









**REPORT**  
**OF THE**  
**STATE ROADS COMMISSION**  
**OF MARYLAND**

**OPERATING REPORT**  
**FOR THE FISCAL YEARS**  
**1951-1952**

**FINANCIAL REPORT**  
**FOR THE FISCAL YEARS**  
**1951-1952**

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CHESAPEAKE BAY BRIDGE

**REPORT**  
**OF THE**  
**STATE ROADS COMMISSION**  
**OF MARYLAND**

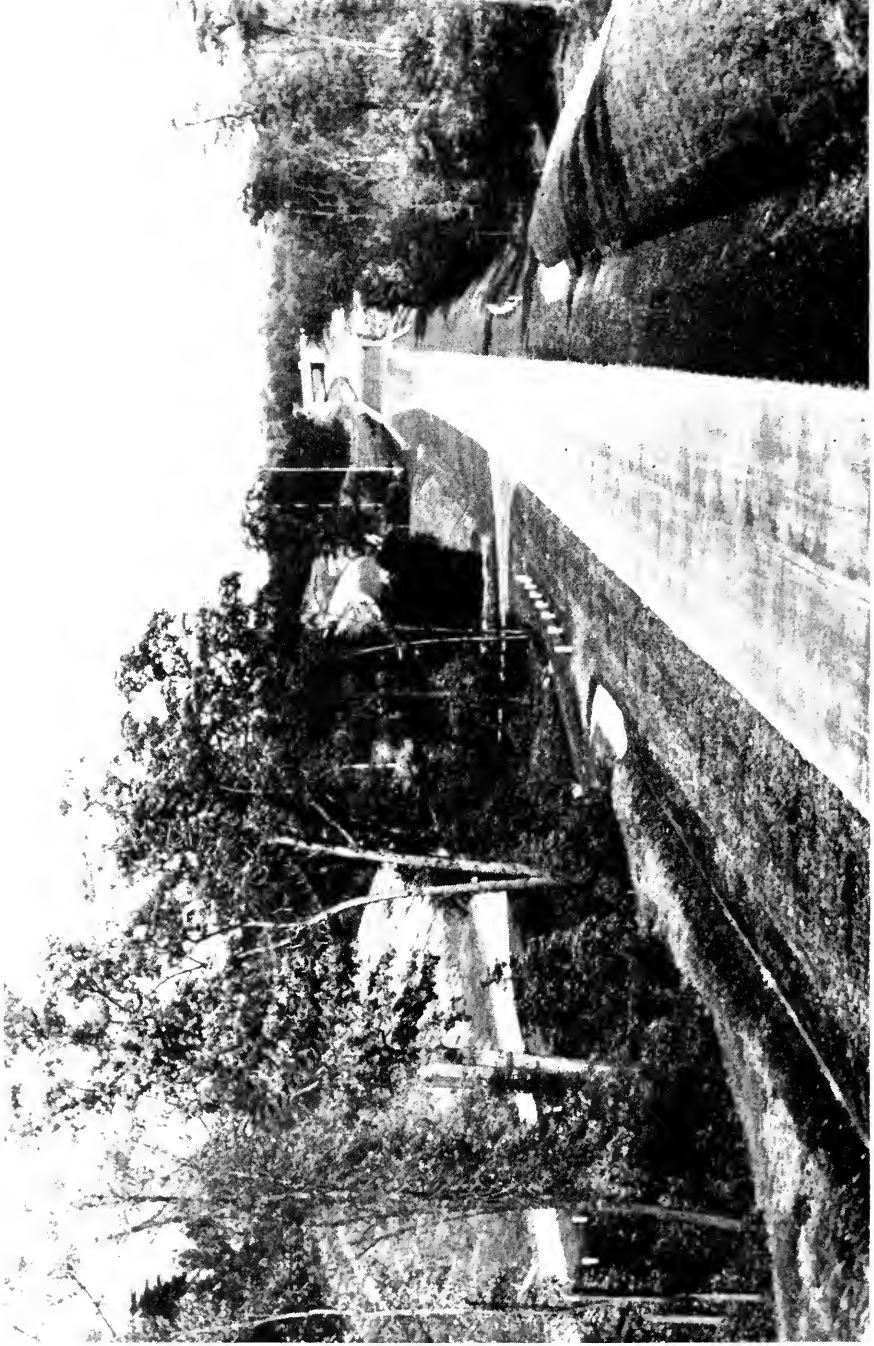
**OPERATING REPORT**  
FOR THE FISCAL YEARS  
1951-1952

**FINANCIAL REPORT**  
FOR THE FISCAL YEARS  
1951-1952



BALTIMORE, MARYLAND

December 15, 1952



BALTIMORE-WASHINGTON EXPRESSWAY—LOOKING NORTH FROM WINTERSON ROAD SHOWING A 113 FOOT MEDIAN STRIP IN WHICH NATURAL CONTOURS AND DESIRABLE EXISTING TREES AND UNDERGROWTH HAVE BEEN RETAINED

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**OFFICE OF THE STATE ROADS COMMISSION  
OF MARYLAND**  
**108 EAST LEXINGTON STREET  
BALTIMORE, MARYLAND**

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JOSEPH RUZICKA, INC.

To His Excellency, Theodore R. McKeldin, Governor of Maryland:

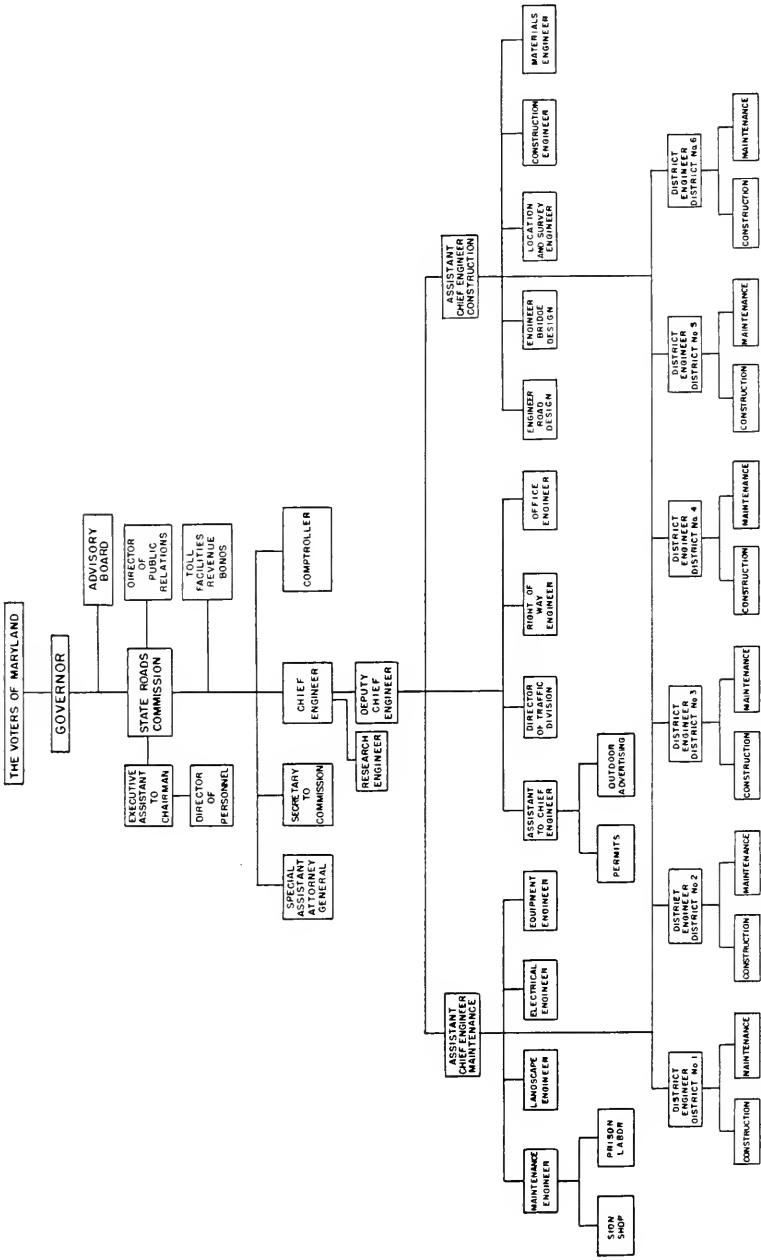
RE:

We have the honor to submit an operating and financial report covering the activities of the State Roads Commission of Maryland for the fiscal years 1951-1952.

Respectfully,  
RUSSELL H. MCCAIN  
AVERY W. HALL  
DAVID M. NICHOLS  
*State Roads Commission*

December 15, 1952

STATE OF MARYLAND  
 ORGANIZATION  
 OF  
 STATE ROADS COMMISSION



ORGANIZATION CHART

# STATE ROADS COMMISSION

## MEMBERS

ROBERT M. REINDOLLAR—*Chairman* (July 1, 1950 to December 29, 1950)  
JOSEPH M. GEORGE—*Chairman* (December 29, 1950 to January 25, 1951)  
RUSSELL H. McCAIN—*Chairman* (January 26, 1951 to June 30, 1952)  
JOSEPH M. GEORGE—*Member* (July 1, 1950 to December 28, 1950)  
RUSSELL H. McCAIN—*Member* (July 1, 1950 to January 25, 1951)  
LEONARD E. KOLMER—*Member* (January 3, 1951 to April 17, 1951)  
AVERY W. HALL—*Member* (January 29, 1951 to June 30, 1952)  
DAVID M. NICHOLS—*Member* (April 18, 1951 to June 30, 1952)  
CHARLES R. PEASE, *Secretary*  
ALBERT S. GORDON, *Executive Assistant To Chairman*

## STATE HIGHWAY ADVISORY COUNCIL

ABEL WOLMAN, *Chairman*

CHARLES S. GARLAND

E. ASBURY DAVIS

## ORGANIZATION PERSONNEL

### *Engineering Department*

WILLIAM F. CHILDS, JR., *Chief Engineer*  
WALTER C. HOPKINS, *Deputy Chief Engineer*  
P. A. MORISON, *Assistant Chief Engineer—Maintenance*  
CORDT A. GOLDEISEN—*Assistant Chief Engineer—Construction*

AUSTIN F. SHURE <i>Assistant to Chief Engineer</i>	ALLAN LEE <i>Engineer of Road Design</i>
FRANK P. SCRIVENER <i>Maintenance Engineer</i>	ALBERT L. GRUBB <i>Engineer of Bridge Design</i>
THOMAS M. LINTHICUM <i>Construction Engineer</i>	GEORGE N. LEWIS, JR. <i>Director Traffic Division</i>
J. ELDRIDGE WOOD <i>Materials Engineer</i>	R. B. BURGESS <i>Engineer—Special Assignments</i>
LEROY C. MOSER <i>Right of Way Engineer</i>	E. L. WORTHINGTON <i>Research Engineer</i>
NORMAN M. PRITCHETT <i>Location Engineer</i>	A. F. DI DOMENICO <i>Office Engineer</i>

### *District Engineers*

DISTRICT No. 1—C. ALBERT SKIRVEN, *Salisbury, Maryland*  
DISTRICT No. 2—ROLPH TOWNSHEND, *Chestertown, Maryland*  
DISTRICT No. 3—E. G. DUNCAN, *Laurel, Maryland*  
DISTRICT No. 4—D. P. CAMPBELL, *Towson, Maryland* (July 1, 1950–April 17, 1951)  
DISTRICT No. 4—ENOCH C. CHANEY, *Towson, Maryland* (April 18, 1951–June 30, 1952)  
DISTRICT No. 5—JOSEPH CHANEY, *Upper Marlboro, Maryland*  
DISTRICT No. 6—G. BATES CHAIRES, *Cumberland, Maryland*

### *Accounting Department*

CARL L. WANNEN, *Comptroller*  
MORRIS M. BRODSKY, *Assistant Comptroller—General Accounting*  
JAMES W. ROUNTREE, JR., *Assistant Comptroller—Procedures and Controls*  
CHARLES I. NORRIS, *Assistant Comptroller—Budgets and Costs*

### *Legal Department*

JOSEPH D. BUSCHER, *Special Assistant Attorney General*

### *Personnel, Pensions, and Workmen's Compensation Division*

W. PHELPS THOMAS, *Personnel Manager*

### *Public Relations Division*

CLINTON H. JOHNSON, *Director*

### *Revenue Bonds and Toll Facilities Department*

LOUIS J. O'DONNELL, *Chief Administrative Officer*  
WILLIAM A. CODD—*Chief Auditor* (July 1, 1950 to May 1, 1952)

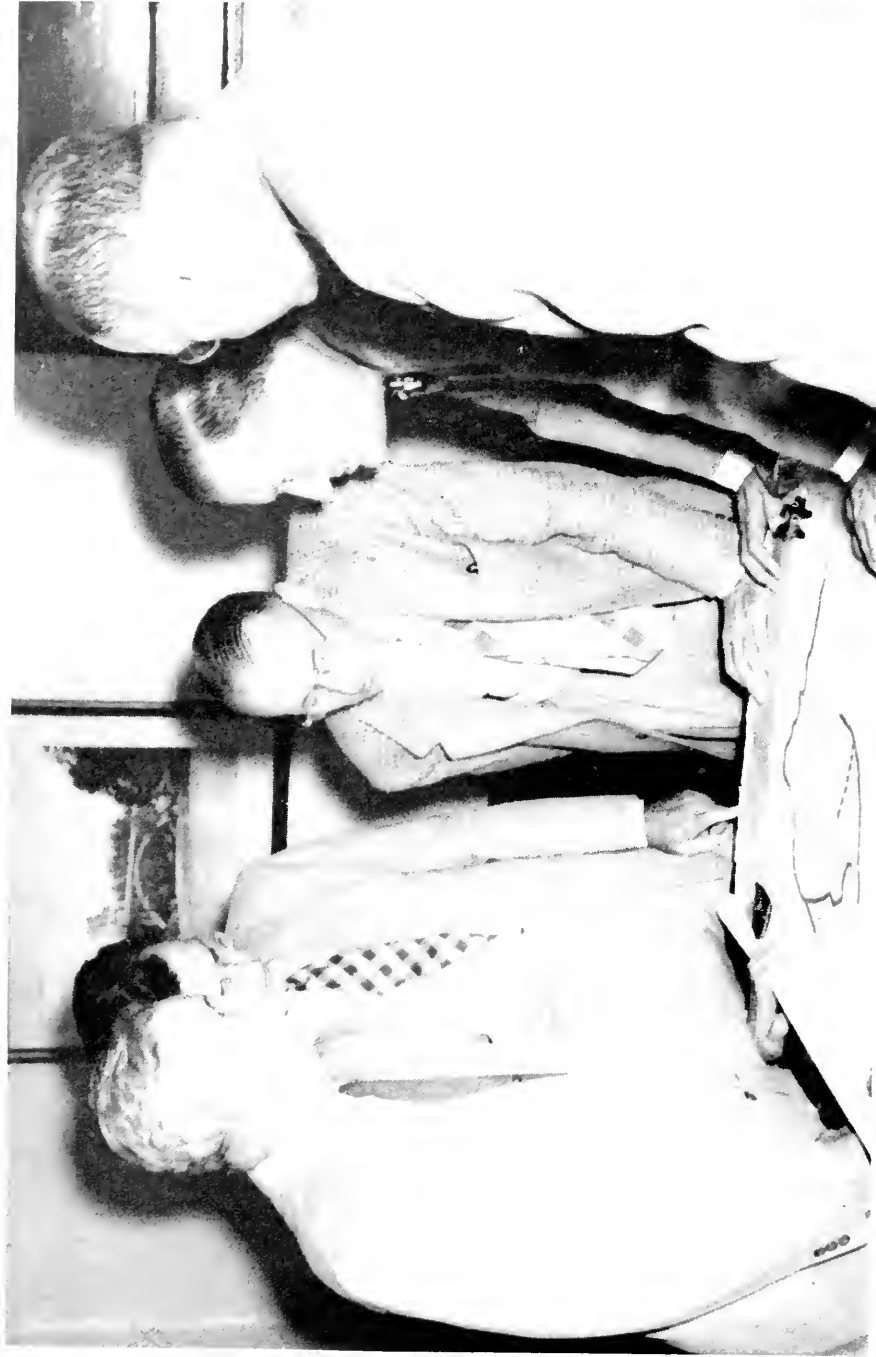


ANNAPOLIS-WASHINGTON EXPRESSWAY LOOKING WEST FROM PATUXENT RIVER



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STATE AND BALTIMORE COUNTY OFFICIALS STUDYING PROPOSED LAYOUT OF BALTIMORE  
BELTWAY WITH THE GOVERNOR

## REPORT OF THE CHIEF ENGINEER

TO THE HONORABLE CHAIRMAN AND  
MEMBERS OF THE STATE ROADS COMMISSION:

The biennial report of the Chief Engineer for the period from July 1, 1950 to and including June 30, 1952, is submitted herewith, accompanied by the reports of the Division Heads, Sub-Division Heads and District Engineers.

These reports, supported by data, tables and maps, give in detail the accomplishments of the Engineering Division of the Commission during the past two fiscal years. They give as full and complete information, concisely and briefly, as the volume of work covered permits.

In the reports of the District Engineers, the accomplishments for each of the two fiscal years is given by Districts. These reports present in tables the mileages, costs and other pertinent information by contracts, and are classified as to Primary, Widening and Resurfacing, Secondary and Miscellaneous Projects.

Gerald S. Rinehart who was appointed Assistant Chief Engineer-Construction on July 16, 1948 resigned on June 15, 1950. Mr. Cordt A. Goldeisen, who has been in the continuous service of the Commission since June, 1921 and who had qualified for the position before the Employment Commissioner, was promoted to fill the vacancy.

Due to the work load imposed upon the Division of Road Design, it was deemed advisable to establish a separate department to expedite location and survey work, consequently, the Highway Location and Survey Division was set up on December 1, 1951. This Division was placed in charge of Mr. Norman M. Pritchett, who has been in the continuous employ of the Commission since March 1, 1928 and Location Engineer since July 1, 1946.

After more than thirty years of very creditable service with the Commission, twenty-two years of which was as head of the Right-of-Way Division, which he formed in 1929, Mr. LeRoy W. Kern, Right-of-Way Engineer resigned on July 1, 1951 to accept a position with a Maryland Corporation. He was succeeded by the promotion of Mr. LeRoy C. Moser who had been associated with Mr. Kern in the Right-of-Way Division since July 16, 1930 and is particularly well qualified to fill this position.

With the ever increasing technological aspects of Highway Engineering, the need for up-to-date technical procedures was recognized early in the undertaking of the expanded road construction and reconstruction program. In fulfillment of this apparent need, Mr. Philip C. Cooper, who had been in the employ of the Commission in various positions of responsibility since 1929 and who demon-

strated more than ordinary ability towards the solution of technical problems was promoted to the newly created position of Research Engineer. In this capacity he carried on with credit, several research projects up to May 25, 1950 when he resigned to accept the position of City Engineer of Salisbury, Maryland.

On November 16, 1951 Mr. Edward L. Worthington, who had many years of experience on highway construction and maintenance both in Maryland and West Virginia and was formerly Road Commissioner of West Virginia, was employed as Research Engineer and he carried out the duties of this assignment with credit to the Commission and himself.

With the large volume of construction and reconstruction under way throughout the State, the Engineering Division made a careful study of the six engineering districts with a view to redistricting the State on a more equitable and economical basis. As a result of this engineering study, the State Roads Commission approved of dividing the State into seven rather than six districts and the change became effective July 1, 1952.

District No. 7, with headquarters at Frederick, is now comprised of Carroll, Frederick and Howard Counties. To accomplish this some changes were effected in Districts No. 3, No. 5 and No. 6. District No. 3 originally comprised Anne Arundel, Carroll, Howard and Montgomery Counties. Under the change Anne Arundel County was assigned to District No. 5 and Carroll and Howard Counties to the newly created District No. 7. Also Prince George was transferred to District No. 3 so that under the seven district arrangement District No. 3 is now comprised of the two metropolitan Counties of Montgomery and Prince George.

With the transfer of Prince George's County to District No. 3 and Anne Arundel County to District No. 5, District No. 5 now comprises Anne Arundel, Calvert, Charles and St. Mary's Counties instead of Calvert, Charles, Prince George's and St. Mary's under the original district plan.

In District No. 6 Frederick was transferred to District No. 7, so District No. 6 is now comprised of Allegany, Garrett and Washington Counties instead of Allegany, Frederick, Garrett and Washington under original scheme.

Mr. Thomas G. Mohler, formerly Assistant District Engineer-Construction, District No. 6 at Cumberland, qualified for and was promoted to District Engineer for District No. 7 at Frederick.

Following the decision of the Commission to micro-film all records, micro filming was started on June 11, 1951, under the direction of the Office Engineer. As of June 30, 1952, 118,931 Accounting Division vouchers covering the period from 1940 to 1948 inclusive, and 8,100 Right-of-Way Division folders have been filmed. The work is being performed by a crew of four men working in two-man shifts.

During fiscal years ending June 30, 1951 and June 30, 1952 a total of \$53,815,908 of construction and reconstruction was awarded, covering a total of 386.206 miles, and representing 183 contracts. This is exclusive of the Chesapeake Bay Bridge.

The following table gives a resume of the work covered by these awards:

Classification	Number of Contracts	Miles	Amount of Authorization
Primary.....	53	84.140	\$29,358,467
Widening and Resurfacing.....	70	250.989	21,033,077
Secondary.....	23	50.064	1,868,087
Miscellaneous.....	37	1.013	1,556,277
<b>TOTAL.....</b>	<b>183</b>	<b>386.206</b>	<b>\$53,815,908</b>

During the period covered by this report, there were completed 187 projects, totalling 413.776 miles having a dollar value of \$67,704,472. This total represents contracts awarded from 1948 to 1952 inclusive, as follows:

Year	Number of Contracts	Miles	Amount Authorized
1948	8	17.584	\$ 6,665,817
1949	50	125.060	36,350,232
1950	96	200.517	21,523,258
1951	31	67.715	3,118,431
1952	2	2.900	46,734
<b>TOTAL</b>	<b>187</b>	<b>413.776</b>	<b>\$67,704,472</b>

Among the highway projects completed during the last two years, some of those of greatest importance in benefit to the motoring public were:

Relocation of U. S. Route 40 over Sideling Hill, in Washington and Allegany Counties. This project, covering seven miles and costing \$2,443,744, eliminated one of the most hazardous portions of Western Maryland's major highway.

Construction, in Queen Anne's County, of approximately ten miles of divided highway with control of access between the Chesapeake Bay Bridge and Queenstown as a complete relocation of U. S. Route 50, plus an extension of the divided highway southward from Queenstown and the widening and resurfacing of sections of existing Route 50. This combination of projects has vastly improved the capacity and safety of Maryland's most heavily-traveled vacation route between the Chesapeake Bay Bridge and Ocean City.

Relocation of Maryland Route 5 as a divided highway with control of access for three miles from the District of Columbia Line to Wood's Corner, in Prince George's County. This improvement, planned as the first of several projects to provide a divided highway from the District line to U. S. Route 301, has considerably improved the congestion and safety factors in the heavily-populated and rapidly-developing area southeast of the Nation's capital.

Continuation of the Baltimore National Pike as a controlled access divided highway for an additional ten miles between West Friendship and Ridgeville. This improvement was accomplished in two sections, the first five miles being

opened to traffic in November, 1951, and the second five-mile portion in November, 1952. Contracts planned for award during the current year will extend this new highway—which constitutes a badly-needed relocation of U. S. Route 40—as far as the Monocacy River, bringing it within a mile of the eastern limits of Frederick.

Completion of ten miles of limited-access expressway between Parole and U. S. Route 301 to provide a modern, safe highway for the heavy volume of traffic that has been using the Defense Highway—U. S. Route 50 between those points. In connection with the opening of this ten-mile section to traffic it should be noted that all contracts necessary to connect this new road with the Ritchie and Revell Highways and provide a complete bypass of Annapolis, via the new Severn River Bridge, will have been awarded by the end of 1952.

Extension of Maryland Route 97—more familiarly known as Georgia Avenue—as a divided highway for five miles from Colesville Road to Glenmont, in Montgomery County. This improvement has provided long-needed relief for congestion in a heavily built-up section of suburban Washington.

Extension of U. S. Route 140 as a divided highway for seven miles from Finksburg to the southeastern edge of Westminster. This improvement has materially increased the carrying capacity and safety of this important traffic artery between Reisterstown and Westminster. Other contracts now in progress will continue this divided highway around the northern edge of Westminster to connect with both Route 140 and Maryland Route 32 beyond the town.

In addition to the foregoing list of highway sections completed and opened to traffic, many other equally important projects are in varying stages of completion, all of them so designed that they will be available for use immediately upon completion. Some of the work in that category includes:

Baltimore-Washington Expressway from the Friendship Airport Interchange to Jessup Road. This highway, with limited access features, designed to carry much of the traffic now using the existing Washington Boulevard between Baltimore and Waterloo, is expected to be ready for use in the near future.

Washington National Pike from the southeastern edge of Frederick to the vicinity of Clarksburg, in Montgomery County. This limited access divided highway constitutes a 13-mile relocation of U. S. Route 240. It, too, will be ready for opening to traffic within the next few months.

Extension of the Baltimore-Harrisburg Expressway northward as a limited access highway from Shawan Road toward Belfast Road and the provision of access from Timonium Road and Shawan Road so that traffic may use the completed portion of the Expressway lying between those two points. A similar connection will be provided at Belfast Road as soon as the new high-

way, which constitutes a relocation of the existing York Road—U. S. Route 111—reaches that point.

These are only three of the most important jobs in a long list of construction or rehabilitation projects now in progress, many of which are due for completion before the end of 1953.

Early in this biennium the Commission and the Advisory Council realized that unless a sound State Highway Program and a method for financing it were developed, that by late 1953 or early 1954, road funds would be available only to the extent of current revenues reduced by debt service requirements for State Highway Construction Bonds, and determined to formulate a sound highway construction and reconstruction program and to suggest a plan for financing it.

The Engineering staff was directed on July 15, 1951 to review the present highway system on a State-wide basis and to make recommendations looking toward the completion of a modern and adequate State Highway system.

During the past year the staff in cooperation with the members of the Commission and members of the Advisory Council have worked diligently to complete this report for a Twelve-year Road Construction and Reconstruction Program. Work on this report is progressing rapidly and it is expected to be ready for presentation to the Legislative Council this fall.

It is the desire of the Engineering Division to again emphasize the vital importance of some degree of control of access for all highways of intra-state importance and for proposed by-passes of urban areas. In the absence of a State-wide roadside control law, the control of access feature is the only means now available to the State Roads Commission to protect Maryland's investment in the highways and to prevent their early functional obsolescence, which is surely to occur as a result of uncontrolled and indiscriminate roadside development.

Some form of control of access was urged in the report entitled "Maryland Highway Needs 1941-1960", it has been stressed during construction under the expanded road construction program initiated in the Fall of 1947, and its continuation and expansion is urged in connection with the proposed "Twelve-year Construction and Reconstruction Road Program" now in the process of preparation.

Past experiences have removed all questions as to the need for control of access and if we are to profit by these diabolical experiences, history must not repeat itself. We have turned the pages back to learn the lesson and it is now incumbent upon us to turn the pages forward to profit by the teachings of the past.

While the past five years have been arduous and trying, in the accomplishments there comes to us a certain amount of satisfaction and compensation in the knowledge that our joint efforts have not been in vain.

In these accomplishments we have received excellent cooperation from the Material Producers, the Contractors, the County Commissioners of the respective counties of the State, the Officials of the Various Cities and Towns, The Public at large, and the Bureau of Public Roads. Without this splendid coordination of effort

and the full support of the Commission, the Highway Advisory Council, the Division Heads, the Sub-Division Heads, The District Engineers and their Assistants, and the Consulting Engineers engaged for the surveys and preparation of plans on a number of projects, the work under the program could not have been advanced to the extent it has been as evidenced in this report for the Fiscal Years 1951 and 1952.

To them and to all others whom we may have inadvertently overlooked we express our appreciation and gratitude.

Respectfully submitted,

WILLIAM F. CHILDS, JR.  
*Chief Engineer*



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**THE CHESAPEAKE BAY BRIDGE**

WALTER C. HOPKINS

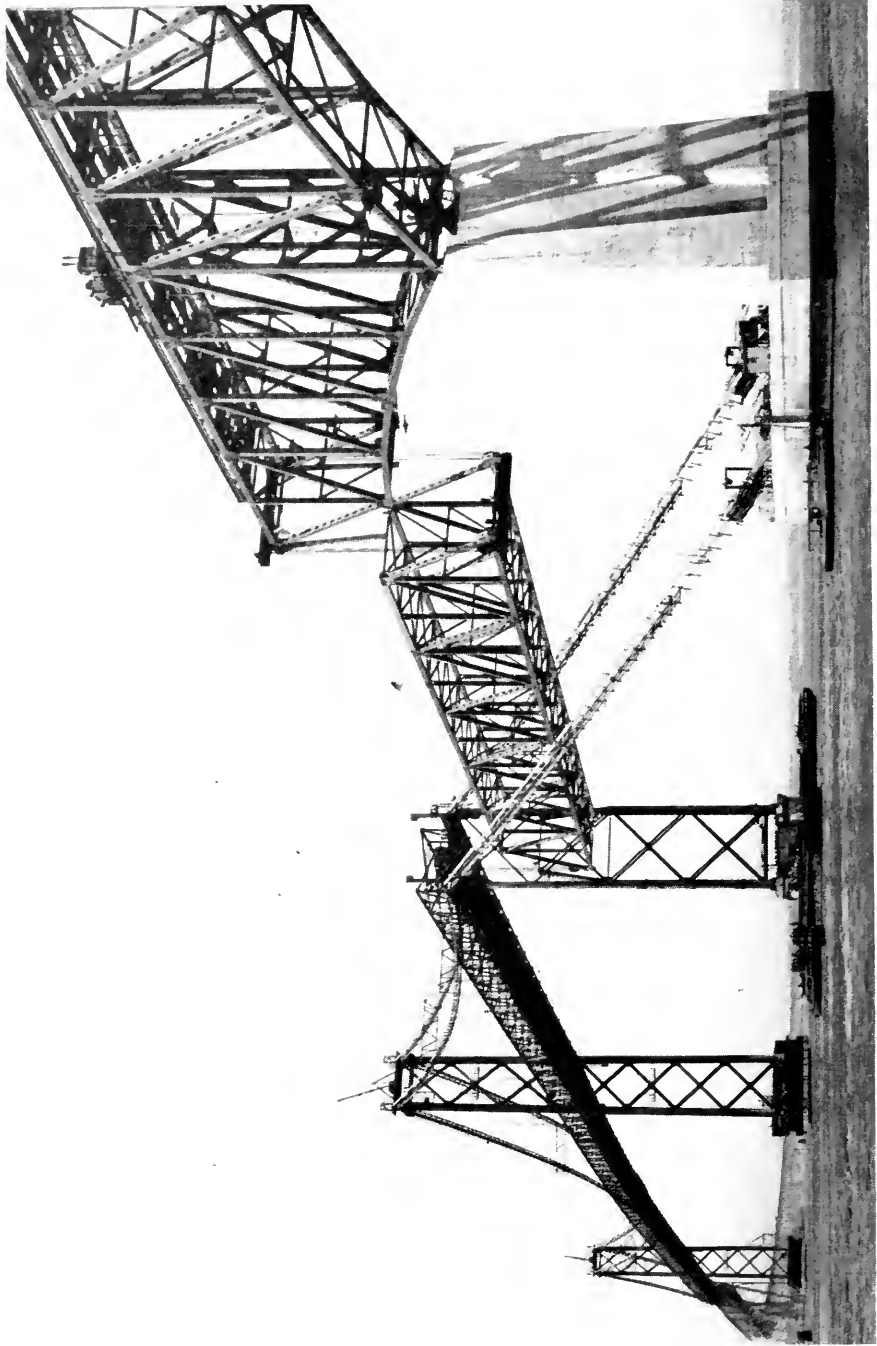
*Deputy Chief Engineer*

WILLIAM A. JORDAN

*Chief Maintenance Officer—Toll Bridges*

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RAISING THE FINAL 400 TON STEEL SPAN ON THE CHESAPEAKE BAY BRIDGE

## THE CHESAPEAKE BAY BRIDGE

On September 4, 1947, during the administration of Governor William Preston Lane, Jr., the State Roads Commission, consisting of Robert M. Reindollar, Chairman, P. Watson Webb, Member, later replaced by Joseph M. George, and Russell H. McCain, Member, signed an engineering agreement with the J. E. Greiner Company, Consulting Engineers of Baltimore, for surveys, plans, specifications and supervision of construction of the Chesapeake Bay Bridge.

The site of the bridge was determined to be from near Sandy Point at the ferry terminal on the Western Shore and Kent Island on the Eastern Shore. The first field contract was awarded November 25, 1947 for sub-surface explorations or borings to determine foundation requirements. The boring operations were plagued by cold weather, ice and wind which eventually forced a complete stoppage of work. However, work was resumed as soon as possible and the boring contract was finally completed during June, 1948. The boring contract was followed by a contract for driving and loading test piles, awarded October 6, 1948, to determine pile foundation requirements. Meanwhile, Bridge Revenue Bonds dated October 1, 1948 in the total amount of \$43,925,000 were issued and sold under the terms of a Trust Agreement of the same date to provide funds for financing the project. Before the test piles contract was completed in the Spring of 1949, contracts were awarded on January 4, 1949 for roadway-grading work on the East and West approaches.

Grading for the Roadway Approaches, the first construction work on the Chesapeake Bay Bridge Project, was started immediately following ceremonies conducted by the Governor and the State Roads Commission on January 12, 1949.

The State Roads Commission, intent on taking advantage of availability and delivery of steel foundation piles without delaying the construction schedule, meanwhile placed contract orders on January 3, 1949 with two different steel companies for furnishing and delivery of all pile requirements for all piers but not including the bents. These piles were furnished to the pier foundation contractors in sufficient time to meet their requirements, thus permitting foundation work to proceed without delay on account of material delivery.

Concurrently with these activities the Consulting Engineers were engaged in preparing complete plans and specifications for the Bridge.

The State Roads Commission received bids for construction of the complete superstructure on March 8, 1949 and for the complete substructure on March 22, 1949. The proposals received for substructure construction were rejected by the Commission on the grounds of exorbitant prices. The Commission then during July and August of 1949 received bids for substructure construction in several sections, using revised and alternate designs to obtain more favorable bid prices.

Meanwhile the Attorney General, acting for the State Roads Commission, suc-

cessfully defended an injunction suit filed in Circuit Court of Baltimore City on September 1, 1949, to prevent the construction of the Chesapeake Bay Bridge.

In the Fall of 1949, during the months of September, October and November, contracts for the sub and superstructures were awarded. The contractors, consisting of one for fabrication and delivery of steel pier forms, five for foundation and substructure work and one for the complete superstructure, immediately started to procure materials and to make preparations to commence work. One other contract, for construction of islands at each anchor pier was also awarded at this time. This work was delayed pending the completion of the two anchor piers.

The first work on the bay started November 3, 1949 with dredging to relocate the Sandy Point ferry channel, so as to provide necessary space for construction of the adjacent bridge. The dredging was included in the contract for construction of twenty-nine monotube pile bents comprising the west trestle approach and at the same time the contractor secured materials and began pile driving operations for this portion of the project.

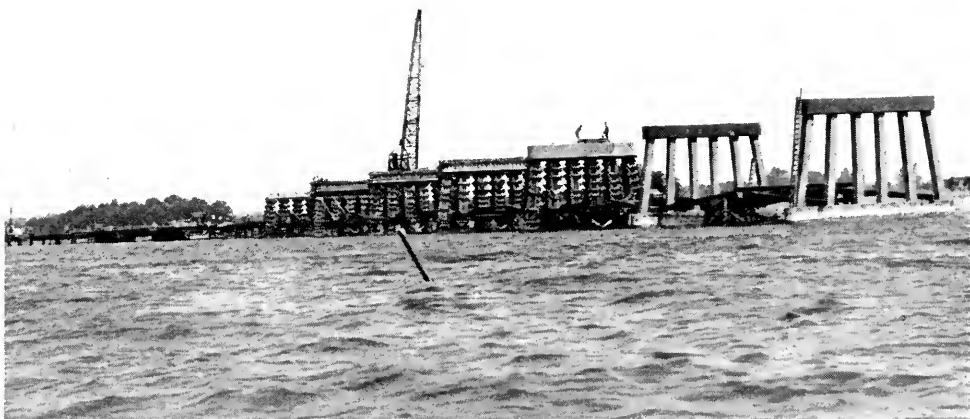
The bents in the west trestle were constructed by driving hollow steel monotube shells to foundation elevation and filling the shells with reinforced concrete to form cast-in-place piles. Each bent of piles was then capped at the water line to form a bottom strut and all piles were extended to the supporting top cap by columns. Each bent is of reinforced concrete construction. The piles were driven progressively from the shore by means of a trestle and the bents were formed and poured progressively from Bent No. 29 shoreward. Floating equipment was not used on this portion of the substructure.

Preliminary to pier construction, a line of survey dolphins, consisting of pile clusters capped with wooden platforms, were placed across the bay opposite each pier on a line parallel to, and two hundred feet from the centerline of the bridge, except for the cofferdams piers nearest each shore, for which the survey platforms were placed in between the piers and on the centerline of the bridge, located to control the location of several piers from a single platform. The survey platforms were located by triangulation from shore baselines. Exact pier location was established by long span direct measurements with the use of suspended music wire which had been calibrated before each measurement from towers and monuments established on a shore measuring line. The pier work was in turn established and controlled by direct angular and linear measurement from the survey platforms. As piers progressed to the out-of-water stage the survey control operations were transferred to the piers. All completed pier work and establishment of anchor bolt locations were controlled and established by direct angular and long span measurements, using surveying instruments and calibrated tapes for short measurements, and music wire for long measurements. Vertical control was carried across the bay using the survey platforms and precise leveling instruments. The construction of the bridge from the beginning to the end was under constant check for line and grade.

The pier contractors during November 1949 began dredging work preliminary to

pier construction, and assembled materials and a flotilla of heavy construction equipment to begin work early in the Spring of 1950. By Summer of 1950 there was assembled on the bay a great array of floating construction equipment consisting of dredges, floating derricks, cranes, pile drivers, barges, scows, floating concrete plants, tugs and launches.

The piers are of two types, namely; the open cofferdam type pier and the Potomac Pier or permanent form type. Piers are numbered from 1 to 57 with Pier 1 following Bent 29 about 1,842 feet from the west abutment, and progressing eastward to



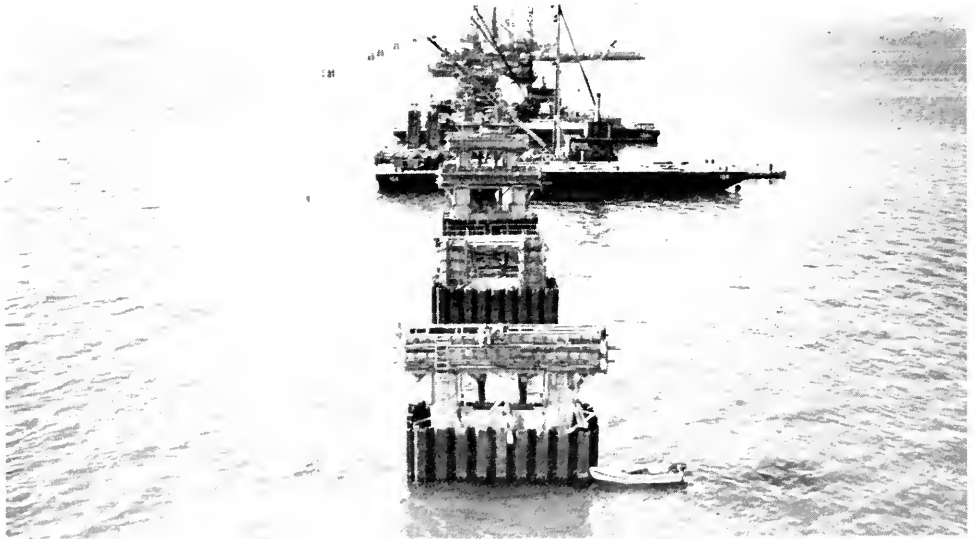
CONSTRUCTION OF WEST BENTS—CHESAPEAKE BAY BRIDGE

Pier 57, which is about 2,272 feet from the east abutment. The substructure between Pier 57 and the east abutment consists of Bents numbered 30 to 65 inclusive. Between the east abutment and the east shore line a filled causeway 1,756 feet in length was constructed.

Piers 1 to 10, inclusive, and 41 to 57, inclusive, were constructed by the open cofferdam method and are located in water varying in depth from 15 to 25 feet. These piers were constructed by first building a cofferdam enclosure made up of driven steel sheet piles, then excavating to the required pier bottom elevation within the cofferdam, driving steel H-piles to support the pier, pouring a seal of tremie concrete, pumping out the cofferdam, placing pier forms, setting the reinforcing steel, and then pouring concrete by conventional methods. After the concrete had hardened the sheet piling was then extracted. These piers are encased with metal protection plates at the waterline to prevent damage from ice and tide.

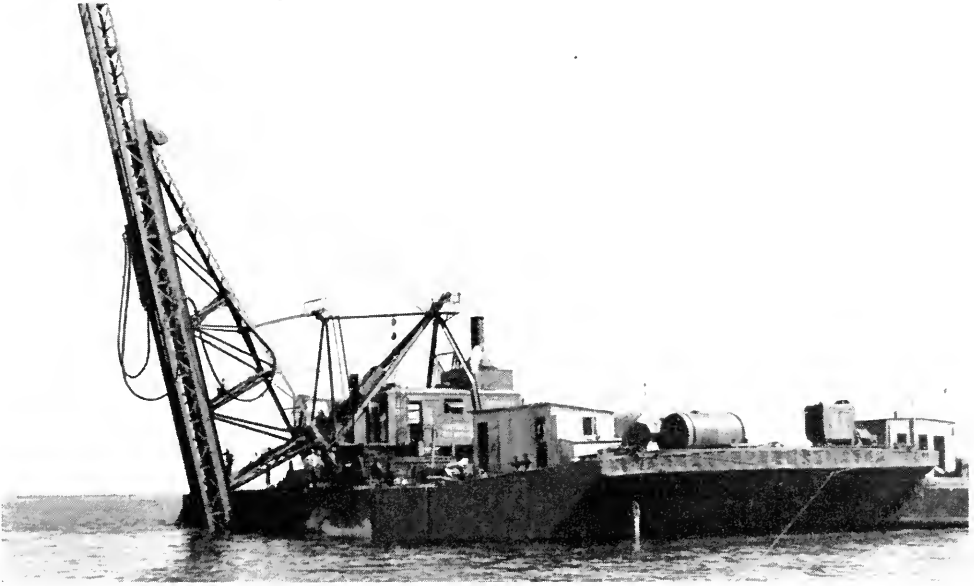


VIEW LOOKING WEST SHOWING PERMANENT STEEL FORM PIERS, COFFER DAM PIERS, WEST BENTS AND SURVEY PLATFORMS—CHESAPEAKE BAY BRIDGE



VIEW LOOKING WEST SHOWING EAST COFFER DAM PIERS CHESAPEAKE BAY BRIDGE

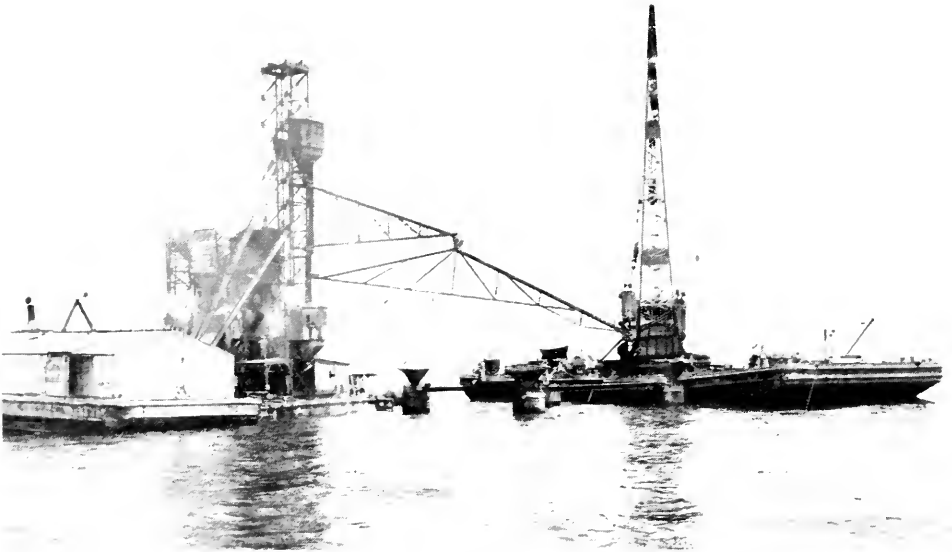
Piers 11 to 40, inclusive, with the exception of the suspension span anchor piers (Nos. 23 and 28) were constructed as permanent steel form type piers. These piers were constructed by first excavating below the bay bottom, then driving temporary piles to support a wooden platform at the pier bottom, which was ten feet below the bay bottom. The platforms were prefabricated for use as bottom forms for the piers, with openings provided in the platforms for each permanent steel pile. They were lowered and secured to temporary piles and permanent steel H-piles were then driven through the platform openings to support the piers.



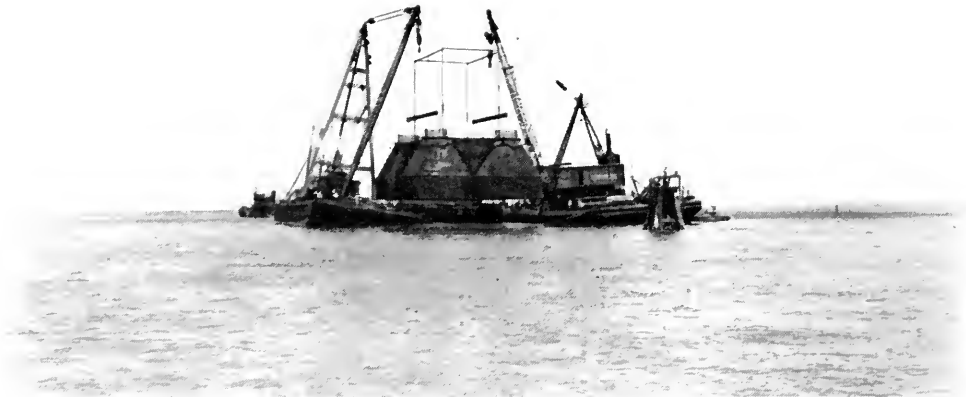
DRIVING UNDERWATER BATTER PILES FOR PERMANENT STEEL FORM PIER—  
CHESAPEAKE BAY BRIDGE

Special underwater steam pile driving hammers were required for this work. The piles, driven under water were on radial lines and were battered, requiring the development of special methods to locate the piles correctly. After the piles were driven, permanent steel forms which were prefabricated with pier reinforcing steel incorporated were lowered to the platforms by floating derricks. The piers were then filled with tremie concrete to within eight feet of the water surface by means of tremie tubes. The above-water portions of the piers were formed and poured by conventional concrete forming and pouring methods. This Potomac type of pier is located in water depths varying from 25 to 88 feet. Excavated areas not occupied by the piers were restored to original bay bottom by back filling.

Piers 23 and 28 are the cable anchorage piers and were constructed by open cofferdam methods. The water depth at Pier 23 is about forty-four feet and that at Pier 28 about fifty-seven feet.



POURING TREMIE CONCRETE IN PERMANENT STEEL FORM PIERS—CHESAPEAKE BAY BRIDGE



SETTING PERMANENT STEEL FORM FOR PIER 25—CHESAPEAKE BAY BRIDGE

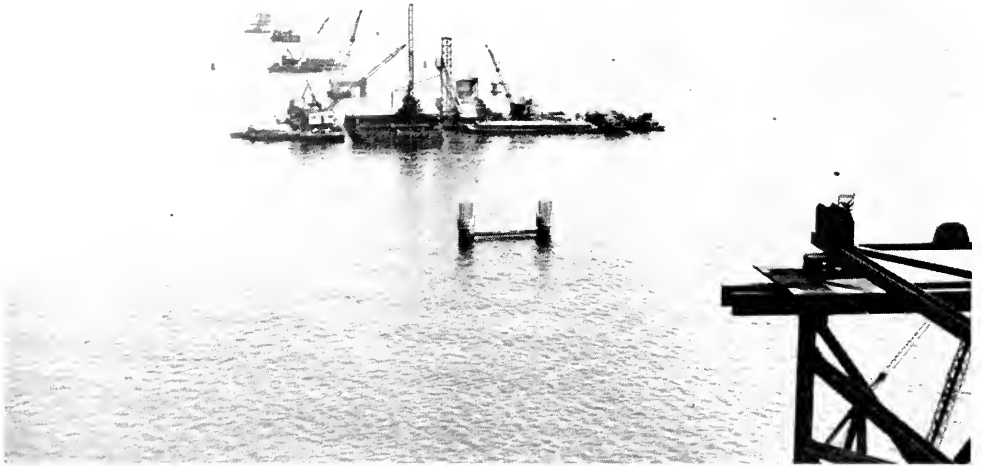


To provide a firm base for the islands, firm bottom for cofferdam construction and pile support for the anchorages, the silt forming the bay bottom was dredged out to firm material and the holes back filled with sand. At Pier 28 the depth of silt was so great that the bottom preparation had to be extended to include Pier 27 also, so that the islands to be constructed at Pier 28 could not displace the silty material and possibly with the material, the piles supporting Pier 27. The back fill sand was dredged from a borrow area located in the bay south of the bridge.

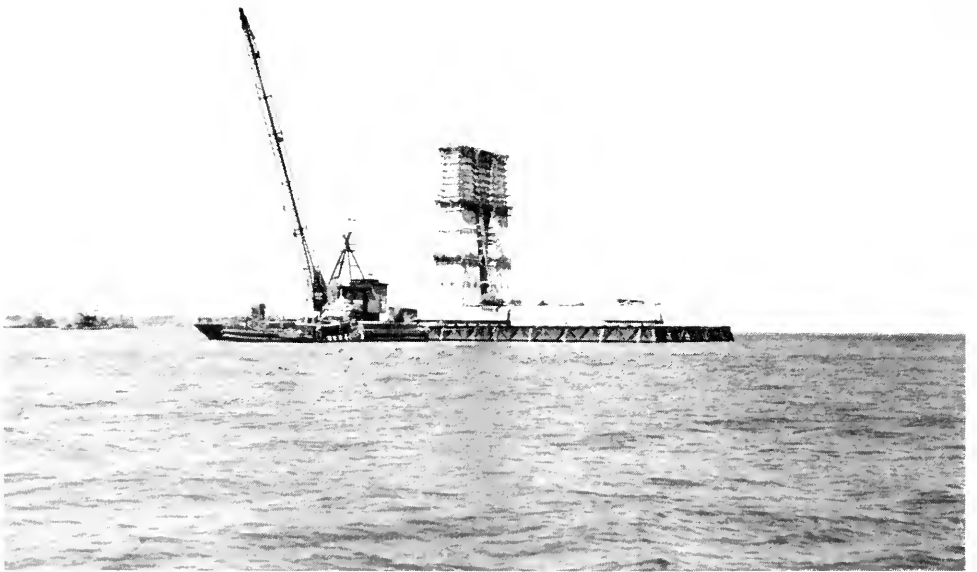
After completing the fill to the vicinity of the bay bottom, a timber frame supported by timber piles was constructed to rest the steel cofferdam template and framing on. Master piling was driven around the template framing. The master piling consisted of 36 inch 170 pound W F Beams with sheet pile strips for interlock welded to their flanges. Since these piles supported rails on which the equipment operated they had to be driven to certain bearing capacity and good alignment and the sheet piling could not be driven progressively with the master piles because of the uncertainty that friction in the interlocks would have given to master pile load capacity and the effect of tide on the cofferdam alignment. The spaces between the master piling were later filled with sheet piling necessitating 76 closures, so that master piling had to be very accurately set. A whirley type pile driver was mounted on the cofferdam to move back and forth across the width of the cofferdam and on rails longitudinally with the cofferdam. The anchorage cofferdam piers are 78 x 149 feet. Six hundred piles were driven for each anchorage pier. Thirty-eight of these piles are plumb and 562 battered 1 to 4. Approximately two thirds of the batter piles are inclined against the pull of the cable. The pile layout was so designed as to make the elastic center of the pile group practically coincident with the center of gravity of the Dead Load. When the piles were all driven, the cofferdams were sealed by tremie poured concrete, after which the cofferdams were pumped out and the piers constructed by forming and pouring in the open. Above the tremie seal and the pier base, the piers are cellular constructed. As the pier construction progressed upward in lifts, the steel anchorages for the bridge suspension cables were set and embedded in the concrete piers. The anchorage piers also support, by means of superimposed concrete shafts, portions of the cantilever trusses leading to the suspension spans.

East trestle approach Bents 30 to 65 inclusive, carrying the substructure from Pier 57 to the east abutment were constructed by driving two clusters of steel H-bearing piles for each bent. The pile clusters were capped at the water line by footings and a reinforced concrete strut, upon which was constructed a framed reinforced concrete bent consisting of two columns and a cap for the superstructure bearing.

By the end of the year 1950, the substructure work was about seventy per cent complete. However, construction progress during November was adversely affected by two severe storms occurring late in the month. The first lasted for a two day period, November 20th and 21st, when winds reached velocities reported at 50 miles per hour. The second and more severe storm began the night of November 24th



COFFER DAM FOR ANCHORAGE PIER—CHESAPEAKE BAY BRIDGE



ANCHORAGE PIER CONSTRUCTION—CHESAPEAKE BAY BRIDGE

and lasted until November 26th. During this period winds with reported velocities up to 70 miles per hour occurred in conjunction with extremely high tides.

The Contractors suffered equipment damage, loss of construction materials and suffered loss of time both during the storm and afterward, since it was necessary to effect repairs, move equipment back to the site from safe anchorages, and to round up barges which had broken loose.

The damages suffered by the partially completed substructure consisted of the total loss of Bent 26, lesser damage to other bents, extensive damage to permanent steel forms in place for several of the deep water piers, but not then filled with concrete, and considerable damage to the uncompleted filled causeway between the east abutment and the east short line.

During the Fall of 1950, the superstructure Contractor began shipments of fabricated steel to Baltimore for storage, and by the end of the year 1950 had begun superstructure erection operations at the site.

The steel superstructure was erected mostly by a flotation method. Superstructure erection was in general according to this brief description of procedure.

A falsework erection dock supported by steel bearing piles was erected parallel and adjacent to the location of the truss span between Piers 20 and 21. The three-hundred foot simple deck truss span between Piers 20 and 21, which is the highest one of this type, was erected on the erection dock. Four specially constructed steel barges with bilge water control were partially submerged and placed under the truss. The barges were then pumped out, thereby raising the truss from the falsework. By use of tugs and anchor cables the barges were maneuvered to position to place the truss in its exact position over its piers. The barges were then partially submerged by opening sea cocks to lower the truss over the anchor bolts already installed in the top of the piers. After the first truss span was floated into position, traveller cranes were erected on its top. Succeeding spans were assembled on the erection dock by the traveller cranes using shop fabricated members stored on scows alongside. Each succeeding span thus erected was floated into its position on the piers in manner similar to that employed to position the span between Piers 20 and 21.

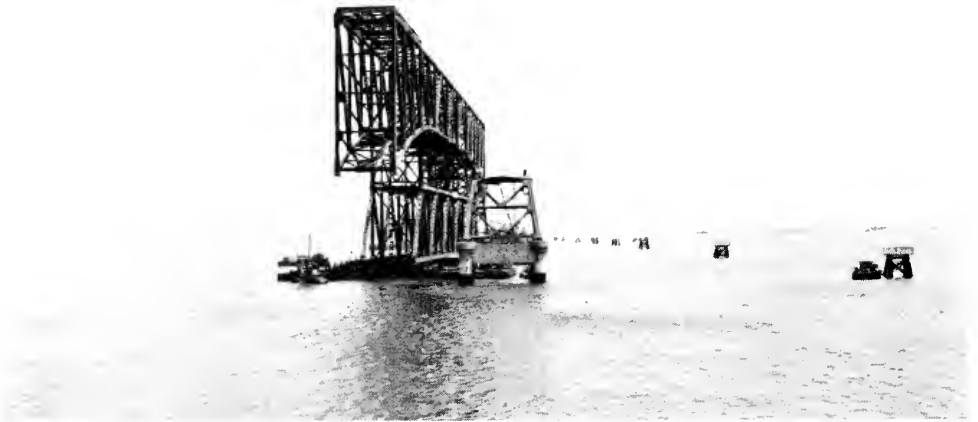
Simultaneous with the flotation erection, beam spans, 100-foot girder spans, cantilever and suspended sections of cantilever trusses, truss towers, and suspension bridge towers were being erected by floating derrick.

The main towers of the suspension bridge are 354 feet high. These towers were erected in prefabricated sections which were set to the extent of the reach of the floating derrick or about 125 feet high. Devices called Chicago booms were utilized to carry the tower to the completed height. These booms worked in pairs, one on each leg of the tower, to raise the tower sections and each other as the height increased.

The suspension bridge towers, including the side towers, were tied together with a net-work of temporary storm guy cables extending from anchorage Pier 23 to anchorage Pier 28. Temporary suspension foot bridges were then erected under the



CONSTRUCTION OF EAST BENTS—CHESAPEAKE BAY BRIDGE



TRUSS ERECTION BY FLOTATION—CHESAPEAKE BAY BRIDGE

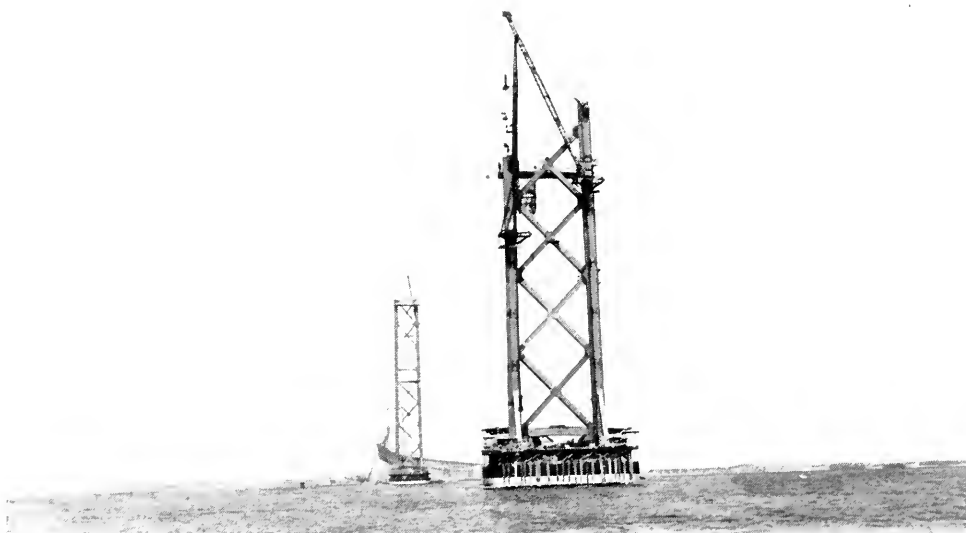
location of both bridge cables from anchorage to anchorage, together with endless tramway cables erected over the location of the bridge cables. The bridge cables are made up of twisted strands, each strand being pulled from reels at anchorage Pier 23 to anchorage Pier 28. The prestressed and measured premarked strands were pulled alternately for one cable and then the other, the cable pulling attachment going over loaded on one side and coming back empty on the other side. All strand reels, winches and machinery were located at Pier 23. The cable strands were pulled in place during the day and adjusted during the night to secure more constant temperature during adjustment. Adjustments were made by shim blocks at the socket connections to the anchorages. Amount of required adjustments were determined by coinciding length marks with tower saddles. The strands were adjusted for lay by men working from the foot bridge. After the strands were erected and adjusted, extruded aluminum fillers were placed between the strands to round out the cable which was then bound temporarily, and the bridge cable bands were fastened at premarked locations for attachment of suspender cables, which drop vertically to support the stiffening trusses.

Stiffening trusses for the suspension spans which had been prefabricated in sections in Baltimore and floated to the site on barges, were then lifted into position by means of lifting cables suspended from the bridge cables, the power being carried from the tower piers, up the towers and over the bridge cables to the point of suspension.

After the erection of the stiffening trusses, the cables were wrapped with No. 9 galvanized steel wire by machines which wound the wrapping wire circumferentially and tightly. The wire wrapping and a protective coating paste of zinc chromate applied immediately before wrapping form a weather-proof protection cover and round the cable out to approximately fourteen inches in diameter.

Returning to the substructure; late in December 1950, the lower section of the permanent steel form for Pier 29 failed while the Contractor was engaged in the operation of pouring tremie concrete therein. The upper section of the form was removed to prevent it from becoming damaged. Underwater inspection indicated that extensive repairs were necessary. Because of the failure of this form, caused by the breaking of welds and subsequent separating of the diaphragm from the cylinders, a complete reinspection of the forms for Piers 30 and 31 was instituted in order to determine the adequacy of their welds. In order to effect repairs to the damaged portion of Pier 29 it was necessary to have the fabricating ship yard build a repair section and in addition, extensive underwater work on the pier was necessary. Subsequent investigations and developments brought about by form failure resulted in the return of Pier forms 30, 31 and 36 and portions of Pier forms 29, 37 and 38 to the fabricating ship yard for inspection and repairs. This caused considerable delay and expense.

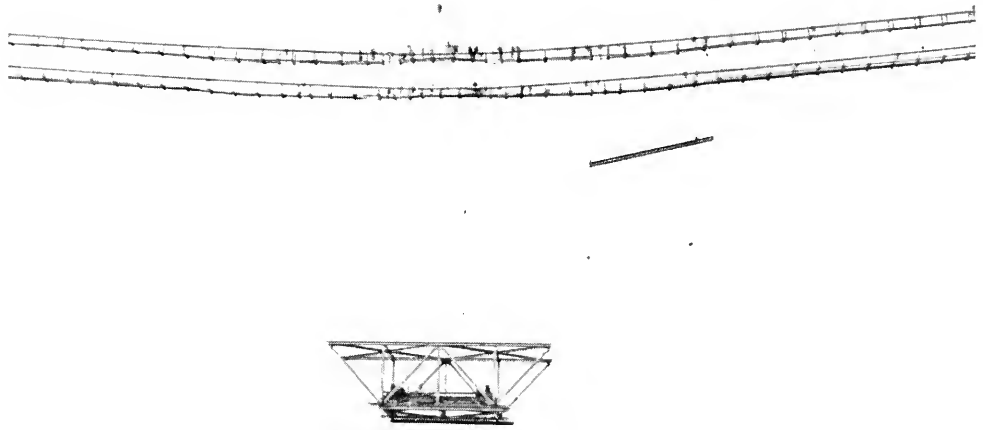
During the night of December 20, 1951, a derrick boat belonging to one of the Contractors broke loose during a southeast storm and was blown from its mooring



ERECTION OF SUSPENSION BRIDGE TOWERS—CHESAPEAKE BAY BRIDGE



ERECTING OF SUSPENSION BRIDGE TRUSSES—CHESAPEAKE BAY BRIDGE



ERECTION OF SUSPENSION BRIDGE TRUSSES LIFTING A STIFFENING TRUSS SECTION INTO POSITION—CHESAPEAKE BAY BRIDGE



MAIN SPAN SUSPENSION BRIDGE—CHESAPEAKE BAY BRIDGE

and struck several of the concrete bents, causing severe damage to portions of Bents 13 and 16.

The erection of Span T-15 (spanning Piers 28-29) was completed at the erection dock and on December 26, 1951, the Contractor attempted to float this span into position. The operation began about noon, at which time the wind velocity was negligible. Shortly thereafter, the velocity increased suddenly to between 20 and 35 miles per hour. The tugs experienced difficulties in handling the tow and it was carried beyond the planned position to the east near Pier 36. Subsequently, one stern line parted; and the one tug remaining was unable to maneuver, with the result that the tow pushed one tug against Pier 36, then swung to the southeast striking truss T-23, already in place between Piers 36-37. The tow then rebounded to the west and passed between Piers 35 and 36; both tugs were then free and the tow floated to the southeast and grounded on the eastern shore about midway between the bridge site and Matapeake Ferry. Several members of erected Span T-23 were damaged and were repaired or replaced. The flotation unit for Span T-15, consisting of that truss and the truss for Span T-14, which was being used as false work were extensively damaged. The unit was reloaded, returned to the erection dock, dismantled and rebuilt, using new members where required.

During April 1951 work was begun on the concrete roadway deck slab, beginning at the west abutment and progressing eastward. A large portion of the bridge deck bottom was formed with beam section metal forms which were moved ahead as the deck progressed forward. Other slab forms were of plywood. After reinforcing steel was placed for the deck a timber runway was constructed from the abutment to the end of the prepared concrete pour. Concrete was brought to the job in mixer trucks that loaded into power buggies on the walkway. The power buggies transported the concrete over the runway to the pouring point. The runway was removed and the slab finished as the pour progressed backward. As the previously poured slabs gained required strength the mixer trucks were driven out over the completed concrete slab. Pouring operations thus progressed outward toward the center of the bay. During August 1951, pouring of the concrete deck westward from the east abutment was begun, the deck work on the west side of the channel continuing.

Curb and parapet sections were precast and trucked to the bridge. This operation began during July 1951. The precast sections were set to grade and alignment and fastened in by poured-in-place posts at intervals of about six feet. The concrete posts support malleable cast iron posts carrying a double pipe railing. Deck slab pouring operations ceased in November 1951 but were resumed during April 1952. Curb and parapet work continued through the winter.

The deck slabs over the beam spans and the curb and parapet throughout was poured of concrete using regular aggregate. The deck slabs over the girder, truss and suspension spans were poured of concrete using lightweight aggregates. Emulsified asphalt curing was used on the entire bridge slab. The bridge roadway was finished off with asphaltic concrete Specification "B" 2 inches thick placed over the concrete slab by mechanical spreader. The asphaltic wearing surface was mixed



in Baltimore and trucked to the site. The concrete deck work and asphaltic surface were completed the latter part of July 1952. The roadway deck contains a three foot open grid wind slot in the center of each driving lane running longitudinally throughout the suspension spans.

The underside of the concrete bridge deck slab was dampproofed by application of two absorptive tar prime coats and one tar seal coat. All dampproofing applications were applied by pneumatic spray guns. The bulk of this work was done during the Summer of 1952 beginning about the first of April and completed by the end of September. The tar seal required heating only during cool weather. Spray workability during cold weather was also obtained by diluting the seal coat with the prime coat. Also where excessive penetration occurred seal coat was added to the absorptive coat. The purpose of the dampproofing is to seal the concrete deck slab against corrosive vapors prevalent over the bay.

The steel superstructure received the following four-coat paint applications:

*Shop Coat:* Red lead-iron oxide weighing  $23\frac{1}{2}$  pounds per gallon.

*First Field Coat:* Red lead-iron oxide tinted brown, weighing 14 pounds per gallon.

*Second Field Coat:* Aluminum tinted blue weighing 8 pounds per gallon.

*Third Field and Final Coat:* Aluminum weighing  $8\frac{1}{2}$  pounds per gallon.

The shop coat was brushed on at the fabricating shops before shipment. The fabricated material was shipped to Baltimore by rail where it was stored for shipment by water to the bridge site as required. While in storage at Baltimore most of the fabricated material received the first field coat by brush application. The steel was thus erected after receiving two coats of paint on all surfaces except field connections which were bare except for a clear coating of rust preventive, these connections receiving the full four coats after erection. Extensive cleaning and spot painting beginning with the shop coat was also required after erection because of failures in the shop coat due to mill scale and other causes. The Second Field Coat of Blued Aluminum was begun by brush application with portions of this coat being completed by spray application. Practically all of the Third Field and Final Coat of Aluminum was applied by spray application. Spray application of the Aluminum Coats increased production over that of brush methods and in addition, produced a more uniform covering and appearance. Exceptions to the general procedure outlined above included power wire brushing of practically all of the pipe railing after erection followed by brush application of the full four coats and a brush coat application of zinc chromate paint on all welds to neutralize the weld before application of the regular four coats of paint. Also the galvanized suspender ropes and the galvanized main cable wrapping wire received brush coats of zinc oxide primer followed by the two regular coats of aluminum.

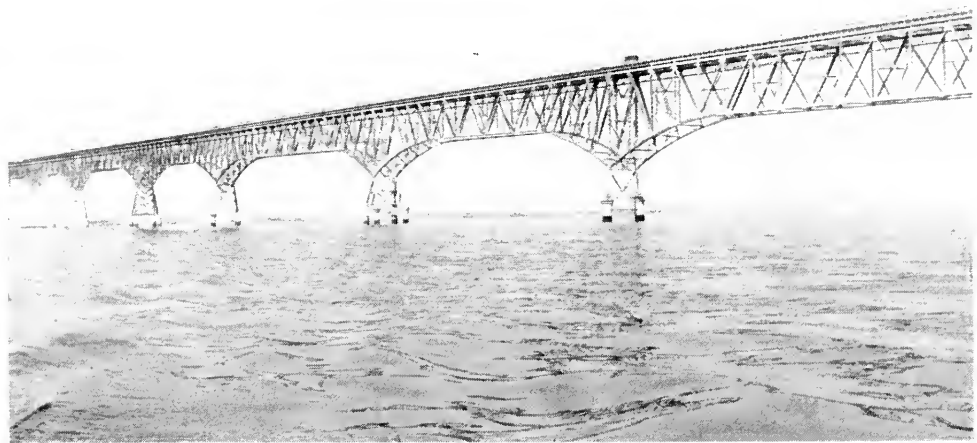
When the bridge was opened to traffic, painting was substantially completed between the west abutment and the suspension span, as well as all other trusses and towers above the roadway and the east beam and girder spans. Painting remaining to be completed after the bridge was opened to traffic included a large portion of the bridge railings, insides of towers, the last two coats for the below-deck

portion of the suspension bridge stiffening trusses, and the last two coats of the deck cantilever trusses and the underside of the through cantilever trusses. All painting was completed by the end of November 1952.

The contract for construction of Islands at Piers 23 and 28 was awarded during November 1949. However, since it was necessary to complete the piers and erect the superstructure over the location, the island work did not commence until the latter part of June 1952. The Specifications indicated that sand fill of suitable type for construction of the islands was present and available from borrow areas in the bay in close proximity to the bridge, and stipulated that the contractor would obtain the necessary dredging permit from the U. S. Corps of Engineers while the Engineer would obtain a permit for dredging in nearby borrow areas from the State Department of Tidewater Fisheries. When this State Department would not grant such a permit because of the presence of oyster beds, the Engineer and the Contractor surveyed the bay to locate suitable material in borrow areas complying with requirements of both the Corps of Engineers and the Department of Tidewater Fisheries. This resulted in obtaining the sand fill material from a borrow area located in the vicinity of Seven Foot Knoll off Bodkin Point approximately 10 miles up the bay from the bridge site.

The proposed completed Islands, one at anchorage Pier 23 and one at anchorage Pier 28, are 138 feet long measured parallel to the centerline of the bridge extending 108 feet channelward from the face of the pier and 150 feet wide transversally to the centerline of the bridge. These dimensions are at the top of each Island ten feet above the water. The sides slope 2 to 1 from the top to the bay bottom. The Islands are designed to protect the back stays of the bridge cables against damage by ships off course, and conversely to protect ships against damage by the cable, by causing the vessels to be grounded on the island slopes before contact with the cables. The contract generally called for construction in 10 foot lifts by means of dumped stone rings or dykes around the perimeter filled inside with sand. The stone sizes vary from fines to 2000 pound stones with the sand being as coarse as obtainable in the bay, but excluding material passing a No. 80 sieve. Two lifts of approximate seven foot heights were thus completed at Pier 23 and one at Pier 28. Experience gained from construction thus far indicated that the dumped stone could not be confined to the desired cross section, the resulting slope varying from 2 to 1 to 10 to 1, thus being considerably flatter than required. Construction methods were then changed by using slag placed by clam shell bucket instead of dumped stone to form the dykes to retain the sand. Bank run slag is used varying from fines to 500 pound pieces as an average. The advantages of the placed slag over the dumped stone thus far gained is accurate placement, the slope holding to very nearly the 2 to 1 slope desired. In addition, the slag is of lesser density than the stone which had a density exceeding that estimated, thereby contributing to quantity overrun. Placed slag dykes about seven feet high filled in between with sand fill are expected to continue up to elevation -15.0. From elevation -15.0 to the top of the Island at elevation +10.0 the dykes are expected to be constructed as planned by using clam shell

bucket placed stone in pieces varying in weight from 5 pounds to 4000 pounds. The tops of the Islands are to be capped with a covering of crushed stone or slag varying in size from 2 inch to 8 inch pieces over the sand filled area. The stone as well as the slag is trucked to a loading dock in Baltimore from whence it is transported to the site by dump bottom scows for dumped stone and flat top barges for placed slag. The Islands, 43 per cent complete October 1952, are expected to be completed by October 1953.



PAINTING PROGRESS ON CANTILEVER TRUSSES EAST OF MAIN SPAN—CHESAPEAKE BAY BRIDGE

Following the storms of November 1950 during which Bent 26 was destroyed, the State Roads Commission retained specialized foundation Consulting Engineers to review the design and construction of the substructure and the filled causeway. In conformity with recommendations from these Consulting Engineers, the State Roads Commission awarded a contract which included stone rip-rap protection around Bents 13 to 29, inclusive. The water depth in this area varies from  $4\frac{1}{2}$  to 15 feet. The protection consists of a core around each bent of washed gravel of sizes  $\frac{1}{2}$  to  $3\frac{1}{2}$  inches, the gravel core being enveloped in a 3 foot minimum thickness stone protection consisting of stones varying in weight from fines to 2000 pounds. The protection for each bent extends two feet above the water, the gravel core slopes being  $1\frac{1}{2}$  to 1 and the stone envelope slopes being 1 to 1. This work was begun in the Fall of 1951 and completed in September 1952.

As previously related, contracts were awarded in January 1949 for grading the

roadway approaches on both the Eastern and Western shores. This provided access for the bridge contractors to the site, and also provided time for settlement of certain fills over marshes traversed by the west approach. Three such marsh areas in lengths varying from 250 feet to 850 feet were crossed. Borings in these marsh areas revealed organic matter and silt to depths as low as elevation  $-45.0$ . Construction to stabilize fill settlement in these areas consisted of muck excavation to elevation  $-4.0$ , and end dumping with the resultant mud waves ahead and on the sides being mechanically removed and cast clear. As the fill approached a static condition it was rolled with heavy machinery and thus brought to required grades. In addition, overburden fills varying in depths from 2 to 5 feet were superimposed.



STONE PROTECTION AROUND WEST BENTS—CHESAPEAKE BAY BRIDGE

The fills were thus completed in May 1949 and left until the paving contract started in the Fall of 1951. The West Roadway Approach paving, together with the grading in the area occupied by the existing ferry road was done under separate contract beginning in the Fall of 1951 and finishing during the Summer of 1952. The West Approach constructed under the Chesapeake Bay Bridge Project is 1.1 miles long, being a divided highway except for 0.2 mile of 24 foot highway between the Toll Plaza and the west abutment.

During the Summer of 1949 the East Roadway Approach Grading Contract was completed. This extended from the bay to a point just west of Chester, Md. and included the construction of one 64-foot span bridge over Cox Creek to carry one 24 foot lane of a graded divided highway. A separate contract was awarded August 1951 for construction of the second bridge over Cox Creek required for the other

roadway of divided highway. Also awarded at that time was a contract for paving the East Approach Roadway from the east abutment of the Chesapeake Bay Bridge to the end of the previously graded East Approach and including grading and paving of connections to the existing highway (Old U. S. Route 50) at Stevensville. This provides one mile of 24 foot roadway extending from the east abutment to the Stevensville intersection and 1.6 miles of divided highway extending from the Stevensville intersection to the end of the Chesapeake Bay Bridge Project. All right-of-way for both the East and West Roadway approaches was acquired for a controlled access arterial Highway.

The east abutment of the Chesapeake Bay Bridge is located in the bay one third mile off-shore. This one third mile of shallow water having a maximum depth of  $5\frac{1}{2}$  feet occurring at the abutment end, is spanned by a filled causeway which during construction was subjected to considerable publicity and criticism, but finished complete as a very substantially constructed portion of the Chesapeake Bay Bridge Project. A contract was awarded in November 1949 for a causeway constructed of A-3 fill material protected at the water line by a loose stone wall projecting approximately three feet above the water with a concrete slab planned to extend up the slope of the fill. The fill material was obtained from borrow pits located on land adjacent to the site and trucked to the fill. The fill was placed progressively outward from shore by end dumping to a height of four feet above the water, the stone protection being mechanically placed on each side 35 feet ahead of filling to prevent tide washing. The stone protection consisted of quarried rock in sizes ranging from fines to 1200 pound pieces and was placed on 2 to 1 slopes on the water side to a finished elevation of +2.6. Material saturated by bay water was bladed forward to prevent trapped water. Between the plane of the end dumping at elevation +4.0 and the top of the fill elevation 20.0 at the abutment and 14.0 at the shoreline, the fill was placed in layers and sheepfoot rolled to compaction densities of 95 to 110. The fill slopes were dressed to a 3 to 1 slope and the concrete slope paving eliminated from the contract which was completed in June 1950.

The incompleeted causeway was subject to some progressive erosion until November 1950 when storms caused erosion to such an extent to revise the planned method of slope protection. A contract known as Rehabilitation of East Causeway was awarded during August 1951 for completion of the Causeway. Work under this contract began with driving a steel sheet pile cut-off wall located 18 inches from the inside toe of existing stone protection, circumventing the perimeter of the Causeway Fill, the sheet piling being driven  $2\frac{1}{2}$  feet into the original bay bottom and extending to cut-off elevation varying from elevation +6.0 to +8.0. When the contract was begun the original stone protection was substantially covered by eroded Causeway fill material. This eroded material was excavated between the cut-off wall and the existing stone protection to a level plane equal in elevation to the then present elevation of sand material on the bayward side of the stone protection. The fill material was removed from the interstices of the stone and the excavated area filled with concrete, depths averaging about four feet. This mass concrete, anchored

between the stone and cut-off wall was then continued to the top of the cut-off wall on a 2 to 1 slope. The eroded fill behind the cut-off wall was restored and covered with 6 inch reinforced concrete slab extending to elevation +12.0, above which the slope is protected by sod. This work was completed during August 1952.

