

DEPARTMENT
OF
HIGHWAYS
AND
TRANSPORTATION

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ANNUAL REPORT
1971

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A. KIRK MEARNS, JR.
SECRETARY



DOVER, DELAWARE 19901

November 15, 1971

TO: Honorable Russell W. Peterson, Governor of Delaware
and Members of the State Senate and House of Representatives
Dover

I am pleased to submit the Annual Report of the Department of Highways and Transportation covering the period July 1, 1970 through June 30, 1971.

In accordance with Senate Bill 547, it offers a concise and factual summary of the accomplishments and activities of the Department during its first year of existence. It also describes increased efforts to protect our environment and to contribute toward planning for the total transportation system.

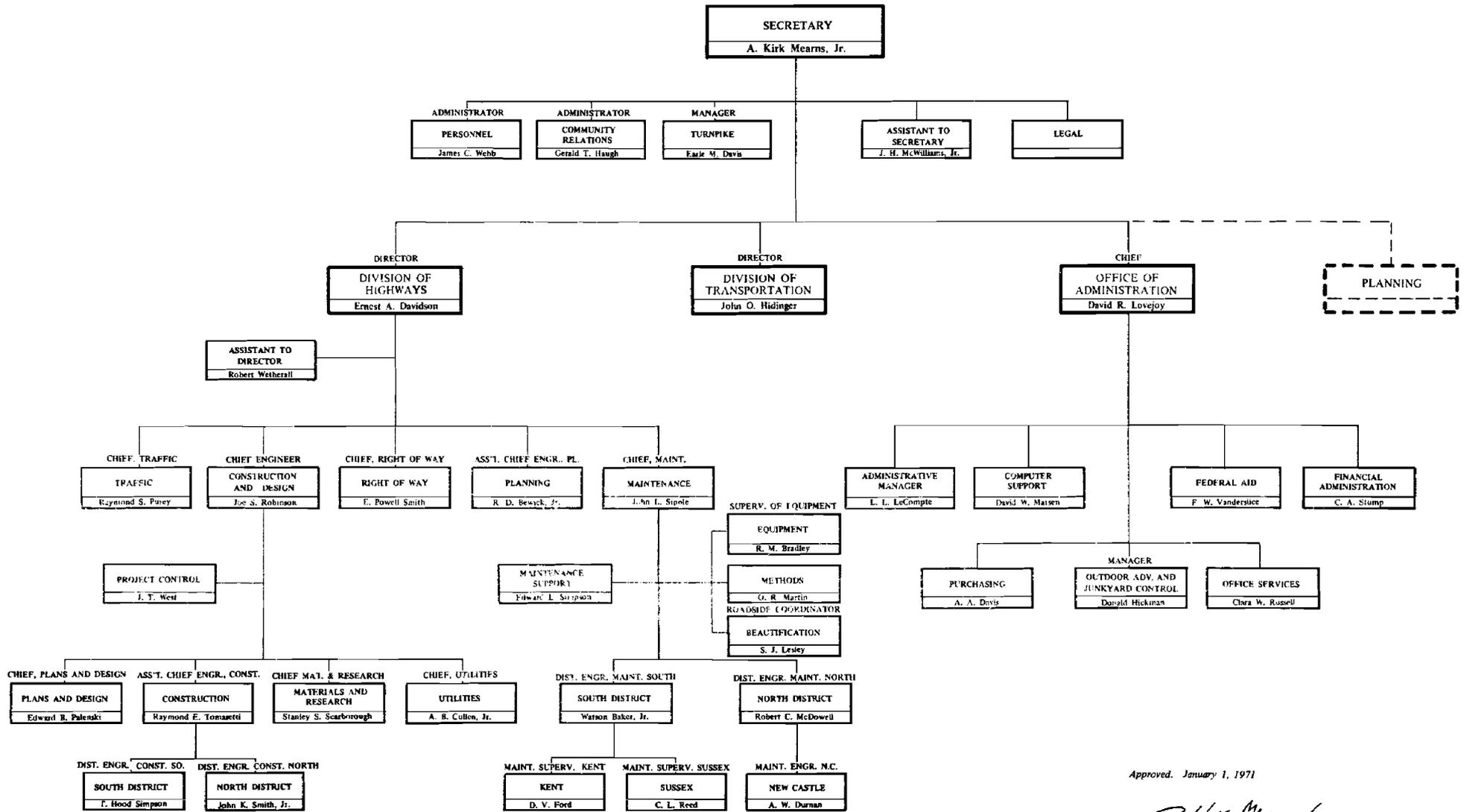
With your continuing support, the Department will strive to keep pace with the highway needs of the First State.

Respectfully,


A. KIRK MEARNS, JR.

Enclosure

DEPARTMENT OF HIGHWAYS AND TRANSPORTATION



Approved: January 1, 1971


 A. Kirk Mearns, Jr., Secretary

PERSONNEL

Reorganization of the Division of Highways and creation of the Division of Transportation highlighted this year's personnel activities. A major accomplishment of the Highway reorganization was the Statewide separation and consolidation of the maintenance and construction functions. Transportation has been partially staffed and recruiting efforts are continuing.

DEPARTMENT OF HIGHWAYS AND TRANSPORTATION

For the Department of Highways and Transportation, the fiscal year from July 1, 1970 to June 30, 1971, was a period of transition as well as achievement.

On August 5, 1970, the State Highway Department became a part of Delaware highway history as it was legislatively linked with the State Department of Transportation and charged with providing a system of "total Transportation" - a balanced network of highways, mass transit and aviation.

The Department's first year under the Cabinet form of government saw many organizational changes.

Headed by Secretary A. Kirk Mearns, Jr. and advised by a six-man Council on Highways, the Department has been organized in four general operating divisions: Highways, whose Director is Ernest A. Davidson; Transportation, John O. Hiding; Administration, David R. Lovejoy; and a recently formed Office of Planning, Research and Evaluation, Dr. Christian F. Davis.

The Council on Highways "shall serve in an advisory capacity to the Director of Highways, the Secretary of the Department and the Governor", Senate Bill No. 547, March 24, 1970. Members of the Council are:

Charles S. Eller, Chairman
Frances West
Robert A. Fulwiler, Jr.
John R. Hitchens
Bernard Isaacson
Ernest E. Killen
Charles H. West

EMPLOYMENT

Day-to-day work included recruiting, organization, salary administration, job classification and other personnel transactions for the Department's 1404 employees.

A general freeze on employment has been maintained throughout the year. Terminated employees were replaced only when absolutely necessary and few new positions were filled. As of June 30, the Department had 1404 employees, including 16 summer civil engineering undergraduates. The turnover rate improved to about 12.2 percent as opposed to last year's 15.5 percent.

Eighty-eight employees retired during the year; 36 under the newly established Mandatory Retirement Program. This will be followed for those employees over 65 until 1975 when the mandatory retirement age of 65 years will be established for all employees.

Through an Affirmative Action Program, the Personnel Section is working to attract and hire more individuals from minority groups.

EMPLOYEE RELATIONS

New employee evaluation and disciplinary action policies were put into effect during the year. A new promotional policy has been proposed by the Department and tentative agreement has been reached with both union representatives and the State Personnel Commission.

A formal Supervisory Training Program is being prepared for all levels of supervisory personnel and will be introduced in the fall of 1971.

Tentative agreement has been reached on the Construction Union Contract while the Maintenance Union Contract remains in effect until June 1972.

The Tuition Reimbursement Program gave aid to 57 employees for studies in the engineering, technical and administrative fields.

RECRUITING

During the year a continuing college recruiting program was established to insure a selective input of graduate engineers. Two civil engineers at the doctorate level were recruited, together with three at the master's degree level and 12 at the bachelor's degree level. The majority were recruited from the University of Delaware; however, graduates of Northeastern University, Purdue University, Penn Morton College and the University of Kentucky also are represented among new employees. Campus visits also were made to Virginia Polytechnic Institute, the University of Maryland and the University of Virginia.

A major effort is being placed on recruiting young engineers as emphasis is added to in-house work with less reliance on consultants and contractors. Results will be realized in a more efficient and less costly overall operation.

TRAINING

Fourteen civil engineers are enrolled in the engineering training program, which is designed to familiarize recent graduates with all phases of Department activities.

Five completed the program during the year and have received permanent assignments.

The training program has produced positive effects in recruiting college graduates, as the majority of States do not offer a similar program.

ACTUAL/PROJECTED MANPOWER STRENGTH 1968-1976

1968 - 1391
1969 - 1364
1970 - 1364
1971 - 1404
1972 - 1406
1973 - 1420
1974 - 1434
1975 - 1448
1976 - 1462

(As of 1 July)

COMMUNITY RELATIONS

Keeping the people of Delaware fully informed of activities of the Department of Highways and Transportation is the function of the Community Relations Section.

Its personnel are in daily contact with the newspapers, radio and television stations in the State, giving out information concerning the Department's plans and projects.

