is at the Governor's right.

Photo courtesy Long Island Rail Road



TRANSPORTATION GRANTS AUTHORIZED BY THE 1969 LEGISLATURE

AVIATION

SPONSOR (Name of Airport in Parentheses)	PURPOSE	TOTAL COST	STATE SHARE
Albany County (Albany County Airport)	Extend runway 10-28, construct taxiway, relocate road	\$ 3,961,000	\$ 1,485,000
Town of Brookhaven (Brookhaven Airport)	Acquire land, install fencing, construct taxiway and apron	1,111,000	417,000
Broome County (Broome County Airport)	Replace airport lighting	165,000	62,000
Clinton County (Clinton County Airport)	Expand apron	50,000	19,000
Town of Harrietstown – Village of Saranac Lake (Adirondack Airport)	Extend, widen, strengthen runway 5-23; expand apron	1,200,000	450,000
Town of Islip (Long Island MacArthur Airport)	Acquire land, extend and strengthen runway, related items	4,915,000	1,844,000
City of Jamestown (Jamestown Airport)	Strengthen and widen runway 7-25, related items	2,821,000	1,059,000
Monroe County-City of Rochester (Rochester Airport)	Expand apron, improve lighting, extend access road (Expansion of 1968 Project)	1,225,000	460,000
Niagara Frontier Port Authority (Greater Buffalo International Airport)	Access roads, clear zones, rescue truck ramp, FAA and customs building	580,000	218,000
Town of North Elba (Lake Placid Airport)	Acquire land	66,000	25,000

MASS TRANSIT

SPONSOR	PURPOSE	TOTAL COST	STATE SHARE
Albany County	Purchase 100 buses	\$ 3,300,000	\$ 1,237,000
City of Amsterdam	Purchase 7 buses	250,000	98,000
Town of Huntington	Purchase 3 buses	108,000	27,000
City of Ithaca	Purchase 3 buses	72,000	27,000
Nassau County	Purchase 35 buses	1,428,000	357,000
Onondaga County	Purchase and install two-way radio system in buses	317,000	119,000
	Purchase 50 buses	1,871,000	468,000
City of Rochester	Purchase 77 buses	2,654,000	664,000
Westchester County	Purchase 77 buses	3,234,000	808,000
New York City (Subways)	East Sixty-third Street line	154,000,000	101,025,000
	Second Avenue line	151,000,000	99,000,000
	Northeast Bronx extension of the Second Avenue line	135,000,000	88,000,000
	Queens Express bypass line	89,000,000	58,000,000

SPONSOR	PURPOSE	TOTAL COST	STATE SHARE
Ogdensburg Bridge and Port Authority (Ogdensburg Airport)	Install runway and lights, construct maintenance building	16,000	6,000
City of Olean (Olean Airport)	Approach light landing aids	12,000	9,000
Oneida County (Oneida County Airport)	Acquire land, extend, strengthen and light runway 15-33 and taxiway	1,455,000	546,000
	Widen runway 9-27	435,000	164,000
Saratoga County (Saratoga County Airport)	Acquire land, remove obstructions; rehabilitate and light runway and apron; construct access road	200,000	75,000
Village of Sidney (Sidney Airport)	Acquire land, construct and light runway, taxiway and apron; install fencing and obstruction lighting	798,000	300,000
Sullivan County - Village of Monticello (Sullivan County International Airport)	Taxiway, apron, lighting and fencing	1,273,000	478,000
City of Syracuse (Clarence E. Hancock Airport)	Acquire land; extend and light taxiway	616,000	231,000
Westchester County (Westchester County Airport)	Improve runway and taxiway	1,106,000	415,000
Niagara Frontier Transportation Authority	Acquisition of property for a regional aviation facility, based on findings and recommendations of feasibility studies underway	10,000,000	3,750,000
Contingency funds	In event Federal funds are not available	----	11,911,000
Supplemental funds	To meet increased costs of 1968 projects	2,865,000	1,076,000
TOTAL		\$34,870,000	\$25,000,000

SPONSOR	PURPOSE	TOTAL COST	STATE SHARE	
New York City	Long Island expressway line	158,000,000	104,000,000	
	South-eastern Queens line	122,000,000	80,000,000	
	Nostrand Avenue line	90,000,000	22,000,000	
	Utica Avenue line	131,000,000	32,000,000	
	Staten Island Rail Transit	25,000,000	18,750,000	
	Design	Mid-town Manhattan line	4,700,000	3,525,000
		Southern extension of the Second Avenue line	7,300,000	5,475,000
		Park Avenue line, the Bronx	2,400,000	1,800,000
		Fourteenth Street - Canarsie line extension	5,900,000	4,425,000
		Jamaica Avenue line	1,000,000	750,000
Contingency Funds	In event Federal funds are not available	----	6,155,000	
Supplemental Funds	To provide for increased costs of 1968 projects	1,440,000	540,000	
TOTAL		\$1,090,974,000	\$629,250,000	



This section of the Eastern Expressway (Interstate Route 490) was opened to traffic in 1969. It completes the route which now extends from the Governor Thomas E. Dewey Thruway near Victor to Rochester. Thruway toll booths can be seen in foreground.

Photo by Wahl's Photographic Service

Design & Construction

The Department continued to advance a large-scale program of design and construction to meet the State's highway needs in 1969. The Division of Design and Construction, at year's end, had design under way for projects with an estimated cost of approximately \$3 billion, while construction contracts in force were in excess of \$1.3 billion. These operations were carried out through Highway and Structures Design and Construction Subdivisions.

Highway Contracts

During 1969, 251 contracts for highway or parkway construction or improvement and railroad grade crossing elimination were awarded at a cost of \$462,205,704. They provided for work totaling 1,330 contract-miles.

Work of various types on new highways, ranging from construction to landscaping to installation of traffic signs, amounted to \$341,988,776 and covered approximately 895 miles. Contracts awarded for reconstruction, resurfacing or other improvements to existing highways totaled \$120,216,928 and involved 435 miles.

Completed during the year were 278 contracts involving 1,959 miles of projects with a cost of \$440,308,656. This was a new dollar record that reflects the high level of contract awards of recent years.

The value of work in progress at the end of the year, \$1,317,931,261, also was a new high for the date. It involved 316 contracts covering 2,006 miles.

The 1969 highway contract awards, while slightly below the 1968 total of \$465.5 million, reflected a continuation of the record programs of recent years. Yearly awards have exceeded the \$400 million mark since 1965, with the record high, \$551.9 million, achieved in 1967. The 1969 total was smaller than anticipated due to postponement

of some bid offerings late in the year in cooperation with the Federal Government's anti-inflation drive.

With the 1969 awards, the total value of highway contracts launched during Governor Rockefeller's administration rose to \$3,989,453,782. This has provided for 18,694 miles of construction or other improvements for highways, parkways, bridges and railroad crossings.

State appropriations for the 1969 highway program were financed for the most part from the Transportation Bond Issue approved in 1967. In addition to matching Federal aid, the appropriations permitted the Department to continue letting additional contracts with 100 per cent State funds.

New Work

New construction in 1969 was launched on the Southern Tier Expressway in Cattaraugus, Chautauqua, Chemung, Tioga and Steuben Counties. Other major highway contract awards provided for the construction of the final four miles of the North-South Expressway (Interstate Route 81) on Wellesley Island in Jefferson County; 1.7 miles of the Long Island Expressway in Suffolk County; new segments of the Albany Riverfront Route (Interstate Route 787), a new bridge over the Hudson River between Watervliet and Troy, segments of the North-South and East-West Arterials in Amsterdam and the eight-mile Adirondack Connection east of Plattsburgh in Clinton County.

In New York City construction started on the giant interchange between the Bruckner, Cross Bronx and Hutchinson River Expressways which will complete links between major bridges and routes leading upstate and to New England. The contract for \$67,850,489 is the largest in Department history.

The 1969 parkway construction contracts provided for new sections of the Lake Ontario State Parkway in Monroe and Orleans County. A major New York City project involved widening a section of the Grand Central Parkway in Queens.

Railroad grade crossing elimination con-

tracts included a major project on the Long Island Rail Road near Hicksville in Nassau County. Smaller projects were carried out in other sections of the State.

New interchanges for the Governor Thomas E. Dewey Thruway were started in Greene, Genesee and Erie Counties. Work began on a new interchange for Interstate Route 84 in Dutchess County and for Interstate Route 81 in Onondaga County.

Other contracts involved reconstruction, traffic sign modernization, resurfacing, safety and other improvements to existing State highways such as Routes 5, 5S, 13, 16, 26A, 27, 36, 57, 87, 104, 386 and others. Also, a considerable number of county roads were improved with State and Federal aid under Department contracts.

Completed Projects

Highway projects completed in 1969 provided additional mileage for major expressways in the State and improvements to many other routes. Progress was particularly noteworthy on the Southern Tier Expressway, where almost 27 miles of new four-lane pavement were placed in service.

Other major highway segments opened included 10 miles of the Aurora Expressway in the Buffalo area, 10 miles of Interstate Route 84 in Dutchess and Putnam Counties, almost nine miles of the Long Island Expressway in Suffolk County, seven miles of Route 15 and 17 expressway between Presho and Painted Post in Steuben County, the first three miles of the Susquehanna Expressway (Interstate Route 88) in Broome County and some six miles of Interstate Route 90 in Albany and Rensselaer Counties, including the Patroon Island Bridge over the Hudson River.