A contract was awarded August 1951 for Navigation and Approach Lighting. Under the contract 24 mercury vapor street lights were installed in the Toll Plaza and Administration Building area. The Navigation lighting and fog signals installed on the bridge conform to U. S. Coast Guard Requirements, and the completed installation has been inspected and approved by that agency. The navigation lighting consists of 98 lights beginning at Pier 1 and ending at Pier 41. The general lighting



COMPLETED EAST CAUSEWAY—CHESAPEAKE BAY BRIDGE

pattern consists of a navigation light on each end of each pier, and range lights through the channel spans. Flashing red aerial beacons are installed atop the two main towers on either side of the main sailing course. Fog signals at the main sailing span are four oscillator type fog horns working in pairs, audible three miles, and those at the secondary eastern channel are two 1000 pound bells working singly. There is no roadway lighting on the bridge. The roadway is defined by delineator reflectors. All controls for navigation lighting are located in the Administration Building, together with an emergency generator plant capable of producing a supply of electric current sufficient to operate the navigation lighting, fog signals and the toll collection equipment.

The Administration Building and Toll Plaza were constructed under contract awarded September 1951 which included the toll booths and a water treatment

plant. The Toll Plaza provides six collecting lanes, two of which are reversible to take care of abnormal traffic volume in either direction. The Administration Building houses the toll collection recording equipment and provides offices and facilities for toll collection personnel. In addition, housing is provided for the heating plant and electric apparatus. The building also includes a large garage and shop for bridge maintenance equipment. The toll collection equipment furnished under separate contract, provides a four-way check on the toll collector in the following manner:—First, when a vehicle is driven into a collection lane it passes over an axle counter treadle fastened in the pavement thereby recording the number of axles involved in the transaction. Second, the collector takes the fare and by



MAIN SAILING SPAN—CHESAPEAKE BAY BRIDGE

means of a button box “rings up” the class and amount of the transaction which is also recorded. Third, when the fare is recorded, the amount paid appears in lights on a fare indicator on the side of the toll booth for inspection by the customer. At the same time the amount is also flashed in lights on panels set in the canopy above for inspection by the management. Fourth, when the collector completes his duty period he counts his receipts, makes up a bank deposit slip for the amount collected and locks the slip and money in a deposit bag which is opened by the bank. Each collector has an identifier key assigned to him which he keys into the booth equipment when he begins and keys out at the end of duty. All transactions during the time his key is in the equipment are recorded against his number. The equipment will not work without the key in place. The collectors have no access to the recording room. Thus bank deposits are reconciled with recordings.

Principal maintenance equipment purchased for the Bay Bridge includes: a wrecker truck for removal of disabled vehicles from the bridge, two trucks equipped for snow and ice removal, a small rotary snow plow for casting snow over the side, loader, mechanical sweeper, small tank flusher, grass cutting equipment and several light trucks. This equipment is operated by a maintenance crew based at the bridge who, in addition, also performs certain maintenance work on other bridges in the Toll Bridge System. It was determined by experience that it was necessary to patrol the bridge to insure uninterrupted flow of traffic. The patrol is operated twenty-four hours a day by five patrolmen working in shifts from two Jeep cars purchased for that purpose. The patrol cars are equipped with emergency fire fighting, pushing, towing, gasoline and tire changing equipment. The patrolmen render valuable service for efficient operation of the bridge and for the bridge patrons.

#### CHESAPEAKE BAY BRIDGE FACTS

Work started on Bridge Structure—November 3, 1949.

Bridge Opened—July 30, 1952.

Length:

Shore to shore, including Causeway—22,990 ft. (4.35 miles).

Bridge structure—21,286 ft. (4.03 miles).

Entire project, including approach roads—40,800 ft. (7.727 miles).

Suspension bridge span over Main Sailing Course—1,600 ft.

Width:

Roadway width between curbs—28 ft.

Emergency footwalk, each side—1½ ft.

Height:

Roadway height above bay surface at Main Sailing Course—198½ ft.

Height of suspension bridge towers above bay surface—354 ft.

Clearance:

Horizontal clearance for ships under suspension bridge—1,500 ft.

Vertical clearance for ships under suspension bridge—186½ ft.

Truss span over Eastern channel span—780 ft.

Horizontal clearance for ships under Eastern channel span—690 ft.

Vertical clearance for ships under Eastern channel span—63 ft.

Diameter of Suspension Bridge Cables—14 inches.

Foundation:

Reinforced concrete piers supported on steel piles driven into the bay bottom, the deepest piles penetrating 203 ft. below the bay water surface.

Superstructure:

123 fabricated steel spans. Span lengths range 60 feet to 1,600 feet, consisting of beams, girders, simple trusses, cantilever trusses and cable suspension bridge. Bituminous roadway paving on reinforced concrete slab deck.

Traffic Capacity:

1,500 vehicles per hour in one direction.

8,500,000 vehicles per year.



Approximate Cost of Project—\$45,000,000.00. Bridge Revenue Bonds Redeemable from Toll Proceeds.

Alignment:

The curve in the bridge alignment is necessary to comply with regulations determined by the Corps of Engineers, U. S. Army, in conjunction with the necessity of landing the bridge on favorable terrain. The regulations required the bridge to cross normal to the ship sailing course approximately  $1\frac{1}{2}$  miles south of Sandy Point Lighthouse.

THE CHESAPEAKE BAY BRIDGE PROJECT HAS BEEN CONSTRUCTED  
UNDER CONTRACTS HELD BY THE FOLLOWING:

J. E. Greiner Company

*Consulting Engineers for entire project*

F. P. Asher, Jr. & Sons, Inc.	Millison Construction Co., Inc.
Baltimore Contractors, Inc.	Raymond Concrete Pile Company
Bethlehem Steel Company	Shanahan Artesian Well Company
Blumenthal-Kahn Electric Co., Inc.	John D. Sheetz Construction Company
Booth & Flynn Company	Frederick Snare Corporation
Carnegie-Illinois Steel Corporation	J. Rich Steers, Inc.
Construction Aggregates Corporation	Taller & Cooper, Inc.
C. J. Langenfelder & Son, Inc.	Nello L. Teer Company
Merritt-Chapman & Scott Corporation	Tidewater Construction Corporation

On July 30, 1952, the Chesapeake Bay Bridge was opened to traffic following Dedication Ceremonies conducted by Governor Theodore R. McKeldin and the State Roads Commission consisting of

Russell H. McCain, *Chairman*

Avery W. Hall, *Member*

David M. Nichols, *Member*

The Honorable Wm. Preston Lane, Jr., former Governor of Maryland, expressed the statement:

“The completion of the Bridge marks the realization of a dream of over forty years. It is the most outstanding single accomplishment that Maryland has ever undertaken.

The Bridge will be a link that binds the people of Maryland closer together on a mutual path of spiritual and material progress.

Twenty years ago as Attorney General, I was in a position intimately to see a similar effort doomed to failure. That experience was a background to my determination to get the Bridge built while I was Governor.”

The Honorable Theodore R. McKeldin, Governor of Maryland expressed the statement:

“A Bridge is a friendly device and a valuable utility. It brings friends and neighbors closer. It facilitates transportation of people and produce. I am proud to have this beautiful span across our magnificent Chesapeake Bay opened in my administration. It is with happiness that I welcome all attending these opening ceremonies. I hope Marylanders will use the Bridge often to know our State better and for the profitable exchange of commerce. I hope this span will bring many visitors to Maryland. I thank and commend all who had a part in this great undertaking.”

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## CONSTRUCTION

CORDT A. GOLDEISEN

*Assistant Chief Engineer—Construction*

ALLEN LEE

*Engineer of Road Design*

ALBERT L. GRUBB

*Engineer of Bridge Design*

J. ELDRIDGE WOOD

*Materials Engineer*

THOMAS M. LINTHICUM

*Construction Engineer*

NORMAN M. PRITCHETT

*Location Engineer*

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POURING CONCRETE PAVING ON RELOCATED U. S. ROUTE 29 NEAR SCAGGSVILLE

## **ASSISTANT CHIEF ENGINEER—CONSTRUCTION**

The Assistant Chief Engineer-Construction forms a direct contact between the Chief Engineer, Deputy Chief Engineer and the six District Engineers relative to Construction projects.

He also exercises general supervision over the activities of the Highway Location and Survey Division, Division of Road Design, Division of Bridge Design, Materials Division and Construction Division.

Reports from each of these Divisions appear in the following pages.



GRADING OPERATIONS ON MD. ROUTE 231 BETWEEN HUGHESVILLE AND BENEDICT

## HIGHWAY LOCATION AND SURVEY DIVISION

This Division is concerned with the location of highways and bridges and all survey work necessary for the development of contract plans for the improvement of existing highways and bridges and the construction of new highways and bridges.

The Division, normally operating nineteen field survey parties on a state-wide basis, is under the direction of Chief Assistant Location Engineer Frank V. Dreyer, and Assistant Location Engineers J. F. Loskot and Roland M. Thompson. Office detail is handled by Herbert K. Morrison. It is noteworthy that the experience of these men ranges from a minimum of twenty-three years to a maximum of thirty-two years.

The work of the Division is divided into two distinct categories, the first that of actual location and the necessary surveys incidental thereto; and the second the overall survey work involved that transpires between the time the centerline is laid out in the field, right of way stakeouts, construction stakeouts, condemnation surveys as necessary, to the final survey for the determination of actual construction quantities.

### LOCATION

Location studies pertinent to the determination of desirable locations for roads, bridges, interchanges and other traffic facilities involve the study of drainage features, soil conditions, property damages, traffic volumes, utility to the travelling public, traffic desires, grades, curvatures, right of way conditions, effects on public utilities, construction costs and other related aspects of highway planning.

These location studies are initiated on available general maps of the area involved and then refined by the use of available detail maps which are obtained from such sources as the U. S. Geological Survey, the U. S. Coast & Geodetic Survey, the Army Map Service, our own county geological maps, and in many instances, maps prepared by this Division especially to suit the project study.

On projects involving entirely new locations, aerial photography and photogrammetric development of the aerial photography is used extensively. Aerial coverage of a project for a broad area can generally be obtained and developed with minute details at a cost of approximately 10 to 20% of the cost of information obtained by conventional ground survey methods. Astonishing accuracies are obtained in the photographic work, which generally are far superior in accuracy to traverse surveys developed for study purposes. Aerial surveys have been used occasionally by the State Roads Commission since 1941, but in the period covered by this report they have been used extensively, with resultant cost savings, and in most cases the probability of lessened construction costs due to the wealth of information available from the aerial surveys for location work.

On projects involving rehabilitation of existing highways, it is the general prac-

tice to use existing plans supplemented by field surveys to determine desirable rehabilitations. In certain cases these rehabilitation projects adapt themselves to aerial surveys which can be accomplished at a fraction of the cost involved in field surveys.

Location problems are many and complex, and involve meetings with engineers and officials of other states, counties, towns, federal agencies, other state agencies, public utility companies, district engineers, traffic engineers, construction engineers, individual citizens, and groups of citizens concerning problems of mutual interest about the location, improvement and construction of the various traffic facilities.



SECTION OF OLD U. S. ROUTE 40

#### SURVEYS

The survey portion of the work accomplished by this Division involves surveys of many distinct characteristics. The nineteen survey parties are well rounded ones, with ten of the chiefs having a minimum of twenty years' experience and a maximum of thirty-six years. The other nine have experience records of from six to fifteen years, with many having benefit of some years of college education.

General types of surveys performed by parties of this Division include traverse, profile, preliminary, right of way, condemnation, bridge location, precise bridge layouts, construction, property, hydraulic or soundings for under water conditions, precise triangulation and control for coordinate systems and photogrammetric work.

In addition, members of this Division act as liaison men, and have the responsibility for the development of highway projects performed by consulting engineers. Due to the accelerated program of the past few years, considerable time is



expended by members of this Division in the control of the consulting engineers' work.

The Tables below show survey work accomplished by field parties for the fiscal years July 1, 1950 to June 30, 1951 and July 1, 1951 to June 30, 1952, under the headings of Dual Highways, Primary Roads, and Secondary Roads.



RELOCATED DIVIDED HIGHWAY WITH CONTROL OF ACCESS FEATURES—BALTIMORE NATIONAL PIKE BETWEEN WEST FRIENDSHIP AND MORGAN STATION

An additional Table shows the breakdown of the survey work for the years covered by this report.

TABLES SHOWING WORK ACCOMPLISHED BY SURVEY PARTIES  
FISCAL YEAR, JULY 1, 1950 TO JUNE 30, 1951

Description	Miles Dual Highways	Miles Primary Roads	Miles Secondary Roads	Total Miles
Traverse Surveys.....	58.8	33.0	27.3	129.1
Preliminary Centerline Surveys.....	48.5	56.0	22.4	116.9
Right of Way Stakeouts.....	52.3	38.1	27.9	118.3
Construction Stakeouts.....	26.9	11.2	13.4	51.5
Final Surveys.....	33.9	66.9	9.8	110.6

Borrow Pits:

90 Preliminary Borrow Pits  
50 Final Borrow Pits

Property Surveys:

137 Properties, Totaling 7097 Acres

## FISCAL YEAR, JULY 1, 1951 TO JUNE 30, 1952

Description	Miles Dual Highways	Miles Primary Roads	Miles Secondary Roads	Total Miles
Traverse Surveys .....	67.0	39.6	54.3	160.9
Preliminary Centerline Surveys .....	64.1	38.2	58.4	160.7
Right of Way Stakeouts .....	34.8	17.4	25.7	77.9
Construction Stakeouts .....	27.8	13.1	14.4	55.3
Final Surveys .....	58.9	39.3	41.4	139.6

## Borrow Pits:

24 Preliminary Borrow Pits  
48 Final Borrow Pits

## Property Surveys:

89 Properties, Totaling 3168 Acres.

NOTE: The term 'Traverse Surveys,' as used in these Tables, covers complete surveys on roads of minor importance, on which it is not necessary to make the more exacting centerline surveys.

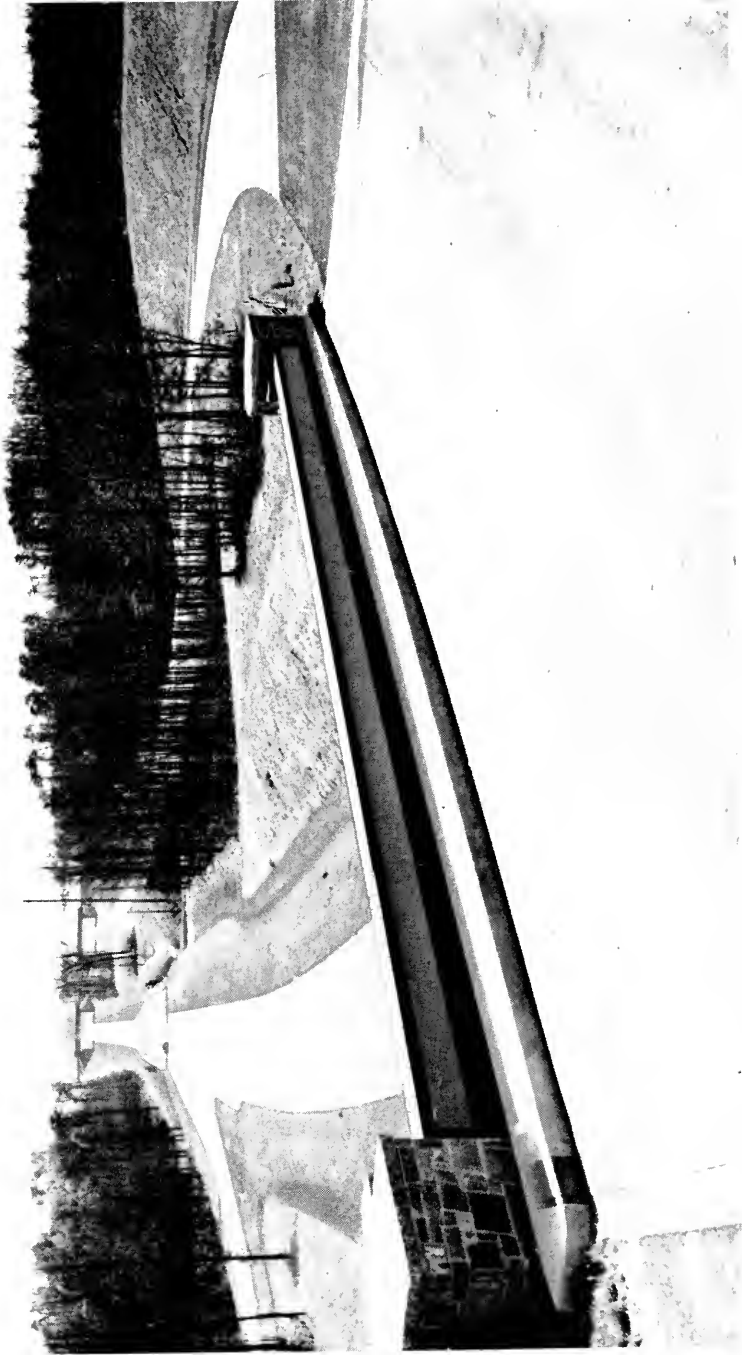
It should be noted in interpreting the Tables shown above, that actually much more additional work is done than is indicated there.

For a modern highway—especially in the dual highway classification—extensive spur lines must be run on all streams and intersecting roads, which, in the aggregate, account for as much mileage as the main line and, in some cases, amount to twice as much.

Interchange areas, bridge locations, etc. must be very carefully contoured; and all such work, although not shown as 'mileage' in the Tables above, amounts to a considerable portion of the survey forces' work—probably as much as 15%.

## BREAKDOWN OF WORK ACCOMPLISHED BY SURVEY PARTIES

Description	July 1, 1950 to June 30, 1951	July 1, 1951 to June 30, 1952
Traverse .....	129.1 Miles	160.9 Miles
Topography .....	206.0 "	231.3 "
Preliminary Centerline .....	116.9 "	160.7 "
Preliminary Cross-section .....	139.2 "	213.5 "
Check Levels .....	136.0 "	170.0 "
Profile .....	27.8 "	43.1 "
Spur Lines .....	84.3 "	84.2 "
Reset Centerline .....	231.2 "	129.7 "
Final Centerline .....	61.8 "	104.5 "
Final Cross-sections .....	97.0 "	172.5 "
Final Measurements .....	110.6 "	139.6 "
Construction Stakeouts .....	51.5 "	55.3 "
Right of Way Stakeouts .....	118.3 "	77.9 "
Cut Centerline .....	44.0 "	64.5 "
Cut Cross-sections .....	46.0 "	80.8 "
Property Surveys .....	7096.64 Acres	3168 Acres
Miscellaneous Property Surveys .....	221 Days	59 Days
Condemnation Stakeouts .....	6 Days	15 Days
Preliminary Borrow Pits .....	90 Pits	24 Pits
Final Borrow Pits .....	50 Pits	49 Pits
Bridge Construction Stakeouts .....	31 Days	21 Days
Miscellaneous Field Work .....	664 Days	412 Days



SECTION OF BALTIMORE-WASHINGTON EXPRESSWAY LOOKING SOUTH FROM FRIENDSHIP AIRPORT INTERCHANGE

## DIVISION OF ROAD DESIGN

The prime function of the Division of Road Design is to prepare detailed construction plans, specifications, and proposal forms for the roadway construction portion of the road program, as recommended by the Chief Engineer and approved by the Commission. Along with the construction plans, rights-of-way sheets—necessary for dealing with property owners in acquiring the land on which the road is to be built—are also prepared in detail. Considerable incidental work, such as preliminary studies and estimates, is also done. These phases of the work in this division and some information on the division's organization are given herewith.



BEFORE IMPROVEMENT

The personnel of the division is organized on a "squad" basis; an engineer of many years' experience in highway design heads each squad, and this engineer is responsible for all the work done by his squad: consisting of, 'preparation of plans,' 'specifications,' 'right-of-way sheets,' etc., as outlined above. Usually each squad, consisting of from five to eight men, has three or more active projects in some state of preparation at all times.

The Assistant to the Engineer of Road Design has, for many years, been Mr. W. A. Friend. The various squads are headed by the following personnel:

Mr. C. W. Clawson, Rights-of-Way Data	Mr. J. C. Pritchett, Estimates
Mr. T. E. Clayland, Design	Mr. E. L. Reese, Design
Mr. P. W. Doering, Design	Mr. W. O. Robins, Finals
Mr. F. A. Hering, Design	Mr. G. R. Springham, Design
Mr. W. A. Kollmer, Design	Mr. E. F. Unger, Design

## DESIGN

Upon receipt of the survey information for a highway project, the problem is closely analyzed by the experienced engineers, and a preliminary grade line preliminary drainage study, and other pertinent features are selected and shown on the preliminary plans. These preliminary plans are then sent into the field for study by the Construction Engineer, District Engineer, and a representative of this division, so as to tie the design in with actual existing field conditions.



AFTER IMPROVEMENT—INTERCHANGE AREA AT U. S. ROUTE 301 AND MD. ROUTE 5 AT T.B. MARYLAND

After this field inspection, the squad leader and the members of his squad proceed to complete the final plans. Many interesting phases of highway engineering are encountered, and many difficult problems are met and solved. First, the type of pavement is determined. This selection of pavement in most instances is based on an economic study, resulting in an annual cost of the road. Drainage parallel to, and under, the highway is carefully analyzed by rational design methods; and the correct drainage structures are designed and shown on the plans. Detailed designs of intersection channelizations at grade, and traffic interchanges where the grades are separated, are carefully studied in connection with the traffic anticipated at the intersections. Plans, are then prepared for the correct type of facility. The design of these intersections and interchanges is an especially interesting phase of highway engineering. The Design Committee of the American Association of State Highway Officials has done careful and considerable research work along these particular

lines. All available information is utilized by the State Roads Commission's forces in developing plans for channelized intersections and interchanges.

The finished plans for each highway project also includes a "tabulation of quantities" of items of work entering into the job. This quantity list is prepared in elaborate detail, and in such manner that the contractors and our field engineers can readily determine the amount of work necessary for various installations along the project.

The right-of-way sheets, which have been previously mentioned, are vitally important documents to the State Roads Commission, and they, in conjunction with the construction plans, provide the means by which property owners are informed of the manner in which their properties will be involved. In most cases, these plats are prepared by the same squad which prepares the construction plans.

Following is a table showing, by type, the mileage of plans prepared and advertised for the 1951-1952 fiscal years:

TABLE SHOWING, BY TYPE, PLANS PREPARED FOR ADVERTISEMENTS FOR THE FISCAL YEARS 1951 AND 1952

Description	July 1, 1950 to June 30, 1951 (Miles)	July 1, 1951 to June 30, 1952 (Miles)	Total Miles
Concrete.....	11.95	2.20	14.15
Concrete (Dual Highway).....	10.88	8.27	19.15
Concrete Shoulders.....	—	2.95	2.95
Bituminous Concrete Surfacing.....	122.75	122.34	245.09
Bituminous Concrete Surfacing (Dual Hwy).....	4.16	4.25	8.41
Bituminous Stabilized Base.....	20.00	4.68	24.68
Bituminous Surface Treatment.....	7.35	11.99	19.34
Bituminous Penetration Macadam.....	7.08	0.04	7.12
Gravel Surface Course.....	2.57	1.76	4.33
Grading and Drainage (Dual Highway).....	—	0.34	0.34
Seeding Park Area (Dual Highway).....	15.04	12.52	27.56
<b>TOTAL.....</b>	<b>201.78</b>	<b>171.34</b>	<b>373.12</b>

#### RIGHT-OF-WAY DATA

One large squad of this division is engaged solely in work dealing with rights-of-way. This squad prepares the right-of-way plats which require special features; such as, control of access at intersections, etc., special drainage conditions, and all plats for bridge structures. They prepare special condemnation plats which are required to be presented in court when condemnation of property is necessary. They compile descriptions of acquired or conveyed parcels of land, and prepare many special study plats and property mosaics incidental to the acquisition of the required right-of-way.

The following table gives a record of the plats prepared during the fiscal years 1951-1952:

TABLE SHOWING PROPERTY PLATS PREPARED FOR RIGHT-OF-WAY PURPOSES

County	July 1, 1950 to June 30, 1951			July 1, 1951 to June 30, 1952		
	R/W Plats	Condemnation Plats	Miscellaneous	R/W Plats	Condemnation Plats	Miscellaneous
Allegany	7	4	1	17	—	—
Anne Arundel	44	5	—	71	20	3
Baltimore	32	—	1	26	14	2
Calvert	13	—	—	—	—	1
Caroline	3	2	—	42	—	—
Carroll	3	8	—	11	—	—
Cecil	84	—	—	35	2	1
Charles	4	1	—	44	2	—
Dorchester	12	7	—	40	1	2
Frederick	39	1	1	24	—	—
Garrett	—	2	—	—	—	—
Harford	7	14	—	31	9	—
Howard	33	33	1	28	30	1
Kent	38	1	—	70	—	—
Montgomery	27	2	2	76	11	6
Prince Georges	13	19	—	49	3	7
Queen Anne's	33	20	19	3	—	3
Saint Mary's	27	—	—	3	10	2
Somerset	—	—	—	—	—	—
Talbot	3	—	1	43	—	4
Washington	56	4	—	3	12	4
Wicomico	9	6	5	18	3	—
Worcester	23	2	—	12	1	1
<b>TOTAL</b>	<b>510</b>	<b>131</b>	<b>31</b>	<b>646</b>	<b>118</b>	<b>37</b>

## FINAL PAYMENT

Another large squad of this division is constantly engaged in checking computations of the total quantities of items of work used in the various construction projects. Final adjusted payments to the contractors are based on these final quantities.

The following tabulation gives accomplishments by the Finals Section for fiscal years 1951-1952:

TABLE SHOWING BY TYPE, CONTRACTS ON WHICH FINALS HAVE BEEN COMPLETED FOR 2 YEARS—FISCAL YEARS JULY 1, 1950 TO JUNE 30, 1952

Classification	Miles
Concrete	26.901
Concrete (Dual Highway)	10.375
Concrete Shoulders	2.974
Bituminous Concrete Surfacing	169.584
Bituminous Stabilized Base	27.156
Bituminous Surface Treatment	11.457
Bituminous Penetration Macadam	30.094
Gravel Surface Course	22.366
Grading and Drainage Dual Highway	4.124
Seeding Park Area (Dual Highway)	21.008
<b>TOTAL</b>	<b>326.039</b>
Bridges	40 Structures

### MISCELLANEOUS

In addition to what might be described as the actual "Production Work" outlined above, a large quantity of important exploratory work is performed by this division in the form of preliminary studies and research, the results of which do not appear as completed projects. Numerous preliminary studies and estimates are frequently necessary in order to formulate a final solution of difficult problems, such as interchanges, placement of drainage structures, alternate rights-of-way acquisitions, etc. The study best suited to the problem at hand becomes a part of the finished plans, and therefore the remainder of the research and investigation does not appear as "productive work."

Liaison is maintained with public utility companies, so that they are informed concerning work proposed by the Commission and may coordinate adjustments to their facilities with contractors work schedules.

Weekly detour bulletins, showing road conditions, are published by this division.

### FEDERAL CONTACTS

Mr. Herbert C. Bowers is responsible for all liaison with the Bureau of Public Roads when projects are to be financed partly by Federal funds. He also handles routine contacts with railroads, municipalities, counties, and public utilities, when Federal Government funds are involved.

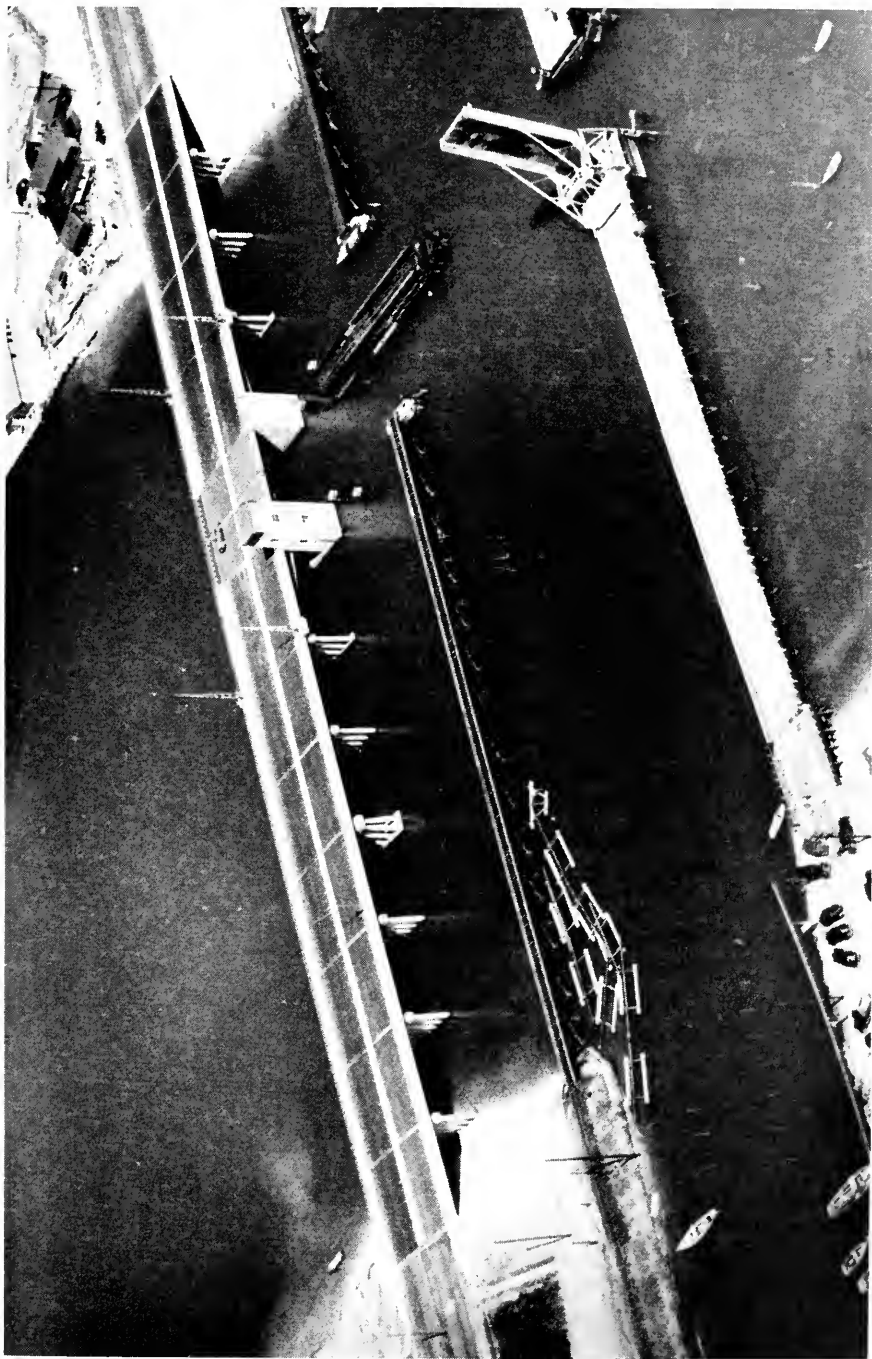
## DIVISION OF BRIDGE DESIGN

The functions of this Division are divided into four major categories, i.e. Design and Drafting under the supervision of H. H. Bowers; Specifications and Contracts under the supervision of L. B. Kravetz; Hydraulics and Construction under the supervision of H. G. Downs; and Special Studies, Reports and Permits under the supervision of M. D. Philpot.

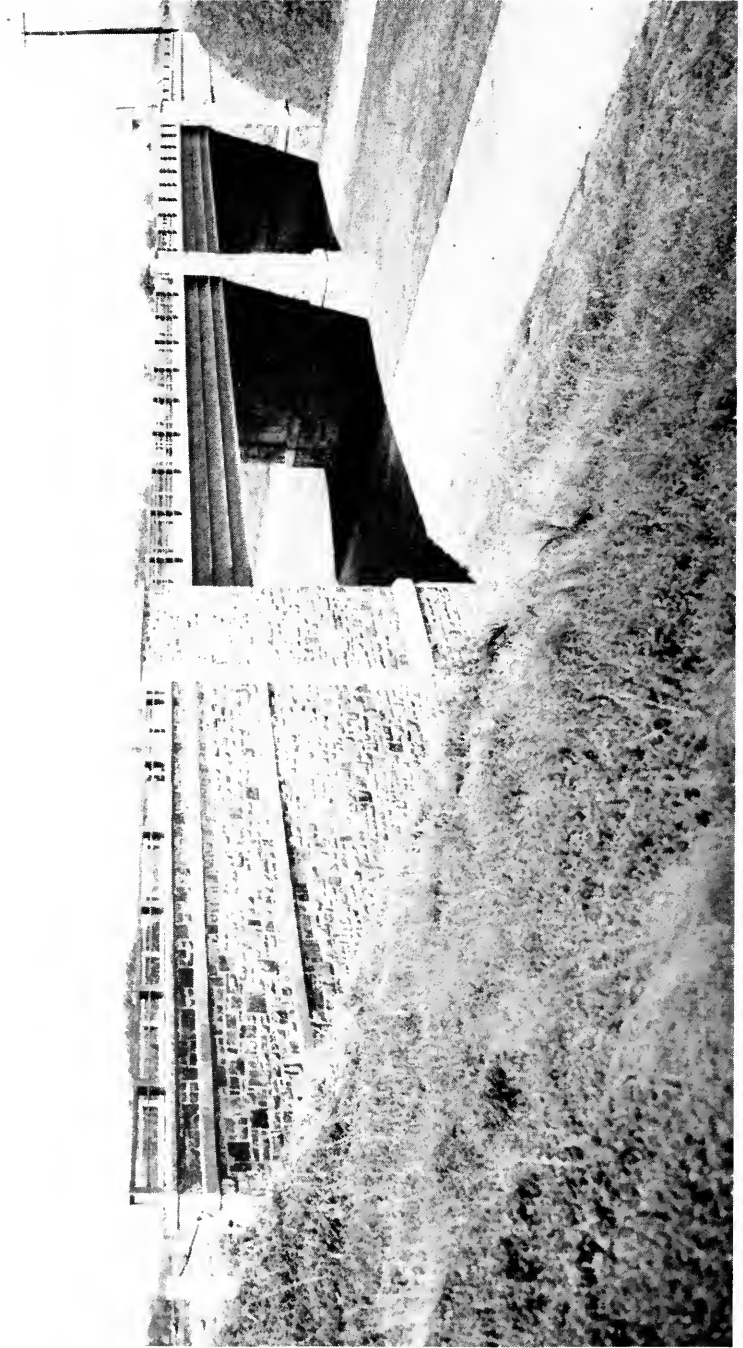
During the period covered by this report, the Division of Bridge Design completed and released for advertisement approximately 250 drawings for highway structures ranging in diversity from major, long span bridges to small drainage structures. These drawings portrayed bridges over rivers and streams, highway and railroad grade separations, highway interchange structures and single and multiple cell culverts. These plans also included directions for repairing, rehabilitation and widening of existing structures. In this latter category, analyses were made of existing movable span bridges where it was necessary to overhaul and rebuild the machinery operating the draw span.

The Division was also charged with the responsibility of preparing reports on a variety of projects. Amongst these was a report on the feasibility of increasing the elevation of U. S. Highways #1 and #50 at the Peace Cross at Bladensburg in Prince George's County, in order to alleviate the frequent flooding conditions encountered during and after periods of heavy and excessive rainfall. A report was also prepared for proposed elimination of grade crossings in Aberdeen. The Balti-





NEW FOUR LANE BRIDGE OVER KENT NARROWS U. S. ROUTE 50



BRIDGE CARRYING DAVIDSONVILLE ROAD OVER THE ANNAPOLIS-WASHINGTON EXPRESSWAY

more and Ohio Railroad, the Pennsylvania Railroad and the Pulaski Highway (U. S. Route 40) are mutually proximate, generally parallel and must be crossed by a large proportion of the traffic in the town of Aberdeen and between the town and the Aberdeen Proving Grounds of the United States Army.

Another report was prepared for a new bridge over the Potomac River between Brunswick, Frederick County, Maryland and Loudoun County, Virginia.

Also prepared were technical data for proposed legislation in connection with load limits of trucks using the highways. All available data relative to bridges posted for load carrying limitations throughout the State Roads System were assembled and made available.

In addition to designs, analyses, drawings and specifications relating to new bridges, repairing bridges and extending bridges in the two fiscal periods, there was also included considerable work on non-bridge projects, such as bulkheads, jetties, weighing stations, buildings, remodeling buildings and possible new ferry systems. The Commission's program of modernization and replacement of public highway maintenance facilities was implemented in the construction of new buildings by the splendid cooperation of the Department of Public Improvements which collaborated in preparing architectural drawings, as well as plumbing and heating layouts. Situation plans, floor plans, building types and general designs were developed in the Division of Bridge Design.

The personnel enrollment of this Division has been subject to rapid change. Loss of trained engineers to private industry continues because of the constant inducement of greater financial reward, and in addition, two capable men were lost through death. Thus, considerable difficulty has been experienced in completing programmed projects with a continually shrinking organization.

The following tables list projects for which bids were received during the fiscal periods indicated.

JULY 1, 1950 TO JUNE 30, 1951

County	Crossing	Location	Type	Remarks
Anne Arundel	2 streams	Baltimore-Washington Expressway connecting road from Md. Route 168 to U. S. Route 301	Concrete box culverts	
	Stream	B/W Expressway, Jessup Interchange to Dorsey Interchange	Concrete box culverts	
	Baltimore-Washington Expressway	Md. Route 175 (Jessup Rd.) about 1.0 Mi. East of Jessup	Steel I-beam	
Baltimore	2 streams	Md. Route 30 Hanover Pike	Concrete box culverts	
	Pennsylvania Railroad	Md. Route 135 at Ruxton	Repair to floor system of existing truss bridge	
Baltimore and Howard	Patapsco River	Md. Route 125 at Woodstock	Replacing floor of Existing Bridge	
Calvert	Hall's Creek	Old Chesapeake R. R. Roadbed, Lyons Creek-Paris	Concrete box culvert	

JULY 1, 1950 TO JUNE 30, 1951—Continued

County	Crossing	Location	Type	Remarks
Calvert and Charles	Patuxent River	Md. Route 231—Benedict Bridge	Administration Bldg. for Toll Collection	Bldg. on Calvert Co. side
Caroline		Denton	Office and garage bldg.	For highway maintenance
Cecil	Penna. R. R.	Weber's Bridge, Md. Route 267 near Charlestown	Repairs to existing bridge	
	Susquehanna River	U. S. Route 1—Conowingo Dam	Repairs to roadway on the dam	Deteriorated curbs repaired with gunite
Charles	Hell's Bottom Run	Md. Route 6, 0.5 Mi. East of Dentsville	Concrete box culvert	
	Parker Creek	Prince Frederick By-Pass	Concrete box culvert	
Frederick	3 streams	Washington National Pike—relocation U. S. Route 240	Concrete box culverts	
Frederick and Montgomery	3 streams	Washington National Pike, relocation U. S. Route 240	Concrete box culverts	
Harford	Deer Creek	State Route 136, South of Dublin	Steel through truss	Underpinning existing foundations which were seriously scoured by flood of Sept. 10, 1950
	Deer Creek	Md. Route 161, 1.5 Mi. South of Darlington	Reconstruct backwalls of existing bridge	Existing abutments moved out of place by unknown causes
Howard	3 streams	Relocation of Md. Route 196 (Columbia Pike) between Atholton and Burtonsville	Concrete box culverts	
	Middle Patuxent River	Relocation of Md. Route 196 (Columbia Pike) between Atholton & Burtonsville	Steel I-beam bridge	
Kent and Queen Anne's	Chester River	On Md. Route 290 at Crumpton	Steel I-beam	Included relocated approaches
Montgomery	stream	Md. Route 97 Georgia Ave., Seminary Ave. to Viers Mill Road	Concrete box culvert	
		Md. Route 97 Georgia Ave., Seminary Ave. to Viers Mill Road	Concrete retaining wall	Wall constructed to prevent embankment from encroaching on cemetery grounds
	Comus Rd. and Little Bennett Creek	Washington National Pike, Relocation U. S. Route 240 near Hyattstown	Steel I-beam bridges	
Prince George's	Henson Creek, Paynes Branch Waterloo Branch Piscataway Cr.	Md. Route 5, Woods Corner to T.B.	Concrete box culverts, C.M. pipe arches, steel I-beam	5 existing structures widened
	Branch of Northwest Branch	Md. Route 501, Chillum Rd.	Concrete box culvert extension	
	Northwest Branch	Md. Route 500, Queens Chapel Road	Steel I-beam bridge	Existing bridge widened
Queen Anne's	Unicorn Branch	Md. Route 313, Sudlersville to Unicorn Mills	Concrete box culvert (3 cell)	Existing concrete slab bridge widened
Talbot	Oak Creek	Md. Route 33 at Royal Oak	Repairs to existing draw-bridge	Extensive alteration of floor and machinery

JULY 1, 1950 TO JUNE 30, 1951—*Concluded*

County	Crossing	Location	Type	Remarks
Washington	Several streams	Md. Route 65, Lappans to Sharpsburg	2 open top concrete culverts—steel grating	
	Marsh Run	Md. Route 60, Hagerstown—Leitersburg	Concrete box culvert	
	Hamilton Run	Md. Route 60, Hagerstown—Leitersburg	Concrete box culvert	
Wicomico	N. Y. P. & N. Railroad	U. S. Route 13, North Division Street, Salisbury	Steel I-beam	New bridge constructed alongside existing one to form dual highway. Includes extensive approach work
Worcester	Stream	U. S. Route 113, Snow Hill—Newark	Concrete box culvert	Existing structure widened
	Purnell Branch	U. S. Route 113, Snow Hill—Newark	Concrete slab bridge	
		Ocean City, 21st, 23rd & 26th Sts. on Atlantic Ocean	Timber jetties	Beach anti-erosion project

## JULY 1, 1951 TO JUNE 30, 1952

County	Crossing	Location	Type	Remarks
Alleghany		Md. Route 49, Braddock Rd.) near Alleghany Grove	Grading & drainage of lot for bldg. & garage	For district Headquarters
	Matthew Run	Md. Route 55, Vale Summit to Miller	2 concrete box culverts	
Alleghany and Washington	Several streams	U. S. Route 40, Sideling Hill Mountain, West of Hancock	Repair existing concrete pipe culverts	Existing structures under heavy fill developed load cracks
Anne Arundel	Cabin Branch	U. S. Route 301, 3 mi. north of Glenburnie	Widened with concrete box culvert	
	Cat-tail Branch	Annapolis—Washington Expressway, Doepkins Entrance	Steel I-beam	Private bridge built for owner as part of Right-of-Way agreement
Baltimore	3 streams	Md. Route 111, Padonia—Cockeysville	Concrete box culvert	Widening & reconstruction
	Western Run	Md. Route 25, Falls Rd.) near Butler	Steel I-beam	Included approach work
	Red House Run	Md. Route 7 (Old Philadelphia Road)	Concrete box culvert	Several structures
	Thornton Mill Road	Baltimore—Harrisburg Expressway	Steel I-beam	Northbound lane of Expressway only
	Western Run	Baltimore—Harrisburg Expressway	Steel I-beam	Bridge for north lane only
Baltimore and Howard	Patapsco River	U. S. Route 1 at Elkridge	Widening existing concrete arch	
Baltimore City		108 E. Lexington Street	Alteration & modernization of elevators	Headquarters building of the Commission
Carroll	Silver Run	U. S. Route 142, 2 Mi. northwest of Union Mills	Widened with Steel I-beam	Substructure of existing concrete girder bridge underpinned

JULY 1, 1951 TO JUNE 30, 1952—Continued

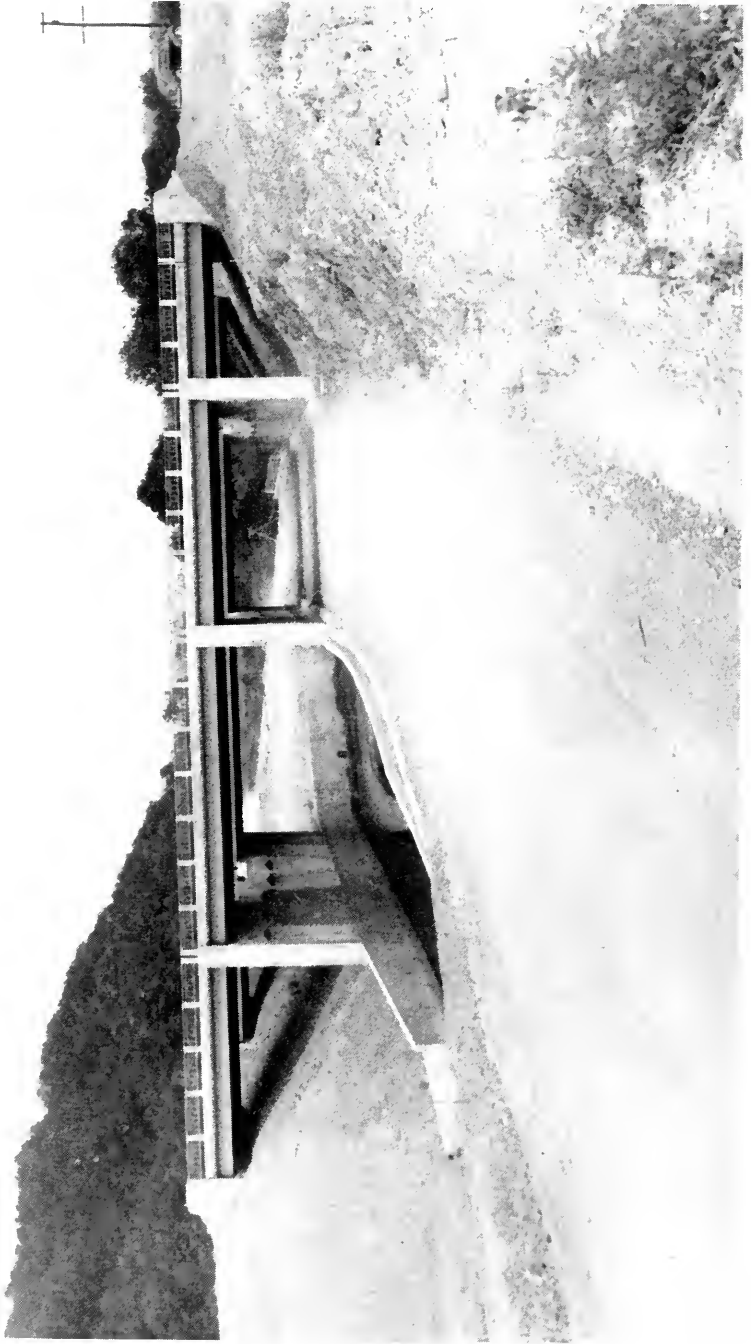
County	Crossing	Location	Type	Remarks
	U. S. Route 140	Westminster Bypass, 0.5 Mi. north of Westminster	Steel I-beam	Dual highway
	Md. Route 31, stream & Western Md. Railway	Westminster Bypass, 0.5 Mi. east of U. S. Route 140	Steel I-beam	Dual highway
Cecil	Octoraro Creek	U. S. Route 1, Conowingo—Rising Sun	Steel I-beam extension	
	Several streams	U. S. Route 1, Conowingo—Rising Sun	Concrete box culvert extensions	
Dorchester	Road ditch-Oyster Shell Road	Md. Route 343, Cambridge—Lloyds	Widening existing slab bridge	
	Jenkins Creek		Widening existing slab bridge	
Dorchester and Wicomico	Nanticoke River	Md. Route 313 at Sharptown	Repair existing drawbridge	Extensive repair of floor and machinery
Howard and Carroll	4 streams	Relocation of U. S. Route 40, Morgan Rd.—Ridgeville	Concrete box culverts	
Howard and Montgomery	Patuxent River	Relocation of U. S. Route 29, Columbia Pike, Scaggsville-Burtonsville	Steel girder bridge	Northbound lane of future dual highway
Montgomery	Washington National Pike (Reloc. U. S. Route 240)	Comus Rd., 1.0 mi. northwest of Clarksburg	Steel I-beam	Bridge carries County Road over the Expressway
		Md. Route 121 (Clarksburg Rd.) at Clarksburg	Steel I-beam	Bridge carries Route 121 over the Expressway
Queen Anne's	Branch of Wye River	Md. Route 50 near St. Peter's Church	Widening existing bridge	
	Island Creek, Granny Finley Br. & Br. of Corsica River	U. S. Route 213, Church Hill—Centerville	Widening existing structures	
St. Mary's	St. Clement Creek	Md. Route 5, 0.7 mi. west of Moganza	Widening existing concrete arch	
Washington	Tonoloway Creek	U. S. Route 40 at west end of Ilancock	Widening of existing arch bridge	
Worcester	Bachelor's Branch Willow Grove Creek, Pilehard Creek	U. S. Route 113, Snow Hill—Pocomoke City	Widened with concrete culverts	
	South Branch, Middle Branch, Birch Branch, Carey's Branch	U. S. Route 113, Berlin—Delaware State Line	Widened with concrete culverts	

The preceding tabulations give a general picture of the geographical distribution and variation in types of typical bridge projects. During the same period that these projects were being developed, designed, advertised, awarded and constructed or placed under construction, the Engineers of this Division were investigating and preparing preliminary studies for probably an equal number of bridge projects which, it is hoped, will be placed in the "advertised" category in the near future.

Distributed throughout this report will be found photographs of many of the projects accomplished.



QUEENSTOWN INTERCHANGE—BRIDGE CARRYING U. S. ROUTE 50 OVER PROPOSED ROAD TO DELAWARE



BRIDGE CARRYING WASHINGTON NATIONAL PIKE OVER COMUS ROAD AND LITTLE BENNETT CREEK



## MATERIALS DIVISION

The approval of materials used in the construction and maintenance of roads, bridges and other structures, is the primary function of this Division. Control of the quality is effected through inspection, sampling, and testing by standardized methods for compliance with applicable specifications.

The Division's work is divided into two categories: Field and Laboratory. The field personnel, under the immediate supervision of Elliott P. Owings, inspects certain fabricated materials, obtains samples for the Laboratory and controls the quality and quantity of other materials through appropriate field tests.

The Laboratory, under the immediate supervision of B. Gordon Hesson, is equipped with precision instruments, standard testing machines and equipment with which refined analyses and physical tests are conducted. The laboratory staff is responsible for final rejection or approval of materials. On occasions, after the rejection of materials on the basis of laboratory tests, the Commission has engaged impartial private laboratories to retest in several questionable cases. The State Roads Laboratory findings have been consistently confirmed.

This reporting period marked the movement of the Laboratory from 647 W. Redwood Street to a larger and more modern building acquired by the Commission at 520 Albemarle Street. The requirement for continuous operation during the simultaneous evacuation of the old premises and the renovation of the new, dictated the use of interim housing and facilities for the laboratory group. The Commission arranged for the transfer of testing equipment during the summer of 1950 to the University of Maryland at College Park. The Administrative and Clerical Staff moved directly to the building at Albemarle Street. Liaison was established between Baltimore and College Park and the services of the Division were uninterrupted.

Early in 1951 the testing sections moved from College Park to Albemarle Street. The chemical, bituminous materials, cement and certain parts of the soils analysis group, occupied the controlled temperature room because many of the tests of these sections are affected by erratic temperature changes.

Bituminous concrete extractions are carried on in a room equipped with exhaust fans to carry off noxious fumes. Aggregates are now graded in a separate shaker room where noise is confined and dust and grit carried off by appropriate equipment.

A larger moist room is provided for curing concrete test cylinders. A freeze-thaw room is equipped for testing large samples under extreme conditions. Working space for special projects was promptly put to use.

Field men are assigned an office in which reports are prepared and reference information filed.

The facilities of the photographic darkroom have proved invaluable in recording the developments of special projects and the depiction of routine and specialized methods through illustrated papers.

The field and laboratory work of the Division is carried on through the facilities of five sections: Soils, Chemical, Bituminous Materials, Bituminous Concrete and Portland Cement Concrete.

### SOILS SECTION

During the last thirty years the long neglected engineering properties of soil have been resolved into a definite practical form. Structural stability of soils is a quality that the road engineer has found to be controlled by shrinkage, expansion,



THE CHEMICAL SECTION IS EQUIPPED FOR CHEMICAL AND ELECTRO-CHEMICAL ANALYSES

compaction and moisture. Methods for measuring these properties and a system of soil classification have been devised and found authentic.

A soil survey, as conducted by this section, includes far more than meets the eye. Along a proposed right-of-way, samples of all types of soils are taken from borings which sometimes extend to a depth of 40 to 50 feet beneath the surface. After the analysis and classification of the soils is completed, the design engineer is directed to the best use of each soil type from the standpoint of its engineering properties. Recommendations are propounded for changes in line or grade and modification of design because of the presence of swamp muck, deposits of unsuitable soils, subsurface water sources, and other conditions conducive to differential settlement.

Notations are made describing the presence of good top soil and high grade sub-

soils which are useful in base of subbase construction. Information gathered from geological and soil maps, together with experience, are used in the accumulation and evaluation of the soil information. Specifications are written for the subbase. A description is given for the use of the best prevailing soils and available borrow material, gravel, and backfill. Field inspection trips are made to control variables in these soils and to solve any unforeseen problems which may develop and require further study.

At the same time, supervision is exercised over compaction control. The importance of satisfactory and uniformly compacted road foundations cannot be over-



BITUMINOUS MATERIALS SECTION—PHYSICAL TESTS ARE PERFORMED ON A MULTIPLICITY OF RELATED BITUMINOUS PREPARATIONS—NEW LABORATORY

emphasized. The actual degree of compaction is measured by tests conducted by construction personnel. These results are compared with the laboratory densities for each soil involved throughout the project. The Construction Division and the Materials Divisions have collaborated closely to produce an effective control over soil compaction.

At some locations in the State there is a preponderance of soils commonly regarded as "troublesome" in road building. A study was made to find a means of detecting some soils in this group that can be safely used. The effort produced a theory and formula involving measurable qualities of soils, and appears to be sound. However, laboratory and field work will be necessary before the knowledge is put to practical use.

*Soils Statistical Data:*

Work Performed	July 1, 1950 to June 30, 1951	July 1, 1951 to June 30, 1952	Total
Borrow pits sampled and analysis performed .....	205	195	400
Gravel pits sampled and analysis performed .....	345	661	1006
Top soils sampled and analysis performed .....	217	142	359
Soils sampled from surveys and analysis performed....	391	241	632
Proctor density and moisture determinations made....	1532	1448	2980
163 Soil surveys made and soil profiles prepared for proposed construction of .....	96.7 miles	46.2 miles	142.9
Total routine classifications analyses of soil samples ...	4856	5485	10,341

On sections of highway where the traffic count is low and heavy loads infrequent, low cost roads are feasible and economical. This type of road is constructed mainly of good local materials in combination with stabilizing agents such as soluble salts, limestone screenings, cement, tar or asphaltic products to create an all-weather surface. Each project of this sort requires special study. The choice and the quantity of a stabilizing agent required to yield a suitable combination is predicated on tests conducted by the Soils Section. In many instances this group acts in an advisory capacity and assists in the actual construction of these projects.

Fly-ash is a by-product of combustion; a solid which is trapped from the smoke of certain heavy industries. It has been found to have a stabilizing effect upon certain types of Maryland soils when used in combination with lime.

Several soil types have been tested for their suitability to this type of treatment. During the two year period 572 tests have been performed using varying proportions of fly-ash and lime. The work is still in its preliminary stages. Certain positive results have emerged. Predicated upon these findings made in the laboratory, several hundred feet of road shoulder have been successfully stabilized and another extensive project is being studied.

## CHEMICAL SECTION

The evaluation and control of certain materials can best be accomplished through chemical analysis. It is in this category that quality cannot be felt, seen, or revealed through destructive or other physical tests. It is only with adherence to correct chemical composition that these materials are the most effective.

Among the materials regularly tested in this section are fertilizer for roadside beautification, calcium chloride for low cost soil stabilized roads and highway shoulder treatment, and lime used as a soil neutralizer and for mortar.

Galvanized coatings on hardware and metal pipe showed an increase during the reporting period and emerged as the most frequently tested material for this section.

Paint, used in great quantity in State work, is carefully checked for close adherence to specifications.

*Chemical Statistical Data:*

Material	July 1, 1950 to June 30, 1951	July 1, 1951 to June 30, 1952	Total
Calcium Chloride	5	17	22
Canvas, Duck	4	3	7
Curing Compounds	12	11	23
Enamel, equipment	10	12	22
Enamel, sign	1	3	4
Fertilizer and Lime	31	3	34
Hardware, Galvanized	31	26	57
Metal, corrugated	403	403	806
Miscellaneous	10	6	16
Paint, Aluminum	6	12	18
Paint, bridge	181	114	295
Paint, ferry system	7	0	7
Paint, guard rail	16	38	54
Paint, miscellaneous	7	9	16
Paint, traffic	46	80	126
Pipe, helical	21	9	30
Reflectorizing beads	20	13	33
Varnish, asphaltic	6	4	10
Varnish, spar	2	1	3
Total Samples Tested	819	764	1583

A study was made of three different types of paint and consistent with progress in paint technology, specifications were revised to improve the product.

A rapid and simplified method was devised to replace the standard, time consuming, routine testing for titanium dioxide, an ingredient largely responsible for the whiteness of traffic paint. Periodic rechecks have been made of the new method.

The Division is responsible for conducting all traffic paint road tests of an investigatory or development nature. For this purpose a five-gallon pressurized paint tank has been acquired which can be attached to the spray nozzles of the regular center line painting truck. This device eliminates the need for employing the large truck tank for test purposes. More tests, involving a greater number of formulations can now be accomplished in the time available for this type of work.

The general use of reflectorizing glass beads in conjunction with center line traffic paint was adopted last year, after several years of investigation and road tests. These beads, sprayed on to the center line stripe as it is applied to the road increases the night visibility of the line to the motorist by seven to fifteen times under various atmospheric conditions. Specifications and suitable tests have been adopted for the control of bead quality. A specialized portable photometer, capable of checking the effective brightness of the beaded paint on the road or in the laboratory is a useful piece of equipment for this control.

With the development of colorless membrane curing compounds for use with portland cement concrete, a new specification for this material was prepared and adopted. Emphasis was placed upon the performance characteristics of the curing agent.

## BITUMINOUS SECTION

Tar, asphalt and asphalt emulsions are used in prodigious quantity for road surfacing, base courses and maintenance. These materials, together with damp-proofing preparations, surface coating, and other preparations, undergo physical tests in this section. Tests are performed prior to acceptance and at the time of shipment for use.

Fuels and lubricants used by State Roads vehicles and the Ferry System are subjected to appropriate tests prior to the awarding of the annual contracts for the supply of these products. Subsequent checks of these products during the contract period insures the continued quality.

*Bituminous Statistical Data:*

Material	July 1, 1950 to June 30, 1951	July 1, 1951 to June 30, 1952	Total
Asphalt Cement	68	105	173
Asphalt Cutback	36	25	61
Asphalt Dipping Material	37	16	53
Asphalt Emulsion	85	96	181
Crack Sealer, Asphalt	16	11	27
Creosote	1	0	1
Curing Agent, Asphalt	10	7	17
Dampproofing	2	8	10
Gasoline	8	8	16
Joint Sealing Material, Hotpoured	2	11	13
Naphtha	1	0	1
Oil, Form	6	2	8
Oil, Fuel	14	23	37
Oil, Lubricating	29	27	56
Pipe, Asphalt Coated	23	0	23
Roofing Felt	1	0	1
Roofing Paper	1	1	2
Tar, Liquid	21	10	31
Waterproofing	15	5	20
Total Samples Tested	376	355	731

Recently, the use of rubberized asphalt sealer has been specified for closing the joints between concrete road slabs in lieu of the mineral filled asphalt sealing compound known as Maryland "K". This new thermoplastic sealer overcomes the deficiencies of Maryland "K" by retaining its normal consistency and adhesiveness in extremes of weather. Sensitive to overheating, special care and new equipment is necessary for melting and pouring the material. A comprehensive study was made of current practice in these operations. A digest of the best methods was assembled and distributed to those concerned with applying the material.

In order to recheck the field heating procedure, special kits were designed and fabricated for casting samples on the job during pouring operations. The filled kits are returned to the laboratory where tests are conducted.

## BITUMINOUS CONCRETE SECTION

Bituminous concrete, known as Specification "B," is the product of carefully graded mineral aggregate, bound together with asphalt cement. It is employed most frequently to resurface rough or badly disintegrated existing highway of acceptable line, grade and adequate foundation.

The routine analysis of the proportioning of mixes actually applied to the road is done by a refluxing device, developed in the laboratory. The apparatus and procedure has been presented to an appropriate national body. To meet the requests for detailed information about the method, an illustrated paper was pre-



TECHNICIAN, MASKED AS PROTECTION FROM NOXIOUS FUMES, DRAWS OFF A SAMPLE OF ASPHALT LADEN SOLVENT

pared for distribution. Adopted in several states as a method for analysis of asphaltic mixes, the procedure is popularly referred to as the "Maryland Method" and the equipment as the "Maryland Extractor."

Technicians employed in testing the samples of bituminous concrete and supervisors exercising the exacting control required for the production of the mixture have offered valuable suggestions for the improvement of the product.

During the period of this report 2,437 samples were tested. This represented an 86 per cent increase over the previous two years.

The increased use of Bituminous concrete on the Eastern Shore, requiring frequent personal contact for prompt assistance, dictated the need for a Materials Division representative in residence. Chosen for this position was Carter R. Perkins,

whose wide experience and years of service qualifies him to render valuable advice and make immediate on-the-spot materials decisions.

A function of this section is the design of new types of bituminous concrete mixes for specific jobs. These formulations are transmitted direct to the Division of Road Design as recommendations. In preparing these recommendations, due consideration is given to availability of local component materials consistent with economy. The type and volume of traffic and the condition of the existing road or subbase also influence the formulation of the mix.



RECORDING WEIGHT OF AGGREGATE—BITUMINOUS CONCRETE EXTRACTION PROCESS

The claims that the incorporation of small amounts of rubber in the asphalt paving mixture will improve the quality of the pavement is considered a current highway research problem. This Division has made a preliminary study of the history of this process and its experimental use in the field. We have accumulated and presented data so as to fully acquaint the Engineering Personnel with the facts.

Late in 1951 test sections of this type of mix were laid on U. S. Route 111 north of Towson. Materials Division representatives were present to observe the methods and obtain samples for comparison with conventional bituminous paving mixtures. Periodic examination of the project is made to determine whether the initial extra expenditure justifies the use of the rubber for this purpose.

#### PORTLAND CEMENT CONCRETE SECTION

The controls on the production of concrete used in State Roads bridges, highways and other structures are exercised prior to, during, and after the construction.



All materials entering into the production of concrete must receive Laboratory approval before any mixing is started. These ingredients are cement, fine and coarse aggregate, water, and specialized additives. Based on the assay of each element, a job mix design is evolved prescribing the proportional quantities of each component.

During the construction continual checks are made on the materials as they are received. Deviations from the initial values dictate proportioning adjustments.

Steel bars and wire mesh for the internal reinforcement of concrete are examined for size and quality and tested for tensile and yield strengths.

A variety of other materials requiring destructive physical tests add to the function of this section.

*Tests made by the Portland Cement Concrete Section:*

Material	July 1, 1950 to June 30, 1951	July 1, 1951 to June 30, 1952	Total
Brick.....	14	10	24
Block, Concrete.....	11	3	14
Cement.....	183	49	232
Cores, Concrete drilled.....	1514	1719	3233
Copper flashing.....	11	6	17
Cylinders, Concrete.....	5220	2389	7609
Gravel.....	140	194	334
Guard Fence, Fittings and Cable.....	24	10	34
Joint Filler, Premolded.....	36	53	89
Miscellaneous.....	20	25	45
Mix designs, Concrete.....	336	251	587
Pipe, Cast Iron.....	7	1	8
Pipe, Concrete Plain.....	4	2	6
Pipe, Concrete Reinforced.....	398	362	760
Pipe, Vitrified.....	35	21	56
Right-of-Way Posts.....	5	3	8
Sand.....	176	170	346
Screenings and Dust.....	61	71	132
Slag.....	14	21	35
Steel, Reinforcing.....	651	288	939
Stone.....	172	304	476
Water.....	80	19	99
Welders certified.....	7	6	13
Wire and Mesh.....	501	375	876
Total Samples Tested.....	9620	6352	15,972

When a new section of portland cement concrete road is completed and occasionally before it is opened to general traffic, the Materials Division core drill crew starts test boring operations. Measurement of extracted concrete cores determines the thickness of the road pavement. The truck and mounted drill rig is essentially a device for cutting out these cylindrical sections of road. A hollow steel bit, power driven in a rotary motion cuts into the concrete and is aided by abrasive steel shot. When cutting reaches the subbase, the core is extracted and measured by a device which equitably averages the thickness of the road pavement.

More than four times as many concrete road test cores were drilled during this reporting period than in the previous two years. This increase was facilitated by the replacement of the old core drill truck and drilling equipment. The new equipment cuts faster and is not slowed by cutting through unusually hard material which is sometimes encountered. Other factors contributing to the increased work were, a simplified installation of bits, a modification of bit slots which reduces the frequency for bit changes, and the reduction of the quantity of water consumed resulting in fewer interruptions caused by refilling the tanks.



BEGINNING A CUT, THE HOLLOW CYLINDRICAL BIT IS IN CONTACT WITH THE ROAD

Economies effected by personnel operating the equipment includes the reuse of cores removed to replug the road and a saving in bits by welding together used short bits to create useful full length tools.

#### GENERAL

The riding public is initially concerned with the smoothness of the roads they travel. Designers and engineers share this concern in the interests of safety and durability. This controversial quality is now measurable in relative terms. Machines to measure and record roughness have had an evolution spanning almost thirty years. A recent development, the Road Roughness Indicator, consists basically of a standard automobile wheel and tire mounted on precision built springs attached to a framework drawn behind a panel truck. As the tire passes over a rough spot the wheel is displaced by the bumps and these are recorded as inches and fractions of inches on an accumulator which adds them up as the test run is made.

Early in 1950, five members of the staff were called into Federal Military Service with a volunteer Engineer Utilities group. Activated the year before with the sanction of the Commission, the members were trained for supervision of Army emergency road repair in event of an enemy attack on Maryland. The unit served in Korea and all members have returned to their duties at the laboratory.

A work bench fitted out with basic hand tools and welding equipment has proved to be a large time saver in effecting on-the-spot repairs and the construction and development of efficiency aids. One such project was the construction of a welded



THE THICKNESS OF PAVING IS DETERMINED FROM THE EXTRACTED CORE: TEN MEASUREMENTS MADE AT MATHEMATICALLY DERIVED LOCATIONS ARE AVERAGED FROM EACH CORE—CORE DRILL TRUCK

tubular rack, from salvage pipe, with a capacity of 60 five gallon cans. The material thus stored is immediately available as graded bulk material, representative of generally used ingredients from all sections of the State. It is used in testing theoretical proportioning mixes of road paving and investigative work.

In 1952 a two-day conference was held for construction inspectors, responsible for bituminous concrete production and construction. Time-tested methods were reviewed and discussed and new procedures explained.

A motion picture produced recently by the United States Bureau of Public Roads, explaining the significance and conduct of soils tests and the mechanics

of soil stabilization, was shown to State Roads Construction personnel at eight different locations in the State by soils experts of the Laboratory staff. Each showing was followed by a discussion and question period.

The Division participated cooperatively with other State Highway laboratories in the chemical analysis of paint and cement; physical tests on aggregates, cement, bituminous material, reinforcing steel and soils analysis. The series is conducted periodically under the sponsorship and coordination of the American Association of State Highway Officials, for the purpose of checking the reproducibility of standard methods. Laboratories participating are afforded an evaluation of their own techniques.



INDICATOR IN OPERATION. TRUCK DOORS CAN BE CLOSED FOR WINTER OPERATIONS

Frequently called upon to assist in the investigation of road conditions requiring rectification, the Division has drawn upon its knowledge stemming from experience, consulted experts for advice and devised and conducted tests to confirm theories. This service has required no small amount of time and energy on the part of its personnel. These efforts have been met by the cooperation of all Divisions and Districts concerned.

## CONSTRUCTION DIVISION

The functions of the Construction Division, beside forming a direct contact between the Assistant Chief Engineer—Construction and the six District Engineers, include interviewing and selection of adequate and efficient personnel and their

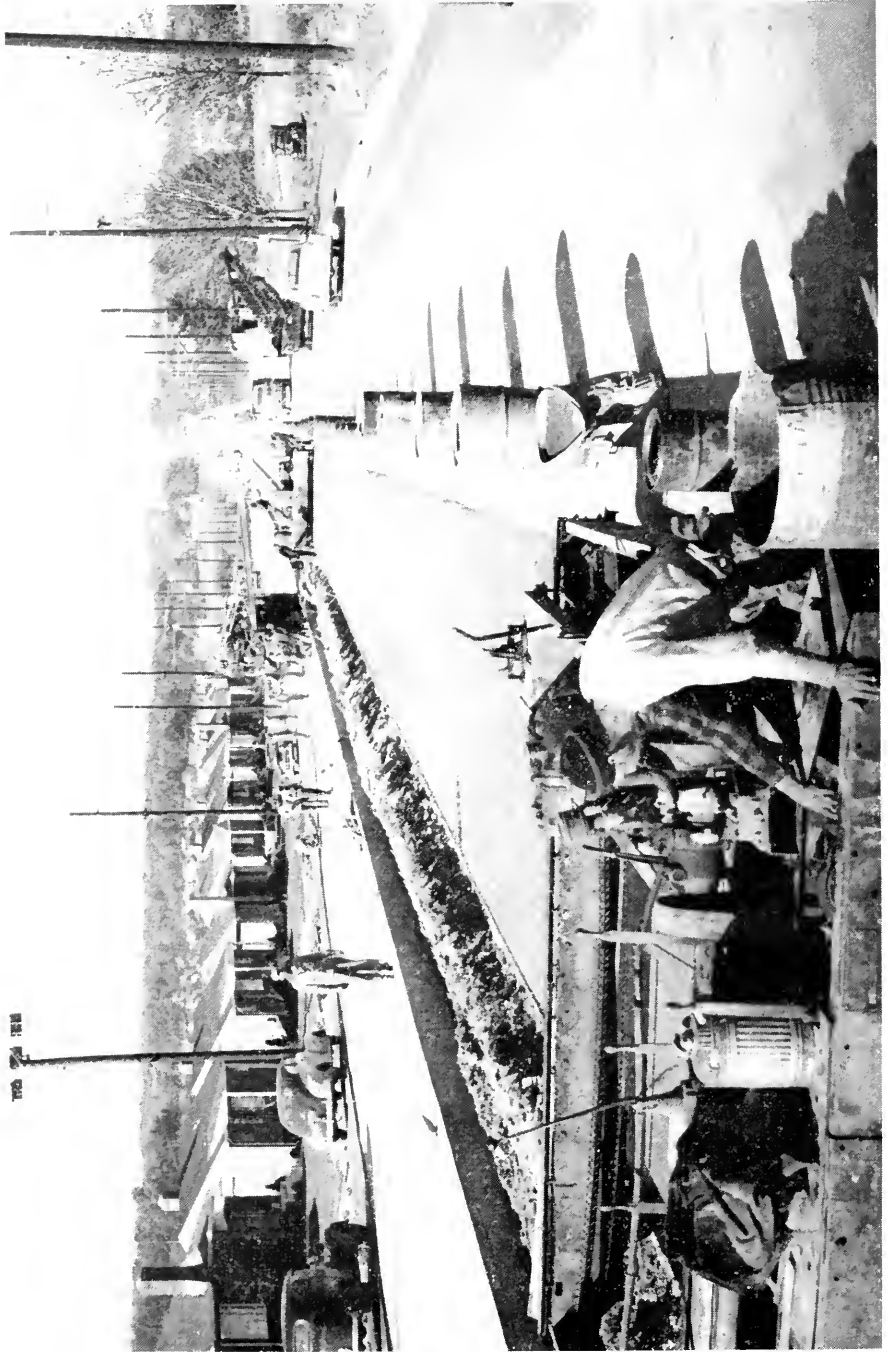
assignment to the District Engineers for inspection work on highway, road and bridge construction projects to protect the interests of the State Roads Commission to the extent that contractors perform their work in accordance with the Specifications, Plans and Special Provisions.

Personnel are interviewed, employed and assigned from lists of eligible applicants supplied by the State Employment Commission. When these lists contain insufficient number of qualified applicants for the positions to be filled, other applicants may be interviewed and employed on a temporary basis, subject to examination. Development of and maintaining an adequate, experienced, intelli-



LOADED IN TRUCK. THE INDICATOR CAN BE TRANSPORTED TO ANY PART OF THE STATE—ROAD ROUGHNESS INDICATOR

gent and tactful personnel which can work smoothly as an organization and with contractors, with a minimum amount of friction, has been a problem since the inception of the State Roads Commission as one of the most important of all State Departments. Within the period covered by this report, the services of experienced, trained and valuable employees of the Construction Division have been lost because the men could receive immediately, in other branches of engineering or private industry, salaries comparable to and in some instances higher than the compensation of State Roads Commission employees with twenty years and more of service. Provision and authorization for at least seven Senior Assistant Highway Engineer, Grade II positions, promotional within the organization for Construction Division personnel, to have charge of inspection on groups of projects dis-



LAYING CONCRETE PAVEMENT ON RECONSTRUCTED GEORGIA AVENUE—NEAR GLENMONT, MARYLAND

tributed among the Districts would be an incentive for men qualified to hold positions of such responsibility to remain in the employ of the State Roads Commission and would probably have prevented the resignation of some of the men who left for more remunerative employment. The Assistant Construction Engineer handles personnel in addition to other duties.

It is expected that with the cooperation of the Materials Division and other departments that classes of instruction for more recent employees in order to familiarize them with the Specifications, keeping daily records, making sketches, etc. will be held during the winter months of 1952 and 1953.

A comparison of Personnel for the fiscal years 1948 to 1952 is as follows:

Classification	6-30-48	6-30-49	6-30-50	6-30-51	6-30-52
Assistant Chief Engineer-Const.....	0	1	1	1	1
Construction Engineer.....	1	1	1	1	1
Asst. Construction Engineer.....	1	1	1	1	1
Senior Stenographer.....	1	2	2	2	2
Junior Stenographer.....	0	1	1	0	0
Jr. Asst. Bridge Engineer I.....	6	4	7	7	7
Jr. Asst. Bridge Engineer II.....	2	1	8	7	3
Jr. Asst. Highway Engineer I.....	22	24	32	28	30
Jr. Asst. Highway Engineer II.....	10	10	23	21	16
Road Inspector Grade I.....	28	33	40	30	23
Road Inspector Grade II.....	48	51	59	59	81
Road Inspector Grade III.....	62	113	176	157	135
TOTALS.....	182	242	351	314	299

It can be readily understood from the decrease in the number of personnel in the Bridge and Highway Engineer grades why men of less experience were placed in charge of inspection on projects of major importance such as the Baltimore-Washington Expressway, the Washington National Highway, the Annapolis-Washington Expressway, the Baltimore National Highway, the Baltimore-Harrisburg Expressway and many projects of less money value.

Other functions of the Construction Division are to coordinate the methods of construction on a State wide basis; interpret the Specifications, plans and Special Provisions; check the adequacy and efficiency of the engineering; inspection and supervision of Construction Personnel as well as that of contractors; make written reports on the progress of contractors, copies of which are made available to District Engineers, Construction personnel on each project, the Chairman, Chief Engineer, Deputy Engineer and Assistant Chief Engineer—Construction; make preliminary field inspections on projects, checking all aspects of alignment, grades and drainage; recommending any changes deemed advantageous prior to final completion of construction plans. These inspections are made by the Construction Engineer in conjunction with representatives of the District Office, the Division of Road or Bridge Design and the Right-of-Way Department in some instances and representatives of the Bureau of Public Roads on projects involving Federal par-

icipation. During the fiscal year, June 30, 1951 and June 30, 1952, the mileage covered by these inspections was 144.672 and 59.377 miles, respectively.

The road, bridge, drainage and other projects under construction and completed during the period July 1, 1950 to June 30, 1952 with contract amount are as follows:

<i>7-1-50 to 6-30-51</i>			
Road Projects	64	(161.079 miles)	\$13,636,010.72
New Bridges, Bridges repaired			
Storm Drainage and other Projects	20		1,678,103.25
	84		<u>\$15,314,113.97</u>
<i>7-1-51 to 6-30-52</i>			
Road Projects	76	(228.75 miles)	\$29,634,219.20
New Bridges, Bridges repaired			
Storm Drainage and other Projects	39		11,791,671.69
	115		<u>\$41,425,890.89</u>
TOTAL PROJECTS	199	(389.83 miles)	\$56,740,004.86

District Engineers will show these contracts in detail in the reports for their respective districts.







PRISON LABOR CAMP LOCATED IN WICOMICO COUNTY

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## MAINTENANCE

P. A. MORISON

*Assistant Chief Engineer—Maintenance*

FRANK P. SCRIVENER

*Maintenance Engineer*

ROBERT B. BURGESS

*Engineer—Special Assignments*

JOHN C. GRANNAN

*Equipment Engineer*

S. W. BAUMILLER

*Landscape Engineer*

LOUIS PFARR

*Sign Shop Foreman*

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SECTION OF U. S. ROUTE 301



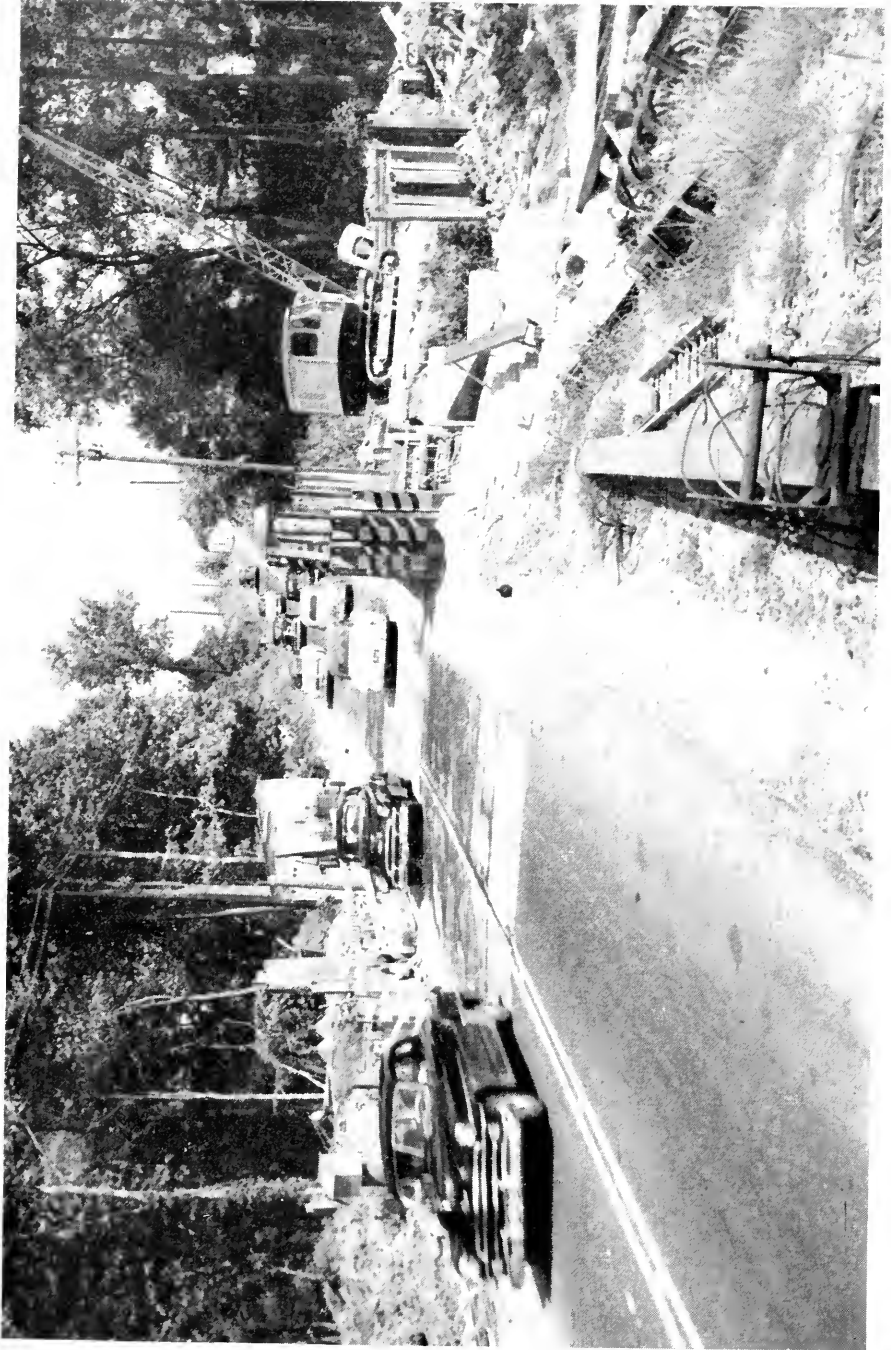
SAME LOCATION AFTER IMPROVEMENT—WORK PERFORMED BY PRISON LABOR

## **ASSISTANT CHIEF ENGINEER—MAINTENANCE**

The Assistant Chief Engineer—Maintenance forms a direct contact between the Chief Engineer, Deputy Chief Engineer and the six District Engineers relative to Maintenance work.