Prepared news releases are regularly sent to all Delaware news media, special articles are prepared as needed and hundreds of individual requests for information are filled each year.

Increased usage of the HINT (Highway Information News Tips) line was achieved. This taped news release is available on a 24 hour basis to all media by simply dialing the proper telephone number.

The Department's newspaper, the Hiwayman, is produced by the Community Relations Section to provide internal communications. It is distributed to about 1500 employees, legislators, highway departments of other States and interested persons.

Community Relations conducted 4 public hearings in 1971 as part of the Department's policy of facilitating broader public participation in highway planning.

While the hearings are the focal point of the public's part in the planning procedure, involvement of individuals and local officers in the process begins much earlier through informal meetings with Community Relations and Engineering staff members and those who may be affected by the proposed project.

Other allied items handled by the Community Relations Section are prepared correspondence for the signature of the Secretary or the Governor in response to queries from the public regarding highways; distribution of road maps and brochures to Delaware tourists; alerting fire companies, police and schools to road closings; preparing speeches and presentations for civic organizations; producing brochures to cover public hearings, right of way and construction projects; and assembling the annual report.

TRAFFIC

DIVISION OF HIGHWAYS

The Division of Highways is responsible for the planning, construction, and maintenance of Delaware's 4,372 miles of State roads and highways.

Keeping these roads in top condition and providing new ones to match the spiraling vehicle registration - there is one car for every two Delawareans - is the job of 1,350 highway employees.

The hub of the highway system is the Administration Center in Dover where the Division's major functions - planning, design, right of way, traffic, materials and research, construction and maintenance - are headquartered.

It is here that engineers guide highways and bridges from concept to concrete, a task which involves the talents and training of dozens of specialists.

But equally important, especially to the efficient performance of the Division's construction and maintenance functions, are the district offices, each headed by district engineers.

Construction by contract, which includes the bulk of all road building, is for the most part directed from the district offices at Bear, Dover, and Georgetown, with construction sites supervised by engineers and inspectors attached to the districts.

Maintenance, which is a diverse operation handling jobs from patching pot holes to plowing snow to picking up litter, has district offices at Bear, Dover, and Georgetown and is further subdivided into two regions and 12 areas: at Delmar, Seaford, Ellendale, Gravel Hill, Dagsboro, Harrington, Magnolia, Cheswold, Middletown, State Road, Kiamensi, and Foulk Road.

Citizens with questions or problems relating to the Division of Highways should contact their nearest district or maintenance office for assistance.

The safest and most efficient method of moving traffic on Delaware's streets and highways is the concern of the Bureau of Traffic.

This is facilitated by the carefully planned use of signals, signs, pavement markings and lighting to effectively warn, regulate and guide motorists. In addition, traffic engineers review preliminary road plans and, where warranted, recommend changes in the geometric design to eliminate potential traffic hazards and keep traffic moving smoothly.

During the fiscal year, extensive tests of safer and longer-lasting pavement marking materials were made.

In one test, plastic type marking material was used to install school crosswalks and precut letters of the same substance were used to form the word SCHOOL at several locations. Monthly inspections and evaluations found the material durable, long lasting, highly visible and resistant to snow plow damage. This will provide a greater degree of safety for school children and a savings to the Department.

Thermoplastic Pavement Marking Material has been introduced in painting edgelines and centerlines on several high traffic volume roadways in New Castle County, including a stretch of I-95 from Basin Road to the Pennsylvania line.

Beside greater safety for motorists, use of this material will cut down repainting from twice a year to every three years for edgelines and every two years for centerlines.

In the area of signal operations, a method to reduce the cost of adding left turn protection to existing signals was developed and implemented by the Bureau's signal shop at a cost of \$90 for a double advance green unit compared to \$680 for a factory-made unit.

This year, for the first time in the past 10 years, the gap was closed between approved signal resolution and the rate of installation of new signals; during the last decade there have been numerous occasions when there would be year-long waiting periods.

It is anticipated that with the release of additional bond funds, new signal construction can start within two weeks of resolution approval.

ROAD DESIGN SECTION

CONSTRUCTION AND DESIGN

Construction and Design are under the leadership of the Chief Engineer and includes Plans and Design, Construction, Materials & Research, Utilities, and Project Control.

REVIEW SECTION

During the past fiscal year nine projects amounting to \$21,373,068.00 were awarded.

Twenty-four other projects estimated to cost \$108,715,000.00 are presently under design.

AWARDED

70-08-008	Reading R.R. over Rt. 141	\$ 877,302.00
69-02-001	Phase I, Prices Corner Inter.	3,890,000.00
69-06-006	I-495, Edgemoor to I-95	11,907,352.00
67-05-002	Rt. 14, Fenwick Island to Bethany Beach	1,583,758.00
68-03-012	Phase I, Harmony Road	1,306,207.00
69-06-003	Barksdale Road	400,028.00
69-12-002	Apple Road	465,489.00
69-11-001	Polly Drummond Road	678,876.00
70-04-011	Bellefonte Streets	264,058.00
	TOTAL	\$21,373,068.00

UNDER DESIGN

Rt. 141

69-02-002	Phase II, Prices Corner Inter.	\$ 3,500,000.00
69-02-003	Phase III, Prices Corner Inter.	3,500,000.00
	Grading, Sta. 294± to Brandywine Crk.	3,000,000.00
	Kennett Pike Reconstruction & Struct.	1,500,000.00
	Grading & Paving Reading R.R. Bridge to Kennett Pike	1,500,000.00
	Grading & Paving Lancaster Pike to Reading Railroad	2,000,000.00
	Brandywine Creek Bridge & Approach	5,000,000.00
	Brandywine Creek to Rockland Road	3,500,000.00

I-495

65-01-006	Bridge 6-10 to Rogers Rd.	13,500,000.00
70-06-003	Christina River Bridge to Edgemoor, Stabilization	15,500,000.00
71-03-005	Grading & Paving, Rogers Road to Christina River Bridge	3,500,000.00
	Grading & Paving, Christina River Bridge to Edgemoor Road	2,500,000.00

67-08-009	Centerville Road	850,000.00
70-12-003	Newark Arterial	17,000,000.00
69-02-021	Frederica to Camden	8,000,000.00
67-10-006	Rt. 141 thru Newport	10,000,000.00
70-04-005	Phase II, Harmony Road	1,400,000.00
67-10-015	Rehoboth Bypass	6,000,000.00
70-06-005	Naamans Road	5,000,000.00
70-04-012	Lore Avenue	290,000.00
70-04-010	Elmhurst Streets	375,000.00
70-08-004	Colonial Heights	270,000.00
70-10-012	North Hills	230,000.00
70-08-009	B&O Railroad Bridge	800,000.00
	TOTAL	\$108,715,000.00

Road Design is responsible for in-house engineering procedures in the preparation of complete plans for contract letting: Developing preliminary plan layouts, design criteria and detailed construction plans.

During the fiscal year, 51 projects were under active design, 18 of which were completed and advertised before June 30, 1971. Total estimated construction cost was \$17,760,000.

While safety has been of major concern in highway design in the past, it is rapidly becoming the prime concern of the highway designer. Wider right of ways, flatter slopes and less hazardous structures are all part of this stronger emphasis.

In line with the Governor's Economy Committee recommendations, the Design Section is continuing to upgrade its professional staff toward a goal of designing 80 percent of Delaware's highway projects.

New methods of drafting, such as computerized plotting of cross-sections and computerized earthwork calculations, are being used to increase efficiency and cut costs. Computer programs also are being used extensively for the repetitive mathematical computations, freeing the highway designer for the more intricate design problems.

BRIDGE SECTION

The Department awarded contracts for 23 bridge structures with a construction cost of \$10,012,466 during fiscal 1970-71. Of this total, the Bridge Section actually prepared the complete design on 16 projects with a dollar value of \$827,603. The remainder of the designs were prepared by consultants with review and approval by the Bridge Section.

The largest single project involving structures was the Interstate 495 Christina River Bridge substructure. Design work is virtually complete for all remaining structures on I-495 and is proceeding on the Route 141 project.

Bids were taken on 10 small bridge replacement projects. This is a continuing program and plans were completed on a number of additional projects which must await future funding.

The Bridge Section assumed the Department's responsibility for carrying out the National Bridge Inventory and Inspection Program on July 1, 1971. A Statewide inspection team is being organized for this work.