In the Rochester area, the final section of the Eastern Expressway (Interstate Route 490) was placed in service to complete that route between Rochester and the Thruway at Victor. At Syracuse two and one-half miles of Interstate Route 690 were placed in service as well as the initial section of the Baldwinsville Bypass (Route 48). South of Utica the Sauquoit Valley Arterial ex-

pression was opened.

In Westchester County another five mile section of the Sprain Brook Parkway, between Yonkers and Elmsford, was opened to traffic. In Warren County at Lake George, the Prospect Mountain State Parkway was completed. On Staten Island, a two-mile portion of the Richmond Parkway was opened. Also in New York City, the reconstructed interchange of the Brooklyn-Queens and Long Island Expressways was opened in Queens, together with improved connecting expressway.

Other major highway improvements completed during the year included the extension of Route 10 and reconstruction of Routes 8 and 30 in Hamilton County, improvement of Route 8 in Warren County, Route 304 in Rockland County, Deer Park Avenue in Suffolk County and others.

Interstate Progress

At the end of 1969 1099.5 of the 1,355 miles allocated New York State in the National System of Interstate and Defense Highways -- better than 81 per cent -- were in use. Of the 255 miles remaining, 66 miles were under construction and another 130 miles consisted of new Interstate 88 which was only authorized in 1968.

Highway and Bridge Design

The Department revised its procedures during 1969 to ensure that social, economic and environmental effects of Department-sponsored projects receive wider consideration in design decisions. The changes included expanding the list of advisory agencies consulted about probable effects of a project and other measures to provide fuller public participation in highway planning and considerations. In keeping with new regulations for Federal-aid projects, which require corridor as well as design public hearings when a route is on new location, the procedural changes include presenting all feasible alternates to advisory agencies and the public through a hearing and other media, rather than just presenting a single proposal recommended by the Department.

Final decisions, which are based upon

Federal approval after evaluation of all information, including the views of advisory agencies and the public, must be published in newspapers and the basis for the decision documented for public inspection.

Initial Department experience with the new process indicates it will require more time and manpower in the preliminary phases of design. However, it is hoped this will be offset by eliminating time lost because of conflicts with local goals.

A highlight of the year was the successful

completion in the Structures Design and Construction Subdivision of the BEST pilot study to assess the feasibility of integrating structural design computer programs into a system capable of producing a complete highway bridge design. Launched in 1966 at the request of the U. S. Bureau of Public Roads, the study has produced a revolutionary system combining the engineer's judgment and knowledge with the computer's speed to produce an entire bridge design in the time formerly required to design a single element

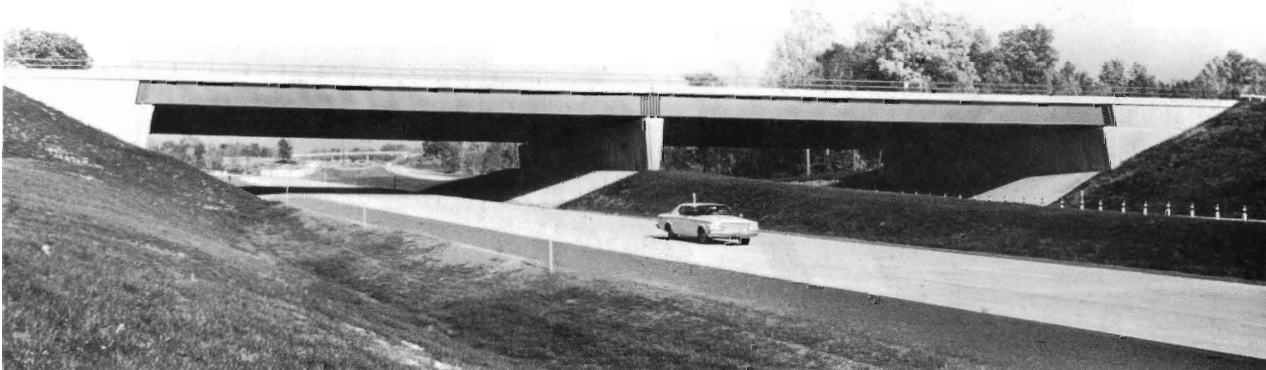
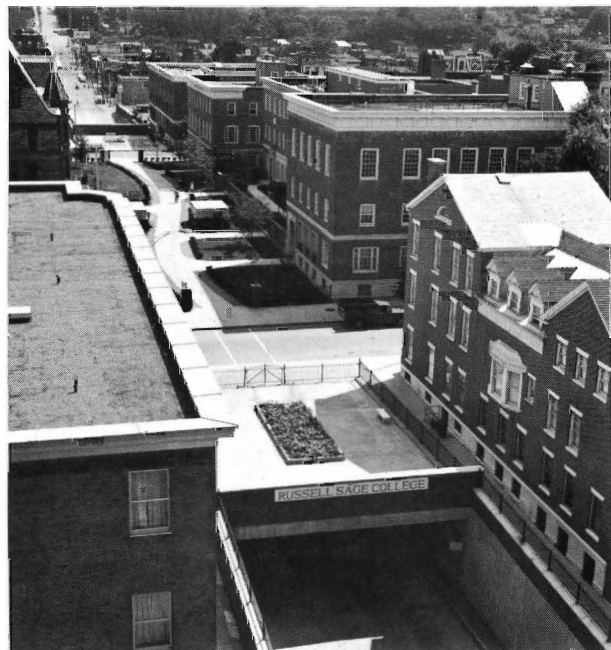
The new Patroon Island Bridge at Albany. Pavement in foreground is part of uncompleted Albany Riverfront Route (Interstate Route 787).





These were the Department's 1969 winning entries in the Highway Beauty Awards Competition of the U. S. Department of Transportation: first place, "Most Outstanding Highway in its Rural Setting," a reconstructed section of Columbia County Route 80, top photo (award was shared with Columbia County); honorable mention, same category, Interstate Route 81 section in Broome and Cortland Counties, left center photo; honorable mention, "Multiple Use," the Ferry Street Arterial Tunnel under Russell Sage College campus, Troy, right center photo; and honorable mention, "Most Outstanding Bridge," Route 17 structure over Interstate Route 84 in Orange County, bottom photo.

National Beauty Award Winners



of a structure. At year's end the system was in limited use preliminary to full-scale application to the design program. Department engineers predict it will provide structures which are designed more efficiently and constructed more economically than ever before.

Under the regular bridge design program, plans for structures with a cost of \$176 million were completed during the year. Among these were plans for the Bruckner Expressway interchange placed under construction in New York City.

Another design activity provided aerial photographs of the Interstate Route 88 corridor from Binghamton to the Schenectady County line. A new aerial Survey and Photogrammetry Section in the Bureau of Electronic Data Processing that was established during the year increased the Department's capabilities in this field.

Safety

The Department in 1969 continued an accelerated program to eliminate roadside hazards in conformance with the national policy for safer roadsides. The program, launched in 1968, is being carried out on new construction and reconstruction projects as well as in special safety improvement contracts. It features:

- Removal of all dangerous fixed objects within 30 feet of the pavement or provision of suitable guide rail protection.

- Rehabilitation of existing guide and bridge railing to conform to the latest standards.

- Alteration of existing signs and sign supports to provide a break-away type base, suitable guide rail protection or relocation of the sign 30 feet from the pavement. Efforts also were made to reduce the number of signs by combining installations and eliminating any that could be dispensed with.

- Provision of impact attenuation devices at certain problem areas where other types of protection are not feasible. These devices, which were still under study as the year ended, are designed to reduce the impact of collisions between vehicles and fixed

objects. The types under study included sand-filled containers, water-filled cylinders, and groups of empty steel barrels and devices using torsion tubes to absorb the energy. Initial installations are expected next year.

Department bridge engineers continued the bridge inspection safety program in 1969. In addition to checking bridges on the State Highway System, the program ensures inspections of all bridges in the State, with the cooperation of local officials.

Highway Esthetics

The Department's successful concern with esthetics in highway design and construction was reflected in results of the second annual Highway Beauty Awards Competition of the U. S. Department of Transportation which were announced in late 1969. Department entries received both first prize and honorable mention in the category, "The Most Outstanding Highway in Its Rural Setting and Environment," and honorable mention in two other classes.

Winner of the first prize for outstanding rural highway was a section of Columbia County Road 80 which had been reconstructed by the State Department of Transportation in cooperation with the Columbia County Highway Department. A 3.2 mile section of the county road in the Towns of Taghkanic and Copake was reconstructed on improved alignment and widened from 14 and 16 feet to 24 feet. To preserve the beauty of the countryside, natural growth was retained wherever possible and areas that were disturbed were landscaped and reseeded.

Design of the project and acquisition of right of way were performed by Columbia County. The Department reviewed the plans, awarded the contract and supervised the construction. The work was financed with State and Federal funds under the aid program for secondary roads.