He also exercises supervision over Maintenance Operations, Roadside Development, Sign Shop and Equipment Division.

Reports from each of these Divisions appear in the following pages.



WIDENING BRIDGE OVER BRANCH OF WYE RIVER, QUEEN ANNE'S COUNTY

## MAINTENANCE

Preserving and keeping highways, together with pertinent structures, in such condition so as to permit safe and economical use by the motoring public is known as maintenance of the highway system.

The necessity for proper maintenance is paramount at the present time since today the highway networks of America are the arteries through which the transportation life-blood of the nation flows both in peace and war. Certainly our economy and perhaps, even our survival, are dependent upon proper maintenance of our highways.

### ORGANIZATION

The Assistant Chief Engineer—Maintenance, located in Baltimore, represents the Chief Engineer as the general administrator of the entire organization. Other engineers working out of the headquarters office in Baltimore supervise administrative details, make field inspections and coordinate various maintenance activities in order to insure uniformity of methods, policies and practices. Other engineers located in Baltimore are responsible for the preparation of specifications for the purchase of equipment, paint, signs and other materials, supervision and direction of roadside development, the planning and supervising of prison labor projects.

During the period of this report, the State comprised six engineering districts, each under the supervision of a District Engineer. Offices of these engineers are located in Salisbury, Chestertown, Laurel, Towson, Upper Marlboro and Cumberland. During the last quarter of the report, it was proposed that due to the pressure of work entailed in carrying out the accelerated road program, that an additional district be set-up. Effective as of July 1, 1952, an additional district was established in Frederick.

Each District Engineer has a Maintenance Assistant with a District-wide assignment whose duties are to coordinate the maintenance activities in his District, make periodic inspections of all roads and structures and exercise general supervision of all maintenance work and its related functions.

A Resident Maintenance Engineer is located in each county, whose duties are to program and direct the operations in his assigned counties. A man of this classification is located in Princess Anne, Snow Hill, Salisbury, Cambridge, Easton, Chestertown, Centerville, Denton, Elkton, Churchville, Towson, Westminster, Gaithersburg, Laurel, Glen Burnie, Upper Marlboro, Sunderland, LaPlata, Leonardtown, Frederick, Hagerstown, Cumberland and Oakland.

The organization is further broken down into Foremen, Equipment Operators, Mechanics, Clerks, Laborers, both skilled and unskilled, the number varying as the necessity warrants.

Tabulated below is a list showing the complement of men forming the maintenance organization at the end of 1952.

Chauffeur.....	287
Road Foreman.....	87
Chauffeur-Foreman.....	89
Motor Equipment Operator.....	139
Automobile Mechanic.....	41
Gas Shovel Operator.....	20
Blacksmith.....	3
Shop Foreman.....	20
Shop Clerk.....	26
Skilled and Unskilled Laborers.....	900

Up to date maintenance methods require the proper use of modern equipment. Each employee is trained in his own assignment and is encouraged to learn the operation of other pieces of equipment so that the entire personnel may be molded into a composite, mobile organization, capable of continuously carrying out the many and varied requirements of satisfactory maintenance.

The standard work-week of the field forces is 50 hours. During emergencies, however, such as snow storms, floods, etc., hours of work are unlimited until the roads are safe for travel.

Recent salary increases and reclassification of employees have not only contributed to the present high morale of the personnel, but are continuing to pay dividends. Many of the older employees from point of service whose loyalty, experience and ingenuity are so necessary for the successful operation of a maintenance organization might have been tempted to leave for positions of higher pay in similar fields of endeavor had not these changes been brought about.

## MAINTENANCE OPERATIONS

### MAINTENANCE OF ROAD SURFACES

The condition of the road surface is the yard stick by which maintenance operations are measured. All other items of maintenance are secondary in that they contribute their relative value to retaining smooth and safe surfaces. Road surfaces are maintained by patching, bituminous surface treatment, the surface and sub-surface sealing of joints and cracks and the placing of plant mix wearing courses.

The tabulation below shows the quantities of work performed by maintenance crews, State-wide, on roadway surfaces during the period of this report.

#### ROADWAY SURFACING

Type of Work	Unit of Charge	Rigid J-K	Semi-Rigid I	Non-Rigid F, G, H, I	Untreated D-E
Patching.....	Sq. yds.	465,703	497,907	1,733,625	268
Blading—dragging.....	Miles				366.40
Jacking—asphalt.....	Sq. yds.				
Jacking—cement slurry.....	Sq. yds.	167			
Resurfacing—non bituminous.....	Sq. yds.	601		29,055	831
Joint and crack filling.....	Gals.	151,221	16,450	4,177	
Oiling—bituminous.....	Sq. yds.	538,139	1,505,704	3,293,108	36,184



### *Patching*

Patching is the restoration of small areas of road surface which have become distorted or broken. The old adage, "a stitch in time saves nine" is certainly apropos of patching operations. Generally, bituminous patches are placed. However, concrete is used where the concrete surfacing is free of bituminous patches. The extensiveness of these patching operations is borne out by the fact that field reports show that 2,700,000 square yards was the average area patched yearly during the two years of this report. This patched area is approximately 41.2% of the entire surface area in the State highway system.

### *Bituminous Surface Treatment*

This operation is the periodic sealing of entire road surfaces and the providing of an additional wearing course by the application of aggregate. It is a seasonal operation of major importance and should not be carried on when the air temperature is below 55° F. Exceptions to this rule are necessary, however, on occasions. During the month of October, the District Engineers submit to the Baltimore office, a suggested bituminous surface treatment program to be carried out during the following spring and summer. Experience indicates that this is the best time of the year to determine the roads requiring this treatment. This program designates the roads to be treated, the application rate of bituminous material and mineral aggregate and the estimated cost. From this information, a tentative State-wide surface treatment program is formulated, subject to a second inspection made after the spring thaw. During the month of April, bids are sent out to interested parties for the furnishing and applying of the bituminous material and the furnishing of cover aggregate. This aggregate is placed by State Roads Commission maintenance forces. Tabulations showing the miles of roads on both the State and County system that were surface treated during the time of this report are shown on succeeding pages.

### *Retread*

An operation which is an improvement over bituminous surface treating is the placing of approximately 90 lbs. or an average of 1" in thickness of aggregates mixed with bituminous material and placed with machine precision. This eliminates the irregularity in the surface and provides, upon completion, a smooth riding surface which is impossible to obtain under straight bituminous surface treatment methods.

### *Surface and Sub-Sealing*

All joints and cracks in the surfaces are kept sealed from the top by the use of bituminous crack filler.

## SURFACE TREATMENT, STATE SYSTEM, FISCAL YEAR 1951

District and County	Miles Road	Miles Shoulder	GALLONS		
			Asphalt	Emulsion	Tar
<b>No. 1</b>					
Dorchester .....	9.46	10.79		77,786	
Somerset .....	10.94	14.81		91,241	
Wicomico .....	6.20	14.91		90,260	
Worcester .....	6.69	4.64		44,294	
Total .....	33.29	45.15		303,581	
<b>No. 2</b>					
Caroline .....	12.65	12.63	81,390		
Cecil .....	18.60	19.90	170,872		
Kent .....	1.30	3.75	14,889		
Queen Anne's .....	7.28	7.57	38,587		
Talbot .....	4.92	20.10	145,916		
Total .....	44.75	63.95	451,654		
<b>No. 3</b>					
Anne Arundel .....	19.00		87,668		
Carroll .....	2.20		4,969		
Howard .....	10.96	16.16	40,538		
Montgomery .....	22.36		57,002		
Total .....	51.52	16.16	190,177		
<b>No. 4</b>					
Baltimore .....	11.16	12.12	66,743		
Harford .....	28.23	17.60	108,751		
Total .....	39.39	29.72	175,494		
<b>No. 5</b>					
Calvert .....	15.77	2.30	53,981		
Charles .....	30.50	2.60	99,469		
Prince George's .....	18.23	0.85	64,731		
St. Mary's .....	17.50		63,395		
Total .....	82.00	5.75	281,576		
<b>No. 6</b>					
Allegany .....	5.80		16,949		
Frederick .....	13.97		31,001		
Garrett .....	19.05		56,246		
Washington .....					
Total .....	38.82		104,196		
Grand Total .....	292.77	160.73	1,203,097	303,581	

## SURFACE TREATMENT, COUNTY SYSTEM, FISCAL YEAR 1951

District and County	Miles Road	Miles Shoulder	GALLONS		
			Asphalt	Emulsion	Tar
<b>No. 1</b>					
Somerset .....	21.35			90,513	
Wicomico .....	81.13			255,507	
Worcester .....	32.42			128,126	
<b>Total</b> .....	<b>140.90</b>			<b>474,176</b>	
<b>No. 2</b>					
Caroline .....	7.68		26,473		
Cecil .....	70.78		403,989		
Kent .....	6.86		24,040		
Queen Anne's .....	41.80		283,395		
Talbot .....	29.20		221,468		
<b>Total</b> .....	<b>156.32</b>		<b>959,365</b>		
<b>No. 5</b>					
Calvert .....	18.50		83,604		
Charles .....	57.38		206,535		
St. Mary's .....	36.74		134,934		
<b>Total</b> .....	<b>112.62</b>		<b>425,073</b>		
<b>Grand Total</b> .....	<b>409.84</b>		<b>1,384,438</b>	<b>474,176</b>	

## SURFACE TREATMENT, STATE SYSTEM, FISCAL YEAR 1952

District and County	Miles Road	Miles Shoulder	GALLONS		
			Asphalt	Emulsion	Tar
<b>No. 1</b>					
Dorchester .....	5.49	7.90		36,170	
Somerset .....		6.50		12,598	
Wicomico .....	9.61	21.10		112,334	
Worcester .....	9.52	38.53		100,038	
<b>Total</b> .....	<b>24.62</b>	<b>74.03</b>		<b>261,140</b>	
<b>No. 2</b>					
Caroline .....	34.07	11.54	149,485		
Cecil .....	14.45	22.60	185,353		
Kent .....	2.67	10.50	61,237		
Queen Anne's .....	9.18	14.38	88,195		
Talbot .....	17.65	20.80	188,419		
<b>Total</b> .....	<b>78.02</b>	<b>79.82</b>	<b>672,689</b>		
<b>No. 3</b>					
Anne Arundel .....	29.76		67,241	35,389	
Carroll .....	13.12	7.40	58,719		
Howard .....	13.07		30,415		
Montgomery .....	14.63		41,105		
<b>Total</b> .....	<b>70.58</b>	<b>7.40</b>	<b>197,480</b>	<b>35,389</b>	
<b>No. 4</b>					
Baltimore .....	4.23	8.98	41,559		
Harford .....	18.62		42,809		
<b>Total</b> .....	<b>22.85</b>	<b>8.98</b>	<b>84,368</b>		
<b>No. 5</b>					
Calvert .....	17.27		47,050		
Charles .....	42.00		141,203		
Prince George's .....	18.09	0.42	60,155		
St. Mary's .....	33.15		116,249		
<b>Total</b> .....	<b>110.51</b>	<b>0.42</b>	<b>364,657</b>		
<b>No. 6</b>					
Allegany .....	11.84		34,366		
Frederick .....	14.42		34,981		
Garrett .....	13.35		37,489		
Washington .....					
<b>Total</b> .....	<b>39.61</b>		<b>106,836</b>		
<b>Grand Total</b> .....	<b>346.19</b>	<b>170.65</b>	<b>1,426,030</b>	<b>296,529</b>	

## SURFACE TREATMENT, COUNTY SYSTEM, FISCAL YEAR 1952

District and County	Miles Road	Miles Shoulder	GALLONS		
			Asphalt	Emulsion	Tar
<b>No. 1</b>					
Somerset .....	12.20			38,728	
Wicomico .....	53.55			210,401	
Worcester .....	39.75			127,521	
Dorchester .....					
Total .....	105.50			376,650	
<b>No. 2</b>					
Caroline .....	16.85		112,533		
Cecil .....	64.05		354,453		
Kent .....	12.15		122,657		
Queen Anne's .....	29.55		244,036		
Talbot .....	3.40		54,208		
Total .....	126.00		887,887		
<b>No. 5</b>					
Calvert .....	16.09		76,787		
Charles .....	53.42		177,685		
St. Mary's .....	41.07		210,430		
Total .....	110.58		464,902		
Grand Total .....	342.08		1,352,789	376,650	

Where conditions warrant, surfaces have been sub-sealed by the use of bituminous material. This material, having a high melting point and a low penetration, is heated to a temperature of approximately 400° F. and by the use of a distributor, forced through the surface onto the sub-base through holes previously drilled. The action of the material in flowing under the surface, fills any voids in the base, reseats the slab and in addition, when it is cooled, places a material under the joint which does not readily lend itself to pumping action. This pumping is a forecast of surface failure.

In addition, where small sections of rigid type pavements have settled, they have been mud-jacked into position by cement soil slurry. This material is pumped through holes previously drilled into the road surfaces, and the distorted sections, which have been out of section as much as 6", have been restored. Generally one crew carries on sub-sealing and mud-jacking operations on a State-wide basis.

## SHOULDERS

Due to narrow right of way widths on the earlier constructed projects, the graded section was confined in width to practically what is now considered a standard two-lane highway. Consequently, the shoulders provided on the narrow pavement widths are being used by the motoring public as part of the surface. Since they were not constructed for this purpose, an additional burden has been placed

on maintenance crews to maintain these shoulders. Mechanical equipment is being used almost continuously to widen, grade and provide some form of stabilized shoulders so that they can be used with safety. The widening also provides off-surface parking and a storage place for snow which has been removed from the surface.

The following table covers the quantity of work performed in this phase of maintenance, on a State-wide basis, for the period of this report.

## SHOULDER MAINTENANCE

Type of work	Unit of charge	Bitum.	Stabilized	Grass	Earth
Patching.....	Sq. yds.	402,226	892,124	60,190	746,584
Blading—dragging.....	Miles	150	46,038.12	1,589.62	150,141.42
Sodding.....	Sq. yds.			12,353	2,600
Mowing and hand cutting.....	Miles	199	2,483.21	677,259.04	988.1
Gilling—bituminous.....	Sq. yds.	610,587	997,348	26	4,915
Removal—excess material.....	Cu. yds.	114,548	401	31,834	2,003,443

## GUARD RAIL

Due to the widening and improving of the shoulder areas and the provision for an easier slope on fill sections, the need for guard fence has been reduced in many instances and consequently, many miles have been removed. Hand labor methods of painting are now being replaced by mechanical means, at a considerable saving in cost and with more lasting results.

The following table covers the quantity of work performed in this phase of maintenance, on a State-wide basis, for the period of this report.

## GUARD FENCE

Type of work	Unit of charge	Repairs	Replacements	New Installations
New fence.....	Lin. ft.	62,123	12,603	9,527
Posts.....	Number	16,166	4,403	2,142
Cable.....	Lin. ft.	32,898	8,560	15,199
Fittings.....	Number	2,292	3,314	1,718
Paint.....	Gals.	3,439.50	2,060.50	124

## DRAINAGE

As previously mentioned, all phases of maintenance lead to providing a smooth surface. Good drainage is a "must" to a well maintained surface, for without it no surface, regardless of depth, can withstand the pounding of present day traffic. Maintenance crews are engaged in replacing numerous cross-drains which have failed after many years of service. A yearly inspection is made of every cross-drain in the State in order to determine the condition of these pipes before failure is encountered.

The following table covers the quantity of work performed on this phase of maintenance, on a State-wide basis, for the period of this report.

## DRAINAGE (CLEANING)

Ditching (new) .....	Lin. ft.	172,952
Cleaning—ditches .....	Lin. ft.	5,556,002
Cleaning—pipe culverts .....	Number	21,010
Cleaning—box culverts .....	Number	6,572
Cleaning—bridges .....	Number	590
Cleaning—catch basins .....	Number	5,755
Cleaning—misc. structures .....	Number	769
Riprapping .....	Sq. yds.	2,374

## WINTER OPERATIONS

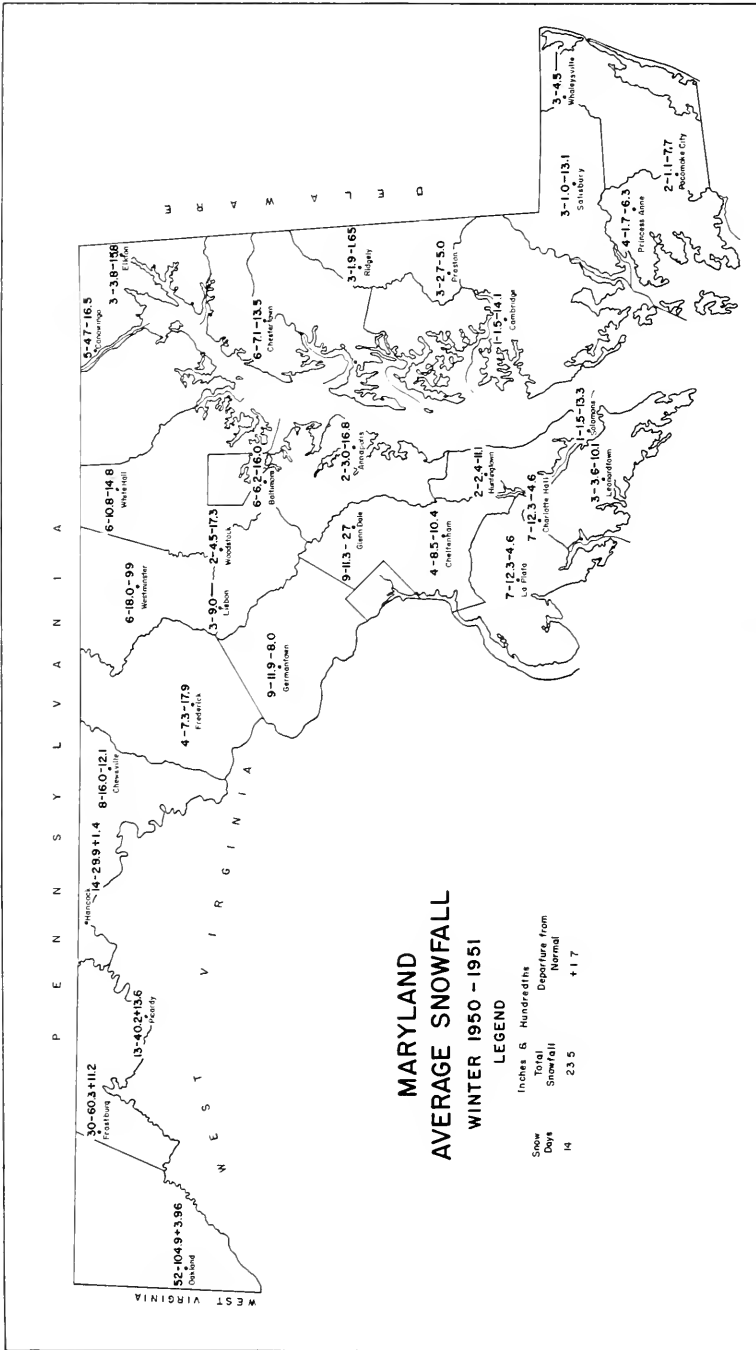
The winters covered by this report have been unusually mild, the snow fall below average and the need for cindering operations has been below normal years. However, the erection and subsequent dismantling of snow fence, the preparation and distribution of abrasive materials in storage bins and the overhauling of snow removal equipment have to be carried out, "just in case."

Approximately 337 trucks, ranging in size from three to seven tons, equipped with snow plows, either the rotary, v-type or one-way plows, and 79 motor patrol units, 60 of which are equipped with v-type plows, are available for snow removal operations. Approximately 325 miles of snow fence was erected and dismantled each year, during this biennium. Accompanying this report are maps showing the average snow fall over the State for the years of 1950-51 and 1951-52.

The treatment of icy roads with abrasives is an operation again demonstrating the loyalty of the entire organization. Employees realize that the fast transportation of the traveling public hinges upon the promptness and continuity of its operation in freezing and sub-freezing temperatures.

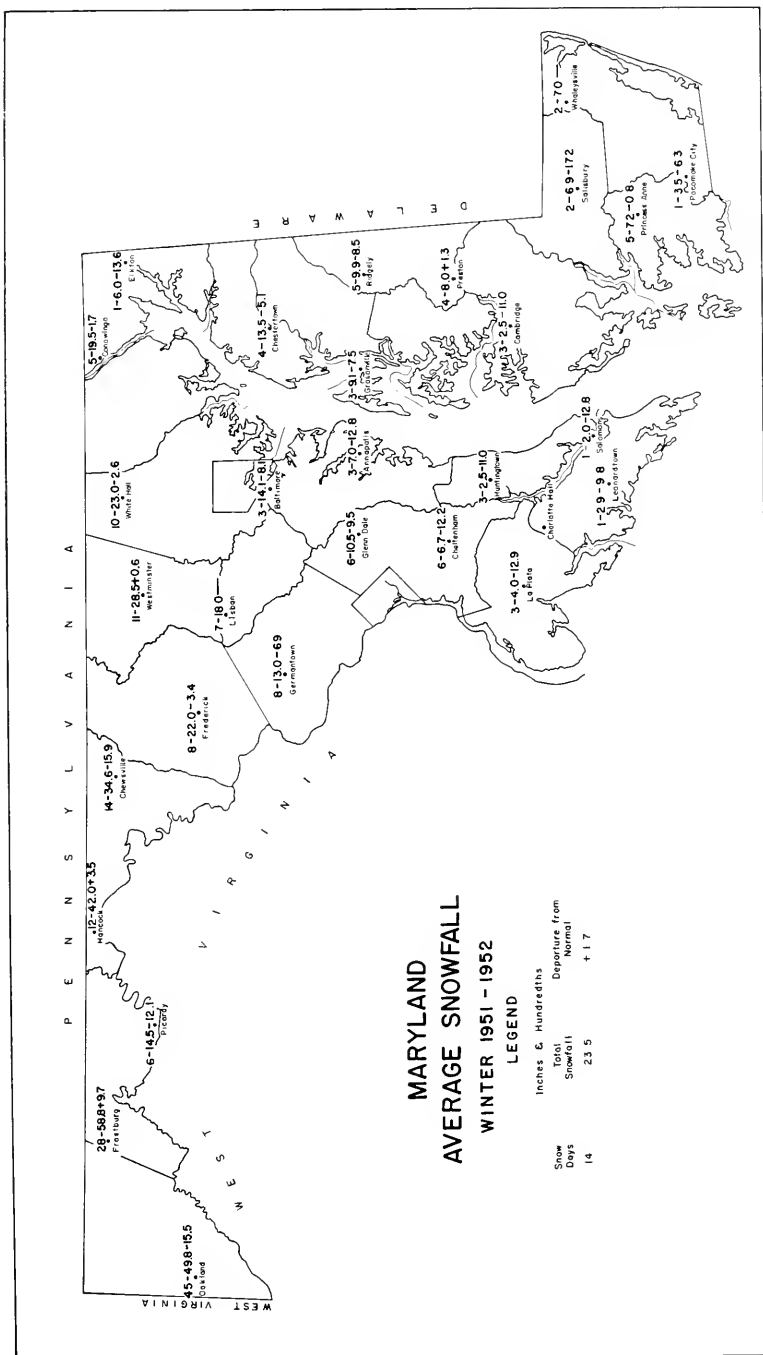
Cinders and sand are the abrasives generally used. These materials are usually treated with calcium chloride or sodium chloride, which prevents a stockpile of abrasives from freezing and, upon application, help to imbed the abrasives in the ice on the pavement surfaces. Approximately 30,000 tons of this material are spread during the normal winter season. Again mechanical equipment is used in loading and applying these abrasives to the road surface.

Weather and road condition information is furnished the traveling public during the ever-changing conditions of the road surfaces during storms, etc. from the central, district and resident maintenance engineers' offices. These offices are open continuously for the duration of these emergencies. The press and radio are notified, for release to the public, of information pertaining to the changes in the road surfaces or conditions. This information is compiled not only from our own forces patrolling the highway, but from the State Police and the Weather Bureau. The police have been very cooperative during emergencies, and the Weather Bureau has given forecasts of weather conditions so that maintenance crews can be alerted and in this manner get a jump on any storms which might strike during the day or night.



MARYLAND SNOW FALL—WINTER 1950—1951





MARYLAND SNOW FALL—WINTER 1951—1952

## PRISON LABOR

To help relieve the idleness of the inmates in the various penal institutions of the State, the 1937 General Assembly authorized and directed the State Roads Commission to expend the sum of \$100,000.00 per year for the fiscal years 1938-39, such monies to be used for the purpose of establishing reconstruction, betterment and maintenance projects suitable for prison labor. Subsequent General Assemblies have not only continued this authorization but have increased it to the point that the State Roads Commission may, at the present time, spend any available funds on projects which they consider suitable for prison labor work.



SECTION OF MD. ROUTE 28 NEAR DARNESTOWN, MD. BEFORE WIDENING AND RESURFACING

Primarily, the type of projects selected have been the widening and, in some cases, resurfacing of pavement surfaces, the extension and widening of drainage structures, widening of cuts and fills and the correction of poor drainage.

Projects selected for improvement by prison labor forces are planned and directed by an engineer located in the Baltimore Office. He is assisted by five Project Engineers, together with Junior Engineers, Equipment Operators and a complement of prison laborers. At the present time, this Commission is working 50 men from a recently located camp at Quantico in Wicomico County; 40 men from the Chester Camp in Queen Anne's County; 30 men from the Maryland Penitentiary; 30 men from the Maryland House of Correction in Howard County; 50 men from the prison camp located in Gaithersburg, Montgomery County, and 10 men from the prison camp at Sandy Point, Anne Arundel County.

Tabulated below is a list of the projects which were brought to completion or are in the process of being completed, during the period of this report.

In addition to working on projects shown above, prisoners from the various institutions and camps are used for emergency highway repairs, normal maintenance operations and roadside betterment work in areas where free labor is at a premium. Such an area would be those portions of Prince George's and Montgomery Counties in close proximity to Washington.



SAME LOCATION AFTER IMPROVEMENT—SHOWING RELOCATION—WORK PERFORMED BY PRISON LABOR

#### ROADSIDE DEVELOPMENT

The Roadside Development Division's activities are under the supervision of the Landscape Engineer. He is responsible for the control and direction of all professional administrative landscape work. His duties are to prepare, or to supervise the preparation of highway landscape plans and specifications necessary for the completion of landscape projects to be done by contract or otherwise; to supervise or superintend construction of such projects; to prepare landscape development programs; to inspect areas and to make reports as to acquisition of land and selection of sites for proposed landscape development.

In this Division, there are experienced landscape men who operate out of Baltimore City and work in all six of the Commission's Districts. These men, although few in number, act as a nucleus among men on landscape projects of size and importance. They handle, assist, or supervise all the important work of the Commission which pertains to landscaping.

PRISON LABOR PROJECTS AUTHORIZED PRIOR TO JULY 1, 1950, AND COMPLETED DURING THE PERIOD OF THIS REPORT

Project Number	Route Number	Location	Miles	Description of Work	Authorized Amount	Per Cent Completed Prior to July 1, 1950	Per Cent Completed This Report
AA-402X AA-415X-1	Md. 2 Md. 178	Ritchie Highway—Harmdale General Hwy. at Epping Forest Road		Spec. 'B' Crossover 6" Surface Course Spec. 'B' 1 1/2"	23,000 10,780	9 88	91 12
AA-381X-1 AA-381X-5 AA-395X-1	Md. 176 Md. 176 U. S. 301	Harmons-Dorsey Road Harmons-Dorsey Road Belle Grove Road	2.63 — 2.25	Resurfacing Spec. 'B' 22' Drainage, Shoulders, Seeding & Resurface Spec. 'B' 24'	71,500 66,000 125,000	49 53 21	51 17 79
Co-208X Cl-322X	Md. 312 Md. 27	North of Ridgely Mt. Airy to Howard Co. Line	0.28 1.26	9" Gravel Mixed in Place 3'	11,170 92,500	85 5	15 95
Co-320X Co-332X Ho-245X-1	U. S. 40 Md. 272 Md. 99	Aiken Elkton Elk Neck Road St. John's Lane Slack's Corner	12.81 1.69 6.30	Asphalt Subgrading 3' Bitum. Treated Shoulders Widen to 22' Pen. Mac.	76,676 5,500 96,250	80 37 79	20 63 21
Ho-245X-2	Md. 99	St. John's Lane—Slack's Corner		Resurface Spec. 'B' 22'	118,450	2	98
Ho-246X-1 K-177X	Md. 103 Md. 561	Waterloo Road Wash. Blvd. Lynch Road	4.96 2.46	Gravel Shoulders Widen to 22'—Resurface Spec. 3'	13,750 71,500	3 89	97 11
K-179X K-180X	U. S. 213 Md. 298	Goose Hill Chestertown Fairlee Bullertown	4.00 6.50	Widen to 24'—Spec. 'B' Widen to 22' Resurface Spec. 3'	132,000 275,000	— —	100 90
K-483X	Md. 289	Quaker Neck Road	2.30	Widen to 22' Surf. Treated Gravel	12,870	—	100
M-452X M-456X M-462X M-465X M-467X M-475X P-476X	Md. 28 Md. 28 Md. 28 Md. 97 U. S. 240 Md. 5	Darnestown Dawsonville Dawsonville Beallsville Beallsville Locksville (U. S. 15) Brookville Howard Co. Line Gaithersburg Rockville Prison Camp Surratsville to T. B. Cut-off	3.50 5.50 7.00 4.13 4.61 4.10	Widen to 22'—Spec. 'B' Widen to 22'—Spec. 'B' Widen to 22'—Pen. Mac. Widen to 22' Widen to 24'—Pen. Mac. Painting Roof Widen to 24'—Resurface Spec. 3'	39,958 81,010 106,260 77,000 208,704 770 100,000	89 73 64 88 19 9	11 27 36 12 95 81 91
P-667X P-675X	Md. 212 Md. 561	Riggs Road Seabrook—Bowie	2.59 4.35	Widen to 24' Resurface Spec. 3'	40,260 114,080	54 65	46 35
P-677X Q-223X	U. S. 50 Md. 19	Edmonston Rd.—Landover Rd. Church Hill—Ingleside	0.50 7.24	Resurf. Spec. 'B' Curb to Curb Widen to 20' Bit. Treated Gravel	100,000 21,683	— 91	Cancelled 9
Q-223X-2 Q-236X-1	Md. 19 Md. 300	Church Hill—Ingleside Church Hill—Duhamel's Corner	7.24 8.79	Resurface 22' Spec. 'B' Widen to 22' Resurface Spec. 3'	120,120 319,000	19 76	81 24
Q-240X	U. S. 50	Matapeake—Stevensville	0.80	Widen to 30' Bit. Surf. Treated	4,400	19	81
Wi-262-114	—	Prison Labor Camp at Chantico	—	—	24,200	57	43

The Division's routine work consists of the maintenance of all trees and shrubbery planted by or under the direction of the Division, also, the numerous specially developed landscape features of utility such as memorials, wayside picnic and rest areas, off-the-highway parking areas, and scenic over-looks. It gives landscape advice and assistance to the various departments of the Commission.—To the Construction Division it furnishes plans and specifications and also the supervision of difficult landscape construction work; to the Maintenance Division advice and assistance pertaining mostly to the control of erosion; to the Right of Way Division information, advice and cost estimates for the moving or resetting of plant material from the limits of newly acquired rights of way; to the Division of Bridge Design advice and assistance for controlling erosion on areas adjacent to bridges, and to the District Engineers advice and assistance on numerous items of work of a landscape nature. It also gives advice to other State Departments, including municipalities, town and State Institutions.

This Division cooperates very closely with garden clubs and other civic organizations throughout the State. It furnishes advice and labor to these organizations on all of their State approved roadside planting projects. Under this policy, thousands of trees and shrubs have been furnished by civic organizations and planted by the Commission. The Division takes great pride in these plantings and special effort is given to their maintenance so as to assure successful and creditable results.

The most outstanding project yet to be undertaken by this Division is the creation of more than a hundred picnic and scenic roadside areas throughout the State. We have spent much time in the careful selection of the most desirable locations within our rights of way having the necessary and required features of scenic beauty, accessibility, availability, water if possible, and shade.

It is our desired objective as a start to have five or more picnic areas installed in each of the 23 counties. However, many more areas will be added as desirable locations become available along our newly constructed highways.

These picnic area installations have been accepted by the public as a great service and our Commission is receiving many favorable comments and offers of land on which to build more sites.

This Division has been cooperating with the Game and Inland Fish Commission toward the creation of combination picnic and fish pond areas. One such area already completed is located on State Route 121 near Clarksburg. This area was dedicated by our Governor to the local communities and was received with such enthusiasm that it was suggested by the Governor and the Commission Chairman that more of these combination areas be installed.

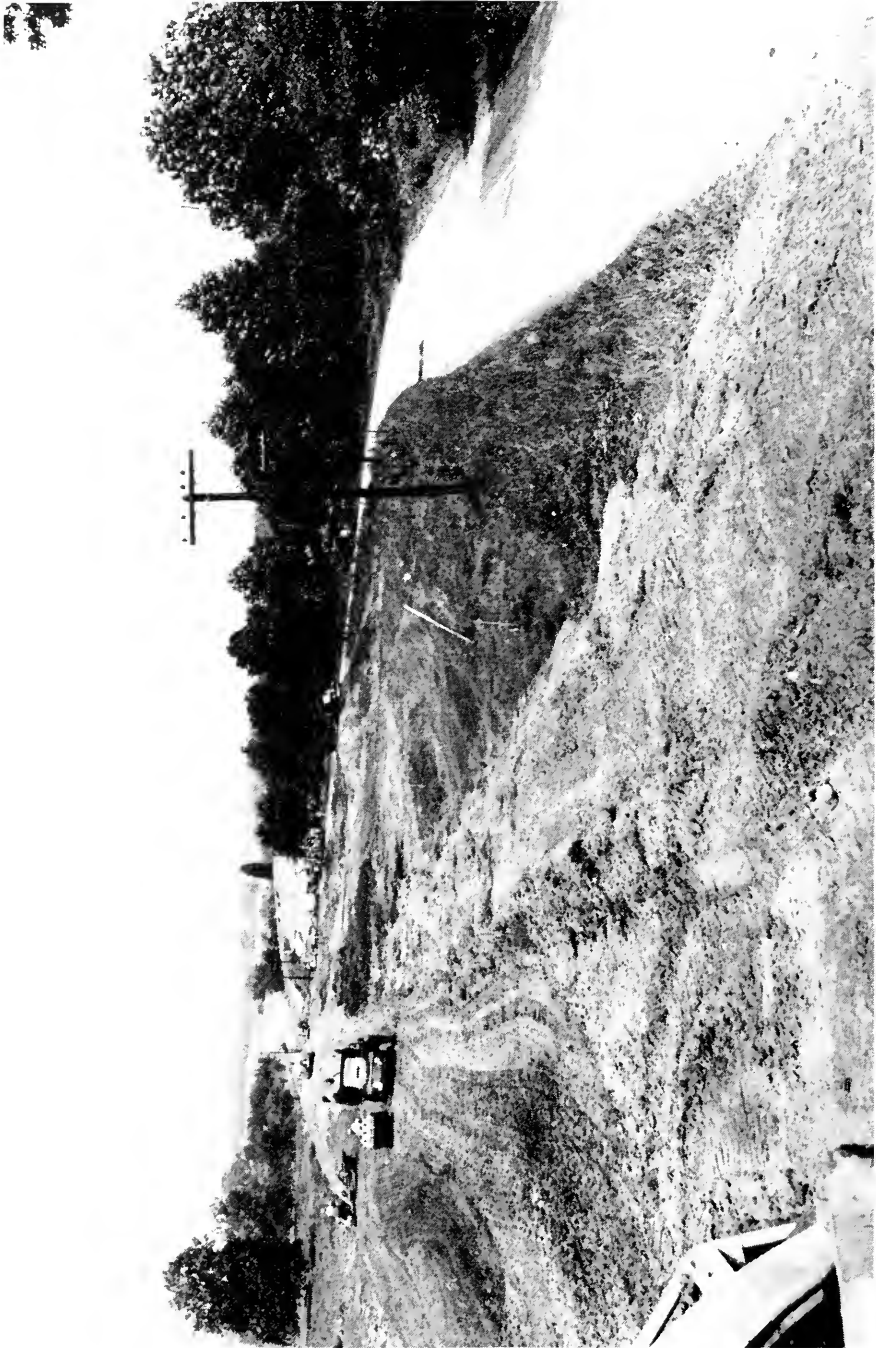
The Construction Engineer and the Landscape Engineer work together on reconnaissance and surveys for the purpose of integrating landscape features and principles in the construction of highways and their appurtenances. In addition to the integration of wayside areas having potent possibilities for landscape development, the Division is now more than ever conserving desirable existing trees and shrubs both small and large which happen to be in the center park area of dual

## PRISON LABOR PROJECTS AUTHORIZED JULY 1, 1950 TO JUNE 30, 1952

Project Number	Route Number	Location	Miles	Description of Work	Authorized		Per Cent Completed	Remarks
					Amount	Date		
AA-418X-2	U. S. 301	Glen Burnie to Dorsey Road	0.15	Widen to 44 ft	6,050	1-24-51	100	To relieve left turn traffic
AA-429X	U. S. 301	Belle Grove Rd. to Dorsey Road	3.35	Widen & Resurface Spec. 'B'	150,500	6-27-51	100	Modify two curves—Seed & sod Banks
AA-434X	Md. 168	From U. S. 301 to Md. 167	1.30	Widen & Resurface	66,000	10-3-51	100	Two 4 ft Shoulders—Resurface Spec. 'B'
AA-436X	Md. 713	From Md. 175 to Md. 176	2.49	Widen & Resurface	223,000	10-24-51	80	10' Shoulders, Extend Drainage, Seed Slopes
AA-438X	Md. 2	Naval Academy Gates No 849	—	Widen	2,118	2-28-52	100	
AA-442X	—	Near Glen Burnie	—	Alter Buildings & Erect Fence	3,300	4-22-52	90	
AA-395X-1	—	—	—	—	—	—	—	—
B-583X-1	U. S. 301	Balto. City Line to Belle Grove Road	2.25	Widen & Resurface Spec. 'B'	125,000	3-22-50	100	Widen to 24 ft.
Cl-303X	—	Connection between new U. S. 140 & U. S. 140	0.65	Widen & Resurface	28,600	11-7-51	100	Locust & Maple Aves. & Leidy Road at Westminster
Cl-329X-3	Md. 27	N. Limits Mt. Airy	0.70	Widen & Resurface	24,200	10-11-50	100	S' Shoulders, Drainage Structures & Side Ditches
Ce-336X-1	U. S. 213	Chesapeake City to Bohemia Bridge	4.22	Widen, Level Course & Resurface	215,380	8-23-50	100	10' Shoulders, Modify Curves
Ce-336X-2	U. S. 213	Bohemia Bridge to Cecilton	4.03	Widen, Level Course & Resurface	220,000	11-9-50	100	10' Shoulders, Drainage Structures, Seeding & Mulching
Ce-341X-1	U. S. 213	Cecilton to Sassafras River	3.00	Widen & Modify Curves	181,500	9-13-51	70	Extend Drain Structure & Side Ditches
Ce-357X	U. S. 40	Perryville Easterly	2.00	Mulch & Seed Slopes	1,783	9-20-51	80	Extend Drain Structure & Side Ditches
D-229X	Md. 16	Cambridge to Church Creek	6.00	S' Earth Shoulders	85,800	7-6-51	50	S' Shoulders, Extend Drainage Structures, etc.
F-517X	Md. 80	U. S. 240 to Md. 75	4.70	Rehabilitate & Widen to 20 ft	220,000	8-23-50	100	
Cl-322X-2	Md. 27	Ridgeville to Mt. Airy	0.80	Rehabilitate & Resurface	21,824	8-23-50	100	
F-488X-1	U. S. 15	Near Toms Creek	—	Modify Curve	28,404	11-21-50	100	
F-519X	U. S. 1	Bel Aire to Deer Creek	5.38	10' Stab Shoulders, Drain Structures, etc.	71,016	1-2-52	10	Recut side ditches, seeding & Mulching.
H-323X-2	—	—	—	—	—	—	—	—
Ho-241X-1	Md. 27	Carroll Co. Line to Mont. Co. Line	1.45	Widen, Modify Curves & Resurface	86,900	11-9-50	100	
Ho-251X	Md. 97	Mont. Co. Line to U. S. 40	6.90	Widen, Modify Curves & Resurface	164,560	7-11-51	93	
Ho-256X	Md. 476	Md. 144 to U. S. 40	0.50	Widen, to 24 ft & Resurface	22,000	10-10-51	100	Connection between old U. S. 40 & Dual U. S. 40
Ho-251X-2	Md. 97	U. S. 40 to N. of Mont. Co. Line	6.20	Widen 0.2 Mi. & Resurface	220,000	6-18-52	30	Restore Shoulders to meet Cross section.
K-186X-1	U. S. 213	Sassafras River to Galena	1.50	Widen to 24' & Resurface Spec. 'B'	121,000	9-26-51	100	10' Shoulders, extend drainage structures, ditches, etc.
K-190X	Md. 298	Butlertown to Lyneh	2.20	Widen to 20' & Resurface Spec. 'B'	110,000	9-26-51	100	10' Shoulders, extend drainage structures, ditches, etc.
K-191X	Md. 20	Chestertown to Roek Hall	12.75	2-S' Earth Shoulders, Drainage, etc.	241,000	10-24-51	00	
K-187X-2	Md. 20	Patrice Relocation	0.75	Construct 24 ft Road	55,000	3-26-52	00	20' Compact Gravel—24' Spec 'B' Surface
K-194X-2	Md. 298	Lyneh to Redden's Corner	1.40	Widen to 20 ft	38,500	4-30-52	10	Extend drainage Structures, side ditches, etc.
M-479X	U. S. 240	W. Limit Rockville to W. Limit Relocation	0.40	Construct new pavement 0.3 Mile	24,200	9-20-50	100	Widen & Resurface 0.1 Mile

M-480X	U. S. 240	West of Seneca Creek	0.55	Widen to 36 ft for 3rd Lane	17,600	1-31-51	99
M-496X-2	Md. 28	Darrestown to Hunting Hill	5.45	Modify Curves, Widen & Re-surface	412,500	2-14-52	10
M-496X-3	Md. 28	First St. Roekville	—	Widen & Resurface	22,000	2-28-52	85
Q-241X-1	Md. 300	Duhawks Corner to Delaware Lane	4.60	Widen to 22 ft	62,700	7-12-50	100
Q-241X-2	Md. 300	Duhawks Corner to Delaware Lane	4.60	Construct Earth Shoulders	25,300	12-27-50	100
Q-235X-1	Md. 313	Siddersville to Unicorn Mills	4.60	Construct Earth Shoulders	30,360	12-27-50	99
P-675X-1	Md. 504	Bowie to Seabrook	4.35	8 ft Gravel Shoulders, Drainage, etc.	55,517	8-16-50	100
P-680X	Md. 504	Seabrook to Latham	1.27	Widen to 22 ft & Resurface	48,400	8-22-50	100
S-184X	Md. 593	St. Stephens to Dames Quarters	3.40	Widen to 21 ft	88,000	9-27-50	100
S-188X	Md. 627	Md. 363 turn Oriole	2.50	Widen & Resurface	64,240	10-10-51	80
S-186X	Md. 529	Loretta to Allen	2.73	Widen & Resurface	90,000	4-30-52	20
T-138X-1	Md. 328	Easton twd. Matthewsstown	4.36	Construct Earth Shoulders	28,380	8-29-51	100
T-146X	Md. 333	Peach Blossom Creek to Oxford	7.42	2-10 ft Shoulders	90,750	10-3-51	100
		TOTAL	120.90		3,811,382		

Fill in Borrow Pit Ditches  
Gravel Shoulders, Drainage  
Ditches, etc.  
Drainage Structures, Ditches,  
etc.  
Drainage Structures, Side  
Ditches, etc.



RECONSTRUCTION OF MARYLAND ROUTE 28—BETWEEN HUNTING HILL AND DARNESTOWN—BY PRISON LABOR





TYPICAL PICNIC AREA LOCATED ON U. S. ROUTE 50 DORCHESTER COUNTY

highways. This material is being conserved above and below grade, as well as on grade of the highway lanes. In addition to the outstanding attractiveness these existing trees give, (and for which there is no substitute), they also screen headlight glare, especially well in sections where conservation is above grade. The integration of such conservation, principles and practices in location and design of the new highway, results in having a complete highway built around the four basic qualities of utility, safety, beauty and economy.

The Division's accomplishments for the fiscal years 1950-1952 done with State forces and Prison Labor forces and for which this Division furnished plans, specifications, advice, assistance and supervision are listed as follows:

On approximately 25 projects, we have mulch-seeded 1,353,333 square yards of roadside slopes; seeded 51,000 square yards of park area; sodded 255,080 square yards of drainage area; constructed 96,666 square yards of turf stabilized shoulders; fertilizer used was 195 tons; seed used was 36,535 lbs. and mulch used was 677 tons.

The Division's accomplishments for the fiscal years 1950-1952 done by contract and for which this Division supplied the plans, specifications and supervision are as follows:

On approximately 77 contracts, we have mulch-seeded 3,362,850 square yards of roadside slope area; 279,445 square yards of park area seeding; 571,980 square yards solid grass sodding and constructed 134,000 square yards of turf stabilized shoulders. Topsoil salvaged or brought in and used on these contracts was about 381,421 cubic yards; fertilizer used was 626 tons; grass seed used was 117,404 lbs.; mulch used was 1749 tons and lime used was 38 tons.

#### SIGN SHOP

The Sign Shop located at 519 President Street, Baltimore, makes about 95 per cent of the road signs used throughout the State. The signs are lettered by hand and the silk screen process.

Sign repainting is normally required every four or five years. However, for the safety and information of the traveling public, replacements and repairs necessitated by demolition, vandalism, etc., are erected and repaired as soon as possible.

The paint striping machine, operated out of the Baltimore shop, works on a State-wide schedule. Center line and lane stripes were applied, during this biennium to approximately 2500 miles per year, in addition to the surface marking of school zones, intersections and railroad crossings.

Small paint spray units have been assigned to each District. Surface lettering, danger point marking, cross walks, guard rail painting, and center line spotting for striping are done by crews operating from the District shops.

All signs, markers and surface markings are in conformity with the Manual on Uniform Traffic Control Devices for Streets and Highways.

The personnel consists of the following:

- 1 Foreman
- 1 Operator—Paint Machine



ERECTING NEW DIRECTIONAL SIGN FOR CHESAPEAKE BAY BRIDGE—SIGN MADE BY THE SIGN SHOP

- 1 Assistant—Paint Machine
- 7 Sign Painters
- 3 Sign Painter Helpers
- 2 Chauffeurs
- 1 Shop Clerk
- 2 Laborers

In the operations of the Sign Shop, the following equipment is used:

- 1 Air-powered Paint Mixer
- 1 Metal Bending Machine
- 2 Power Saws
- 1 Power Sander
- 1 Power Punch
- 1 Power Shears
- 1 Paint Striping Machine
- 1 Carryall Truck
- 2 Pick-up Trucks
- 1 Passenger Car
- 1 Scotchlite Machine

There have been manufactured or repaired and erected, during the period of this report, the following:

- 2000—Non-Luminous School Signs
- 2000—Luminous Stop Signs
- 2023—Luminous Metal Signs—Arrows, Town Markers, By-Pass, Alternate, Begin and End State Maintenance
- 349—Luminous Highway Junction Signs
- 158—10" x 10" Bulls Eyes and Crossover Markers
- 4400—18" x 12" Non-Luminous Parking Signs
- 396—3' x 4' Luminous Metal on Wood Signs: Road Under Construction, Direction and Distance Signs
- 1550—2' x 3' Luminous Metal and Metal on Wood Signs: Keep Right, Dangerous Curve, Direction and Distance Signs
- 300—8" x 48" Non-Luminous Men Working Signs
- 531—18" x 36" Non-Luminous Metal on Wood: River and Stream Markers, County Line Signs
- 884—2' x 4' Luminous Metal on Wood: Keep To Right, No Left Turn, Direction and Distance Signs
- 4880—2' x 2' Luminous Metal: Federal Route Markers, Stop Ahead, Slow, Single Lane Ahead
- 1207—15" x 18" Luminous State Route Markers
- 831—30" x 30" Luminous Metal: Keep Right, Road Construction Ahead, Keep Left
- 200—5' x 8' Non Luminous Metal on Wood: Courtesy Signs

- 3079—8" x 48" Non Luminous Wood Panel: Direction and Distance Signs
- 342—6 $\frac{1}{2}$  x 12" Non Luminous Metal: Federal Aid Markers
- 199—10" x 24" Luminous Metal: Arrows, One Way Signs
- 693—30" x 48" Luminous Metal on Wood: Direction and Distance Bridge Weight Signs
- 396—3' x 4' Luminous Metal on Wood: Direction and Distance Signs
- 120—Non Luminous Plywood: Picnic Area Signs
- 50—4' x 4' Luminous Plywood: Curve, Stop Signs
- 7900—Non-Luminous Bumper Signs, State Police

There have been used 25,000  $\#5$  reflector buttons for luminous signs, 15,000  $\#1$  reflector buttons for guard rail markings, and 10,000  $\#15_s$  reflector buttons for delineators.

In addition, the activities of the Sign Shop included such miscellaneous items as office lettering, the printing of Ferry signs, Bridge signs, State Police signs, Contractor's Construction Signs, etc.

## EQUIPMENT DIVISION

Accompanying Table Number One shows the amount of Equipment owned by the Maryland State Roads Commission as of June 30, 1952, by Districts and Divisions.

During the Fiscal Year of 1951, the Commission's purchases of new equipment amounted to \$670,503.48 and during the Fiscal Year of 1952, totaled \$761,513.48. The details of these purchases are shown in the accompanying Table Number Two. The amounts as shown represent total costs without trade-in deductions.

In the purchasing of new equipment the Commission received, on trade-ins or outright sales of old equipment, the amount of \$61,806.46 for the Fiscal Year of 1951 and \$121,064.04 for the Fiscal Year of 1952, as shown in detail in the accompanying Table Number Three.

TABLE 1  
EQUIPMENT OF THE MARYLAND STATE ROADS COMMISSION AS OF JUNE 30 1952

Type of Equipment	Dist. 1	Dist. 2	Dist. 3	Dist. 4	Dist. 5	Dist. 6	Dist. 7	Dist. 8	Dist. 9	Dist. 10	Dist. 11	Dist. 12	Dist. 13	Dist. 14	Dist. 15	Dist. 16	Dist. 17	Dist. 18	Dist. 19	Dist. 20	Dist. 21	Dist. 24	Dist. 25	Dist. 26	Dist. 29	Total	
<b>Passenger Cars</b>																											
Buicks	—	1	1	—	—	1	2	2	—	3	1	5	1	1	—	1	1	—	—	—	—	1	2	—	1	—	24
Cadillac	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Chevrolets	7	8	8	6	7	8	4	2	6	2	1	—	2	3	1	14	2	7	8	3	40	10	1	—	—	—	154
Oldsmobiles	1	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	5
<b>Total Passenger Cars</b>	8	9	9	7	8	9	6	4	6	6	2	5	3	4	1	15	3	7	9	4	41	12	1	5	—	—	184
<b>Trucks</b>																											
Carry Alls	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chevrolets	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
G.M.C.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Compressor Mounted	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chevrolets	—	—	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7
Dodge	—	—	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
G.M.C.	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Internationals	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
White	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Core Drill Mounted	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Federal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Crusher Mounted	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Mack	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Distributor	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
G.M.C.	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Dumps	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Autocar	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Corbitts	—	3	—	2	1	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10
Federals	—	14	13	12	19	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	74
F.W.D.	—	5	2	1	3	1	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18
G.M.C.	—	31	38	30	18	27	20	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	169
Internationals	—	1	10	5	6	16	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	46
Mack	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Oshkosh	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Walters	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8
Paint-Line	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9
Federal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Panels	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Chevrolets	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
G.M.C.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1

Pickups	10	7	8	6	6	8	8	7	7	1	2	1	1	2	1	1	2	1	60
Chevrolets		1		1	1	2													4
Dodges			1	1	1	1													5
Fords	3		1	2	1	1													5
Internationals																			
Screen-sides																			
Chevrolets		1	1	2	1	1	1												6
Dodges		1	1	1	1	1													3
Fords	1	1	1	1	1														3
Sedan Delivery																			
Chevrolet												1							1
Stake																			
Federal		1																	1
Station Wagons																			
Fords													1						2
Willys													9						9
Tanks																			
Chevrolet								1											1
Federals							1												2
Indiana			1																1
International		1																	1
Tower																			
G.M.C.																			1
Tractors																			
Federal																			1
Ford	1													1					1
Internationals	1	1	1	1	1	1													6
Traffic Signal Maintenance																			
Chevrolets																			
Utility—Compressor-Mounted—Paint																			
Chevrolet			1																1
Utility—Pole Erecting																			
Federal																			1
Utility—Sign																			
Chevrolet			1																1
Van																			
International																			1
Wrecker																			
Dodge			1																1
Total Trucks	53	80	74	57	76	85	3	15	8	15	2	4	7	12	7	22	14	515	

TABLE 1—Continued

Type of Equipment	Dist. 1	Dist. 2	Dist. 3	Dist. 4	Dist. 5	Dist. 6	Dist. 7	Div. 8	Div. 9	Div. 10	Div. 11	Div. 12	Div. 13	Div. 14	Div. 15	Div. 16	Div. 17	Div. 18	Div. 19	Div. 20	Div. 21	Div. 24	Div. 25	Div. 26	Div. 29	Total	
Miscellaneous Equipment																											
Auto Patrols	15	22	9	4	17	6			6											1							79
Boat													2														1
Boring Machines		1						1																			1
Bridge Test Driver																											1
Brush Cutting Machine																											1
Cleaners	5	5	4	3	4	4									1				1								26
Compressors	5	7	5	6	6	4		1																			36
Conveyors	3	5	2	1	5	3																					19
Core Drills	2	4	1	4		2								1		4											5
Crack Fillers	1	1	1	1		1																					13
Cranes																											5
Crushers																											2
Ditcher						2																					1
Engines	1	2	4	3	2	2			1													1					16
Finisher				1	1	1																	1				1
Generators	2		1	1	1	1														2							9
Graders	7	29	2	1	13	5																1					57
Groovers	1	1	1	1		1																					5
Heaters (Tar)	12	24	20	16	24	23			1																		120
Heaters (Rub. Asphalt)	1		1																								2
Impactors	1					1																					2
Loaders	6	10	9	6	7	8			6																		52
Mixers—Bituminous	4	8	2	1	4	8																					28
Mixers—Concrete	1	3	1	2	2	3																					12
Mowers—Gang	2	6	12	6	1																		1				28
Mowers—Hand	13	11	13	4	7	4																	4	1			59
Mowers—Highway	12	30	23	19	17	16																					117
Mud Jack									1																		1
Paint Machines	1	2	1	2	4	1																					11
Pile Drivers	2				2	3																					4
Planers	3	4			2	3																					12
Pumps	7	4	9	5	2	6								2													37
Rollers	11	18	17	10	17	26													1								103
Roughness Indicator																1											1
Saws—Chain	3	5	2	4	1	6																					29
Scrapers		1	1	1		1			8																		2
Shovels	2	2	1	1	1	1																					8





TABLE 2

TYPE, AMOUNT AND COST OF EQUIPMENT PURCHASED BY THE MARYLAND STATE ROADS COMMISSION DURING THE FISCAL YEARS 1951 AND 1952

Type of Equipment	Fiscal Year 1951		Fiscal Year 1952		Grand Total	
	Amount	Cost	Amount	Cost	Amount	Cost
Passenger Cars						
Buicks	2	\$5,318.50	5	\$10,131.24	7	\$15,449.74
Cadillac	1	4,064.99	—	—	1	4,064.99
Chevrolets	30	41,790.56	43	70,522.43	73	112,312.99
Oldsmobiles	1	2,323.43	4	8,776.57	5	11,100.00
Total Passenger Cars	34	\$53,497.48	52	\$89,430.24	86	\$142,927.72
Trucks						
Carry Alls:						
Chevrolets	—	—	2	\$3,150.62	2	\$3,150.62
G.M.C.	2	\$4,026.30	3	4,918.20	5	8,944.50
Dumps:						
G.M.C.	58	150,322.08	—	—	58	150,322.08
Internationals	—	—	46	172,625.12	46	172,625.12
Walters	—	—	4	39,040.00	4	39,040.00
Paint—Line:						
Federal	—	—	1	8,576.62	1	8,576.62
Panels:						
Chevrolets	1	1,753.01	1	1,308.19	2	3,061.20
G.M.C.	1	1,602.93	—	—	1	1,602.93
Pickups:						
Chevrolets	12	17,950.32	16	20,420.07	28	38,370.39
Screen-sides:						
Chevrolets	—	—	2	3,752.95	2	3,752.95
Fords	—	—	2	4,673.74	2	4,673.74
Sedan Delivery:						
Chevrolet	1	1,583.95	—	—	1	1,583.95
Station Wagons:						
Willys	3	5,853.67	—	—	3	5,853.67
Tanks:						
Chevrolet	—	—	1	1,620.59	1	1,620.59
International	—	—	1	3,202.72	1	3,202.72
Tractor:						
Ford	1	3,773.45	—	—	1	3,773.45
Traffic Signal Maintenance						
Chevrolet	—	—	1	3,180.50	1	3,180.50
Utility—Compressor-Mounted—Paint:						
Chevrolet	—	—	1	1,920.30	1	1,920.30
Utility—Sign:						
Chevrolet	—	—	1	1,923.27	1	1,923.27
Van:						
International	—	—	1	3,856.42	1	3,856.42
Total Trucks	79	\$186,865.71	83	\$274,169.31	162	\$461,035.02
Miscellaneous Equipment						
Auto Patrols:						
Adams	—	—	2	\$23,666.00	2	\$23,666.00
Allis Chalmers	19	\$152,609.20	4	23,700.00	23	176,309.20
Warco	—	—	3	42,015.00	3	42,015.00
Boat:						
Deadrise	—	—	1	600.00	1	600.00

TABLE 2—Continued

Type of Equipment	Fiscal Year 1951		Fiscal Year 1952		Grand Total	
	Amount	Cost	Amount	Cost	Amount	Cost
Miscellaneous—Continued						
Brush Cutting Machine:						
Hall Holmes.....	1	12,905.08	—	—	1	12,905.08
Cleaners:						
Jenny.....	—	—	1	588.00	1	588.00
Kerrick.....	—	—	1	795.26	1	795.26
Compressors:						
Chicago Pneumatic.....	—	—	1	5,524.50	1	5,524.50
Davey.....	2	9,934.00	—	—	2	9,934.00
LeRoi.....	3	7,455.00	—	—	3	7,455.00
Schramm.....	1	1,541.60	1	872.20	2	2,413.80
Worthington.....	—	—	1	1,735.00	1	1,735.00
Conveyors:						
Atlas.....	2	3,181.08	—	—	2	3,181.08
Farquhar.....	1	1,236.00	—	—	1	1,236.00
Core Drill:						
Calyx.....	1	2,329.20	—	—	1	2,329.20
Crack Fillers:						
Hecker.....	1	702.00	2	1,249.04	3	1,951.04
Sealz Melter.....	2	3,048.80	—	—	2	3,048.80
Grader:						
Adams.....	1	4,000.00	—	—	1	4,000.00
Groovers:						
Tennant.....	4	4,028.44	—	—	4	4,028.44
Heaters—Rubber						
Asphalt:						
Hecker.....	1	1,727.00	1	1,736.25	2	3,463.25
Heaters—Tar:						
Aerol.....	6	2,420.11	—	—	6	2,420.11
Littleford.....	3	2,100.94	4	3,620.00	7	5,720.94
Loaders:						
Athey.....	2	17,407.95	1	4,154.71	3	21,562.66
Hough.....	3	16,060.68	6	32,121.32	9	48,182.00
Nelson.....	—	—	2	15,902.00	2	15,902.00
Pettibone Mulliken.....	1	8,300.00	5	42,633.40	6	50,933.40
Mixer—Bituminous:						
Kwik Mix.....	1	2,817.50	—	—	1	2,817.50
Mowers—Gang:						
Woods.....	—	—	1	416.74	1	416.74
Worthington.....	5	5,150.00	12	12,150.00	17	17,300.00
Mowers—Hand:						
F & N.....	—	—	1	77.91	1	77.91
Gravelly.....	5	2,486.12	9	4,529.22	14	7,015.34
Homko.....	—	—	1	101.20	1	101.20
Jacobsen.....	—	—	3	670.40	3	670.40
Moto.....	—	—	1	240.00	1	240.00
National.....	1	181.30	2	347.81	3	529.11
Pathfinder.....	2	366.52	—	—	2	366.52
Scythette.....	—	—	1	141.61	1	141.61
Toro.....	3	600.66	1	120.93	4	721.59
Worthington.....	—	—	1	440.00	1	440.00
Mowers—Highway:						
Case.....	2	1,968.60	—	—	2	1,968.60
Centaur.....	7	11,270.00	26	41,860.00	33	53,130.00
John Deere.....	—	—	2	2,759.70	2	2,759.70
Worthington.....	—	—	1	2,180.00	1	2,180.00

TABLE 2—*Concluded*

Type of Equipment	Fiscal Year 1951		Fiscal Year 1952		Grand Total	
	Amount	Cost	Amount	Cost	Amount	Cost
Miscellaneous— <i>Continued</i>						
Paint Machines:						
Meili Blumberg	2	1,417.68	1	761.31	3	2,178.99
Pumps:						
Carter	—	—	3	744.80	3	744.80
Gorman Rupp	—	—	2	259.20	2	259.20
Rex	—	—	1	257.00	1	257.00
Rollers:						
Galion	4	23,500.00	2	12,288.00	6	35,788.00
Huber	8	41,392.00	5	37,495.40	13	78,887.40
Littleford	8	11,624.00	4	7,264.00	12	18,888.00
Pierce Bear	—	—	2	10,860.00	2	10,860.00
Saws—Chain:						
Disston	3	1,524.00	—	—	3	1,524.00
Homelite	3	1,099.39	1	451.00	4	1,550.39
Mall	1	342.00	—	—	1	342.00
McCulloch	—	—	1	479.40	1	479.40
Reed Prentice	2	635.00	2	696.60	4	1,331.60
Scraper—Culvert:						
Flexible	1	791.75	—	—	1	791.75
Shovel:						
Insley	1	10,634.00	—	—	1	10,634.00
Sweepers:						
Grace	—	—	1	1,225.12	1	1,225.12
Hough	—	—	5	6,247.70	5	6,247.70
Littleford	—	—	1	1,350.00	1	1,350.00
Standard	1	980.00	—	—	1	980.00
Tiller:						
Merry Tiller	—	—	1	287.50	1	287.50
Tractors:						
Allis Chalmers	1	9,300.00	—	—	1	9,300.00
Caterpillar	4	47,026.37	—	—	4	47,026.37
Fordson	—	—	2	2,982.34	2	2,982.34
International	—	—	6	36,307.52	6	36,307.52
Trailers:						
Dorsey	—	—	2	6,393.84	2	6,393.84
Insley	1	1,995.00	—	—	1	1,995.00
LaCrosse	—	—	1	3,765.00	1	3,765.00
National	—	—	1	850.00	1	850.00
Trail Truck	1	173.22	—	—	1	173.22
Welders:						
Hobart	1	835.00	—	—	1	835.00
Lincoln	1	1,043.10	—	—	1	1,043.10
Total Miscellaneous Equipment	123	\$430,140.29	142	\$397,913.93	265	\$828,054.22
GRAND TOTAL—All Equipment	236	\$670,503.48	277	\$761,513.48	513	\$1,432,016.96

TABLE 3

TYPE, AMOUNT AND SALVAGE OF EQUIPMENT TRADED-IN OR SOLD BY THE MARYLAND STATE ROADS COMMISSION DURING THE FISCAL YEARS 1951 AND 1952

Type of Equipment	Fiscal Year 1951		Fiscal Year 1952		Grand Total	
	Amount	Cost	Amount	Cost	Amount	Cost
<b>Passenger Cars:</b>						
Buicks.....	4	\$2,378.00	7	\$5,068.08	11	\$7,446.08
Cadillac.....	1	2,000.00	—	—	1	2,000.00
Chevrolets.....	14	8,491.94	40	40,578.93	54	49,070.87
<b>Total Passenger Cars.....</b>	<b>19</b>	<b>\$12,869.94</b>	<b>47</b>	<b>\$45,647.01</b>	<b>66</b>	<b>\$58,516.95</b>
<b>Trucks:</b>						
<b>Carry Alls:</b>						
Chevrolets.....	1	864.02	3	900.00	4	1,764.02
<b>Dumps:</b>						
Dodges.....	3	600.00	1	566.67	4	1,166.67
Federals.....	11	2,200.00	12	6,800.02	23	9,000.02
Ford.....	1	200.00	—	—	1	200.00
F.W.D.....	—	—	1	1,366.00	1	1,366.00
Internationals.....	3	600.00	2	1,133.34	5	1,733.34
Macks.....	29	5,800.00	19	10,766.65	48	16,566.65
Oshkosh.....	—	—	1	566.67	1	566.67
Walters.....	—	—	3	4,098.00	3	4,098.00
Whites.....	7	1,400.00	4	2,266.65	11	3,666.65
<b>Paint—Line:</b>						
G.M.C.....	—	—	1	680.00	1	680.00
<b>Panel:</b>						
Dodge.....	1	150.00	—	—	1	150.00
<b>Pickups:</b>						
Chevrolets.....	10	2,562.50	4	1,565.00	14	4,127.50
Ford.....	1	207.75	—	—	1	207.75
<b>Screensides:</b>						
Chevrolets.....	—	—	3	1,250.00	3	1,250.00
<b>Tank:</b>						
International.....	—	—	1	512.04	1	512.04
<b>Van:</b>						
Chevrolet.....	—	—	1	512.04	1	512.04
<b>Welder:</b>						
Ford.....	—	—	1	225.00	1	225.00
<b>Total Trucks.....</b>	<b>67</b>	<b>\$14,584.27</b>	<b>57</b>	<b>\$33,208.08</b>	<b>124</b>	<b>\$47,792.35</b>
<b>Miscellaneous Equipment:</b>						
<b>Auto Patrols:</b>						
Adams.....	3	\$3,522.00	—	—	3	\$3,522.00
Caterpillar.....	15	11,700.00	4	\$10,980.00	19	22,680.00
<b>Bin:</b>						
Butler.....	1	1,775.00	—	—	1	1,775.00
<b>Cleaners:</b>						
Kerrick.....	—	—	1	\$50.00	1	\$50.00
<b>Compressors:</b>						
Gardner Denver.....	1	\$350.00	—	—	1	350.00
Ingersol.....	—	—	1	1,224.50	1	1,224.50
Sullivan.....	1	900.00	1	109.00	2	1,009.00
<b>Conveyors:</b>						
Silver Flash.....	—	—	1	100.00	1	100.00
<b>Crushers:</b>						
Champion.....	1	261.00	—	—	1	261.00
Climax.....	—	—	1	56.00	1	56.00

TABLE 3—*Concluded*

Type of Equipment	Fiscal Year 1951		Fiscal Year 1952		Grand Total	
	Amount	Cost	Amount	Cost	Amount	Cost
Miscellaneous— <i>Continued</i>						
Graders:						
Austin .....	1	300.00	—	—	1	300.00
Caterpillar .....	3	700.00	1	100.00	4	800.00
Rome .....	1	175.00	—	—	1	175.00
Heaters—Tar:						
Littleford .....	5	145.00	7	281.00	12	426.00
Loaders:						
Barber Greene .....	—	—	1	1,300.00	1	1,300.00
Mixers—Bituminous:						
Jaeger .....	—	—	1	21.00	1	21.00
Kwik .....	—	—	1	66.00	1	66.00
Mowers—Gang:						
Pennsylvania .....	2	250.00	—	—	2	250.00
Mower—Hand:						
Reo Royale .....	—	—	1	20.00	1	20.00
Mowers—Highway:						
Centaur .....	—	—	22	3,300.00	22	3,300.00
Silver King .....	—	—	7	937.50	7	937.50
Planers:						
Gledhill .....	—	—	2	31.00	2	31.00
Pumps:						
Domestic .....	—	—	1	12.50	1	12.50
Jaeger .....	—	—	1	50.00	1	50.00
Rex .....	—	—	2	120.00	2	120.00
Rollers:						
Austin .....	2	575.00	1	250.00	3	825.00
Buffalo .....	11	3,300.00	8	7,050.00	19	10,350.00
Galion .....	1	325.00	—	—	1	325.00
Hercules .....	1	300.00	—	—	1	300.00
Littleford .....	3	150.00	3	136.00	6	286.00
Shovels:						
Bucyrus Erie .....	1	2,629.00	—	—	1	2,629.00
Osgood .....	—	—	1	1,800.00	1	1,800.00
Snow Plows—Rotary:						
Snow King .....	1	78.25	2	182.45	3	260.70
Sweepers:						
Hough .....	—	—	2	500.00	2	500.00
Tractors:						
Allis Chalmers .....	—	—	2	4,800.00	2	4,800.00
Caterpillar .....	3	5,608.00	5	7,902.00	8	13,510.00
Cletrac .....	1	705.00	—	—	1	705.00
Holt .....	2	604.00	—	—	2	604.00
International .....	—	—	1	500.00	1	500.00
Trailer:						
Williams .....	—	—	1	330.00	1	330.00
Total Miscellaneous Equipment .....	60	\$34,352.25	82	\$42,208.95	142	\$76,561.20
GRAND TOTAL—All Equipment .....	146	\$61,806.46	186	\$121,064.04	332	\$182,870.50

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**DISTRICT NO. 1**  
**Headquarters—Salisbury, Maryland**

C. ALBERT SKIRVEN  
*District Engineer*

CARROLL L. BREWINGTON, JR.  
*Assistant District Engineer*  
Construction

HARRY V. JONES  
*Acting Assistant District Engineer*  
Maintenance

DORCHESTER COUNTY  
WM. H. MOORE  
*Resident Maintenance Engineer*

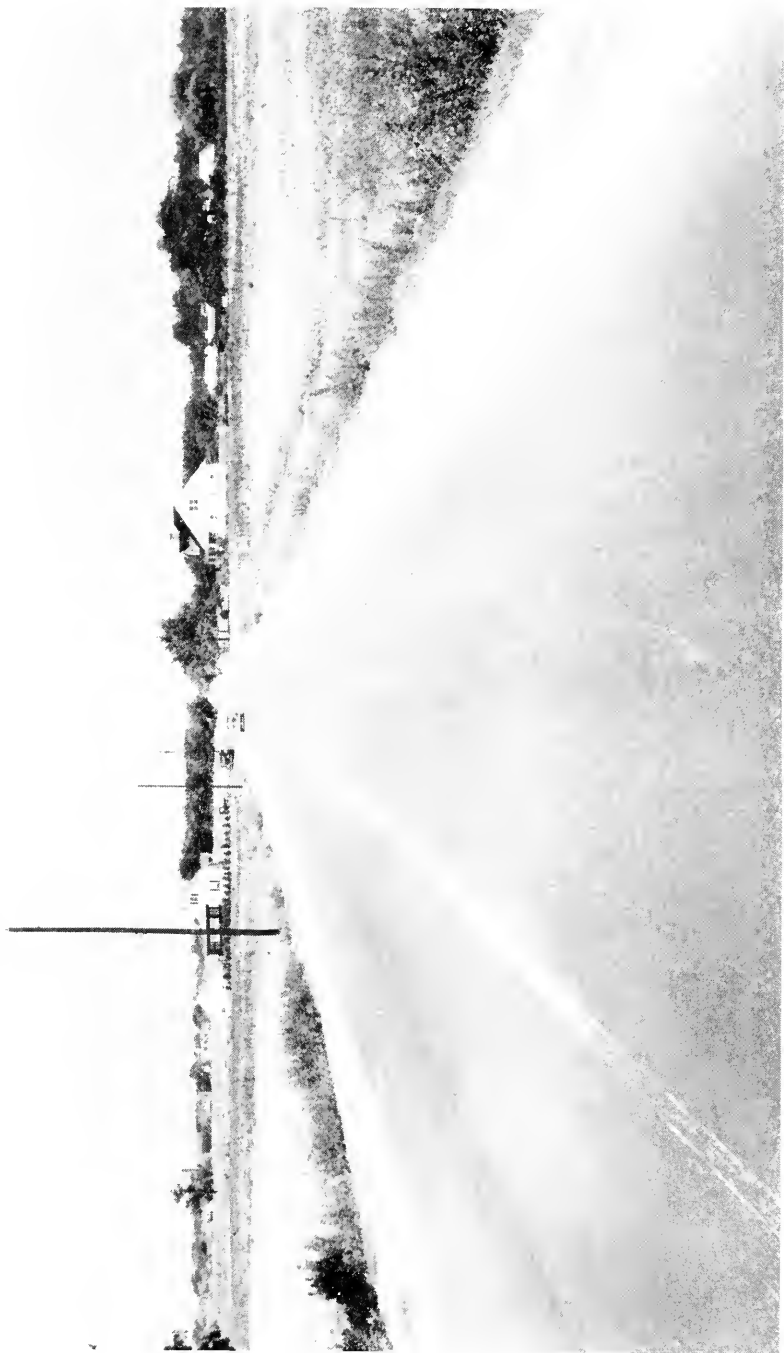
SOMERSET COUNTY  
WOODLAND JACKSON  
*County Roads Superintendent*

WICOMICO COUNTY  
CLARENCE W. TAYLOR  
*Junior Assistant Highway Engineer*

WORCESTER COUNTY  
WM. F. WALLER  
*Resident Maintenance Engineer*

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SECTION OF MARYLAND ROUTE 12 SOUTHEAST OF SALISBURY, MARYLAND AFTER WIDENING AND RESURFACING



## DISTRICT NO. 1

District No. 1 is bounded on the north by the Choptank River and the State of Delaware, on the east by the State of Delaware and the Atlantic Ocean, on the south by the State of Virginia, and on the west by the Chesapeake Bay and contains Dorchester, Somerset, Wicomico, and Worcester Counties. There was no marked difference in maintenance operations in the two years covered by this report. Winters were mild, with very little snow and ice. Washouts and other damage from storms were at a minimum.

The general increase in pay which took place effective July 1, 1951, and amounted to approximately 12 per cent in the total payroll of the operating gangs, necessitated greater care in maintenance operations in order not to exceed the budget, but still make maximum use of equipment and purchase sufficient materials to maintain the roads in safe condition.

In District No. 1 the State Roads Commission forces maintained roads as follows:

County	1951		1952	
	State System	County System	State System	County System
Dorchester .....	150.54	—	155.79	—
Somerset .....	116.55	287.29	116.55	287.29
Wicomico .....	150.97	534.88	156.61	536.56
Worcester .....	168.07	446.73	171.64	448.49
<b>TOTALS.....</b>	<b>586.13</b>	<b>1,268.90</b>	<b>600.59</b>	<b>1,272.34</b>

The Dorchester County Roads Board maintains the County system in that County. The general maintenance operation on the State system, beginning at the end of surface treatment season in September and progressing with the seasons is as follows:

Hauling local bank gravel to restore shoulders, cleaning of culverts and ditches, cutting bushes along the right of way, erection of snow fence, pouring seams, snow removal and ice treatment, stocking cover material for surface treatment, dismantling snow fence, mowing road sides, and surface treatment.

Blading of shoulders, patching of surface, and traffic service operations proceed throughout the year as needed.

Maintenance operations on the County system are generally as on the State system except there is more hauling of local bank gravel to stabilize graded roads and more blading of these roads to keep them in shape.

The equipment used in all maintenance operations on both State and County systems consists mainly of: 36 dump trucks, 3 cranes, 13 motor patrol units, 1 Athey loader, 6 bulldozers, 6 shoulder maintainers, 8 rollers—5-10 ton.

Personnel is kept at the lowest level consistent with efficiency in order to use as much of the maintenance funds as possible for equipment use and purchase of materials, the work being as far as possible spread around the year to give constant employment to the least number of men. The entire district payroll, exclusive of construction men, contains approximately 190 names.

Of the roads maintained by the State Roads Commission in District No. 1, penetration macadam or surface treated roads requiring retreatment approximately every four years as of January 2, 1952 were as follows:

	Miles	% of System
District wide State System.....	203.86	33.8
Somerset County System.....	76.37	26.6
Wicomico County System.....	232.24	43.4
Worcester County System.....	136.65	30.5
TOTAL.....	649.12	34.6

Quantities used in maintenance surface treatment district wide—State and County systems—were as follows:

Year	Miles	Gallons of Oil	Tons of Chips
1951	232	704,221	28,243
1952	204	592,385	23,860

The County Commissioners of the three counties wherein we maintain the County System of roads have graveled and applied initial treatment at their expense from local tax levies, but under our supervision to approximately 6 per cent of their respective systems each year for the past five years. This, if continued, will increase the miles to be surface treated on the County systems by approximately 75 miles per year in the total of the three counties.