BRIDGE SECTION

STRUCTURAL CONTRACTS - BIDS RECEIVED - JULY 1, 1970 TO JUNE 30, 1971

<u>CONTRACT</u>	<u>CONTRACT DESCRIPTION</u>	<u>BID PRICE</u>
<u>New Castle County</u>		
68-03-012	Harmony Rd. Relocated, Bridge Nos. 245 and 248	\$ 417,540.00
68-09-011	W. of Yorklyn across Red Clay Creek Bridge No. 111	159,240.00
68-09-013	Pike Creek Rd., Bridge No. 199 and No. 200	100,240.00
68-09-016	S. of Blackbird across Massey's Creek Bridge No. 469	18,780.00
68-10-019	Intersection Newport Gap Pike and Hercules Road, Bridge No. 166	75,270.00
69-02-001	Prices Corner Interchange, Bridge Nos. 600, 600A & 600B Phase I	1,344,070.00
69-06-003	Barksdale Rd. W. of Newark, Bridge No. 280	23,390.00
69-06-006	I-495 Edgemoor to Claymont, Part A Bridge Nos. 823 & 824, Part B Bridge Nos. 829, 830 & 828A	1,115,945.00
69-12-002	Apple Rd. Extn. Newark, Bridge No. 555	250,000.00
69-12-006	S. R. 82 S.E. of Ashland, Bridge No. 122	32,978.00
69-12-007	Near Cooches Bridge, Bridge No. 672	89,330.00
70-04-016	I-495 & Christina River, Bridge No. 813	5,329,288.00
70-07-010	3rd St. Bridge Wilmington, Bridge No. 693	35,820.00
70-08-008	S. R. 141 at Reading Railroad, Bridge No. 591	709,630.00
71-01-002	10th Street over I-95 City of Wilmington, Bridge No. 755	17,365.00
71-04-005	Harvey Rd. at B & O Railroad Crossing, Bridge No. 51A	6,800.00
<u>Kent County</u>		
68-10-014	C.R. 31, S.W. Magnolia over Double Run Creek, Bridge No. 31A	18,763.00
69-12-008	N.E. of Milford over Swan Creek, Bridge No. 409A	66,866.00
69-12-009	S.E. of Clayton over Mill Creek, Bridge No. 137B	51,865.00
70-05-001	S.R. 6, East of Smyrna over Mill Creek, Bridge No. 9A	47,557.00
<u>Sussex County</u>		
68-10-009	S.R. 26, Dagsboro to Shaft Ox Corner, Bridge Nos. 587, 588 and 589	52,512.00
69-12-010	Trussum Pond Bridge, Bridge No. 349	43,137.00
71-03-001	Indian River Inlet Bridge, Bridge No. 156	10,980.00
	TOTAL	\$10,012,466.00

CONTRACTS COMPLETED AND ACCEPTED - JULY 1, 1970 TO JUNE 30, 1971

New Castle County

<u>CONTRACT</u>	<u>CONTRACT DESCRIPTION</u>	<u>BID PRICE</u>
64-03-002	Rt. 2 (Elkton Rd.), Md. Line to Newark	\$ 1,334,141.70
65-07-019	Grading & Paving Interstate Rts I-95 and I-495	2,994,379.80
65-10-003	Rt. 72, Limestone Rd. to Milford Crossroads	732,755.65
66-06-008	Farnhurst Interchange Roadway, Guardrail & Lighting	589,465.49
67-06-010	Landscaping I-95, Christiana Inter- change	179,906.04
67-10-018	Intersection Improvements	165,703.76
68-02-001	I-95 Signing	476,111.00
68-04-001	Traffic Capacity Improvement, Kirkwood Highway	114,613.45
68-08-005	Landscaping, Adams & Jackson Streets, Wilmington	7,374.00
68-09-003	Miscellaneous Gates & Fencing	8,838.30
68-09-010	Replacement of Bridge 130 on Rd. 26	106,441.00
68-09-015	Replacement of Bridge 212 on Rd. 322	62,685.00
68-09-016	Replacement of Bridge 469 on Rd. 484	18,782.75
68-10-017	Traffic Safety Improvements, U.S. 13- St. Georges to Rogers Corner	182,002.15
68-10-020	Wrangle Hill Road - Road 356	172,527.25
68-12-011	Bellefonte Streets	166,260.80
69-01-002	Lancaster Ave. S. duPont Rd. to Greenhill Avenue	116,545.20
69-02-005	Hbt Mix Patching Program 1969-1970	465,695.00
69-02-016	Skyline Drive	71,442.25
69-07-001	Safety Rest Area - U.S. 13 North of Smyrna	12,979.57
69-07-004	Henderson Road Intersection Improv., Roadway & Structures Test Borings - Rt. 141, Newport	50,952.77
69-11-003	Roadway & Structures Test Borings - Rt. 141, Newport	59,665.00
70-01-008	Augustine Bridge Deck Repairs	22,569.40
70-02-001	Resurfacing I-95	393,174.60
70-02-004	Structure Borings - Del. Rt. 141 Brandywine Creek to Rockland Rd.	20,979.10
70-02-008	Roadway & Structure Test Borings Rt. 141 - Prices Corner Interchange	27,698.80
70-03-002	Rising Sun Bridge, Painting and Repairs	24,040.00
70-03-003	Walnut Street Bridge, Painting	18,000.00
70-03-007	Concrete Patching Program 1970-1971	63,155.00
70-03-014	Suburban Development Improvements - White Clay, Mill Creek, and Christiana Hundreds	99,467.50
70-03-015	Suburban Development Improvements - New Castle Hundred	102,310.00
70-04-001	Cleaning & Painting Bridges	31,700.00
70-04-009	Heald St., 16th St., and N. Market St. Bridge Repairs	49,860.00
70-05-002	VanBuren Street Bridge Repairs	22,881.00
70-06-001	I-495 Sewer Relocation at Christina River Bridge	39,784.00
70-06-004	Rt. 141 - Structure Borings - Lancaster Pike to Brandywine Creek	13,411.30
70-07-008	Demolition of Bldgs., Rt. 141 thru Newport	4,500.00
70-07-009	Demolition of Bldgs., Prices Corner Interchange	16,200.00
70-07-010	Third Street Bridge Deck Repairs Wilmington	35,822.13
71-01-005	Demolition & Removal of Bldgs., I-495 and Christiana Interchange	1,000.00

<u>CONTRACT</u>	<u>CONTRACT DESCRIPTION</u>	<u>BID PRICE</u>
<u>Kent County</u>		
65-05-005	Bush Drive	11,140.00
66-09-003	Rt. 12 - Hollandsville thru Felton to U.S. 13	632,515.61
66-09-007	Lebanon Road	404,819.78
67-10-017	Intersection Improvements (Kent Co. - Area II)	222,752.95
68-09-018	Killen's Pond Dam & Bridge Replacement	131,023.44
68-09-025	Del. State College Circumferential Road	109,912.20
68-10-012	Woodland Beach Causeway & Bridge	469,228.40
68-10-016	Road 355, Rd. 356 to U.S. 113A	149,912.80
69-02-008	Hot Mix Patching Program 1969-1970	332,840.00
69-02-014	Landscaping, Administration Center	14,789.78
69-12-001	Bridge Painting & Repairs - Kent & Sussex	30,689.00
70-09-005	Caesar Rodney School District, Sidewalks	17,937.50
<u>Sussex County</u>		
66-09-008	Road 562, Rt. 404 to Road 17	184,906.11
67-04-009	Road 76, Packing House Corner to Road 24	317,504.88
67-10-020	Millsboro Pond Bridge Approach	219,281.17
67-10-025	Road 331, Dagsboro to Millsboro	159,573.17
67-10-026	Road 545, Rt. 13 to Road 594	198,250.60
68-09-002	Bridgeville Drainage - Rt. 13A North	69,433.50
68-09-019	Replacement of Bridge 558 on Road 417	58,726.05
68-10-010	Road 70, U.S. 13 to Laurel	33,882.29
69-01-003	Road 46, Rt. 28 to Road 484	63,694.00
69-02-010	Resurfacing 1969-1970	150,644.00
69-02-011	Hot Mix Patching 1969-1970	186,445.00
69-04-004	Love Creek Bridge Rehabilitation	68,535.00
69-12-001	Bridge Painting & Repairs - Kent and Sussex	30,689.00
69-12-010	Replacement of Bridge 349 on Road 72, Trussum Pond	43,137.60
70-03-010	Hot Mix Patching Program 1970-1971	234,525.00
70-04-013	Dirt Roads (Nos. 216, 235, 236A, 419, 482 and 610)	193,894.00
TOTAL		\$14,081,647.27