The Department's other awards were: Honorable Mention, "The Most Outstanding Highway in Its Rural Setting and Environment," for a new 17-mile section of the North-South Expressway (Interstate Route

81) in Broome and Cortland Counties.

Honorable Mention in the category, "The Most Outstanding Example of Multiple Use -- Urban and Rural Highways With Other Related Activities," for a section of the Ferry Street Arterial in Troy which was built under the Russell Sage College campus. The 0.18-mile-long tunnel eliminated division of the campus by a surface street. The extra cost involved in building the tunnel was paid by the college.

Honorable Mention in the category, "The Most Outstanding Bridge, Ramp, Overpass, Interchange Area, Tunnel Approach or Other Highway Structure," for a bridge carrying the Route 17 Expressway over Interstate Route 84 in Orange County. The structure was built in connection with construction of Interstate Route 84 between Route 17 and Route 17M.

To preserve and enhance roadside appearance, the Department in 1969 authorized expenditures of approximately \$8 million for landscaping in highway construction or reconstruction projects, including \$2.3 million for planting.

During the year the Department continued to work with other State agencies and the State Natural Beauty Commission in the development of a scenic highway system. All the counties of the State, with the exception of those in New York City, are cooperating in the planning.

This 25-foot profilograph measures pavement roughness for highway research. The wheel "feels" irregularities which are noted by the analog recorder mounted on the frame.

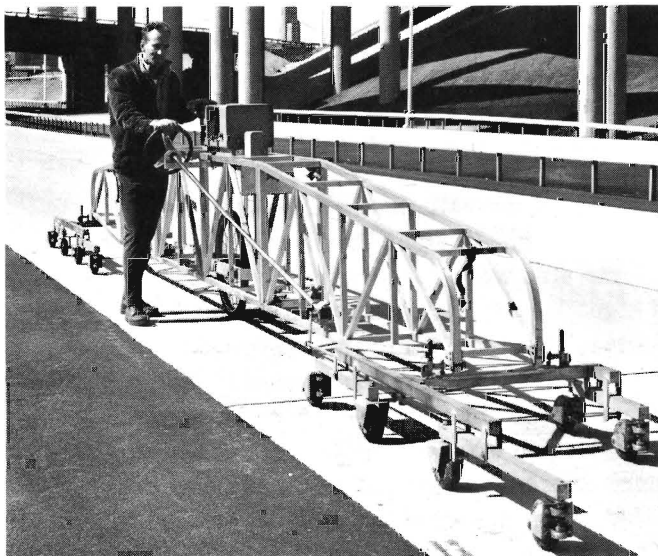
Parking Areas

During 1969 the Department completed construction of 16 rest areas along State highways to bring the total in service throughout the State to 279. Two new areas with comfort stations were completed to bring the total of such facilities to seven. In addition, contracts were awarded to provide sanitary facilities at 11 other sites. These are being built under a program launched in 1967 to provide comfort stations along expressways. The construction of smaller roadside parking facilities and scenic turn-outs was provided for in a number of regular highway construction and reconstruction contracts awarded during the year.

Physical Research

The Department's broad physical research program in the fields of materials, design and construction practices, maintenance and safety produced new benefits in 1969.

A major contribution to the construction of smoother-riding highways was the identification of construction practices that contribute to surface roughness in new concrete pavements. This resulted from a two-year evaluation of new concrete pavements during which the pavement was monitored during and immediately after construction by means of a hand-propelled profilograph. The findings will result in changes in construction specifications.



Another project resulted in specification of a new heated paint for pavement marking on State highways. At the request of the Division of Traffic Engineering and Safety, performance of a traffic paint heated to 120 degrees Fahrenheit prior to application was evaluated. Its prime advantage is a quick drying time, which results in less interference with traffic during application.

New projects initiated during the year included a study of the causes of variations in skid resistance on concrete pavements. As a measure to increase skid resistance, the Department, following evaluation, changed its concrete pavement texturing specification.

Laboratory research on concrete during the year demonstrated the feasibility of predicting concrete strength potential with accuracy within 48 hours after placement. Field use of the new method was initiated to evaluate it as a substitute for the 28-day compression test for detection of understrength concrete.

Other research activity included completion of the Department's third series of full-scale crash tests on guide rail systems and other roadside safety devices for the purpose of design improvement.

Testing

The Department continued its quality assurance program to determine the suitability of materials for use in transportation projects and engaged in other programs to aid Department operations.

These included a detailed comparison of bituminous concrete mixing and control procedures of the Federal Aviation Administration with those of the Department with the objective of utilizing the best of each for airport construction.

During the year New York became the first State in the country to institute a comprehensive program for field inspection and laboratory testing of skid-resistant aggregates in highway pavement top course bituminous mixes. This was in conjunction with recent changes in Department specifications to incorporate skid-resistant qualities in bituminous pavement placed by the Department.

Other projects included completion of field and laboratory testing of the first "hot storage bin" facilities to be used in the State. These store hot bituminous concrete for highway projects for periods up to several days, permitting production of greater volumes at one time with resultant savings in cost.

Also under its testing programs, the Bureau of Materials conducted a survey of Department needs and manufacturers' abilities to upgrade reliability of traffic control devices. It also took initial steps in the development of a testing program for wearing courses of orthotropic bridge decks, and assisted in writing specification changes to keep pace with technology in the areas of concrete, pre-cast products and steel reinforcing bars.

The quality assurance program was facilitated by the use of new equipment which permitted more accurate and rapid chemical analysis through instruments rather than "wet bench" chemistry. Use of a machine to determine concrete strengths now virtually eliminates the chance of human error in such computations.

Soil Mechanics

Application of the Department's soil mechanics proficiency to the aviation program was reflected in the provision of earth engineering technical assistance for design and construction projects for eight airports in 1969.

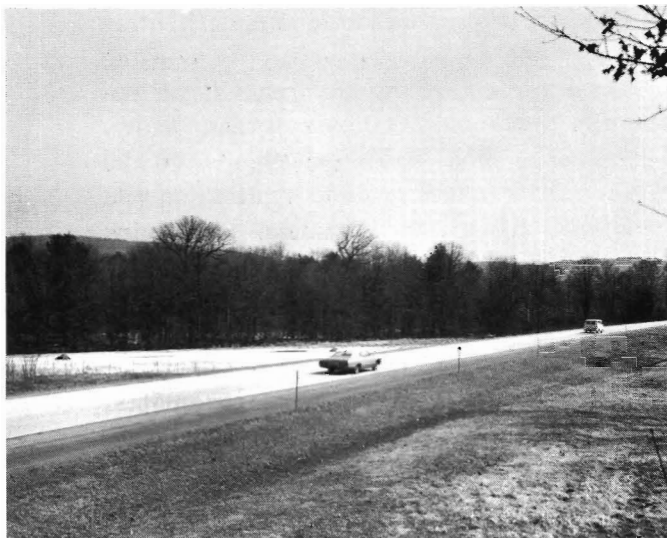
For all types of projects, almost a quarter of a million linear feet of borings and the equivalent of 57,900 feet of seismic surveys were advanced by the Bureau of Soil Mechanics during the year.

A total of 72,000 earth engineering tests were performed on soil and rock samples for the design and construction of highways, bridges and buildings. Terrain reconnaissance reports were prepared for selection of 510 miles of proposed highways. Foundation analyses and investigations were completed for 520 highway, bridge, building and canal projects.

Department engineers reviewed foundation plans and specifications for 102 dams proposed for construction throughout the State.

Something New on the Highway ---

A WILDLIFE SANCTUARY



The median on a new segment of the four-lane Southern Tier Expressway just west of Apalachin in Tioga County, has been put to unique use. At the request of conservationists, the Department designed the highway so that a wide area of swamp which has long been a wildlife refuge could be left untouched.

This section of the expressway, which extends from Owego in Tioga County to the Broome County line west of Binghamton, was opened to traffic in 1969. Today, as motorists skim along the expressway lanes on either side, many varieties of waterfowl and other

birds, as well as small animals, flourish in the wooded and open marsh areas of this approximately mile-long portion of the median. It ranges in width from 400 feet to almost 1,000 feet and is protected by a wire stock fence.

Birdwatchers and other nature lovers may visit the sanctuary by means of a graveled path that leads from nearby old Route 17 through an underpass of the eastbound expressway lanes to inside the median. Maintenance of the refuge is supervised by the State Conservation Department.



The sanctuary is in the wooded section of the median shown in the background of this photo.

Real Property

The Department's land acquisition program for highway development and other public projects in 1969 was marked by further improvement in relocation assistance procedures and the development of a plan for reorganization of the Division of Real Property.

The restructuring of the Division, to be implemented during the coming year, is aimed at further improving service to property owners and others affected by land acquisition and at the same time increasing the efficiency of such operations for State purposes. The plan will provide for three bureaus -- Appraisals, Negotiations and Property Services. The latter will deal with relocation problems. The titles of the other bureaus explain their mission.

Operations

The Department's 1969 land acquisition program involved the following:

- Filing of 5,400 appropriation maps for property with an estimated value of \$50 million.

- Processing agreements for adjustment of 5,686 claims and their certification for payments totaling \$74 million.

- Payments of \$1,094,000 as reimbursement for moving expenses to occupants of commercial or residential property acquired by the State. In addition, \$240,724 was paid to former owners of appropriated property for proration of taxes.