Although the mileage of oiled surface on the County systems increased each year, a reduction in the amount of this type of surface treatment on the State system resulted in less total mileage being treated in 1952 than in 1951. This reduction in the amount of oiled surface treatment on the State system was the result of several factors such as: rehabilitation, thereby making successive retreatment unnecessary; and selective retreatment each season rather than automatic retreatment at regular intervals.

Considerable difficulty has been experienced in maintaining earth shoulders safe for traffic along the generally narrow roads constructed in the State system prior to 1940, many of which are only 14 to 16 feet wide.

It has been necessary for the past seven years to restore eroded shoulders with bankrun gravel, and to surface treat rather than drag in order to make them safe for traffic. Eighteen miles were so treated in 1951 and 26 miles in 1952.

This operation has taken place on those roads not likely to be included in widening and resurfacing in the near future.

On the County systems we have continued a practice established prior to the period of this report. We have restored 48 deteriorated untreated timber bridges varying in length from 20 to 106 feet. Restoration was made by the use of treated timber piles and treated timber superstructures. In addition to this, most of the smaller bridges—5 feet to 20 feet in length—have been replaced by modern pipe culverts.

It is difficult indeed to select any one construction project more important than another completed within these two years. All of them, from the construction of dual highways on Route 50 near Ocean City, and on Route 13 near Salisbury to the widening and resurfacing of parts of Route 12 and Route 331 at Vienna, have improved conditions that were very bad and the improvements have been needed for sometime.

Tables showing data pertaining to road construction contracts awarded, projects completed, and maintenance reports for the period July 1, 1950 to June 30, 1952, follow.

REPORT OF THE STATE ROADS  
ROAD CONSTRUCTION CONTRACTS—JULY 1,

Project Number	Contract Number	Location			Miles	Description of Project
		Route No.	From	To		
47 68	Wi-133-5 D-125-1	U. S. 13 Harrison Ferry Road U. S. 13	End Middle Neck Reloc. Md. 331—Hurlock	Leonards Mill Pond Md. 313—Finchville	2.478 4.909	PRIMARY JULY 1, 1950 TO Dual reinf. conc. surf. Bit. stab. gravel surf.
47A	Wi-226-1	U. S. 13	Br. over NYP&N RR	N. Division Street, Salisbury		Str. st. superstructure for 2nd lane of dual
				Total '50-'51	7.387	
75 47B	S-187 Wi-226-2	U. S. 13 U. S. 13	Westover At NYP&N RR	Pocomoke N. Division St. Sal- isbury	6.009 0.720	JULY 1, 1951 TO Resurf. spec. "B" 2nd stage Substructure of br. & ap- proaches
				Total '51-'52	6.729	
	5			Total Primary	14.116	
224	Wo.-313	Balto. Ave.	2nd to N. 15th; Phila. Ave. to Wer. to S. 1st		1.694	WIDENING AND RE- JULY 1, 1950 TO Spec. "B" wid. & wid. & resurf.
204	Wo.-312-1	S. 1st. St. U. S. 113	Balto. Ave. to Phila. Ave. Md. 365 Snow Hill twd. Newark		3.439	Wid. mod. curves & resurf.
137A	S-185	Md. 363	2.8 mi. W. of Pr. Anne thru St. Stephens		5.900	Resurface spec. "B"
240 240A	Wo.-317	U. S. 50	Pocomoke R.	Berlin	7.538	Widen & resurface spec. "B"
				Total '50-'51	18.571	
262	D-232	Md. 331	Rhodesdale	Vienna	6.300	JULY 1, 1951 TO Widen & resurface spec. "B"
284	D-232	U. S. 50	Nanticoke R. Br. at Vien- na, Northerly		0.379	Widen & resurface spec. "B"
244	Wi-268	Md. 12	U. S. 50, Salisbury	Worce. Co. Line	7.167	Widen, resurface mod. curves spec. "B"
281	Wi-268	U. S. 50	Baptist Street	U. S. 13	0.200	Resurf. curb to curb spec. "B"
				Total '51-'52	14.046	
	6			Total Widening and Resurfacing	32.617	
	S-76-1		N. of Rehobeth twd. Pocomoke		1.999	SECONDARY JULY 1, 1950 TO Stab. surface treated
	S-76-2		3.4 mi. N. of Rehobeth	U. S. 13	1.900	Stab. surface treated
	Wi-257-1	Burbage Crossing	Pocomoke River	Md. 354	1.261	Stab. & bit. surf. treated
				Total '50-'51	5.160	
	Wo.-320		Burbage Xing twd. Liber- tytown		2.900	JULY 1, 1951 TO Stab. & bit. surface treated
				Total '51-'52	2.900	
	4			Total Secondary	8.060	
	Ed-33-114		Bridge in Wie. & Dor. —Talbot Co.			MISCELLANEOUS JULY 1, 1950 TO Cleaning & painting br.
				Total '50-'51	—	
	Wo.-319 Wo.-300-7	U. S. 113	At Ocean City Bachelors Br. Willow Grove Cr. Pilchard Cr. Br. over Nanticoke R. at Sharptown			JULY 1, 1951 TO 3 timber jetties Widen & reconstruct exist. str. Tr. timber floor, etc. exist- ing br.
	D-227-1 Wi-266-1	Md. 313				
				Total '51-'52	—	
	4			Total Miscellaneous	—	
	19			GRAND TOTAL	54.793	

COMMISSION OF MARYLAND  
1950 TO JUNE 30, 1952. DISTRICT NO. 1

Date Advertised	Bids Opened	Date of Award	Date of Notice To Proceed	Date Started	Date Completed or Per Cent Completed as of June 30, 1952	Engineer's Estimate	Contract Cost	Total Amount Authorized	Contractor
PROJECTS									
JUNE 30, 1951									
4-25-50	5-16-50	7-12-50	7-27-50	8-7-50	8-22-51	\$769,292	\$647,612	\$944,753	George & Lynch Delmarva Asph. Co.
9-5-50	9-26-50	11-21-50	1-5-51	1-16-51	11-30-51	217,967	173,496	219,520	
5-22-51	6-12-51	6-27-51	7-25-51			112,430	129,698	142,668	Baltimore Contractors, Inc.
						1,099,689	950,806	1,306,941	
JUNE 30, 1952									
6-26-51	7-10-51	7-25-51	8-15-51	9-12-51	11-7-51	200,015	202,345	332,697	T. B. Gatch & Sons Bero Engineering & Construction Co.
10-30-51	11-27-51	12-13-51	1-16-52	3-17-52	22.4	416,000	352,286	475,129	
						616,015	554,631	707,826	
						1,715,704	1,505,437	2,014,767	
SURFACING PROJECTS									
JUNE 30, 1951									
8-15-50	8-29-50	8-30-50	9-13-50	10-21-50	11-9-50	65,073	65,425	75,239	Eastern Hwys. Corp.
12-19-50	1-9-51	2-27-51	3-29-51	5-31-51	92.0	331,931	362,445	431,812	Eastern Hwys. Corp.
5-15-51	6-5-51	7-6-51	7-23-51	7-23-51	9-27-51	146,602	170,675	196,276	T. B. Gatch & Sons
6-26-51	7-10-51	7-18-51	8-13-51	9-5-51	6-6-52	359,421	347,461	399,580	Eastern Hwys. Corp.
						903,027	946,006	1,102,907	
JUNE 30, 1952									
9-13-51	10-2-51	10-3-51	10-18-51						T. B. Gatch & Sons
9-13-51	10-2-51	10-3-51	10-18-51	4-7-52	73.0	238,490	215,635	247,980	
11-6-51	11-27-51	11-28-51	12-17-51	2-20-52					Eastern Hwys. Corp.
11-6-51	11-27-51	11-28-51	12-17-51	2-20-52	64.0	253,802	243,377	279,883	
						492,292	459,012	527,863	
						1,395,319	1,405,018	1,630,770	
PROJECTS									
JUNE 30, 1951									
6-20-50	7-5-50	7-12-50	8-3-50	8-21-50	9-25-50	18,518	19,428	22,342	Waller Paving Co., Inc.
8-22-50	9-13-50	9-20-50	10-9-50	10-18-50	11-13-50	17,572	15,603	17,163	
10-17-50	10-31-50	11-15-50	12-7-50	12-18-50	7-18-51	73,165	63,395	78,904	Hannaman-Burroughs Co.
						109,255	98,426	118,409	
JUNE 30, 1952									
10-2-51	10-16-51	11-7-51	11-15-51	11-9-51	5-24-52	32,312	29,128	32,041	Hannaman-Burrough Co.
						32,312	29,128	32,041	
						141,567	127,554	150,450	
PROJECTS									
JUNE 30, 1951									
5-8-51	5-22-51	5-29-51	6-20-51	7-10-51	87.0	68,500	38,400	38,280	John W. Johnson, Inc.
						68,500	38,400	38,280	
JUNE 30, 1952									
7-24-51	8-7-51	8-22-51	9-4-51	10-15-51	81.0	46,460	44,930	51,670	Trimper Constr. Co. Allied Contractors
11-20-51	12-11-51	2-6-52	3-10-52			73,490	52,987	61,436	
5-27-52	6-17-52	6-26-52				72,130	84,400	97,070	John D. Sheetz Con- str. Co.
						192,080	182,317	210,160	
						257,580	220,717	248,446	
						\$3,510,170	\$3,258,726	\$4,044,433	

DOLLAR VALUE OF CONTRACTS COMPLETED JULY 1, 1950 TO JUNE 30, 1952  
DISTRICT NO. 1

Project Number	Contract Number	Location		Miles	Description of Project	Date Authorized	Amount Authorized	Date Completed	Contractor
		Route	From						
None				1948 PROGRAM					
26	S-156-1 D-102-1 Wo-253-1 D-211-1 D-211-2	Md. 413 Taylors Island Rd. U. S. 50 U. S. 50	Westover Bridge over Slaughter Creek Herring Creek 2 mi. W. of Mt. Hodly	1949 PROGRAM 7.620	One-lane, reinf. conc. surf. Treated timber pile br.	Apr. 20, 49 July 20, 49	\$1,386,617 253,635	Sept. 15, 50 July 25, 50	C. J. Langenfelder & Son J. D. Shoertz Construction Co.
39 43	Wo-253-1 D-211-1	U. S. 50	0.3 mi. W. of Md. 452 Sunburst Avenue	3.885 1.270	Dual-hwy. reinf. conc. surf. Pen. mac. & spec. "B" surf.	Aug. 3, 49 Aug. 17, 49	1,214,184 287,114	Sept. 25, 50 Aug. 4, 50	Nello L. Teer Co. T. B. Gatch & Son, Inc.
43A	D-211-2	U. S. 50	1.27 mi. E. of Cambridge	2.338	Pen. mac. & spec. "B" surf.	Dec. 14, 49	401,800	July 2, 51	Thos. A. Reilly Co.
139 31	Wi-133-6 Wi-199-1	U. S. 13 U. S. 50	Leonard's Mill Pond Virginia	2.132 5.636	Pen. mac. base spec. "B" Pen. mac. spec. "B" surf.	Dec. 28, 49 Oct. 4, 49	289,379 1,013,326	Nov. 3, 50 Apr. 24, 51	H. L. Phillips & Co. Thos. A. Reilly Company
	(7)		Total Completed	22.881			4,846,138		
2A	Wi-260	Md. 349	Rockwalking toward Tyuskin	1950 PROGRAM 12.557	Spec. "B" resurf.	Mar. 1, 50	317,206	Nov. 17, 50	Eastern Highways Corp.
192	Wi-259	Isabella St.	N. Division St., City Limits Salisbury	1.023	Spec. "B" resurfacing	Mar. 1, 50		Nov. 17, 50	Eastern Highways Corp.
219 191-A	Wo-285-5 D-225 S-181-1	Md. 589 Md. 335-336 U. S. 13	1.1 mi. S. E. U. S. 113 twd. Grays Corner Lakesville Bridge over Manokin R. in Princess Anne	1.562 6.700	Stab. base course Pen. mac. resurf. Reconstr. & widen Br.	Apr. 5, 50 Apr. 26, 50 June 21, 50	87,636 205,733 36,539	Oct. 11, 50 Oct. 11, 50 Jan. 19, 51	Plessantion & Edgell H. L. Phillips & Co. George & Lynch, Inc.
47 224	Wi-133-5 Wo-313	U. S. 13 S. 1st. St.	End Middle Neck Rd. Balto. Ave. to Pkts. Ave. Wor. St. Pkts. to Balto. Pkts. Ave. Wor. to S. 1st Pocomoke River	2.478 1.694	Dual reinf. conc. surf. Spec. "B" widen. & re-surf.	July 12, 50 Aug. 30, 50	944,753 75,229	Aug. 22, 51 Nov. 3, 50	George & Lynch Eastern Highways Corp.
68	Wi-257-1 D-125-1 S-76-1	Barbours Crossing	Md. 354	1.261 4.909 1.990	Stab. & bit. surf. treated Bit. stab. graded surf. Stab. surf.	Nov. 15, 50 Nov. 21, 50 July 12, 50	78,904 219,590 22,342	July 18, 51 Nov. 30, 51 Sept. 25, 50	Hannaman Burroughs Co. Delmarva Asphalt Co. Waller Paving Co.
58	S-76-2 Wi-199-3 (12)	U. S. 50	U. S. 13 2.8 mi. N. W. Salisbury Total Completed	1.900 6.315 42.398	Stab. surf. Pen. mac. base spec. "B" Resurf. spec. "B"	Sept. 20, 50 Apr. 19, 50	17,163 783,664 2,792,569	Nov. 13, 50 May 13, 52	Waller Paving Co. T. E. Russell Co.
137A	S-185	Md. 363	2.8 mi. W. of Pr. Anne 4th St. Stephen	1951 PROGRAM 5.900	Resurf. spec. "B"	July 6, 51	196,276	Sept. 27, 51	T. B. Gatch & Sons, Inc.
75	S-187 Wo-320	U. S. 13	Pocomoke	6.000 2.900	Resurf. spec. "B" 2nd stage Stabilization bit. surf. tr.	July 25, 51 Nov. 7, 51	232,697 32,041	Nov. 7, 51 May 23, 52	T. B. Gatch & Sons, Inc. Hannaman Burroughs
240-240A	Wo-317 (4)	U. S. 50	Berlin Total Completed	7.538 22.347	Widen & resurf. spec. "B"	July 18, 51	399,580 860,594	June 6, 52	Eastern Hlways. Corp.
	(23)		GRAND TOTAL	87.626			\$8,499,301		

RECAPITULATION OF PROJECTS COMPLETED BY CLASSIFICATIONS - DISTRICT No. 1

Classification	1948		1949		1950		1951		1952		Total	
	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Amount
Primary .....	—	—	20,749	\$1,303,131	13,702	\$1,917,937	6,009	\$232,697	—	—	40,460	\$6,483,765
Widening and Resurfacing .....	—	—	2,132	289,372	21,974	631,717	13,438	595,856	—	—	37,544	1,519,945
Secondary .....	—	—	—	—	6,722	206,045	2,900	32,641	—	—	9,622	238,086
Miscellaneous .....	—	—	—	253,635	—	3,870	—	—	—	—	—	257,505
Total Completed (23) .....	—	—	22,881	\$1,846,138	42,398	\$2,792,569	22,347	\$860,594	—	—	87,626	\$8,499,301

MAINTENANCE REPORT  
JULY 1, 1950-JUNE 30, 1951  
*Roadway Surfacing*

Type of Work	Unit of Charge	Rigid J-K	Semi-Rigid I	Non-Rigid F, G, H, L	Untreated D-E
Patching .....	Sq. yds.	25,493	15,595	12,349	
Blading—dragging .....	Miles				
Jacking—asphalt .....	Sq. yds.				
Jacking—cement slurry .....	Sq. yds.				
Resurfacing—non bituminous .....	Sq. yds.				
Joint and crack filling .....	Gals.	2,860		1,262	
Oiling—Bituminous .....	Sq. yds.	500	97,262	439,000	

*Shoulder Maintenance*

Type of Work	Unit of Charge	Bitum.	Stabilized	Grass	Earth
Patching .....	Sq. yds.	4,728	206,367		
Blading—dragging .....	Miles		6,817		
Sodding .....	Sq. yds.				
Mowing and hand cutting .....	Miles		105	755	
Oiling—bituminous .....	Sq. yds.	44,535	102,129		
Removal—excess material .....	Cu. yds.			1,060	

*Maintenance—Bridges and Structures*

Type of Work	Unit of Charge	Repairs	Replacements	New Installations
Bridge repairs .....	Number	167		
Pipe and box culverts .....	Number		3	453
Curb and gutter .....	Lin. ft.		23	
Catch basins .....	Number		1	8
Spillways, etc. ....	Number			1
Bituminous rebutt .....	Lin. ft.			
Underdrain .....	Lin. ft.			

*Guard Fence*

Type of Work	Unit of Charge			
New fence .....	Lin. ft.	1,125		
Posts .....	Number	308	16	13
Cable .....	Lin. ft.	964		100
Fittings .....	Number	42	57	32
Paint .....	Gals.	12	2	1

*Right-of-Way*

Type of Work	Unit of Charge	Maintenance	
		Roadside	Park Area
Mowing, clearing and grubbing .....	Miles	3,500	4
Beautification .....	Sq. yds.	225	
Resetting fence .....	Lin. ft.		1
Removal of debris .....	Truck loads	622	1
Top-soil .....	Cu. yds.		
Cutting grass .....	Acres	15	148
Trimming trees .....	Number	69	
Moving equipment .....	Units	511	
	Miles	4,004	



*Traffic Service*

Highway markers .....	Number	3,629
Surface guide lines .....	Miles	566
Surface marking, schools r.r., etc. ....	Number	212
Snow removal .....	Inches, miles	
Ice treatment .....	Cu. yds.	309
Traffic lights .....	Number	29
Snow fence .....	Lin. ft.	179,500
Manual traffic count .....	Hours	204

*Drainage (Cleaning)*

Ditching (new) .....	Lin. ft.	4,900
Cleaning—ditches .....	Lin. ft.	205,495
Cleaning—pipe culverts .....	Number	2,583
Cleaning—box culverts .....	Number	111
Cleaning—bridges .....	Number	49
Cleaning—catch basins .....	Number	393
Cleaning—misc. structures .....	Number	
Riprapping .....	Sq. yds.	

MAINTENANCE REPORT  
JULY 1, 1951-JUNE 30, 1952

*Roadway Surfacing*

Type of Work	Unit of Charge	Rigid J-K	Semi-Rigid I	Non-Rigid F, G, H, I	Untreated D-E
Patching .....	Sq. yds.	25,576	29,380	6,386	
Blading—dragging .....	Miles				
Jacking—asphalt .....	Sq. yds.				
Jacking—cement slurry .....	Sq. yds.				
Resurfacing—non bituminous .....	Sq. yds.				
Joint and crack filling .....	Gals.	12,025			
Oiling—bituminous .....	Sq. yds.		121,509	161,018	

*Shoulder Maintenance*

Type of Work	Unit of Charge	Bitum.	Stabilized	Grass	Earth
Patching .....	Sq. yds.	5,734	96,390		
Blading—dragging .....	Miles		5,759		
Sodding .....	Sq. yds.				
Mowing and hand cutting .....	Miles		460	1,258	
Oiling—bituminous .....	Sq. yds.	77,733	202,294		
Removal—excess material .....	Cu. yds.			19	

*Maintenance—Bridges and Structures*

Type of Work	Unit of Charge	Repairs	Replacements	New Installations
Bridge repairs .....	Number	196		204
Pipe and box culverts .....	Number	8	18	66
Curb and gutter .....	Lin. ft.			
Catch basins .....	Number	1	1	1
Spillways, etc. ....	Number			
Bituminous rebutt .....	Lin. ft.			
Underdrain .....	Lin. ft.			

*Guard Fence*

New fence .....	Lin. ft.	2,010		312
Posts .....	Number	215	31	55
Cable .....	Lin. ft.	440	40	130
Fittings .....	Number	77	10	24
Paint .....	Gals.	281		

*Right-of-Way*

Type of Work	Unit of Charge	Maintenance	
		Roadside	Park Area
Mowing, clearing and grubbing	Miles	3,648	
Beautification .....	Sq. yds.	693	
Resetting fence .....	Lin. ft.		9
Removal of debris .....	Truck loads	432	
Top-soil .....	Cu. yds.		
Cutting grass .....	Acres	30	165
Trimming trees .....	Number	76	
Moving equipment .....	Units	121	
	Miles	2,880	

*Traffic Service*

Highway markers .....	Number	2,762	
Surface guide lines .....	Miles	37	
Surface marking, schools r.r., etc. ....	Number	161	
Snow removal .....	Inches, miles	2 $\frac{1}{2}$ "—74 mi.; 4"—155 mi.; 5 $\frac{1}{2}$ "—200 mi.; 6"—165 mi.	
Ice treatment .....	Cu. yds.	130	
Traffic lights .....	Number	39	
Snow fence .....	Lin. ft.	250,800	
Manual traffic count .....	Hours	810	

*Drainage (Cleaning)*

Ditching (new) .....	Lin. ft.	400
Cleaning—ditches .....	Lin. ft.	279,503
Cleaning—pipe culverts .....	Number	1,824
Cleaning—box culverts .....	Number	91
Cleaning—bridges .....	Number	50
Cleaning—catch basins .....	Number	425
Cleaning—misc. structures .....	Number	405
Riprapping .....	Sq. yds.	
Grouting—riprap—cement .....	Cu. yds.	10

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**DISTRICT NO. 2**  
**Headquarters—Chestertown, Maryland**

ROLPH TOWNSHEND  
*District Engineer*

C. R. SHARRETTS  
*Assistant District Engineer*  
Construction

L. B. DEPUTY  
*Assistant District Engineer*  
Maintenance

CAROLINE COUNTY  
GEORGE H. FOOKS  
*Resident Maintenance Engineer*

C'ECIL COUNTY  
J. J. WARD, JR.  
*Junior Assistant Highway Engineer*

KENT COUNTY  
OWEN S. SELBY  
*Resident Maintenance Engineer*

QUEEN ANNE'S COUNTY  
WM. F. LEAVERTON  
*Resident Maintenance Engineer*

TALBOT COUNTY  
HARRY C. RASH  
*Resident Maintenance Engineer*

CLYDE C. THRIFT  
*District Equipment Supervisor*

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EASTON GARAGE—HEADQUARTERS FOR MAINTENANCE OF STATE AND COUNTY ROADS IN TALBOT COUNTY

## DISTRICT NO. 2

District No. 2 comprises Caroline, Cecil, Kent, Queen Anne's and Talbot Counties. The State and County mileages maintained in this district are as follows:

County	State Roads	County Roads
Caroline .....	159.83	452.38
Cecil .....	200.78	443.61
Kent .....	159.32	227.55
Queen Anne's .....	169.04	386.77
Talbot .....	124.75	272.89
<b>TOTAL .....</b>	<b>813.72</b>	<b>1,783.20</b>

In the maintenance operations the County roads have been materially improved by the addition of bank-run gravel, widening, etc., and in almost every case the County Commissioners have supplemented the amount of money available to the County so that additional improvements could be made. Many County roads have been surface-treated and quite a few small bridges have been rebuilt by the use of pressure-treated timber.

The State maintenance is handled by as small a force as possible in each County. This force takes care of the ordinary maintenance, oiling and snow removal. In case of emergency it is supplemented by the County forces.

A storage and maintenance garage for Caroline County is being constructed at Denton. We have central mixing plants for bituminous material located at Denton, Elkton and Centreville so that patch material is available and can be gotten readily throughout the district.

Some widening and improvement has been done to State roads. During this period construction has been voluminous, especially the widening of roads and placing of blacktop material on them. The construction of the north-south highway has been completed from the Chesapeake Bay Bridge to Queenstown. An interchange has been constructed at Queenstown and the dual highway started toward Easton. A contract will be advertised for the construction of a single lane from Queenstown to Route 213, which will be a big help to the north-south traffic. All of Route 213 has been reconstructed from Elkton to Wye Mills except a short section between Chestertown and Kennedyville.

Tables showing data pertaining to road construction contracts awarded, projects completed, and maintenance reports for the period July 1, 1950 to June 30, 1952 follow.

DOLLAR VALUE OF CONTRACTS COMPLETED JULY 1, 1950 TO JUNE 30, 1952  
DISTRICT NO. 2

Project Number	Contract Number	Location		Miles	Description of Project	Date Authorized	Amount Authorized	Date Completed	Contractor
		Route	From To						
29	Co-173-1 Q-224-1	Md. 404	Queen Anne Hillsboro	1948 PROGRAM 3.889	Reinf. Conc. Surf.	Feb. 10, '49	\$635,745	Aug. 1, '50	George & Lynch
48	Ce-290-2	Md. 282	Cecilton	1949 PROGRAM 5.730	Pen. mac. surfacing	June 22, '49	403,451	Oct. 26, '50	United Paving Co.
55	Co-215-1	Md. 313	0.2 mi. S. E. Anderson- town twd. Federalsburg	3.594	Gravel surf.	Sept. 5, '49	175,118	Aug. 1, '50	George & Lynch, Inc.
29B	Q-224-4	Md. 404	Queen Anne	Bridge	Hillsboro By-Pass	Sept. 8, '49	128,146	Aug. 11, '50	George & Lynch, Inc.
174	T-118-2	Md. 33	1.25 mi. N. of Easton	0.600	Pen. mac. base & bit. conc. surf.	Oct. 26, '49	96,466	Nov. 4, '50	Hannaman Burroughs
145	Q-228-1	Md. 313	Ingliside	4.020	Pen. mac. base, spec. "B"	Oct. 26, '49	308,193	May 1, '51	Eastern Highways Corp.
161	K-173-1	U. S. 213	Locust Grove	4.036	Pen. mac. wid. & resurf.	Dec. 14, '49	517,621	July 25, '51	Bere Eng. & Constr. Corp.
44B	Q-168-7	U. S. 50	Kent Narrows	2.706	Reinf. conc. dual highway	Dec. 28, '49	1,651,117	Jan. 31, '52	C. J. Langenfelder & Son
145A	Q-228-2	Md. 313	Barelay	3.155	Pen. mac. wid. spec. "B" surf.	Dec. 28, '49	175,429	June 28, '51	Eastern Highways Corp.
44D	Ce-322-2 K-174-2 / Q-168-4	U. S. 213 U. S. 50	At Georgetown Bridge over Kent Narrows		Repairs to Sussfras R. Bridges Steel I-beam br.	Dec. 28, '49 Dec. 28, '49	101,775 874,243	Apr. 30, '51 Mar. 16, '52	John D. Sheetz Co. John D. Sheetz Co. McLean Contracting Co.
	(10)		Total Completed	23.841			4,432,059		
188	Ce-328	U. S. 40	Charlestown Intersac. E. twd. N. E. Toll Booth	1950 PROGRAM 3.195	Spec. "B" resurf.	Mar. 1, '50	246,491	Oct. 25, '50	Bituminous Constr. Co.
206	K-168-2	Flatland Rd.	Jackson Sta. Rd.	1.900	Bit. stab. base course	Mar. 29, '50	22,719	Sept. 5, '50	E. Stewart Mitchell
	T-138	Md. 328	Easton twd. Matthews	2.254	(2nd stage)	May 3, '50	148,037	Oct. 20, '50	Eastern Highways Corp.
	Co-140-6	Greensboro Bursville Rd.	Bursville	4.366	Spec. "B" wid. & resurf.	May 11, '50	29,736	Sept. 25, '50	E. Stewart Mitchell
55A	T-131-1	U. S. 40	0.265 mi. S. E. Chapel Br. S.R.C. Property on U. S. 50 at Easton	2.219	Bit. stab. base course	May 11, '50	114,979	July 13, '51	Choptank Constr. Co.
184A	Co-215-3	Anderson- town Rd.	End Contr. Co. 215-1 twd. Federalsburg	2.850	Office & garage building	May 18, '50	185,000	Jan. 20, '51	George & Lynch
	T-127-2	Md. 333	Peach Blossom Creek Bridge	1.667	Repair & wid. exist. br.	May 18, '50	165,173	June 20, '51	Massoury Resurf. & Cons. Co.
	Co-140-7	Greensboro Bursville Rd.	Beg. Con. Co-140-6		Bit. stab. base course	May 18, '50	20,979	July 25, '50	R. B. Groves
141	Ed-31-214	Md. 309	Metal Structures, Dis- trict 2 U. S. 50 nr. Easton twd. Cordova	3.800	Cleaning & painting	May 18, '50	11,682	Oct. 15, '50	C. Carafos Cont. Co.
	T-131-2	U. S. 50	S.R.C. Property on U. S. 50 at Easton	2.510	Mac. wid. spec. "B" re- surf. Gr. dr. & pave garage lot gravel	June 14, '50 June 21, '50	200,431 27,629	Nov. 9, '50 Sept. 13, '51	Bituminous Constr. Co. G. C. Burr, Inc.
116	Co-209	Md. 331	Dover Bridge	0.300	Pen. mac. & spec. "B" wid. & resurf. 3 edd. conc. cul. & pen. mac. appr.	July 6, '50 July 26, '50	229,138 119,893	Dec. 7, '51 Oct. 29, '51	Eastern Highways Corp. John D. Sheetz Constr. Co.

116A	Co-209-1	Md. 331	Bethlehem	Preston	3,214	Pen. mac. & spec. "B" wid. & resurf. Spec. "B" resurf.	Aug. 8, '50	276,087	Oct. 16, '51	T. B. Gatch & Sons
221	Co-333	Elkton Sta.	Main St. North St. Br. SE. & Delaware Avenue At Crumpton		3,246		Aug. 9, '50	79,228	Oct. 26, '50	Bit. Constr. Co.
210	K-178-1	Md. 290	At Crumpton		0,220	St. beam & conc. br. gravel apprt.	Aug. 16, '50	249,788	June 26, '51	McLean Contracting Co.
210	Q-257-1	Md. 290	At Crumpton		3,504	St. beam & conc. br. gravel apprt. Bit. stab. base spec. "B" surf. (2nd stage)	Aug. 16, '50	107,412	June 26, '51	McLean Contracting Co.
44F	Q-215-2	U. S. 50	Md. 404 S. E. of Andersontown twd. Federalsburg				Aug. 16, '50		Nov. 27, '50	Bituminous Constr. Co.
198	Q-168-11	U. S. 50	At Kent Narrows Bridge				Aug. 30, '50	617,698	Mar. 31, '52	McLean Contr. Co.
184B	Q-235	Md. 313	Sudlersville	Unicorn Mills	4,951	Spec. "B" wid. & resurf.	Sept. 20, '50	314,006	Aug. 16, '51	Bituminous Constr. Co.
218	T-127-3	Md. 333	Trappe Ct. Br.		6,171	Repair & wid. exist. br.	June 8, '50	138,311	May 22, '51	Camden Constr. Co.
44E	Q-168-10	U. S. 50	Goldshoro	Maydel		Wid. mod. curves & resurf. spec. "B"	Dec. 20, '50	586,400	May 8, '52	Bituminous Constr. Co.
			N. Bd. Lane U. S. 50 over New Road		46,517	St. deck-grinder bridge	Apr. 26, '50	303,223	May 9, '52	John D. Sheetz Constr. Co.
	(22)			Total Completed				4,194,100		
235	Co-337-1	Md. 267	Weber's Bridge N. Stony Run toward R. R. Avenue	Charlestown	1951 PROGRAM	Bridge floor, etc.	Apr. 4, '51	8,132	Aug. 17, '51	Thompson, Grace & Mays
246	Co-227	Md. 314	Main Street in Greensboro	Elkton	5,500	Resurf. spec. "B"	June 6, '51	315,077	Sept. 28, '51	Bituminous Constr. Co.
228	Q-252-1	Md. 480	617. mt. W. St. Peters Church N. Md. 404		0,659	Widen & resurf. spec. "B"	July 25, '51	54,794	Nov. 13, '51	Bituminous Constr. Co.
229	T-144	U. S. 50	Choptank R. Br. at Cam-bridge	Trappe	2,570	Widen & resurf. spec. "B"	Sept. 26, '51	242,154	Feb. 16, '52	Bituminous Constr. Co.
	T-137-2	U. S. 50	Oak Creek Bridge		4,570	Widen & resurf. spec. "B"	June 28, '51	295,740	May 16, '52	T. B. Gatch & Sons, Inc.
141A	K-184-1	Md. 33	Redding's Cor. (Chapel)	Boulden's Cor. Cordova	1,302	Tt. timber & asph. plank floor, etc.	June 27, '51	48,767	May 30, '52	John D. Sheetz Constr. Co.
	T-145-1	Md. 399	3.8 mi. N. E. of U. S. 50		2,270	Gravel surf. Widen & resurf. spec. "B"	Mar. 28, '51	44,467	June 23, '52	David A. Bramble
	(8)			Total Completed	17,738		Oct. 3, '51	129,472	June 3, '52	Eastern Highways Corp.
	(41)			GRAND TOTAL				1,138,063		
								\$10,400,507		

REPORT OF THE STATE ROADS  
ROAD CONSTRUCTION CONTRACTS—JULY 1,

Project Number	Contract Number	Location			Miles	Description of Project
		Route No.	From	To		
44F	Q-168-11	U. S. 50	At Kent Narrows Bridge			PRIMARY JULY 1, 1950 TO Baseule and flanking spans, etc.
				Total '50-'51	—	
55B	Co-215-6	Anderson-town Road	S. Andersontown twd. Federalsburg		3.125	JULY 1, 1951 TO Bit. stab courses spec. "B"
44H	Q-168-15	U. S. 50	At Kent Narrows			Removal of existing bridge
				Total '51-'52	3.125	
	3			Total Primary	3.125	
116	Co-209	Md. 331	Dover Bridge		2.510	WIDENING AND JULY 1, 1950 TO Pen mac & spec. "B" wid. & resurf.
116A	Co-209-1	Md. 331	Bethlehem		3.214	Pen mac & spec. "B" wid. & resurf.
221	Ce.-333	Elkton Sts.	Main, North & Bridge St. & Delaware Avenue		3.246	Spec. "B" resurface
210	K-178-1 Q-237-1	Md. 290	At Crumpton		0.220	Steel beam conc. br. Gravel appr.
116B	T-135	Md. 331	RR Xing Easton		4.205	Spec. "B" wid., mod. & resurf.
198	Q-235	Md. 313	Sudlersville		4.951	Spec. "B" wid. & resurf.
184	T-127-1	Md. 333	Oxford		7.420	Mac. wid. spec. "B" resurf.
218	Co-223	Md. 311	Goldsboro		6.171	Wid. mod. curves & resurf. spec. "B"
235	Ce.-340	U. S. 40	Stony Run twd. Elkton		5.500	Resurface spec. "B"
193	Ce.-329	U. S. 222	U. S. 1		3.588	Wid. mod. curves, resurf. spec. "B"
229	T-144	U. S. 50	Choptank R. Br. Cam- bridge		4.570	Widen & resurf. spec. "B"
				Total '50-'51	45.595	
246	Co-227	Md. 314 Md. 480	R. R. Avenue 0.867 Main St. in Greensboro 0.659		1.526	JULY 1, 1951 TO Widen & resurface spec. "B"
228	Q-252-1	U. S. 50	0.17 mi. W. St. Peter's Ch. Nr. Md. 404		2.570	Widen & resurface spec. "B"
141A	T-145-1	Md. 309	3.8 mi. N. E. of U. S. 50 (Chapel)		2.270	Widen & resurface spec. "B"
156- 150D	Ce.-334-1	U. S. 1	Across Conowingo Dam and to Rising Sun		6.983	Reloc. & spec. "B" wid. & resurf.
51A	Q-254-2	Md. 300	Duhamel's Cor.		4.598	Spec. "B" resurf.
				Total '51-'52	17.947	
	16			Total Widening and Resurfacing	63.542	
	Co-215-2	Md. 404	S. E. of Andersontown twd. Federalsburg		3.594	SECONDARY JULY 1, 1950 TO Bit. stab. base; spec. "B" 2nd stage
				Total '50-'51	3.594	
	K-184-1 K-168-3	Flatland Rd.	Redding's Cor. N. W. Md. 20 (end K-168- 2) twd. Hanesville		1.302 1.458	JULY 1, 1951 TO Gravel surf. Gravel surf.
				Total '51-'52	2.760	
	3			Total Secondary	6.354	
	K-80-1	Md. 20	At Radeliffe Creek		0.360	MISCELLANEOUS JULY 1, 1950 TO 3 Cell conc. cul. & pen. mac. appr. Bridge floor, etc.
	Ce.-337-1	Md. 267	Weber's Bridge Nr. Charlestown			Tr. timber & asph. plank floor, etc.
	T-137-2	Md. 33	Br. over Oak. Cr.			
				Total '50-'51	0.360	
	Co-226		On SRC Property at Den- ton			JULY 1, 1951 TO Conc. block office & Gar- age bldg. Widen existing bridge
	Q-252-2	U. S. 50	Over Branch of Wye River			
	Ed-35-214	U. S. 1 & U. S. 40	Cleaning & painting bridges on Routes U. S. 1 and U. S. 40			
				Total '51-'52	—	
	6			Total Miscellaneous	0.360	
	28			GRAND TOTAL	73.381	



COMMISSION OF MARYLAND  
1950 TO JUNE 30, 1952. DISTRICT No. 2

Date Advertised	Bids Opened	Date of Award	Date of Notice To Proceed	Date Started	Date Completed or Per Cent Completed as of June 30, 1952	Engineer's Estimate	Contract Cost	Total Amount Authorized	Contractor
<b>PROJECTS</b>									
<b>JUNE 30, 1951</b>									
7-11-50	8-29-50	8-30-50	9-18-50	10-12-50	3-31-52	\$482,710	\$537,129	\$617,698	McLean Contr. Co.
						482,710	537,129	617,698	
<b>JUNE 30, 1952</b>									
5-15-51	6-5-51	7-11-51	7-16-51	7-17-51	55.0	97,062	96,041	110,447	E. Stewart Mitchell
12-13-51	1-8-52	1-23-52	2-5-52	5-1-52	23.0	39,000	17,850	19,635	J. B. Rogers
						136,062	113,891	130,082	
						618,772	651,020	747,780	
<b>RESURFACING</b>									
<b>JUNE 30, 1951</b>									
5-23-50	6-13-50	7-6-50	7-31-50	11-10-50	12-7-51	170,550	177,511	229,138	Eastern Hwys. Corp.
6-13-50	7-5-50	8-9-50	9-1-50	10-30-50	10-16-51	204,842	218,336	276,087	T. B. Gateh & Sons
7-18-50	8-8-50	8-9-50	8-21-50	9-20-50	10-26-50	71,311	68,894	79,228	Bit. Constr. Co.
7-11-50	8-8-50	8-16-50	9-8-50	9-23-50	6-26-51	214,667	195,468	249,788	McLean Constr. Co.
6-27-50	7-25-50	8-23-50	9-18-50	11-22-50	92.6	286,001	320,276	378,318	Eastern Hwys. Corp.
8-15-50	9-5-50	9-20-50	10-9-50	10-13-50	8-16-51	230,149	260,006	314,006	Bit. Constr. Co.
8-8-50	8-29-50	12-20-50	1-24-51	3-30-51	90.0	279,321	293,956	358,050	Eastern Hwys. Corp.
10-31-50	11-21-50	12-20-50	1-4-51	2-26-51	5-8-52	497,752	475,130	586,400	Bit. Constr. Co.
5-15-51	6-5-51	6-6-51	6-18-51	6-20-51	9-28-51	272,354	273,980	315,077	Bit. Constr. Co.
4-17-51	5-8-51	6-27-51	7-9-51	7-19-51	92.0	301,910	313,725	385,783	Bit. Constr. Co.
6-5-51	6-26-51	6-28-51	7-19-51	7-25-51	5-16-52	248,952	257,165	295,740	T. B. Gateh & Sons
						2,777,809	2,854,447	3,467,615	
<b>JUNE 30, 1952</b>									
6-26-51	7-10-51	7-25-51	8-6-51	8-14-51	11-13-51	45,012	46,778	54,794	Bit. Constr. Co.
9-4-51	9-25-51	9-26-51	10-9-51	10-12-51	2-16-52	195,154	210,569	242,154	Bit. Constr. Co.
9-13-51	10-2-51	10-3-51	10-19-51	3-21-52	6-3-52	104,786	112,584	129,472	Eastern Hwys. Corp.
3-11-52	4-1-52	5-8-52	5-14-52	5-26-52	2.5	675,870	638,766	789,581	Contee Sand & Gravel Co.
3-18-52	4-8-52	4-10-52	5-1-52	5-13-52	28.0	111,667	103,256	118,745	Bituminous Constr. Co.
						1,132,489	1,111,953	1,334,746	
						3,910,298	3,966,400	4,802,361	
<b>PROJECTS</b>									
<b>JUNE 30, 1951</b>									
7-27-50	8-15-50	8-16-50	8-28-50	8-29-50	11-27-50	103,583	93,402	107,412	Bit. Constr. Co.
						103,583	93,402	107,412	
<b>JUNE 30, 1952</b>									
2-20-51	3-13-51	3-28-51	5-7-51	6-6-51	6-23-52	44,386	34,232	44,467	David A. Bramble
4-22-52	5-13-52	6-11-52				35,125	24,049	27,656	David A. Bramble
						79,511	58,281	72,123	
						183,094	151,683	179,535	
<b>PROJECTS</b>									
<b>JUNE 30, 1951</b>									
6-30-50	7-25-50	7-26-50	8-21-50	9-1-50	10-29-51	105,769	99,037	119,893	John D. Sheetz Co.
2-28-51	3-13-51	4-4-51	6-20-51	6-21-51	8-17-51	11,975	7,072	8,132	Thompson, Grace & Mays
5-22-51	6-19-51	6-27-51	7-16-51	3-5-52	5-30-52	42,800	44,334	48,767	John D. Sheetz Co.
						160,544	150,443	176,792	
<b>JUNE 30, 1952</b>									
6-13-51	7-10-51	7-18-51	8-17-51	2-4-52	20.0	125,000	133,004	152,955	Choptank Constr. Co.
7-31-51	8-21-51	9-5-51	9-19-51	4-21-52	39.3	39,500	31,705	36,961	John D. Sheetz Constr. Co.
5-20-52	6-3-52	6-11-52	6-23-52	6-25-52	14.0	22,000	16,860	18,546	Md. Painting Co.
						186,500	181,569	208,462	
						347,044	332,012	385,254	
						\$5,059,208	\$5,101,115	\$6,114,930	

RECAPITULATION OF PROJECTS COMPLETED BY CLASSIFICATIONS—DISTRICT No. 2

Classification	1948		1949		1950		1951		1952		Total	
	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Amount
Primary .....	3.859	\$635,745	6.300	\$2,828,624	2.850	\$1,105,981	—	—	—	—	13.009	\$4,570,350
Widening and Resurfacing .....	—	—	17.541	1,501,660	33.573	2,633,090	16.436	\$1,037,237	—	—	67.550	5,171,987
Secondary .....	—	—	—	—	9.734	180,846	1.302	44,407	—	—	11.036	225,313
Miscellaneous .....	—	—	—	101,775	0.360	274,183	—	56,899	—	—	0.360	432,857
Total Completed (41) .....	3.859	\$635,745	23.841	\$4,432,059	46.517	\$4,194,100	17.738	\$1,138,603	—	—	91.955	\$10,400,507

MAINTENANCE REPORT  
JULY 1, 1950-JUNE 30, 1951  
*Roadway Surfacing*

Type of Work	Unit of Charge	Rigid J-K	Semi-Rigid I	Non-Rigid F, G, H, I	Untreated D-E
Patching .....	Sq. yds.	142,208	10,478	193,949	
Blading—dragging .....	Miles				
Jacking—asphalt .....	Sq. yds.				
Jacking—cement slurry .....	Sq. yds.				
Resurfacing—non bituminous .....	Sq. yds.				
Joint and crack filling .....	Gals.	23,150		700	
Oiling—bituminous .....	Sq. yds.	113,017	236,000	304,993	

*Shoulder Maintenance*

		Bitum.	Stabilized	Grass	Earth
Patching .....	Sq. yds.	26,908	104,210	1,185	60,606
Blading—dragging .....	Miles		26,587	577	621
Sodding .....	Sq. yds.				
Mowing and hand cutting .....	Miles		418	5,061	9
Oiling—bituminous .....	Sq. yds.	84,554	52,892		
Removal—excess material .....	Cu. yds.		93	952	27,439

*Maintenance—Bridges and Structures*

		Repairs	Replacements	New Installations
Bridge repairs .....	Number	66	2	
Pipe and box culverts .....	Number	5	53	10
Curb and gutter .....	Lin. ft.			30
Catch basins .....	Number		2	
Spillways, etc. ....	Number	1		
Bituminous rebut .....	Lin. ft.			
Underdrain .....	Lin. ft.		84	544

*Guard Fence*

New fence .....	Lin. ft.	9		70
Posts .....	Number	374	130	7
Cable .....	Lin. ft.	1,270	632	
Fittings .....	Number		42	15
Painted .....	Gals.	61	269	

*Right-of-Way*

		Maintenance	
		Roadside	Park Area
Mowing, clearing and grubbing .....	Miles	3,680.2	
Beautification .....	Sq. yds.	8,626	
Resetting fence .....	Lin. ft.		
Removal of debris .....	Truck loads	662	87
Top-soil .....	Cu. yds.	265	
Cutting grass .....	Acres	59	112
Trimming trees .....	Number	206	
Moving equipment .....	Units	65	
	Miles	1,822	

*Traffic Service*

Highway markers	Number	8,625
Surface guide lines	Miles	637.25
Surface marking, schools r.r., etc.	Number	241
Snow removal	Inches, miles	2"—1931 mi.
Ice treatment	Cu. yds.	2,488
Traffic lights	Number	
Snow fence	Lin. ft.	550,010
Manual traffic count	Hours	528

*Drainage (Cleaning)*

Ditching (new)	Lin. ft.	8,170
Cleaning—ditches	Lin. ft.	290,548
Cleaning—pipe culverts	Number	1,465
Cleaning—box culverts	Number	219
Cleaning—bridges	Number	11
Cleaning—catch basins	Number	150
Cleaning—misc. structures	Number	22
Riprapping	Sq. yds.	968

MAINTENANCE REPORT  
JULY 1, 1951-JUNE 30, 1952

*Roadway Surfacing*

Type of Work	Unit of Charge	Rigid J-K	Semi-Rigid I	Non-Rigid F, G, H, L	Untreated D-E
Patching	Sq. yds.	91,039	4,488	109,340	
Blading—dragging	Miles				
Jacking—asphalt	Sq. yds.				
Jacking—cement slurry	Sq. yds.				
Resurfacing—non bituminous	Sq. yds.				
Joint and crack filling	Gals.	12,844			
Oiling—bituminous	Sq. yds.	198,435	238,777	248,461	

*Shoulder Maintenance*

		Bitum.	Stabilized	Grass	Earth
Patching	Sq. yds.	57,307	133,530	18,294	119,934
Blading—dragging	Miles	150	4,808	73	1,442
Sodding	Sq. yds.				364
Mowing and hand cutting	Miles	199	28	3,438	912
Oiling—bituminous	Sq. yds.		25,248		
Removal—excess material	Cu. yds.	114,548	284	928	15,697

*Maintenance—Bridges and Structures*

		Repairs	Replacements	New Installations
Bridge repairs	Number	28		1
Pipe and box culverts	Number	14	277	18
Curb and gutter	Lin. ft.	30		49
Catch basins	Number	2	2	3
Spillways, etc.	Number		6	
Bituminous rebut	Lin. ft.	604		
Underdrain	Lin. ft.		63	629

*Guard Fence*

New fence	Lin. ft.	75	1,382
Posts	Number	1,957	416
Cable	Lin. ft.	11,745	3,316
Fittings	Number		
Paint	Gals.	86	14

*Right-of-Way*

		Maintenance	
		Roadside	Park Area
Mowing, clearing and grubbing	Miles	5,457.5	7
Beautification	Sq. yds.	600	4,650
Resetting fence	Lin. ft.	528	
Removal of debris	Truck loads	584	78
Top-soil	Cu. yds.		511
Cutting grass	Acres		445
Trimming trees	Number	217	
Moving equipment	Units	74	
	Miles	1,332	

*Traffic Service*

Highway markers	Number	9,973
Surface guide lines	Miles	251
Surface marking, schools r.r., etc.	Number	193
Snow removal	Inches, miles	5,504
Ice treatment	Cu. yds.	3,447
Traffic lights	Number	
Snow fence	Lin. ft.	579,960
Manual traffic Count	Hours	706

*Drainage (Cleaning)*

Ditching (new)	Lin. ft.	38,482
Cleaning—ditches	Lin. ft.	438,211
Cleaning—pipe culverts	Number	806
Cleaning—box culverts	Number	1
Cleaning—bridges	Number	16
Cleaning—catch basins	Number	131
Cleaning—misc. structures	Number	
Riprapping	Sq. yds.	



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**DISTRICT NO. 3**  
**Headquarters—Laurel, Maryland**

E. G. DUNCAN  
*District Engineer*

ROLAND E. JONES  
*Assistant District Engineer*  
Construction

WALTER E. SAYERS  
*Assistant District Engineer*  
Maintenance

ANNE ARUNDEL COUNTY  
J. C. WILKERSON  
*Resident Maintenance Engineer*

CARROLL COUNTY  
F. LAMOTTE SMITH  
*Resident Maintenance Engineer*

HOWARD COUNTY  
HOBART B. NOLL  
*Resident Maintenance Engineer*

MONTGOMERY COUNTY  
JOSEPH H. KUHNS  
*Resident Maintenance Engineer*

PERMITS  
A. H. FRIESE  
*Junior Ass't Highway Engineer I.*

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INTERCHANGE AREA AT HYATTSTOWN ALONG WASHINGTON-NATIONAL PIKE—UNDER CONSTRUCTION



## DISTRICT NO. 3

District No. 3, for the biennium of Fiscal Years 1951 and 1952, is comprised of Anne Arundel, Carroll, Howard and Montgomery Counties.

A statistical history of the accomplishments attained under construction and maintenance activities appears elsewhere in this report. The following merely directs the attention of the reader to projects of unusual interest or importance.

### MAINTENANCE

It is quite evident that a careful study of planning maintenance activities, methods and procedure must be initiated to cope with a highway system of such magnitude.

During the period covered by this report a total of 3739 permits were issued to individuals and various organizations for work within State owned right of way.

### ANNE ARUNDEL COUNTY

#### *State Roads—Construction*

The period of this report marks the placing under contract of all sections of the Baltimore–Washington Expressway including the Jessup Interchange with completion of all sections scheduled before the end of calendar year 1952. Thus, Maryland's section of the Baltimore–Washington Expressway with full control of access for a distance of 8.868 miles through Anne Arundel County, from the Patapsco River to Jessup including an interchange to the Friendship Airport shall be completed and made available for traffic. The completion of this highway shall present to the highway users the most modern design and construction of highways ever undertaken by the State of Maryland and is comparable to any similar type of highway existing within the nation.

Likewise, the completion of 10 miles of the Annapolis–Washington Expressway from Parole on U. S. Route 50, easterly to U. S. Route 301 awaits only the early completion of access facilities at each limit of present construction to afford highway users another section of highway with full control of access similar to the Baltimore–Washington Expressway.

These several projects in Anne Arundel County, being part of the Baltimore, Annapolis, Washington triangle highway system, bring to fruition a part of Maryland's endeavor for the ultimate development of this area.

#### *State Roads—Maintenance*

The total miles of State Highways maintained by State Forces in this County is 283.84. This total consists of 56.18 miles of low type bituminous pavement,

137.29 miles of high type bituminous pavement and 90.37 miles of Portland Cement concrete pavement of which 39.0 miles is of dual lane construction.

In addition to normal maintenance activities, sections of earth shoulders were replaced with 1500 square yards of bituminous material 9 inches in depth. This method of improvement provided additional pavement width and completely eliminated constant erosion along steep grades.

On Woodland Beach Road, Route 253, the roadway was widened to 34 feet, drainage facilities extended and bank run gravel shoulders constructed for a distance of 0.6 of a mile.

Maintenance forces also surface treated 280,894 square yards of roadway during this period.

A total personnel of 100 employees assisted by 31 units of equipment performed all phases of maintenance.

This County has many shore fronts along the Chesapeake Bay and its tributaries, which is responsible for a large increase in the volume of traffic during the summer months.

#### CARROLL COUNTY

##### *State Roads—Construction*

The biennium 1951 and 1952 has marked the completion of the relocation of U. S. Route 140, from Finksburg towards Westminster a distance of 6.88 miles and by the construction of temporary access facilities at the Westminster limit of the project has made available to the highway users a modern, safe dual lane highway. Plans have been prepared and contracts let for its early projection around Westminster.

##### *State Roads—Maintenance*

The total miles of State Highways in this County maintained by state forces is 218.47. The break-down of this total as to type of pavement is 23.82 miles of low type bituminous, 107.21 miles of high type bituminous and 87.44 miles of Portland cement concrete, of which 6.88 miles is of dual lane construction.

During the period covered by this report the maintenance forces surface treated 179,288 square yards of highway. Also, on Route 75 from Union Bridge to Frederick County Line 1000 square yards of bituminous material was placed adjacent to the pavement to provide additional width.

A total personnel of 65 employees assisted by 26 units of equipment performed all maintenance operations.

This county has sections of three important highways, U. S. 140, and Route 30, carry a large volume of north and south traffic and U. S. 40 is a heavily travelled east and west route.

#### HOWARD COUNTY

##### *State Roads—Construction*

The important accomplishment in Howard County for the period of this report has been the completion of the relocation of U. S. Route 40, from West Friendship to Morgan Road, a distance of 5.246 miles affording the public the facility of a dual

highway with partial control of access from Baltimore City to the latter limit. The extension of the highway to Ridgeville is now under construction.

Another important addition to the State highway system in Howard County for the period of 1951 and 1952 was the completion of U. S. Route 29, from St. John's Lane to Atholton a distance of 4.905 miles. The present construction is a single lane 24 ft. roadway with the Right of Way acquired providing for an ultimate dual lane highway.

#### *State Roads—Maintenance*

This County has sections of two very important roads showing large traffic counts, Route U. S. 40, east and west and Route U. S. 1, north and south.

The total miles of State maintained highways is 162.13, consisting of various types of pavement as follows: 8.07 miles of low type bituminous, 92.41 miles of high type bituminous and 61.65 miles of Portland cement concrete, of which 16.27 miles is of dual lane construction.

In addition to normal maintenance activities 1000 square yards of bituminous pavement widening was placed on U. S. Route 1, near Dorsey and Lisbon.

During the period covered by this report 213,088 square yards of pavement was surface treated.

All maintenance work was performed by a personnel of 60 employees along with 26 units of equipment.

### MONTGOMERY COUNTY

#### *State Roads—Construction*

Construction of State Highways in Montgomery County for fiscal years 1951 and 1952 is noteworthy for two projects of unusual importance, namely, Georgia Avenue, State Route 97, and the Washington National Pike.

Georgia Avenue, State Route 97, has been rebuilt as an urban dual lane highway from Colesville Road to Viers Mill Road, a distance of 2.891 miles, with the section from Viers Mill Road to Glenmont, a distance of 2.036 miles, under construction and scheduled for completion in late 1952.

This highway replaces the old 20 ft. roadway and serves as an adequate artery for the heavy traffic volumes from eastern metropolitan Montgomery County to the District of Columbia.

The Washington National Pike from Hyattstown to Clarksburg, a distance of 3.800 miles, is an extension of this highway from the Frederick-Montgomery County Line south and will replace existing U. S. Route 240, as a main traffic artery.

This highway is currently under construction and the completed project will be of dual lane construction with full control of access. This project represents another major link of the Maryland interregional highway system.

#### *State Roads—Maintenance*

The enormous flow of traffic on our highways in the portion of this County in the Metropolitan area adjacent to Washington creates quite a maintenance prob-

lem. The older type roads have limited right of way and were not designed to accommodate the traffic of today.

The total miles of State Highways maintained in this county total 334.95. A breakdown of the various types of pavement is as follows: low type bituminous 10.15 miles, high type bituminous 218.49 miles and Portland cement concrete 106.31 miles of which 6 miles is of dual lane construction.

Maintenance forces surface treated 232,092 square yards of roadway and placed 10,000 square yards of bituminous material 9 inches in depth for the purpose of pavement widening and correcting earth shoulder erosion.

A total personnel of 86 employees and 31 units of equipment performed all the maintenance for the period covered by this report.

Tables showing data pertaining to road construction contracts awarded, projects completed, and maintenance reports for the period July 1, 1950 to June 30, 1952 follow.

**Road Construction Contracts**

**Projects Completed**

**Maintenance Reports**

**District 3**

REPORT OF THE STATE ROADS  
ROAD CONSTRUCTION CONTRACTS—JULY 1,

Project Number	Contract Number	Location			Miles	Description of Project
		Route No.	From	To		
35	Ho-234-2	U. S. 40	W. Friendship	Morgan Road	5.246	PRIMARY JULY 1, 1950 TO Dual-r. conc. surf.
33B	AA-368-8	B/W Exp.	Dorsey Road Interchange		1.535	0.400 mi. dual conc. surf.; 0.714 mi. conc. ramps; 0.421 mi. spec. "B" surf. St. beam & conc. bridges
46K	M-383-3	U. S. 240	Overpass of Conus Rd. at Hyattstown & Br. over Little Bennett Cr.			
63D	M-435-3	Md. 97	Adjacent to Georgia Avenue, 1st. Section			Storm sewer outfalls
63A	M-435-2	Md. 97	Colesville Road	Seminary Avenue	1.159	Dual reinf. conc.
63B	M-435-4	Md. 97	Seminary Ave. So. of Viers Mill Road		1.732	Dual reinf. conc.
65	AA-368-13	Exp. Conn.	Md. 168	U. S. 301	1.662	Dual reinf. conc. surf. Interchange roadway
33C	AA-368-9	B/W Exp.	0.32 mi. S. of Dorsey Rd.	0.3 mi. N. Jessup Rd.	1.497 1.909	Dual reinf. conc. (0.747 gr. serv. Rd.) Conc. floor sidewalks, st. handrails
32C	AA-263-9	U. S. 50	Severn River Bridge			
63C	M-435-6	Md. 97	Viers Mill Road	Glenmont	2.036	Dual reinf. conc. rd. Storm sewer outfalls
63F	M-435-7	Md. 97	Adjacent to Georgia Ave. —3rd Section			
63E	M-435-5	Md. 97	Adjacent to Georgia Avenue —2nd Section			Storm sewer outfalls
21A	Ho-234-6	Conne- ction from Rd.	U. S. 40 to Md. 32 at W. Friendship		0.189	Pen. mac. surf.
				Total '50-'51	16.992	
59A	Ho-218-5		Columbia Pike 0.7 mi. N. E. of Atholton and Ho- 218-1 to 0.8 mi. S. W. of Seraggsville		4.545	JULY 1, 1951 R. conc. 1 la. of ult. dual
33F	AA-368-18	B W Exp.	Structure—Jessup Rd. Inter- change			St. beam underpass of Jess- sup
33D	AA-368-10	B,W Exp.	0.31 N. of Jessup Rd.— 0.227 of Jessup Rd. Jes. Inter.		3.430	Dual conc.; conc. ramps, etc. 0.593. spec. "B"; 0.151, pen. mac. 0.300; gravel, 3.430 mi.
27G	AA-389-8		Doepkins Entr. Conne- ction to Co. Rd.		0.303	St. I-beam br. & gravel appr.
35A	Ho-234-3 Cl-308	U. S. 40	W. of Morgan Road	1.25 mi. E. of Ridge- ville	5.293	Dual reinf. concrete
32D	AA-263-10	U. S. 50	Severn River Bridge			Roadway and Navigation lights
46Q	M-383-6	U. S. 240	At Clarksburg Road— Route 121			4 span st. I-beam underpass
46M	M-383-2	U. S. 240	S. of F. Co. Line (End M- 383-4) S. of Clarksburg Rd.		3.800	Dual pen. mac. base spec. "B" top
46P	M-383-5	U. S. 240	At Conus Road			4 span st. I-beam underpass
27H	AA-263-16	Annap. Spur	Dorsey Cr. Weems Cr. & Admiral Drive			Wash borings, etc.
27J	AA-389-10	Annap.- Wash. Expy.	Ramp Conn. W. of Parole & Dual Surf. Broad G. E.		0.297	Ramps
					0.323	Dual spec. "B", 0.620 mi.
				Total '51-'52	17.991	
	(24)			Total Primary	34.983	
89	AA-401-2	Md. 2	Steuarts Corner twd. Mt. Zion		4.951	WIDENING AND RES JULY 1, 1950 Bit. stab. gravel surf.
				Total '50-'51	4.951	

COMMISSION OF MARYLAND  
1950 TO JUNE 30, 1952. DISTRICT No. 3

Date Advertised	Bids Opened	Date of Award	Date of Notice To Proceed	Date Started	Date Completed or Per Cent Completed as of June 30, 1952	Engineer's Estimate	Contract Cost	Total Amount Authorized	Contractor
<b>PROJECTS</b>									
<b>JUNE 30, 1951</b>									
4-4-50	5-2-50	7-13-50	7-24-50	8-4-50	4-4-52	\$1,609,307	\$1,439,055	\$1,779,913	Williams Construction Co
6-27-50	7-25-50	8-2-50	8-21-50	9-7-50	36.0	459,356	455,760	546,624	Nello L. Teer Co.
7-25-50	8-22-50	9-6-50	10-2-50	5-3-51	98.9	395,899	321,974	370,270	Baltimore Contractors Inc.
9-5-50	9-26-50	9-27-50	10-9-50	1-8-51	5-7-51	137,945	144,872	166,602	Wilmoth Paving Co.
8-29-50	9-13-50	10-4-50	10-9-50	10-19-50	4-28-52	541,773	556,865	790,394	Wilmoth Paving Co.
10-3-50	10-24-50	12-13-50	1-4-51	5-18-51	6-24-52	804,070	765,832	975,707	Wilmoth Paving Co.
11-21-50	12-12-50	12-27-50	2-5-51	3-8-51	50.0	1,233,724	1,175,834	1,477,209	Nello L. Teer Co.
12-12-50	1-9-51	2-27-51	3-19-51	4-3-51	81.0	797,232	720,835	888,960	Williams Construction Co.
1-16-51	2-13-51	4-4-51	4-25-51	2-18-52	14.6	805,965	781,676	898,927	Camden Contracting Co.
12-26-50	1-23-51	4-26-51	6-20-51	9-25-51	13.0	1,068,589	1,111,752	1,498,515	Wilmoth Paving Co.
3-6-51	3-27-51	5-2-51	5-9-51	5-10-51	11-18-51	37,667	41,526	50,555	John H. Ensey
10-10-50	10-31-50	5-2-51	5-16-51	6-21-51	9-26-51	44,757	44,639	51,935	Lee Butler Co.
6-5-51	6-26-51	6-28-51	9-13-51	10-1-51	6-5-51	48,825	34,854	40,082	Williams Constr. Co.
						7,985,109	7,595,474	9,535,693	
<b>TO JUNE 30, 1952</b>									
5-22-51	6-12-51	7-18-51	8-1-51	10-8-51	22.0	890,563	965,519	1,230,347	W. E. Graham & Son
5-8-51	5-29-51	8-1-51	8-20-51	2-12-52	33.0	320,288	262,175	301,501	F. Pecora Constr. Co.
5-8-51	5-29-51	8-8-51	8-29-51	8-30-51	36.0	598,538	678,886	865,719	Nello L. Teer Co.
10-2-51	10-16-51	10-17-51	11-7-51	1-14-52	5-24-52	10,087	9,680	11,132	Eugene Chaney
9-25-51	10-16-51	11-7-51	11-19-51	11-27-51	50.0	2,158,184	1,920,134	2,298,154	Williams Constr. Co.
10-23-51	11-20-51	12-4-51	1-10-52			60,000	37,495	41,245	Conway Valley Elec.
11-13-51	12-4-51	12-20-51	1-10-52	5-8-52	24.0	169,013	160,099	184,113	Buekley & Co., Inc.
10-30-51	11-20-51	12-20-51	1-16-52	3-17-52	13.0	2,125,652	1,958,038	2,411,743	Dutcher Constr. Co.
11-6-51	11-27-51	12-13-51	1-3-52	5-12-52	16.0	135,823	115,264	132,554	Allied Contractors, Inc.
3-11-52	3-26-52	4-2-52	4-8-52	4-22-52	65.0	7,000	7,040	7,744	Raymond Conc. Pile Co.
6-3-52	6-24-52	6-26-52	7-23-52			91,732	86,540	112,021	T. Edgie Russell
						6,576,880	6,200,870	7,596,263	
						14,561,989	13,796,344	17,131,956	
<b>URFACING PROJECTS</b>									
<b>TO JUNE 30, 1951</b>									
6-6-50	6-27-50	7-26-50	8-7-50	8-7-50	8-2-51	383,632	304,697	430,402	F. P. Asher, Jr. & Sons
						383,632	304,697	430,402	

REPORT OF THE STATE ROADS  
ROAD CONSTRUCTION CONTRACTS—JULY 1,

Project Number	Contract Number	Location			Miles	Description of Project
		Route No.	From	To		
60A	Cl-305-2	U. S. 140	0.11 mi. S. Big Pipe Ck.	Pa. State Line	4.753	JULY 1, 1951 TO Resurface spec. "B"
283	M-492	U. S. 240	Bradley Lane	D. C. Line	1.190	Resurface spec. "B"
233	AA-430-1	Md. 177	Lipin's Corner	1 mi. E. of Jacobs- ville	4.310	Spec. "B" resurf. curve mod.
60B	Cl-305-3	U. S. 140	Bridge over Silver Run	Mt. Zion	3.682	Widen br. from 24' to 44' Widen rehab., gravel surf. bit. stab.
89A	AA-401-3	Md. 2	N. E. of Butler			
288	Ho-253-1 B-629-1	U. S. 1	320' N. E. of Rolling Road to 0.2 mi. S. of Patapsco R.		0.200	Spec. "B" widening & resurfacing of existing bridge
298	Cl-326	U. S. 140, Md. 32, Md. 27, Md. 31	Streets in Westminster		3.231	Spec. "B" resurf. & wid. & resurf.
					Total '51-'52	17.366
					Total Widening and Resurfacing	22.317
SECONDARY						
	Ho-223-2	Whiskey Bot. Rd.	U. S. 1	Md. 216	2.081	JULY 1, 1950 TO Bit. stab. (2nd stage)
	M-464	Clopper Rd.	Old Germantown	Clopper	1.870	Pen. mac. surf.
	Cl-319-1	Md. 622	0.8 mi. S. of Md. 31 twd. Md. 407		1.318	Pen. mac. surf.
					Total '50-'51	5.269
	AA-433	Anderson's Cor. Rd.	Millersville U. S. 301 & Md. 175 easterly		0.360	JULY 1, 1951 TO Bit. surf. tr gravel
					Total '51-'52	0.360
					Total Secondary	5.629
MISCELLANEO						
	Ed-33-514 314		Bridges, AA, Balto. Co., Calvert Co., P. G. Co.			JULY 1, 1950 TO Cleaning & Painting bridges
					Total '50-'51	
	B-630, Ho-254 M-493	Md. 125 U. S. 240	Over Patapsco R. at Woodstock At Grafton Ave. E. at Dor- set Avenue			JULY 1, 1951 TO Tr. timber floor Storage lanes, etc.
					Total '51-'52	
					Total Miscellaneous	
					39	
					GRAND TOTAL	62.929



COMMISSION OF MARYLAND  
1951 TO JUNE 30, 1952. DISTRICT NO. 3

Date Advertised	Bids Opened	Date of Award	Date of Notice To Proceed	Date Started	Date Completed or Per Cent Completed as of June 30, 1952	Engineer's Estimate	Contract Cost	Total Amount Authorized	Contractor
JUNE 30, 1952									
7-11-51	7-31-51	8-1-51	8-20-51	9-4-51	11-12-51	188,840	175,339	201,640	H. T. Campbell Sons Corp.
8-15-51	9-4-51	9-5-51	9-19-51	9-24-51	11-26-51	61,358	49,970	57,466	A. H. Smith
11-27-51	12-18-51	12-20-51	1-9-52	5-26-52	60.0	157,429	144,590	166,278	Bit. Constr. Co.
11-27-51	12-18-51	1-16-52	2-4-52			38,802	43,808	50,879	Waco Constr. Co.
12-7-51	12-28-51	3-12-52	3-19-52	3-20-52	28.0	242,041	200,368	305,423	Eugene Chaney
1-22-52	2-15-52	2-28-52	3-10-52	3-17-52	24.8	103,837	130,005	149,506	Brooklyn Engr. Corp.
4-1-52	4-22-52	5-21-52	6-3-52	6-11-52	10.5	128,529	122,856	141,285	Contee Sand & Gravel Co.
						920,836	866,936	1,072,477	
						1,304,468	1,171,633	1,502,879	
PROJECTS									
JUNE 30, 1951									
8-1-50	8-15-50	8-23-50	9-7-50	9-11-50	10-13-50	23,841	17,507	20,133	Chas. E. Kern, Inc.
10-10-50	10-24-50	11-29-50	12-7-50	1-9-51	5-17-52	303,140	281,395	323,604	Richard F. Kline
11-14-50	12-5-50	12-27-51	7-9-51	7-19-51	10-24-51	129,232	103,830	125,405	T. Edgie Russell
						456,213	402,732	469,142	
JUNE 30, 1952									
12-20-51	1-8-52	1-16-52	2-28-52	3-13-52	84.3	31,831	28,990	31,889	Reliable Contracting Co.
						31,831	28,990	31,889	
						488,044	431,722	501,031	
US PROJECTS									
JUNE 30, 1951									
5-16-51	5-29-51	6-6-51	6-28-51	7-16-51	8-20-51	9,500	8,800	9,680	Vassilares Contr. Co.
						9,500	8,800	9,680	
JUNE 30, 1952									
7-17-51	8-7-51	8-22-51	9-11-51	2-11-52	2-26-52	7,200	7,456	8,754	Masonry Resurf. & Constr. Co.
11-20-51	12-4-51	12-13-51	1-21-52	4-22-52	5-14-52	4,700	4,179	4,806	J. O. & C. M. Steuart, Inc.
						11,900	11,635	13,560	
						21,400	20,435	23,240	
						\$16,375,901	\$15,420,134	\$19,159,106	

DOLLAR VALUE OF CONTRACTS COMPLETED JULY 1, 1950 TO JUNE 30, 1952  
DISTRICT NO. 3

Project Number	Contract Number	Route	Location From	To	Miles	Description of Project	Date Authorized	Amount Authorized	Date Completed	Contractor
45C 45E	AA-368-2 AA-368-4	B-W Expr. B-W Expr.	Patapsco River Interchange Area Win-terson Road to P. R.R.	Hammocks Ferry Road	1.453 2.422	1948 PROGRAM Dual reinf. conc. surf. Reinf. conc. surf.	Sept. 8, '48 Feb. 2, '49	\$1,579,011 1,000,300	May 8, '51 Aug. 2, '51	Wilmoth Paving Company C. J. Langenfelder & Son
	(2)		Total Completed		3.275			3,179,311		
41A	AA-368-6	B-W Expr.	Bridge over Stony Run	Hanover Rd.	1.211	1949 PROGRAM Dual hwy. reinf. conc. surf.	Apr. 20, '49	1,013,918	Oct. 1, '51	Carozza Hamill & Co.
41B	AA-368-5	B-W Expr.	Bridges over P. R.R.	Stony Run		Dual 6 span steel I-beam br.	July 6, '49	577,766	Nov. 2, '50	Brooklyn Engr. Corp.
54	M-350-3	U. S. 240	East West Highway	Glenbrook	0.650	Divided hwy. reinf. conc. surf.	Aug. 26, '49	565,412	Aug. 5, '50	Wilmoth Paving Co.
27A	AA-389-3	U. S. 50	South River	U. S. 301	6.296	Dual hwy. reinf. conc. surf.	Sept. 14, '49	2,367,610	Aug. 13, '51	C. J. Langenfelder & Son
32A 23	AA-263-5 CI-303-1	U. S. 50 U. S. 140	Severn River Bridge W. of Finksburg Rd. to ward Westminster		3.500	Sub-structure Reinf. conc. dual high- way	Nov. 9, '49 Dec. 21, '49	3,927,270 1,233,879	Mar. 29, '52 Aug. 27, '51	Merritt, Chapman & Scott Nello L. Teer Co.
32B 50	AA-263-7 Ho-218-1	U. S. 50 Columbia P. & U. S. Md. 27	Severn River Bridge South of Columbia to ward Athelton		4.305	Deck St. Plate Girder Super structure Reinf. conc. surf. I-beam	Dec. 21, '49 Dec. 28, '49	2,214,376 1,012,698	Feb. 7, '52 Aug. 15, '51	Harris Structural Steel Co. Wilmoth Paving Company
149	CI-314	Md. 27	Westminster twd. Tay- lorsville		5.001	Reinf. conc. wid. & reloc.	Dec. 28, '49	563,777	May 18, '51	Thos. Bennett & Hunter
37B 37C	AA-384-2 AA-384-6	Md. 176 Md. 176	Harmans At Dorsey & 1.5 mi. E. of Dorsey	Dorsey Relocations	0.910	Spec. "B" sand asph. Reinf. conc. dual 2 exist. br.	Dec. 28, '49 Dec. 28, '49	331,855 17,694	July 31, '50 Sept. 27, '50	F. P. Ashler, Jr. & Son E. A. & J. O. Crandell
27B 27	AA-389-4 AA-389-2	U. S. 50 U. S. 50	Bridge over South River Parole interchange to South River		3.466	St. beam & conc. br. Reinf. conc. surf. dual hwy.	Aug. 10, '49 July 13, '49	294,754 1,732,478	May 31, '51 May 17, '51	Yanguard Constr. Co. Nello L. Teer Co.
21	Ho-234-1	U. S. 40	Pine Orchard	W Friendship	5.490	Reinf. conc. surf. dual	June 8, '49	2,112,692	Apr. 24, '51	T. E. Ritter Co.
	(14)		Total Completed		31.459			18,056,509		
27C	AA-389-6	U. S. 50	Bridge over Patuxent River		1950 PROGRAM	Steel I-beam bridge	Feb. 2, '50	442,552	Aug. 17, '51	A. S. Wilstrom, Inc.
189 199A	AA-416 CI-317	U. S. 301 Md. 30	Severn Run Hill Baltimore Co. Line	5th Ave. Glen Burnie 1 mi. N. Hammstead	5.476 3.490	Spec. "B" resurfacing Spec. "B" wid. & resurf.	Mar. 1, '50 Mar. 1, '50	196,242 183,352	Sept. 23, '50 Oct. 13, '50	Highway Constr. Co. H. T. Campbell Sons Corp.
199B	CI-317-1	Md. 30	Manchester	1 mi. N. Hammstead thru Mayo Road toward Da- vidsonville	3.707	Spec. "B" wid. & resurf.	Mar. 29, '50	298,035	Oct. 25, '50	H. T. Campbell Sons Corp.
	AA-341-3	Md. 214	Mayo Road toward Da- vidsonville		1.721	Bit. stab. base gravel spec. "B" surf.	Apr. 5, '50	68,629	Nov. 1, '50	E. Stewart Mitchell
167	M-461-1	U. S. 240	At Conus Road Inter- section		0.358	Pen. mac. surf. mod. curve	Apr. 19, '50	43,358	July 9, '50	T. E. Russell Company
	M-435-1	U. S. 29	Columbia Blvd. & Semi- nary Ave. at Ga. Ave.			Conc. adj. to channelized inter.	Apr. 26, '50	6,040	July 24, '50	Curtin & Johnson

66	AA-392-3 AA-418-1 CL-316-4 E-131-314, 315 M-435-1 CL-303-4 H-231-2 AA-401-2 H-223-2 M-435-3 M-435-2 CL-319-1	Airport Rd. U. S. 301 Six Br. U. S. 210 U. S. 140 U. S. 40 Md. 2 Whiskey Bot. Rd. Md. 97 Md. 97 Md. 622	Airport Boundary Over Saw Mill Creek at N. End of Glen Burnie N. W. of Detour Metal Structures District 3 and 5 Rockville By-Pass Engl. Cont. 303-1 toward Westminster W. Friendship Stearns Corner toward Mt. Zion U. S. 1 Adjacent to Georgia Ave- nue (1st Section) Colesville Road 0.8 mi. S. of Md. 31 twd. Md. 407 (Avaldale to Wheatfield) (B & E) Old Germantown Seminary Avenue Adjacent to Georgia Avenue	Administration Bldg. Fred'k Co. Line	1-015 0-424 1-387 3-380 5-246 4-351 2-081 1-159 1-318 1-870 1-732 39-315	Dual conc. surf. Widen existing bridge Pen. nuc. surf. Cleaning & painting Dual reinf. conc. flush median Dual reinf. conc. surf. Reinf. conc. surf. dual Bit. stab. gravel surf. Bit. stab. (2nd stage) Storm sewer outfalls Dual reinf. conc. Pen. nuc. surf. Pen. nuc. surf. Dual reinf. conc. Storm sewer outfalls	Apr. 29, '50 May 10, '50 May 18, '50 May 18, '50 June 21, '50 June 29, '50 July 13, '50 July 26, '50 Aug. 23, '50 Sept. 27, '50 Oct. 4, '50 Dec. 27, '50 Nov. 29, '50 Dec. 13, '50 May 2, '51	519,748 11,885 13,217 7,744 479,502 1,142,430 1,779,913 430,402 20,133 106,602 790,394 125,466 323,601 975,707 51,935	Williams Constr. Co. J. Melvin Roberts R. F. Kline Dornant Painting Co. Suburban Eng. & Constr. Co. Nello L. Toer Co. Williams Construction Co. F. P. Ashler Jr. & Sons C. E. Kern, Inc. Wilmoth Paving Co. Wilmoth Paving Co. T. Edgce Russell Richard F. Kline Wilmoth Paving Co. Lee Butler Co.	July 12, '51 Oct. 10, '50 July 21, '50 Aug. 12, '50 Nov. 19, '51 Dec. 12, '51 Apr. 4, '52 Aug. 2, '51 Oct. 13, '50 May 7, '51 Apr. 28, '52 Oct. 24, '51 May 17, '52 June 24, '52 Sept. 26, '51
63F	M-435-7 E-1-33-311, 313 H-2-234-6	Md. 97 Bridges	Adjacent to Georgia Ave- nue (3rd Section) AA B. Co., AA Co., C. Co. & P. Co. Connection from Rd. U. S. 40 to Md. 32 at W. Friendship 0.11 mi. S. Big Pipe Cr. Over Patapsco R. at Woodstock Bradley Lane At Dorset Avenue E. at Grafton St. Connection to Co. Rd.	1951 PROGRAM Storm sewer outfalls Cleaning & painting br. Pen. nuc. surf.	May 2, '51 June 6, '51 June 28, '51	50,555 9,680 40,082	John H. Epsy Vassileros Contr. Co. Williams Constr. Co.	Nov. 18, '51 Aug. 20, '51 Mar. 27, '52		
21A	CL-305-2 H-2-231	U. S. 140 Md. 125	Pa. State Line	4-753	Aug. 1, '51 Aug. 22, '51	201,640 8,574	H. T. Campbell Sons, Co. Masonry Resturf. & Con- str. Co.	Nov. 12, '51 Feb. 26, '52		
283	M-492 M-493	U. S. 210 U. S. 240	D. C. Line	1-490	Sept. 5, '51 Dec. 13, '51	57,466 4,807	A. H. Smith J. O. & C. M. Stewart Co Inc.	Oct. 26, '51 May 11, '52		
27C	AA-389-8	Deepkins Entr.	Steel I-beam br. & gravel appr.	0-303	Oct. 17, '51	11,132	Eugene Chaney	May 24, '52		
(8)			Total completed	6-485		383,936				
(46)			GRAND TOTAL	80,484		\$29,606,615				

RECAPITULATION OF PROJECTS COMPLETED BY CLASSIFICATIONS—DISTRICT No. 3

Classification	1948		1949		1950		1951		1952		Total	
	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Amount
Primary.....	3.275	\$3,179,311	25.548	\$17,113,183	13.919	\$6,348,783	0.492	\$101,769	—	—	43.234	\$26,743,046
Widening and Resurfacing.....	—	—	5.911	943,326	17.982	1,061,389	5.943	259,106	—	—	29.836	2,263,821
Secondary.....	—	—	—	—	7.414	551,018	—	—	—	—	7.414	551,018
Miscellaneous.....	—	—	—	—	—	25,669	—	23,061	—	—	—	48,730
Total Completed (46).....	3.275	\$3,179,311	31.459	\$18,056,509	39.315	\$7,986,859	6.435	\$383,936	—	—	80.484	\$29,606,615

MAINTENANCE REPORT  
JULY 1, 1950-JUNE 30, 1951  
*Roadway Surfacing*

Type of Work	Unit of Charge	Rigid J-K	Semi-Rigid I	Non-Rigid F, G, H, I	Untreated D-E
Patching	Sq. yds.	22,419	67,392	298,911	81
Blading—Dragging	Miles				
Jacking—Asphalt	Sq. yds.				
Jacking—Cement Slurry	Sq. yds.				
Resurfacing—Non Bituminous	Sq. yds.				
Joint and Crack Filling	Gals.	23,640			
Oiling—Bituminous	Sq. yds.	515	232,092	60,646	33,834

*Shoulder Maintenance*

Type of Work	Unit of Charge	Bitum.	Stabilized	Grass	Earth
Patching	Sq. yds.	28,468	114,686		35,375
Blading—Dragging	Miles		420		2,571.18
Sodding	Sq. yds.			210	
Mowing and Hand Cutting	Miles			50,119.78	
Oiling—Bituminous	Sq. yds.	20,000			4,915
Removal—Excess Material	Cu. yds.				16,358

*Maintenance—Bridges and Structures*

Type of Work	Unit of Charge	Repairs	Replacements	New Installations
Bridge Repairs	Number	1	1	1
Pipe and Box Culverts	Number	3	10	12
Curb and Gutter	Lin. ft.			120
Paint Bridge (1) Hand Rail— Bridge 3177	Number		1	17
Spillways, etc.	Number	1		3
Bituminous Rebut.	Lin. ft.	500	60	1,191
Underdrain	Lin. ft.			81
Rebut.				4,382

*Guard Fence*

New Fence	Lin. ft.	335	127	13
Posts	Number	5,631	371	262
Cable	Lin. ft.	3,200	150	110
Fittings	Number	23	78	8
Paint	Gals.	540	10	8

*Right-of-Way*

Type of Work	Unit of Charge	Maintenance	
		Roadside	Park Area
Mowing, Clearing and Grubbing	Miles	2,045.02	140
Beautification	Sq. yds.	121	6,803
Resetting Fence	Lin. ft.	3,200	
Removal of Debris	Truck loads	875	42
Top-Soil	Cu. yds.	625	653
Cutting Grass	Acres	83	1,432
Trimming Trees	Number	325	
Moving Equipment	Units	86	
	Miles	4,845	

## MAINTENANCE REPORT—(Continued)

*Traffic Service*

Type of Work	Unit of Charge	Maintenance
Highway Markers	Number	9,085
Surface Guide Lines	Miles	1,428.29
Surface Marking, Schools R.R., Etc.	Number	1,059
Snow Removal	Inches, miles	518.5"—14,929 mi.
Ice Treatment	Cu. yds.	
Traffic Lights	Number	4
Snow Fence, Removal	Lin. ft.	174,380
Snow Fence, Erecting	Lin. ft.	314,900
Manual Traffic Count	Hours	2,973

*Drainage (Cleaning)*

Ditching (New)	Lin. ft.	8,545
Cleaning—Ditches	Lin. ft.	291,630
Cleaning—Pipe Culverts	Number	646
Cleaning—Box Culverts	Number	26
Cleaning—Bridges	Number	74
Cleaning—Catch Basins	Number	475
Cleaning—Misc. Structures	Number	6
Riprapping	Sq. yds.	92
Install Under Drain	Lin. ft.	110

## MAINTENANCE REPORT

JULY 1, 1951-JUNE 30, 1952

*Roadway Surfacing*

Type of Work	Unit of Charge	Rigid J-K	Semi-Rigid I	Non-Rigid F, G, H, I	Untreated D-E
Patching	Sq. yds.	29,752	99,494	198,595	
Blading—Dragging	Miles				
Jacking—Asphalt	Sq. yds.				
Jacking—Cement Slurry	Sq. yds.				
Resurfacing—Non Bituminous	Sq. yds.				
Joint and Crack Filling	Gals.	17,425	750	700	
Oiling—Bituminous	Sq. yds.		498,507		

*Shoulder Maintenance*

Type of Work	Unit of Charge	Bitum.	Stabilized	Grass	Earth
Patching	Sq. yds.	47,269	138,079	2,188	50,167
Blading—Dragging	Miles		382.10		3,657.82
Sodding	Sq. yds.				2,000
Mowing and Hand Cutting	Miles			3,637.02	
Oiling—Bituminous	Sq. yds.	87,107	2,510		
Removal—Excess Material	Cu. yds.				26,234

MAINTENANCE REPORT—(Continued)  
Maintenance—Bridges and Structures

Type of Work	Unit of Charge	Repairs	Replacements	New Installations
Bridge Repairs	Number	11		
Pipe and Box Culverts	Number	10	9	29
Curb and Gutter	Lin. ft.	51.5		
Catch Basins	Number	3		35
Spillways, etc.	Number	4		3
Bituminous Rebut.	Lin. ft.	180		1,316
Underdrain	Lin. ft.			542

*Guard Fence*

New Fence	Lin. ft.	449	401	328
Posts	Number	880	288	1,149
Cable	Lin. ft.	4,605	140	8,342
Fittings	Number	69	38	1,144
Paint	Gals.	167	5	47

*Right-of-Way*

Type of Work	Unit of Charge	Maintenance	
		Roadside	Park Area
Mowing, Clearing and Grubbing	Miles	2,987.50	91.40
Beautification	Sq. yds.	7,039	1,447
Resetting Fence	Lin. ft.	120	
Removal of Debris	Truck loads	779	120
Top-Soil	Cu. yds.	24	1,002
Cutting Grass	Aeres	297	2,156
Trimming Trees	Number	408	
Moving Equipment	Units	75	
	Miles	3,845	

*Traffic Service*

Type of Work	Unit of Charge	Maintenance
Highway Markers	Number	10,905
Surface Guide Lines	Miles	767.42
Surface Marking, Schools, R.R., etc.	Number	773
Snow Removal	Inches, Miles	15½"—17,117
Ice Treatment	Cu. yds.	3,945
Traffic Lights	Number	3
Snow Fence, Removal	Lin. ft.	254,896
Snow Fence, Erecting	Lin. ft.	344,300
Manual Traffic Count.	Hours	1810

*Drainage (Cleaning)*

Type of Work	Unit of Charge	Maintenance
Ditching, (New)	Lin. ft.	15,372
Cleaning—Ditches	Lin. ft.	535,750
Cleaning—Pipe Culverts	Number	893
Cleaning—Box Culverts	Number	951
Cleaning—Bridges	Number	54
Cleaning—Catch Basins	Number	542
Cleaning—Misc. Structures	Number	207
Riprapping	Sq. yds.	155





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**DISTRICT NO. 4**  
**Headquarters—Towson, Maryland**

D. P. CAMPBELL  
*District Engineer (July 1, 1950 to April 17, 1951)*

ENOCH C. CHANEY  
*District Engineer (April 18, 1951 to June 30, 1952)*

JAMES N. HEILE  
*Assistant District Engineer*  
Construction

MILTON C. VOLKER  
*Assistant District Engineer*  
Maintenance

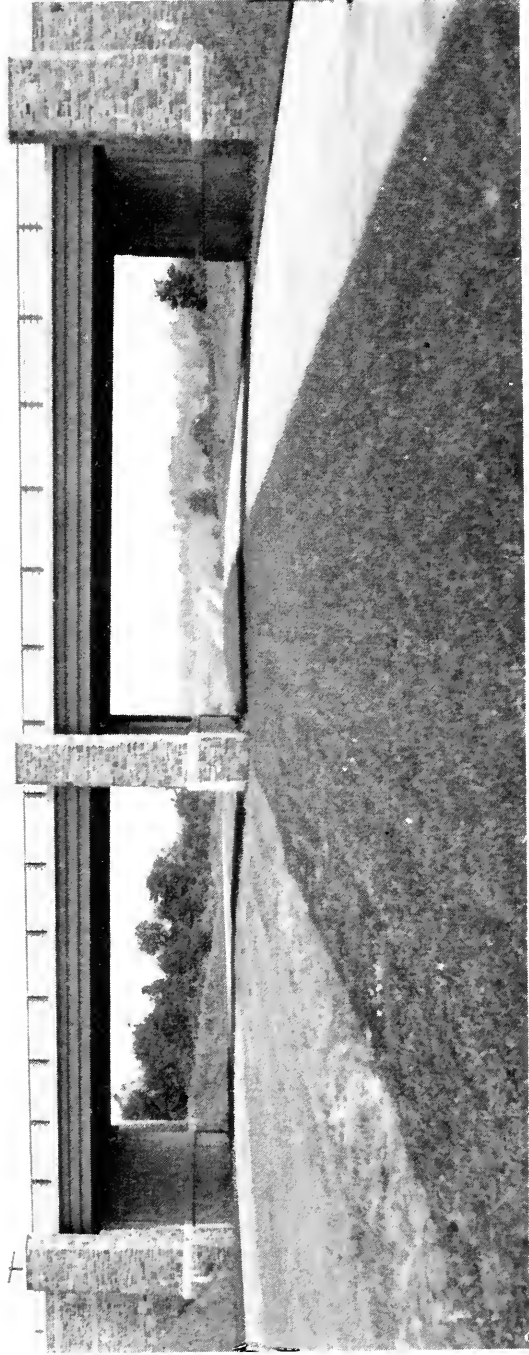
BALTIMORE COUNTY  
CHARLES E. HESSON  
*Junior Assistant Highway Engineer*

HARFORD COUNTY  
PERCY B. SHIPLEY  
*Junior Assistant Highway Engineer*

PERMITS  
ARRA CHANEY  
*Junior Assistant Highway Engineer I*

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SECTION OF BALTIMORE-HARRISBURG EXPRESSWAY SHOWING BEAVER DAM ROAD OVERPASS

## DISTRICT NO. 4

This District comprises Baltimore and Harford Counties and contains 576.94 miles of State Roads. This District covers the entire Metropolitan area of Baltimore City. All County roads in both Baltimore and Harford Counties are maintained by the respective counties. The development in the past two years due to the transformation of large land areas into housing projects, shopping centers, single and multi-unit residential homes in the areas surrounding Baltimore City and Havre De Grace combined with the expansion of Edgewood and Aberdeen Proving Grounds has been responsible for 7317 permits being issued to utilities, developers, private homes and the Metropolitan and Highway Departments of Baltimore County. An additional 109 Freeway permits were issued to business establishments on Pulaski Highway.