ACTIVE CONSTRUCTION CONTRACTS AS OF JUNE 30, 1971

New Castle County

<u>CONTRACT</u>	<u>CONTRACT DESCRIPTION</u>	<u>PERCENT COMPLETED</u>	<u>BID PRICE</u>
64-01-016	Road 356, S. Chapel St. Ext., Newark	96	\$ 597,514.44
65-02-003	Grading, Marsh to Harvey Road	98	1,663,733.38
65-07-011	New Castle Avenue	71	1,136,276.80
66-09-006	McKennans Church Road	59	843,316.37
67-10-021	I-95 Landscaping	87	73,862.00
67-12-002	Linden Hill Road	81	1,617,975.79
67-12-005	Middletown Maintenance Garage	98	113,723.00
68-03-008	State Police Troop 6 Bldg.	98	412,500.00
68-03-012	Relocation of Harmony Road	0	1,306,207.39
68-04-002	Route 896	98	162,975.95
68-07-005	Stoney Creek - Grading, Stabilization and Structures	74	1,428,829.02
68-08-009	Landscaping - Delaware Avenue to 12th Street	98	23,215.90
68-09-008	Red Mill Road	75	593,209.55
68-09-011	Bridge 111	48	159,339.43
68-09-013	Bridges 199 & 200	82	100,239.30
68-10-019	Traffic Capacity Improvements Hercules Road & Lancaster Pike	0	415,681.32
68-12-008	Richardson Park - Elmhurst (Sec. 1)	96	369,400.97
68-12-009	Brack-Ex	93	223,500.00
69-02-001	Prices Corner Interchange	0	3,890,000.00
69-06-003	Barksdale Road	7	400,027.74
69-06-006	I-495, Grading & Paving	21	11,907,352.08
69-10-001	I-95 Safety Modifications	75	264,968.90
69-10-002	Richardson Park - Elmhurst (Sec. 2)	27	259,204.56
69-11-001	Polly Drummond Hill Road	24	678,875.55
69-12-002	Apple Road Extension	0	465,489.34
69-12-006	Bridge 122, Replacement	0	32,978.50
69-12-007	Bridge 672, Replacement	0	89,380.75
70-02-002	Gender Road	25	126,519.32
70-02-003	Wrangle Hill Road	98	73,178.95
70-03-006	Hot-Mix Patching, 1970-71	97	470,400.00
70-03-012	Brandywine Hundred	93	203,790.00
70-04-007	Delaire	98	94,113.35
70-04-011	Bellefonte Streets	0	264,057.50
70-04-016	Christina River Bridge, Substructure	28	5,329,288.20
70-05-003	Frogtown Crossing	65	61,887.10
70-08-002	Route 896	91	210,550.75
70-08-007	Biddles Corner to Port Penn	95	227,438.71
70-08-008	Reading R.R. over Route 141 Relocated	18	877,302.10
70-08-010	Overhead Sign - South Wilmington Viaduct	0	29,990.00
70-09-004	Delaware Route 7 & Route 4	0	29,769.83
71-01-002	10th Street Bridge Repairs	0	17,365.00
71-01-003	Demolition, Prices Corner Interchange	80	19,999.00
71-01-004	Demolition, Route 141 thru Newport	97	7,700.00
71-02-004	Blasting, Talley Road Maintenance Yard	98	3,600.00
71-03-005	St. Georges Detour	0	27,777.00
71-04-005	Cleaning & Painting Bridge 51-A	0	8,200.00

ACTIVE CONSTRUCTION CONTRACTS AS OF JUNE 30, 1971

<u>CONTRACT</u>	<u>CONTRACT DESCRIPTION</u>	<u>PERCENT COMPLETED</u>	<u>BID PRICE</u>
<u>Kent County</u>			
67-08-008	Milford Bypass	67	5,287,141.75
67-10-014	U.S. 13 thru Dover	71	1,480,938.42
68-03-007	Police Academy	98	590,800.00
68-10-002	Motor Vehicle Inspection Facilities	98	312,032.00
68-10-014	Road 31, Canterbury to Magnolia	79	333,988.05
68-12-007	Communications Center	98	251,259.00
69-12-008	Bridge 409-A, Replacement	30	66,866.54
69-12-009	Bridge 137-B, Replacement	20	51,865.50
70-03-008	Hot-Mix Patching, 1970-71	35	389,965.09
70-03-009	Resurfacing, 1970-71	94	159,810.00
70-04-004	Dirt Roads	75	389,356.00
70-05-001	Mill Creek Bridge Rehabilitation	92	47,557.20
70-06-007	Milford School Sidewalks	90	16,884.44
<u>Sussex County</u>			
67-05-002	Fenwick Island to Bethany Beach	60	1,583,758.10
67-08-008	Milford Bypass	67	5,287,141.75
68-10-009	Route 26, Dagsboro to Shaft Ox Corner	63	490,957.15
69-06-004	Motor Vehicle Inspection Facilities	98	352,900.00
70-03-011	Resurfacing, 1970-71	98	198,895.20
70-10-002	Wharton Street, Milton	0	20,554.70
70-10-006	Townsend & West 6th Streets, Laurel	0	80,882.80
70-10-009	Maryland Line to Laurel, U.S. 13	0	809,526.71
71-03-001	Pedestrian Stairs at Bridge 156	0	10,980.00
71-04-001	Intersection Improvements - Route 14 and Melson Road	98	20,906.00
TOTAL			\$50,260,529.49

MATERIALS AND RESEARCH

The Department maintains a Materials and Research laboratory at the Administration Center, Dover, and field laboratories in Wilmington and Georgetown to test and inspect materials used in the construction of roads and bridges.

A total of 36,223 samples were processed, tested and reported in the laboratories during the fiscal year. This includes soils, concrete, asphalt, lumber, and aggregate.

In addition to testing and approving all materials, the responsibility of field control of all materials on all projects became a function of the section this year, increasing personnel from 75 to 100. Field laboratories at Dover and Wilmington were closed during the consolidation.

For its research to improve the skid resistance of pavements, Materials and Research purchased a skid test trailer and has begun an extensive program to locate areas of unsafe pavement and determine which aggregates and mixes provide acceptable levels of friction.

In the interest of taxpayer savings as well as public safety, Materials and Research engineers made a two-month study of the effects of studded tires on pavement which led to the legislative banning of studded snow tires between April 15 and October 15.

Added savings, as well as increased quality standards, should come from the increasing use of nuclear testing instruments. Ten portable, nuclear testing gages were acquired in the spring and are being used, with good results, to determine the density of bituminous concrete and soil aggregate layers during roadway construction.

Research activities slated for the coming year include correlation of nuclear density and moisture equipment with present test methods; aggregate and mix design research using the skid trailer; and a pavement wear project.

UTILITIES

Thousands of miles of utility lines - gas, water, telephone, sewer, and electricity - are located in Delaware highway right of ways. 980 additional right of way franchises, for a total of 1,026 miles, were granted this year.

Relocating and adjusting those lines during highway construction and reconstruction is the function of the Utilities Section. Coordinating not only with the utility companies, but on an interdepartmental basis as well, the Section reviews and approves all changes, prepares cost figures, processes preliminary and final estimates and arranges for payment.

During the report year, 608 miles of utilities were constructed or relocated along highway rights of way. Safety installations were installed or upgraded at 12 railroad grade crossings, including four high-speed crossings of Penn Central Railroad. \$701,343 was paid to utility companies for adjustment to their facilities on highway construction projects.

On Interstate 495 from the Christina Interchange Bridge to Edgemoor Road, a five mile stretch of road, utility work alone will require 24 months of continuous construction, most of which will have to be done simultaneously with highway construction. Since the highway is limited access, all utilities must be moved outside the denial of access lines. Estimated cost of the work is \$3,467,033.

PROJECT CONTROL

The section continues to schedule projects by use of a broad version of the Critical Path Method Network and to monitor each project from the date of authorization through all the activities necessary for the project to be available for advertising. These projects in addition to data relative to finance and personnel are displayed by graphic presentations on 13 charts in the Department's Chart Room.

There are 61 projects displayed on the charts and all are in various stages of design. The following 20 projects will be available for Advertising for bids during Fiscal Year 1972.

CONTRACT NO.	DESCRIPTION	COST ESTIMATE (Const.)
68-04-003	Rt. 9 - Rd. 381 to New Castle	\$ 1,250,000
67-08-009	Centerville Rd. - Greenbank Rd. to Lancaster Pike	1,000,000
68-08-004	Silverside Rd. - Philadelphia Pike to Marsh Road	1,080,000
70-06-003	I-495 - Christina River to Edgemoor Rd. (Stabil. only)	15,500,000
68-10-018	Casho Mill Rd. - Rd. 360 to Road 11	145,000
71-04-003	Resurface - Brandywine River Bridge - I-95	175,000
70-04-010	Elmhurst Streets	415,000
70-10-008	U.S. 13 (S.B.) - Rogers Corner to Tybouts Corner	620,000
67-10-012	12th Street - Wilmington	550,000
70-08-004	Colonial Heights	300,000
70-04-012	Lore Avenue	320,000
68-03-001	Rt. 14 - Rt. 16 to Milford Bypass	3,400,000
69-02-002	Prices Corner Interchange - Phase II	4,000,000
70-04-005	Harmony Road	1,660,000
71-02-007	Rt. 141 through Newport - Viaduct Substructure	3,500,000
66-07-002	Rt. 141 - East of Kennett Pike to Brandywine Bridge	3,500,000
66-07-002	Kennett Pike and Bridge	1,750,000
70-08-009	Rt. 2 & Cleveland Avenue Intersection Improvements	900,000
65-01-004	I-495 - Bridge 6-10 to Rogers Corner - Phases I & II	14,545,000
-----	TOPICS Projects	344,000

It is the responsibility of the section to insure that all of the above projects, where appropriate, meet the requirements of the U.S. Department of Transportation and the Federal Highway Administration.