- Collection of \$673,670 in rentals for use of appropriated real property pending its utilization for State purposes.

- Public sale of 64 buildings which produced revenue of \$43,086.

- Provision of relocation assistance to 1,200 families and the establishment and operation of 17 special "on-site" relocation advisory assistance offices.

Relocation Assistance Improved

During the year the Department continued

its efforts to make its relocation assistance program still more responsive to the needs of those displaced by Department projects. These included enlarging the scope of moving expense allowances and a new provision for compensating property owners for loss of favorable mortgage financing.

Moving expense improvements included provision for a residential owner or tenant to choose either reimbursement for actual incurred costs, or according to a schedule of allowable charges based on the number of rooms that he occupied. Provision also was added for payment of dislocation allowances in certain instances, as well as mileage fees and subsistence costs.

As the result of 1969 State legislation, the Department for the first time was empowered to make compensatory payments to property owners for loss of low interest mortgage financing sustained when they were forced to give up property in the path of a State project. The Department placed in effect procedures under which such payments are made when an appropriation affects the original mortgage. The payment is authorized in view of the higher interest costs a property owner must pay in financing a purchase today.

The Department also continued to improve its policies and procedures to be in full compliance with Federal-aid project requirements. These included implementation of new policy for the preparation and approval of relocation plans assessing the total relocation problem arising from any given project, and proposing acceptable solutions based upon analyses of available replacement housing.

In further action to make State functions regarding supplemental payments to owners and tenants compatible with new Federal concepts, the Department in 1969 prepared legislative proposals to be submitted in the coming year. These included a proposal for additional payments to owners and tenants of appropriated property to ensure that they will be able to afford safe, sanitary and decent replacement housing.



Traffic Engineering & Safety

New projects in traffic engineering and safety launched by the Department in 1969 included a pilot study in the City of Syracuse for the TOPICS Program and action to initiate TOPICS projects in 12 other urban areas of the State. Administration of this program to increase the safety and efficiency of major roads and streets in urban areas through State and Federally-financed traffic operations improvements is being handled by the Department's Division of Traffic Engineering and Safety.

This unit also initiated an accident surveillance program as a feature of New York State's Federally-approved highway safety plan. The surveillance program provides for the identification of highway accident locations through statistical data recording techniques similar to those used by industry for quality control. Locations pinpointed under the system are investigated in depth to determine the nature and extent of the problem and the remedial action required.

A third new activity was the start of an inventory of signs, signals and pavement markings on the State Highway System. One of the first inventories of this magnitude ever undertaken by a state, it is financed by a Federal Highway Safety Grant for completion by mid-1970. An immediate benefit will be the information provided on the number and location of signs which must be changed because of the new 55-mile-an-hour Statewide speed limit which becomes effective October 1, 1970.

Training Programs

A Federal grant also financed initiation

of a traffic safety engineering training program administered by the Department for State and local government personnel. This covers highway safety program management, elements of professional traffic engineering that apply to highway safety, and the technical considerations involved in the operation of a highway safety program.

Traffic Operations

In another area related to the safe and efficient movement of people and goods on the State's highways, the Department issued more than 2,300 traffic control orders involving speed limits, parking, movement and weight restrictions on highways. Of these, 145 applied to speed limits on town and county roads. The rest pertained to the State Highway System.

For the purpose of improving traffic control and safety, Department engineers made more than 6,500 field investigations during the year. In addition, technical assistance was given 30 municipalities on major traffic problems and minor advisory assistance was given in scores of other instances.

Permits

A total of 56,069 permits was issued during the year for movement of oversize or overweight vehicles on sections of the State Highway System. Fees from these special hauling permits amounted to \$609,218. There were 9,325 permits issued for work within the State highway right of way for fees of \$227,842.

New rules and regulations for the accommodation of utilities within the State highway right of way were issued. Revision of regulations pertaining to driveway entrances on State highways and other types of work within the right of way was under way.



Maintenance

Major activities of the Department include the operation and maintenance of the State Highway and Barge Canal Systems. In 1969 these functions were performed by the Division of Maintenance through Highway Maintenance, Waterways Maintenance and Equipment Management Subdivisions. The Department's civil defense and personnel safety units also operated as part of the Maintenance Division

HIGHWAYS

The Department maintained and operated 13,965 miles of improved roads on the State Highway System in 1969.

One of the major activities carried out at a cost of \$23 million was snow and ice control.

Traffic control maintenance operations included centerline and lane marking for all State highways with pavement widths over 18 feet, repainting of 1,600 lane-miles of solid center line and approximately 15,000 miles of edge-line marking. An innovation was the use of heated paint for pavement marking. Its fast-drying time reduces interference with traffic.

George Dupre, Oswego County Residency maintenance foreman, receiving a Civil Service merit award for his invention of an attachment to Department paving equipment which eliminates hand raking in resurfacing stabilized shoulders. With him are J. O. Clintsman, left, Region 3 Maintenance Supervisor, and Charles Broadbent, right, Resident Engineer.



Signal maintenance work included installation of 120 signals, maintenance of 2,581 signals and the reconstruction of 130 others. Other activities involved installation, replacement and maintenance of traffic signs and delineators.

Maintenance activities for the protection and repair of pavement resulted in surface treatment of 1,015 miles of highway pavement and shoulders. In addition, Department forces carried out 197 miles of highway resurfacing and shoulder stabilization.

Other types of maintenance concerned guide rails, parking and rest areas, mowing, tree removal, work on shoulders, ditches and structures. Approximately 16,000 acres within State highway right of way were treated with herbicides to control weed growth and to improve sight distance and roadside appearance. Precautionary procedures were followed in the application of the chemicals to avoid damage to beneficial natural growth and wildlife, and to avoid pollution of streams or crops.

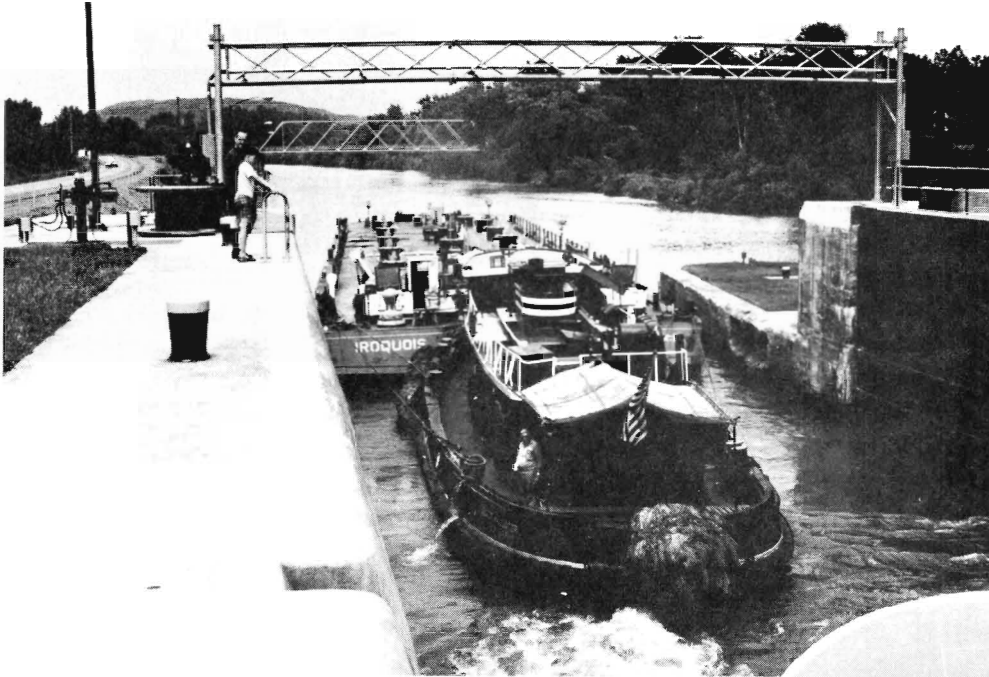
WATERWAYS

The New York State Canal System began its 143rd year of operation on April 18, 1969 and closed on December 1, 1969, completing a navigation season of 228 days.

Cargo totaling 3,248,440 tons was transported on the system during the season, 595 tons less than last year and two per cent more than the average tonnage for the past five years.

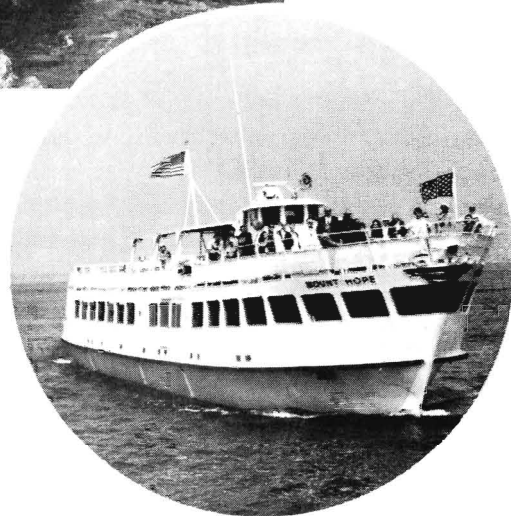
The Champlain Division originated 1,381,335 tons, the Erie Division 1,489,366 tons, the Oswego Division 377,699 tons and the Cayuga-Seneca Division 40 tons.