A summary and brief description of construction and maintenance activities carried out in this District by counties for fiscal years 1951 and 1952 follows:

### BALTIMORE COUNTY

#### *Construction*

In addition to the thirteen tabulated projects completed, two structures were built on Maryland Route 7. The two contracts were awarded on October 20, 1950. One, a double box culvert over White Marsh, was completed on December 9, 1950 and the other, a bridge over Honeygo Run was completed on December 22, 1950. Another additional contract awarded October 24, 1951, for redecking a bridge over the Patapsco River at Woodstock was completed February 26, 1952.

A contract was also awarded on November 15, 1951, for an additional stairway at the Sulphur Spring Road underpass which was completed on June 4, 1952.

The above four contracts total an authorized amount of \$118,043. A reconstruction program covering 31.45 miles for widening, curve modification and resurfacing with bituminous concrete, of which 5.47 miles have been completed. Balance of program will be completed this construction season. This program has been one of the major roadway improvements.

#### *Maintenance*

The State Forces maintain 305.23 miles of State Roads of which 23.33 miles were surface treated in 1951 and 22.60 miles in 1952.

Other major improvements made by the State Forces were the construction of roadway approaches to Honeygo and White Marsh Bridges on Maryland Route 7 following the flood of August 1950.

The State Forces also resurfaced 1.5 miles of dual highway on Maryland Route

151 with bituminous concrete in 1951 and 1.0 miles of dual highway on this same route in 1952.

In 1952 these same forces resurfaced 1.9 miles on Bellona Avenue, Maryland Route 134, from Charles Street to Ruxton Road with bituminous concrete.

The surface treatment of stabilized shoulders on several of the completed resurfacing projects was also accomplished.

The conversion of old type wire guard rail with cable type was continued during the past two years which has now greatly reduced the amount of this type of guard rail still in use.

During the month of June 1952 three wind and rain storms caused considerable damage to shoulders, culverts and stream beds at bridges in addition to the emergency work of the removal of fifty-three trees across the highways.

#### HARFORD COUNTY

##### *Construction*

In addition to the twelve tabulated projects a contract was awarded on October 20, 1950, for the rebuilding of a box culvert over Broad Run on Maryland Route 136 which was completed on March 26, 1951, for an authorized amount of \$28,600.

A reconstruction program covering 29.75 miles for widening, curve modification and resurfacing with bituminous concrete of which 11.21 miles have been completed. Balance of program will be completed this construction season. This program has been the major roadway improvement.

##### *Maintenance*

The State Forces maintain 271.71 miles of State Roads of which 45.83 miles were surface treated in 1951 and 18.62 miles in 1952. These same forces also constructed the roadway approaches to the new Broad Creek culvert on Maryland Route 136, north of Dublin.

On Maryland Route 136 north of Deer Creek 0.5 mile of roadway was resurfaced with mixed-in-place material.

The conversion of old type wire guard rail with cable type was continued during the past two years to the extent that only small sections remain.

At Churchville the storage yard was enlarged by the acquisition of 1.5 additional acres which required clearing, draining and surfacing and the entire property has been fenced.

Numerous replacements of concrete surfacing around the Toll Booth area on the Havre De Grace Bridge during the past two years were completed by the State Forces in addition to the regular maintenance of landscaping on the bridge approaches.

Tables showing data pertaining to road construction contracts awarded, projects completed, and maintenance reports for the period July 1, 1950, to June 30, 1952, follow.

**Road Construction Contracts**

**Projects Completed**

**Maintenance Reports**

**District 4**

REPORT OF THE STATE ROADS  
 ROAD CONSTRUCTION CONTRACTS—JULY 1,

Project Number	Contract Number	Location			Miles	Description of Project
		Route No.	From	To		
None						PRIMARY JULY 1, 1950 TO
25	B-578-8	U. S. 111 Rel.	0.14 mi. S. of Shawan Rd.	0.373 mi. N. Thorn- ton Mill Road	2.330	Reinf. Conc. Surf.—1 la. Ult. Dual Conc. pen. mac. surf.
51	B-578-14	U. S. 111 rel.	At Timonium Road with connections		0.757	
	2			Total '51-'52	3.087	
				Total Primary	3.087	
150	II-323	U. S. 1	Broadway & Hickory to- ward Conowingo, Bel Air		5.375	WIDENING AND RES JULY 1, 1950 TO Widen & Resurf. Spec. "B"
200A	II-333-1	Md. 7	Balto. (Ha Ha Branch)	Baltimore Co. Line	5.215	Spec. "B" Resurf.
40	II-316-1	Md. 22	Main St. Bel Air twd.	Churchville	6.289	Spec. "B" Wid. Mod. & Re- surf.
41-85	B-582	Alt. U. S. 40	E. of Ingleside Ave.	Montrose Avenue	0.989	Spec. "B" & P. Conc. Surf.
220	B-610	U. S. 111	Joppa Rd. Towson twd.	Cokeysville	1.955	Wid. Mod. Curves & Re- surf. Spec. "B"
199	B-327-1	Md. 30	N. of Reisterstown	Carroll Co. Line	5.475	Wid. Mod. Curves & Re- surf. Spec. "B"
220A	B-610-1	U. S. 111	Lutherville	Padonia	1.984	Wid. Mod. Curves & Re- surf. Spec. "B"
				Total '50-'51	27.282	
220B	B-610-2	U. S. 111	Padonia	Cokeysville	2.098	JULY 1, 1951 TO Wid. Mod. Curves; Spec. "B" Pen. Mac. Base
119A	B-631	Md. 126	B. C. Line twd. Gwynn Oak		0.500	Resurf. Spec. "B"
256	II-346	Md. 129	B. C. Line	Old Court Road	0.700	Resurf. Spec. "B"
150E		U. S. 1	5.4 Mi. N. E. of Bel Air twd. Conowingo		2.974	Resurf. Spec. "B"
255	B-633	Md. 26	Randallstown	North Branch	4.500	Widen & Resurf. Spec. "B"
265	II-347	U. S. 1	Balto. Co. Line toward Md. 24		3.900	Resurf. Spec. "B"
230	B-594-2	Md. 7	Approaches to Red House Run		0.216	Wid. & Resurf. Spec. "B" Conc. Box Cul.
288	B-629-1	U. S. 1	320' N. E. of Rolling Road	0.2 Miles S. of Pa- tapasco River	0.436	Spec. "B" Wid. & Resurf. Conc. Curb
118A	Ho-253-1	U. S. 140	Old Court Road	Woodley Avenue	7.740	Mod. Wid. Exist. Br. Spec. "B" Resurf. & Drain- age Adj.
118B	B-642			Md. 30	Beginning of Dual Hwy.	1.022
				Total '51-'52	24.086	
	15			Total Widening and Resurfacing	51.368	
	II-324-1	Creswell Rd.	Creswell (Md. 136)	Md. 7	2.571	SECONDARY JULY 1, 1950 TO Pen. Mac. Surf.
				Total '50-'51	2.571	
None						JULY 1, 1951 TO
	(1)			Total Secondary	2.571	

REPORT OF THE STATE ROADS COMMISSION OF MARYLAND

COMMISSION OF MARYLAND

1950 TO JUNE 30, 1952. DISTRICT NO. 4

Date Advertised	Bids Opened	Date of Award	Date of Notice To Proceed	Date Started	Date Completed or Per Cent Completed as of June 30, 1952	Engineer's Estimate	Contract Cost	Total Amount Authorized	Contractor
<b>PROJECTS JUNE 30, 1951</b>									
1-22-52	2-19-52	4-22-52	5-12-52	6-16-52	1.8	\$1,209,330	\$1,228,967	\$1,512,312	Nello L. Teer Co.
4-29-52	5-20-52	6-11-52	7-7-52			279,719	302,692	393,096	Nello L. Teer Co.
						1,489,049	1,531,659	1,905,408	
						1,489,049	1,531,659	1,905,408	
<b>REFACING PROJECTS JUNE 30, 1951</b>									
12-6-49	12-28-49	7-19-50	7-31-50	9-18-50	98.0	265,429	274,017	413,770	T. B. Gatch & Sons, Inc.
8-15-50	9-5-50	9-6-50	9-18-50	9-27-50	5-28-51	16,784	10,618	13,710	H. T. Campbell Sons Corp.
6-6-50	6-27-50	11-1-50	11-27-50	4-5-51	68.0	576,540	641,645	912,892	H. T. Campbell Sons Corp.
9-15-50	10-10-50	11-1-50	2-5-51	5-7-51	11-15-51	278,589	254,591	293,780	P. Reddington & Sons
9-15-50	10-10-50	11-15-50	11-27-50	3-5-51	4-21-52	203,213	219,010	251,862	Wm. A. Harting
11-14-50	12-5-50	12-27-50	1-17-51	2-14-51	95.0	328,316	379,117	441,984	H. T. Campbell Sons Corp.
4-10-51	5-1-51	6-20-51	7-27-51	9-13-51	42.0	225,748	245,828	292,702	H. T. Campbell Sons Corp.
						1,894,619	2,024,826	2,620,700	
<b>JUNE 30, 1952</b>									
7-17-51	8-7-51	8-22-51	9-13-51	1-4-52	44.4	336,867	345,980	399,877	H. T. Campbell Sons Corp.
8-15-51	9-4-51	9-5-51	9-19-51						
8-15-51	9-4-51	9-5-51	9-19-51	5-28-52	62.0	62,453	70,675	81,276	H. T. Campbell Sons Corp.
8-21-51	9-11-51	9-19-51	10-16-51	5-22-52	21.0	112,487	112,415	129,277	T. B. Gatch & Sons, Inc.
9-4-51	9-25-51	9-26-51	10-19-51	4-1-52	44.0	235,915	250,967	288,612	H. T. Campbell Sons Corp.
10-2-51	10-16-51	10-17-51	11-1-51			145,089	137,721	158,379	T. B. Gatch & Sons, Inc.
11-6-51	11-27-51	12-13-51	12-26-51	6-2-52	5.0	99,672	113,652	155,700	J. Melvin Roberts
1-22-52	2-13-52	2-28-52	3-10-52	3-17-52	24.8	287,553	303,500	414,025	Brooklyn Engr. Corp.
5-13-52	6-3-52	6-4-52				359,722	318,019	365,722	H. T. Campbell Sons Corp.
5-13-52	6-3-52	6-4-52	7-9-52						
						1,639,758	1,652,929	1,992,868	
						3,534,377	3,677,755	4,613,568	
<b>PROJECTS JUNE 30, 1951</b>									
7-6-50	7-25-50	8-2-50	8-14-50	8-29-50	10-21-50	33,599	29,482	32,430	T. B. Gatch & Sons
						33,599	29,482	32,430	
<b>JUNE 30, 1952</b>									
						33,599	29,482	32,430	

REPORT OF THE STATE ROADS  
ROAD CONSTRUCTION CONTRACTS—JULY 1,

Project Number	Contract Number	Location			Miles	Description of Project
		Route No.	From	To		
	EC-189-1		Kraft Bldg. Fleet & Albermarle Street		0.189	MISCELLANE JULY 1, 1950 TO Alterations and Additions to Bldg. Pen. Mac. Surf. (curve mod.) Repairs to Bridge, etc.  R. C. Backwalls on Existing Bridge Gunite Repairs, etc. Roadway Deck
	B-599-1	Md. 129	S. of Walnut Avenue twd. Coves Road			
	11-339-2	Md. 136	Over Deer Cr. S. of Dublin			
	H-340-2 11-343-1	Md. 161	Over Deer Creek between Level & Darlington			
	Ce-339-1	N. S. 1	Conowingo Dam			
				Total '50-'51	0.189	
	B-622-1	Md. 134	Br. over P. R.R. at Ruxton		0.275	JULY 1, 1951 TO Repair Floor System 80' Span St. I-Beam Br. Spec. "B" App. Installation, etc. Air Cond. System Plumbing, Elec. etc.  Roadway Lighting System Cleaning & Painting Bridges Alterations, etc. to Elevators
	B-625-1	Md. 25	Over Western Run			
	AW-614		108 E. Lexington Street			
	AW-614-1		108 E. Lexington Street			
	B-636	Md. 150	Eastern Avenue Underpass			
	ED. 36-414 AW-613		5 Bridges in Harford; 1 in Balto. Co. 108 E. Lexington Street			
				Total '51-'52	0.275	
	12			Total Miscellaneous	0.464	
	30			GRAND TOTAL	57.490	



REPORT OF THE STATE ROADS COMMISSION OF MARYLAND

COMMISSION OF MARYLAND  
1951 TO JUNE 30, 1952. DISTRICT No. 4

Date Advertised	Bids Opened	Date of Award	Date of Notice To Proceed	Date Started	Date Completed or Per Cent Completed as of June 30, 1952	Engineer's Estimate	Contract Cost	Total Amount Authorized	Contractor
<b>OUS PROJECTS</b>									
JUNE 30, 1951									
7-18-50	8-1-50	8-3-50	8-14-50	8-18-50	8-6-51	85,000	82,344	90,578	Colwill Constr. Co., Inc.
6-6-50	6-27-50	8-9-50	9-1-50	5-7-51	10-17-51	32,911	28,276	37,517	H. T. Campbell Sons Corp.
12-5-50	12-19-50	12-20-50	1-12-51	1-5-51	3-24-51	35,950	39,573	45,508	McLean Contr. Co.
4-4-51	4-24-51	5-2-51	5-14-51	6-6-51	7-31-51	3,895	5,095	5,859	J. D. Sheetz Constr. Co.
5-15-51	6-5-51	6-13-51	7-9-51	7-23-51	9-25-51	23,600	12,416	13,657	Eastern Gunite Co.
						181,446	167,704	193,119	
JUNE 30, 1952									
6-5-51	6-26-51	7-18-51	8-1-51	10-8-51	11-9-51	7,900	8,045	8,850	Wm. T. Lyons Co.
12-20-51	1-15-52	2-6-52	2-21-52	5-12-52	3.3	164,220	161,387	187,594	J. H. Williams & Co.
4-29-52	5-13-52	5-21-52	6-3-52			17,000	17,985	19,782	Md. Refrig. Co.
4-29-52	5-16-52	5-21-52	6-25-52			10,000	10,568	11,625	United Clay & Sup. Co.
5-13-52	5-27-52	6-18-52	7-2-52			1,800	2,595	2,855	S. H. Jackson
5-26-52	6-10-52	6-18-52	7-2-52			12,000	11,790	12,969	Dormant Ptg. Co.
5-27-52	6-17-52	6-26-52				27,000	30,385	33,424	General Elevator Co.
						239,920	242,755	277,099	
						421,366	410,459	470,218	
						<b>\$5,478,391</b>	<b>\$5,649,355</b>	<b>\$7,021,624</b>	

DOLLAR VALUE OF CONTRACTS COMPLETED JULY 1, 1950 TO JUNE 30, 1952  
DISTRICT No. 4

Project Number	Contract Number	Location		Miles	Description of Project	Date Authorized	Amount Authorized	Date Completed	Contractor
		Route	From To						
45B	AA-398-1 B-577-2 B-332-5	B/W Expt. Sulphur Spring Rd.	Bridges over Patapsco River Approaches to Underpass of T. R.R.	0.110 0.600	PROGRAM Dual-steel beam & conc. br. Reinf. conc. surfacing	Aug. 26, '48 Mar. 17, '49	\$675,912 561,757	July 31, '50 June 16, '51	McLean Contracting Co. Frank L. Carozza
	2		Total Completed	0.710			1,237,669		
52B 52C	B-578-4 B-578-6	U. S. 111 U. S. 111	Zink Underpass Padonia Road Underpass		PROGRAM Reinf. conc. underpass Reinf. conc. underpass	June 29, '49 Aug. 24, '49	66,635 287,304	Oct. 30, '50 July 20, '51	Allied Contractors Smith, DeCourse & Christ Hill
52D	B-578-7	U. S. 111	Br. over York Rd., Rehor. at Beaver Dam Rd.		Steel beam & conc. br.	Sept. 28, '49	162,718	May 9, '51	J. Melvin Roberts
52A 159	B-578-9 H-322	U. S. 111 Md. 24	Tinonium Rd. 2.5 mi. S. of Bel Air Md. 7 at Van Bibber	4.069 2.652	Reinf. conc. surf. Pen. mac. & spec. "B" surf.	Dec. 28, '49 Dec. 28, '49	709,298 386,011	June 21, '51 Jan. 16, '52	Reto Enger. & Contr. Corp. H. T. Campbell & Son
	H-257-1	Susquehanna Hill Rd.	Flintville	2.043	Pen. mac. surf.	Jan. 18, '50	253,784	Dec. 28, '51	Thos. A. Redly Company
	6		Total Completed	8.764			1,865,810		
200	H-329 H-232-15 H319-1	Md. 7 U. S. 40	U. S. 40 Southwesterly to Balto. Branch Bayre De Graze Bridge Hickory U. S. 1	1050 5.300	PROGRAM Spec. "B" Resurf. Repairs to Bridge, etc. Mac. Base & Pen. Mac. Surf.	Mar. 1, '50 Apr. 12, '50 Apr. 26, '50	219,626 68,816 150,413	Aug. 29, '50 Aug. 17, '51 Jan. 11, '52	T. B. Gatch & Sons, Inc. Brooklyn Eng. Corp. T. A. Redly Co.
202	B-602	Kenwood A., Md.	Trump Mill Road	3.026	Spec. "B" Resurf.	May 3, '50	105,970	Oct. 25, '50	Interstate Amiesite Co.
15A	B-603	Joppa Rd., Md. 148	U. S. 111	0.610	Spec. "B" Resurf.	May 3, '50	92,554	Dec. 8, '50	Chas. E. Kern, Inc.
150A	H-328	U. S. 1	6 mi. N. E. of Bel Air twd. Conowingo	2.974	P. Conc. Shoulders	May 3, '50	13,986	Aug. 10, '50	Carfax Conf. Co.
	Ed-31-414	Md. 165	Metal Structures District 4 N. of Bush's Corner twd. Pylesville	0.133	Cleaning & Painting Vet. curvy Mod. Pen.	May 18, '50 June 21, '50	13,710	Sept. 16, '50	H. T. Campbell & Sons
	H-324-1	Creswell R. Kraft Bldg.	Creswell (Md. 136)	2.571	Pen. Mac. Surf. Alterations, additions to Building	Aug. 2, '50 Aug. 3, '50	32,430 94,686	Oct. 21, '50 Aug. 6, '51	T. B. Gatch & Sons Colwill Constr. Co. Inc.
	B-599-1	Md. 129	S. of Walnut Ave. toward Caves Rd.	0.189	Pen. Mac. Surf. (Curve Mod.)	Aug. 9, '50	37,517	Oct. 17, '51	H. T. Campbell & Sons
200A	H-333-1	Md. 7	Balto. (Hg Ha) Branch & E. of Ingleside Avenue	5.215	Spec. "B" Resurf.	Sept. 6, '50	242,295	May 28, '51	H. T. Campbell & Sons
41-85 220	B-582 B-610	Alt. U. S. 40 U. S. 111	Montrose Avenue	0.989 1.855	Spec. "B" Pl. Conc. Surf. Wid. Mod. Curves and Repairs to Bridge, etc.	Nov. 1, '50 Nov. 15, '50	293,780 251,862	Nov. 15, '51 Apr. 21, '52	P. Reddington & Sons Win. A. Harting
	H-338-2 B-609	Md. 136 U. S. 40	S. of Dublin Aberdeen		Seedling Park Area—21,008 ml.	Dec. 20, '50 Apr. 5, '50	45,508 22,227	Mar. 24, '51 July 1, '50	McLean Contracting Co. Woodbine Nurseries
	15		Total Completed	25.562			1,693,390		

				1951 PROGRAM						
11-340-2	Md. 161	Over Deer Creek between Level & Darlington		—	R. C. Backwalls on exist- ing Bridge	May 2, '51	5,859	July 31, '51	John D. Sheetz Constr. Co.	
11-343-1	U. S. 1	Conowingo Dam		—	Gumite Repairs, etc. Road- way Deck.	June 13, '51	13,657	Sept. 25, '51	Eastern Gumite Company	
B-622-1	Md. 134	Br. over P. R. R. at Ruxton		—	Repair Floor System	July 18, '51	8,850	Nov. 9, '51	Wm. T. Lyons Co.	
	3		Total Completed				28,366			
	26		GRAND TOTAL	35,036			\$4,825,225			

RECAPITULATION OF PROJECTS COMPLETED BY CLASSIFICATIONS—DISTRICT NO. 4

Classification	1948		1949		1950		1951		1952		Total	
	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Amount
Primary.....	0.710	\$1,237,669	4.069	\$1,236,015	19.643	\$1,206,087	—	—	—	—	4.779	\$2,463,684
Widening and Resurfacing.....	—	—	2.652	386,011	5.597	191,843	—	—	—	—	22.235	1,532,098
Secondary.....	—	—	2.043	253,784	0.322	295,460	—	\$28,366	—	—	7.640	445,627
Miscellaneous.....	—	—	—	—	—	—	—	—	—	—	0.322	323,826
Total Completed (26).....	0.710	\$1,237,669	8.764	\$1,865,810	25.562	\$1,693,390	—	\$28,366	—	—	35.036	\$4,825,235

MAINTENANCE REPORT  
 JULY 1, 1950-JUNE 30, 1951  
*Roadway Surfacing*

Type of Work	Unit of Charge	Rigid J-K	Semi-Rigid I	Non-Rigid F, G, H, I	Untreated D-E
Patching .....	Sq. yds.	39,317	39,337	151,560	
Blading—Dragging .....	Miles				
Jacking—Asphalt .....	Sq. yds.	60			
Jacking—Cement Slurry .....	Sq. yds.				
Resurfacing—Non Bituminous .....	Sq. yds.			24,831	831
Joint and Crack Filling .....	Gals.				
Oiling—Bituminous .....	Sq. yds.		5,437	581,273	2,350

*Shoulder Maintenance*

Type of Work	Unit of Charge	Bitum.	Stabilized	Grass	Earth
Patching .....	Sq. yds.	81,679	29,639	19,358	1,824
Blading—Dragging .....	Miles		35	347	4,684
Sodding .....	Sq. yds.			7,319	600
Mowing and Hand Cutting .....	Miles		93	1,748.47	
Oiling—Bituminous .....	Sq. yds.	101,513	900	26	
Removal—Excess Material .....	Cu. yds.			8,455	9,383

*Maintenance—Bridges and Structures*

Type of Work	Unit of Charge	Repairs	Replacements	New Installations
Bridge Repairs .....	Number	38	3	9
Pipe and Box Culverts .....	Number	17	16	73
Curb and Gutter .....	Lin. ft.	1,000	518	70
Catch Basins .....	Number	19	11	36
Spillways, etc. ....	Number	1	3	8
Bituminous Rebutt .....	Lin. ft.			808
Underdrain .....	Lin. ft.		20	1,819

*Guard Fence*

New Fence .....	Lin. ft.	15,397	5,280	2,971
Posts .....	Number	582	433	122
Cable .....	Lin. ft.	5	50	1,350
Fittings .....	Number	25	364	112
Paint .....	Gals.	806	223	4

*Right-of-Way*

Type of Work	Unit of Charge	Maintenance	
		Roadside	Park Area
Mowing, Clearing and Grubbing .....	Miles	2,502	
Beautification .....	Sq. yds.	195	5,639
Resetting Fence .....	Lin. ft.	6,289	
Removal of Debris .....	Truck loads	1,027	241
Top-Soil .....	Cu. yds.	740	708
Cutting Grass .....	Acres		1,102
Trimming Trees .....	Number	318	
Moving Equipment .....	Units	131	
	Miles	6,619	
Removal of Trees .....	Number	107	

MAINTENANCE REPORT—(Continued)  
Traffic Service

Type of Work	Unit of Charge	Maintenance
Highway Markers	Number	6,822
Surface Guide Lines	Miles	181.4
Surface Marking, Schools, R.R., etc.	Number	364
Snow Removal	Inches, miles	1,776
Ice Treatment	Cu. yds.	4,028
Traffic Lights	Number	6
Snow Fence	Lin. ft.	368,450
Manual Traffic Count	Hours	2,085

*Drainage (Cleaning)*

Stream Change	Lin. ft.	2,715
Ditching (New)	Lin. ft.	4,410
Cleaning—Ditches	Lin. ft.	260,592
Cleaning—Pipe Culverts	Number	902
Cleaning—Box Culverts	Number	51
Cleaning—Bridges	Number	22
Cleaning—Catch Basins	Number	657
Cleaning—Misc. Structures	Number	5
Riprapping	Sq. yds.	131
Curb and Gutter	Lin. ft.	197,150

MAINTENANCE REPORT  
JULY 1, 1951—JUNE 30, 1952  
*Roadway Surfacing*

Type of Work	Unit of Charge	Rigid J-K	Semi-Rigid I	Non-Rigid F, G, H, I	Untreated D-E
Patching	Sq. yds.	28,030	43,387	106,069	
Blading—Dragging	Miles				
Jacking—Asphalt	Sq. yds.				
Jacking—Cement Slurry	Sq. yds.	107			
Resurfacing—Non Bituminous	Sq. yds.	601		4,224	
Joint and Crack Filling	Gals.	14,847			
Oiling—Bituminous	Sq. yds.	65,376		747,044	

*Shoulder Maintenance*

Type of Work	Unit of Charge	Bitum.	Stabilized	Grass	Earth
Patching	Sq. yds.	121,289	32,494	19,165	1,616
Blading—Dragging	Miles		196.2	385.62	65.12
Sodding	Sq. yds.			4,333	
Mowing and Hand Cutting	Miles		167.21	3,588.77	
Oiling—Bituminous	Sq. yds.	188,149			
Removal—Excess Material	Cu. yds.			20,420	10,191

MAINTENANCE REPORT—(Continued)  
Maintenance—Bridges and Structures

Type of Work	Unit of Charge	Repairs	Replacements	New Installations
Bridge Repairs .....	Number	50	1	7
Pipe and Box Culverts .....	Number	25	17	65
Curb and Gutter .....	Lin. ft.	2,416	116	772
Catch Basins .....	Number	17	5	68
Spillways, etc. ....	Number			8
Bituminous Rebutt. ....	Lin. ft.		280	4,060
Underdrain .....	Lin. ft.		120	2,103

*Guard Fence*

New Fence .....	Lin. ft.	4,459	4,340	3,761
Posts .....	Number	2,465	643	230
Cable .....	Lin. ft.	45	662	5,026
Fittings .....	Number	28	276	316
Paint .....	Gals.	142	4	13

*Right-of-Way*

Type of Work	Unit of Charge	Maintenance	
		Roadside	Park Area
Mowing, Clearing and Grubbing .....	Miles	1,434.12	18
Beautification .....	Sq. yds.	60,722	9,300
Resetting Fence .....	Lin. ft.	8,280	
Removal of Debris .....	Truck loads	1,446	273
Top-Soil .....	Cu. yds.	1,229	618
Cutting Grass .....	Acres		1,240
Trimming Trees .....	Number	138	
Moving Equipment .....	{ Units	151	
	{ Miles	8,212	
Removal of Trees .....	Number	87	

*Traffic Service*

Type of Work	Unit of Charge	Maintenance
Painting Curbs .....	Lin. ft.	8,480
Highway Markers .....	Number	11,965
Surface Guide Lines .....	Miles	349.95
Surface Marking, Schools, R.R., etc. ....	Number	507
Snow Removal .....	Inches, Miles	1,645.3
Ice Treatment .....	Cu. yds.	3,223.8
Traffic Lights .....	Number	7
Snow Fence .....	Lin. ft.	357,750
Manual Traffic Count .....	Hours	2,267

## MAINTENANCE REPORT—(Concluded)

*Drainage (Cleaning)*

Curb and Gutter . . . . .	Lin. ft.	132,744
Ditching (New) . . . . .	Lin. ft.	6,063
Cleaning—Ditches . . . . .	Lin. ft.	364,974
Cleaning—Pipe Culverts . . . . .	Number	1,126
Cleaning—Box Culverts . . . . .	Number	45
Cleaning—Bridges . . . . .	Number	59
Cleaning—Catch Basins . . . . .	Number	1,049
Cleaning—Misc. Structures . . . . .	Number	55
Riprapping . . . . .	Sq. yds.	881
Removal of Curb and Gutter . . . . .	Sq. yds.	253



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**DISTRICT NO. 5**  
**Headquarters—Upper Marlboro, Maryland**

**JOSEPH CHANEY**  
*District Engineer*

**JOHN H. REEDER**  
*Assistant District Engineer*  
Construction

**KENNETH O. WEBB**  
*Assistant District Engineer*  
Maintenance

**CALVERT COUNTY**  
**A. M. NOLL**  
*Resident Maintenance Engineer*

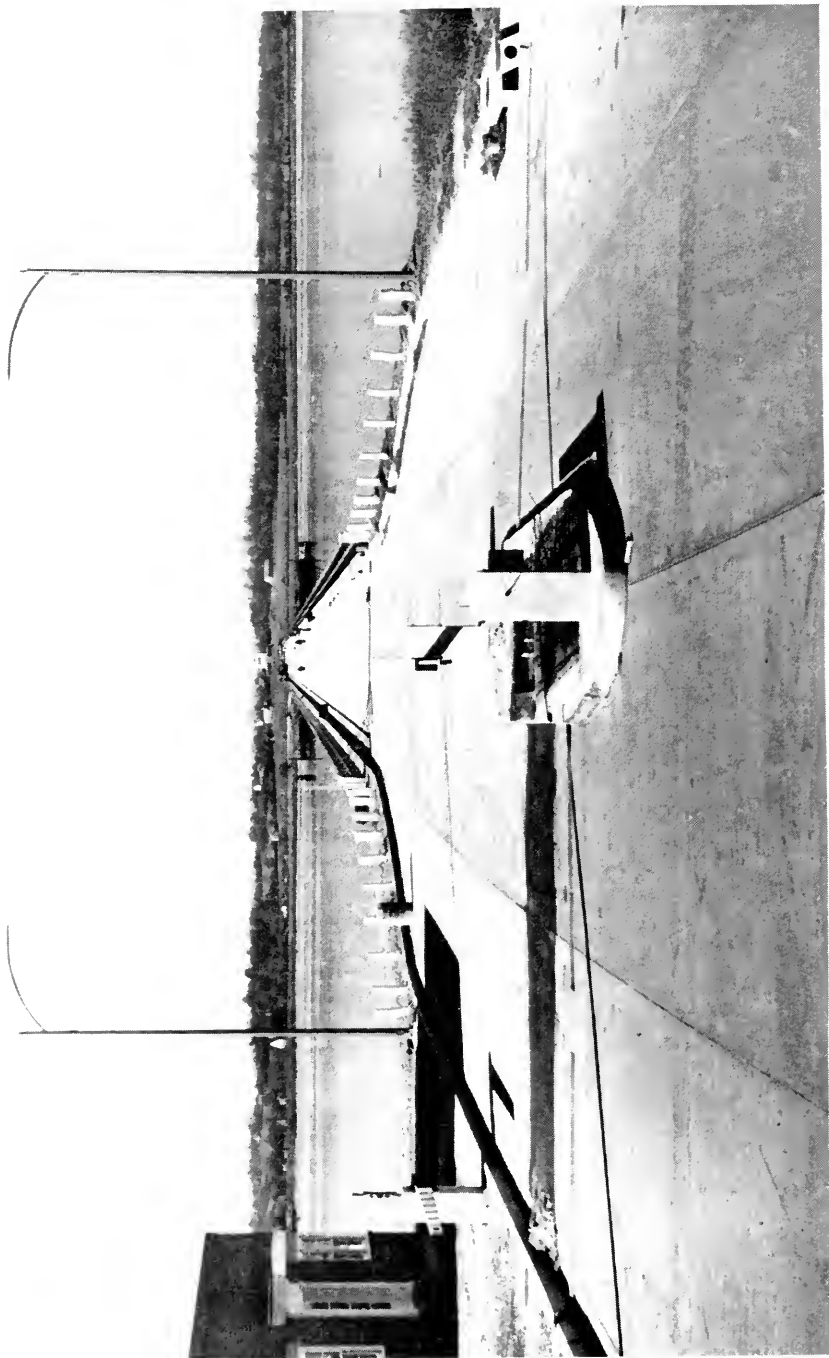
**CHARLES COUNTY**  
**W. A. FOWKE**  
*Resident Maintenance Engineer*

**PRINCE GEORGE'S COUNTY**  
**J. P. SMITH**  
*Junior Assistant Highway Engineer*

**ST. MARY'S COUNTY**  
**M. C. THOMPSON**  
*Resident Maintenance Engineer*

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BRIDGE OVER PATUXENT RIVER CONNECTING CHARLES AND CALVERT COUNTY

## DISTRICT NO. 5

This District is comprised of Calvert, Charles, Prince George's and St. Mary's Counties. Both State and County roads are maintained by Commission forces in Calvert, Charles and St. Mary's Counties—State Roads only in Prince George's County.

A summary and brief description of the construction and maintenance activities, by Counties, during the period covered by this report, follow:

JULY 1ST, 1950 TO JUNE 30TH, 1952

### CALVERT COUNTY

#### *State Roads—Construction*

A section of the Old Chesapeake Beach Railroad between Owings and Paris was completed in December 1951. This 1.671 miles of roadway consisted of grading, draining and surfacing, 24' of gravel was placed and bituminous stabilized.

Prince Frederick By-Pass was completed in the fall of 1951. This section of roadway by-passes the Town of Prince Frederick, beginning at a point on Route 2 approximately 0.5 of a mile northwest of Route 231 and extending southeasterly by relocation for a distance of 2.448 miles. It consisted of grading, drainage and bituminous stabilized gravel 24' in width.

Hallowing Point—Benedict Toll Bridge. Work was completed in the spring of 1952 on the 3343 ft. steel beam bridge with a 24 ft. concrete deck over the Patuxent River between Hallowing Point in Calvert County and Town Point in Charles County.

Administration Building and Toll Booths on the Calvert County side of the Patuxent River at Hallowing Point, were completed in the fall of 1951. Also under separate contract, the approaches to the Patuxent River Bridge on both the Calvert County and Charles County sides of the river were completed in the spring of 1952. This project consisted of grading, draining and surfacing 0.995 miles of 24' surface treated gravel roadway.

#### *State Roads—Maintenance*

In addition to normal maintenance, 34.02 miles of road were surface treated with bituminous material and covered with mineral aggregate.

0.35 of a mile of road was stabilized 5" in depth with bituminous material, between Chesapeake Beach and North Beach.

*County Roads—Construction*

The following roads were graded 24' in width, drained and surfaced 16' in width with bank gravel, by State Road forces:

Paris twd. Sunderland via Pushaw Station .....	0.8 mi.
Mill Branch twd. Patuxent River .....	1.0
Bowens twd. Route 231 .....	1.4
Route 512 twd. William Wharf .....	1.4
Anne Arundel County Line to Chaney .....	1.1
Huntingtown to Route 263 .....	1.4
Huntingtown twd. Patuxent River (Holland Cliffs) .....	1.5
Route 265 twd. Island Creek on Rt. 264 .....	1.0
Route 510 to Route 262 .....	1.3
Sunderland twd. Willows .....	1.0
Briscoe's Turn (Route 416 twd. 262) .....	1.0
Barstow twd. Buena Vista .....	1.1
Route 521 twd. Deep Landing .....	0.9
5th Street North Beach .....	0.1
North Beach twd. North Beach Park .....	0.3
1 Block Calvert St. Johnstown (Solomons) .....	0.1
Bowens twd. Sandy Point .....	1.2

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16.6 miles

The following treated timber bridges were constructed by State Road forces:

- 2 double 10' span bridges between Lower Marlboro and Chaneyville.
- 1 double 10' span bridge between Wallville and Route 2 near St. Leonards.
- 1 triple 10' span bridge between Huntingtown and Route 263 near Parran.

*County Roads—Maintenance*

17.8 miles of road received initial bituminous surface treatment, and 18.00 miles retreated with bituminous material.

## CHARLES COUNTY

*State Roads—Construction*

A section of Route 3, between Thompkinsville and Rock Point, for a distance of 5.15 miles, completing the rehabilitation of Route 3 between U. S. 301 and Rock Point. In reconstructing this section of roadway the grade was raised, drainage structures replaced and graded to a width of 44 ft. Spec. "B" bituminous concrete, using bank run gravel, was placed 24' in width on a compacted gravel base. Under the same contract the section of Route 533 between Route 3 and Cobb Island, was reconstructed by widening, replacing drainage structures and surfacing with bituminous stabilized gravel 24 feet in width. These sections of roadway were completed in the fall of 1951.

A section of the LaPlata—Indian Head Road, State Route 225, beginning at a point 6.5 miles west of LaPlata and extending westerly toward Indian Head, for a distance of 4.937 miles, was completed in the fall of 1951. This project consisted of grading, draining and surfacing with bituminous stabilized gravel 24' in width, completing the reconstruction of Route 225 between LaPlata and Indian Head.

In the fall of 1951, a 9.5' x 8.0' reinforced concrete box culvert was constructed on Route 6, 0.5 of a mile east of Dentsville, replacing the old timber bridge at this point.

A section of Route 6, beginning at U. S. Route 301 and extending in an easterly direction on Route 6 through the Town of LaPlata, for a distance of 0.661 miles, was widened and surfaced with bituminous Specification "B." This improvement was completed in the summer of 1951.

A section of dual highway, beginning at a point 0.27 of a mile south of the Charles County Line at Mattawoman and extending southerly via relocation, for a distance of 2.831 miles paralleling Routes 301 and 5 terminating at the intersection of Berry Road in Waldorf, was started in the spring of 1952. As of July 1, 1952 this project was 30% complete.

#### *State Roads—Maintenance*

In addition to normal maintenance, 12.55 miles of road received initial bituminous surface treatment, and 53.49 miles were retreated with bituminous material and covered with mineral aggregate.

1.1 mile of Route 301 which had been used for testing strength of road by the Bureau of Public Roads, was rehabilitated.

#### *County Roads—Construction*

The following roads were graded 24' in width, drained and surfaced 16' in width with bank gravel, by State Road forces:

Baptist Church Road .....	0.70 mi.
Joseph Bowie Road .....	2.25
Friendship Landing Road .....	1.20
DeMarr Road .....	1.30
Sylvester Road .....	1.10
Watson Road .....	0.75
Radio Station Road .....	2.20
Kentucky Avenue Road .....	1.85
Bowling Road .....	3.10
Dowes Road .....	0.50
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	14.95 miles

The following timber bridges were constructed by State Road forces:

- 1 double 12' span bridge on Mt. Hope to Doncaster Rd.
- 1 quadruple 13' span treated timber bridge on Durham Church to Grayton Road.
- 1 20' span bridge on Kentucky Avenue.
- 1 20' span bridge on White Plains—Boonesville Road.
- 2 20' span bridges on Pisgah—Ironsides Road.
- 1 14' span bridge on Bowling Road.
- 1 14' span bridge on Port Tobacco—Chapel Point Road.
- 2 16' span bridges on Spring Hill—Newton Road.
- 1 double 16' span bridge on Smith Point Road.

*County Roads—Maintenance*

42.60 miles of road received initial treatment of bituminous material, and 12.75 miles were retreated with bituminous material.

## PRINCE GEORGE'S COUNTY

*State Roads—Construction*

A section of dual highway along Route 5, beginning at the District of Columbia Line and extending southerly for a distance of 3.153 miles to Wood's Corner, was completed in the spring of 1952, consisting of grading, draining and paving two 24' concrete lanes of divided highway.

As of July 1, 1952 the section of dual highway over U. S. Route 301 and Route 5, beginning at T. B. and extending southerly to Mattawoman with an overpass at T. B. taking the south bound traffic on 301 over Route 5 and merging with Route 5 to the south, was 75% complete. It is anticipated that this project, consisting of 3.388 miles of divided highway, two 24' wide bituminous concrete surfaced lanes on gravel base, will be completed in the fall of 1952.

A pedestrian bridge at Lanham adjacent to the Lanham bridge on Route 50 over the Pennsylvania Railroad, was completed in the spring of 1952.

A pedestrian bridge on Route 1 over Paint Branch at College Park, was completed in 1951.

Five structures on Route 5, between Wood's Corner and T. B., were widened in 1951.

A section of dual highway on the Queens Chapel Road between Northwest Branch and the District of Columbia Line, and the widening of the bridge over Northwest Branch, was completed July 1, 1952.

The final surfacing on the south bound lane of the Marlboro By-Pass, consisting of two courses of bituminous Specification "E," 24' wide and 7.245 miles long, was completed in June 1952.

The Interchange from the Annapolis-Washington Expressway to U. S. Route 301, approximately two miles south of Priest Bridge, is nearing completion and is expected to be completed in the early fall of 1952.

Two double 15 x 10 concrete culverts on the Edmonston Road over two branches of Briar Ditch, with approaches 0.43 of a mile in length, were completed in the fall of 1950.

Two courses of bituminous Specification "B" were placed on the Suitland Road, Route 218, from the traffic light in Suitland to the District of Columbia Line, and under the same contract a section of Queens Chapel Road, Route 500, from Hamilton Street to U. S. Route 1; a total distance of 3.37 miles. This project was completed in the late fall of 1951.

On Route 214, Central Avenue, between U. S. 301 and the Patuxent River, 2:580 miles were widened and resurfaced with Specification "B," and gravel shoulders constructed.

On U. S. 301, from the Crain Monument to the Marlboro By-Pass, 2.400 miles were resurfaced with Specification "B" and gravel shoulders constructed. On Route 4, from Crain Monument to Federal Spring Branch, 0.500 of a mile was resurfaced with Specification "B."

#### *State Roads—Maintenance*

In addition to normal maintenance, 37.58 miles of road were retreated with bituminous material and covered with mineral aggregate.

2,000 lin. ft. of bituminous shoulder, 5' in width, were constructed.

### ST. MARY'S COUNTY

#### *State Roads—Construction*

A section of Route 242, between Morganza and Clements, 4.205 miles in length, consisting of grading, draining and gravel surfacing, 5" of which was bituminous stabilization, was completed in the fall of 1950.

Work was completed in the spring of 1951 on a section of Route 237, between Route 5 and Clements, for a distance of 3.449 miles. This project consisted of grading, draining and gravel surfacing, 5" of which was bituminous stabilization. Included in this project is a triple span steel beam bridge over Head-of-the-Bay at Clements. A section of Route 245, beginning 2.3 miles east of Leonardtown and extending to the village of Hollywood, a distance of 2.992 miles, the gravel surface was bituminous stabilized as a base course and surfaced with bituminous concrete Specification "B." This project was completed in the early summer of 1951.

Beginning at Calloway and extending westerly to Valley Lee over Route 249, for a distance of 3.578 miles, this section of roadway was reconstructed by grading, draining and surfacing with 24 ft. of bituminous stabilized gravel.

Between Lovexville and Route 235, along Route 5, for a distance of 6.747 miles, was reconstructed by widening, drainage structures replaced, several bad curves eliminated, and surfaced with bituminous concrete Specification "B," 24 ft. in width. This project was completed in June 1952.

Between Great Mills and St. Mary's City along Route 5, for a distance of 6.135 miles, is now being reconstructed by widening, replacing drainage structures and surfacing with bituminous concrete Specification "B." In the immediate vicinity of St. Mary's City, in order to eliminate several bad curves, a portion of the old roadway was abandoned and completely rebuilt over a relocated line. This project will be completed in the fall of 1952.

The widening of the arch bridge over Parson's Run on Route 5 near Morganza, started in June 1952. The anticipated completion date is November 1952.

#### *State Roads—Maintenance*

In addition to normal maintenance, 50.68 miles of road were retreated with bituminous material and covered with mineral aggregate.

0.35 of a mile of bituminous curb and shoulder was constructed.

*County Roads—Construction*

The following roads were graded 24' in width, drained and surfaced 16' in width with bank gravel, by State Road forces:

Carroll Knight Road .....	2.30 mi.
Riehley Brown Road .....	1.45
Knottly Hall Road .....	0.85
Blakney Road .....	0.35
Town Creek Road .....	0.17
Sypher Road .....	0.60
Quakeman Road .....	0.50
Brown-Chaporis Road .....	0.25
Coltons Point Road .....	0.20
Arnold Road .....	0.20
St. Andrew's Road .....	2.40
Green Hill Road .....	1.00
George Laurence Road .....	1.00
Abells Wharf .....	1.00
Seven Gables Road .....	0.20
Bull Road .....	1.10
Society Hill Road .....	0.40
Gibson Railway Road .....	0.40
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	14.37 miles

*County Roads—Maintenance*

24.46 miles of road received the initial surface treatment with bituminous material, and 47.14 miles were retreated with bituminous material and covered with mineral aggregate.

Tables showing data pertaining to road construction contracts awarded, projects completed, and maintenance reports for the period July 1, 1950 to June 30, 1952 follow.



**Road Construction Contracts**

**Projects Completed**

**Maintenance Reports**

**District 5**

REPORT OF THE STATE ROADS  
ROAD CONSTRUCTION CONTRACTS—JULY 1,

Project Number	Contract Number	Location			Miles	Description of Project
		Route No.	From	To		
57B	P-391-3	U. S. 301	S. Bd. Lane overpass of Md. 5 at T. B.			PRIMARY JULY 1, 1950 to Steel I-beam bridge
27D	P-631-7	U. S. 50	Overpass of U. S. 301		2.448	Steel beam bridge dual Bit. stab. gravel surf. Administration bldg. etc.
38	C-194-1	Md. 2	Prince Frederick By-pass			
60A	C-184-4	Md. 231	Patux. R. Bridge at Benedict			
67	Ch-253-4	Md. 500	Nr. D. C. Line twd. Hamilton St.; Queens Chapel Rd.		0.265	2nd lane reinf. conc. surf. widen br.
	P-522-3				0.724	Dual
					Total '50-'51	3.437
						JULY 1, 1951 to
60B	C-184-2	Md. 231	0.434 mi. E. of Br. to 0.561 mi. W. of Benedict Bridge		0.995	Gravel surf. bit. stab.
17B	P-519-10	U. S. 301	Marlboro By-pass		7.245	Spec. "B" surf. gravel sho. 3 channel
27F	P-631-9	U. S. 50	Connection to Clover-leaf at U. S. 301, with ramps, etc.		0.742	Conc. ramps
					0.383	Conc. dual hwy. 0.526 mi. gravel & spec. "B"
57A	Ch-257-2	U. S. 301	0.274 mi. S. of Pr. Geo. Co.	Md. 5 at Waldorf	2.831	Dual-bit. surf. tr. gravel (1st stage)
					Total '51-'52	12.196
					Total Primary	15.633
						WIDENING AND JULY 1, 1950 to
173	Ch-265-2	Md. 225	Ripley twd. Indian Head		5.113	Gravel Surf. Bit. Stab. base course
73	Ch-260-1	Md. 6	Md. 3 thru La Plata to Clark's Run		0.731	Bit. stab. gravel wid. spec. "B" resurf.
133A	SM-281-7	Md. 245	N. E. of Leonardtown	Hollywood	2.992	Bit. stab. base spec. "B" surf.
182	Ch-264-2	Md. 3	Tompkinsville	Rock Point	5.150	Bit. stab. gravel spec. "B" resurf.
181	Ch-270-1	Md. 533	Md. 3 twd. Cobb Island		0.940	Bit. Stab. Gravel
183	SM-291	Md. 5	Md. 235	Loveville	6.747	Gravel bit. stab. & spec. "B" surf.
					Total '50-'51	21.673
						JULY 1, 1951 to
273	P-698	Md. 500	Md. 410	U. S. 1	1.730	Resurface spec. "B"
272		Md. 218	D. C. Line	Md. 458 (Suitland)	1.640	Resurface spec. "B"
276	P-701	Md. 214	U. S. 301	Patuxent R.	2.580	Widen & resurf. spec. "B"
75	SM-292-1	Md. 5	Great Mills	St. Mary's City	6.135	Relocations, wid. & resurf. spec. "B"
274	P-709	U. S. 301	Marlboro Monument	Marlboro By-Pass	2.400	2,900 mi. spec. "B" resurf.
275		Md. 4	Marlboro Monument	Federal Spr. Br.	0.500	
290	SM-291-4	Md. 5	At St. Clements Creek			Widen exist. arch br.
308	Ch-282	U. S. 301	Nr. Allen's Fresh twd. Bel Alton Test Rd.		0.946	Spec. "B" resurf.
					Total '51-'52	15.931
					Total Widening and Resurfacing	37.604
						SECONDARY JULY 1, 1950 to
None	C-197-1	CBRR R W	4.5 mi. SE Lyon's Creek	Paris	1.671	JULY 1, 1951 to Gravel surf. bit. stab.
					Total '51-'52	1.671
					Total Secondary	1.671
						MISCELLANEOUS JULY 1, 1950 to
	Ch-124-13	U. S. 301	Potomac River Bridge			Repairs to bridge, etc.
	P-660	U. S. 1	At Paint Branch Bridge, College Park			Ped. br. adj. to existing bridge
	P-451	Present U. S. 50	P.R.R. Overpass at Lanham			St. plate girder ped. br. adj. to exist. br.
	P-688- Ho-249	U. S. 1	Along Laurel By-pass & Ex. Mont. Ave.		0.059	San. sewers, spec. "B" surf.
	P-673-1	Md. 5	5 Location N. & S. of Clinton			Widen 5 existing bridges
	Ch-271-1	Md. 6	Hill's Bottom Run nr. Dentsville			9-5' x 8' R.C. box
					Total '50-'51	0.059
						JULY 1, 1951 to
	Ch-273	U. S. 301	At Md. 3; 5.6 mi. S. of Waldorf		0.130	Additional R. conc. lane
	Ch-124-14	U. S. 301	At Potomac R. Bridge			Repairs to fender system—Piers 14 & 15
					Total '51-'52	0.130
					Total Miscellaneous	0.189
					GRAND TOTAL	55.097

COMMISSION OF MARYLAND  
1950 TO JUNE 30, 1952. DISTRICT NO. 5

Date Advertised	Bids Opened	Date of Award	Date of Notice To Proceed	Date Started	Date Completed or Per Cent Completed as of June 30, 1952	Engineer's Estimate	Contract Cost	Total Amount Authorized	Contractor
<b>PROJECTS</b>									
<b>JUNE 30, 1951</b>									
3-7-50	3-28-50	7-19-50	7-31-50	8-10-50	90.0	\$198,330	\$205,206	\$235,987	Zerkel Constr. Co.
6-27-50	7-18-50	9-20-50	10-2-50	3-19-51	81.0	221,002	205,366	286,171	Allied Contractors
8-1-50	8-29-50	10-11-50	10-23-50	11-1-50	12-18-51	449,721	410,486	512,059	C. H. Lawson
5-1-51	5-15-51	6-13-51	6-27-51	7-5-51	11-21-51	30,530	48,006	52,807	Wm. T. Lyons Co. Inc.
5-1-51	5-22-51	6-27-51	7-16-51	7-19-51	99.5	531,846	520,700	648,805	John H. Ensey
						1,431,429	1,389,764	1,735,829	
<b>JUNE 30, 1952</b>									
6-13-51	7-3-51	7-11-51	7-30-51	8-9-51	72.0	126,968	90,852	107,480	Eugene Chaney
10-23-51	11-6-51	11-15-51	11-19-51	11-22-51	5-29-52	331,358	314,419	361,582	McGuire & Rolfe
10-16-51	11-6-51	11-21-51	12-4-51	12-10-51	55.0	400,853	362,262	481,601	F. P. Asher Jr. & Sons, Inc.
11-20-51	12-4-51	12-20-51	1-16-52	1-22-52	24.0	574,878	489,280	697,671	F. P. Asher Jr. & Sons, Inc.
						1,434,057	1,256,813	1,648,334	
						2,865,486	2,646,577	3,384,163	
<b>RESURFACING PROJECTS</b>									
<b>JUNE 30, 1951</b>									
7-18-50	8-8-50	8-23-50	8-31-50	9-18-50	1-15-52	314,848	324,549	488,232	F. P. Asher, Jr. & Sons, Inc.
7-11-50	8-8-50	8-30-50	9-18-50	9-28-50	6-28-51	44,924	45,806	60,676	R. H. Haughton, Inc
7-25-50	8-15-50	8-16-50	9-5-50	9-25-50	7-22-51	59,388	57,323	65,921	American Asph. Prod. Co.
7-25-50	8-15-50	10-11-50	10-19-50	11-16-50	1-23-52	367,139	433,081	568,043	F. P. Asher Jr. & Sons
7-25-50	8-15-50	10-11-50	10-19-50	11-16-50	1-23-52				
7-18-50	8-8-50	10-18-50	11-8-50	11-28-50	99.0	488,451	424,736	548,447	A. H. Smith
						1,274,750	1,285,495	1,737,319	
<b>JUNE 30, 1952</b>									
8-21-51	9-11-51	9-19-51	10-1-51	10-15-51	12-14-51	137,690	112,839	129,765	McGuire & Rolfe
8-21-51	9-11-51	9-19-51	10-1-51	10-15-51	12-14-51			84,588	A. H. Smith
9-18-51	10-2-51	10-10-51	11-8-51	5-25-52	21.0	94,104	73,555		F. P. Asher Jr. & Sons, Inc.
9-18-51	10-9-51	10-18-51	11-6-51	11-16-51	59.0	624,695	559,403	683,314	
2-6-52	2-26-52	2-28-52	3-26-52	4-15-52	5-8-52	38,521	31,312	36,009	A. H. Smith
2-6-52	2-26-52	2-28-52	3-26-52	4-15-52	5-8-52				
3-18-52	4-8-52	4-17-52	5-8-52	6-16-52	4.0	27,200	23,912	27,499	Speri-Jones
5-20-52	6-10-52	6-11-52	6-25-52	7-1-52		28,277	24,611	28,302	A. H. Smith
						950,487	825,632	989,477	
						2,225,237	2,111,127	2,726,796	
<b>PROJECTS</b>									
<b>JUNE 30, 1951</b>									
<b>JUNE 30, 1952</b>									
11-28-50	12-19-50	1-4-51	1-12-51	1-15-51	12-17-51	261,509	236,990	300,038	F. P. Asher Jr. & Sons
						261,509	236,990	300,038	
						261,509	236,990	300,038	
<b>PROJECTS</b>									
<b>JUNE 30, 1951</b>									
4-11-50	5-9-50	7-12-50	7-31-50	10-10-50	99.0	58,314	69,643	80,089	Smith, DeCorse & Christliff
7-18-50	8-1-50	8-9-50	8-24-50	3-6-51	4-20-51	14,250	16,865	19,395	State Foundation Co.
6-27-50	7-18-50	8-23-50	9-13-50	11-20-50	7-14-51	13,565	27,785	31,953	Brooklyn Engr. Corp.
9-13-50	10-3-50	10-4-50	10-19-50	11-1-50	3-27-51	23,607	25,495	54,319	Wm. A. Harting Co. Inc.
11-28-50	12-19-50	12-27-50	1-17-51	3-19-51	9-13-51	61,883	78,064	94,773	Camden Construction Co.
4-4-51	4-24-51	5-2-51	5-14-51	6-26-51	9-12-51	17,775	13,715	16,072	John D. Sheetz Constr. Co.
						189,394	231,567	296,521	
<b>JUNE 30, 1952</b>									
10-30-51	11-13-51	11-15-51	12-10-51	12-10-51	2-2-52	9,886	9,565	11,000	Eugene Chaney
3-24-52	4-8-52	4-10-52				14,000	14,000	15,400	Cl. A. Norris
						23,886	23,565	26,400	
						213,280	255,132	322,921	
						\$5,565,512	\$5,249,826	\$5,733,918	

DOLLAR VALUE OF CONTRACTS COMPLETED JULY 1, 1950 TO JUNE 30, 1952  
DISTRICT No. 5

Project Number	Contract Number	Route	Location		Miles	Description of Project	Date Authorized	Amount Authorized	Date Completed	Contractor
			From	To						
17	P-519-1 P-519-2	E. S. 301 U. S. 301	Marlboro By-Pass Br. over Western Run	Marlboro By-Pass	1948 PROCGRAM 7.245 Bridge	Bit. stab., gravel surf. Steel beam & conc. bridge	Oct. 6, '48 Nov. 4, '48	1,196,943 163,195	Aug. 17, '50 Aug. 16, '50	C. J. Langenfelder & Son Allied Contractors, Inc.
	(2)		Total Completed		7.245			\$1,360,138		
83	SM 286-1 CH-266-1	Md. 242 Md. 225	Morganza Md. 3 toward Mason Springs	Clements	1949 PROCGRAM 4.205 3.899	Gravel surf. bit. stab. Gravel surf. bit. stab.	June 29, '49 Aug. 24, '49	387,753 398,254	Sept. 7, '50 Aug. 24, '50	F. P. Asher, Jr. & Son F. P. Asher, Jr. & Son
131	P-646-1	Md. 205	Culverts over Brier Ditch & Branch Gordon's Cor. Md. 5	Md. 224	0.430	Reinf. conc. box culverts	Dec. 7, '49	163,225	Oct. 23, '50	Waco Construction Co.
144	P-658	Md. 414		Woods Corner	3.918	Pen. mac. gravel wid. spec. "B"	Dec. 28, '49	559,680	July 26, '50	F. P. Asher, Jr. & Son
37	P-391-1	Md. 5	D. C. Line	Woods Corner	3.153	Reinf. conc. dual highway	May 24, '50	1,504,028	Apr. 11, '52	Reu Construction Co.
	(5)		Total Completed		17.605			3,612,940		
84	SM 287-1 P-452-7	Md. 237 Irving St., Laurel Md. 249	Clements Lafayette Ave.	Md. 5	1950 PROCGRAM 3.432	Gravel & bit. stab. base course	May 18, '50	396,900	May 31, '51	F. P. Asher, Jr. & Son
82	SM-288-1	Md. 249	Md. 5 (Callaway)	Md. 602	0.274	Gravel surf.	Apr. 26, '50	14,506	July 7, '50	Waco Construction Co.
133A	P-660 SM-281-7	U. S. 1 Md. 245	At Point Branch Br. N. E. of Leonardtown	College Park Hollywood	3.578	Gravel & bit. stab. base course	June 14, '50	303,638	July 3, '51	J. O. & C. M. Stuart, Inc.
173	CH-265-2	Md. 225	Ripley toward Indian Head		2.992	Ped. br. adj. to exist. Br. Bit. stab. base, spec. "B" surf.	Aug. 9, '50 Aug. 16, '50	19,385 65,921	Apr. 30, '51 July 22, '51	State Foundation Co. American Asphalt Prod. Co.
73	P-451 CH-260-1	Pr. U. S. 50 Md. 6	P. R. R. Overpass at Lan- ham Md. 3 thru La Plata	Clark's Run	5.113	Gravel surf. bit. stab. base course	Aug. 23, '50	488,232	Jan. 15, '52	F. P. Asher, Jr. Sons
38	P-688 Ho-249 CH-264-1 CH-264-2	U. S. 1 Md. 2 Md. 3	Along Laurel By-Pass & Ext. Mont. Ave. Prince Frederick By-Pass Tompkinsville		0.731	St. pl. ggr. ped. br. adj. to exist. br. Bit. stab., gravel wid. spec. "B" resurf.	Aug. 23, '50 Aug. 30, '50	25,300 60,676	July 14, '51 June 28, '51	Brooklyn Eng. Corp. R. H. Houghton, Inc.
181	CH-270-2 P-673-1 C-197-1	Md. 533 Md. 5 CBRR R/W	Md. 3 toward Cobb Island 5 locations N. & S. of Clin- ton 4.5 mi. S. E. Lyon's Cr.	Rock Point Paris	0.059 2.448 5.150 0.940 1.671	San. sewers spec. "B" surf. Bit. stab. gravel surf. Bit. stab. gravel, resurf. spec. "B" Widen 3 existing br. Gravel surf. bituminous stab.	Oct. 4, '50 Oct. 11, '50 Oct. 11, '50 Dec. 27, '50 Jan. 4, '51	54,319 512,059 568,043 94,773 300,038	Mar. 27, '51 Dec. 18, '51 Jan. 23, '52 Sept. 13, '51 Dec. 17, '51	Wm. A. Harting C. H. Lawson F. P. Asher, Jr. & Son Camden Constr. Co. Inc. F. P. Asher, Jr. & Son
	(13)		Total Completed		26.388			2,963,890		

60A	Ch. 271-1 C-184-4 Ch. 253-4 P-468	Md. 6 Md. 231 (Md. 500 Md. 218 U. S. 301	Hall's Bottom Run Patuxent R. Bridge at Pentecost Md. 110 D. C. Line At Jct. Md. 3 5.6 mi. S. of Waldorf Marlboro By-Pass	Nr. Dentonville	1951 PROGRAM 9.5' x 8' R. C. box culvert Administration Building Resurf. spec. "B" Resurf. spec. "B" Additional R. conc. lane Spec. "B" resurf. gravel Sho.	1,730 1,640 0.130 7.245	May 2, '51 June 13, '51 Sept. 19, '51 Nov. 15, '51 Nov. 15, '51	16,072 52,807 129,765 11,000 301,582	Sept. 12, '51 Nov. 21, '51 Dec. 14, '51 Feb. 2, '52 May 29, '52	J. D. Sheetz Constr. Co. W. T. Lyons Co. Inc. McGuire & Rolfe McGuire & Rolfe McGuire & Rolfe
17B	P-519-10	U. S. 301		Total Completed		10,745		571,226		
274 275	P-709	U. S. 301 Md. 4	Marlboro Monument Marlboro Monument	Marlboro By-Pass Federal Spr. Branch	1952 PROGRAM 2,400	2,400	Feb. 28, '52	36,009	May 8, '52	A. H. Smith
		(26)		GRAND TOTAL		64,883		\$7,824,203		

RECAPITULATION OF PROJECTS COMPLETED BY CLASSIFICATIONS—DISTRICT NO. 5

Classification	1948		1949		1950		1951		1952		Total	
	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Amount
Primary.....	7.245	\$1,300,138	3.153	\$1,504,028	2.448	\$512,059	7.245	\$414,389	—	—	20.091	\$3,730,614
Widening and Resurfacing.....	—	—	14.452	1,508,912	21.936	1,883,500	3.370	129,765	2.900	\$36,009	42.658	3,558,186
Secondary.....	—	—	—	—	1.071	300,038	—	—	—	—	1.071	300,038
Miscellaneous.....	—	—	—	—	0.333	208,293	0.130	27,072	—	—	0.463	235,365
Total Completed (26).....	7.245	\$1,300,138	17.605	\$3,012,940	26.388	\$2,903,890	10.745	\$571,226	2.900	\$36,009	64.883	\$7,824,203

MAINTENANCE REPORT  
 JULY 1, 50-JUNE 30, 1951  
*Roadway Surfacing*

Type of Work	Unit of Charge	Rigid J-K	Semi-Rigid I	Non-Rigid F, G, H, I	Untreated D-E
Patching	Sq. yds.	11,749	84,209	193,259	
Blading—dragging	Miles				115
Jacking—asphalt	Sq. yds.				
Jacking—cement slurry	Sq. yds.				
Resurfacing—non bituminous	Sq. yds.				
Joint and crack filling	Gals.	6,640	9,210		
Oiling—bituminous	Sq. yds.			3,129	

*Shoulder Maintenance*

Type of Work	Unit of Charge	Bitum.	Stabilized	Grass	Earth
Patching	Sq. yds.	20,842	28,293		327,778
Blading—dragging	Miles		1,014	207	3,671
Sodding	Sq. yds.				
Mowing and hand cutting	Miles			1,312	67.1
Bituminous curb and gutter	Sq. yds.	2,162			
Removal—excess material	Cu. yds.				17,756

*Maintenance—Bridges and Structures*

Type of Work	Unit of Charge	Repairs	Replacements	New Installations
Bridge repairs	Number	1		
Pipe and box culverts	Number	7	28	10
Curb and Gutter	Lin. ft.		1	3,715
Catch Basins	Number			
Spillways, etc.	Number			
Bituminous rebutt.	Lin. ft.			1,362
Underdrain	Lin. ft.			

*Guard Fence*

New fence	Lin. ft.	5,356	690	
Posts	Number	960	400	
Cable	Lin. ft.	11,988	1,820	
Fittings	Number	1,062	40	
Paint	Gals.	581	5	5

*Right-of-Way*

Type of Work	Unit of Charge	Maintenance	
		Roadside	Park Area
Mowing, clearing and grubbing	Miles	1,620.96	4
Beautification	Sq. yds.		
Resetting fence	Lin. ft.	4,217	
Removal of debris	Truck loads	1,433	
Top-soil	Cu. yds.		
Cutting grass	Acres		2
Trimming trees	Number	44	5
Moving equipment	Units	127	
	Miles	3,706	

MAINTENANCE REPORT—(Continued)  
*Traffic Service*

Highway markers.....	Number	9,294
Surface guide lines.....	Miles	142
Surface marking, schools, R.R., etc.....	Number	412
Snow removal.....	Inches miles	5.5"-1,674
Ice treatment.....	Cu. yds.	4,766
Traffic lights.....	Number	2
Snow fence.....	Lin. ft.	230,524
Manual traffic count.....	Hours	1,013

*Drainage (Cleaning)*

Ditching (new).....	Lin. ft.	8,550
Cleaning—ditches.....	Lin. ft.	962,085
Cleaning—pipe culverts.....	Number	2,137
Cleaning—box culverts.....	Number	207
Cleaning—bridges.....	Number	27
Cleaning—catch basins.....	Number	697
Cleaning—misc. structures.....	Number	3
Riprapping.....	Sq. yds.	
High water.....	Hrs.	2,134

MAINTENANCE REPORT  
JULY 1, 1951—JUNE 30, 1952  
*Roadway Surfacing*

Type of Work	Unit of Charge	Rigid J-K	Semi-Rigid I	Non-Rigid F, G, H, I	Untreated D-E
Patching.....	Sq. yds.	13,555	80,519	162,781	187
Blading—dragging.....	Miles				241
Jacking—asphalt.....	Sq. yds.				
Jacking—cement slurry.....	Sq. yds.				
Resurfacing—non bituminous.....	Sq. yds.				
Joint and crack filling.....	Gals.	3,150	6,490		
Oiling—bituminous.....	Sq. yds.		41,300		

*Right-of-Way*

Type of Work	Unit of Charge	Maintenance	
		Roadside	Park Area
Mowing, clearing and grubbing.....	Miles	851.7	44
Beautification.....	Sq. yds.	13,061	1,414
Resetting fence.....	Lin. ft.	6,650	
Removal of debris.....	Truck loads	1,016	37
Top-soil.....	Cu. yds.		
Cutting grass.....	Acres		252
Trimming trees.....	Number	14	
Moving equipment.....	Units	207	
	Miles	3,779	



*Traffic Service*

Highway markers.....	Number	8,256
Surface guide lines.....	Miles	806.35
Surface marking, schools, R.R., etc.....	Number	280
Snow removal.....	Inches miles	2,077
Ice treatment.....	Cu. yds.	1,199
Traffic lights.....	Number	4
Snow fence.....	Lin. ft.	162,930
Manual traffic count.....	Hours	451

*Drainage (Cleaning)*

Ditching (new).....	Lin. ft.	24,001
Cleaning—ditches.....	Lin. ft.	946,705
Cleaning—pipe culverts.....	Number	2,414
Cleaning—box culverts.....	Number	333
Cleaning—bridges.....	Number	60
Cleaning—catch basins.....	Number	588
Cleaning—misc. structures.....	Number	
Riprapping.....	Sq. yds.	20
High water.....	Hrs.	1,067



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**DISTRICT NO. 6**  
**Headquarters—Cumberland, Maryland**

G. BATES CHAIRES  
*District Engineer*

THOMAS G. MOHLER  
*Assistant District Engineer*  
Construction

R. E. L. PUTMAN  
*Assistant District Engineer*  
Maintenance

GARRETT COUNTY  
EDWARD P. KAHL  
*Junior Assistant Highway Engineer*

ALLEGANY COUNTY  
GEORGE B. HALE  
*Resident Maintenance Engineer*

WASHINGTON COUNTY  
RALPH T. THAYER  
*Junior Assistant Highway Engineer*

FREDERICK COUNTY  
SILAS D. KUHN  
*Junior Assistant Highway Engineer*

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BEFORE IMPROVEMENTS



AFTER IMPROVEMENTS—RELOCATION OF U. S. ROUTE 40 OVER SIDELING HILL

## DISTRICT NO. 6

There are four (4) counties in this district, namely Garrett, Allegany, Washington, and Frederick, all located in Western Maryland, with the eastern part of the district being generally of a very rolling terrain rising in the western part to a mountainous section reaching an elevation of a trifle under 3,000 feet.