TRANSPORTATION PLANNING

RIGHT OF WAY

The Department's relocation officers gave assistance during fiscal 1971 to 126 families, businesses and organizations displaced by highway construction.

Relocation specialists many times went beyond the requirements of Federal law in finding new living quarters for families and helping them to make the move as easily as possible.

Moving expenses and "additive payments" to enable families and businesses to obtain "decent safe and sanitary" new quarters totaled \$267,118. These payments were in addition to reimbursement to property owners for the value of 956 parcels of land taken for highway projects during the year. Total right of way expenditures for 1970-1971 were \$9,058,831.

Property values have continued in their upward price spiral to the extent that right of way costs are demanding and ever increasing part of construction funds.

As property increases in value, the decision to sell for right of way purposes demands time consuming study by the owner. Time is usually a factor in advertising a project. Faced with the impossible task of satisfying both owner and Department, the Right of Way Office has been forced to submit an unprecedented number of cases in court in order to obtain early entry rights. Of the 72 condemnations filed during the year, however, 47 were settled and only 16 were tried.

This year 18 buildings were sold or demolished and one parcel of land was traded. Sales produced a revenue of \$16,885 and rental of excess land or buildings earned \$8,481.

PLANNING

The objective of the highway network is to aid local, State and National goals in creating a better total living and working environment. The highway system, as part of the overall transportation system, is a basic force in shaping Delaware's future development.

The highway network should provide for the movement of people and goods with maximum safety, economy, efficiency, convenience and dispatch and result in the minimum disruptive influences in adjacent land utilization, existing neighborhoods and scenic and historic sites. It should do this at the least total expense to the government and highway user.

The principal function of the Bureau of Highway Planning is to develop the long range highway system, program the project priorities and then plan the individual projects to be consistent with the master plan.

The Transportation Planning Studies Section is responsible for the provision of comprehensive forecast traffic volumes.

As input, it utilizes not only the latest information on vehicular travel trends and traffic generation rates, but also the best projection, land use, economics, transit desires and transportation usage by air, rail and water. It is, therefore, necessary to maintain very close coordination with other State, County, and Municipal agencies.

Basically, the output is directed toward project planning and design efforts requiring 20-Year forecast traffic volumes.

This year the work of this Section can be divided into four major divisions: the New Castle County Land Use and Transportation Planning Program, the Kent and Sussex Study, the 1990 Functional Classification and Needs Study, and Impact Studies, which relates proposed development to existing and proposed highway networks.

New Castle County Program

This continuing planning process implies continual surveillance of actual development trends so the accuracy of the original forecasts may be progressively evaluated and the 20-Year development, highway and transit plans adjusted to meet any deviations.

The present 20-Year plans should be phased so capital improvement priorities may be established and so highway rights-of-way be reserved.

Kent-Sussex Study

All initial inputs to the Kent and Sussex Counties land use and transportation study have been analyzed and alternatives discussed with the interested planning agencies. As an outcome of this cooperative effort, a recommended highway network plan for Kent and Sussex Counties was submitted to the U.S. Department of Transportation for approval.

With the completion of this study, along with the already completed New Castle County Program Plan, make a Statewide comprehensive highway phase for the State of Delaware.

1990 Highway Functional Classification & Needs Study

A major effort of the Transportation Planning Section during fiscal year 1970-1971 was the 1990 Highway Functional Classification and Needs Study which was a joint enterprise of the Federal, State and local governments. The objective of the study was to provide reliable data upon which consideration of future highway financing and responsibility could be based.

PLANNING SURVEY SECTION

A. Traffic Volume and Classification Counts

Traffic volumes expressed as average annual daily traffic (AADT) provides source data for pavement designs and assists in establishing priorities for scheduling highway improvements. AADT's are also used to estimate annual miles of travel along Delaware's highways, and to estimate fuel consumption. Current AADT's are also projected into the future based on planned land uses and are thus useful in determining locations and designs on new highways.

B. Road Inventory Studies

The most important development to be considered for Fiscal 1972 is photologging. Photologging is the taking of a picture along the roadway at an interval of .01 mile. Studies in other states have shown photologging to be a valuable tool for road inventory, sufficiency, accident, maintenance, and traffic surveys at a cost which is less than by more traditional methods. A test of photologging equipment is scheduled for the summer of 1971.

C. Accident Inventories and Safety Studies

Approximately 15,000 accident reports were coded last year.

- a. 1969 Intersection Accident Summary
- b. Before-After accident studies at numerous locations to evaluate the effectiveness of geometric design.
- c. Accident analyses along two sections of Interstate 95 in and south of the City of Wilmington.
- d. A survey of locations where skidding causes an abnormal number of accidents. This study was forwarded to the Materials and Research Section for use in conjunction with their newly acquired skid sled.
- e. Numerous studies for location where both major and minor improvements are scheduled.

D. Preparation of the Preliminary Six-Year Capital Improvements Program

The 6-Year (1972-1977) Capital Improvement Program was reviewed, updated and, after approval by the Highway Advisory Council, submitted to the State Planning Office. Again, the State Planning Office recommended that only \$11,370,000 be appropriated to the Department. This relatively small amount allowed the Department to work on projects which were previously authorized. Of the \$11,370,000 the State Planning Office has recommended only \$3,250,000 for non-corridor and corridor projects which usually took a major portion of the State Highway budget.

All other programs and recommended funds are listed below:

Highway & Highway-Railway Crossing Safety Improvement	\$ 250,000
TOPICS Program	100,000
Intersection Improvements	200,000
Traffic Signals Improvements	250,000
Bridge Rehabilitation, Repair & Replacement	750,000
Miscellaneous Small Projects	200,000
Pavement Rehabilitation and Treatment	1,300,000
Suburban Street Improvements	250,000
Engineering and Contingencies	1,500,000
Advanced Engineering & Planning	300,000
Advanced Right-of-Way Acquisition	1,000,000
Beach Erosion	200,000

The Advisory Council of Highways also has approved funds for non-corridor projects during the reporting year.

ADVANCED PLANNING

For next fiscal year, public hearings will be held on those projects designated as 90 percent or more complete. Specifically, however, we are anticipating or have scheduled location hearings for the 1) Dover East-West Connector, 2) the City of New Castle Del. Rt. 9 Bypass, 3) the duPont Road Study, 4) the Smyrna Bypass, 5) Route 141 from Prices Corner to Lancaster Pike, and 6) Chestnut Hill Road from Ogetown to Route 7. A yearly work program would consist in part of an evaluation of some potential projects in the comprehensive planning areas such as the 1985 Plan for New Castle County. From these developments it would be anticipated that where routes were feasible, right of way preservation techniques could be developed, such as public hearing and filing of tentative right of way maps.

SUBDIVISION PLANNING OFFICE

Subdivision Planning is an agent for a cohesive interrelationship between land use and the highway network. Meetings with County Planning and Zoning Commission are resulting in a cooperative effort to achieve maximum utilization of land with minimal impact upon the highways.

Reserved and/or dedicated strips of right of way have been obtained along routes which will be upgraded in accordance with Comprehensive Transportation Plans. This reservation of right of way will result in reduced design and right of way manhours and less public opposition when the projects are implemented. Anticipated legislative and policy revisions will increase the success of this endeavor.

PLANNING SUPPORT

The annual State Official Highway Map was revised and reprinted. A total of 140,000 maps were printed.

A new State map, size 30" X 55", scale 1" = 2 miles, is nearing completion and should be available in August, 1971.

Plans are underway to investigate the feasibility of producing aerial photo maps of each County to be used for planning purposes. The maps would be made more functional by the addition of color to define the major highways by alignment and number.

MAINTENANCE

Inflationary forces reflected in material and labor costs, coupled with the increasingly demanding job of keeping Delaware's highways in good shape, raised maintenance expenditures by more than 8.52 percent in the 1970-1971 fiscal year. They rose from \$7,686,000 in 1969-1970 to \$8,477,184.

The trend is likely to continue as mileage on the State's highway system increases and traffic gets heavier. The share of the State highway budget needed for maintenance also is creeping up.

Striving to cut costs and increase efficiency, the Department's Maintenance Division has initiated Statewide programming of maintenance, both routine and special.

This year also saw the successful completion of the pilot program for the Daily Maintenance Operations Report. Put into effect July 1, 1971, their cost data input and retrieval program will compliment the entire new maintenance management system, consisting of:

Quality Standards	Policy Manual
Quantity Standards	Procedures Manual
Performance Standards	Performance Budget
Maintenance Feature	Uniform Planning &
Inventory	Scheduling

The most significant event for the Bureau of Maintenance during the report year was the January 1, 1971 reorganization. This provided for the establishment of two maintenance districts, North and South, consisting of 13 Statewide maintenance areas.