A new type of canal use was initiated in 1969, with the introduction of regular, 12-day cruises on the canal system and connecting waterways. Cruise boat trips started in July and six circuits of the system and Lake Ontario were made before the season closed. The boat carried a full complement of 50 passengers on each trip. Additional vessels of this type may be expected on the canals in coming years. Pleasure boating



Above, tug and oil barge passing through the Champlain Canal at Comstock. Right, New England-based cruise vessel which included New York State canals in its 1969 itinerary.

Photos courtesy State Commerce Department and the American Canadian Line



activity continued at a brisk pace. The number of pleasure boats using canal locks totaled 146,013 passages.

Maintenance and Repair

Employees of the Waterways Maintenance Subdivision performed a variety of activities in maintaining and repairing the canal. Dredging and cleaning operations by canal forces resulted in the removal of 1,408,377 cubic yards of material from canal and feeder channels and spoil areas. Bank protection programs resulted in the rehabilitation of 57,511 linear feet of canal bank. Of the 65,642 tons of stone placed, only 16,182 tons were purchased. The remainder came from spoil areas remaining from the construction of the canal.

Lock overhauls were completed during the winter at Lock 4 on the Champlain Canal and Locks 7, 16, 20, 23 and 28B on the Erie Canal. Major repairs were made to Locks 10, 28A

and 35 on the Erie Canal, and Locks 1 and 5 on the Oswego Canal. New engines and auxiliary equipment for two of the Department's steam tugs were purchased for installation by Department forces.

The Department's centralized shop program produced 168 pieces of 12 and 15-inch discharge pipe for use in hydraulic dredging, 16 valves and other items required for the lock maintenance program. Their production in Department shops represented savings in costs in comparison to prices that would have to be paid for items purchased from private firms.

Rehabilitation Projects

To carry out major rehabilitation pro-

jects on the canal system, 10 reconstruction or improvement contracts with a cost of \$1,800,000 were awarded during 1969. Twelve projects with a value of \$3,800,000 were completed and 11 contracts costing \$3,200,000 remained in force at the end of the year.

Prize Locks

In the prize lock program, with ratings based on the quality of maintenance and performance, Erie Canal Lock 9, located at Rotterdam Junction, was awarded first prize and Erie Locks 28B at Newark and 14 at Canajoharie received second and third prizes, respectively.

Permits

Permits in force for temporary use of canal lands and waters increased over 1968. Permit transactions (issuances and cancellations) totaled about 450 during 1969 and resulted in a net increase in the number of active permits to just over 4,000. The income from permits was up \$3,000 compared with 1968, to about \$167,000.

EQUIPMENT MANAGEMENT

The Department's fleet of more than 15,000 vehicles and units of motorized equipment continued to be operated under modern

equipment management methods in 1969.

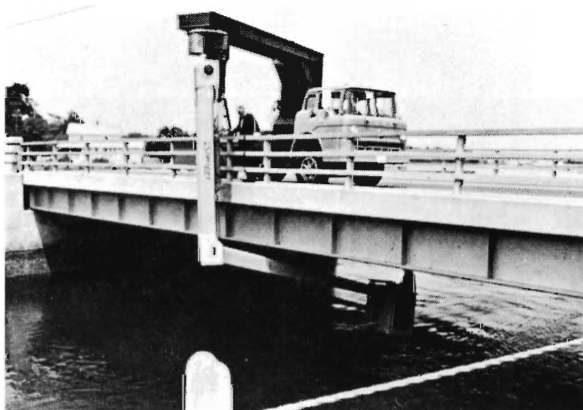
Purchases added to the Department's inventory five heavy-duty 10-wheel dump trucks and 107 snow plows. The larger hauling capacity of these trucks will provide savings in hauling materials for stockpiling, such as sand and salt used in ice control. The snow plows are needed as replacements and to meet the demands of the expanding highway network.

Ordered on an experimental basis for 1970 was a vehicle with a hydraulic arm to be used for bridge inspection. The equipment can convey a man above, beneath or alongside the deck for inspection purposes.

Operations to cut cost and increase efficiency included initiation of "Project Uptime." This involves review of all phases of the equipment management function where new approaches show promise of reducing out-of-service time and cost of repair. Areas considered include preventive maintenance and repair, training, procurement and inventory management, shop standards, pre-scheduling and production control, and centralized repair of major components.

Estimated savings of about \$50,000 through reduction of replacement expenditures were reported from the pilot program for centralized repair of sand and cinder spreaders.

New bridge inspection unit ordered by the Department.



Ten-wheeled truck of the type added to the motor fleet.



PERSONNEL SAFETY

A Safety Manual for Department personnel was issued in 1969. It contains rules for safe working practices and prescribes safety gear and apparel to be worn by personnel in the performance of their duties. It also outlines highway signing procedures for various types of maintenance work in conformance with the State Manual of Uniform Traffic Control Devices.

CIVIL DEFENSE

To carry out its responsibilities in civil defense, the Department continued in 1969 to maintain a full-time staff at State Civil Defense Commission headquarters. In addition, Department personnel have been assigned to the staff of the Civil Defense District Director in each of the six Civil Defense Districts, and a regional liaison representative serves

in each of the Department's Regions.

During the year a manual of administrative procedures in civil defense matters was completed for use of Department personnel. It includes an updated radiological monitoring plan to be carried out by Department employees.

The Department's civil defense staff processed requests during the year for emergency equipment from approximately 20 local communities or State agencies. Department personnel participated in several civil defense exercises and assisted in an emergency created by floods in Sullivan County. Assistance was given in preparation of damage estimates in cooperation with Federal representatives and led to declaration of the region as a major disaster area.

Department personnel participated in meetings throughout the State to brief local officials on civil defense preparations, procedures and responsibilities.

Town & County Roads

Town Highway Improvement

Town road reconstruction completed under the Department-administered Town Highway Improvement Plan covered 776 miles in 1969 at a cost of \$8,569,542.

State aid to the 538 towns participating amounted to \$3,837,482. The towns paid the balance.

In addition to reconstruction, stabilization of roads built prior to 1957 continued as part of the program. In 1969 this involved 32 miles in 20 towns at a cost of \$67,798. The State paid \$34,471 and the towns' share was \$33,327.

With the 1969 work, 18,205 miles of sub-standard town roads have been rebuilt during the 18 years this State-aided program has been in operation. The work was carried out at a cost of \$92,445,010 to the State and \$76,341,862 to the towns.

In addition, 3,799 miles of highways have been stabilized with State aid of \$4,173,525. The towns' share of this cost was \$4,356,489.

County Roads

As required by State Highway Law, County Highway Superintendents reported to the Commissioner of Transportation on 1969 operations. Their reports showed:

A total of 974.39 miles of county roads was constructed or reconstructed during the year at a cost of \$26,440,900.

Bridge or culvert construction cost an additional \$2,681,214.

Maintenance of county roads and bridges cost \$46,878,346.

Total expenditures on county roads and bridges in the State, including construction and maintenance, was \$76,000,550.

A Visit from the Governor



Governor Rockefeller, accompanied by Lt. Governor Malcolm Wilson and Secretary to the Governor Alton Marshall made an official visit to the Department's Main Office September 18. The Governor shook the hands of hundreds of employees as Commissioner Parker and other executives conducted him through the Department's facilities and explained the functions of its various units.

At left, he is shown addressing employees of the Structures Design and Construction Subdivision. He paused at three points during his tour to address groups.

During his visit, Governor Rockefeller used the Department's new two-way radio network to broadcast greetings and best wishes to an estimated 6,000 Department employees in other parts of the State.



Manpower & Employee Relations

A major reorganization of the Department took place late in 1969. Field forces were regionalized directly under the Commissioner of Transportation and plans were completed for coordination in 1970 of Department operational forces -- Design and Construction, Maintenance, Real Property and Traffic Engineering and Safety Divisions -- under the new position of Assistant Commissioner for Transportation Operations. Also in process was reorganization of the Real Property Division. Facilitating these changes and processing other personnel transactions for the Department's approximately 14,000 employees was the Office of Manpower and Employee Relations.

Personnel Operations

The new regional office plan was implemented in October and November and changed substantially the organizational structure of the Department as it was established in 1967. District Engineers were reclassified in the new title of Regional Director of Transportation with the responsibility of implementing all Department policies and programs in their respective regions. Under this structure, program control is vested in the Main Office while physical control rests with the Regional Directors.

Specialized personnel services implemented the reorganization by broadening position descriptions to fit engineering management roles rather than applying the engineering-oriented concept under which many positions were classified more than 30 years ago.

Under the reorganization, many relationships between field and main office positions were changed and required new descriptions. Resident engineer positions were assigned on three separate levels according to newly established quantitative criteria.

Other activities included the analysis, preparation and review of 788 positions for classification, reclassification, geographical pay differentials and increased minimum salary applications. Applications for reclassification of existing positions rose to 375, compared with 205 in 1968. A number of positions entirely new to the Department and State were included in the 359 new position applications submitted to the Civil Service Department. Total authorized positions in the Department as of the end of the year was 16,318.