A brief description and summary of the construction and maintenance activities carried on in this district by counties for the fiscal years beginning July 1, 1950 and ending on June 30, 1952 follows.

### GARRETT COUNTY

#### *Construction*

Four (4) major construction projects were either started or completed during the period covered by this report, and these generally consisted of widening and resurfacing U. S. Route 219 from Gortner to Red House, the rebuilding in its entirety from Keyzers Ridge to the Pennsylvania State Line on U. S. Route 40, the rebuilding of a section of U. S. Route 219 just south of Deep Creek Lake, and the rebuilding of a section of U. S. Route 219 from Accident toward Hoyes.

Four (4) bridges were repainted during this period, these bridges are namely the large structure over Deep Creek Lake; the overhead bridge at Altamont over the B. & O. Railroad tracks; the interstate structure over the Potomac River between Kitzmiller, Maryland and Blaine, West Virginia; and the interstate structure over the Potomac River and the Western Maryland Railway Company's tracks between Gorman, Maryland and Gorman, West Virginia.

In this county the Commissioners handle their own road construction program and during this period, have not participated in any Federal Aid.

#### *Maintenance*

In this county the regular maintenance work was carried on by the State forces on 162.03 miles of road in the State Highway System as the County Commissioners maintain the County roads with their own organization.

Snow removal and ice treatment during at least five (5) months out of each calendar year is quite a major problem, and a large number of miles of snow fencing has to be erected in the fall and dismantled and stored in the spring to help control drifting.

Several thousand cubic yards of cinders and sand, treated with several hundred tons of salt and calcium chloride, have to be stock piled each fall for spreading on the road during the winter season.

Low temperatures were recorded during the period covered by this report of

16° below zero, and during the winter season we had approximately 50 cycles of snow and sleet storms.

The Commission has purchased for use and stored in this county a new, large, and modern Rotary Snow Plow which cost approximately \$22,000.00 and which has been a tremendous help in keeping the roads open for the traveling public during the past two winter seasons.

A very worthwhile improvement was made along U. S. Route 50, the Northwestern Pike, and U. S. Route 219 from Gortner to Red House by the placing of several thousand tons of burned mine shale or gob on the shoulders of these two highways.

Regular surface treatment operations, center line operations, painting of guard rail, shaping of the shoulders, etc., were carried on; however, the season for this type of work in this county is very short.

## ALLEGANY COUNTY

### *Construction*

Ten (10) construction projects were either started or completed during the period covered by this report and these projects generally consisted of the construction of a new and modern structure over the Potomac River, the Baltimore and Ohio Railroad tracks and the Western Maryland Railway tracks between McCool, Maryland and Keyser, West Virginia, which structure was generally financed by the two (2) States and the Bureau of Public Roads. Approaches were built to the Maryland end of this bridge. This was quite a major project, as it was generally relocated in a mountainous area, with a third lane for most of its length for slow moving vehicles, and eliminated some very crooked sections of the old road.

Approximately 6 $\frac{1}{2}$  miles of U. S. Route 220 from Cresaptown south to a point approximately one (1) mile below Rawlings, was either widened or reconstructed.

The section of State Route 55 beginning at Clarysville on U. S. Route 40 and extending to Vale Summit for a distance of a trifle over two (2) miles, was rebuilt for its entire length.

A short section of old U. S. Route 220 near McCool was resurfaced with Specification "B" concrete and a very well worthwhile improvement was made on State Route 36 just north of Westernport by the relocation and easing of a curve.

In addition to the above, three (3) sections of county roads were rebuilt under State supervision, being jointly sponsored or financed by the Allegany County Commissioners and The Bureau of Public Roads. These roads are known as the Mill Run Road in the lower part of Allegany County, the Lower Town Creek Road in the eastern part of the county and the Williams Road just outside of Cumberland, the latter road will be taken into the State System when completed.

A contract has been let and work is under way grading and draining a lot approximately 5 $\frac{3}{4}$  acres in size, located along the Braddock Road on which plans have been made to construct or build a modern District Engineer's office, garages and

proper storage facilities for the Commission's equipment working out of the Cumberland area.

Two (2) bridges were repainted during this period, namely, the Interstate Bridge over the Potomac River known as the Wiley Ford Bridge, which is jointly maintained by the two (2) States and also the Interstate structure over the Potomac River between Maryland and West Virginia, known as the Paw Paw Bridge.

### *Maintenance*

The State Forces maintained or carried on maintenance work on 158.58 miles of the State Highway System in this county. The County Road System is maintained by the County Commissioners.

The maintenance operations carried on are also broken up and compiled by various units, in this report; however, there are several items connected with work accomplished by our maintenance forces which are worthy of comment. The major operation was the placing of a mixed-in-place surfacing on the Braddock Road for its entire length consisting of approximately 42,000 square yards.

During the period covered by this report five (5) picnic areas have been constructed. These have been used extensively by the traveling public, particularly during the summer months.

The regular surface treatment operations, center line marking, painting of guard rails, patching of shoulders, etc., were carried on; however, the season for this type of work in this particular county is also very short as severe weather conditions prevailed in the western part of the county. During the two (2) winter seasons covered by this report, we had approximately 70 cycles of snow and sleet storms, with the lowest temperature reaching 14 degrees below zero. This type of weather requires the erection each fall and the dismantling in the spring of quite a large mileage of snow fencing, and in order to skid proof the roadways after the snow and sleet storms it requires the use of several thousand tons of abrasives treated with either salt or calcium chloride.

Under the construction program arrangements are being made to construct a modern garage and storage sheds, which will also help promote the efficiency of the maintenance operations in this county.

## WASHINGTON COUNTY

### *Construction*

Construction projects carried on in this county during the period covered by the report, consisted of approximately ten (10) projects either under way or completed, with the major one being the relocation over Sideling Hill on U. S. Route 40. This consisted of building an entire new highway for a length of just a trifle under seven (7) miles. This particular project up to this time, is one of the largest and most costly ones the Commission has ever undertaken. Grades were held to a maximum of 6% and for approximately 90% of the length of the project a third lane was built for the use of slow moving vehicles. It was also necessary to build a new and high

level bridge across Sideling Hill Creek at the Washington-Allegany line to get above flood stage, as well as to meet the grades coming down the west slope of the mountain proper. The regular excavation on this job amounted to approximately 1,330,000 cubic yards, which gives some idea of the magnitude of the project.

Among the other projects was the rebuilding in its entirety of a section of U. S. Route 40 from the west limits of Hagerstown to and through the village of Hopewell. Also on U. S. Route 40 between Hagerstown and Clear Spring a section was rebuilt in the area of Shady Bower to eliminate some sharp vertical curves.

Approximately four (4) miles of State Route 60 from Hagerstown toward Leitersburg was reconstructed, making it a very modern section of highway.

Two (2) projects are now under way on State Route 65 from Hagerstown to Sharpsburg, which generally covers the rebuilding or the widening and resurfacing of this section of highway for its entire length.

The section of State Route 64 from Hagerstown toward Chewsville for a length of approximately three (3) miles is being rebuilt in its entirety.

On U. S. Route 40 there has been completed the widening of the surfacing from Huyett's Cross Road to Wilson, a distance of approximately three (3) miles, and at the west end of Hancock on U. S. Route 40 the widening of the arch bridge over Little Tonoloway Creek is under construction.

In this county the County Commissioners generally handled their own construction program and have only taken advantage of Federal Aid on one project to date, which project was handled by our Commission, financed by the Bureau of Public Roads and the Washington County Commissioners. This consisted of resurfacing a section of Northern Avenue just outside of the northern limits of Hagerstown.

### *Maintenance*

State forces maintained or carried on maintenance work in this county on 226.46 miles of the State Highway System. The County Roads System is maintained by the Washington County Commissioners with their own organization.

Regular surface treatment operations, center line marking, painting of guard rail, shaping of shoulders, etc., were carried on in this county with the various operations and units broken up and compiled in this report; however, several maintenance operations of an extraordinary nature were accomplished.

Two (2) of the larger items accomplished by State forces was the placing on State Route 572, the Gapland Road, a mixed-in-place surfacing for a length of approximately one (1) mile, and also the same type of work was completed on alternate U. S. Route 40 from the Frederick-Washington County line on top of South Mountain toward Boonsboro, for a distance of a little over one (1) mile.

In cooperation with the Town Authorities of Boonsboro, two (2) blocks at the west end of the Town on U. S. Route 40 were widened.

Woodmont Hill on State Route 453 which was in the State System but was only stabilized with soil, was paved by our forces for its entire length of 0.4 miles.

"Catseye" delineators were installed as center line markings on U. S. Route 40



from Hagerstown to the Washington-Frederick County line on top of South Mountain, which is a decided help to the traveling public, particularly during the fog and snow seasons.

A scenic overlook was installed at Parkhead on U. S. Route 40 between Clear Spring and Hancock and is being used extensively by the traveling public.

Another overlook has been constructed near the summit of Sideling Hill on U. S. Route 40 which is being used continuously by the traveling public, and plans have been made and work has been started to combine a picnic area with this latter overlook.

Two (2) picnic areas constructed on U. S. Route 40 between Hagerstown and the top of South Mountain are being used by the traveling public and plans are in progress to start another on U. S. Route 340 at the approach to the Sandy Hook Bridge which will also combine an overlook over the Potomac River.

The winter season also presents quite a problem in the western part of this county and particularly on some of the roads that run north and south, requiring the erection and use of a considerable mileage of snow fencing and a large quantity of abrasives and salt for ice treatment. During the period covered by this report we had a low temperature of 18 degrees below zero.

Some additional storage facilities are needed in our Hagerstown Yard to properly store the equipment, and a small garage set-up in Boonsboro would be a decided help in carrying on maintenance activities in this county.

#### FREDERICK COUNTY

##### *Construction*

Extensive construction work has been carried on in this county during the period covered by this report, with the most important projects being carried on from a point just south of Frederick to the Frederick-Montgomery County Line near Hyattstown. This is the construction of the new Washington National Pike and will replace U. S. Route 240, for through traffic.

Up to the present time twelve (12) contracts have been let for the construction of this particular road, and consist of a trifle under nine (9) miles of dual highway construction, one (1) interchange between this new road and U. S. Route 15, a steel plate girder bridge to carry this new road over U. S. Route 15, an overpass over the B. & O. Railroad tracks near Frederick Junction, a five (5) span steel girder bridge to carry this road over the Monocacy River, a steel I-beam bridge to carry this road over the Araby Church (Frederick County) Road, a steel and concrete bridge to carry the Frederick County Amelung Road over this new project, at State Route 80 a steel beam and concrete bridge to carry the new project over State Route 80, a steel I-beam bridge to carry this road over Bennett's Creek, and the construction of a steel beam bridge to carry this road over the Fire Tower (Frederick County) Road.

On State Route 26 east of Libertytown a relocation was constructed around Unionville; also on U. S. Route 26 between Mt. Pleasant and Libertytown some

sections of this road were relocated, others widened, and the entire length resurfaced with bituminous concrete.

On State Route 31 from State Route 26 towards New Windsor 3.30 miles were either widened or relocated and rebuilt.

On U. S. Route 15, a short distance north of Worman's Mill, a short relocation was made and a new bridge was constructed across Tuscarora Creek to replace an outmoded structure.

A mixed-in-place surfacing was placed on U. S. Route 40 from New Market to Frederick.

Sub-surface explorations have been made prior to advertising for the construction of a new bridge across the Potomac River between Maryland and Virginia at Brunswick.

On U. S. alternate Route 40 from a short distance west of Frederick to a point near the west foot of Braddock Mountain, the road is being modernized by widening, relocating and resurfacing.

U. S. Route 15 from Evergreen Point towards Lime Kiln, for a distance of approximately 2.7 miles, is being modernized by widening, relocating and resurfacing.

State Route 71 from the Carroll County Line to New Midway is also being modernized by widening, relocating, and resurfacing.

Several bridges were repainted during the period covered by this report, one over Catoctin Creek, one over the Monocacy River, and the bridge in Monrovia.

The prison labor forces accomplished a very worthwhile improvement on State Route 80 between Urbana and Fingerboard which consisted of widening and resurfacing the road for its entire length plus a couple of minor relocations. This same force on U. S. Route 15, just south of Emmitsburg, cut off and rebuilt a very abrupt hilltop in front of Mt. St. Joseph's College, and rebuilt and relocated a very sharp curve just south of the college on this same road.

Numerous construction projects on the County Roads System in Frederick were carried on by the Frederick County Roads Board under the supervision of our Commission, which projects were jointly financed by the Bureau of Public Roads and the Frederick County Commissioners. The plans, advertising, etc. were handled directly by the Frederick County Engineer. Some of these roads built by the Frederick County Roads Board are, the Old Middletown Road; two (2) sections of the Old Frederick Road; Woodville Road; Pennsylvania Shop Road; Harvey Branch Road; the Old Annapolis Road; the Flagpond Road; and the Ballenger Creek Pike.

### *Maintenance*

During the period of this report the regular maintenance work was carried on in this county by our forces on 301.16 miles. The County Roads were maintained by the Frederick County Roads Board with their own organization.

Among extraordinary items of work accomplished by our maintenance forces was the placing of a bituminous mix surfacing on alternate U. S. Route 40 from the top of South Mountain east towards Middletown for approximately two (2)

miles; a short section of the same type of work on State Route 79 north of Brunswick; and approximately 1.5 miles on State Route 81 north of Thurmont.

Catseyes were placed in the surfacing as a guide line from the western edge of Frederick on U. S. Route 40 to the top of South Mountain and are of a decided help during the bad weather period.

Three (3) additional picnic areas were developed; namely, one on U. S. Route 40 near the east foot of Braddock Mountain, on State Route 26 east of Unionville, and on U. S. Route 340 near Jefferson; and plans call for the construction of more of these areas.

Another item of extraordinary work accomplished by our forces was the widening of a short section of State Route 75 in the vicinity of Union Bridge which consisted of placing macadam surfacing on each side for a width of  $2\frac{1}{2}$  feet.

Snow removal in this county does not present a major problem; however, during each winter season we will have on an average of two or three rather severe storms that do prove troublesome as far as snow removal itself is concerned, and of course this does make it necessary to erect in the fall and remove in the spring a considerable amount of snow fencing for the prevention of drifting, with most of the fencing being erected on the roads that run north and south. Sleet and icy conditions on the roads are generally taken care of by the spreading of abrasives such as cinders treated with salt and calcium chloride.

Tables showing data pertaining to road construction contracts awarded, projects completed, and maintenance reports for the period July 1, 1950 to June 30, 1952 follow.

REPORT OF THE STATE ROADS  
ROAD CONSTRUCTION CONTRACTS—JULY 1,

Project Number	Contract Number	Location			Miles	Description of Project
		Route No.	From	To		
46H	F-425-11	U. S. 240	Overpass of Fire Tower Co. Rd.			PRIMARY JULY 1, 1950 to
46I	F-425-12	U. S. 240	Bridge over Bennett Creek			Steel beam & conc. overpass, dual
46J	F-425-3	U. S. 240	Overpass of Md. 80 at Urbana			Steel beam bridge (dual)
69	F-380-1	U. S. 15	Br. over Tuscarora Cr. & Appr.		0.568	Steel beam & conc. bridge, dual
46E	F-425-1	U. S. 240	0.5 mi. N. W. of Urbana	1.1 mi. N. of Mont. Co. L.	2.586	Conc. surf. & steel I-beam
					2.467	Dual highway
56	G-155-5	U. S. 219	4.35 mi. N. E. of Oakland twd. McHenry		3.123	Con. rds., ramps, etc. spec. "B"
46L	F-425-13, M-383-4	U. S. 240	Fire Tower Rd.	0.45 mi. S.F.M. Co.	1.576 1.951	Pen. mac. base spec. "B" surf. Dual highway Con. rds., ramps, etc. spec. "B"
				Total '50-'51	12.271	
46N	F-425-15	U. S. 240 Rel.	At Intersection of U. S. 15		0.799	JULY 1, 1951 to 2 leaves & 2 drives of interchange
70	F-507-2	Md. 17	At Brunswick Bridge		0.126	Dual hwy. spec. "B" surf. Sub-surface explorations
20A	W-392-3, A-407-5	U. S. 40	At Sideling Hill Relocation			Reinforce 4 exist. pipe cul.
				Total '51-'52	0.925	
	10			Total Primary	13.196	
27	G-248-4	U. S. 219	Accident twd. Hoyes		3.627	WIDENING AND RE JULY 1, 1950 to
211	W-403-1	U. S. 40	St. Paul's Church	Shady Bower	0.511	Wid. & relocations pen. mac. surf.
209	W-404	Md. 60	Northern Ave. Hagerstown twd. Pennsylvania Line		4.016	Spec. "B" mod. & resurf. Spec. "B" wid. & resurf.
180	W-399-1	Md. 65	Lappans	Sharpsburg	6.719	Wid. mod. curves & resurf. spec. "B"
158	F-496-1	U. S. 40	U. S. 40 toward Middletown		3.058	Wid. mod. curves & resurf. spec. "B"
217	W-405	Md. 64	Hagerstown	Chewsville	2.971	Wid. mod. curves resurf. spec. "B"
207	F-509-1	U. S. 15	N. & S. of Washington National Pike		2.713	Wid. mod. curves & resurf. spec. "B"
				Total '50-'51	23.615	
250	A-438	U. S. 220	Md. 135 at McCool, Northerly		0.750	JULY 1, 1951 to Resurface spec. "B"
279	W-420	U. S. 40	Huyett	Wilson	2.950	Widen Pl. Concrete
282	F-526	U. S. 40	New Market	Frederick	5.900	Bituminous bound resurf. face
208	F-508	Md. 71	Carroll Co. Line	New Midway	2.878	Reloc. wid. & resurf. spec. "B"
180A	W-399	Md. 65	Hagerstown	Lappans	4.990	Wid. mod. curves, resurf. spec. "B"
287	A-437	Md. 36	At Negro Elbow	Westernport	0.036	Curve Mod. Penn. Mac. Surf.
154A	A-435-1	Md. 55	Vale Summit	Miller	2.422	Spec. "B" wid. & resurf.
				Total '51-'52	19.926	
	11			Total Widening and Resurfacing	43.541	

REPORT OF THE STATE ROADS COMMISSION OF MARYLAND

COMMISSION OF MARYLAND  
1950 TO JUNE 30, 1952. DISTRICT No. 6

Date Advertised	Bids Opened	Date of Award	Date of Notice To Proceed	Date Started	Date Completed or Per Cent Completed as of June 30, 1952	Engineer's Estimate	Contract Cost	Total Amount Authorized	Contractor
<b>PROJECTS</b>									
<b>JUNE 30, 1951</b>									
4-25-50	5-16-50	7-26-50	8-14-50	8-18-50	8-9-51	\$141,397	\$127,246	\$147,333	E. D. Plummer & Sons
5-31-50	6-20-50	8-3-50	8-17-50	8-28-50	2-20-52	155,697	121,195	139,374	Camden Constr. Co.
6-6-50	6-27-50	8-3-50	8-14-50	8-24-50	92.0	137,000	131,009	150,660	J. Melvin Roberts
6-30-50	8-1-50	8-9-50	8-24-50	9-5-50	5-20-52	137,320	143,333	187,333	L. R. Woesche & Son
8-15-50	9-5-50	9-6-50	9-25-50	10-10-50	52.6	1,325,125	1,237,274	1,587,865	W. E. Graham & Sons
8-22-50	9-13-50	9-27-50	10-16-50	10-26-50	82.8	355,358	383,646	476,193	Keely Constr. Co.
8-22-50	9-13-50	9-27-50	10-16-50	10-25-50	57.8	980,214	924,197	1,107,826	Dutcher Constr. Co.
						3,232,111	3,067,900	3,796,584	
<b>JUNE 30, 1952</b>									
1-15-52	2-5-52	2-6-52	2-21-52	3-10-52	18.6	270,667	280,530	323,109	T. Edgie Russell
3-11-52	3-26-52	4-2-52	4-8-52	4-22-52	6-10-52	8,500	9,750	10,725	Raymond Conc. Pile Co.
3-18-52	4-8-52	4-17-52	5-8-52			58,000	39,978	43,975	Arnico Dr. & Metal Prod. Co.
						337,167	330,258	377,809	
						3,569,278	3,398,158	4,174,393	
<b>SURFACING PROJECTS</b>									
<b>JUNE 30, 1951</b>									
5-9-50	6-6-50	7-6-50	7-17-50	7-25-50	96.0	544,417	511,080	632,742	Richard F. Kline
6-6-50	6-27-50	7-19-50	8-3-50	8-10-50	5-9-51	66,608	74,222	90,855	Bester-Long, Inc.
9-5-50	9-26-50	12-20-50	1-17-51	2-19-51	9.0	396,536	383,527	486,056	Bester-Long, Inc.
9-19-50	10-10-50	12-20-50	1-17-51	2-20-51	52.0	744,697	763,327	977,826	A. A. Mackie Constr. Co.
12-19-50	1-9-51	6-6-51	6-27-51	7-9-51	79.5	30,000	570,354	705,907	American Asph. Prod. Co.
4-24-51	5-15-51	6-21-51	7-12-51	7-23-51	52.0	369,359	428,582	572,869	Thomas, Bennett & Hunter
12-19-50	1-9-51	6-27-51	7-19-51	8-13-51	54.0	278,304	251,716	305,973	E. D. Plummer
						2,429,921	2,982,808	3,772,228	Sam Finley, Inc.
<b>JUNE 30, 1952</b>									
8-28-51	9-18-51	9-26-51	10-24-51	11-3-51	5-6-52	21,803	23,842	27,418	Cumberland Constr. Co.
9-4-51	9-25-51	9-26-51	10-18-51	4-21-52	52.6	56,116	62,878	72,309	C. Wm. Hetzer
9-13-51	10-2-51	10-3-51	10-11-51	10-12-51	12-14-51	73,608	64,560	74,243	T. Edgie Russell
9-18-51	10-2-51	10-17-51	11-14-51	1-29-52	10.0	416,359	361,939	443,729	Sam Finley, Inc.
12-20-51	1-8-52	2-14-52	3-4-52	3-17-52	4.0	670,925	636,200	881,630	M. J. Grove Lime Co.
1-15-52	1-29-52	4-10-52	5-1-52	5-7-52	40.0	7,739	8,068	11,589	Cumberland Contracting Co.
5-6-52	5-27-52	5-29-52				428,796	411,159	473,557	Cumberland Contracting Co.
						1,675,346	1,568,646	1,984,475	
						4,105,267	4,551,454	5,756,703	

REPORT OF THE STATE ROADS  
ROAD CONSTRUCTION CONTRACTS—JULY 1,

Project Number	Contract Number	Location			Miles	Description of Project
		Route No.	From	To		
						SECONDARY JULY 1, 1950 TO
	F-486	Old Fred. Rd.	Md. 76 toward	Md. 77	3.512	Intermediate type sur-
	F-486-1		End of F-486	Md. 77		facing and 1 bridge
	A-382-1	Mill Run Rd.	George's Cr. twd. Garrett		1.191	Sandstone base course
			Co. Line			
	F-459-1	Woody'l Rd.	Woodville	Iron Bridge	3.683	Plant mix wearing sur-
	F-514	Pa. Shop Rd.	Md. 80	Md. 27	2.481	
	F-515	Harvey Br.	Nr. Harvey Bridge To-		3.200	
			ward Emmitsburg			face
	A-423-1	Lower Town	S. of Flintstone twd.		0.997	Shale base. bit. armor
		Cr. Rd.	Town Creek			coat
	F-513	Flag Pond Rd.	Ballenger Cr. Pike	Pt. of Rocks Rd.	0.778	Pen. mac. surf.
	W-407	Northern Ave.	U. S. 11	N. Lim. Hagers-	0.609	Spec. "B" surf.
				town		
	A-424-1	Wms. Rd.	End of Md. 51 twd.		0.983	Pen. mac. surf.
			Twiggstown			
	F-487-2	Old Annap.	Md. 26	Md. 75	3.800	Pen. mac. surf.
		Rd.				
				Total '50-'51	21.234	
	F-520		Ballenger Cr. Pike nr.		2.528	JULY 1, 1951 TO
			Adamstown twd. Jeffer-			Pen. Mac. Surf.
			son			
	F-530-617	Old. Fred. Rd.	Md. 76	U. S. 15 Nr. Emmits-	2.017	Pen. mac. surf.
				burg		
				Total '51-'52	4.545	
	10			Total Secondary	25.779	
						MISCELLANEOUS
						JULY 1, 1950 TO JUNE
						MISCELLANEOUS
						JULY 1, 1951 TO JUNE
	W-424-1	U. S. 40	Br. over Little Tonoloway			Widen existing arch bridge
			Cr. — Hancock			
	A-429-1	Md. 29	SRC Lot at Allegany			Grading, drainage &
			Grove			Fencing
	E. D.-37-714		3 Bridges in Fred'k Co.			Cleaning & Painting Br.
	E. D.-38-614		1 Br. in Alleg. Co. & 1 Br.			Cleaning & painting
			in Garrett Co.			Bridges
				Total '51-'52	—	
	4			Total Miscellaneous	—	
	(38)			GRAND TOTAL	82.516	

REPORT OF THE STATE ROADS COMMISSION OF MARYLAND

COMMISSION OF MARYLAND  
1950 TO JUNE 30, 1952. DISTRICT NO. 6

Date Advertised	Bids Opened	Date of Award	Date of Notice To Proceed	Date Started	Date Completed or Per Cent Completed as of June 30, 1952	Engineer's Estimate	Contract Cost	Total Amount Authorized	Contractor
PROJECTS JUNE 30, 1951									
6-12-50	6-26-50	7-17-50		7-24-50	6-30-51	66,719	63,050	69,354	L. R. Raesche & Son
7-6-50	7-25-50	8-3-50	8-24-50	9-5-50	4-9-52	66,271	73,511	87,788	Geo. F. Hazelwood Co.
8-22-50	9-11-50	9-23-50		9-29-50	10-7-50	16,371	13,005	36,394	Richard F. Kline
					10-19-50	11,037	8,767		
					10-31-50	14,242	11,313		
7-6-50	7-25-50	10-4-50	10-19-50	10-28-50	4-2-52	35,596	40,872	49,503	Geo. F. Hazelwood
9-18-50	10-2-50	10-23-50		11-30-50	8-1-51	60,621	58,504	64,000	M. J. Grove Lime Co.
10-10-50	10-24-50	10-25-50	12-18-50	12-18-50	4-6-51	15,925	14,958	16,453	Bester-Long, Inc.
8-1-50	8-29-50	3-5-51	5-28-51	8-6-51	55.0	148,993	166,799	201,819	Cumberland Constr. Co.
4-23-51	5-14-51	6-5-51		6-11-51	8-1-51	34,550	34,345	34,345	T. Edgie Russell
						470,325	485,124	559,656	
JUNE 30, 1952									
6-4-51	6-18-51	7-26-51		8-7-51		72,043	74,032	74,032	M. J. Grove Lime Co.
5-10-52	5-26-52	6-24-52				80,852	70,915	70,915	T. Edgie Russell
						152,895	144,947	144,947	
						623,220	630,071	704,603	
PROJECTS 30, 1951 (none) PROJECTS 30, 1952									
2-11-52	2-26-52	3-12-52	3-31-52	5-9-52	27.6	32,500	38,403	44,463	John D. Sheetz Constr. Co.
1-24-52	2-19-52	6-11-52	7-2-52			50,430	47,587	52,346	Geo. F. Hazelwood Co.
5-27-52	6-10-52	6-18-52	7-1-52			2,400	2,660	2,926	Md. Painting Co.
6-3-52	6-17-52	6-26-52				8,800	5,875	6,463	United Bridge Ptg. Co.
						94,130	94,525	106,198	
						94,130	94,525	106,198	
						\$8,391,895	\$8,674,208	\$10,741,897	

DOLLAR VALUE OF CONTRACTS COMPLETED JULY 1, 1950 TO JUNE 30, 1952  
DISTRICT No. 6

Project Number	Contract Number	Route	Location		Miles	Description of Project	Date Authorized	Amount Authorized	Date Completed	Contractor
			From	To						
	G-195-1	Md. 560	Loch Lynn	Gorman	1948 PROGRAM 2.495	Pen. mac. surface	May 11, '48	\$312,954	Sept. 6, '50	Interstate Amesite Co.
	F-476-1 W-396-1	Md. 26 U. S. 40	Unionville Relocation 1 mi. E. of Huxeyts	W. Limits Hagerstown	1949 PROGRAM 3.788 1.896	Pen. mac. surfacing Pen. mac. base spec. "B" surf.	Aug. 24, '49 Nov. 16, '49	914,390 225,671	June 19, '51 Mar. 30, '51	T. Edgzie Russell Bester-Long, Inc.
63 46 B	G-248-5 F-425-5	U. S. 219 U. S. 240	Gortner Bridge over Monocacy River	Redhouse	3.972	Spec. "B" resurfacing 5 span st. plate girder I- beam br.	Nov. 30, '49 Dec. 21, '49	113,212 876,510	July 12, '50 Nov. 19, '51	Keeley Constr. Co. Condit & Foundation Co.
46-D	F-425-4	U. S. 240	Bridge over U. S. 15	Libertytown	4.013	Dual steel plate conc. & stone br.	Dec. 21, '49	392,262	May 31, '51	Frank Pecora Constr. Co.
153	F-476-2	Md. 26	Mt. Pleasant	Libertytown	4.013	Pen. mac. & spec. "B" surf.	Dec. 21, '49	239,771	Dec. 14, '50	American Asph. Prod. Co.
46C 148 24	F-425-6 F-498 G-192-2	U. S. 240 Md. 31 U. S. 40	Bridge over B. & O. R.R. Md. 26 Np. Libertytown Keyser's Ridge	New Windsor Pennsylvania State Li.	3.308 3.533	Steel I-beam br. Reinf. conc. wid. & surf. Pen. mac. & spec. "B" surf.	Dec. 28, '49 Dec. 28, '49 July 6, '49	173,271 539,071 642,618	Apr. 27, '51 May 10, '51 June 23, '51	Empire Constr. Co. Carozza Hammill & Co. S. T. Brottenmarkle Const. Co.
	(9)		Total Completed	Total Completed	20.510			4,136,776		
46-G	F-425-9	U. S. 240	Overpass of Araby Ch. Co. Rd.		1950 PROGRAM St. beam & conc. br.		Mar. 29, '50	164,171	July 25, '51	Zerkel Constr. Co.
	F-461-1 (PC-54-A)	Old Middle- town Rd.	N. of Jefferson toward Middletown		1.392	Pen. mac. surf.	Apr. 10, '50	50,900	Oct. 24, '50	N. W. Eitzler Co.
22	A-283-3	U. S. 220	McCool Northerly		1.415	Pen. mac. base spec. "B" surf.	Apr. 12, '50	715,739	Feb. 24, '52	Empire Constr. Co.
46-F	F-425-8 F.D.-31-614	U. S. 240	Underpass of Co. Road Metal Structures District 6	2 1/2 mi E. Monocacy R.		Steel I-beam bridge Cleaning & painting	May 11, '50 May 24, '50	108,370 25,883	July 26, '51 Oct. 18, '51	Zerkel Constr. Co. Dornant Painting Co.
	F-486 F-486-1 W-403-1 F-425-11	Old Fredk Rd. U. S. 40 U. S. 240	Md. 76 twd. Md. 77 End of F. 486 St. Paul's Church Overpass of Fire Tower Co. Rd.		3.512 0.511	Intermediate type surf. and I bridge Spec. "B" mod. & resurf. Steel beam & conc. dual overpass	July 17, '50 July 19, '50 July 26, '50	69,354 90,855 146,333	June 30, '51 June 30, '51 May 9, '51 Aug. 9, '51	L. R. Waesche & Sons L. R. Waesche & Sons Bester-Long, Inc. E. D. Plummer & Sons
46-I	F-425-12	U. S. 240	Bridge over Bennett Creek	Iron Bridge	3.683	Steel beam bridge, dual	Aug. 3, '50	139,374	Feb. 29, '52	Camden Constr. Co. Inc.
	F-459-1	Woodville Road	Woodville		2.481	Plant mix wearing surf.	Sept. 23, '50	36,394	Oct. 7, '50	L. R. Waesche & Sons
	F-514	Penn's Shop Road	Md. 80	Md. 27	3.200	Plant mix wearing surf.			Oct. 19, '50	Richard F. Kline
	F-515	Hanney Br. Road	Nr. Hanney Bridge to- ward Emmitsburg		0.778	Pen. mac. surf.	Oct. 23, '50	64,000	Aug. 1, '51	M. J. Grove Lime Co.
	F-513	Flag Pond Road	Balleager Cr. Pike	Pt. of Rocks Rd.	0.997	Shale base bit. armor coat	Oct. 4, '50	49,503	Apr. 2, '52	Geo. F. Hazelwood Co.
	A-423-1	Lower Tn. Cr. Rd.	S. of Flintstone toward Town Creek	N. Limits Hagerstown	0.609	Spec. "B" surf.	Oct. 25, '50	16,453	Apr. 6, '51	Bester-Long Co.
	W-407	Ave.	U. S. 11		1.191	Sandstone base course	Aug. 3, '50	87,788	Apr. 9, '52	Geo. F. Hazelwood Co.
69	A-382-1	Mill Run Rd.	George's Cr. twd. Gar- rett Co. Line		0.568	Conc. surf. & steel I- beam br.	Aug. 9, '50	187,333	May 20, '52	L. R. Waesche & Son



(15)			Total Completed	20,337		1,952,450		
F-487-2	Old Amp- olds Rd. U. S. 40 U. S. 220	Md. 26 New Market Md. 135 at Northley	Md. 75 Frederick	1951 PROGRAM 3,800 Pen. mac. surf. 5,900 Bit. bound resurf. 0,750 Resurf. spec. "B"	June 5, '51 Oct. 3, '51 Sept. 26, '51	31,345 74,243 27,418	Aug. 1, '51 Dec. 11, '51 May 6, '52	T. Edgie Russel T. Edgie Russel Cumberland Contr. Co.
282 230			Total Completed	10,459		135,706		
F-507-2	Md. 17	At Brunswick Bridge		1952 PROGRAM Sub-surf. explorations	Apr. 2, '52	10,725	June 10, '52	Raymond Cone, Pile Co.
(29)			GRAND TOTAL	53,792		\$6,548,611		

RECAPITULATION OF PROJECTS COMPLETED BY CLASSIFICATIONS - DISTRICT No. 6

Classification	1948		1949		1950		1951		1952		Total	
	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Amount	Miles	Amount
	Primary.....	—	—	7.321	\$2,999,051	1.983	\$1,461,320	—	—	—	\$10,725	9.304
Widening and Resurfacing .....	—	—	13.189	1,137,725	0.511	90,855	6.650	\$101,361	—	—	20.350	1,329,941
Secondary.....	2.495	\$312,954	—	—	17.843	374,392	3.800	34,345	—	—	24.138	721,091
Miscellaneous .....	—	—	—	—	—	25,883	—	—	—	—	—	25,883
Total Completed (29).....	2.495	\$312,954	20.510	\$4,136,776	20.337	\$1,952,450	10.450	\$135,706	—	\$10,725	53.792	\$6,548,611

MAINTENANCE REPORT  
JULY 1, 1950-JUNE 30, 1951  
*Roadway Surfacing*

Type of Work	Unit of Charge	Rigid J-K	Semi-Rigid I	Non-Rigid F, G, H, I	Untreated D-E
Patching .....	Sq. yds.	22,830	9,721	200,812	
Blading—dragging .....	Miles				10.40
Bituminous, mixed-in-place .....	Sq. yds.		145,874		
Joining and crack filling—"Flint-seal" .....	Lbs.	1,000			
Removing extruding Md. "K" .....	Miles	11,994			
Joining and crack filling .....	Gals.	13,285		1,515	
Oiling—bituminous .....	Sq. yds.			357,764	

*Frost Boils*

Number .....					223
Square yards, surfacing .....					2,370
Cubic yards, excavation .....					943
Tons material in backfill (stone) .....					1,307
Surfacing, pre-mix bituminous, tons .....					546

*Shoulder Maintenance*

		Bitum.	Stabilized	Grass	Earth
Patching .....	Sq. yds.	4,994	3,515		38,483
Blading—dragging .....	Miles				1,416.10
Backfilling (burnt mine gob) .....	Cu. yds.		788		
Mowing and hand cutting .....	Miles			7,209.50	
Oiling—bituminous .....	Sq. yds.				
Removal—excess material .....	Cu. yds.		24		20,584

*Maintenance—Bridges and Structures*

		Repairs	Replacements	New Installations
Bridge repairs .....	Number	54		
Pipe and box culverts .....	Number	7	14	125
Curb and gutter .....	Lin. ft.	62	275	1,200
Catch basins .....	Number	10		16
Spillways, etc. ....	Number			1
Bituminous rebutt .....	Lin. ft.			367
Underdrain .....	Lin. ft.			1,243
Concrete steps .....	Sets			7
Concrete retaining wall .....	Cu. yds.		4.5	
Headwalls .....	Number	3	4	7
Manholes .....	Number			1
Painting bridges (2) .....	Gallons	85		

*Guard Fence*

		Repairs	Replacements	New Installations
Woven wire .....	Lin. ft.	550		
Fence .....	Lin. ft.	20,594		
Posts .....	Number	1,480	842	174
Cable .....	Lin. ft.	200	110	141
Posts stencilled .....	Number	300		
Fittings .....	Number	228	1,982	67
Paint .....	Gals.	176	1,367.50	

MAINTENANCE REPORT—*Continued*  
*Right-of-Way*

Type of Work	Unit of Charge	Maintenance	
		Roadside	Park Area
Mowing, clearing and grubbing . . . . .	Miles	3583.11	
Beautification . . . . .	Sq. yds.	17,446	
Resetting fence . . . . .	Lin. ft.	78	
Removal of debris . . . . .	Truck loads	1,906	17
Top-soil . . . . .	Cu. yds.	28	
Cutting grass . . . . .	Acres		107.50
Trimming trees . . . . .	Number	722	1
Moving equipment . . . . .	{ Units	67	
	{ Miles	2,958	
Removing trees . . . . .	Number	86	
Picnic areas (created) . . . . .	Number	3	
Widening cross section . . . . .	Cu. yds.	4,091	
Removing snipe signs . . . . .	Number	542	

*Traffic Service*

Snow fence—repaired . . . . .	Lin. ft.	19,180
Snow fence—striped . . . . .	Lin. ft.	97,115
Painted curb . . . . .	Lin. ft.	1,990
Ice treatment (salt) . . . . .	Tons	853.60
Crushing Cinders . . . . .	Cu. yds.	6,534
Highway markers . . . . .	Number	10,831
Surface guide lines . . . . .	Miles	508.92
Surface marking, schools, R.R., etc. . . . .	Number	279
Snow removal (see below)* . . . . .	Miles	837.34
Ice treatment (cinders and sand) . . . . .	Cu. yds.	15,970
Traffic lights . . . . .	Number	
Snow fence, erected . . . . .	Lin. ft.	494,350
Snow fence, dismantled . . . . .	Lin. ft.	519,956
Manual traffic count . . . . .	Hours	1,034

*Drainage (Cleaning)*

Stream change . . . . .	Cu. yds.	75
Ditching (new) . . . . .	Lin. ft.	9,006
Cleaning—ditches . . . . .	Lin. ft.	461,098
Cleaning—pipe culverts . . . . .	Number	4,436
Cleaning—box culverts . . . . .	Number	96
Cleaning—bridges . . . . .	Number	123
Cleaning—catch basins . . . . .	Number	261
Cleaning—misc. structures . . . . .	Number	7
Riprapping . . . . .	Sq. yds.	127
Cleaning—curb and gutter . . . . .	Lin. ft.	17,040

\* Snow fall by counties: Allegany 63.0"; Frederick 15.5"; Garrett 102.0"; Washington 38.5".

MAINTENANCE REPORT  
JULY 1, 1951-JUNE 30, 1952  
*Roadway Surfacing*

Type of Work	Unit of Charge	Rigid J-K	Semi-Rigid I	Non-Rigid F, G, H, I	Untreated D-E
Patching .....	Sq. yds.	13,715	13,907	99,614	
Blading—dragging .....	Miles				
Base repairs (stone—18")—1,015 sq. yds., 507 cu. yds.					
Filling line cave-in sink—212 cu. yds.....	Sq. yds.				
Resurfacing—non bituminous .....	Sq. yds.				
Joint and crack filling .....	Gals.	20,185			
Oiling—bituminous .....	Sq. yds.	160,296	34,820	389,774	

*Frost Boils*

Number .....	4
Square yards surfacing .....	230
Cubic yards, excavation .....	104
Backfill material (¾ 1 stone and stone screenings), tons .....	130
Specification "B," tons.....	24

*Shoulder Maintenance*

		Bitum.	Stabilized	Grass	Earth
Patching .....	Sq. yds.	3,008	4,921		110,801
Blading—dragging .....	Miles		20		1819.30
Sodding .....	Sq. yds.			491	
Mowing and hand cutting.....	Miles			6,591	
Oiling—bituminous .....	Sq. yds.	4,834			
Removal—excess material.....	Cu. yds.				39,439
Penetration on shoulders.....	Sq. yds.		2,417		

*Maintenance—Bridges and Structures*

		Repairs	Replacements	New Installations
Bridge repairs .....	Number	75		
Pipe and box culverts .....	Number	38	11	52
Curb and gutter.....	Lin. ft.	37		322
Catch basins .....	Number	11	1	9
Spillways, etc.....	Number			
Bituminous rebutt.....	Lin. ft.			292
Underdrain .....	Lin. ft.		18	1,611
Bridges—spot painted.....	Number	2		
Headwalls.....	Number	1		
Retaining walls.....	Lin. ft.	100	36	75
Sidewalks .....	Sq. yds.			16

*Guard Fence*

New fence .....	Lin. ft.	12,389	1,690	690
Posts .....	Number	1,314	833	71
Cable .....	Lin. ft.	1,317	1,640	
Fittings.....	Number	738	427	
Paint.....	Gals.	763.50	161	42

## MAINTENANCE REPORT—(Continued)

*Right-of-Way*

Type of Work	Unit of Charge	Maintenance	
		Roadside	Park Area
Mowing, clearing and grubbing	Miles	3440.55	
Beautification	Sq. yds.	35,202	
Resetting fence	Lin. ft.	306	
Removal of debris	Truck loads	2,361	
Top-soil	Cu. yds.		
Cutting grass	Acres		127.50
Trimming trees	Number	1,138	
Moving equipment	Units	37	
	Miles	1,353	
Civil defense signs—erected and removed	Number	30	
Brush burned	Loads	128	
Picnic areas (created)	Number	3	
Picnic tables painted	Number	3	15
Picnic tables built	Number	6	
Removing snipe signs	Number	4,054	
Removing trees	Number	611	
Seeded slopes	Sq. yds.	125	
Widening cross section	Cu. yds.	1,402	

*Traffic Service*

Snow fence (painted) striped	Lin. ft.	29,700
Ice treatment (salt)	Tons	880.40
Highway markers	Number	6,999
Surface guide lines	Miles	804.30
Surface marking, schools, R.R., etc.	Number	179
Snow removal* (see below)	Miles	848
Ice treatment (cinders and sand)	Cu. yds.	12,655
Traffic lights	Number	
Snow fence, erected	Lin. ft.	531,526
Snow fence, dismantled	Lin. ft.	525,481
Manual traffic count	Hours	1,493
Cinders, crushed and hauled to stockpile	Cu. yds.	8,911
Headwalls, striped (painted)	Number	42
Maintenance stakes painted	Number	967
Clotting (paint) for centerline stripe	Number	346
Painting and marking danger points for centerline stripe	Miles	330
Painted curb	Lin. ft.	522
Removed signs (50 miles)	Number	142
Repaired catseyes	Number	125
Painted signs	Number	131
Snow fence repaired	Lin. ft.	38,310

*Drainage (Cleaning)*

Cleaning—streams.....	Lin. ft.	4,850
Ditching (new).....	Lin. ft.	45,053
Cleaning—ditches.....	Lin. ft.	519,426
Cleaning—pipe culverts.....	Number	6,118
Cleaning—box culverts.....	Number	101
Cleaning—bridges.....	Number	48
Cleaning—catch basins.....	Number	387
Cleaning—misc. structures.....	Number	59
Riprapping.....	Sq. yds.	
Flume sodded.....	Sq. yds.	80

\* Snowfall by Counties: Garrett 58.5"; Allegany 56.6"; Frederick 28.0"; Washington 42.0".





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**RIGHT-OF-WAY DIVISION**

LEROY W. KERN—July 1, 1950–June 30, 1951

*Right-of-Way Engineer*

LEROY W. MOSER—July 1, 1951–June 30, 1952

*Right-of-Way Engineer*

R. DONALD WOOTEN

*Assistant Right-of-Way Engineer*

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EXTENSION OF BALTIMORE NATIONAL PIKE TOWARD RIDGEVILLE

## RIGHT-OF-WAY DIVISION

The principal function of the Right-of-Way Division is the acquisition of rights-of-way for State Highway purposes.

During the fiscal years of 1951 and 1952, 4320 rights-of-way were acquired in the exercise of this function. The magnitude and importance of right-of-way acquisition is perhaps better demonstrated when the cost of these acquisitions, totaling in excess of 51 $\frac{1}{4}$  million dollars (exclusive of Divisional operating costs) is compared with the payments of approximately 59 $\frac{1}{4}$  million dollars made on construction contracts. This comparison indicates that better than 8% of the total outlay for the construction and/or improvement of the State Highway facilities was expended for rights-of-way and resultant damages to the remainders of properties due to the taking.

In the acquisition of rights-of-way for highway purposes, property owners are required to dispose of part or all of their properties, which, in many instances, they are reluctant to do at any price. By law and policy they, of course, are entitled to just compensation. However, it is inevitable that under these circumstances an amicable negotiated settlement, which is fair both to the property owner and to the public, cannot always be reached. In such cases the only recourse is condemnation. Of the 4,320 rights-of-way acquired, it was necessary to file condemnation in 263 cases. At the beginning of the fiscal year 1951, there were 49 condemnation cases remaining on the Court Dockets, making a total of 312 cases pending during the fiscal years of 1951 and 1952. During this two-year period, 44 cases were tried and Jury Awards made; and 124 cases were settled by further amicable negotiation, leaving 144 cases still to be disposed of at the end of the fiscal year 1952.

A further breakdown of these cases is as follows: Of the 49 cases carried over into the fiscal year of 1951, 13 were tried, 12 were settled by further amicable negotiation and 24 remaining on the Court Dockets at the end of the fiscal year 1952. Of the 263 cases filed during the fiscal years of 1951 and 1952, 31 were tried and 112 were settled by further amicable negotiation, leaving 120 of these cases undisposed of at the end of the fiscal year 1952. Thus, during the two fiscal years, it was only necessary to file condemnation proceedings in slightly in excess of 6% of the 4,320 acquisitions. Approximately one-half of those filed were settled later by further negotiations, leaving only about 3% of the total rights-of-way acquisition as actual trials or remaining as potential trials at the end of the fiscal year.

When it is considered that during the past two fiscal years many of these rights-of-way were in the more involved category, such as the rehabilitation of major traffic arteries, expressways and controlled access arterial highways, this record of accomplishment is worthy of just pride, not only for the number of rights-of-way acquired, which was the greatest in any previous two-year period, but also in the

small percentage of cases in which it was necessary to resort to condemnation proceedings.

Naturally, the achievements of this Division in a program of this magnitude have not been easily gained, but are the results of the training and building of an organization over a period of years, which organization is the outgrowth of the Right-of-Way Division as created in 1932.

Prior to 1932, it was the policy of the Commission to secure rights-of-way through the organizations of the District Engineers. During the several years preceding 1932, two men operating from the main Commission Office had assisted in rights-of-way acquisitions, devoting their time to securing rights-of-way on the more involved projects such as grade crossing eliminations, major road relocations and bridge approach projects. They also handled condemnation cases and assisted the District Engineers in special problems and method of procedure.

In 1932 the Commission realized that the acquisition of rights-of-way was progressively increasing to a status of major importance in the rehabilitation and expansion of the highway system and, consequently, an independent Right-Of-Way Division was organized, consisting of the two already trained right-of-way men, augmented by the appointment of six additional right-of-way examiners or agents, and stenographic and clerical help.

The expansion of the Right-Of-Way Division since 1932, both in personnel and volume of work performed, has been synchronized with the expansion of our highway program. Today, the acquisition of rights-of-way is one of the major phases in the creation of the highway system.

In order to cope with the increased volume of rights-of-way acquisitions generated by the Commission's accelerated road program which was inaugurated in 1947, the Right-Of-Way Division began a gradual expansion of both office and field personnel in 1948, which increase continued somewhat into 1951. This expansion of the organization necessitated training of the new personnel, some of which was accomplished during the fiscal years of 1949 and 1950, but much of which continued on into the fiscal years of 1951 and 1952.

With an organization handling a greatly increased volume of work, it was necessary to expand the planning and supervisory part of the organization. Previously, practically all Division decisions and supervision of all the field activities were handled through the Right-of-Way Engineer. Delegation of authority and responsibility became necessary to cope with the expanded work of the Division. This phase of the reorganization, although conceived during the fiscal years of 1949 and 1950, did not actually culminate until the fiscal years of 1951 and 1952.

In order to relieve the Right-of-Way Engineer of many administrative duties, particularly matters pertaining to personnel and certain matters of policy, the Special Assistant Attorney General assigned to the State Roads Commission, Mr. Joseph D. Buscher, was appointed Administrative Director of the Right-Of-Way Division. Prior to this appointment, all administrative duties were the responsibility of the Right-Of-Way Engineer. The immediate supervision of the office was

under an Assistant Right-of-Way Engineer, and all appraisals and negotiating work (which was done on a project basis) were done under the immediate supervision of three Assistant Rights-of-Way Engineers, all reporting to the Right-of-Way Engineer.

Under the present organization, the Right-of-Way Engineer exercises general supervision over all activities of the Division, which includes not only actual rights-of-way acquisitions, and other normal functions of the Division, but also acts as the Commission's representative in appearing before and meeting with public bodies and individuals in matters pertaining to real estate.

In order to develop a more effective field organization, the State was divided into three (3) sections or areas which were designated as Areas "A," "B" and "C" with an Assistant Right-of-Way Engineer in charge of each area.

As presently constituted, these areas comprise the following:

Area "A," which is in charge of Mr. Louis A. Yost, Jr., consists of Districts # 1, #2 and #4.

Area "B," which is in charge of Mr. Carl A. Cline, consists of Districts # 5, and #6.

Area "C," which is in charge of Mr. Haines B. Felter, consists of District #3 in which are located most of the major metropolitan projects.

Since the original establishment of these areas, there have been several shifts of Districts between areas to affect a better distribution of work volumes, and, no doubt, similar shifts will have to be made in the future.

Greatly increased responsibility and authority has been given these Assistant Right-of-Way Engineers. Each Assistant in charge of the various areas is responsible for supervising all personnel and rights-of-way acquisitions in that area. They are responsible to the Right-of-Way Engineer and the Administrative Director of the Division. Each Assistant has been delegated not only authority and responsibility for supervision in their respective areas, but also authority to carry on in his own name and position the necessary correspondence with the property owners, the public in general and the necessary contacts with other Divisions and Departments of the Commission's Organization. However, all matters of policy and procedure which require clearing through the Chief Engineer and the Commission must be presented through the Right-of-Way Engineer. The field Assistant Right-of-Way Engineers are responsible for the preparation and handling for the Right-of-Way Division of all condemnation cases in their areas.

The organization under each of the field Assistant Right-of-Way Engineers in charge of an area is briefly as follows:—

Within each area there are Right-of-Way Examiners—Grade I, II and III under the direction of the Assistant Right-of-Way Engineer. There are teams consisting of one Grade I and several Grade II and III Right-of-Way Examiners. The Grade I Right-of-Way Examiner, under the supervision of the Assistant Right-of-Way Engineer, is responsible for several projects. He makes the pre-negotiation appraisals which are reviewed and approved by the Assistant Right-of-Way Engineer before

negotiations with property owners are begun, and where necessary, secures the services of and consults with local real estate experts. He supervises all work of his team, including the establishment of property lines, obtaining of title lead data, preparing of property mosaics, calculating areas, preparation of master plats, negotiating with the property owners and the preparation of supporting reports accompanying amicably negotiated options and cases referred to the office for condemnation. He also assists the Right-of-Way Engineer and Assistant Right-of-Way Engineer in making rights-of-way cost estimates on proposed alternate lines as well as working on special right-of-way problems.

Rights-of-way acquisition not only require the vast amount of field work outlined above, but also creates an almost equal amount of research, clerical and stenographic activity. This work, done by an ably organized and trained organization is under the immediate supervision of Assistant Right-of-Way Engineer, Mr. R. Donald Wooten.

The office force, similar to the field force, has had to expand to meet the demands made by the heavy road construction program of recent years, and has also added certain functions and refinements which have increased the Division's value to the Commission, and more important, to the general public. For this reason it is felt that a brief resume of the operations of the office force would not be out of place in this report and would be of interest to its readers.

Perhaps the best way to accomplish this purpose would be to take a theoretical road project and carry it through the various steps it must take in the office.

As soon as the field forces know that a certain property will be touched by a project, a preliminary title lead report is submitted to the office in triplicate. The name of the owner or owners of that property is first indexed, both by project and by alphabetical listing, on project cards. A record of that property is also set up in a special ledger which has been so designed that all costs involved in each property acquisition can be listed. An individual file for each acquisition is also made, and a copy of this title lead report placed in this file is the first step in what ultimately becomes a complete record of every phase of that particular transaction.

A copy of this title lead report is then transmitted to the Legal Division so that a title examination may be obtained from local attorneys in the county in which the property is located. A record is made of each such request so that they may be followed through until the title examination is received. When the title examination (in duplicate) is completed by a local attorney and returned to the office, an appropriate entry is made, a copy of the title examination is transmitted to the field forces for use during negotiations with the property owners, and the other copy placed in the individual file for future use in condemnation.

After the field representative has completed negotiations and has obtained a signed option contract from the property owner, that contract, together with its supporting reports, appraisals, and justification report is returned to the office for processing. A careful check is then made against the right-of-way plats to assure that all rights required for the construction of the project through that property

have been secured. If the option is thus determined to be in proper order, authorizations for expenditure of funds are prepared and the contract is presented to the Commission, accompanied by a letter of recommendations which briefly reports on the most important features of the transaction. After favorable consideration by the Commission, the authorization is signed by the Chairman and attested by the Secretary, with appropriate minute entry, and returned to the Right-of-Way Division as authority to accept the option and proceed with settlement for the land and rights to be acquired.

It might be stressed at this point that no purchase of right-of-way or property is ever consummated until the Commission itself has approved an authorization for that purchase, and before any such proposed transaction is presented to the Commission for consideration and approval, there is first assembled in the office a complete report of the details of that particular case, accompanied by such supporting reports as are necessary to provide a comprehensive record of the transaction.

After having thus obtained Commission approval, the property owner is the notified by registered mail of the acceptance of his contract. He is provided with a copy of the terms of the contract which he had signed and vouchers are sent to him for signature and certification. It might be added at this point that all checks on State Funds are issued by the State Treasurer, whose regulations require that before any such payment is made, a bill or voucher must be presented, bearing a certification that the bill or voucher is just and correct and that payment has not been previously made. To comply with these regulations and to assure that such payments are made to the proper party, this department prepares all such vouchers on special forms and sends them to the property owners for signature when the option is accepted.

When the option is accepted, the office likewise provides copies of the terms for the District Engineer in whose District the property is located so that he will have knowledge of just what work is to be performed by each of the parties to the agreement. When unusual features are involved, as for example, a case where buildings are located in the right-of-way and must be moved, adjusted or disposed of, appropriate letters must be prepared and sent to the other Divisions of the Commission which will arrange for the completion of such details. In some cases of property adjustments, such as to gasoline vending equipment, special correspondence is necessary to arrange for the carrying out of these adjustments in accordance with previous agreements, and in other situations further special agreements must be prepared to cover unusual contingencies.

The next step in the office procedure comes when a property owner signs and returns the vouchers which were sent to him when his option was accepted. These vouchers are processed through a ledger section of the office, where they are first checked against the authorizations to determine whether or not such payment has been approved by the Commission and then checked against the ledger itself to make sure that payment has not been made. Certain additional safeguards have been set

up to prevent duplication of payment, and it is not until all phases have been carefully checked that the vouchers are then processed through the Accounting Division to the State Treasurer for payment. While the vouchers are clearing through the Treasurer for payment, personnel of the ledger section assemble the necessary plats, files and title examinations so that this data will be available when the check comes through, and when the check is actually received from the State Treasurer, further checks are made against the ledger and additional entries are made therein.

The check and the data thus assembled is then turned over to the Legal Division which then carries through and arranges for the final settlement through designated local attorneys, who bring the title examinations to date and obtain all necessary signatures on the deeds by which the land, easements and rights required are conveyed to the State. After settlement has been made, bills for legal and recording fees are then cleared through the ledger section in much the same manner as the cash payments previously discussed. The recorded deeds are subsequently obtained from the Clerks of several Circuit Courts after they have been recorded among the Land Records. Appropriate entries as to the date of the conveyance and the Liber and folio numbers on such deeds are made in the ledger record and these deeds are then transmitted to the office of the Secretary where they are filed, thus bringing to a conclusion a cycle which started when the contact was originally made with the property owner to prepare the initial title lead report.

The office procedure in condemnation cases is similar except for variations to fit the different steps in obtaining title in this manner.

The processing of settlements, however, is but a part of the work of the office force. Special analyses, agreements, deeds, leases, contracts and other data must be prepared. Members of the general public, property owners, and their attorneys and agents make many visits to the office for the purpose of discussing phases of rights-of-way transactions, and they must be interviewed and assisted in every way possible.

Several years ago a section was set up to handle requests for information as to Commission ownership of its rights-of-way. This section has already gone through many of the old records of the Commission in assembling the information necessary to answer such requests. On most of the major highways and on some of the other sections of State Highways, Master Plats have been prepared showing the widths of these highways. Requests for such information total several hundred a year and most requests, unless they involve much research, are answered and/or plats provided to persons requesting same within 24 hours of the receipt of the request.

A great deal of time is spent in the office in reviewing and analyzing bills rendered by public utilities for adjustments to their facilities which are made necessary by the construction of State Highways. Some years ago a policy was established regarding such utility adjustments and "Directives" were issued setting forth the conditions under which the utility companies would be entitled to payment against those circumstances where the utilities would be required to assume the cost of making their adjustments. Plats showing the former location of such facilities, to-



gether with the new or proposed future location thereof, are prepared in the Districts. Information as to the utility company's right to be in their former location is assembled and sent to this office for review and analysis. This information is carefully checked against title examinations and other available data to determine the extent of the Commission's liability for payment, and a comprehensive report on the findings is provided for the Assistant to the Chief Engineer who is in charge of adjustments to these facilities.

Another phase of the office activity is to check requests for entrance permits on Freeways such as the Pulaski Highway, etc. against the original options to determine whether or not any commitments were made in the original acquisitions with respect to entrance control, etc. These requests on occasion, represent considerable research, and many of them have been handled since the Pulaski Highway, the Ritchie Highway and the Hagerstown-Frederick Relocation were declared by the Commission as "Freeways."

The office had likewise completed, at the end of the last fiscal year, the major part of the work of preparing an inventory of all excess land owned by the Commission. It is contemplated that this inventory will be completed before the end of the current year; and when it is finished, the Commission will have a complete record of all real estate owned by it, and classified into various categories.

The office is now developing plans to make available for reference copies of all subdivision plats bordering along the State Roads system, in Montgomery and Prince George's Counties, where numerous additional dedications abutting the existing State Roads Right-of-way have been made in accordance with the regulations of the Maryland National Capital Park and Planning Commission. These plats are already being assembled and will be bound in book form, route by route. The Commission will then be in a position to utilize the full widths of these dedications when needed.

During the past several months, a considerable number of the field and office forms have been revised and improved to provide additional data and safeguards, which have been found desirable, as a result of added experience. One of the most important of these has been the preparation of new standard deed and option forms which supersede several previous forms, thus simplifying the work of all concerned. The condemnation report form has also been improved to provide more information for the Legal Division's use in handling condemnation cases.

Another important step forward has been the microfilming of the older Departmental records, which was started toward the close of the past fiscal year; and when this has been completed, not only the work of the Department will be facilitated, but valuable records will have been preserved.

Traditionally, it has been the policy to acquire rights of way just prior to actual construction. Acting under Legislative consent to condemn property for future highway needs, the Commission has approved a program of acquiring rights-of-way on many of our major projects that are not scheduled for actual construction for several years in the future. It is anticipated that this procedure will greatly facili-

tate construction and also be more popular with and cause less hardship to the public.

Surveys, preparation of plans and right-of-way plats are now in progress for this future program and this Division is preparing to proceed with these acquisitions as soon as this preliminary work is completed.

On July 1, 1951, the former Right-of-Way Engineer Mr. LeRoy W. Kern, retired. Mr. Kern had been with the Commission for 31 years and to him, more than anyone else, should go the major credit for the organization and development of the Right-of-Way Division. His outstanding ability and devotion to duty has been one of the major contributions to the accomplishments of this Division.

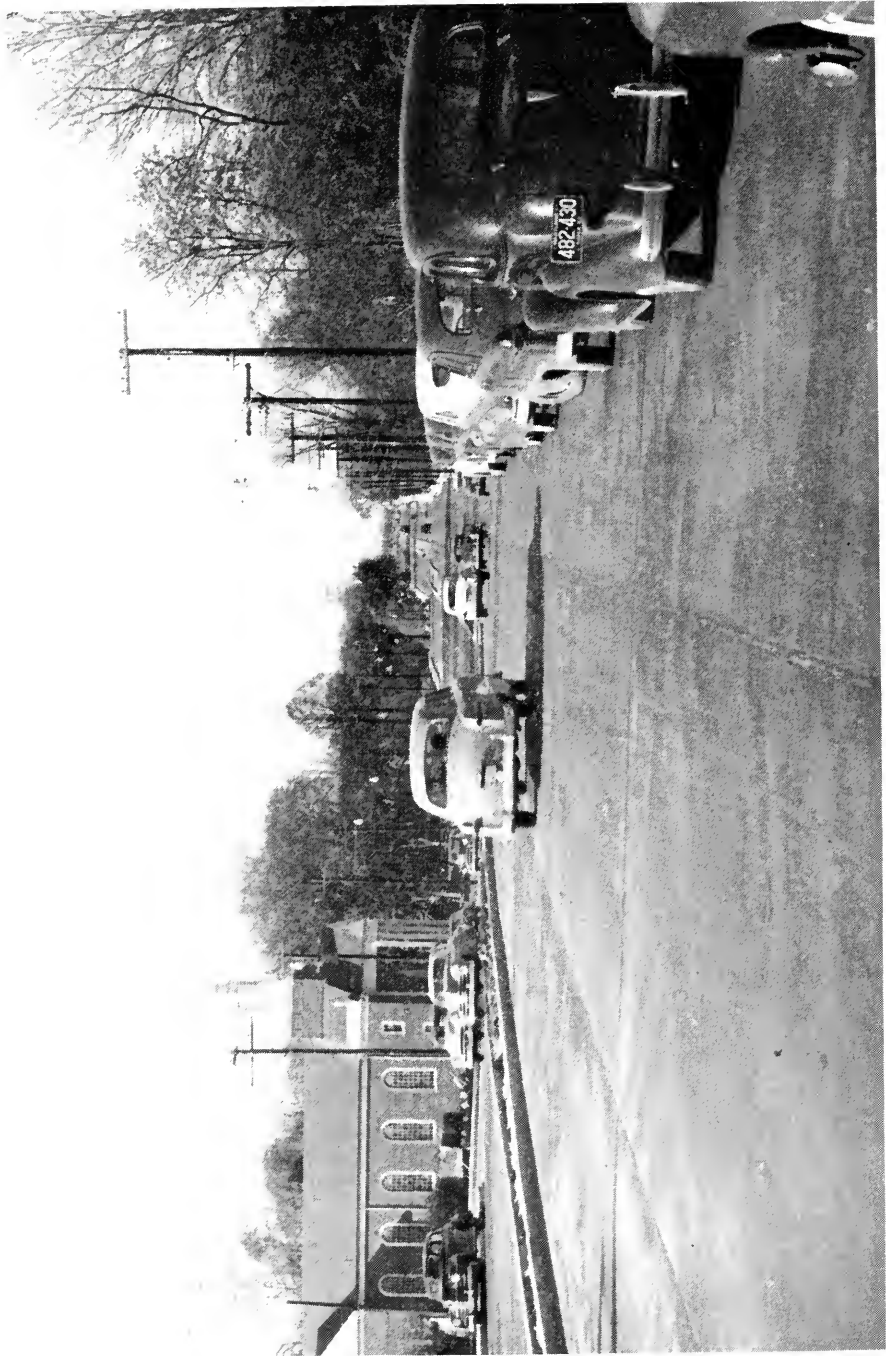
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**TRAFFIC DIVISION**

GEORGE N. LEWIS, JR.

*Director*

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COMPLETED SECTION OF GEORGIA AVENUE AT SILVER SPRING, MARYLAND

## TRAFFIC DIVISION

This is a report of the activities of the Traffic Division of the Maryland State Roads Commission for the period July 1, 1950 to June 30, 1952. The performance record of the Division, reported herein, indicates a great expansion in the number of activities and the volume of assignments since the days when the Traffic Division was first organized in 1940. Originally planned to carry on the work begun by the Highway Planning Survey by keeping current the more important data obtained during that study, the work of the Division now includes the numerous diversified phases of Highway Planning and Traffic Engineering. Among the various functions of the Traffic Division are: Preparation and publication of maps, erection and maintenance of traffic signals, review of construction plans for traffic operation and highway safety, traffic studies in incorporated towns, enforcement of weight and size limitations of commercial vehicles, review of application for permits for access to shopping centers and other businesses, physical inventory of roads, maintenance of regularly scheduled automatic and manual traffic counter stations, analysis of accident experience at various locations, origin and destination studies, speed zoning, plan for highway signing and marking, cooperate in design of interchanges and channelized intersections, and, plan and conduct special studies made for a great variety of purposes.

In addition to the regularly scheduled road inventory and traffic counting procedures, traffic studies, ranging from spot checks to comprehensive surveys requiring several weeks, are continually being conducted in the field. The data obtained from these traffic studies and investigations are analyzed and, supplemented by the vast amount of data on file in the office, are used to determine possible solutions to the particular problem at hand or are used in the broader field of planning and research.

In connection with his administrative duties, the Director of the Traffic Division served in an active capacity on the following committees:

Governor's Truck Weight Committee

Regional Planning Committee—Washington Metropolitan Area

Conference on Greater Washington Traffic Problems

Committee of Trial Magistrates and State Officials

Traffic Court Judges and Prosecutors Conference

Committee appointed by the Highway Advisory Council to study Farm-to-Market (Secondary) Roads

Secretary of the Interregional Conference on Highway Transportation

Many cooperative projects were undertaken with national agencies, other states, and engineering universities. Probably the most important of these was the study, Road Test One-Md which was made to determine the effect of heavy axle loads on

concrete pavements. This study, which was conducted in Maryland by the Highway Research Board, was participated in by 12 states and the District of Columbia.

Based on the findings of Road Test One-Md and with due consideration of all other pertinent factors, the Truck Weight Commission presented its report to the Legislature. As a result, the General Assembly in 1951 enacted a law which reduced the legal maximum axle load on tandem axles from 22,400 pounds to 20,000 pounds, increased the penalties for all overweight violations, and passed other legislation governing the height, width, and length of commercial vehicles. Other legislation resulting from recommendations originating in the Traffic Division gave the State Roads Commission authority to limit and control access, under certain physical or traffic conditions, to businesses or abutting property owners along State highways, and prohibited the use of the right-of-way along State highways by anyone selling or displaying merchandise.

The State Roads Commission formally adopted the Manual on Uniform Traffic Control Devices, prepared jointly by the American Association of State Highway Officials, the Institute of Traffic Engineers, and the National Conference on Street and Highway Safety, as the standard to be used in all highway signs and markers, and pavement markings. The task of preparing a new Maryland Manual of Traffic Control Devices has been assigned to the Traffic Division. A number of illustrations have been prepared for inclusion in the new Manual and a preliminary draft of the text will be sent to the Commission upon completion. In connection with the preparation of the Manual of Traffic Control Devices, a series of field tests were conducted in cooperation with the Sign Shop to determine the effectiveness of several different methods of sign reflectorization. Following these tests, a comprehensive study was made to ascertain the time required, and the cost of labor and materials for each of the type signs tested in the field.

The Division has been enlisted in the Civil Defense effort to a considerable extent. In addition to the highway data which have been supplied the Civil Defense Authorities, the Traffic Division has been assigned as the communications center of the State Roads Commission. Its duty will be to receive all alerts and pass them on, in accordance with a prearranged schedule, until the entire personnel of the Commission in all parts of the state have been notified.

An increasing volume of work has been undertaken by this Division in the amount of aid given to various consulting engineers who have been retained by the State Roads Commission to make certain studies. Among the firms requesting and receiving considerable data from this Division are: Coverdale and Colpitts, Associated Consulting Engineers, Inc.; J. E. Greiner Company; Knappen, Tippet, Abbott Engineering Company; Ballard and Thompson; and the Public Administration Service. The assistance given to these firms consisted of—traffic volume data, the drafting of charts and maps, considerable research of past studies, and the organization and, conduct and analysis of a great number of origin and destination studies.

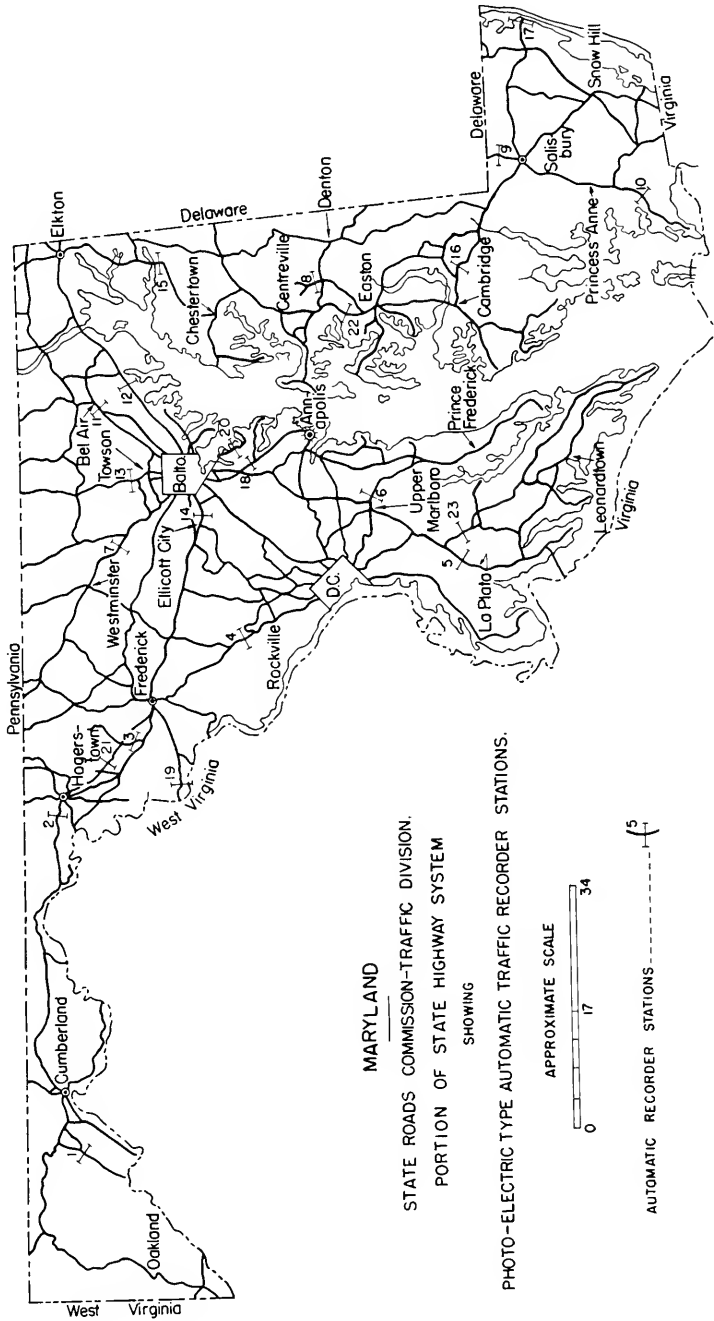
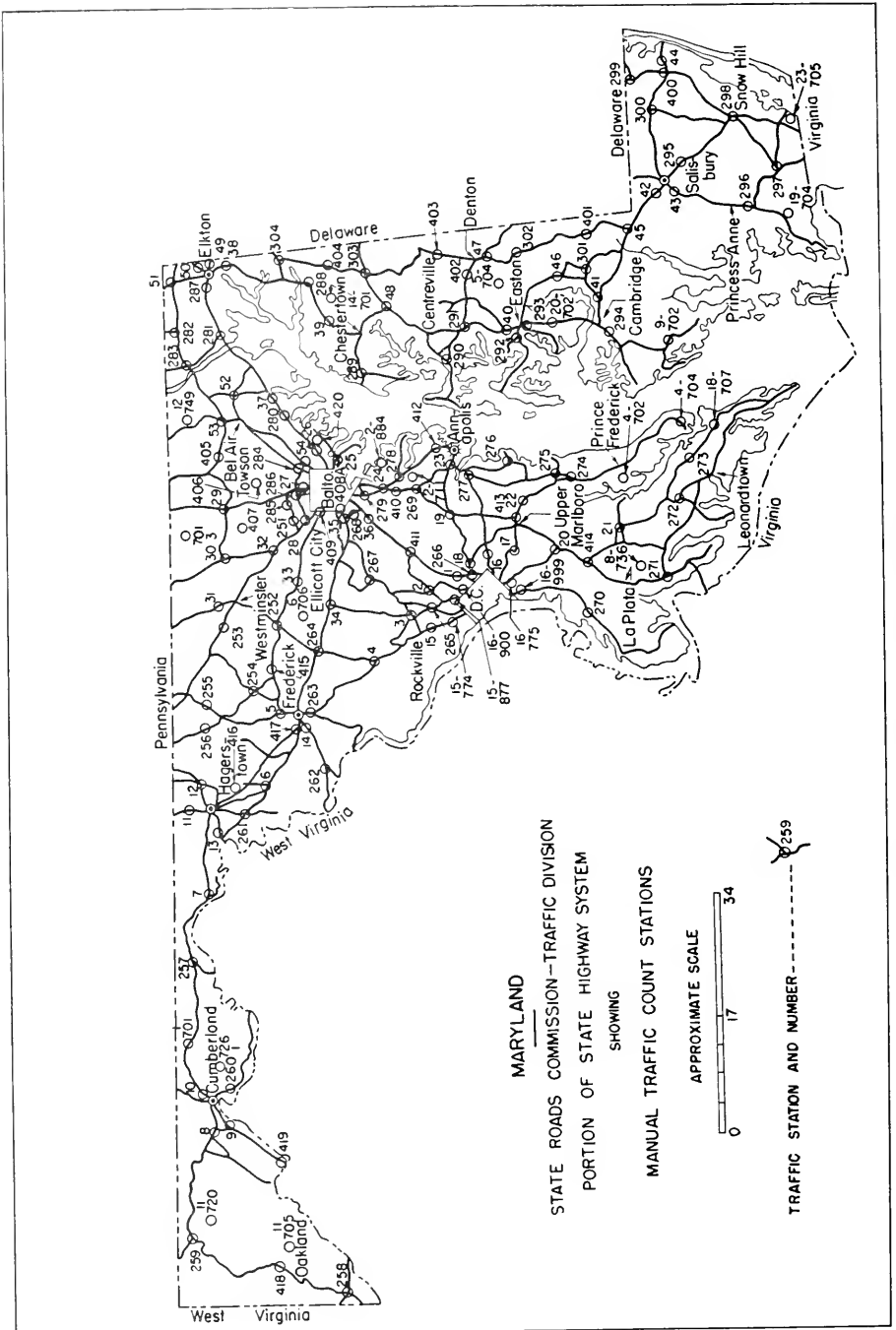


PHOTO-ELECTRIC TYPE TRAFFIC RECORDER STATIONS



MANUAL TRAFFIC COUNTER STATIONS



## TRAFFIC SECTION

*Traffic Counts*

The Traffic section is under the immediate supervision of John L. Mintiens; Supervisor of Highway Traffic Control.

The number of permanent traffic counting stations where traffic volumes are recorded by the means of photo-electric recording machines for each hour of the 24 hours has been increased from 18 to 23. These additional stations, which were made necessary by the ever-increasing changes in the traffic patterns of the state, are located on: U. S. 40, between Frederick and Hagerstown; U. S. 50, north of Easton; Md. 173, at Stony Creek; U. S. 310, near the West Virginia line; and Md. 5, east of Waldorf. Data obtained at each of the toll facilities in Maryland make it possible to determine the 24 hour volumes of vehicles crossing the Susquehanna River Bridge, the Potomac River Bridge, and more recently, the Chesapeake Bay Bridge. The availability of these traffic counts at the Bay Bridge makes it possible to utilize the counter now in operation on U. S. 50, east of the bridge, at another location. Accordingly, this counter will be moved to a point on U. S. 50 between Cambridge and Vienna. In order to obtain more comprehensive data in Southern Maryland, the counter formerly located north of Waldorf on a section of road where U. S. 301 and Md. 5 run concurrently, has been moved south of Waldorf and an additional counter has been installed on Md. 5, east of Waldorf. The locations of the 23 photo-electric automatic traffic recorder stations are shown on the map on page 221. Another map on page 222 shows the locations of 116 key stations at which eight hour manual counts, classified by type of vehicle, are made four times each year, once during each season. These counts are supplemented by 72 hour weekend counts made by portable automatic recorders, one of which is placed on each leg of the intersection at which the count is being made. The portable counting equipment is also used during the field phase of origin and destination studies and special studies where required.