NORTH MAINTENANCE DISTRICT

North District maintains 175 miles of primary roads and 190 miles of secondary roads in a highly urbanized area, in addition to 191 miles of tertiary roads and 512 miles of suburban development streets.

The new area 12 garage on Talley Road was completed during the year and other garages and yards are being renovated. Primary objectives during the year included improved personnel management at the Area level, accurate response to fiscal and operational reporting systems, continual performance evaluations and increased maintenance productivity without excessive cost.

SOUTH MAINTENANCE DISTRICT

The Southern District, south of the Chesapeake and Delaware Canal, has 651 miles of primary roads, 2,097 miles of secondary roads, 520 miles of tertiary roads and 68 miles of suburban development streets. This large rural area demands the full spectrum of maintenance services, from grading dirt roads (over 1,000 miles per month) to the prevention of beach erosion.

Special programs by maintenance personnel also included replacement of 10 small bridges with large diameter pipe, installation of 6 left turn lanes and widening and reconstructing 6 roads.

EQUIPMENT

Major purchases of new equipment this year were nine dump trucks, two street sweepers, one front-end loader and 19 tailgate spreaders. The \$239,749 cost reflects an increase of 44% over last year, but still falls critically short of the necessary funds to replace aged and "tired" equipment. Repairs cost \$713,808, while operating expenses were \$282,084.

The reorganization of maintenance resulted in changes of equipment policies.

- Set up a Statewide preventative maintenance program
- Standardized equipment cost records
- Developed Statewide Table of allowance, hourly rental rates and inventory identification system
- Inspected each maintenance shop to determine proper utilization, shop techniques and equipment requirements
- Established a Statewide equipment pool
- Developed a surplus equipment program to reduce overhead equipment cost

Equipment projects for the coming year include:

- Determine a flat rate time for repairs without flat rate procedures
- Rotate equipment on Statewide level to insure equalization in usage
- Maximize "skid-mounts" to reduce truck inventory
- Procure equipment which will provide a year-round maintenance function
- Install time clocks in all shops
- Install movement recorders in independently operating maintenance equipment

BEAUTIFICATION

The Department has long worked to protect and improve the environment. This includes long-standing programs to landscape roadsides, discourage littering, develop roadside parks and rest areas and pilot projects to remove junk cars adjacent to our highways and control outdoor advertising.

Maintenance of all highway landscaping projects is the function of the Roadside Development Section. This represents the protection of a \$425,000 investment.

Five major landscaping contracts were completed along Interstate 95 through Wilmington; Adams and Jackson Streets, Delaware Avenue and 12th Street in Wilmington. The addition of headlight screens and barrier plantings on I-95 were also completed under a Safety Modifications contract. Plans for additional landscaping along I-95 to Pennsylvania line were completed.

Departmental planning projects included vegetative crash barriers, headlight screens and landscaping around several Departmental buildings and garages.

A full-time Statewide crew has been assigned the task of roadside spraying. This includes guardrail abatement spraying programs and control of Johnsongrass. Area maintenance crews will be used to augment the spraying program.

For the coming year an intensive program of synthetic slope stabilization has been scheduled along with crownvetch seeding and pre-emergent herbicide programs.

DIVISION OF TRANSPORTATION

In an era when urban populations are increasing, urban space is decreasing and urban environmental problems are becoming acute, it is obvious that maintaining and improving public transportation is vital to the future of our cities.

Delaware has not yet reached the crisis proportions of some States and hopes, by implementing the concept of "total transportation", to avoid them. The reorganization of the Department will insure close cooperation and unified planning for highways, mass transit and air related facilities.

MASS TRANSIT

The Greater Wilmington Transit Authority became DART (Delaware Authority for Regional Transit) on May 17, 1971, and immediately began the task of winning public acceptance and support for bus transportation.

Although the quantity of mass transit service has remained essentially the same as in fiscal 1970 (3,152 hours per week in 1971 against 3,135 hours per week in 1970), the services have been redesigned to achieve increased effectiveness. For example, thinly patronized night runs have been curtailed, while peak hour express runs have been added.

In addition, the Short Line which formerly operated under a Public Service Commission charter in the Foulk Road-Concord Pike area ceased operations on April 1, 1971. These routes were incorporated into DART's schedules, resulting in more frequent transit runs for the Brandywine Hundred area.

Financial Status of DART

Contrary to nationwide experience, transit ridership in New Castle County continues to increase since the public acquisition of the private companies. There has been a cumulated 30 percent increase in ridership since January 1969 and a 2.6 percent increase during the past fiscal year. However, at the same time, escalating operating expenses have outstripped increases in ridership. Consequently, DART ended the fiscal year with a \$213,000 cash deficit (excluding depreciation).

Legislation

In order to maintain the quality and quantity of transit services and to eliminate the necessity of a fare increase to offset the financial deficit, the General Assembly passed H.B. 224, appropriating \$250,000 for transit operations to be administered by the Director of the Division of Transportation. This Bill was signed into law by Governor Russell W. Peterson on June 30, 1971.

Recognizing the dilemma of elderly people on fixed incomes and the proportion of their income used for transportation, the General Assembly passed H.B. 22, directing DART to provide lower fares for people over 65.

Mass Transit Planning

The recognized importance of mass transit as an integral part of the total transportation picture, coupled with the continuing problems of scarce funds, has focused attention on the necessity for sound transit planning and programming.

The first phase of the transit planning program commenced in April 1971 as a joint effort of the Division of Transportation and DART. The purpose of this first phase was to examine the current operations and restructure the routes and schedules for increased efficiency and effectiveness.

Succeeding phases will look six and 20 years into the future and result in a six-year capital improvements program and a 20-year plan for transit improvements.

The Division of Transportation and DART have jointly submitted an application to the Urban Mass Transit Administration seeking two-thirds Federal funding participation in the State's transit planning efforts.

Experimental Projects

Although the main contribution that mass transit is making toward easing urban congestion lies in regularly scheduled routes with frequent trips and increased speeds, there are several innovative projects that merit careful evaluation and implementation. For example, access to urban employment opportunities for center city residents has been provided via a Special night shift bus to the Newark Chrysler plant.

Under a contract with Model Cities, DART runs the Model City Loop bus, providing access to downtown Wilmington and area hospitals for Model City residents. The ridership on this Loop has increased from 325 to 928 passengers per day, within a ten month period.

Other ideas being evaluated include use of mini buses, Dial-A-Ride, Park-and-Ride and exclusive bus lane projects.

AVIATION

Delaware is one of the few States whose Capital City is inaccessible by air. To remedy this, the 125th General Assembly passed S.B. 666, appropriating \$100,000 to be matched by \$100,000 from Kent County, for a general aviation airport in the environs of Dover.

A plan for unlimited joint use for civilian aircraft at Dover Air Force Base was turned down by the Pentagon. Their agreement to a limited joint use contract that would allow multi-engine aircraft with instrument rated pilots to be operated from a civilian terminal and use Air Base runways and taxiways was unacceptable to some members of the State Senate and the Kent County Levy Court.

Other alternatives for the Kent County Airport were considered, but the State's appropriated \$100,000 could not be committed before the end of the fiscal year and reverted to the General Fund.

The project is in limbo and new legislation must be sought when the Legislature reconvenes in 1972.

Air Systems Plan

Since aviation is becoming an increasingly important part of maintaining the State's economic health, and since there are many unanswered questions concerning not only the direction for the Kent County Airport but also the future of air traffic in New Castle County, the Division of Transportation will prepare a Statewide aviation systems plan. This is required by the Airport and Airway Development Act of 1970 and is the basis for the formulation of the National Airport System Plan.

The Division is preparing an application to be submitted to the Federal Aviation Administration requesting two-thirds Federal Funding for the study.

OFFICE OF ADMINISTRATION

Fiscal management and other non-engineering functions of the Department of Highways and Transportation have been centralized, since the inception of the Cabinet system, under the Office of Administration.

This includes the former Division of Administration and Management Services, with the exception of Project Control; the Computer Support Section; the Administrative Assistant and his staff; and the Office of the Controller.

Significant achievements during fiscal 1971 were the reorganization of the new Office of Administration, the consolidation and centralization of payroll operations, the re-establishment of the external audit program and the implementation of a pilot abandoned vehicle removal program.

Future plans involve consolidation of the Highway Accounting System into the State's Central Accounting System and consolidation of all Departmental purchasing and all fiscal control agents into the Office of Administration, also improved records retention procedures and implementation of internal audit.