During the year a study was initiated to automate personnel transactions records through electronic data processing operations. This would make personnel data accessible on an immediate basis and in large volume.

Retirements

The inroads of time were reflected in 1969 by the retirement of a number of executives of the Department. These included Commissioner J. Burch McMorran, who reached mandatory retirement age in July. Also retiring were Robert W. Sweet, Chief Engineer; Joseph P. Ronan, Assistant Commissioner for Manpower and Employee Relations; Walter V. MacDonald, Assistant Commissioner for Public Affairs; Paul G. Baldwin, Director of the Real Property Division; Vernon J. Burns, Deputy Chief Engineer in charge of Structures Design, and District Engineers Austin M. Sarr, James C. Norton, Norman W. Krapf and William J. Dennis.

Resulting vacancies were filled both from outside sources and Department ranks. Commissioner McMorran was succeeded on September 2, 1969 by General T. W. Parker, USA, Ret., former Chief of Staff, Supreme Headquarters Allied Powers, Europe, who was appointed by Governor Rockefeller. Another appointment was that of E. Wilson Campbell, former director of the Chicago Area Transportation Study, as the Department's first Director of Transportation Planning. A series of promotions filled other vacancies and provided advancement for a

number of employees in a trend that is bringing younger men into Department management.

Recruiting

Recruiting efforts were intensified in 1969 to provide the manpower capability to meet the increased program responsibilities of the Department and reduce a 16 per cent overall position vacancy rate, particularly in engineering titles. A comprehensive and extensive recruitment campaign produced 143 junior engineers, one of the most successful engineering manpower acquisitions of recent years.

In addition, a number of applicants were attracted to other highly technical Department positions. These included airport development specialist, equipment management consultant, transportation operations analyst, rail transportation specialist, motor carrier specialist, photogrammetrist, engineering contract specialist, transportation program planning analyst, and transportation financial systems analyst.

During the year a notable advance was achieved for future recruitment. In view of the intense competition for sub-professional engineering personnel, the requirement for a written examination for the position of engineering technician was eliminated for holders of AAS degrees in civil or related technology.

Training

The Department stepped up training activity in 1969. This ranged from college courses to in-service instruction in occupational skills. The major activities included:

- Studies with tuition assistance at four-year colleges. About 800 employees attended college with Department assistance. Most of the undergraduate studies were in engineering, although some were involved in administrative or special technology studies. About 20 per cent of those in the program were seeking graduate degrees in civil or transportation engineering.

- Seminars or short-term college courses, ranging from one day to one semester.

About 100 Department personnel attended such sessions on assignment.

- Adult education night courses for engineering aides and technicians at secondary schools and two-year colleges.

- Training for signal maintenance crews. Basic courses which will be followed by more sophisticated training were initiated in all ten regions of the Department. A similar course in automotive electricity was initiated in one region for equipment management personnel and will be extended to other regions later.

- Equipment operation and maintenance training. Sessions were held throughout the State for equipment already in use. These were conducted by factory representatives and about 1,500 Department employees participated. Also, selected groups of motor equipment mechanics attended advanced training sessions at factories.

- A drill rig operator's training course, conducted by the Soil Mechanics Bureau for Maintenance Division personnel.

- Courses conducted by the Department of Civil Service were attended by 130 Department employees. The Department also continued its "Effective Listening" course with 185 personnel participating.

Employee Relations

Increased employee relations activity occurred during the year to implement the Public Employees Fair Employment Act. Major assistance was provided the Office of Employee Relations in forming state negotiating units and determining collective negotiation representation for State employees.

A proposal for a new organization for administration of Department labor-management relations was developed. This would effectuate an expanded Department program in this field.

Management & Finance

Innovation and improvement in Department administrative and fiscal operations continued in 1969 through the efforts of the Office of Management and Finance and its Divisions of Finance and Administration.

Accounting

As the result of the work of a Department task force activated in April, 1969, an integrated accounting system is expected to be

installed for the Department as of April 1, 1970. This will make fiscal information available to Department management in greater extent and detail than the present system and facilitate billing the Federal Government for reimbursement under Federal aid programs.

Department disbursements for 1969 were at an all time high. This reflected the magnitude of the highway construction program and the continuing expansion of Department activities for the improvement of aviation and mass transit facilities.

A statement of 1969 disbursements and receipts in connection with Department operations follows:

DISBURSEMENTS		Disbursements
Services and Expenses		1/1/69 - 12/31/69
Executive, administrative and fiscal		\$ 8,743,111
Transportation planning and construction		46,673,014
Highways, Operation and Maintenance		70,491,331
Waterways, Operation and Maintenance		8,717,915
Equipment Management, Operation and Maintenance		17,148,515
Civil Defense		62,059
Traffic		1,482,129
Consultant Agreements		24,907,854
Capital Programs		
Construction and reconstruction of highways, parkways and grade crossings, with and without Federal aid		455,125,502
Acquisition of Rights of Way		73,869,207
Construction and improvement of district office buildings and residencies		3,715,815
Improvements to the Barge Canal system, with and without Federal aid		3,386,236
Mass Transit and Aviation		8,928,059
Aid to Localities		
Town highway improvement program		3,796,499
Statutory aid		7,321,424
REVENUE AND REIMBURSEMENT		Receipts
From Federal Government		
for Highways		226,214,708
Improvements to the Barge Canal		67,280
Other Revenue (by source)		
Canal revenue		595,118
Highway revenue		2,248,480

Budget Activities

The Department's budget for the year involved estimated operating expenses of more than \$150 million, plus approximately \$1 billion in capital allocations for highway construction and improvement and for capital grants to finance aviation and mass transit projects. Two hundred new Federal aid highway projects were approved for the Department by the U. S. Department of Public Roads and involved \$298 million in Federal funds for preliminary engineering, acquisition of property and construction.

Approval of the Federal Bureau of Public Roads also was obtained for the operation of cost control and accounting centers for reproduction services and material testing that will enable the Department to collect an estimated additional \$400,000 annually in Federal reimbursement.

Capital Projects Coordination

During 1969 the first update of the Transportation Action Program was completed. This program, which will be revised annually, lists all projects approved by the Department, together with pertinent data. In conjunction with the Action Program and other project management operations, a system of numbering capital projects for identification was established on a Department-wide basis.

An initiation request procedure for planning projects also was introduced during the year. This will facilitate an orderly review of all proposed capital projects prior to approval.

Management Improvement

Efforts to improve Department management and administration continued in 1969 with the Management Improvement Bureau participating in 42 projects for this purpose. Some of the most important were:

- a study by an advisory committee of the organization of the Design and Construction Division. As an outgrowth of this study, development of a work plan for training and development of employees with executive potential was

launched. This is expected to result in a Department-wide management development program.

- development of aviation and mass transportation capital projects procedure and guidelines manuals.
- an organizational study of the Real Property Division.
- an organizational study of the Waterways Maintenance Subdivision.
- development and issuance of a traffic engineering and safety manual.
- systems design for the new integrated accounting.

The Bureau of Management Improvement was reorganized during the year and five new management consultant positions were approved which will increase the capability of the unit. The new positions provide for professionals in civil engineering, operations and financial systems to carry out management studies in those fields.

During the year, responsibility for the initiation of electronic data processing systems for administrative purposes was consolidated in the Management Improvement Bureau. This was formerly a function of the Bureau of Electronic Data Processing.

Internal Audit

Efforts to evaluate Department operations for the purpose of improvement were aided by 19 audits, surveys, investigations or studies completed by the Internal Audit Bureau. These covered the Bureaus of Personnel and Materials, and part of the Bureau of Soils, as well as some Department-wide operations such as contract accounting. Emphasis was placed on total bureau review to aid future planning by program managers and budget personnel.

Electronic Data Processing

The Department continued to make extensive use of its computers and other electronic data processing equipment in 1969. Some of these applications included simulation of traffic volume on transportation networks and other projects for transportation study purposes. Other systems involved

time and cost accounting, contract accounting, inventories of Department's vehicles, operating supplies and equipment; work for the equipment management information system, stock inventories, contract bid letting verification, and computing average prices on contract items.

The Bureau of Electronic Data Processing also operated systems for CADRE, computer automated design for road engineers; BEST, the new bridge engineering system, allotment accounting and hydraulic engineering.

In addition, the Department operated a large-scale communications system for field use of the computers located in the Main Office. The computers are linked directly to Regional Office for use in earthwork computations and other engineering applications.

The Bureaus' operations continued to provide reduction in time required for the collection, processing and distribution of vital engineering management information. It also made possible the collection and presentation of engineering information which was not feasible to process manually.

In obtaining these services from its computers the Department is using a new approach to engineering problems. This is a "total systems" approach as contrasted to the development of single and often unrelated programs for each specific engineering problem. An example is the BEST system of fully automated and integrated bridge design which was completed in 1969.

Equipment acquired by the Bureau for a newly created pilot Aerial Survey and Photogrammetry Section included two and three-projection stereoplotters and a stereoscope.

Administrative Services

Activities by the Business Administration Bureau resulted in the provision of more space for expanding units, centralization of storage and control functions for supplies and equipment parts, purchasing improvements and handling of a large volume of printing and other reproduction services.