The traffic volumes obtained from the regularly scheduled automatic counter stations and the permanent recorders are compiled and tabulated on cards, each covering a one week period. In order to expedite the transfer of this information to our files, three specially equipped adding machines were purchased. By the use of these machines and the complete revision of the form on which the traffic data are recorded, it is no longer necessary to perform the time-consuming task of making duplicate copies of the cards for submission to the U. S. Bureau of Public Roads. The traffic volume data obtained are constantly referred to by all Divisions of the State Roads Commission, the U. S. Bureau of Public Roads, municipal and county authorities, and other interested individuals. Monthly traffic tables showing the volumes of traffic at each electric-eye station and the rate of increase or decrease from the corresponding period for the previous year are published and distributed.

Since only 13 of the 23 electric-eye counters have been in continuous operation since 1941, the total volumes of traffic passing all 13 stations are shown in the

following tabulation. A percentage comparison showing the net change of each year from the previous year, and a comparison of each year with 1941 is made so that the increasing trend of traffic volumes, broken only during World War II, may be visualized.

Year	Total Vehicles Counted	Per Cent Change Compared to 1941	Per Cent Change Compared to Preceding Year
1941	18,440,663	—	+12.08
1942	12,913,669	-29.97	-29.97
1943	10,600,804	-42.51	-17.91
1944	11,464,356	-37.83	+ 8.15
1945	12,659,701	-31.35	+10.43
1946	17,396,129	- 5.67	+37.41
1947	18,393,215	+ 0.26	+ 5.73
1948	20,349,094	+10.35	+10.63
1949	22,613,352	+22.63	+11.13
1950	24,659,933	+33.73	+ 9.05
1951	27,189,912	+47.44	+10.26
1952	30,319,000*	+64.41	+11.51

\* Estimate based on first 8 months of 1952.

The following tabulation shows the net gasoline consumption by years from 1941 to 1951, and is estimated for 1952. Comparisons are made with 1941, the last normal year before the war, and with each previous year.

Year	Gallons	Per Cent Change Compared to 1941	Per Cent Change Compared to Preceding Year
1941	355,524,287	—	+14.85
1942	300,696,894	-15.42	-15.42
1943	252,059,294	-29.10	-16.18
1944	264,219,063	-25.68	+ 4.82
1945	291,796,082	-17.93	+10.44
1946	371,557,222	+ 4.51	+27.33
1947	407,045,622	+14.49	+ 9.55
1948	440,998,738	+24.04	+ 8.34
1949	481,090,217	+35.32	+ 9.09
1950	534,815,699	+50.43	+11.17
1951	582,430,390	+63.82	+ 8.90
1952	637,586,000*	+79.34	+ 9.47

\* Estimate based on first 7 months of 1952.

# MILEAGE REPORT

## MARYLAND STATE ROADS COMMISSION

### TRAFFIC DIVISION

#### Highway Mileage on State, County, and Municipal Systems, by Types, by Counties, and by Districts—Dec. 31, 1951

County and Districts	System Mileages										A & B		C & D		E		F & G		H & I		J		K			
	Totals		State		County		Mun.		State		County		Mun.		State		County		Mun.		State		County		Mun.	
Dorchester	689.72	155.79	497.80	36.13	54.33	1.86	—	—	200.61	3.16	10.40	135.19	24.43	79.92	15.30	1.25	—	65.26	—	0.38	0.21	—	—	—	0.82	
Dorchester*	422.11	116.55	287.29	18.27	2.35	0.70	—	—	173.31	1.13	8.82	76.37	11.27	46.43	—	—	—	61.30	—	3.07	—	—	—	—	3.07	
Worcester	762.88	156.61	536.56	69.71	1.64	0.53	—	—	236.09	2.78	16.60	232.24	21.40	79.36	1.61	39.42	—	60.65	—	1.30	—	—	—	—	0.46	
Worcester*	600.06	171.64	448.49	39.93	50.77	0.46	—	—	218.17	5.64	42.60	136.65	16.26	48.58	—	—	—	94.18	—	3.72	—	—	—	—	3.72	
District No. 1	2,534.77	600.50	1,770.14	164.04	—	109.09	3.55	—	343.45	10.01	64.70	580.45	73.36	254.29	17.21	52.62	—	281.39	—	8.47	0.21	—	—	—	1.28	
Caroline*	641.23	159.83	452.38	29.62	3.20	0.86	—	—	22.60	6.52	28.10	33.43	12.79	59.64	0.01	1.75	—	72.09	—	2.25	—	—	—	—	2.25	
Caroline*	609.42	200.78	443.61	25.63	23.10	0.51	—	—	178.60	6.74	24.18	118.40	16.29	87.72	4.61	0.62	—	88.88	—	0.45	—	—	—	—	0.45	
Kent*	397.51	159.32	227.55	10.64	9.36	0.33	—	—	82.05	1.70	28.09	22.01	7.38	38.97	0.40	0.82	—	92.26	—	—	—	—	—	—	—	
Queen Annes*	568.18	169.04	386.77	10.37	4.25	0.39	—	—	1.46	4.92	43.68	66.74	2.62	64.48	0.16	0.72	—	60.88	—	1.23	—	—	—	—	1.23	
Talbot*	431.52	124.75	272.59	33.88	4.65	0.25	—	—	96.48	10.43	8.44	63.46	12.07	44.81	1.16	5.92	—	71.50	—	2.05	—	—	—	—	2.05	
District No. 2	2,705.86	843.72	1,753.20	108.94	—	39.96	0.34	—	282.29	30.31	132.49	304.04	51.15	295.62	6.28	9.83	—	385.61	—	6.04	—	—	—	—	—	
Anne Arundel	1,023.93	283.84	600.99	49.10	7.79	0.64	—	—	241.71	8.58	53.47	398.78	21.92	137.29	2.21	8.82	—	90.37	—	1.00	4.23	—	—	—	—	
Carroll	980.53	218.47	711.31	50.75	2.42	0.98	—	—	169.64	8.01	23.82	207.39	14.17	107.21	57.12	22.27	—	87.44	—	0.40	2.36	—	—	—	—	
Howard	457.01	162.13	294.88	2.87	2.87	—	—	—	182.93	—	8.07	98.62	—	92.41	—	—	—	61.65	—	2.42	—	—	—	—	—	
Montgomery	1,251.79	334.95	815.83	101.01	9.91	0.14	—	—	286.81	13.43	10.15	341.94	27.09	218.49	136.88	38.04	—	106.31	—	31.43	20.47	—	—	—	—	
District No. 3	3,713.26	999.39	2,513.01	200.86	—	22.99	1.76	—	881.09	30.92	95.51	1,066.73	63.18	555.40	198.88	69.13	—	345.77	—	35.25	27.06	—	—	—	—	
Baltimore	1,722.00	395.23	1,416.77	—	48.40	0.17	—	—	104.96	1.96	649.07	—	—	180.60	231.29	—	—	122.67	—	165.09	—	—	—	—	—	
Harford	884.55	271.71	559.39	53.45	2.48	—	—	—	316.31	20.56	9.66	37.70	21.30	175.19	7.76	—	—	86.86	—	0.99	1.22	—	—	—	—	
District No. 4	2,606.55	576.94	1,976.16	53.45	—	50.88	0.17	—	222.29	20.50	11.62	686.77	21.30	355.79	428.94	7.76	—	209.55	—	166.08	1.22	—	—	—	—	
Calvert*	331.05	126.62	193.39	11.64	—	52.19	—	—	51.66	8.95	97.07	56.20	2.69	20.77	6.40	—	—	8.78	—	—	—	—	—	—	—	
Charles*	567.88	278.37	281.99	7.42	25.41	—	—	—	298.02	3.43	223.36	31.19	3.99	23.01	—	—	—	41.98	—	8.61	37.59	—	—	—	—	
Prince Georges	1,073.04	281.25	577.41	214.38	1.57	1.62	—	—	222.72	48.37	90.85	272.55	76.11	141.86	56.10	44.03	—	48.54	—	—	—	—	—	—	—	
St. Marys*	490.25	210.65	277.18	2.12	10.00	—	—	—	190.38	1.42	144.82	76.56	—	55.39	0.06	0.70	—	10.74	—	0.18	—	—	—	—	—	
District No. 5	2,462.92	897.39	1,329.97	265.56	—	79.17	1.62	—	682.78	62.17	556.10	430.50	82.79	241.63	62.56	44.73	—	100.04	—	8.79	37.59	—	—	—	—	
Allegheny	807.99	158.58	486.24	163.17	—	61.80	0.80	—	24.98	75.59	14.93	116.26	31.61	98.22	18.16	23.77	—	45.43	—	7.27	—	—	—	—	—	
Frederick	1,356.43	301.16	962.58	92.89	19.58	1.20	—	—	561.74	29.96	11.00	10,69	42.63	343.43	133.63	—	—	82.60	—	0.49	—	—	—	—	—	
Garrett	928.01	162.63	722.60	43.38	—	132.88	1.29	—	121.41	21.84	14.91	194.48	14.56	99.15	16.57	1.93	—	47.97	—	—	—	—	—	—	—	
Washington	1,062.45	226.46	633.54	142.45	—	95.89	0.62	—	64.85	28.23	15.39	265.48	41.88	169.16	101.95	42.07	—	32.19	—	—	—	—	—	—	—	
District No. 6	4,094.88	848.23	2,804.76	441.89	—	310.15	3.91	—	892.98	155.62	56.23	576.91	130.36	574.40	480.11	81.70	—	298.19	—	0.49	37.96	—	—	—	—	
STATE TOTAL	18,118,24	4,736,26	12,177,24	1,294.74	—	612.24	13.35	—	3,413.77	308.63	916.63	3,685.40	422.14	2,276.23	1,163.98	265.77	—	1,530.53	—	211.56	118.34	0.21	—	—	—	

\* County Road Mileage maintained by the State Roads Commission.

A & B Unimproved; C Graded & Drained; D Soil Surfaced; E Gravel or Stone; F & G Low Type Bituminous; H & I High Type Bituminous; J Portland Cement Concrete; K Brick.

Special Improvement District mileage in Prince Georges County included with County mileage. County Urban mileage included with County mileage.

*Special Studies*

There are a number of traffic control devices, one or more of which may be used to solve a specific traffic problem. Determination of the proper device is ascertained after a thorough review of all the factual data obtained through traffic engineering studies and investigations, which consist of traffic volume counts, turning movement counts, speed studies, or any other types of studies deemed necessary to secure data on which an impartial and unbiased decision may be based. From the evaluation of the data obtained by these special studies a recommendation is made for the installation of the appropriate sign, signal, or marking if any is needed at the location. A total of 1431 special studies were made by this Division during the two fiscal years ending June 30, 1952.

It is difficult to measure the value and importance of the work performed on special studies. One case may consist of an investigation of a single intersection to determine whether or not a traffic problem exists, and if so, the measures which should be taken to correct the condition. Conversely, it may involve a complete traffic survey of a town or of several miles or more of a highway, resulting in the establishment of a number of traffic regulations, the erection of warning signs, etc., or in a decision to install a coordinated progressive signal system, the design of such a system, and assistance and supervision in the preparation and installation of the system.

In addition to the above special studies, a review was made of 44 sets of plans for highway projects and intersectional treatments, and plans of 84 proposed service stations and shopping centers were reviewed for traffic operation and highway safety. At the same time the appropriate signs, markers, and surface markings were recommended.

Some of the more important studies are as follows:

Baltimore-Washington Expressway Connection to the Ritchie Highway near Cherry Hill Road.

Traffic problems at the University of Maryland Stadium during athletic activities.

Josenhan's Corner—channelization.

Baltimore-Washington Expressway connection to Ferndale—Interchange.

Plans for typical diamond-shaped interchanges for use on Baltimore County Beltway.

Junction U. S. 40 and Alternate U. S. 40, west of Frederick—channelization.

Baltimore National Pike and Morgan Station Road—channelization.

Intersection at Peace Cross—study for increased capacity.

Towson—channelization and signalization at U. S. 111, Md. 148, Md. 146, Md. 141.

Traffic problem on U. S. 40 at Martin Boulevard in connection with the Baltimore Raceway traffic.

Lyons Corner to Paris (old Chesapeake Beach R.R. right-of-way)—Interchanges.

Beltway Studies.

Restudy of speed zoning on Baltimore—Washington Boulevard, Baltimore to D. C. Line.

Waldorf By-pass—channelization.

Brunswick—bridge over Potomac River—channelization.

Signal Study—Wisconsin Avenue, from Bethesda to Naval Hospital.

Kenilworth Interchange.

Interchange at Baltimore—Washington Expressway and Defense Highway.

Signing of Chesapeake Bay Bridge approaches and control of traffic on approaches.

Signing of U. S. 50, from Kent Narrows to Queenstown.

Signing of U. S. 301 and Md. 5, from T. B. towards Waldorf.

Signing of Md. 5, from D. C. Line towards T. B.

Federalsburg By-pass—origin and destination study.

Highway needs in Washington Metropolitan Area.

One-way streets in Frederick.

Farm-to-Market roads problem.

Radar Speed Study, U. S. 40 (Pulaski Highway) and Md. 24 (Edgewood Road).

Assisted in preparation of 15-year program.

Report on controlled-access highways.

On 998 occasions this Division supplied data from its records to other divisions of the Commission, State and Federal agencies, consulting engineers, and interested individuals.

### *Signals and Controls*

Requests for traffic signals, numbering approximately 89, were received by this Division during the first fiscal year covered by this report. These requests originated from Federal and local government agencies, officials, civic and private organizations, and private citizens. Each request was investigated thoroughly through field work and factual data, such as vehicular and pedestrian counts, physical characteristics of the intersection, and accident statistics. It was found that in the majority of these requests signalization was not warranted and other means were employed to correct any existing unfavorable traffic conditions.

At the close of the fiscal year ending June 30, 1951 signals had been installed at 15 additional locations. At several of these new installations, as noted below, the cost of installation and maintenance was borne entirely or partially by county and town authorities. The locations involved are as follows:

Location	Date Put Into Service	Type
Belair Rd. and Fullerton Fire House*	7-15-50	Flasher
Washington Blvd. and Halethorpe Fire House*	7-17-50	Flasher
Laurel By-pass (Second Ave.) and Main St.	7-20-50	Fixed-time
U. S. Route 50 and Md. Route 2, Parole	7-24-50	Semi-actuated
Md. Routes 5 and 245, Leonardtown†	7-26-50	Fixed-time
Marlboro By-pass and U. S. Route 301	8-18-50	Full-actuated
Ager Road and Hamilton St.	9- 1-50	Full-actuated three-phase
Chillum Rd. and Riggs Rd.	9-18-50	Fixed-time
Washington Blvd. and Main St., Laurel	10-10-50	Fixed-time
Harford Rd. and Linwood Ave.‡	10-18-50	Fixed-time
Marlboro Pike and 53rd. Ave.	11- 6-50	Semi-actuated
Marlboro Pike and Silver Hill Road	11- 6-50	Semi-actuated
Governor Ritchie Highway and Guilford Rd., Harundale	11-21-50	Semi-actuated
U. S. Route 40 and Md. Route 32	11-30-50	Fixed-time
Charles Street Ave. and Bellona Ave.	12-12-50	Semi-actuated
U. S. Route 50 and Barber Rd., near Trappe	3- 3-51	Flasher

\* Installed by the State Roads Commission at county's expense.

† Installed by the State Roads Commission at town's expense.

‡ Installed by the State Roads Commission with expense equally divided between the State Roads Commission and the county authorities. Maintenance done by county forces.

Due to changing traffic conditions or relocation of existing routes, revisions were made to existing traffic signals as follows:

Location	Date of Change	Type of Change
Governor Ritchie Highway and Fifth Ave.	8- 4-50	Semi-actuated to flasher except during school hours
Georgia Ave. and Forest Glen Road	8-25-50	Semi-actuated to flasher
Southwestern Blvd. and Sulphur Spring Rd.	9-16-50	Signal discontinued
U. S. Route 40 and Rolling Road	9-18-50	Flasher to semi-actuated
Old U. S. Route 13 and State St., Delmar	9-20-50	Flasher discontinued
Defense Highway and Edmonston Road	2- 6-51	Added signal for pedestrians
Pulaski Highway and Otsego St.	4-17-51	Added signal for left turn
Reisterstown Rd. and Westminster Pike	4-18-51	Installed green arrows
Georgia Ave. and Forest Glen Rd.	6- 1-51	Signal discontinued
U. S. Route 301 and Md. Route 5, T.B.	6-26-51	Signal discontinued

At the conclusion of the fiscal year from July 1, 1951 to June 30, 1952 signalized intersections had been increased by 21 new locations, determined by numerous investigations, including approximately 97 requests. The cost of installation and maintenance at many of the new locations was at the full or partial expense of county and town authorities as noted below. The new installations are as follows:

Location	Date Put into Service	Type
Md. Routes 170 and 175, Odenton	7-27-51	Semi-actuated
University Lane and Colesville Rd.	8-27-51	Semi-actuated
Washington and Fenwick Sts., Leonardtown*	9-10-51	Fixed-time
Chillum and Sargent Roads	10-5-51	Full-actuated
New Hampshire Ave. and Piney Branch Rd.	10-11-51	Semi-actuated
Md. Routes 300 and 313, Sudlersville†	10-17-51	Fixed-time
Rockville By-pass and Viers Mill Rd.	10-22-51	Fixed-time
Connecticut Ave. and Jones Bridge-Kensington Pkwy.	11-21-51	Fixed-time
Old U. S. Route 40 and Morgan Station Rd.	12-17-51	Fixed-time
Reisterstown Rd. and Milford Mill Rd.	1-21-52	Semi-actuated
East-West Highway and Jones Mill Rd., Beach Drive.	1-25-52	Semi-actuated
Georgia Ave. and Seminary Rd.‡	2-1-52	Fixed-time
Md. Route 7 and Edgewood-Emmorton Rd.	2-11-52	Flasher
Wilkens Ave. and Beachfield-Kensington Rd.§	4-2-52	Semi-actuated
U. S. Route 13 and State St., Delmar**	4-4-52	Semi-actuated
Old Annapolis Rd. and Maple Rd.	5-2-52	Semi-actuated
Governor Ritchie Highway and Ordnance Depot Rd.	5-16-52	Three-phase actuated
Md. Route 5 and St. Barnabas Rd.	6-3-52	Full-actuated
Washington Blvd. and Madison St., Hyattsville.	6-10-52	Fixed-time
Washington Blvd. and Longfellow St., Hyattsville.	6-10-52	Fixed-time
Harford and Putty Hill Rds.††	6-16-52	Fixed-time

(The State Roads Commission resumed maintenance of the signal at Pulaski Highway and Md. Route 22 on July 3, 1951 at the expense of the Town authorities.)

\* Installed by State Roads Commission at Town's expense.

† Installed by State Roads Commission with cost divided equally between the State Roads Commission and Town authorities. Maintenance done by the State Roads Commission at Town authorities' expense.

‡ Installed by the State Roads Commission at County's expense.

§ Installed by the State Roads Commission with the cost divided equally between the State Roads Commission and the County authorities. Maintenance done by the State Roads Commission with the expense divided equally between the State Roads Commission and County authorities.

\*\* Installed by the State Roads Commission with the expense divided as follows: State Roads Commission 37 $\frac{1}{2}$ ¢, Delaware 37 $\frac{1}{2}$ ¢, Delmar, Del. 12 $\frac{1}{2}$ ¢, Delmar, Md. 12 $\frac{1}{2}$ ¢. Maintenance done by State Roads Commission with cost split equally between Delmar, Maryland and Delmar, Delaware.

†† Installed by Baltimore County with the expense of installation and maintenance divided equally between the State Roads Commission and the County authorities.

Revisions made during the second fiscal year covered by this report are shown below:

Location	Date of Change	Type of Change
Washington and Fenwick Sts., Leonardtown.	10-4-51	Two-phase to three-phase
New Hampshire Ave. and Ray Rd.	11-20-51	Semi-actuated to full-actuated
Old U. S. Route 40 and Md. Route 32	12-17-51	Signal discontinued
U. S. Routes 40 and 222	2-25-52	Installed green arrow
Eastern Blvd. and Moffett Ave.	3-12-52	Two-phase to three-phase
Washington Blvd. and Knox Road	4-21-52	Two-phase to three-phase
U. S. Route 40 and Morgan Station Rd.	5-13-52	Installed green arrow
Marlboro By-pass and Md. Route 4	5-27-52	Fixed-time to full-actuated
Washington Blvd. and Oglethorpe St.	6-9-52	Interconnected to system through Hyattsville

This Division was maintaining 174 signal locations as of June 30, 1952, one at the expense of Westinghouse, five at the expense of local and county authorities, two with the expense equally divided between the State Roads Commission and county authorities, leaving 166 signalized intersections being maintained at the Commission's expense.

At present there are four employees assigned to signal installation and maintenance, with headquarters at Southern Avenue, Glen Burnie Garage, and Marlboro Garage. There are three ladder trucks, one utility truck, and one pick-up truck assigned to this work. In addition to the signal duties performed, these men are charged with the replacement of obsolete light bulbs or those destroyed by vandals on the bridges of the State highway system.

### INVENTORY AND MAPPING SECTION

#### *Inventory*

This section is under the immediate supervision of George W. Cassell, Supervisor of Inventory and Mapping.

To meet the demand of a nation on wheels for adequate roads, the highway administrator and the highway engineer have found greater need than ever before for the factual data secured by the road field inventory.

These data are used in establishing priority for programming highway projects; for the allocation of maintenance funds in preparation of annual budget requirements for both the State and county highway systems; preparation of new highway maps; revision of existing highway maps; determination of the justification of additions and deletions to the various Federal-aid systems of highways; and maintenance of a current record of the physical condition and mileage of the various highway systems.

During the biennium, road field inventories were completed in Carroll, Cecil, St. Marys, and Wicomico Counties which totaled 2,920 miles of public roads. In the early spring of each year, field inventories are made on those public roads reported by State and county highway officials as additions or improvements to the various highway systems. These data are tabulated annually in such a manner that tables, reports, etcetera, of highway mileage by highway systems, type of surfacing, width of surfacing, and physical condition of the highways for each county, district, and the State, as a whole, are currently up to date.

The State highway system, as of January 1, 1952, comprised a total of 4,736 miles. During the early part of 1952 a thorough study was made of the entire State system and a primary State system consisting of 1,749 miles was selected and approved by the State Roads Commission.

Sufficiency ratings for the primary State system of highways are now being developed. These sufficiency ratings will evaluate the needs of this system of roads and will provide a means of promoting confidence and understanding by the public which must support a program for meeting these needs.

Control sections for the primary State highway system were established in



cooperation with the District Engineers and placed in operation on July 1, 1952. These control sections will provide a source of comparison of annual maintenance costs on a section by section basis.

Additions, deletions, and changes in surface types of the municipal street system of all incorporated towns and special taxing areas have been kept current by this Division from annual reports submitted by the various towns as required by Chapter 560, Acts of 1947.

These data are used to determine the distribution of the gasoline tax and motor vehicle revenue funds for each fiscal year. The annual payments to the towns and counties, exclusive of Baltimore City, from the above sources averaged \$550.46 per mile during the fiscal year 1950-51, and \$561.71 per mile for the fiscal year 1951-52.

The inventory section, in cooperation with the District Engineers, prepares annually the Traffic and Highway Engineering Report for the inventory of State traffic safety activities sponsored by the National Safety Council on a nationwide basis. The final grading of this section placed Maryland sixteenth among the forty-eight States.

The urban traffic problem was recognized in the Federal-aid Highway Act of 1944 which provided for three systems upon which Federal-aid funds would be allocated for highway improvements. These three systems, Federal-aid Primary, Federal-aid Secondary, and Federal-aid Urban, were selected by this Division with the cooperation of the District Engineers, County Commissioners, and officials of all incorporated towns with a population of 5,000 or more. Since the original Act was based upon the 1940 census, it was necessary to expand the urban limits of two towns and add four new urban areas which passed the 5,000 mark in the 1950 census.

The Federal-aid Urban System of highways has been selected and approved for twelve of the thirteen designated urban areas of Maryland. Selection of this system in the last area is well under way. The designation of the Federal-aid Urban System necessitated a revision of both the Federal-aid Primary and Federal-aid Secondary Systems. This revision has been completed and the mileages are as follows:

- 1—Federal-aid Urban System  
State highways and connecting city streets—309.7 miles
- 2—Federal-aid Primary System  
State highways only—1653.3 miles
- 3—Federal-aid Secondary System  
State highways—2422.8 miles  
County highways—2868.5 miles  
City connecting streets—51.9 miles

Annually, a series of loadometer surveys are made in the field to secure information on the weights, sizes, and types of trucks using the highways of Maryland. These data are used to establish trends in traffic classifications, in the gross weights and axle weight distribution of commercial vehicles.

During the last two years, these loadometer studies have been expanded from an eight to a sixteen hour period at ten field stations strategically located throughout the State. In addition, the 1951 study was made on a seasonal basis, instead of yearly, in order to check the seasonal fluctuations in loading practices.

The Division of Road Design is a major user of these studies. The amount, type, and weight of present and anticipated traffic is one of the major factors considered in road design. The Maryland General Assembly of 1951 found this information to be of great value in studying legislation relating to vehicle weights and sizes. The U. S. Bureau of Public Roads is able to develop national and regional trends in vehicular weights and sizes and the American Association of State Highway Officials is able to intelligently review their policy on maximum dimensions and weights of commercial vehicles.

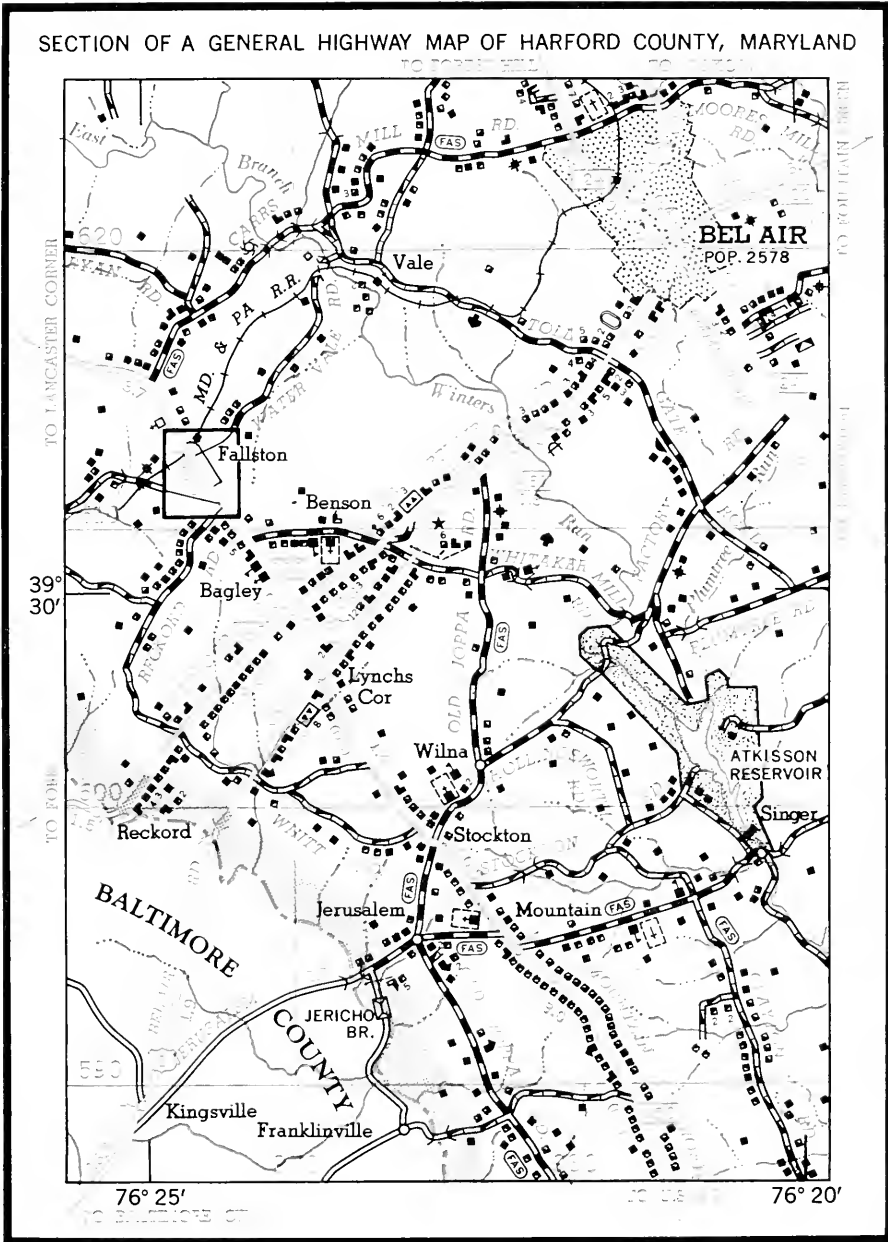
### *Mapping*

The Division, by means of constant research and application of all modern procedures, is continually improving its method of preparing and reproducing highway maps. The new series of highway maps, published by this Division, are considered by the nation's map makers as the finest in the entire country. The mapping techniques used are constantly being reviewed by other States as an aid in improving their map programs. The constructive criticism received from the people who use these maps is most welcome since it is through this medium that better and more useful maps can and will be made.

During the two years covered by this report, highway maps in full colors have been published in two sizes or scales—one inch equals one mile and one inch equals two miles—for Baltimore, Harford, Howard, Montgomery, Prince Georges, and St. Marys Counties. In addition, the areas adjacent to Baltimore City and the District of Columbia have been mapped on enlarged scales and published. Maps of these areas total six in number and are designed in such a manner that the three map sheets covering each area may be fitted together to form a single map of the metropolitan sections of each of the two centers of population.

Highway maps of Carroll, Cecil, Frederick, Washington, and Wicomico Counties are in the drafting stage and are scheduled for publication during 1952 and 1953. Existing maps of the counties, in black and white, for which the new colored map series have not been published, are currently revised from the annual reports of local highway authorities. Reprints are secured in quantities estimated to last a period of two years. The above methods provide printed maps of each county with highway data corrected within the two year period.

The large wall map of Maryland showing the State highway system and important county road connections was revised and reprinted during the spring of 1952. Using this map as a base, the annual average daily traffic volumes are shown for each State highway intersection or junction. These maps, known as traffic volume maps, are widely used and are in demand by such persons and organizations as the various



SECTION OF A GENERAL HIGHWAY MAP OF HARFORD COUNTY, MARYLAND

oil companies, consulting engineers, county and State authorities, transportation companies, etcetera.

The "Official Highway Map" or tourist map is revised, reprinted, and distributed without charge each year to the motoring public. This type of map is by far the most widely used of the various highways maps. Maryland's tourist map is considered ideal, in that the method of folding and ease of reading is most unique. The reports received from the users of this type of map are, indeed, most gratifying and a source of personal pride to those employees of this Division who have made such a map possible.

The demand for highway maps is ever increasing, as evidenced by the distribution, during the biennium, of 150,000 copies of the tourist map; 5,829 copies of the county highway map series; 863 copies of the large wall map of the State; and 436 copies of the traffic volume map.

The Division has, on numerous occasions, been called upon to prepare special charts and maps for the Civil Defense authorities, the University of Maryland, the Department of Forests and Parks, the Department of Game and Inland Fish, and other State departments.

A series of three maps depicting by width of band the average daily traffic volume of each highway route on the primary State highway system for the years 1937, 1941, and 1951 were prepared and distributed. These maps were prepared to demonstrate the tremendous increases and changes in traffic patterns occurring over the fifteen year period covered by the maps. It was not by coincidence that these maps were prepared during 1952, since the opening of the Chesapeake Bay Bridge is expected to exert an influence on the future traffic patterns in Maryland.

Similar maps showing traffic volumes on the Primary State Highway System will be prepared for future years and it will be possible, by comparison with the present maps, to correctly determine the volume and extent of this influence on Maryland's traffic pattern.

Sketch maps showing the system of marked highways through the City of Baltimore were prepared and distributed to the various hotels and tourist directing agencies.

The Division reviews all new maps of Maryland prepared by the various Federal, State, and commercial mapping agencies. Information regarding new highways and changes in highway route markings are supplied to these agencies prior to the publication of new editions of their maps.

#### FISCAL

Every other year, the Committee on Highway Finance of the American Association of State Highway Officials requires an evaluation of the highway needs of the Federal-aid Systems on a continuing and uniform basis. These data are needed in connection with determinations of labor, equipment, and material requirements consistent with the most effective use of the Nation's resources. The data are also used at congressional hearings on Federal-aid legislation.

These reports on costs of needed highway improvements to the Federal-aid highway systems, which have been prepared by the Traffic Division in cooperation with the Office Engineer, are being continually expanded by the Committee on Highway Finance. In order that these reports may be properly prepared in the future, completion of the sufficiency ratings and coordination with the Commission's proposed fifteen year highway improvement program is essential.

Data regarding the source of all local highway funds spent on county highway construction and maintenance for the twenty-three counties for each of the two fiscal years have been secured by this Division. These data are now being reviewed and prepared in proper form for submission to the U. S. Bureau of Public Roads.

The reports required by the U. S. Bureau of Public Roads and prepared by this Division are as follows:

Name of Report	Period Covered by Report
Motor Vehicle Registration Statistics	Month, calendar and registration year
Actual Gallons of Gasoline Sold	Month and calendar year
Application of Gasoline Tax Revenue	Month and calendar year
Distribution of Refunds	Month and calendar year
Distribution of Motor Vehicle Receipts	Month and calendar year
Retail Prices of Gasoline	Monthly

#### BUREAU OF CONTROL SURVEYS AND MAPS

The Bureau of Control Surveys and Maps has functioned as a part of the Traffic Division. The objectives of the Bureau as set up by law are very extensive and would require a reasonably large force. Therefore, the work has been scheduled to follow these objectives in the order in which they will be of most value to the engineering profession.

A considerable amount of effort has been made to consolidate the data of other agencies into a complete record of the survey information pertaining to Maryland. This information has been filed in such a way that the material is readily available, and in many cases requests for information can be furnished immediately over the telephone. It is the aim of the Bureau to solicit additional control points from engineers and surveyors so that, eventually, enough points will be located to warrant the use of the State coordinate system.

In the latter part of 1951 the State Tax Commission requested the Bureau to direct the preparation of tax maps for the State of Maryland. The Bureau prepared specifications for producing these maps, recommended an organization deemed necessary to perform the work, and prepared original budget estimates.

The Bureau continues to cooperate with the Tax Commission on this project by keeping close contact with the work as it progresses to insure that these maps are made in conformity with the specifications and standard map procedures.

Cataloging and maintaining the map library of all published maps of the State constitutes a major part of the work of the Bureau. Maps are constantly being added to the collection.

In 1951 an amendment to the original law was passed which added to the Ad-

visory Board the Director of the State Planning Commission and the Director of the Department of Geology, Mines and Water Resources. Those now on the Advisory Board are: Dean S. S. Steinberg, Chairman; Wm. F. Childs, Jr; Nathan L. Smith; I. Alvin Pasarew; and Joseph T. Singewald, Jr.

#### TRUCK PATROL

The Truck Patrol, which is attached to the Traffic Division, is charged with the enforcement of truck weight and size limitations as prescribed in the Motor Vehicle Code of Maryland.

The maximum strength of this unit is 15 crews, each normally consisting of two uniformed patrolmen and two semi-skilled laborers. However, there has been a gradual loss in the uniformed personnel of the Truck Patrol, with the result that only 13 crews conducted weighing operations last year, and five of these were staffed by only one uniformed patrolman. Future plans call for bringing the Truck Patrol up to its original strength of 15 crews fully manned which will result in a greater scope of coverage.

Each crew has as its equipment one pair of loadometers (portable scales) equalizer blocks, and other necessary accessories, together with a motor vehicle Carry-all for transportation, thus permitting the weighing of trucks on the highways. Each vehicle is equipped with a two-way radio making it possible for these mobile units to be contacted by their supervisors at any time while at their assigned posts, for special instructions, or reassignment.

The following tabulation shows the results of truck weighing activities for the period from July 1, 1950 through June 30, 1951 and from July 1, 1951 through June 30, 1952.

#### *Weighing Operations*

	July 1, 1950 thru June 30, 1951	July 1, 1951 thru June 30, 1952
Number of trucks weighed.....	202,032	163,370
Number of arrests.....	2,867	1,938
Number of cases tried.....	2,836	1,960
Number of cases pending trial (June 30).....	172	150
Number of cases fined.....	2,548	1,915
Number of cases suspended.....	231	4
Number of cases dismissed.....	57	41
Number of cases jailed in default.....	2	—
Amount of fines imposed.....	\$101,669.45	\$154,382.62

A comparison between the two periods clearly shows the effect of the changes in the law governing the weighing of commercial vehicles, which became effective on June 1, 1951. The average fine imposed prior to the new enforcing regulation was \$39.90; and the average fine since that date was \$80.62. Suspensions have been eliminated and the four shown for the period from July 1, 1951 through June 30, 1952 were arrests made prior to June 1, 1951 and came under the old laws.

During the period from July 1, 1951 through June 30, 1952, 24 cases were appealed by the defendants and two by the State. In 24 of these cases the decisions of the Circuit Courts were in favor of the State and in only two were decisions rendered in favor of the defendants.

In addition to the cruising patrols of the truck weight crews now in use, it is planned to establish a number of permanent weighing stations at strategic locations on the Primary highway system. The platform scales have been purchased, plans for the design of the stations are being prepared by the Design Division, and the Right-of-Way Division is currently conducting negotiations for the acquisition of the necessary property at each location.

The Truck Patrol is playing a very important part in the Civil Defense program as set up for the State of Maryland. Due to the two-way communications installations, with which each vehicle is equipped, it is possible to contact the crews in a matter of minutes. In connection with Civil Defense activities each crew is assigned a definite headquarters at which to report immediately upon receipt of the alert signal. During the several practice alerts held it has been demonstrated that the Truck Patrol will be of immeasurable value in any emergency.

The Truck Patrol has proved to be a very flexible and valuable unit in connection with certain other phases of work of the Traffic Division. With the ever-increasing demands upon the regularly-assigned personnel of the Traffic Division proper, the Truck Patrol is available for special assignments, in the gathering of field data, obtaining interviews, etc., in connection with origin and destination studies, loadometer resurvey studies, as well as other special studies, requested by the State Roads Commission and the U. S. Bureau of Public Roads.

#### ORIGIN AND DESTINATION STUDIES

This section is under the immediate supervision of Ernest W. Bunting, Traffic Analyst.

A number of origin and destination studies were made during the period covered by this report. Normally, the data obtained from these studies are used to determine which of a number of projected lines or proposals for new routes would benefit the greatest number of motorists, but in some cases the solution sought is much more complex and varied. The method used in these studies is to select one or more stations strategically located along the route to be studied and establish an interview station at that point. All vehicles passing are stopped and the driver of each, interviewed. The interviewing is carried on for a period of 16, 18, or 24 hours, depending on the known traffic volume pattern at the location. From observations made during the interview, the interviewer records the type of vehicle, whether or not registered in Maryland, and the time of passing. The answer to the simple question "Where did you come from and where are you going" when tabulated for approximately 90 per cent of the vehicles passing through the station, gives a very accurate picture of the needs and desires of the motorists using the route under study.

Application of the origin and destination study methods used have been successful in determining the overall needs of a large area, specifically, an incorporated town. Added to the list of incorporated town studies made previously, with comprehensive reports published and released for Hagerstown, Frederick, and Cumberland, were those of Salisbury and Annapolis, which were completed and issued during the biennium.

By resolution, the 1952 Legislature requested the State Roads Commission to make a thorough study to determine the feasibility of operating a ferry service across the lower Chesapeake Bay, using the vessels which will be released from the Sandy Point-Matapeake run upon completion of the Chesapeake Bay Bridge. A series of origin and destination studies to be made at various locations so situated that the traffic potential to a lower bay ferry may be obtained, have been scheduled. Following completion of the field work, the results will be tabulated, analyzed, and a report issued.

The State Roads Commission has retained Coverdale and Colpitts, Engineering Consultants, to make a study to ascertain the feasibility of establishing toll roads in Maryland. In connection with this study, the Traffic Division has been requested by Coverdale and Colpitts to make a series of 21 origin and destination studies at locations selected by them. The data obtained will be tabulated by the Division and sent to Coverdale and Colpitts for analysis and preparation of a report to the Commission.

#### *Accident Studies*

The accident data on file at the Statistics Division of the Maryland State Police, which are frequently utilized in the investigations and special studies made to determine a solution to a traffic problem at a specific location, were used to develop several comprehensive accident studies of entire route sections of state highways.

An analysis was made and a report prepared showing comparative accident data on the ten State routes which had the highest number of fatal accidents and fatalities for the calendar year 1950.

A straight line diagram of the Baltimore-Washington Boulevard showing, by symbols, the location of all accidents by type of accident, and indicating whether or not the accident occurred during darkness or daylight, was prepared for each of the years 1949, 1950, and 1951.



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**RESEARCH DIVISION**

E. L. WORTHINGTON

*Research Engineer*

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SECTION OF U. S. ROUTE 50 AT QUEENSTOWN, MD.

## RESEARCH DIVISION

The Research Division, operating directly under the Chief Engineer's Office is a newcomer in the organization, having been initiated in November of 1951. It is still in the formative Stage and at present consists of only a Research Engineer and a Secretary.

It is contemplated that the organization will be expanded to include an Assistant Research Engineer, Research Technicians and Clerical personnel.

The purposes for which the Research Division has been set up are as follows:

1. To stimulate and correlate research activities of the State Roads Commission and other organizations pertaining to highway activities, leading to improvement in highway facilities and highway transportation.

2. To extend knowledge of the latest techniques in highway engineering and to benefit highway design, construction, maintenance, and administration whenever possible.

3. To review the research activities of other agencies carrying on research and investigations pertaining to highway activities, and dissemination of this information within the State Roads Commission.

4. To compile reports covering the research activities within the State Roads Commission and dissemination of these reports to interested parties.

5. To study the practical application of research findings to fill immediate needs.

6. To explore the possibilities of using new materials and new processes, and to seek better ways of utilizing and conserving materials.

7. To bring together practicing engineers, with their needs and their administrative experience; and scientists with their own specialized knowledge and skills.

8. To set up a program of research which will reflect the coordinated needs of the several operating departments and divisions of the State Roads Commission.

9. To develop an interest in the program of research by the several department and division heads of the State Roads Commission to the extent that findings will be translated into use.

During the final seven months of the biennial period, the Research Division has accomplished the following:

1. Investigated the design of rigid and flexible types of pavements and made recommendations.

2. Developed a set of instructions for the Control of Bituminous Concrete Paving, Leveling and Widening, for use of the Field Engineers and Inspectors.

3. Developed a new standard form for recording the results of road roughness indicator tests on pavement surfaces.

4. Developed a new standard form for recording daily screen analysis of bituminous concrete mixes.
5. Developed a new standard form for final reports on bituminous paving projects.
6. Prepared data concerning proposed test section of cement concrete pavement to determine merits of Special Drainage & Expansion-Contraction Relief Devices.
7. Represented the State Roads Commission in monthly conferences concerning a cooperative research project on storm water drainage sponsored by Baltimore City, Baltimore County and the State Roads Commission.
8. Investigated and reported on the patching of cement concrete pavements with cement concrete.
9. Recommended a proposed type of Research organization to be set up within the State Roads Commission organization.
10. Investigated and reported concerning the channelization of intersections.
11. Investigated and reported concerning methods of expediting the work on contract construction projects.
12. Developed a set of projects proposed for research in cooperation with the Johns Hopkins University.

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**PERMITS AND OUTDOOR ADVERTISING**

AUSTIN F. SHURE  
*Assistant to Chief Engineer*

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SECTION OF U. S. ROUTE ALTERNATE 40—SHOWING CURVE EASEMENT AT WEST SLOPE OF BRADDOCK MOUNTAIN

## PERMITS AND OUTDOOR ADVERTISING

### RESTRICTIONS ON HIGHWAY USE

The laws of Maryland specify certain controls over the public and private use of the State System of Highways.

The Commissioner of Motor Vehicles administers the Motor Vehicle Laws which control the operation of all types of automotive equipment.

The State Roads Commission administers the authority, under the State laws, of maintaining the traveled way and the entire width of right of way, regulating the use of the area for any purpose other than that for which the highway and its facilities were intended, so as to insure adequate and uninterrupted service to the traveling public.

In the exercising of this authority, the Commission must have adequate legal right to control those public and private interests who also might have a legal or a precedented right to occupy the highway right of way with certain forms of installations.

Permits are granted subject to engineering and traffic regulations and these requirements must be adequate to meet the ever-changing conditions. Laws also must be sufficiently "up to date" to support those necessary regulations.

The Commission's biennial Report for the years 1949 and 1950, and under the "Permits and Outdoor Advertising" section, suggested in a general way certain additional legislation which would be helpful. A portion of this legislation became law and was made effective in 1951. What was done is helpful but not sufficiently adequate. Further legislation is now desirable and suggestions are contained herein for consideration at the proper time.

- (1) Adequate legal support for the use of the performance or permit bond as an assurance of good faith by the permittee in complying with the permit requirements.

The use of the performance bond or the filing of the certified check with the permit application has become common practice throughout the State and their effectiveness has been proven. Any question arising as to the legality of their use would be most harmful in the enforcement of permit requirements.

- (2) Chapter 611 of the Acts of 1951 grants certain authority to the Commission for the control of the building of entrances or connections between private property and the State highway. The requirements are limited to those highways carrying a daily traffic of two thousand vehicles or more. The phraseology of the law as enacted isn't sufficiently suitable for proper control on certain of the State highways where adequate control is important. Embarrassment has resulted in certain instances in the attempt to enforce standard requirements, so a revision of the existing law is desirable.

- (3) The Billboard Law, Article 56, Section 332-342, inclusive, of the Acts of 1931, makes no reference to sign maintenance by the owner. Many of these signs become disreputable in appearance, and provision should be made whereby the Commission should have the authority to remove the sign if the owner fails, after suitable notification, to restore its appearance.
- (4) Better control of billboard location is suggested. The regulations should carry the requirement that no advertising matter is permitted within the limits of the highway. Furthermore, permits will not be granted for the installation of any advertising matter within three hundred feet of a private dwelling.
- (5) The \$10.00 flat fee for oversize and overweight permits is not equitable, neither is it in many instances adequate. Under this legalized fee, a permit for an overweight movement is granted whether the distance is one hundred feet, one hundred miles, or the entire length or width of the State. Pennsylvania, Delaware, and other states use the ton-mile basis in determining the fee for the amount of overload for which a permit is granted. It would seem that the legalized authority for putting this requirement into effect would be proper.

Flat nominal fees can be used for oversize movements with possible additional costs on the basis of a "sliding scale" in the case of moving buildings and where the traffic is interrupted for certain periods of time. The justification for the "sliding scale" of costs for movements of this kind is obvious when one considers that the longer a building is permitted to remain on the highway, the greater the cost of inspection and police control.

- (6) Consideration should be given to the legalizing of exacting a nominal fee for the issuance of certain permits and of a kind where a permit is granted for occupancy within the limits of the State highway above and below ground. Considerable time is consumed by the Commission's employees in the processing of these permits and in making the necessary field inspections; also, in checking up as the work progresses in determining whether or not the Commission's requirements are being complied with.

At least two of the Districts make use of a full-time and experienced employee to keep in touch with this kind of work. The fees should be adequate to cover the expense incurred.

The permits issued during the period from July 1, 1950 to June 30, 1952, inclusive, and under the general direction of Miss Anne T. Stickles, Supervisor of Permits, are listed hereunder:

July 1, 1950 to June 30, 1951		July 1, 1951 to June 30, 1952
44	Freeways	73
15	Traffic Signals	16
3,485	Utilities	3,844
7,730	Special Hauling	9,824
\$86,160	Revenue from Special Hauling	\$111,950



Revenue from Outdoor Advertising and special activities incident to the enforcement of the Billboard Law under the supervision of Mr. Paul E. Sutherland, Director of Outdoor Advertising, amounts to the following:

July 1, 1950 to June 30, 1951	
Sign License Revenue .....	\$3,670.86
Sign Permit Tag Revenue .....	\$10,766.73
	<hr/>
	\$14,437.59
Signs of General Nature removed from roads .....	328
Signs of Cardboard Type removed from roads .....	3,200
Signs removed from newly acquired Right of Way .....	111
	<hr/>
	3,642
July 1, 1951 to June 30, 1952	
Sign License Revenue .....	\$3,987.46
Sign Permit Tag Revenue .....	\$10,778.43
	<hr/>
	\$14,765.89
Signs of General Nature removed from roads .....	103
Signs of Cardboard Type removed from roads .....	12,000
Signs removed from newly acquired Right of Way .....	30
	<hr/>
	12,133



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**PERSONNEL, PENSIONS, AND WORKMEN'S  
COMPENSATION DIVISION**

W. PHELPS THOMAS

*Personnel Manager*

SHERIDAN F. SMITH

*Workmen's Compensation Investigator*

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SECTION OF NEWLY CONSTRUCTED HURLOCK TO FINCHVILLE ROAD

## PERSONNEL, PENSIONS, AND WORKMEN'S COMPENSATION

The work-load of the Personnel Division has continued to be heavy throughout the two fiscal years. The functions performed by this Division may best be visualized by breaking them down into periodic duties as follows:

- Annual:        Efficiency Ratings  
                 Computation and carry-over of Annual Leave
- Semiannual:  Standard Salary Plan Change Tickets (individual increments falling  
                 on July 1 or January 1)
- Monthly:     Processing Monthly Leave Reports and related medical certificates  
                 Employees' Retirement System enrollment and certifications  
                 Blue Cross enrollment
- Daily:        Status changes and the processing of Entry, Change, Transfer and  
                 Cut-off Tickets  
                 Permanent Appointments (from certified lists of eligibles)  
                 Temporary Appointments (made in the absence of eligible lists)  
                 Short-term or Summer Employment  
                 Appointments for physical examinations  
                 Requests for Leave of Absence without Pay (other than military)  
                 Military Leaves and Reinstatements from Military Leave  
                 Requests for Extended Sick Leave (infrequent)  
                 Interviewing for referral and placement  
                 Recruiting (through sources of supply or by advertisement)  
                 Job Classification (establishment of new positions and the reclassifi-  
                 cation of existing positions)  
                 Job Specifications (cooperation in the drafting and revision of test  
                 announcements)  
                 Processing Employer's First Report of Injury and Claims for Com-  
                 pensation

### PERSONNEL

Total employment has been relatively stable throughout the two year period. Roads salaried groups show an overall increase of 55 employees while Roads hourly groups show a decrease of 79 employees. By a coincidence, the total number of employees 3,005 was identical at the beginning and the end of the period.

*Interviewing and Processing Job Applicants*

The selection of employees to meet our personnel needs involves several basic steps:

- (1) The prompt reporting of all immediate vacancies
- (2) The contacting of sources of supply
- (3) The processing of available candidates by interviewing, referral and selection

Our main recruiting sources remain the State Employment Commissioner, the State Roads Commission itself, the Maryland State Employment Service, the Baltimore City Schools Placement Service and colleges and universities. Each job applicant is asked to fill out a Roads application form which provides basic information about his personal history and record of experience. The completed application serves as a basis for preliminary interview in the Personnel Office and referral to the proper Division head for final interview. A total of 285 applicants were registered and referred to Engineering Divisions and other Divisions located in Baltimore City alone for the last six months covered by this report.

During the two year period, 744 persons were placed in 29 Engineering classifications by the hiring of new employees and the promotion and transfer of present employees to higher rated positions. The policy of promotion from within, whenever possible has been followed with a consequent increase in the number of positions so vacated. The result obtained for 29 of these classifications is shown in an accompanying table.

The lack of experienced applicants was most seriously encountered by our Division of Road Design wherein vacancies for young graduate engineers were in excess of applicants to fill these positions. Advertisements were run in three engineering publications in an attempt to fill vacancies requiring the services of young engineering graduates. At times the shortage of experienced stenographers has been a critical one requiring us to advertise for such employees in order to fill immediate vacancies. The need for Junior Engineering Aides II was successfully met by running advertisements in the Baltimore City Press and selected papers throughout the 23 counties.

*Activities, Research and Services Rendered*

Accident prevention activities include participation in the annual Governor's Safety-Health Conference and Exhibit, the distribution of safety materials made available by the State Industrial Accident Commission, our insurer the State Accident Fund and the Maryland State Police among others. In 1951, a revised series of Safety-Health Administrative memoranda was issued covering the topics of tick bites, poison ivy and heat fatigue.

Chapter 665 of the Acts of 1951 provided that State employees holding temporary appointments for 14 months prior to June 1, 1951 should receive permanent classification without examination. Pursuant thereto a total of 55 employees including 22 Truck Patrolman were adopted into the Merit System as of June 1, 1951.

Analysis of Absence due to Illness. A comparative study suggested by data contained in the *31st annual report of the State Employment Commissioner* (1951) was made of possible abuse of the sick leave privilege by certain classes of State employees. Using as a source the Efficiency Ratings of January 1, 1951, a listing was made of those classes (General and Roads) whose record for the calendar year 1950 showed a relatively high sick leave frequency and of those incumbents whose record showed 10 or more times sick or 20 or more total days sick. It is hoped that an improvement will be shown in the future and that any further studies will indicate a marked decrease in this type of absence from duty.

First Aid Training in cooperation with the American Red Cross. Three 45-hour first aid Instructor Training courses were held in 1951, at Salisbury, Frederick and Upper Marlboro. These courses resulted in the certification of 36 qualified first aid Instructors representing Construction and Maintenance personnel assigned to 5 Engineering Districts (1, 2, 3, 5 and 6). In the Baltimore area 17 employees completed the first aid standard course and of these 8 went on and completed the advanced course.

Information was gathered on the Training Programs for Junior Engineers conducted by nine State Highway Departments having such programs in operation. The information and materials received were made available to the Chief Engineer and to the Public Administration Service representatives. The original replies and materials remain on file at the Personnel Office.

### *Procedures*

During this period the following form-letters and procedures were developed by the Personnel Division:

- Employment Letter in reply to job applicants
- Employment Letter in reply to Engineering Graduates
- Graduate Engineer Questionnaire for Roads personnel
- Memorandum on Monthly Leave Reporting
- Efficiency Rating procedures

A Personnel Administrative Memorandum series was begun which now includes:

1. Vacancy Procedure, Classified Service
2. Employees Entrance Check List

An Injury-Compensation Administrative series was also begun based upon "injury in the line of duty" as defined in *Bulletin N. S. 45* re: Leave with pay regulations, M. S. Rule 50, and *Bulletin N. S. 51* re: Revised Monthly Leave Report.

### *Public Administration Service*

During the last months of the period the Personnel Division had the opportunity to cooperate with representatives of the Public Administration Service, Chicago,

PERSONNEL TABLES

Date	Total Employees	ROADS (proper)		Ferry and Toll Facilities
		Salaried	Hourly	
June 30, 1950	3,005	1670	981	354
Dec. 31, 1950	2,929	1660	913	356
June 30, 1951	2,936	1656	920	360
Dec. 31, 1951	2,906	1635	896	375
June 30, 1952	3,005	1725	902	378

NUMBER OF JOB APPLICANTS RECEIVED AND REFERRED BY THE PERSONNEL DIVISION FOR THE PERIOD JANUARY 1952 THROUGH JUNE 1952

Applicants for permanent jobs . . . . .	211	Non-Engineering:	
Applicants for temporary jobs . . . . .	74	Accounting, Clerical Stenographic . . .	82
Total Job Applicants . . . . .	285	Engineering Operations:	
		Construction . . . . .	46
		Design . . . . .	55
		Location and Survey . . . . .	72
		Others . . . . .	30
		Total Job Applicants . . . . .	285

NUMBER OF EMPLOYEES HIRED, AND PROMOTED (INCLUDING TRANSFERS) IN 29 ENGINEERING CLASSIFICATIONS, AND THE NUMBER VACATING THE POSITIONS FOR VARIOUS REASONS

Classification	Total Filled	Filled by Promotion	Filled by New Employees	Total Vacated Jobs
Assistant Chief Engineer . . . . .	1	1	0	1
Assistant R W Examiner I . . . . .	1	1	0	0
Bituminous Plant Inspector . . . . .	1	0	1	0
Bridge Engineer . . . . .	1	1	0	0
Civil Engineering Aide . . . . .	9	8	1	1
Jr. Assistant Bridge Engineer I . . . . .	7	6	1	6
Jr. Assistant Bridge Engineer II . . . . .	18	10	8	26
Jr. Assistant Highway Engineer I . . . . .	26	22	4	13
Jr. Assistant Highway Engineer II . . . . .	39	26	13	34
Jr. Bridge Draftsman . . . . .	3	0	3	2
Jr. Draftsman I . . . . .	23	16	7	11
Jr. Draftsman II . . . . .	64	3	61	39
Jr. Engineering Aide I . . . . .	37	33	4	26
Jr. Engineering Aide II . . . . .	154	1	153	113
Materials Inspector I . . . . .	12	10	2	0
Materials Inspector II . . . . .	6	5	1	2
Materials Inspector III . . . . .	6	4	2	0
R W Examiner I . . . . .	8	6	2	1
R W Examiner II . . . . .	9	7	2	2
R W Examiner III . . . . .	15	4	11	19
Road Inspector I . . . . .	4	0	4	8
Road Inspector II . . . . .	76	55	21	28
Road Inspector III . . . . .	184	7	177	149
Senior Assistant Highway Engineer I . . . . .	7	7	0	0
Senior Assistant Highway Engineer II . . . . .	9	9	0	2
Senior Draftsman II . . . . .	18	13	5	1
Traffic Analyst I . . . . .	1	1	0	0
Traffic Analyst II . . . . .	2	2	0	0
Traffic Analyst III . . . . .	3	3	0	0
TOTAL . . . . .	744	261	483	484



Illinois, in the studies made of the organization and relative administrative problems of this Commission. Among the information and materials provided by the Personnel Division were the following:

1. A list of the classified and unclassified positions used within this Commission and assigned Standard Salary Scales
2. A set of official SEC job specifications or test announcements for the same classifications
3. A list of Roads positions requiring college degrees, engineering and non-engineering, with names of incumbents holding such degrees. Much of this information was already at hand through the Graduate Engineer Questionnaire of December, 1951.
4. A survey of Engineering promotions over the last three calendar years with following results shown:
  - 33 such promotions in 1949,
  - 41 in 1950 and
  - 97 in 1951.
5. Certain basic data on total Engineering employees, temporary employees, terminations and retirements from which a measurement of Engineering employee turnover was derived by the Public Administration Service.

#### PENSIONS

Membership in the Employees' Retirement System is a condition of employment with the State, and it is compulsory that all regular employees belong.

The enrollment of new members in the Employees' Retirement System shows 983 enrolled during the fiscal years of 1951 and 1952. This was a gain of 16 employees over the years of 1949 and 1950.

The number of employees enrolled on a monthly basis in the System during the fiscal years of 1951 and 1952 is as follows:

July 1, 1950-June 30, 1951		July 1, 1950-June 30, 1952	
Month	No. Enrolled	Month	No. Enrolled
July 1, 1950	58	July 1, 1951	38
Aug. 1, 1950	32	Aug. 1, 1951	36
Sept. 1, 1950	60	Sept. 1, 1951	52
Oct. 1, 1950	39	Oct. 1, 1951	39
Nov. 1, 1950	64	Nov. 1, 1951	13
Dec. 1, 1950	55	Dec. 1, 1951	43
Jan. 1, 1951	35	Jan. 1, 1952	47
Feb. 1, 1951	11	Feb. 1, 1952	41
March 1, 1951	11	March 1, 1952	65
April 1, 1951	13	April 1, 1952	48
May 1, 1951	39	May 1, 1952	42
June 1, 1951	57	June 1, 1952	45
<b>TOTAL</b>	<b>474</b>	<b>TOTAL</b>	<b>509</b>

WORKMEN'S COMPENSATION

*Accident Prevention*

How can accidents be prevented? Accidents, both major and minor, can be prevented only through knowledge, thought, work and continuing effort—job planning, teaching and showing, supervision and follow-up, organization and teamwork. In short, we must all realize that we are our brothers' keepers and act that way.

Clearly, accidents should be prevented if only from the humanitarian motive of saving life and limb and of preventing human suffering. Other powerful motives are the resultant loss of time and skills, the disruption of work schedules and the lowered morale of the injured and of fellow workers. Further, it is estimated that the indirect costs of accidental injuries amount to several times the direct costs. The following table is inserted to high-light recent liberalization of the Maryland Workmen's Compensation law and to underscore the increased responsibility falling upon all of us, both employees and supervisors, to adopt and follow safe work practices as a part of our duty to the State service and to the State Roads Commission.

MAJOR CHANGES IN BENEFITS, EFFECTIVE JUNE 1, 1951, IN MARYLAND WORKMEN'S COMPENSATION LAW DESIGNED TO SHOW INCREASE IN DIRECT COSTS

	1951	Previous provision (date)
Compensation for Death—Maximum . . . . .	\$10,000	\$7500 (1947)
Compensation for Temporary Total Disability—Maximum . . . . .	5,000	4500 (1949)
Compensation for Temporary Partial Disability—Maximum . . . . .	4,000	3500 (1947)
Compensation for Partial Disability (other cases) Maximum . . . . .	7,500	5000 (1949)
Maximum Weekly Rates		
Temporary Total Disability . . . . .	32	28 (1949)
Permanent Partial Disability . . . . .	25	20 (1945)
Temporary Partial Disability . . . . .	25	20 (1931)
Permanent Partial Disability (other cases) . . . . .	25	20 (1945)
Permanent Total Disability . . . . .	10,000	7500 (1943)
	32	28 (1949)
Occupational Diseases . . . . .	Complete coverage	As per schedule (1939)

*Workmen's Compensation Cases and Costs*

The number of accidents and total expenditures have decreased during the two-year period. All Districts and Divisions have helped to make this decrease possible. The following brief summary is presented for purposes of comparison.

- July 1, 1948 to June 30, 1950
  - Total Cases, 807
  - Total Expenses, \$63,702.16
- July 1, 1950 to June 30, 1952
  - Total Cases, 649
  - Total Expenses, \$48,146.11

Three fatal accidents occurred within the fiscal year 1952. Of these, only one, the first was attributed to human failure on the part of Roads personnel. The second was caused by the recklessness or excessive speed of a third party, while the primary cause of the third fatality was mechanical failure in a piece of Road equipment.

Charles R. Castle, a Highway Maintenance Man of Washington County, was crushed and killed instantly by a backing 14-ton grader while acting as flagman on July 11, 1951. Apparently Mr. Castle fainted or stumbled, and fell forward into the path of the grader's left rear wheel. His untimely death was investigated by the Maryland State Police, the engineering District, and the Personnel Director. The latter made recommendations to the Commission for the prevention of similar accidents. Subsequently instructions were issued by the Chief Engineer governing flagmen on both maintenance and construction work.

The second fatality occurred on August 31, 1951, when a Ford Coupe driven by a Navy man returning from leave struck our Centaur mower resulting in the death of our operator, James E. Curry. This untimely death was investigated immediately by the Maryland State Police.

The third fatal accident occurred on June 17, 1952. While employee John W. Rice was riding in cab of paint truck the drive shaft twisted throwing truck out of control. Mr. Rice jumped from cab onto the ground while the truck was in motion and later was taken to the Miners' Hospital at Frostburg where he died.

The two tables following show the distribution of accidents and injuries arising out of and in the course of employment for two successive twelve month periods within the six Districts and the various Divisions of the Commission.

## REPORT OF THE STATE ROADS COMMISSION OF MARYLAND

SUMMARY OF WORKMEN'S COMPENSATION, TIME LOST, AND COSTS  
JULY 1, 1950 TO JUNE 30, 1951

	Cases	Days Lost	Days Compensable
State Roads Employees			
District No. 1 .....	11	119	103
District No. 2 .....	51	226	171
District No. 3 .....	21	324	216
District No. 4 .....	46	295	243
District No. 5 .....	30	127	129
District No. 6 .....	55	93	68
Division No. 8 .....	1	—	—
Division No. 11 .....	2	—	—
Division No. 13 .....	23	54	16
Division No. 14 .....	1	—	—
Division No. 15 .....	1	—	—
Division No. 16 .....	7	4	—
Division No. 18 .....	1	8	5
Division No. 20 .....	21	105	84
Division No. 21 .....	13	20	17
County Roads Employees			
District No. 1 .....	22	130	96
District No. 2 .....	26	159	128
District No. 5 .....	5	24	18
Chesapeake Bay Ferry System .....	10	15	4
TOTALS .....	347	1,703	1,298
Third Party Cases			
District No. 4 .....	3		
District No. 6 .....	3		
Division No. 21 .....	2		
TOTAL .....	8		

## EXPENDITURES

Compensation:		
State .....	\$5,225.48	
County .....	1,424.79	
Ferry .....	14.00	
Total .....		\$6,664.27
Medical:		
State .....	\$5,501.16	
County .....	842.75	
Ferry .....	41.00	
Total .....		\$6,384.91
Hospital:		
State .....	\$1,386.64	
County .....	793.20	
Ferry .....	7.50	
Totals .....		\$2,187.34
GRAND TOTAL .....		\$15,236.52

SUMMARY OF WORKMEN'S COMPENSATION CASES, TIME LOST, AND COSTS  
JULY 1, 1951 TO JUNE 30, 1952

	Cases	Days Lost	Days Compensable
<b>State Roads Employees</b>			
District No. 1 .....	11	188	173
District No. 2 .....	34	123	80
District No. 3 .....	46	57	32
District No. 4 .....	46	184	149
District No. 5 .....	24	124	92
District No. 6 .....	60	531	347
Division No. 8 .....	1	—	—
Division No. 11 .....	2	7	4
Division No. 12 .....	1	—	—
Division No. 13 .....	10	39	33
Division No. 15 .....	1	—	—
Division No. 16 .....	3	21	16
Division No. 20 .....	20	33	15
Division No. 21 .....	5	58	52
Division No. 24 .....	1	—	—
Division No. 26 .....	2	—	—
<b>County Roads Employees</b>			
District No. 1 .....	17	198	169
District No. 2 .....	31	128	68
District No. 5 .....	4	—	—
<b>Chesapeake Ferry Employees</b>			
	29	91	55
<b>TOTALS</b> .....	<b>302</b>	<b>1,782</b>	<b>1,285</b>
<b>Fatal Cases:</b>			
July 11, 1951, Mr. Charles R. Castle, District No. 6			
August 31, 1951, Mr. James E. Curry, District No. 5			
June 17, 1952, Mr. John W. Rice, Di- vision No. 15			
<b>Third Party Cases:</b>			
District No. 4 .....	2		
District No. 2 .....	1		
Division No. 16 .....	1		
Division No. 20 .....	1		
<b>TOTAL</b> .....	<b>5</b>		

**EXPENDITURES**

<b>Compensation:</b>	
State .....	\$25,302.58
County .....	508.42
Ferry .....	37.33
<b>Total</b> .....	<b>\$25,848.33</b>
<b>Medical</b>	
State .....	\$4,615.66
County .....	269.00
Ferry .....	178.00
<b>Total</b> .....	<b>\$5,062.66</b>
<b>Hospital:</b>	
State .....	\$1,325.85
County .....	43.75
Ferry .....	29.00
<b>Total</b> .....	<b>\$1,398.60</b>
<b>Funeral Expenses</b> .....	<b>600.00</b>
<b>GRAND TOTAL</b> .....	<b>\$32,909.59</b>



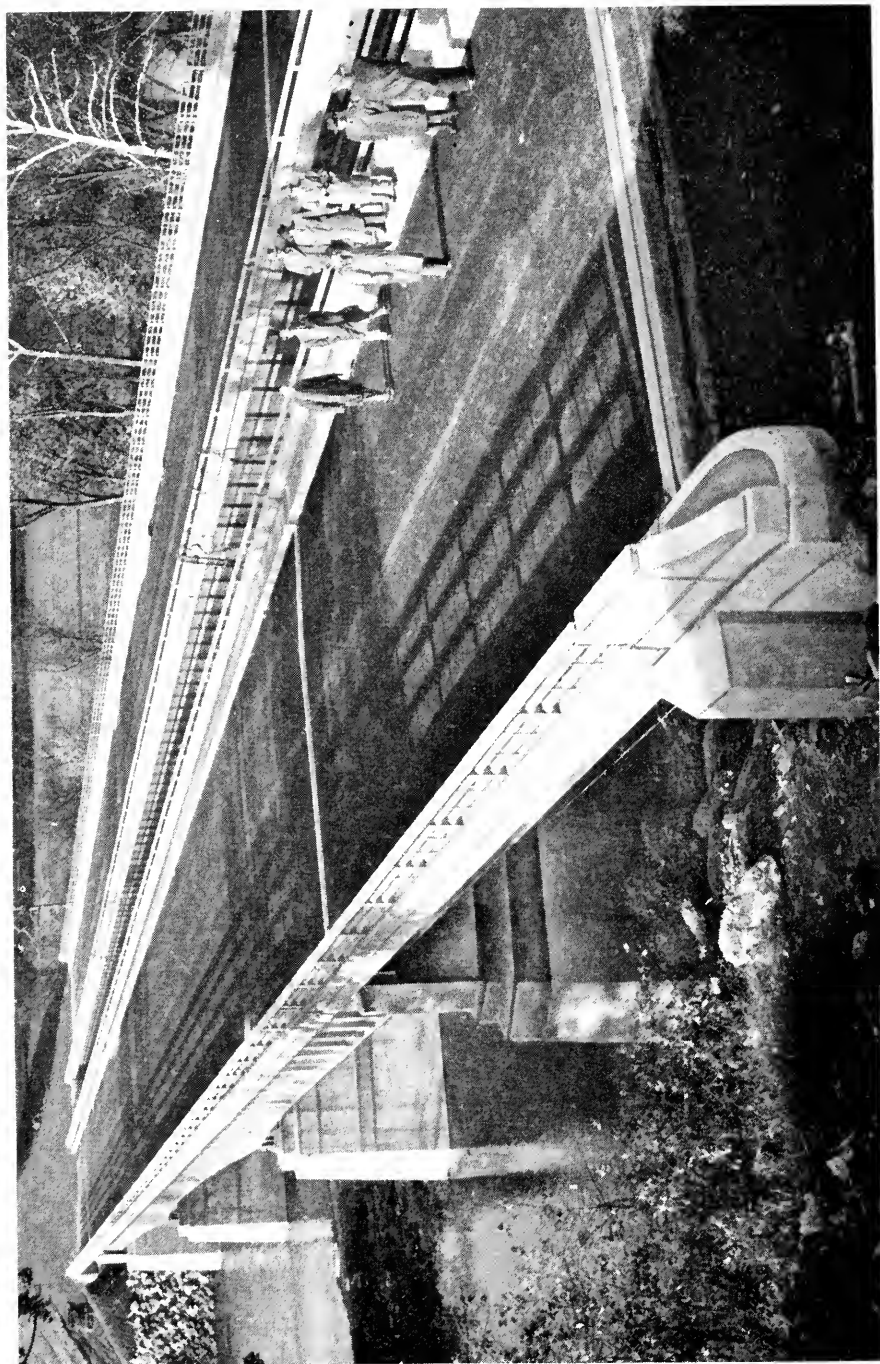
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**PUBLIC RELATIONS DIVISION**

CLINTON H. JOHNSON

*Director of Public Relations*

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INSPECTION OF DUAL BRIDGE OVER MONACACY RIVER WASHINGTON NATIONAL PIKE ON NOVEMBER 3, 1951



## PUBLIC RELATIONS DIVISION

During the two-year period covered by this report the Public Relations Division has continued to function as the State Roads Commission's principal source of factual information concerning the activities of its other divisions.

During the summer of 1950 the Division's information service, in the form of regular news releases covering road projects planned or in progress throughout the State—a service which previously had been limited to newspapers, wire services and highway-user periodicals—was extended to include radio and television stations in Maryland and the District of Columbia.

During the summer of 1951, in cooperation with Station WBAL-TV in Baltimore, the Division produced a series of weekly 15-minute television shows designed to acquaint the public with some of the lesser-known phases of the Commission's operations. Seven such shows were produced and the result, as measured by the volume and nature of written comments received at the WBAL studio, clearly established the value of television as a means of carrying the highway story to the public.

In the autumn of 1950, and again in 1951, the Division planned and staged a series of "Seeing Is Believing" tours, following the same pattern that had proved its popularity when first undertaken in 1949. These tours have afforded an opportunity for weekly newspaper editors, daily newspaper reporters and radio news commentators to inspect all the major road projects in progress throughout the State so that they can acquire at first hand material of interest to their readers and listeners. It should be noted that Governor McKeldin's endorsement of this idea was demonstrated by his personal participation in the 1951 tours.

That the Division's activities are having a cumulative effect in arousing public interest in highway affairs in Maryland has been demonstrated by the steady increase in requests from daily and weekly newspapers for "special service" stories on specific topics and for detailed data, not regularly part of the Division's informational service, to serve as the basis for feature articles and editorials. The Division has done its best to fill these requests with its limited staff.

Unlike most of the Commission's other divisions, the accomplishments of the Public Relations Division do not lend themselves to statistical evaluation. The only records of such a nature are those showing the amount of space devoted to Maryland highway news stories, pictures and editorials by the newspapers to which such material is sent from this Division. These records show that, from the time the Division started functioning on May 1, 1949, to June 30, 1952, the space so occupied has totaled 158,209 column-inches.

Recently the Public Relations Division has been assigned the special task of planning and supervising ceremonies to mark the forthcoming dedication of the Chesapeake Bay Bridge, scheduled to take place July 30.



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**LEGAL DEPARTMENT**

JOSEPH D. BUSCHER

*Special Assistant Attorney General*

FREDERICK A. PUDERBAUGH

*Special Attorney*

CLARKE MURPHY, JR.

*Special Attorney (July 1, 1950–December 30, 1950)*

JOHN B. RUSSELL

*Special Attorney (July 1, 1950–June 30, 1951)*

ANDREW W. STARRATT, JR.

*Special Attorney (January 22, 1951–June 30, 1952)*

EDWIN T. STEFFY, JR.

*Special Attorney (July 1, 1951–June 30, 1952)*

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SECTION OF U. S. ROUTE 50 AT EASTERN APPROACH TO CHESAPEAKE BAY BRIDGE—LOOKING WEST

## LEGAL DEPARTMENT

### YEAR 1950

The activities of this office during the current year were under the supervision of the Special Assistant Attorney General, along with three Special Attorneys.

The work of the legal department of the Commission for the year 1950 continued to be heavy and involved many and varied problems and cases. The work of the Special Assistant Attorney General consisted primarily in acting as general legal adviser and counsel to the Chairman and Members of the Commission and its employees. This included giving legal advice and opinions, oral and written, on the validity and application of State and Local Laws, conferring on land and title matters, drainage complaints, and the many other and varied legal problems which arise in an active governmental agency doing business with the general public.

This Department also approved all contracts for road construction and all agreements to which the State Roads Commission is a party.

The increase in road contracts required an increase in the number of title examinations necessary in the acquisition of rights of ways. During the year 1950, two thousand six hundred and six (2,606) title examinations were made, at a cost by local attorneys in the twenty-three counties of \$99,383.00. These title examinations were all checked by this office. There were also five hundred and forty (540) closings, involving a total expenditure of \$13,168.50.

Construction contracts increased to such an extent that it became necessary to require more right of way acquisitions than in previous years. It became necessary, also, to file more condemnation cases than in any prior year. During the year 1950, one hundred and sixteen (116) condemnation cases were prepared and filed in the various counties. During the year many cases were tried that had been filed in previous years as well as a number of cases which were filed in 1949. In 1950, seventy (70) condemnation cases were tried or otherwise disposed of. This made it necessary for the Special Assistant Attorney General and the three Special Attorneys to spend two or three days in Court in the prosecution of each case tried.

In addition to the above matters, this office attended many meetings and conferences of the Advisory Council of the State Roads Commission, the Commission itself, and of other groups and individuals and furnished legal advice thereto.

Because of the large increase of work in this Department, it became necessary to employ the services of an additional attorney, and on May 1, 1950, Mr. John B. Russell was appointed as a Special Attorney. On December 30, 1950, Mr. Clarke Murphy, Jr. resigned as Special Attorney, and his successor was appointed. It also became necessary to employ an additional stenographer on May 15, 1950.

### YEAR 1951

As a result of the continuation of the accelerated roads program the functions and duties of the office of the Special Assistant Attorney General to the State Roads

Commission continues to be varied and many. One natural adjunct of the accelerated program is the vast increase in the number of rights of way necessary to be acquired by the Commission. Prior to the accelerated program which began several years ago, the Commission normally acquired only several hundred rights of way annually. During the calendar year ending December 31, 1951, the Commission acquired 1911 rights of way.

Each of these acquisitions involved to a greater or lesser degree the rendering of professional legal services by this Department. In each of the 1911 rights of way acquired, this Department had to procure, through local counsel in the several counties, title examinations. After said examinations were received each examination had to be checked, and when the right of way was finally acquired, this Department had to prepare the deeds and supervise the closing of the transaction and the recording of the deeds to the property involved. The increased number of rights of way acquired naturally reflected a greater number of condemnation cases.

During the last calendar year one hundred and thirty-eight (138) condemnation cases were prepared and filed in the Circuit Courts of the several counties of the State. Many of these cases, because of crowded Court calendars, are still pending. However, during the last calendar year one hundred and six (106) cases, some of which were filed in previous years, were tried or otherwise disposed of. In each of the cases tried the average time necessary for a representative of this office to be present in Court, during the trial of the case, was two days.

In addition to the legal work necessitated by right of way acquisitions, this Department approved all contracts entered into by the Commission for road construction and prepared or assisted in the preparation of all contracts negotiated between the Commission and the various counties throughout the State and between other State or quasi State agencies.

Also this office represented the State Roads Commission and the Members thereof individually in all suits and causes of action brought against the Commission, and the Members, as individuals, acting in their official capacities. These legal services required the filing of appropriate legal papers and appearance in the Circuit Courts in a number of the counties throughout the State of Maryland, and in the Baltimore City Courts and the Court of Appeals.

During the 1951 calendar year the Special Assistant Attorney General or a representative of his office attended all of the meetings of the Advisory Council of the State Roads Commission, many of the meetings of the Commission itself and of other groups or individuals and furnished legal advice as requested.

Mr. John B. Russell resigned as Special Attorney on June 30, 1951, to enter private practice. Mr. Edwin T. Steffy, Jr., a graduate of the University of Maryland Law School, a former officer in the U. S. Naval Reserve and a former member of the legal staff of the Baltimore Transit Company was employed as Special Attorney to the State Roads Commission on July 1, 1951.

The legal staff now consists of Mr. Joseph D. Buscher, Special Assistant Attorney General, Mr. Frederick A. Puderbaugh, Mr. Andrew W. Starratt, Jr. and Mr. Edwin T. Steffy, Jr. Special Attorneys.