The various groups making up the Office of Administration were organized into the following sections under the Chief of Administration with the responsibilities as listed:

- Administrative Services
 - P.S. & E. Preparation
 - Advertising
 - Contract Awards and Execution
 - Purchasing
 - Stockroom and Inventory Control
 - Sales and Billings
 - Equal Employment Opportunity
 - Insurance
 - Franchises

Financial Services

- Budget Preparation and Control
- Allotment Control
- Payroll
- Purchase Orders and Invoice Processing
- Federal Claim
- Cash Collection
- Financial Reports

Federal-Aid

- Federal Fund Control
- Programming and P.S. & E. Submissions
- Final Vouchers
- External Audit

Computer Support

- Systems and Programming Services
- Computer Operations for Engineering Applications

Outdoor Advertising and Junkyard Control

- Outdoor Advertising Sign Permits
- Junkyard Licenses
- Abandoned Vehicle Removal Program

Office Services

- Word Processing Center
- Records Center
- Library
- Departmental Mail
- Forms Control
- Telephone Service

Contracts advertised during fiscal 1971:

TYPE	NO.	CONTRACT AMOUNT
Construction		
Federal Participating	7	\$ 3,957,013.59
Toll Road	7	1,650,948.40
100% State	45	10,185,268.60
Total Construction	59	\$15,793,248.59
Materials & Supplies	40	1,262,535.55
Equipment	25	273,951.86
Total	124	\$17,329,736.00

DEPARTMENT OF HIGHWAYS & TRANSPORTATION
 COMPARATIVE STATEMENT OF TOTAL FUNDS AVAILABLE, EXPENDITURES AND UNEXPENDED BALANCES
 FOR THE YEARS ENDED JUNE 30, 1971 & 1970

	<u>YEAR ENDED JUNE 30</u>		<u>INCREASE/ (DECREASE)</u>
	<u>1971</u>	<u>1970</u>	
Funds Available	\$97,336,043.32	\$108,436,840.23	\$(11,100,796.91)
Expenditures	<u>45,642,602.83</u>	<u>40,448,852.60</u>	<u>5,193,750.23</u>
Unexpended Balances	\$51,693,440.49	\$ 67,987,987.63	\$(16,294,547.14)

DISPOSITION OF UNEXPENDED BALANCES

	<u>YEAR ENDED JUNE 30</u>		<u>INCREASE/ (DECREASE)</u>
	<u>1971</u>	<u>1970</u>	
Continuing	43,876,410.14	57,263,824.80	(13,387,414.66)
Encumbered	7,494,413.14	9,907,581.29	(2,413,267.15)
Reverted	<u>322,716.21</u>	<u>816,581.54</u>	<u>(493,865.33)</u>
Unexpended Balances	51,693,440.49	67,987,987.63	(16,294,547.14)

DEPARTMENT OF HIGHWAYS & TRANSPORTATION
COMPARATIVE STATEMENT OF EXPENDITURES BY DIVISIONS
AND SPECIAL FUNDS
FOR YEARS ENDED JUNE 30, 1971 & 1970

	<u>YEAR ENDED JUNE 30</u>		<u>INCREASE/ (DECREASE)</u>
	<u>1971</u>	<u>1970</u>	
GENERAL FUND			
Office of the Secretary	\$ 35,261.33		\$ 35,261.33
Office of Administration	561,462.62	\$ 653,568.79	(92,106.17)
Division of Highways	10,043,302.85	8,784,951.03	1,258,351.82
Division of Transportation	63,115.48		63,115.48
Sub Total	<u>\$10,703,142.28</u>	<u>\$9,438,519.82</u>	<u>\$ 1,264,622.46</u>
FUND SPECIAL CONSTRUCTION & OTHER FUNDS			
11 Federal Aid Trust Account	\$ 99,540.06	\$ 245,459.94	\$ (145,919.88)
40 Highway Improvements 1959		16,718.49	(16,718.49)
42 Highway Construction Fund 1961	59,823.76	321,456.02	(261,632.26)
43 Highway Construction Fund 1964	7,263,647.10	7,283,126.48	(19,479.38)
45 Delaware River & Bay Authority		170,964.53	(170,964.53)
45 Capital Improvements 1966	1,660,552.87	4,481,499.07	(2,820,946.20)
47 Capital Improvements 1967	3,020,531.04	3,769,469.41	(748,938.37)
49 Capital Improvements 1968	4,676,838.45	2,021,276.93	2,655,561.52
49 Capital Improvements 1969	8,929,518.92	4,686,906.68	4,242,612.24
51 Special Funds (Sidewalks, etc.)	17,060.86		17,060.86
52 Capital Improvements 1970	8,273,425.70	1,475,940.19	6,797,485.51
53 Capital Improvements 1971	867,471.35		867,471.35
89 Traffic & Planning	71,050.44	186,747.54	(115,697.10)
Sub Total	<u>\$34,939,460.55</u>	<u>\$24,659,565.28</u>	<u>\$10,279,895.27</u>
TOTAL	<u><u>\$45,642,602.83</u></u>	<u><u>\$34,098,085.10</u></u>	<u><u>\$11,544,517.73</u></u>

DEPARTMENT OF HIGHWAYS & TRANSPORTATION
 CONDENSED STATEMENT OF APPROPRIATIONS, TRANSFERS, AVAILABLE FUNDS,
 EXPENDITURES, AND UNEXPENDED BALANCES FOR YEAR ENDED JUNE 30, 1971

	CONTINUING BALANCE JUNE 30, 1970	ENCUMBERED BALANCE JUNE 30, 1970	ORIGINAL APPROPRIATIONS	SUPPLEMENTAL APPROPRIATIONS	REVENUE
GENERAL FUND					
Office of Secretary	\$ 50,000.00				
Office of Administration		\$ 752.39	\$ 634,380.00		
Division of Highways	132,405.08	1,283,821.90	9,918,000.00	\$ 65,180.00	
Division of Transportation		75.00	98,500.00	100,000.00	
TOTAL GENERAL FUND	\$182,405.08	\$1,284,649.29	\$10,650,880.00	\$165,180.00	
SPECIAL FUNDS, CONSTRUCTION & OTHER					
<u>FUND</u>					
10 U.S. Grant, Federal Aid Fund	\$ 96,987.00				\$8,694,215.-
10 U.S. Grant, National Transportation Needs Study					14,528.-
11 Federal Aid Trust Account	35,602.25	\$ 63,937.81			
40 Highway Improvements 1959	958,517.10				
41 Hard Surfacing Dirt Roads 1955	1,461.01				
42 Highway Construction Fund 1961	1,610,067.02	103,578.77			
43 Highway Construction Fund 1964	2,721,866.33	1,658,753.96			
44 Garrison's Pond Dam	3,209.21				
45 Delaware River & Bay Authority	100,000.00				
46 Capital Improvements 1966	874,944.14	1,711,608.68			
47 Capital Improvements 1967	6,310,822.53	872,606.46			
48 Capital Improvements 1968	8,798,883.76	1,113,564.15			
49 Capital Improvements 1969	16,757,250.42	1,517,965.58			
51 Special Construction Funds (Sidewalks, etc.)					
52 Capital Improvements 1970	17,047,377.17	482,230.01			
53 Capital Improvements 1971					
88 Traffic Planning	46,449.80	12,478.78			
89 Beach Erosion	110.88				
90 Suburban Roads	145.96				
TOTAL SPECIAL FUNDS	\$55,363,694.58	\$7,536,724.20			\$8,708,743.-
TOTAL GENERAL FUND, SPECIAL FUNDS	\$55,546,099.66	\$8,821,373.49	\$10,650,880.00	\$165,180.00	\$8,708,743.-

EXHIBIT A

VE	TRANSFERS	OTHER SOURCES	TOTAL AVAILABLE FUNDS	EXPENDITURES	UNEXPENDED BALANCES	DISPOSITION OF FUNDS		
						ENCUMBERED	CONTINUING	REVERTED TO GENERAL FUND
	\$ (43,030.00)		\$ 50,000.00	\$ 35,261.33	\$ 14,738.67	\$ 775.95		\$ 13,962.72
	(10,973.00)		592,102.39	561,462.62	30,639.77	21,395.84		9,243.93
	150.00		11,388,433.98	10,043,302.85	1,345,131.13	991,799.83	\$163,412.75	189,918.55
	\$ (53,853.00)		198,725.00	63,115.48	135,609.52	26,018.51		109,591.01
			\$12,229,261.37	\$10,703,142.28	\$1,526,119.09	\$1,039,990.13	\$163,412.75	\$322,716.21
	\$ (8,694,215.17)		\$ 96,987.00		\$ 96,987.00		\$ 96,987.00	
			14,528.00		14,528.00		14,528.00	
			99,540.06	\$ 99,540.06				
			958,517.10		958,517.10		958,517.10	
			1,461.01		1,461.01		1,461.01	
	9,940.61		1,723,586.40	59,823.76	1,663,762.64	\$ 39,322.11	1,624,440.53	
	4,340,903.08		8,721,523.37	7,263,647.10	1,457,876.27	1,328,111.11	129,765.16	
			3,209.21		3,209.21		3,209.21	
			100,000.00		100,000.00		100,000.00	
	929,002.17		3,515,554.99	1,660,552.87	1,855,002.12	1,261,027.04	593,975.08	
	602,116.40		7,785,545.39	3,020,531.04	4,765,014.35	631,074.66	4,133,939.69	
	646,269.57		10,558,717.48	4,676,838.45	5,881,879.03	733,468.90	5,148,410.13	
	682,431.53		18,957,647.53	8,929,518.92	10,028,128.61	1,268,589.68	8,759,538.93	
	97,620.00		97,620.00	17,060.86	80,559.14	5,985.81	74,573.33	
	1,431,357.44		18,960,964.62	8,273,425.70	10,687,538.92	961,952.73	9,725,586.19	
		\$13,400,000.00	13,400,000.00	867,471.35	12,532,528.65	222,452.57	12,310,076.08	
			111,122.95	71,050.44	40,072.51	2,339.40	37,733.11	
			110.88		110.88		110.88	
			145.96		145.96		145.96	
	\$ 97,620.00	\$13,400,000.00	\$85,106,781.95	\$34,939,460.55	\$50,167,321.40	\$6,454,324.01	\$43,712,997.39	
	\$ 43,767.00	\$13,400,000.00	\$97,336,043.32	\$45,642,602.83	\$51,693,440.49	\$7,494,314.14	\$43,876,410.14	\$322,716.21