A project to identify and redistribute or dispose of vehicle and equipment parts

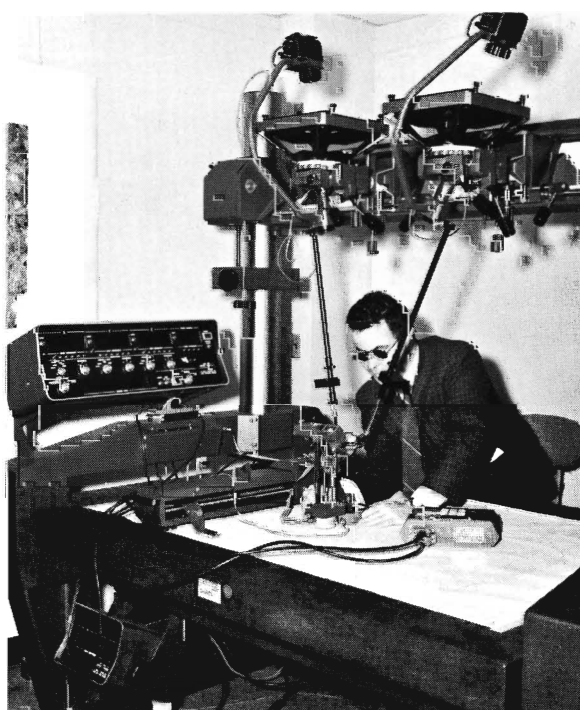
led to the establishment of a centralized surplus parts warehouse in Utica. Parts no longer needed in the various regions were collected for redistribution as needed. More than 2,500 parts identified as being of no use to the Department were earmarked for sale as surplus. Operations analysis was started to standardize the parts supply in each Region through establishment of re-ordering and stock level points.

Expenditures for office supplies and backlogs of orders were reduced through continuing efforts for standardization and control of supply operations and purchases.

Space was arranged in Building Four at the State Office Building Campus, Albany, for the new Photogrammetry Section of the Electronic Data Processing Bureau and the Data Services Bureau of the Planning Division. Preliminary plans were processed for an addition to the Laboratory Building at the Campus.

Partition planning was completed for the Department's new regional office building in Poughkeepsie, and office layouts were

One of the new stereoplotters in the Aerial Survey and Photogrammetry Section of the Electronic Data Processing Bureau.



prepared for Department occupancy of the State Office Building in Utica. Space needs forecasts were developed for new Department quarters in Watertown and Binghamton. The Albany Regional Office was relocated from inadequate quarters downtown to a new rented facility in the suburbs. The same building provided new space for the Department's Engineering Research and Development Bureau.

An experimental purchasing project was initiated by the Purchase Section in cooperation with the Equipment Management Subdivision. This calls for negotiation of a pilot contract with a single bidder for all parts of specified type of equipment. Faster parts delivery and inventory reductions are anticipated.

Another innovation was the launching of a pilot project for the new office landscape system being introduced in State offices. The Business Administration Bureau's offices were selected for the experiment involving arrangement of furniture and portable room dividers as a substitute for fixed partitions. Advantages include greater flex-

ibility in layout and savings in future moving costs by eliminating the need to move partitions when office changes are made. The plan also tends to create more attractive and stimulating work areas.

In addition to producing a large volume of offset printing, and plate-making, art work and photographic services, the Department initiated several new programs in its Graphic Arts Unit, including adoption of the cost accounting and control system for all reproduction services rendered. This provides all units of the Department with an accurate accounting of the costs of their reproduction services and also facilitates obtaining reimbursement from the Federal Government for printing of plans and other work done for Federal aid highway projects.

The Photography Unit began production of diapositive glass plates for the Department's new photogrammetry operations. These plates, when used in the stereoplotters of the Bureau of Electronic Data Processing, produce three dimensional topographic photos for plotting future highways.

Office landscaping is responsible for this attractive scene in the Business Administration Bureau's quarters.



Public Affairs

Public information and public relations efforts in 1969 were broadened in keeping with the widening scope of the Department's activities.

Procedures to keep the public informed under the new double hearing process for proposed highway plans were established in cooperation with the Planning and Design and Construction Divisions. A new schedule and format for news releases announcing public hearings were adopted. A publicity program was initiated for the new TOPICS program of the Division of Traffic Engineering and Safety to educate the public on the procedures and goals of this traffic improvement program.

The Office of Public Affairs also developed news stories in connection with other new activities of the Department, including the processing of capital grants to municipalities to aid private carriers in replacing obsolete buses.

To carry out these and other public information activities, the staff of the Office of Public Affairs prepared and issued some 200 news releases from the Department and drafted considerable data for use by other State agencies. There were fewer Department news releases in 1969 than in previous years because of use of a format developed in 1968 to consolidate information on highway bid openings and eliminate the need for separate releases on each project.

Thousands of telephoned or written inquiries were answered by Office of Public Affairs personnel and special material was prepared upon request for news media.

The Office of Public Affairs also took over the preparation of the Department Newsletter, beginning with the September 1969 issue. This had been a function of the Office of Manpower and Employee Relations.

Other public relations activities included the design of the Department's State Fair

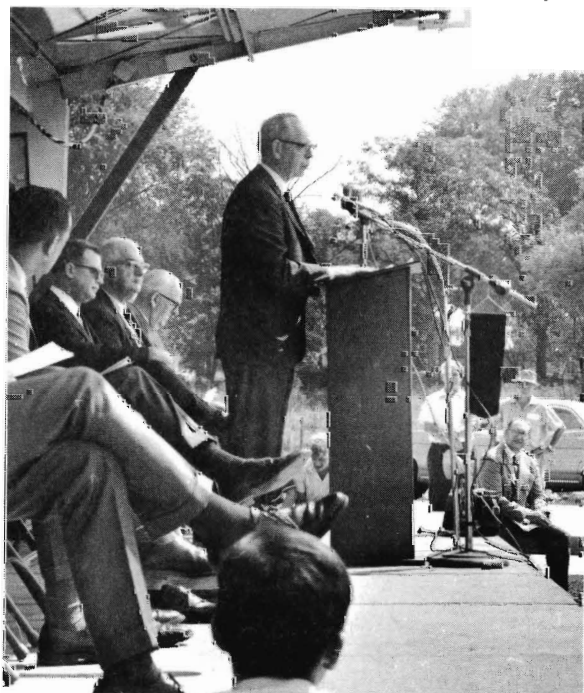


Commissioner T. W. Parker opening the Patroon Island Bridge between Albany and Rensselaer. From left to right are Assemblyman Fred G. Field, Jr., Richard J. Conners, President of the Albany Common Council; Conrad T. Lang, Assistant Commissioner for Operations; Commissioner Parker; Irwin Stewart, President of the Rensselaer Common Council; State Senator Douglas Hudson and Assemblyman Raymond Skuse.

Exhibit, the preparation of Department entries which took four awards in the annual Federal Highway Beauty Contest, the distribution, particularly to schools, of the anti-litter film, "LITTER-ly Speaking," and distribution of the Highway Condition Map. The December 1969 edition of the map was the last to be issued by the Department. A new State touring map issued by the Commerce Department will replace it.

Public events arranged by the Office of Public Affairs included a ceremony to open the new Patroon Island Bridge on Interstate Route 90 between Albany and Rensselaer. Commissioner T. W. Parker, with Albany and Rensselaer city officials, cut the ribbon on September 24 and led a motorcade across the new Hudson River structure. On August 6, Executive Deputy Commissioner E. Burton Hughes was the principal speaker at a ceremony opening the extension of the Sauquoit Valley Arterial between Washington Mills and Clayville in Oneida County. This was sponsored by the Department in cooperation with the Sauquoit Valley Chamber of Commerce.

Executive Deputy Commissioner E. Burton Hughes speaking at ceremonies at Washington Mills, Oneida County, opening the Sauquoit Valley Extension (Route 8) between Washington Mills and Clayville.



Legal Affairs, Contracts, Claims

Direction of the Department's legislative program, legal affairs and the administration of contracts and claims continued as important functions of the Office of Legal Affairs in 1969.

Legislation

During the 1969 session of the State Legislature, 25 of 56 measures prepared by the Staff of the Department's Bureau of Legal Affairs were enacted in law. These included:

- Chapter 222 of the Laws of 1969, which extended the Commissioner of Transportation's authority to terminate intersecting highways in the construction of interstate routes or expressways to other types of highway projects.

- Chapter 223, which added to the methods of abandoning State highways that of agreement between the Commissioner of Transportation and municipal authorities to turn over a route or segment of a highway to the municipality.

- Chapter 300, which permits State acquisition of property to give relief to a property owner whose remaining land is of little or no use to him due to State appropriation of the rest. The power is vested in the Commissioner of Transportation, who may authorize acquisition by purchase or grant of all or part of the remaining property.

- Chapter 508, which permits the construction and maintenance of information centers at State highway safety rest areas by parties other than the Department of Transportation under leases negotiated with the Department.

- Chapter 83, which increases the maximum speed limit on highways of the State as of October 1, 1970, from 50 to 55 miles per hour unless otherwise established.