DEPARTMENT OF HIGHWAYS & TRANSPORTATION
 DETAILED STATEMENT OF AVAILABLE FUNDS, EXPENDITURES AND UNEXPENDED BALANCES
 FOR YEAR ENDED, JUNE 30, 1971

	<u>CONTINUING</u> <u>BALANCES</u> <u>JUNE 30, 1970</u>	<u>ENCUMBERED</u> <u>BALANCES</u> <u>JUNE 30, 1970</u>	<u>ORIGINAL</u> <u>APPROPRIATIONS</u>	<u>SUPPLEMENTAL</u> <u>APPROPRIATIONS</u>	<u>REVENUE</u>
<u>OFFICE OF THE SECRETARY (55-01)</u>					
Salaries & Operations	\$50,000.00				
Total Office of Secretary	\$50,000.00				
<u>OFFICE OF ADMINISTRATION (55-02)</u>					
Salary, Chief of Administration			\$ 19,680.00		
Salaries & Wages of Employees			135,500.00		
Salaries - Overtime			1,500.00		
Personal Services			2,000.00		
Travel			900.00		
Contractual Services		\$597.84	16,000.00		
Supplies & Materials			8,000.00		
Capital Outlay		154.55	800.00		
Social Security			450,000.00		
TOTAL OFFICE OF ADMINISTRATION		<u>\$752.39</u>	<u>\$634,380.00</u>		
<u>DIVISION OF HIGHWAYS (55-05)</u>					
Salary, Director of Highways			\$ 28,000.00		
Salaries & Wages of Employees			5,390,000.00		
Travel		\$ 200.00			
Contractual Services		69,849.74			
Resurfacing Contracts		809,833.80	1,600,000.00		
Bridge Repair Contracts		40,427.65	200,000.00		
Supplies & Materials		176,107.09			
Capital Outlay		159,147.05	400,000.00		
Operations			1,880,000.00		
Lines, Center & Edges of Highways		15,427.82	80,000.00		
Emergency, Snow Removal & Ice Control		1,001.23	250,000.00		
Roadside Grass & Growth Control			90,000.00		
Caesar Rodney School Sidewalks				\$13,200.00	
Stanton School Sidewalks				1,380.00	
Drainage, Route 14				50,000.00	
Gunning-Bedford Ped. Overpass	\$114,000.00				
Milford School Sidewalks					
New Castle Office Building		311.33			
Heating Fuels				600.00	
Garfield Park	11,151.83				
Sussex Beaches	7,242.43				
Millsboro Sidewalks		11,418.58			
A. I. DuPont School Sidewalks	10.82	97.61			
TOTAL DIVISION OF HIGHWAYS	<u>\$132,405.08</u>	<u>\$1,283,821.90</u>	<u>\$9,918,000.00</u>	<u>\$65,180.00</u>	
<u>DIVISION OF TRANSPORTATION</u>					
Salary, Director of Transportation			\$25,000.00		
Salaries & Wages of Employees			17,800.00		
Personal Services			10,000.00		
Travel			2,500.00		
Contractual Services		\$75.00	25,100.00		
Committee on Regional Development					
Supplies & Materials			1,600.00		
Capital Outlay			1,500.00		
Local Authorities Subsidies			15,000.00		
Kent County Airport				\$100,000.00	
TOTAL, DIVISION OF TRANSPORTATION		<u>\$75.00</u>	<u>\$98,500.00</u>	<u>\$100,000.00</u>	

TRANSFERS	OTHER SOURCES	TOTAL FUNDS AVAILABLE	EXPENDITURES	UNEXPENDED BALANCES	DISTRIBUTION OF FUNDS		
					ENCUMBERED	CONTINUING	REVERTED TO GENERAL FUND
		\$50,000.00	\$35,261.33	\$14,738.67	\$775.95		\$13,962.72
		<u>\$50,000.00</u>	<u>\$35,261.33</u>	<u>\$14,738.67</u>	<u>\$775.95</u>		<u>\$13,962.72</u>
		\$ 19,680.00	\$ 19,060.88	\$ 619.12			\$ 619.12
\$ (43,030.00)		92,470.00	85,742.17	6,727.83	\$ 500.00		6,227.83
		1,500.00		1,500.00			1,500.00
17,200.00		19,200.00	247.50	18,952.50	18,752.50		200.00
(500.00)		400.00	309.11	90.89			90.89
(11,000.00)		5,597.84	4,395.64	1,202.20	864.34		337.86
(5,700.00)		2,300.00	873.39	1,426.61	1,279.00		147.61
		954.55	834.90	119.65			119.65
		<u>450,000.00</u>	<u>449,999.03</u>	<u>.97</u>			<u>.97</u>
\$ (43,030.00)		<u>\$592,102.39</u>	<u>\$561,462.62</u>	<u>\$30,639.77</u>	<u>\$21,395.84</u>		<u>\$9,243.93</u>
		\$ 28,000.00	\$ 25,333.18	\$ 2,666.82			\$ 2,666.82
\$ (17,923.00)		5,372,077.00	5,271,652.96	100,424.04	\$ 8,000.00		92,424.04
		200.00	141.51	58.49			58.49
		69,849.74	53,257.78	16,591.96			16,591.96
(72,200.00)		2,337,633.80	1,845,227.62	492,406.18	479,263.73		13,142.45
		240,427.65	225,007.82	15,419.83	14,181.62		1,238.21
		176,107.09	168,362.12	7,744.97			7,744.97
		559,147.05	343,591.88	215,555.17	213,805.00		1,750.17
23,950.00		1,903,950.00	1,649,492.61	254,457.39	245,908.08		8,549.31
25,000.00		120,427.82	90,353.04	30,074.78	29,266.52		808.26
20,000.00		271,001.23	249,814.67	21,186.56	577.27		20,609.29
		90,000.00	87,942.17	2,057.83			2,057.83
		13,200.00	12,776.93	423.07			423.07
		1,380.00	1,380.00				
		50,000.00		50,000.00		\$ 50,000.00	
		114,000.00	598.07	113,401.93		113,401.93	
10,200.00		10,200.00	10,100.00	100.00	100.00		
		311.33	311.33				
		600.00		600.00	600.00		
		11,151.83		11,151.83			11,151.83
		7,242.43		7,242.43			7,242.43
		11,418.58	7,959.16	3,459.42			3,459.42
		<u>108.43</u>		<u>108.43</u>			
\$ (10,973.00)		<u>\$11,388,433.98</u>	<u>\$10,043,302.85</u>	<u>\$1,345,131.13</u>	<u>\$991,799.83</u>	<u>10.82</u>	<u>\$189,918.55</u>
		\$ 25,000.00	\$20,232.39	\$ 4,767.61			\$ 4,767.61
\$12,500.00		17,800.00	15,135.95	2,664.05			2,664.05
		22,500.00	2,485.47	20,014.53	\$19,514.53		500.00
		2,500.00	1,292.43	1,207.57			1,207.57
150.00		25,325.00	19,067.20	6,257.80	1,088.88		5,168.92
2,500.00		2,500.00	2,500.00				
		1,600.00	229.10	1,370.90	141.00		1,229.90
(15,000.00)		1,500.00		1,500.00	1,499.10		.90
		<u>100,000.00</u>	<u>2,172.94</u>	<u>97,827.06</u>	<u>3,775.00</u>		<u>94,052.06</u>
\$ 150.00		<u>\$198,725.00</u>	<u>\$63,115.48</u>	<u>\$135,609.52</u>	<u>\$26,018.51</u>		<u>\$109,591.01</u>