- Chapter 654, which prohibits pedestrians, animals and non-motorized vehicles

on State expressways and Interstate routes and their entrances and exits, except if pathways are provided for such purposes or direction is provided by a police officer.

Contracts

Through competitive bidding, conducted by the Bureau of Contracts and Claims, the Department awarded 251 contracts for highway projects and railroad grade crossing elimination during 1969. The Bureau also conducted sales to dispose of 461 buildings acquired by the Department and other State agencies to make way for construction projects.

The Department negotiated and processed 386 new contracts for the services of private engineering and appraisal firms, and 162 supplemental agreements. These included 40 original agreements for survey and design, and nine for supervision and inspection of highway construction projects. There were 294 agreements for appraisal services, 14 for aerial photography and 29 for miscellaneous work, mainly testing and research.

Claims

Twenty-one highway claims against the Department amounting to \$11,065,630, and two canal claims totaling \$471,362.19 were disposed of through trial in the Court of Claims. Some 142 of 170 small claims filed against the Department were disposed of in 1969.

Grant Agreements

Twenty-six aviation and 21 mass transit agreements between the Department and municipalities or public authorities for capital transportation grants were processed. In addition, 43 contracts were reviewed and processed for construction work or studies for aviation projects.

Equal Employment

An Equal Employment Opportunity Coordinator was appointed in February, 1969 to ensure that contractors offer equal employment opportunities on Department contracts.

Department Officials

OFFICE OF THE COMMISSIONER

T. W. PARKER, Commissioner of Transportation
E. BURTON HUGHES, Executive Deputy Commissioner
RAYMOND T. SCHULER, Assistant Executive Deputy Commissioner

OFFICE OF MANAGEMENT AND FINANCE

WILLIAM A. SHARKEY, Assistant Commissioner for Transportation Management and Finance
JAMES A. McCALLEN, Director, Finance Division
KENNETH E. HOLFORD, Director, Administration Division

OFFICE OF MANPOWER AND EMPLOYEE RELATIONS

WILLIAM LIVINGSTON, Assistant Commissioner for Manpower and Employee Relations

OFFICE OF LEGAL AFFAIRS

SAUL C. CORWIN, Assistant Commissioner for Legal Affairs

OFFICE OF PUBLIC AFFAIRS

JOHN J. DEVINE, Assistant Public Relations Officer

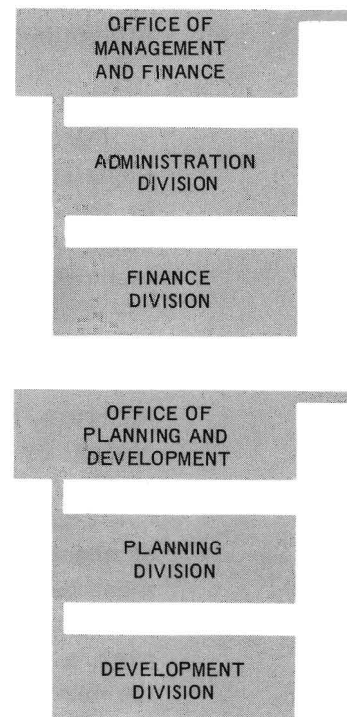
OFFICE OF PLANNING AND DEVELOPMENT

JOHN K. MLADINOV, Assistant Commissioner for Planning and Development
E. WILSON CAMPBELL, Director, Planning Division
CLAUDE B. FRIDAY, Director, Development Division

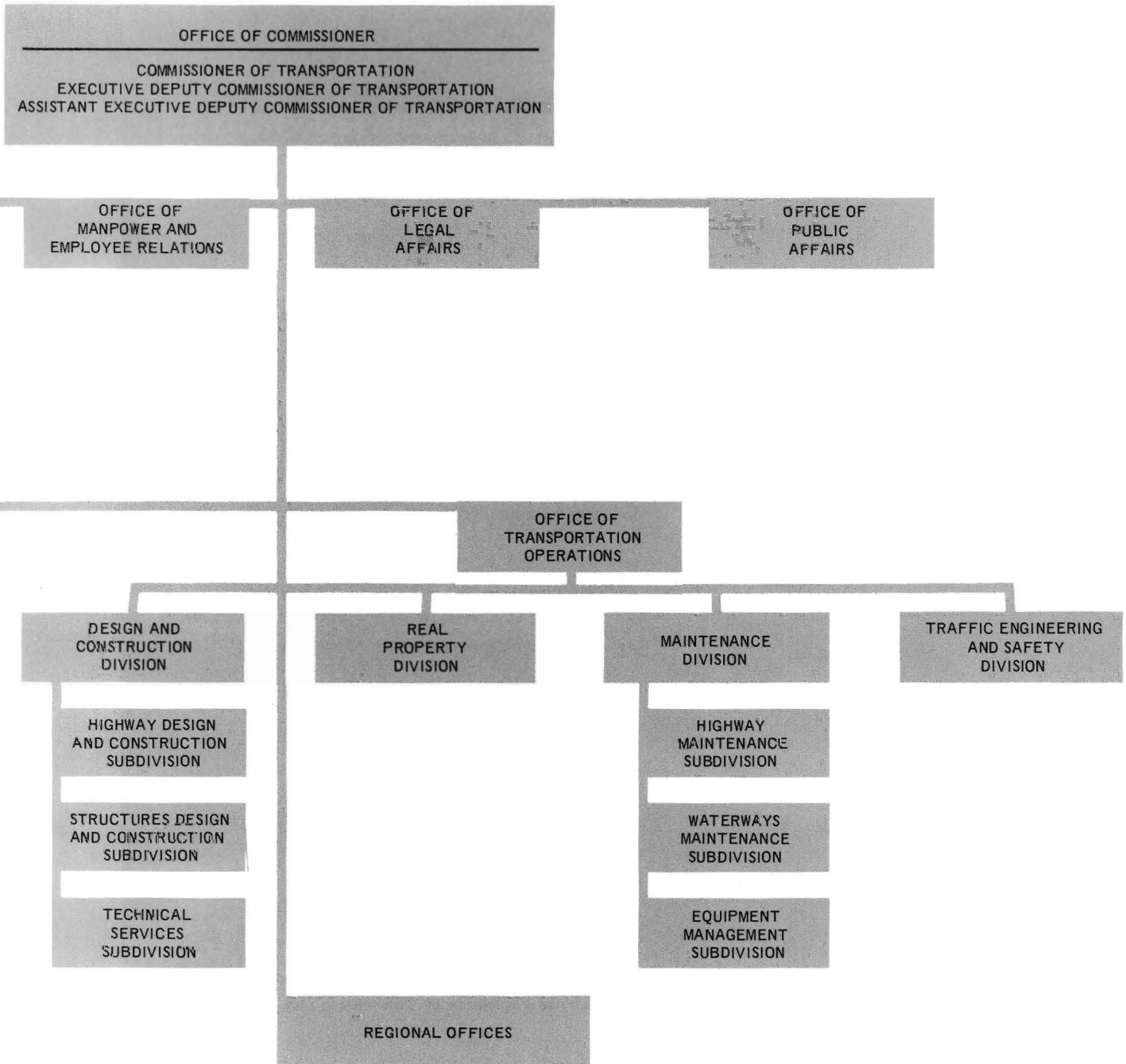
OFFICE OF TRANSPORTATION OPERATIONS

CONRAD H. LANG, Assistant Commissioner for Transportation Operations
BERNARD A. LEFEVE, Chief Engineer, Design and Construction Division
MALCOLM D. GRAHAM, Director (Acting), Design and Construction Subdivision
EDWARD V. HOURIGAN, Director (Acting), Structures Design and Construction Subdivision
GEORGE W. McALPIN, Director, Technical Services Subdivision
WILLIAM C. HENNESSY, Director, Real Property Division
CHARLES E. BESANCENEY, Director, Maintenance Division
GEORGE M. BRIGGS, Director, Highway Maintenance Subdivision
ROBERT N. KAMP, Director, Waterways Maintenance Subdivision
FRANK X. GAENGER, Director (Acting), Equipment Management Subdivision
EDMUND J. BURKE, Director (Acting), Traffic Engineering and Safety Division

(Above list as of April 15, 1970)



ORGANIZATION / DEPARTMENT OF TRANSPORTATION



REGIONAL DIRECTORS OF TRANSPORTATION

FRANK J. FULLER, Region 1, Albany
 BERNARD M. EVANS, Region 2, Utica
 EARLE E. TOWLSON, Region 3, Syracuse
 BERNARD F. PERRY, Region 4, Rochester
 DONALD H. KETCHUM, (Acting), Region 5, Buffalo

LEWIS W. HALLENBECK, (Acting), Region 6, Hornell
 AUSTIN H. EMERY, (Acting), Region 7, Watertown
 M. NICHOLAS SINACORI, Region 8, Poughkeepsie
 JOSEPH C. FEDERICK, Region 9, Binghamton
 RALPH HOLLWEG, (Acting), Region 10, Babylon



A view of the Prospect Mountain Parkway at Lake George which was completed by the Department in 1969.

Prepared by the Office of Public Affairs
Art work and printing by Graphic Arts Section, Business Administration Bureau
Department of Transportation