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REVENUE BONDS AND TOLL FACILITIES DEPARTMENT

LOUIS J. O'DONNELL  
*Chief Administrative Officer*

WILLIAM A. CODD  
*Chief Auditor—Toll Facilities*  
*(July 1, 1950—May 1, 1952)*

WILLIAM A. JORDAN  
*Chief Maintenance Officer—*  
*Toll Facilities*

B. FRANK SHERMAN  
*General Manager—*  
*Chesapeake Bay Ferry System*

GEORGE W. PHILLIPS  
*Assistant General Manager—*  
*Chesapeake Bay Ferry System*

SUPERVISORS—ACCOUNTING DEPARTMENT

HOWARD J. McNAMARA, JR.  
H. DWIGHT WAHAUS

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CHESAPEAKE BAY BRIDGE LOOKING TOWARD STEVENSVILLE, MARYLAND



## REVENUE BONDS AND TOLL FACILITIES DEPARTMENT

During the fiscal biennium 1951–1952, the Revenue Bonds and Toll Facilities Department administered the operation and maintenance of four projects, which produced revenues aggregating \$9,300,939.71. The Department administered the fund provided from the sale of \$43,925,000 Bridge Revenue Bonds (Series 1948) for the construction of a fifth toll project, the Chesapeake Bay Bridge, and during the latter portion of the biennium, engaged in the necessary preparation for placing it in operation in the month of July, 1952.

In the two-year period covered by this report, the collection personnel on the projects—the Chesapeake Bay Ferry System, the Susquehanna River Bridge, the Potomac River Bridge and, during the last seven months of the biennium, the Patuxent River Bridge—handled 18,690,755 individual vehicular toll transactions. Traffic trends indicate that in the next fiscal year, 1953, this number will rise in excess of 12,000,000 individual toll transactions with the opening of the Chesapeake Bay Bridge and the continued increase in the use of the other major toll spans.

Additions were made to the collection personnel at the Susquehanna and Potomac River Bridges in August of 1951 to handle the increased traffic loads at those structures and to place the collection force on a 5-day week basis.

The audit and verification of collections, centralized in the main office of the Department, was modernized with the installation of equipment to convert several of the processes from manual to machine operations.

Plans are under way for the establishment of a utility crew, based at the Chesapeake Bay Bridge, to undertake the maintenance of all the toll projects, now being performed chiefly by contract forces.

During the biennium, each of the major toll projects showed a substantial increase in usage by the motoring public and, with the exception of the Potomac River Bridge, an increase in truck traffic kept pace with the rise in volume of passenger and light commercial vehicles.

From July 1, 1950 to June 30, 1951, a total of 6,311,442 vehicles, including 1,352,364 trucks crossed the Susquehanna River Bridge. In the following 12-month period, this rose to a total of 7,809,801 vehicles, of which 1,390,343 were in the heavy truck classification. Total revenues for the biennium were \$2,827,655.91 for the aggregate of 14,121,243 vehicular crossings.

In the biennium July 1, 1950, to June 30, 1952, a total of 2,702,088 vehicles crossed the Potomac River Bridge, producing \$2,680,773.05 in revenue. In the first year of the biennium, the vehicular crossings totaled 1,231,664, of which 137,638 were in the truck classifications; in the second year, trucks numbered 129,177 of the year's 1,470,424 crossings.

In the first seven months' operation, December 1, 1951, to June 30, 1952, the

Patuxent River Bridge carried 25,970 vehicles, approximately 90% of which were passenger cars.

The increase in traffic on the Chesapeake Bay Ferry System brought its volume to an all-time high in the last year of operation. Its revenues for the biennium totaled \$3,761,415.25. During the 12 months from July 1, 1950, to June 30, 1951, the five vessels in operation carried 872,259 vehicles, of which 143,775 were trucks, and 1,328,030 passengers across the Chesapeake Bay and Eastern Bay. In its final full year's operation, from July 1, 1951 to June 30, 1952, a total of 969,203 vehicles, of which 150,514 were trucks, made the ferry crossing, in addition to 1,477,166 passengers.

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## ACCOUNTING DEPARTMENT

CARL L. WANNEN, *Comptroller*

MORRIS M. BRODSKY  
*Assistant Comptroller*  
General Accounting

JAMES W. ROUNTREE, JR.  
*Assistant Comptroller*  
Procedures and Controls

CHARLES I. NORRIS  
*Assistant Comptroller*  
Budgets and Costs

SUPERVISORS—GENERAL

JOSEPH E. GERICK  
MORRIS P. MARSTON

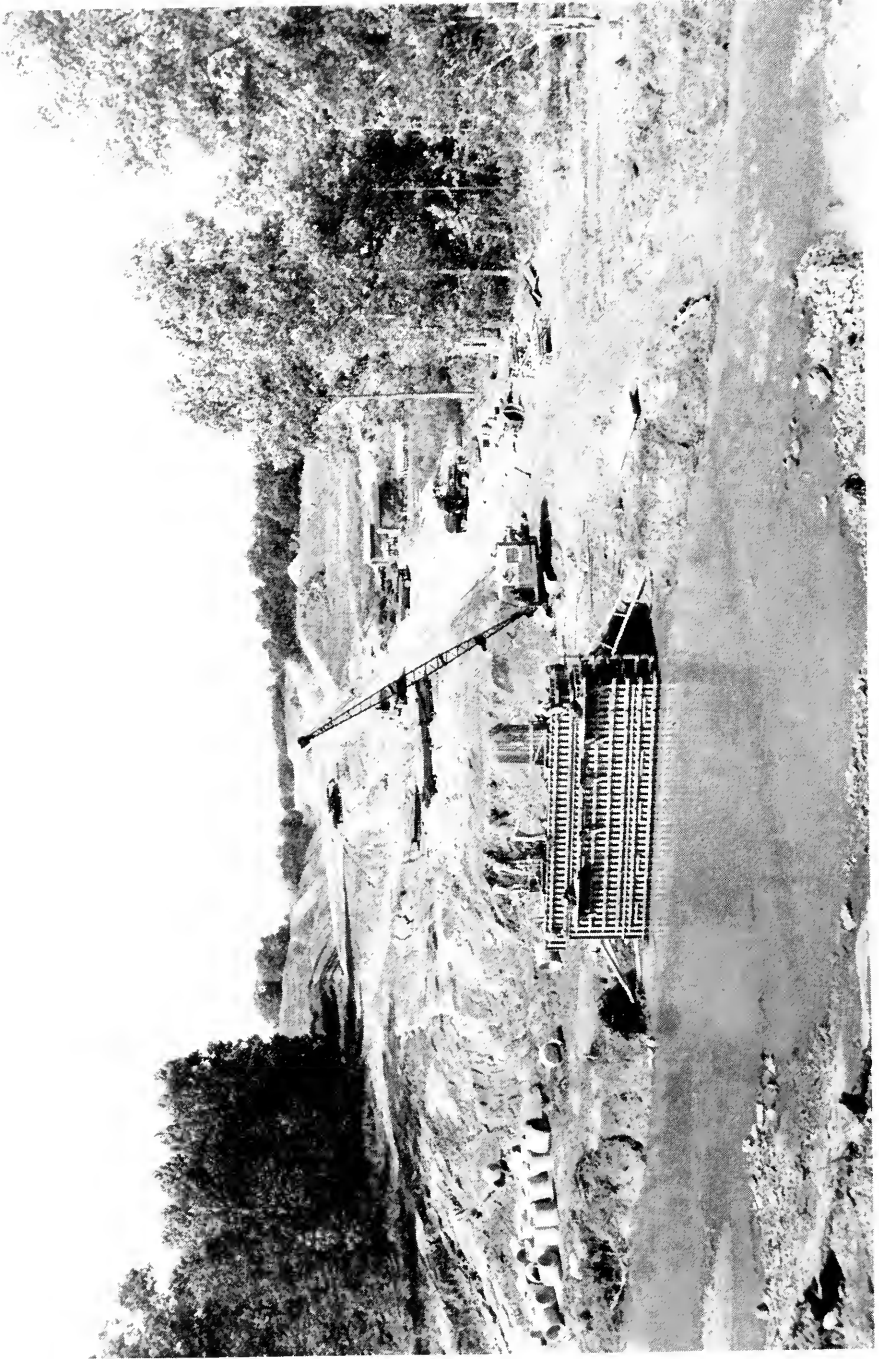
SUPERVISORS—DEPARTMENTAL

JOSEPH T. BUNN  
HENRY L. COMBS  
LESTER S. DISNEY  
CLEMENT M. FRANK

WALTER F. MORAVETZ  
FREDERICK A. ROSEMERE  
S. JOHN STROMER  
IRVING TAYLOR

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CONSTRUCTION OF BRIDGE OVER WESTERN RUN ALONG THE BALTIMORE-HARRISBURG EXPRESSWAY

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# REPORT OF THE COMPTROLLER

December 1, 1952

To the Honorable:

Russell H. McCain, Chairman

Avery W. Hall

David M. Nichols

Members, the State Roads Commission of Maryland.

Sirs:

A report on the finances of the State Roads Commission of Maryland for the fiscal years ended June 30, 1952 and 1951, consisting of financial statements and explanatory comments, is submitted herewith. The financial statements are listed in the accompanying table of contents, and the explanatory comments are as follows:

## GENERAL BASIS OF ACCOUNTING

Revenues and expenditures of the Commission are classified and recorded on a fund-accounting basis; that is, each financial transaction is allocated to one or more of the following Funds:

General Construction and Operating Fund

Maintenance Fund

Counties and Municipalities Tax Revenues Allocation Fund

County Maintenance Funds (a separate fund is maintained for each county)

County Construction Funds (a separate fund is maintained for each county)

Bonded Debt and Debt Service Funds

Toll Bridge Funds (Chesapeake Bay Toll Bridge, Potomac River Toll Bridge, and Susquehanna River Toll Bridge)—Created Under Trust Agreement

Dated October 1, 1948

Chesapeake Bay Ferry System Fund

The accounting system of the Commission provides not only for the fund distribution of expenditures to the various maintenance and construction cost accounts but also for the fund distribution of the same expenditures by objective classification. For objective classification purposes, expenditures are assigned to one of two general groups: (1) expenditures for which the Commission's several department heads are responsible; and (2) expenditures for which no individual department head is responsible, including payments under construction and other contracts, acquisitions of rights-of-way, purchases of fixed assets, and purchases of materials and supplies for storerooms. The accounting system also includes detailed budget

accounts which conform to the requirements of the State's standard classification of expenditures for all State departments and agencies.

Administrative and general expenses of the Commission for the fiscal years under review are reflected by divisions and by descriptive classifications in Exhibits K and L. These expenses were apportioned on a ratable percentage basis to construction and maintenance costs of the Commission incurred in connection with the road systems of the State and Counties and also to costs for work performed by the Commission under special agreements.

Operating equipment expenses of the Commission for the fiscal years 1952 and 1951 are shown by districts and by descriptive classifications in Exhibits M and N, respectively. Distribution of these expenses was made ratably on an hourly-use basis to construction and maintenance costs of the Commission applicable to the State System and to the County Systems and also to costs for work performed by the Commission under special agreements.

Combined statements of departmental and other expenditures (excluding Toll Bridge Funds and Chesapeake Bay Ferry System Fund) for the fiscal years 1952 and 1951, classified by object of expenditure, are presented in Exhibits O and P, respectively.

#### GENERAL CONSTRUCTION AND OPERATING FUND

The revenues and expenditures of this Fund for the fiscal years ended June 30, 1952 and 1951, shown in Exhibit B and Exhibit D, respectively, are summarized as follows:

	Fiscal Year Ended June 30, 1952	1951
REVENUES:		
Gasoline Tax Fund—50% portion . . . . .	\$14,025,035.06	\$12,829,517.92
Excise tax on the issuance of certificates of title to motor vehicles (less refunds) . . . . .	7,135,848.11	7,162,094.70
Total . . . . .	\$21,160,883.17	\$19,991,612.62
Less State Highway Construction Bond Sinking Fund provision . . . . .	6,364,657.58	4,274,289.41
Remainder of State tax revenues . . . . .	\$14,796,225.59	\$15,717,323.21
Federal aid . . . . .	2,514,469.45	2,991,148.44
Portion of Chesapeake Bay Ferry System revenues received on account of redemption of bonds . . . . .	200,000.00	393,626.00
Net income from United States Treasury obligations . . . . .	140,398.54	204,195.22
Reimbursements under special agree- ments, etc. . . . .	534,290.56	357,865.30
Transfers from County Funds as project contributions . . . . .	. . . . .	44,291.80
Transfer from State Highway Construc- tion Bond Fund:		
Net amount derived from the sale of \$25,000,000 Series C bonds . . . . .	. . . . .	24,996,157.65
Net amount derived from the sale of \$25,000,000 Series D bonds . . . . .	24,984,383.26	. . . . .
TOTAL REVENUES . . . . .	\$43,169,767.40	\$44,704,607.62

EXPENDITURES:		
Construction costs.....	\$36,075,541.37	\$40,627,989.83
Federal aid apportioned to Baltimore		
City-Urban Program.....	216,834.05	455,212.76
Other.....	913,245.87	431,735.76
Transfer to Maintenance Fund to supplement revenues.....	1,674,345.13	1,007,667.05
	<hr/>	<hr/>
TOTAL EXPENDITURES.....	\$38,879,966.42	\$42,522,605.40
	<hr/>	<hr/>
Excess of revenues over expenditures.....	\$ 4,289,800.98	\$ 2,182,002.22
Cash balance at beginning of year (including investment in United States Treasury obligations).....	20,572,547.83	18,390,545.61
	<hr/>	<hr/>
Cash balance at end of year (including investment in United States Treasury obligations).....	\$24,862,348.81	\$20,572,547.83
	<hr/>	<hr/>

The balance of \$24,862,348.81 at June 30, 1952, consists of cash with the State Treasurer, \$4,730,618.33, and investment in United State Treasury obligations, \$20,131,730.48.

The 50% share of the Gasoline Tax Fund results from the motor vehicle fuel tax which is imposed at the rate of five cents a gallon. The excise tax on the issuance of certificates of title to motor vehicles represents tax revenues at the rate of 2% of the fair market value of motor vehicles for which original certificates of title or subsequent certificates of title in the case of sales or resales are issued. These revenues are pledged to the extent of debt service requirements for State Highway Construction Bonds issued by the State Roads Commission of Maryland.

Federal aid earnings represent that portion of project costs which is subject to reimbursement by the Federal Government under agreements with the Public Roads Administration. The Federal aid revenue apportioned to Baltimore City in connection with its own projects in the Federal Urban Program is included in this Fund. The status of Federal aid appropriations and project agreements for the fiscal years 1951 and 1952 is shown in Exhibit E and supporting schedule.

In the 1949 fiscal year the General Construction and Operating Fund provided for account of the Chesapeake Bay Ferry System Fund \$1,238,292.70 for the redemption of Chesapeake Bay Ferry System Improvement Bonds of 1945. At the beginning of the two-year period under review \$250,963.00 in partial reimbursement had been received. During the fiscal years 1951 and 1952 further reimbursements of \$393,626.00 and \$200,000.00, respectively, were received.

The proceeds from the sale of State Highway Construction Bonds were currently invested in short term obligations of the United States Treasury to the extent that programmed construction expenditures permitted. The net income from Treasury obligations received in the fiscal years 1951 and 1952 amounted to \$204,195.22 and \$140,398.54, respectively.

Revenues of \$534,290.56 in 1952 and \$357,865.30 in 1951 classified as "Reimbursements under special agreements, etc." include reimbursements of expenditures for account of counties, municipalities, and others as follows:

	Fiscal Year 1952	Ended June 30, 1951
COUNTIES:		
Baltimore .....		\$ 647.44
Calvert .....	\$ 117.36	
Caroline .....		62.24
Cecil .....	60,725.74	43,231.13
Charles .....	696.72	
Dorchester .....		62.23
Kent .....	4,667.40	504.14
Montgomery .....	2,654.96	
Prince George's .....	244.30	
Queen Anne's .....	1,010.35	11,110.59
Somerset .....	5,963.99	25,000.00
Talbot .....	45,622.71	
Wicomico .....	2,192.69	11,860.92
Worcester .....	5,508.80	32,204.03
<b>TOTAL COUNTIES</b> .....	<b>\$129,405.02</b>	<b>\$124,682.72</b>
<b>MUNICIPALITIES</b> .....	<b>12,876.82</b>	<b>7,224.56</b>
<b>OTHER</b> .....	<b>71,138.94</b>	<b>87,758.43</b>
<b>TOTAL</b> .....	<b>\$213,420.78</b>	<b>\$219,665.71</b>

Cash transfers were made from County Funds to the General Construction and Operating Fund representing county participation in the cost of certain projects. Details of these transfers are reflected in the statements pertaining to County Funds.

The funds transferred from the State Highway Construction Bond Fund represent the proceeds from the sale of Series C and Series D bonds after providing for the expenses of their issuance.

Expenditures for the fiscal years under review for construction and reconstruction of roads within the State Highway System are listed by projects in Exhibit F.

Expenditures of \$913,245.87 in 1952 classified as "Other" consist of reimbursable expenditures of \$354,039.35, hauling permit revenues of \$111,950.00 remitted to the State Treasury for credit to the Motor Vehicle Revenue Fund, sign license revenues of \$3,987.46 remitted to the State Treasury General Fund, and net increase of \$443,269.06 in inventories of materials and supplies.

The General Construction and Operating Fund is chargeable each fiscal year, if necessary, with an amount not to exceed \$2,000,000 to supplement revenues of the Maintenance Fund. The summary of expenditures shows the amounts transferred in the 1952 and 1951 fiscal years.

The balance sheets of this Fund at June 30, 1952 and 1951, are set forth in Exhibits A and C, respectively. A comparative summary of these balance sheets follows:

	June 30,	
	1952	1951
<b>ASSETS:</b>		
Cash and investments	\$ 24,862,348.81	\$ 20,572,547.83
Working fund—Payroll and office	500,000.00	500,000.00
Accounts receivable—Federal aid, etc.	1,562,137.15	1,412,333.72
Accounts receivable—Counties, etc.	96,725.28	161,039.03
Inventories of materials and supplies	1,395,596.13	952,327.07
Preliminary construction costs, etc.	117,297.17	605,965.98
Roads system construction and other work in progress	79,962,462.77	67,231,642.68
Future revenues encumbered for the completion of authorized projects	7,599,899.59	21,944,260.01
<b>TOTAL</b>	<u>\$116,096,466.90</u>	<u>\$113,380,116.32</u>
<b>LIABILITIES:</b>		
Unclaimed wages, etc.	\$ 5,252.31	\$ 5,252.31
Due State Comptroller—Working fund advanced	500,000.00	500,000.00
State equity in roads system construction and other work in progress	79,962,462.77	67,231,642.68
Reserve for accounts receivable	1,562,137.15	1,412,333.72
Reserve for completion of authorized projects	34,066,614.67	44,230,887.61
<b>TOTAL</b>	<u>\$116,096,466.90</u>	<u>\$113,380,116.32</u>

The assets of this Fund at June 30, 1952, include \$1,562,137.15 of accounts receivable for Federal aid, etc., earned but not collected. A like amount is represented as a reserve, as it is the Commission's practice to exclude such receivables from revenue until collected. The collections realized from these accounts will reduce the amount of future revenues encumbered at June 30, 1952, for the completion of authorized projects.

A summary of the reserve account for completion of authorized road construction and reconstruction projects for the fiscal years 1952 and 1951 is as follows:

	Fiscal Year Ended June 30,	
	1952	1951
Remainder of construction and reconstruction project expenditures authorized on work in progress at beginning of year	\$44,230,887.61	\$51,674,787.54
Project expenditure authorizations, etc.	25,911,268.43	33,184,089.90
<b>TOTAL</b>	<u>\$70,142,156.04</u>	<u>\$84,858,877.44</u>
Project expenditures	36,075,541.37	40,627,989.83
Remainder of construction and reconstruction project expenditures authorized on work in progress at end of year	<u>\$34,066,614.67</u>	<u>\$44,230,887.61</u>

The net assets underlying the \$34,066,614.67 reserve for the completion of authorized projects at June 30, 1952, include cash and investments, accounts receivable for work performed on a reimbursable basis, inventories of materials and supplies, and advances for preliminary costs, etc., totaling \$26,466,715.08; the remainder of \$7,599,899.59 represents generally the extent to which future

revenues from issuance of State Highway Construction Bonds are encumbered for the completion of authorized projects.

### MAINTENANCE FUND

The revenues and expenditures of this Fund for the fiscal years 1952 and 1951 are set forth in Exhibits B and D and are summarized as follows:

	Fiscal Year Ended June 30, 1952	1951
<b>REVENUES:</b>		
Motor Vehicle Revenue Fund—50% portion	\$4,797,080.85	\$5,358,471.11
Tolls, etc.—Patuxent River Toll Bridge, opened December 1, 1951—Exhibit Q	31,177.19	.....
Sign Permit Fund	10,778.43	10,766.73
Transfer from General Construction and Operating Fund to supplement revenues	1,674,345.13	1,007,667.05
Miscellaneous	34,239.88	19,394.92
<b>TOTAL REVENUES</b>	<b>\$6,547,621.48</b>	<b>\$6,396,299.81</b>
<b>EXPENDITURES:</b>		
Maintenance costs	\$5,708,787.26	\$5,047,034.76
Operation and maintenance of Patuxent River Toll Bridge (from December 1, 1951)	25,470.30	.....
Capital properties acquired	935,203.02	962,522.16
Ocean City beach protection	49,742.20	10,397.58
Sign Permit Fund	9,137.77	10,477.89
Inventory adjustments applicable to prior periods (credit adjustment in italics)	27,666.58	180,783.68
<b>TOTAL EXPENDITURES</b>	<b>\$6,700,673.97</b>	<b>\$6,211,216.07</b>
Excess of revenues over expenditures (excess of expenditures in italics)	\$ 153,052.49	\$ 185,083.74
Cash balance at beginning of year	1,556,333.66	1,371,249.92
Cash balance at end of year	<b>\$1,403,281.17</b>	<b>\$1,556,333.66</b>

Detailed maintenance costs, by districts, are reflected in Schedules 1 and 2 of Exhibit G. At January 1, 1952, the State System consisted of 4,736.26 road miles, shown by districts and by counties as follows:

<b>District No. 1:</b>		
Dorchester County	155.79	
Somerset County	116.55	
Wicomico County	156.61	
Worcester County	171.64	600.59
<b>District No. 2:</b>		
Caroline County	159.83	
Cecil County	200.78	
Kent County	159.32	
Queen Anne's County	169.04	
Talbot County	124.75	813.72



District No. 3:			
Anne Arundel County	283.84		
Carroll County	218.47		
Howard County	162.13		
Montgomery County	334.95	999.39	
<hr/>			
District No. 4:			
Baltimore County	305.23		
Harford County	271.71	576.94	
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District No. 5:			
Calvert County	126.62		
Charles County	278.57		
Prince George's County	281.25		
St. Mary's County	210.95	897.39	
<hr/>			
District No. 6:			
Allegany County	158.58		
Frederick County	301.16		
Garrett County	162.03		
Washington County	226.46	848.23	
<hr/>			
Total road miles		4,736.26	

The assets of this Fund at June 30, 1952, are cash, \$1,403,281.17, and tolls receivable (Patuxent River Toll Bridge), \$191.00. The liabilities consist of a deferred credit for toll tickets sold but unrepresented, \$427.25, and reserves totaling \$1,403,044.92, as follows:

Completion of work on existing authorizations	\$ 53,359.83
Acquisition of district garages and shops and other capital properties	1,274,105.08
Ocean City beach protection	38,453.23
Roadside beautification—Sign Permit Fund	31,419.89
Patuxent River Toll Bridge—Operation and maintenance reserve	5,706.89
Total	<u>\$1,403,044.92</u>

COUNTIES AND MUNICIPALITIES TAX REVENUES  
ALLOCATION FUND

The revenues and expenditures of this Fund for the fiscal years 1952 and 1951 are summarized as follows:

	Fiscal Year Ended June 30, 1952	1951
REVENUES:		
Gasoline Tax Fund—20% portion	\$5,610,014.04	\$5,131,807.13
Motor Vehicle Revenue Fund—20% portion	1,918,832.36	2,143,388.41
TOTAL REVENUES	<u>\$7,528,846.40</u>	<u>\$7,275,195.54</u>

EXPENDITURES:		
Payments to counties.....	\$4,621,155.89	\$4,384,507.97
Payments to municipalities.....	620,279.39	547,706.17
Transfers to County Maintenance Funds.....	2,245,361.41	2,156,918.88
Transfers to County Construction Funds.....	73,126.73	67,654.15
TOTAL EXPENDITURES.....	<u>\$7,559,923.42</u>	<u>\$7,156,787.17</u>
Excess of revenues over expenditures (excess of expenditures in italics).....	\$ 31,077.02	\$ 118,408.37
Cash balance at beginning of year.....	588,394.06	469,985.69
Cash balance at end of year.....	<u>\$ 557,317.04</u>	<u>\$ 588,394.06</u>

The allocation of revenues as to shares of counties and total shares of municipalities within each county is reflected in Schedules 1b of Exhibits B and D for the fiscal years 1952 and 1951, respectively. Schedules 1 and 1a of Exhibits B and D show the individual accounts for counties and municipalities.

Shares of the twelve counties which perform their own road work and shares of all municipalities within counties are remitted direct to the political subdivisions. Shares of the eleven counties in which the State Roads Commission performs maintenance activities on county road systems are administered by the Commission under County Maintenance Funds, to which cash transfers are made. Cash transfers are also made to County Construction Funds to provide the State Roads Commission with funds to finance approved projects in the several counties.

The cash balance of \$557,317.04 in this Fund at June 30, 1952, represents \$327,899.41 payable to counties, payments to whom are generally made on a monthly basis, and \$229,417.63 payable to municipalities, payments being generally made on a quarterly basis.

The mileage inventories of urban paved streets and county rural roads at December 1, 1951, used in distributing 1952-53 highway funds to counties and municipalities other than Baltimore City are as follows:

	Road Mileage Basis for Computing Distributable Shares				
	County			Municipality	Total
	All Rural County Roads	Urban Paved Streets Maintained	Total	Urban Paved Streets Maintained	
Allegany County.....	485.740	.500	486.240	159.745	645.985
Anne Arundel County.....	690.760	.225	690.985	48.385	739.370
Baltimore County.....	1,416.770		1,416.770		1,416.770
Calvert County.....	191.790	1.600	193.390	11.641	205.031
Caroline County.....	449.070	3.313	452.383	27.417	479.800
Carroll County.....	710.670	.640	711.310	49.689	760.999
Cecil County.....	443.230	.380	443.610	24.156	467.766
Charles County.....	281.990		281.990	7.420	289.410
Dorchester County.....	495.500	2.290	497.790	33.545	531.335
Frederick County.....	959.660	2.720	962.380	89.356	1,051.736
Garrett County.....	720.380	2.225	722.605	39.674	762.279
Harford County.....	559.390		559.390	51.960	611.350
Howard County.....	294.880		294.880		294.880
Kent County.....	227.100	.450	227.550	10.076	237.626
Montgomery County.....	812.840	2.995	815.835	99.248	915.083
Prince George's County.....	487.750	87.930	575.680	209.045	784.725
Queen Anne's County.....	386.770		386.770	9.755	396.525
St. Mary's County.....	277.180		277.180	2.120	279.300
Somerset County.....	287.290		287.290	16.986	304.276
Talbot County.....	271.960	.926	272.886	33.476	306.362
Washington County.....	633.540		633.540	140.345	773.885
Wicomico County.....	517.180	17.777	534.957	67.173	602.130
Worcester County.....	448.290	.200	448.490	35.735	484.225
Total Mileage.....	12,049.730	124.171	12,173.901	1,166.947	13,340.848

Certain minimum shares are prescribed by law in determining county allocations.

### COUNTY MAINTENANCE FUNDS

A summary of the consolidated revenues and expenditures of the County Maintenance Funds for the eleven counties whose road maintenance activities are carried on by the State Roads Commission is as follows:

	Fiscal Year Ended June 30,	
	1952	1951
<b>REVENUES:</b>		
Remittances by counties.....	\$ 80,786.62	\$ 107,134.33
Transfers from Counties and Municipalities		
Tax Revenues Allocation Fund.....	2,245,361.41	2,156,918.88
Rental of county equipment.....	1,676.00	2,422.00
<b>TOTAL REVENUES.....</b>	<b>\$2,327,824.03</b>	<b>\$2,266,475.21</b>
<b>EXPENDITURES:</b>		
Maintenance costs.....	\$2,171,966.48	\$1,990,397.00
Special project—road surface treatment.....		29,883.98
Purchases of equipment.....	45,632.81	
Transfers to County Construction Funds...	75,273.15	96,410.83
Transfers to General Construction and Operating Fund.....		210.61
<b>TOTAL EXPENDITURES.....</b>	<b>\$2,292,872.44</b>	<b>\$2,116,902.42</b>

Excess of revenues over expenditures.....	\$ 34,951.59	\$ 149,572.79
Cash balance at beginning of year.....	506,086.38	356,513.59
	<u>541,037.97</u>	<u>506,086.38</u>
Cash balance at end of year.....	\$ 541,037.97	\$ 506,086.38

Revenues and expenditures by counties are set forth in detail in Schedules 2 of Exhibits B and D. Analyses of maintenance costs by counties and by descriptive classifications are set forth in Exhibits H and I.

The cash balance of \$541,037.97 at June 30, 1952, consists of cash balances of nine counties aggregating \$553,017.16, less overdrawn balances in two counties totaling \$11,979.19. Schedules 1 of Exhibits A and C show the individual balance sheet for each county.

At December 1, 1951, the eleven county road systems maintained by the State Roads Commission of Maryland comprised 3,806.496 road miles.

### COUNTY CONSTRUCTION FUNDS

The consolidated revenues and expenditures of all County Construction Funds for the fiscal years 1952 and 1951 are summarized as follows:

	Fiscal Year Ended June 30, 1952	1951
<b>REVENUES:</b>		
Remittances by counties.....	\$ 30,417.98	\$ 235,943.03
Federal aid apportioned by State.....	419,389.91	603,301.43
Transfers from Counties and Municipalities		
Tax Revenues Allocation Fund.....	73,126.73	67,654.15
Transfers from County Maintenance Funds..	75,273.15	96,410.83
<b>TOTAL REVENUES.....</b>	<u>\$598,207.77</u>	<u>\$1,003,309.44</u>
<b>EXPENDITURES:</b>		
Construction costs.....	\$840,144.00	\$ 773,647.79
Federal aid apportioned and paid to:		
Frederick County.....	66,978.08	103,561.54
Dorchester County.....	1,500.00	.....
Transfers to General Construction and Operating Fund.....		44,081.19
<b>TOTAL EXPENDITURES.....</b>	<u>\$908,622.08</u>	<u>\$ 921,290.52</u>
Excess of revenues over expenditures (excess of expenditures in italics).....	\$ <i>310,414.31</i>	\$ 82,018.92
Cash balance at beginning of year.....	315,300.66	233,281.74
	<u>4,886.35</u>	<u>315,300.66</u>
Cash balance at end of year.....	\$ 4,886.35	\$ 315,300.66

Schedules 3 of Exhibits B and D for the fiscal years 1952 and 1951, respectively, set forth in detail the revenues and expenditures for each county. Construction costs are shown by counties and by projects in Exhibit J of this report.

The cash balance of \$4,886.35 at June 30, 1952, consists of balances for six counties aggregating \$294,894.18, less overdrawn balances of fourteen counties totaling \$290,007.83. Anticipated funds scheduled from Federal aid programs, cash balances

and authorized expenditures at June 30, 1952, and estimated balances for future authorizations are reflected in Schedule 3a of Exhibit B.

A consolidated balance sheet of all counties at June 30, 1952 and 1951, is as follows:

	June 30,	
	1952	1951
<b>ASSETS:</b>		
Cash with State Treasurer .....	\$ 4,886.35	\$ 315,300.66
Accounts receivable—Federal aid allocations.....	69,969.05	161,579.00
Future revenues encumbered for the completion of authorized projects .....	529,158.88	818,454.41
<b>TOTAL.....</b>	<b>\$604,014.28</b>	<b>\$1,295,334.07</b>
<b>LIABILITIES:</b>		
Reserves for completion of authorized projects .....	\$370,928.72	\$ 888,159.02
Reserves for accounts receivable.....	69,969.05	161,579.00
Surplus.....	163,116.51	245,596.05
<b>TOTAL.....</b>	<b>\$604,014.28</b>	<b>\$1,295,334.07</b>

Schedules 2 of Exhibits A and C set forth the balance sheet of each county at June 30, 1952 and 1951, respectively.

A summary of road construction authorizations and expenditures for all counties for the fiscal years ended June 30, 1952 and 1951, is as follows:

	Fiscal Year Ended June 30,	
	1952	1951
Remainder of construction and reconstruction project expenditures authorized on work in progress at beginning of year .....	\$ 888,159.02	\$ 617,737.11
Project expenditure authorizations .....	322,913.70	1,088,150.89
<b>TOTAL.....</b>	<b>\$1,211,072.72</b>	<b>\$1,705,888.00</b>
Project expenditures (excluding Federal aid remitted to counties).....	840,144.00	817,728.98
Remainder of construction and reconstruction project expenditures authorized on work in progress at end of year.....	<b>\$ 370,928.72</b>	<b>\$ 888,159.02</b>

BONDED DEBT AND DEBT SERVICE FUNDS

The revenues and expenditures of the Bonded Debt and Debt Service Funds for the fiscal years 1952 and 1951 are summarized as follows:

	Fiscal Year Ended June 30,	
	1952	1951
<b>REVENUES:</b>		
Portion of the proceeds of 50% share of the Gasoline Tax Fund .....	\$ 4,808,165.59	\$ 3,212,402.60
Portion of the proceeds of Excise Tax on Issuance of certificates of Title to Motor Vehicles .....	1,556,491.99	1,061,886.81
Proceeds from sale of State Highway Construction Bonds:		
Series C (including premium, \$7,250.00, and accrued interest, \$19,748.97).....		25,026,998.97
Series D (including premium, \$1,475.00, and accrued interest, \$14,061.32).....	25,015,536.32	
Net income from United States Treasury obligations .....	120,398.83	
<b>TOTAL REVENUES</b> .....	<b>\$31,500,592.73</b>	<b>\$29,301,288.38</b>
<b>EXPENDITURES:</b>		
Redemption of State Highway Construction Bonds .....	\$ 3,332,000.00	\$ 1,666,000.00
Interest on State Highway Construction Bonds .....	997,895.08	632,692.41
Bond issue expenses .....	31,153.06	30,841.32
Transfer to General Construction and Operating Fund—net funds available for construction projects.....	24,984,383.26	24,996,157.65
<b>TOTAL EXPENDITURES</b> .....	<b>\$29,345,431.40</b>	<b>\$27,325,691.38</b>
Excess of revenues over expenditures.....	\$ 2,155,161.33	\$ 1,975,597.00
Cash balance at beginning of year (including investment in United States Treasury obligations).....	4,087,233.00	2,111,636.00
Cash balance at end of year (including investment in United States Treasury obligations).....	<b>\$ 6,242,394.33</b>	<b>\$ 4,087,233.00</b>

Revenues and expenditures of the Bonded Debt and Debt Service Funds are set forth in detail in Schedules 4 of Exhibits B and D.

The balance of \$6,242,394.33 at June 30, 1952, includes \$6,111,595.50 of tax revenue funds set aside for redemption of \$4,998,000.00 par value State Highway Construction Bonds maturing in the 1953 fiscal year and for the payment of \$1,113,595.50 of interest due on outstanding State Highway Construction Bonds in the 1953 fiscal year. The remainder of funds represents \$120,398.83 of income from Sinking Fund investments, said sum to be used to provide in part the debt service requirements for the 1954 fiscal year on State Highway Construction

Bonds, and \$10,400.00 required to redeem unrepresented bonds of another issue called in a prior period.

The Legislature of 1947 authorized and empowered the State Roads Commission of Maryland to issue in series from time to time by formal resolution State Highway Construction Bonds not to exceed in the aggregate \$100,000,000 and directed that the proceeds from all issues, after providing for certain debt retirement, etc., be used for the financing of authorized construction projects. The status of the State Highway Construction Bond authorization of \$100,000,000 at June 30, 1952, is as follows:

Authorized by the Commission and issued:

Series A, dated August 1, 1949 . . . . .	\$ 22,500,000
Series B, dated December 1, 1949 . . . . .	2,500,000
Series C, dated December 1, 1950 . . . . .	25,000,000
Series D, dated December 1, 1951 . . . . .	25,000,000
Authorized by the Commission but unissued (to be issued as required) . . . . .	25,000,000
<b>TOTAL . . . . .</b>	<b><u>\$100,000,000</u></b>

The Series C State Highway Construction Bonds of a total par value of \$25,000,000 were sold at a premium of .029%, or a total of \$25,007,250. The total interest requirement for Series C bonds, less the premium realized, results in an average annual interest rate of 1.45051%.

The Series D State Highway Construction Bonds of a total par value of \$25,000,000 were sold at a premium of .0059%, or a total of \$25,001,475. The total interest requirements for Series D bonds, less the premium realized, indicate an average annual rate of 1.73046%.

State Highway Construction Bonds of a total par value of \$75,000,000 had been issued and \$4,998,000 of those bonds had been redeemed prior to the close of the 1952 fiscal year, leaving \$70,002,000 of bonds outstanding at June 30, 1952. Debt service requirements for outstanding State Highway Construction Bonds are shown in Schedule 3a of Exhibit A.

### TOLL BRIDGE FUNDS

Toll and other revenues of the Susquehanna River Toll Bridge, the Potomac River Toll Bridge, and the Chesapeake Bay Toll Bridge (opened to traffic 6:00 P.M. July 30, 1952) are administered pursuant to the terms of a Trust Agreement dated October 1, 1948, by and between the State Roads Commission of Maryland and the Baltimore National Bank as Trustee, securing the payment of State of Maryland Bridge Revenue Bonds (Series 1948) issued in the total amount of \$43,925,000.

*Revenue Projects General Fund and Operations Reserve Fund*

The consolidated transactions of the Revenue Projects General Fund and Operations Reserve Fund for the fiscal years ended September 30, 1952 and 1951, are summarized as follows:

	Fiscal Year Ended 1952	September 30, 1951
REVENUES:		
Susquehanna River Toll Bridge:		
Tolls .....	\$1,594,640.13	\$1,356,555.63
Other .....	2,125.44	874.76
Potomac River Toll Bridge:		
Tolls .....	1,549,853.95	1,313,456.85
Other .....	1,944.85	1,282.56
Chesapeake Bay Toll Bridge (opened 6:00 P.M. July 30, 1952):		
Tolls .....	911,628.75	.....
Other .....	39.81	.....
TOTAL REVENUES.....	\$4,060,232.93	\$2,672,169.80
EXPENDITURES:		
Expenses, excluding administrative and general expenses:		
Susquehanna River Toll Bridge.....	\$ 152,174.42	\$ 137,579.23
Potomac River Toll Bridge.....	97,121.56	80,847.89
Chesapeake Bay Toll Bridge (from 6:00 P.M. July 30, 1952).....	199,796.65	.....
Administrative and general expenses—net ..	71,820.59	62,338.22
TOTAL EXPENDITURES.....	\$ 520,913.22	\$ 280,765.34
Net income.....	\$3,539,319.71	\$2,391,404.46
Deduct—Adjustment to cash position (to con- vert toll revenues to cash basis, etc.).....	2,259.63	25,802.18
Remainder.....	\$3,537,060.08	\$2,365,602.28
Transfers to Revenue Projects Interest and Sinking Fund.....	3,511,774.10	2,350,419.73
Net increase in cash balance with Trustee.....	\$ 25,285.98	\$ 15,182.55
Cash balance with Trustee at beginning of year ..	282,414.50	267,231.95
Cash balance with Trustee at end of year:		
Revenue Projects General Fund.....	\$ 82,805.00	\$ 49,719.00
Operations Reserve Fund.....	224,895.48	232,695.50
	\$ 307,700.48	\$ 282,414.50

The balance of \$82,805.00 at September 30, 1952, in the Revenue Projects General Fund is the sum required to provide for the October and November, 1952, portion of the 1952-1953 Annual Budget of Current Expenses.

The balance of \$224,895.48 at September 30, 1952, in the Operations Reserve Fund provides a reserve for paying expenses of operation, maintenance or repair, replacing equipment, and for insurance.



*Revenue Projects Interest and Sinking Fund*

Article V of the Trust Agreement provides for the transfer of funds in the Revenue Projects General Fund to the Revenue Projects Interest and Sinking Fund, after providing for the stipulated requirements of the Revenue Projects General Fund and the Operations Reserve Fund.

The transactions in the Revenue Projects Interest and Sinking Fund for the fiscal years 1952 and 1951 are as follows:

	Fiscal Year Ended September 30,	
	1952	1951
REVENUES:		
Income from investments.....	\$ 11,206.02	\$ 1,856.00
Transfers from Revenue Projects General Fund.....	3,511,774.10	2,350,419.73
TOTAL REVENUES.....	<u>\$3,522,980.12</u>	<u>\$2,352,275.73</u>
EXPENDITURES:		
Redemption of Bridge Revenue Bonds (Series 1948) Due October 1, 1952.....	\$ 918,000.00	.....
Payment of Interest on Bridge Revenue Bonds (Series 1948):		
Due April 1 and October 1, 1951.....		\$1,321,667.50
Due April 1 and October 1, 1952.....	1,321,667.50	.....
TOTAL EXPENDITURES.....	<u>\$2,239,667.50</u>	<u>\$1,321,667.50</u>
Excess of revenues over expenditures.....	\$1,283,312.62	\$1,030,608.23
Cash balance at beginning of year (including investment in United States Treasury obligations).....	1,944,981.87	914,373.64
Cash balance at end of year (including investment in United States Treasury obligations):		
Bond Service Account.....	\$ 614,025.49	\$ 204,744.83
Reserve Account.....	2,614,269.00	1,740,237.04
	<u>\$3,228,294.49</u>	<u>\$1,944,981.87</u>

The balance of \$614,025.49 at September 30, 1952, in the Bond Service Account results from the transfer of funds accumulated in the Revenue Projects General Fund during the month of September, 1952, which funds are available for account of serial bonds maturing October 1, 1953, and interest payable April 1, 1953, on all bonds.

The balance of \$2,614,269.00 at September 30, 1952, in the Reserve Account is held for the payment of interest on all bonds and maturing principal on serial bonds in the event that funds in the Bond Service Account are insufficient.

*Chesapeake Bay Bridge Construction Fund*

The transactions of this Fund through September 30, 1952, are summarized as follows:

## REVENUES:

Proceeds from sale of Bridge Revenue Bonds (Series 1948) dated October 1, 1948:	
\$37,500,000 par value sold October 27, 1948 .....	\$37,500,000.00
\$6,425,000 par value sold November 1, 1949, including premium of \$154,000 .....	6,579,500.00
Total .....	\$44,079,500.00
Less portion applied toward redemption of Bridge Revenue Refunding Bonds (Series 1941) .....	362,384.34
Remainder available for construction costs .....	\$43,717,115.66
Net income from investments .....	1,223,974.80
TOTAL REVENUES .....	\$44,941,090.46
Expenditures for construction costs—net .....	39,900,257.39
Cash balance, September 30, 1952 (including investment in United States Treasury obligations) .....	\$ 5,040,833.07

The balance of \$5,040,833.07 at September 30, 1952, consists of \$2,040,833.07 in cash and \$3,000,000 invested in securities of the United States Treasury. Both the cash and investment securities are held by the Baltimore National Bank as Trustee. This balance is subject to encumbrances of \$4,086,453.15 under existing construction contracts, leaving \$954,379.92 available for further construction costs and for contingencies.

*General*

A summary of the balance sheets of the Toll Bridge Funds at September 30, 1952 and 1951, is as follows:

	September 30, .....	September 30, .....
	1952	1951
ASSETS:		
Cash and investments .....	\$ 8,666,926.56	\$ 21,154,851.16
Capital properties .....	50,195,259.65	36,055,076.40
Encumbered future toll revenues, etc. ....	43,007,000.00	43,925,000.00
Other assets .....	33,498.34	22,597.57
TOTAL .....	\$101,902,684.55	\$101,157,525.13
LIABILITIES:		
Reserves:		
Created under Article V of Trust Agreement (Operating and Sinking Funds) .....	\$ 3,542,165.97	\$ 2,231,307.74
Construction .....	5,077,020.09	18,899,514.99
Other .....	81,238.84	46,626.00
Bridge Revenue Bonds (Series 1948) payable .....	43,007,000.00	43,925,000.00
State equity in capital properties .....	50,195,259.65	36,055,076.40
TOTAL .....	\$101,902,684.55	\$101,157,525.13

Financial transactions pertaining to toll bridges are shown in the accompanying Exhibits AA, BB, CC, DD, EE, FF, GG, HH, and II.

### CHESAPEAKE BAY FERRY SYSTEM FUND

The revenues and expenditures of the Chesapeake Bay Ferry System Fund for the fiscal years ended May 31, 1952 and 1951, are summarized as follows:

	Fiscal Year Ended May 31, 1952	1951
<b>REVENUES:</b>		
Tolls.....	\$1,953,108.64	\$1,762,479.09
Concessions and rents.....	93,560.20	82,004.96
Recoveries of insurance.....	23,941.58	1,978.90
Miscellaneous.....	1,960.21	5,101.50
<b>TOTAL REVENUES.....</b>	<b>\$2,072,570.63</b>	<b>\$1,851,564.45</b>
<b>EXPENDITURES:</b>		
Operating expenses.....	\$1,179,001.09	\$ 926,120.44
Maintenance and repairs.....	124,427.81	251,196.09
General expenses.....	273,741.72	255,570.52
Acquisition of capital properties, etc.....	54,829.83	7,828.89
<b>TOTAL EXPENDITURES.....</b>	<b>\$1,632,000.45</b>	<b>\$1,440,715.94</b>
Excess of revenues over expenditures.....	\$ 440,570.18	\$ 410,848.51
<b>SURPLUS CHARGES:</b>		
Payment on account of redemption of Chesapeake Bay Ferry System Improvement Bonds.....	\$ 200,000.00	\$ 644,589.00
Creation of reserve for accounts receivable, etc.....	2,107.05	.....
<b>TOTAL SURPLUS CHARGES.....</b>	<b>\$ 202,107.05</b>	<b>\$ 644,589.00</b>
Net increase ( <i>decrease</i> ) in surplus.....	\$ 238,463.13	\$ 233,740.49
Add ( <i>deduct</i> )—Adjustment to cash position (to convert toll income to cash basis, etc.).....	10,985.93	22,412.70
Net increase ( <i>decrease</i> ) in cash balance.....	\$ 249,449.06	\$ 256,153.19
Cash balance at beginning of year.....	169,388.69	425,541.88
Cash balance at end of year.....	\$ 418,837.75	\$ 169,388.69

The cash balance of \$418,837.75 at May 31, 1952, is subject to the provision for payment of \$224,279.00 to the General Construction and Operating Fund of the State Roads Commission to apply on account of funds advanced by that Fund for the redemption of Chesapeake Bay Ferry System Improvement Bonds of 1945. The remainder of \$194,558.75 is held as a working fund in connection with the operation of the Chesapeake Bay Ferry System.

The balance sheets of the Chesapeake Bay Ferry System at May 31, 1952 and 1951, are summarized as follows:

	1952	May 31 1951
<b>ASSETS:</b>		
Cash	\$ 418,837.75	\$ 169,388.69
Inventories of materials and supplies	16,260.63	23,991.42
Accounts receivable and insurance claims— net	78,853.21	76,961.19
Fixed assets—at cost	5,209,884.53	4,977,178.16
<b>TOTAL</b>	<u>\$5,723,836.12</u>	<u>\$5,247,519.46</u>
<b>LIABILITIES:</b>		
Accounts payable, deposits, etc.	\$ 25,049.11	\$ 21,209.11
Deferred credit—Insurance claims receiv- able	37,138.99	35,831.83
State equity in fixed assets	5,209,884.53	4,977,178.16
Earned surplus	451,763.49	213,300.36
<b>TOTAL</b>	<u>\$5,723,836.12</u>	<u>\$5,247,519.46</u>

Financial transactions of the Chesapeake Bay Ferry System are set forth in Exhibits AAA, BBB, CCC, and DDD.

### GENERAL

The 1952 and 1951 reports of the State Comptroller set forth the application of the gross receipts of the State derived from the motor vehicle fuel tax and from motor vehicle fees and fines; a summary of this data follows:

	Fiscal Year Ended June 30, 1952	1951
<b>MOTOR VEHICLE FUEL TAX—Application of funds:</b>		
Payment of refunds	\$ 2,064,796.13	\$ 2,088,503.30
Reserve for refunds	75,000.00	.....
Salaries and expenses of the Gasoline Tax Division in the office of the Comptroller of the Treasury	84,574.72	74,741.17
Shares apportioned:		
Baltimore City (30%)	8,415,021.02	7,697,710.72
State Roads Commission for use of counties and municipalities (20%)	5,610,014.04	5,131,807.13
State Roads Commission (50%)	14,025,035.06	12,829,517.92
<b>TOTAL MOTOR VEHICLE FUEL TAX</b>	<u>\$30,274,440.97</u>	<u>\$27,822,280.24</u>

MOTOR VEHICLE FEES AND FINES—Application of funds:

Payment of license refunds . . . . .	\$ 125,399.26	\$ 107,451.80
Payment of fine refunds . . . . .	10,869.30	8,197.30
Salaries and expenses of the Department of Motor Vehicles . . . . .	1,355,177.61	1,165,266.84
Salaries and expenses of the Department of Maryland State Police . . . . .	1,816,627.30	.....
Salaries and expenses of the Traffic Court of Baltimore City . . . . .	105,422.33	87,722.57
Salaries and expenses of the State Roads Commission of Maryland in enforcing weight and size limitations on motor vehicles . . . . .	180,176.57	.....
Payments to counties on account of salaries and expenses of trial magistrates . . . . .	179,693.00	175,700.00
Shares apportioned:		
Baltimore City (30%) . . . . .	2,878,248.52	3,215,082.68
State Roads Commission for use of counties and municipalities (20%) . . . . .	1,918,832.36	2,143,388.41
State Roads Commission (50%) . . . . .	4,797,080.85	5,358,471.11
<b>TOTAL MOTOR VEHICLE FEES AND FINES . . . . .</b>	<b>\$13,367,527.10</b>	<b>\$12,261,283.71</b>

The shares of these State revenues apportioned to the State Roads Commission are reflected in Exhibits B and D for the 1952 and 1951 fiscal years respectively.

Under the caption General Construction and Operating Fund, the remainder of authorizations to complete construction and reconstruction projects in progress at June 30, 1952, is stated as \$34,066,614.67. Funds totaling \$24,862,348.81 for financing these construction expenditures are available in the form of cash and investments of the General Construction and Operating Fund at June 30, 1952, and the remainder of \$9,204,265.86 will be provided from the unissued \$25,000,000 of State Highway Construction Bonds authorized by the 1947 Legislature.

It is contemplated that construction contract awards through December 31, 1953, will exhaust all funds provided through the issuance of the State Highway Construction Bonds authorized by the 1947 Legislature. A review of the financial status of the Commission and recommendations in connection therewith are included in the "Proposed Twelve-Year Program for Road Construction and Reconstruction 1954-1965" issued by the State Roads Commission of Maryland and its Advisory Council on October 27, 1952.

Respectfully submitted,

CARL L. WANNEN,  
*Comptroller*

COMBINED BALANCE SHEET, JUNE 30, 1952 (INCLUDING ALL FUNDS EXCEPT SUSQUEHANNA RIVER TOLL BRIDGE, POTOMAC RIVER TOLL BRIDGE, CHESAPEAKE BAY BRIDGE, AND CHESAPEAKE BAY FERRY SYSTEM)

	TOTAL	GENERAL CONSTRUCTION AND OPERATING FUND	MAINTENANCE FUND	COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATION FUND	COUNTY MAINTENANCE FUNDS (Schedule 1)	COUNTY CONSTRUCTION FUNDS (Schedule 2)	BONDED DEBT AND DEBT SERVICE FUNDS (Schedule 3)	FIXED ASSETS (Schedule 4)
<b>ASSETS</b>								
<b>CASH AND INVESTMENTS:</b>								
Cash with State Treasurer	\$ 7,576,410.19	\$ 4,750,618.33	\$ 1,403,281.17	\$ 557,317.04	\$ 541,037.97	\$ 4,886.35	\$ 339,269.33	
Investment in obligations of the United States - at cost								
Treasury F. C. Certificates of Indebtedness (Including accrued interest purchased):								
Series B, due July 1, 1952, par value \$5,000,000	5,040,909.50	5,040,909.50						
Series D, due September 1, 1952, par value \$5,000,000	5,044,923.27	5,044,923.27						
Series E, due October 1, 1952, par value \$5,000,000	5,041,397.36	5,041,397.36						
Series A, due February 15, 1953, par value \$5,000,000	5,004,500.35	5,004,500.35						
Treasury 2-1/2% Bonds:								
Due June 15, 1962/67 (par value \$3,000,000)	2,964,218.75						2,964,218.75	
Due December 15, 1963/68 (par value \$3,000,000)	2,938,906.25						2,938,906.25	
<b>Working Fund:</b>								
Payroll	471,000.00	471,000.00						
Office	26,000.00	26,000.00						
Special	3,863.00	3,863.00						
	33,862.18						33,862.18	
<b>DEBT SERVICE FUNDS WITH FISCAL AGENT</b>								
<b>ACCOUNTS RECEIVABLE:</b>								
United States Government (Federal aid)	1,152,239.52	1,082,270.48				69,969.05		
Tenants and others	279,453.67	279,453.67						
Counties, etc.	86,316.28	86,725.28	191.00					
	1,385,896.13	1,385,896.13						
<b>PRELIMINARY CONSTRUCTION COSTS, ETC.</b>								
<b>ROADS SYSTEM CONSTRUCTION AND OTHER WORK IN PROGRESS:</b>								
ROADS SYSTEM AND OTHER FIXED ASSETS (Book value)	79,962,462.77	79,962,462.77						\$289,877,168.44
FUTURE TAX REVENUES ENCUMBERED AND PORTION OF EXISTING SINKING FUND RESERVED FOR THE REDEMPTION OF STATE HIGHWAY CONSTRUCTION BONDS							70,002,000.00	
<b>FUTURE REVENUES ENCUMBERED FOR THE COMPLETION OF AUTHORIZED PROJECTS:</b>								
State tax revenues, bond proceeds, etc.	7,569,899.59	7,569,899.59			11,979.19			
County funds and Federal aid apportionments	541,138.07					529,158.88		
<b>TOTAL</b>	\$485,169,399.50	\$115,896,153.90	\$1,403,472.17	\$557,317.04	\$553,017.16	\$604,014.28	\$76,278,256.51	\$289,877,168.44

**LIABILITIES**

**TAX APPROPRIATIONS PAYABLE TO:**

Cities  
Municipalities  
Unclaimed Wages, Etc.  
Matured and Called Bonds and Interest Coupons  
Payable through State Treasurer for Fiscal Agent  
State Highway Construction Bonds Payable:

Series A  
Series B  
Series C  
Series D

Due State Comptroller for Working Fund Advanced  
State Equity in Roads System Construction and Other  
Work in Progress

State Equity in Roads System and Other Fixed Assets  
Deferred Credit—Toll Tickets Outstanding—Patuxent River Toll Bridge

Reserves:  
Completion of authorized projects  
State Highway Construction Bonds Sinking Fund

Acquisition of capital properties  
Green City beach protection  
Sign Permit Fund

Accounts receivable  
Patuxent River Toll Bridge  
Surplus Available for New Projects, Etc.

\$ 327,809.41  
229,417.63  
5,252.31 \$ 5,252.31  
44,262.18  
19,500,000.00  
2,168,000.00  
22,334,000.00  
25,000,000.00  
500,000.00  
79,962,462.77  
289,877,168.44  
427.25  
34,400,903.22  
6,231,904.32  
1,274,105.08  
38,453.23  
31,419.89  
1,431,793.90  
3,706.89  
716,133.67

\$ 5,252.31  
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34,400,903.22  
6,231,904.32  
1,274,105.08  
38,453.23  
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5,706.89  
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34,400,903.22  
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5,706.89  
716,133.67

\$327,809.41  
229,417.63  
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2,168,000.00  
22,334,000.00  
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79,962,462.77  
289,877,168.44  
427.25  
34,400,903.22  
6,231,904.32  
1,274,105.08  
38,453.23  
31,419.89  
1,361,824.15  
5,706.89  
716,133.67

TOTAL \$185,169,339.50 \$115,806,153.90 \$1,403,472.17 \$557,317.04 \$553,017.16 \$604,014.28 \$76,278,256.51 \$289,877,168.44

**NOTES:**

The State Roads Commission is authorized to issue State Highway Construction Bonds in the aggregate principal amount of \$25,000,000 in addition to the \$70,002,000 bonds outstanding at June 30, 1962, shown by this statement.  
Accounts receivable of \$1,152,333.53 at June 30, 1962, representing earnings to be collected under Federal aid agreements are reflected in this Balance Sheet. This amount does not include \$4,553,425.58 earnable under existing Federal aid project agreements, nor \$10,348,674.72 (which includes allotment for the 1963 fiscal year) available for future Federal aid projects. A summary of Federal aid accounts is set forth in Exhibit B, and details as to project agreements are shown in Schedule I of that Exhibit.

**COUNTY MAINTENANCE FUNDS  
COMBINED BALANCE SHEET, JUNE 30, 1952**

	ASSETS			LIABILITIES
	CASH WITH STATE TREASURER	FUTURE RECEIPTS ENCUMBERED FOR THE COMPLETION OF AUTHORIZED PROJECTS	TOTAL	SURPLUS AVAILABLE FOR NEW PROJECTS, ETC.
CALVERT COUNTY	\$ 24,159.38		\$ 24,159.38	\$ 24,159.38
CAROLINE COUNTY	101,089.02		101,089.02	101,089.02
CECIL COUNTY	41,446.85		41,446.85	41,446.85
CHARLES COUNTY	20,986.62		20,986.62	20,986.62
KENT COUNTY	82,344.73		82,344.73	82,344.73
QUEEN ANNE'S COUNTY	<i>10,974.86</i>	\$10,974.86		
ST. MARY'S COUNTY	20,247.87		20,247.87	20,247.87
SOMERSET COUNTY	25,874.75		25,874.75	25,874.75
TALBOT COUNTY	<i>1,004.33</i>	1,004.33		
WICOMICO COUNTY	164,063.65		164,063.65	164,063.65
WORCESTER COUNTY	72,804.29		72,804.29	72,804.29
<b>TOTAL</b>	<b>\$541,037.97</b>	<b>\$11,979.19</b>	<b>\$553,017.16</b>	<b>\$553,017.16</b>

ITALICS INDICATE RED FIGURES.

**COUNTY CONSTRUCTION FUNDS  
COMBINED BALANCE SHEET, JUNE 30, 1952**

	ASSETS				LIABILITIES			
	CASH WITH STATE TREASURER	ACCOUNTS RECEIVABLE UNITED STATES GOVERNMENT (Federal Aid)	FUTURE RECEIPTS ENCUMBERED FOR THE COMPLETION OF AUTHORIZED PROJECTS—COUNTY FUNDS AND FEDERAL AID APPORTIONMENTS	TOTAL	RESERVE FOR COMPLETION OF AUTHORIZED PROJECTS	RESERVE FOR ACCOUNTS RECEIVABLE	SURPLUS AVAILABLE FOR NEW PROJECTS, ETC.	TOTAL
ALLEGANY COUNTY	\$141,083.09			\$141,083.09	\$113,858.69		\$ 27,224.40	\$141,083.09
ANNE ARUNDEL COUNTY	11,137.01			11,137.01	7,072.08		4,064.93	11,137.01
BALTIMORE COUNTY	<i>51,319.31</i>		\$ 80,825.33	29,515.02	29,515.02			29,515.02
CAROLINE COUNTY	<i>13,981.66</i>		28,178.47	12,196.81	12,196.81			12,196.81
CARROLL COUNTY	<i>22,562.36</i>		29,022.21	6,459.85	6,459.85			6,459.85
CECIL COUNTY	<i>17,299.42</i>		35,936.67	18,727.25	18,727.25			18,727.25
CHARLES COUNTY	9,936.34			9,936.34			9,936.34	9,936.34
DORCHESTER COUNTY	<i>12,811.01</i>		12,811.01					
FREDERICK COUNTY	<i>27,037.20</i>		27,037.20					
GARRETT COUNTY	<i>22,895.52</i>		24,306.86	1,411.34	1,411.34			1,411.34
HARFORD COUNTY	<i>13,584.69</i>		24,503.40	9,918.71	9,918.71			9,918.71
KENT COUNTY	3,861.11		42,799.55	46,660.66	46,660.66			46,660.66
MONTGOMERY COUNTY	<i>31,269.84</i>		78,933.81	47,672.97	47,672.97			47,672.97
PRINCE GEORGE'S COUNTY	<i>17,683.32</i>		17,683.32					
QUEEN ANNE'S COUNTY	<i>29,528.28</i>		30,192.86	664.48	664.48			664.48
SOMERSET COUNTY	<i>4,329.01</i>		4,329.01					
TALBOT COUNTY	<i>7,942.33</i>		14,784.00	6,841.67	6,841.67			6,841.67
WASHINGTON COUNTY	121,890.84			121,890.84			121,890.84	121,890.84
WICOMICO COUNTY	<i>14,871.78</i>		25,855.14	10,983.36	10,983.36			10,983.36
WORCESTER COUNTY	6,985.79		51,960.04	58,945.83	58,945.83			58,945.83
UNDISTRIBUTED (Appor- tioned when realized).		\$69,969.05		69,969.05		\$69,969.05		69,969.05
<b>TOTAL</b>	<b>\$ 4,886.35</b>	<b>\$69,969.05</b>	<b>\$529,158.88</b>	<b>\$604,014.28</b>	<b>\$370,928.72</b>	<b>\$69,969.05</b>	<b>\$163,116.51</b>	<b>\$604,014.28</b>

ITALICS INDICATE RED FIGURES.



**BONDED DEBT AND DEBT SERVICE FUNDS**  
**COMBINED BALANCE SHEET, JUNE 30, 1952**

	TOTAL	STATE HIGHWAY CONSTRUCTION BONDS— BONDED DEBT FUND (Schedule 3a)	STATE HIGHWAY CONSTRUCTION BONDS— SINKING FUND	REFUNDING AND IMPROVEMENT BONDS OF 1941—DEBT SERVICE FUND	4% BONDS OF 1933—DEBT SERVICE FUND
<b>ASSETS</b>					
CASH WITH STATE TREASURER . . . . .	\$ 339,269.33		\$ 328,869.33		\$10,400.00
INVESTMENT IN OBLIGATIONS OF THE UNITED STATES—at cost:					
Treasury 2½% Bonds:					
Due June 15, 1962/67 (par value \$3,000,000) . . . . .	2,964,218.75		2,964,218.75		
Due December 15, 1963/68 (par value \$3,000,000) . . . . .	2,938,906.25		2,938,906.25		
DEBT SERVICE FUNDS WITH FISCAL AGENT . . . . .	33,862.18		32,209.68	\$52.50	1,600.00
FUTURE TAX REVENUES ENCUM- BERED AND PORTION OF EXISTING SINKING FUND RESERVED FOR THE REDEMPTION OF STATE HIGHWAY CONSTRUCTION BONDS . . . . .	70,002,000.00	\$70,002,000.00			
<b>TOTAL . . . . .</b>	<b>\$76,278,256.51</b>	<b>\$70,002,000.00</b>	<b>\$6,264,204.01</b>	<b>\$52.50</b>	<b>\$12,000.00</b>
<b>LIABILITIES</b>					
MATURED AND CALLED BONDS AND INTEREST COUPONS PAYABLE THROUGH STATE TREASURER OR FISCAL AGENT . . . . .	\$ 44,262.18		\$ 32,209.68	\$52.50	\$12,000.00
STATE HIGHWAY CONSTRUCTION BONDS PAYABLE:					
Series A . . . . .	19,500,000.00	\$19,500,000.00			
Series B . . . . .	2,168,000.00	2,168,000.00			
Series C . . . . .	23,334,000.00	23,334,000.00			
Series D . . . . .	25,000,000.00	25,000,000.00			
RESERVE—STATE HIGHWAY CON- STRUCTION BONDS SINKING FUND . . . . .	6,231,994.33		6,231,994.33		
<b>TOTAL . . . . .</b>	<b>\$76,278,256.51</b>	<b>\$70,002,000.00</b>	<b>\$6,264,204.01</b>	<b>\$52.50</b>	<b>\$12,000.00</b>

**BONDED DEBT AND DEBT SERVICE FUNDS**  
**STATE HIGHWAY CONSTRUCTION BONDS PAYABLE, JUNE 30, 1952**

MATURITY DATE	INTEREST RATE	PRINCIPAL	
		MATURITIES	TOTAL
<b>SERIES A, DATED AUGUST 1, 1949:</b>			
August 1, 1952	4 <sup>00</sup> / <sub>100</sub>	\$1,500,000.00	
August 1, 1953	11 <sup>40</sup> / <sub>100</sub>	1,500,000.00	
August 1, 1954	11 <sup>40</sup> / <sub>100</sub>	1,500,000.00	
August 1, 1955	11 <sup>40</sup> / <sub>100</sub>	1,500,000.00	
August 1, 1956	11 <sup>40</sup> / <sub>100</sub>	1,500,000.00	
August 1, 1957	11 <sup>40</sup> / <sub>100</sub>	1,500,000.00	
August 1, 1958	11 <sup>40</sup> / <sub>100</sub>	1,500,000.00	
August 1, 1959	11 <sup>40</sup> / <sub>100</sub>	1,500,000.00	
August 1, 1960	11 <sup>40</sup> / <sub>100</sub>	1,500,000.00	
August 1, 1961	11 <sup>40</sup> / <sub>100</sub>	1,500,000.00	
August 1, 1962	11 <sup>40</sup> / <sub>100</sub>	1,500,000.00	
August 1, 1963	11 <sup>40</sup> / <sub>100</sub>	1,500,000.00	
August 1, 1964	11 <sup>40</sup> / <sub>100</sub>	1,500,000.00	\$19,500,000.00
<b>SERIES B, DATED DECEMBER 1, 1949:</b>			
December 1, 1952	4 <sup>00</sup> / <sub>100</sub>	\$ 166,000.00	
December 1, 1953	4 <sup>00</sup> / <sub>100</sub>	166,000.00	
December 1, 1954	1 <sup>00</sup> / <sub>100</sub>	166,000.00	
December 1, 1955	1 <sup>40</sup> / <sub>100</sub>	167,000.00	
December 1, 1956	1 <sup>40</sup> / <sub>100</sub>	167,000.00	
December 1, 1957	1 <sup>40</sup> / <sub>100</sub>	167,000.00	
December 1, 1958	1 <sup>40</sup> / <sub>100</sub>	167,000.00	
December 1, 1959	1 <sup>40</sup> / <sub>100</sub>	167,000.00	
December 1, 1960	1 <sup>40</sup> / <sub>100</sub>	167,000.00	
December 1, 1961	1 <sup>20</sup> / <sub>100</sub>	167,000.00	
December 1, 1962	1 <sup>20</sup> / <sub>100</sub>	167,000.00	
December 1, 1963	1 <sup>20</sup> / <sub>100</sub>	167,000.00	
December 1, 1964	1 <sup>20</sup> / <sub>100</sub>	167,000.00	2,168,000.00
<b>SERIES C, DATED DECEMBER 1, 1950:</b>			
December 1, 1952	21 <sup>40</sup> / <sub>100</sub>	\$1,666,000.00	
December 1, 1953	21 <sup>40</sup> / <sub>100</sub>	1,666,000.00	
December 1, 1954	2 <sup>00</sup> / <sub>100</sub>	1,666,000.00	
December 1, 1955	11 <sup>40</sup> / <sub>100</sub>	1,666,000.00	
December 1, 1956	11 <sup>40</sup> / <sub>100</sub>	1,667,000.00	
December 1, 1957	11 <sup>40</sup> / <sub>100</sub>	1,667,000.00	
December 1, 1958	11 <sup>40</sup> / <sub>100</sub>	1,667,000.00	
December 1, 1959	13 <sup>80</sup> / <sub>100</sub>	1,667,000.00	
December 1, 1960	13 <sup>80</sup> / <sub>100</sub>	1,667,000.00	
December 1, 1961	13 <sup>80</sup> / <sub>100</sub>	1,667,000.00	
December 1, 1962	13 <sup>80</sup> / <sub>100</sub>	1,667,000.00	
December 1, 1963	11 <sup>20</sup> / <sub>100</sub>	1,667,000.00	
December 1, 1964	11 <sup>20</sup> / <sub>100</sub>	1,667,000.00	
December 1, 1965	11 <sup>20</sup> / <sub>100</sub>	1,667,000.00	23,334,000.00
<b>SERIES D, DATED DECEMBER 1, 1951:</b>			
December 1, 1952	4 <sup>00</sup> / <sub>100</sub>	\$1,666,000.00	
December 1, 1953	4 <sup>00</sup> / <sub>100</sub>	1,666,000.00	
December 1, 1954	21 <sup>20</sup> / <sub>100</sub>	1,666,000.00	
December 1, 1955	21 <sup>20</sup> / <sub>100</sub>	1,666,000.00	
December 1, 1956	13 <sup>80</sup> / <sub>100</sub>	1,666,000.00	
December 1, 1957	13 <sup>80</sup> / <sub>100</sub>	1,667,000.00	
December 1, 1958	11 <sup>20</sup> / <sub>100</sub>	1,667,000.00	
December 1, 1959	11 <sup>20</sup> / <sub>100</sub>	1,667,000.00	
December 1, 1960	11 <sup>20</sup> / <sub>100</sub>	1,667,000.00	
December 1, 1961	15 <sup>40</sup> / <sub>100</sub>	1,667,000.00	
December 1, 1962	15 <sup>40</sup> / <sub>100</sub>	1,667,000.00	
December 1, 1963	15 <sup>40</sup> / <sub>100</sub>	1,667,000.00	
December 1, 1964	13 <sup>80</sup> / <sub>100</sub>	1,667,000.00	
December 1, 1965	13 <sup>80</sup> / <sub>100</sub>	1,667,000.00	
December 1, 1966	13 <sup>80</sup> / <sub>100</sub>	1,667,000.00	25,000,000.00
<b>TOTAL</b>			<b>\$70,002,000.00</b>

EXHIBIT A, Schedule 3a—Concluded

NOTE—A summary of debt service requirements, by fiscal years, is as follows:

Fiscal Year Ending June 30	Total	Principal	Interest
1953	\$ 6,111,595.50	\$ 4,998,000.00	\$1,113,595.50
1954	5,961,455.50	4,998,000.00	963,455.50
1955	5,849,938.00	4,998,000.00	851,938.00
1956	5,763,078.50	4,999,000.00	764,078.50
1957	5,690,722.83	5,000,000.00	690,722.83
1958	5,627,175.21	5,001,000.00	626,175.21
1959	5,561,528.75	5,001,000.00	560,528.75
1960	5,493,815.21	5,001,000.00	492,815.21
1961	5,425,051.46	5,001,000.00	424,051.46
1962	5,353,170.42	5,001,000.00	352,170.42
1963	5,278,155.42	5,001,000.00	277,155.42
1964	5,202,090.21	5,001,000.00	201,090.21
1965	5,123,941.25	5,001,000.00	122,941.25
1966	3,390,261.25	3,334,000.00	56,261.25
1967	1,681,586.25	1,667,000.00	14,586.25
<b>TOTAL</b> .....	<b>\$77,513,565.76</b>	<b>\$70,002,000.00</b>	<b>\$7,511,565.76</b>

EXHIBIT A, Schedule 4

STATEMENT OF ROADS SYSTEM AND OTHER FIXED ASSETS FOR THE FISCAL YEAR ENDED JUNE 30, 1952

	BALANCE, JULY 1, 1951	ADDITIONS			DEDUC- TIONS	BALANCE, JUNE 30, 1952
		GENERAL CONSTRUC- TION AND OPERATING FUND	MAINTEN- ANCE FUND	TOTAL		
<b>ROADS SYSTEM:</b>						
Roads.....	\$236,219,741.95	\$19,386,057.35		\$19,386,057.35		\$255,605,799.30
Bridges (Since May, 1929).....	22,555,051.58	3,939,906.94		3,939,906.94		26,494,958.52
Traffic Control Facilities (Since July, 1948).....	220,619.13	18,756.99		18,756.99		239,376.12
<b>TOTAL ROADS SYSTEM</b> .....	<b>\$258,995,412.66</b>	<b>\$23,344,721.28</b>		<b>\$23,344,721.28</b>		<b>\$282,340,133.94</b>
<b>OTHER FIXED ASSETS:</b>						
Lands and Buildings.....	\$ 964,653.63		\$ 245,443.94	\$ 245,443.94		\$ 1,210,097.57
Engineering Equipment.....	349,638.61		66,686.18	66,686.18		416,324.79
Office Equipment.....	226,484.30		37,408.35	37,408.35	\$ 1,300.00	262,592.65
Road Equipment.....	3,844,044.59		692,472.31	692,472.31	274,430.98	4,262,085.92
Shop, Storeroom, and Yard Equipment.....	979,747.41		28,059.35	28,059.35	200.00	1,007,606.76
Transportation Equipment.....	339,435.08		79,553.84	79,553.84	40,662.11	378,326.81
<b>TOTAL OTHER FIXED ASSETS</b> .....	<b>\$ 6,704,003.62</b>		<b>\$1,149,623.97</b>	<b>\$ 1,149,623.97</b>	<b>\$316,593.09</b>	<b>\$ 7,537,034.50</b>
<b>TOTAL</b> .....	<b>\$265,699,416.28</b>	<b>\$23,344,721.28</b>	<b>\$1,149,623.97</b>	<b>\$24,494,345.25</b>	<b>\$316,593.09</b>	<b>\$289,877,168.44</b>

NOTES:

This statement does not include construction work in progress at June 30, 1952. The balance of \$289,877,168.44 at June 30, 1952, has not been reduced by the book value of certain capital property dispositions in prior periods not reported for record, such book value being indeterminate.

EXHIBIT B  
**COMBINED STATEMENT OF REVENUES AND EXPENDITURES FOR THE FISCAL YEAR ENDED JUNE 30, 1952 (INCLUDING ALL FUNDS EXCEPT SUSQUEHANNA RIVER TOLL BRIDGE, POTOMAC RIVER TOLL BRIDGE, CHESAPEAKE BAY BRIDGE, AND CHESAPEAKE BAY FERRY SYSTEM)**

	TOTAL	ELIMINATIONS	GENERAL CONSTRUCTION AND OPERATING FUND	MAINTENANCE FUND	COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATION FUND (Schedule 1)	COUNTY MAINTENANCE FUNDS (Schedule 2)	COUNTY CONSTRUCTION FUNDS (Schedule 3)	BONDED DEBT AND DEBT SERVICE FUNDS (Schedule 4)
CASH BALANCE, JULY 1, 1951 (Including Investment in United States Treasury Obligations)	\$27,625,895.59		\$20,572,517.83	\$1,556,333.66	\$ 588,394.06	\$506,086.38	\$315,300.66	\$ 4,087,233.00
REVENUES:								
Gasoline Tax Fund:								
50% portion	\$14,025,035.06							
20% portion	5,610,014.04		\$ 9,216,869.47		\$5,610,014.04			\$ 4,808,165.59
Excise tax on issuance of certificates of title to motor vehicles	7,137,993.57		5,581,501.58					1,556,491.99
Motor Vehicle Revenue Fund:								
50% portion	4,797,080.85			\$4,797,080.85				
20% portion	1,918,832.36			31,177.19	1,918,832.36			
Tolls, etc.—Potomac River Toll Bridge	31,177.19					\$419,389.91		
Federal aid	2,933,859.36		2,514,469.45					
Specific work authorizations—billwork	213,420.78		213,420.78					
Sale of new, old, and scrap materials, and miscellaneous income	4,594.00			4,594.00				
Rental of properties	12,715.38			12,715.38				
Remittances by counties	8,026.40			8,026.40				
Rental of equipment	111,204.60							
Insurance recoveries	1,676.00					\$ 80,786.62		
Sign Permit Fund	8,667.85			8,667.85		1,676.00		
Net income from United States Treasury obligations	10,778.43			10,778.43				
Proceeds from sale of Series D State Highway Construction Bonds	260,797.37		140,398.51					120,398.83
Accrued interest on Series D State Highway Construction Bonds	25,001,475.00							25,001,475.00
Reimbursement of advances for account of Toll System Facilities, etc.	14,061.32							14,061.32
Portion of Chesapeake Bay Ferry System revenues received on account of redemption of bonds	24,755.75		24,755.75					
Reimbursement of the cost of enforcing weight-and-size limitations on motor vehicles	200,000.00		200,000.00					
Collections for account of State Treasurer:	180,176.57		180,176.57					
Sign licenses—General Fund	\$ 3,987.46		3,987.46					
Hauling permits—Motor Vehicle Revenue Fund	111,950.00		111,950.00					
TOTAL REVENUES	\$62,506,341.88	\$115,937.46	\$18,187,929.60	\$4,873,040.10	\$7,528,846.40	\$ 82,462.62	\$449,807.89	\$31,500,562.73

TRANSFERS FROM:														
General Construction Fund	1,674,345.13													
Counties and Municipalities Tax Revenues Allocation Fund	2,318,488.14													
County Maintenance Funds	75,273.15													
Bonded Debt and Debt Service Funds	24,984,383.26													
TOTAL REVENUES, INCLUDING TRANSFERS	\$92,506,341.88	\$29,168,427.14	\$43,171,912.86	\$6,547,385.23	1,674,345.13									\$31,500,592.73
TOTAL	\$90,132,237.47	\$29,168,427.14	\$63,714,460.69	\$8,103,718.89										\$33,587,825.73
EXPENDITURES:														
Construction costs	\$36,915,685.37													
Maintenance costs	7,926,386.55													
Operation and Maintenance of Patuxent River Toll Bridge	25,470.30													
Capital properties acquired	935,203.02													
Ocean City beach protection	49,742.20													
Sign Permit Fund	9,137.77													
Payment of tax apportionments:														
Counties	4,621,155.89													
Municipalities	620,279.39													
Advances for account of Toll System Facilities, etc.	29,177.01													
Specific work authorizations—bill work	129,278.59													
Remittances of collections to State Treasurer:														
Sign licenses—Motor Vehicle Revenue Fund	3,987.46													
Hauling permits—Motor Vehicle Revenue Fund	111,950.00													
Federal aid apportioned to:														
Baltimore City—Urban Program	216,834.05													
Frederick County—Secondary Program	66,978.08													
Dorchester County—Secondary Program	1,500.00													
Refunds of excise tax on issuance of certificates of title to motor vehicles	2,145.46													
Redemption of State Highway Construction Bonds:														
Series A, due August 1, 1951	1,500,000.00													\$ 1,500,000.00
Series B, due December 1, 1951	166,000.00													166,000.00
Series C, due December 1, 1951	1,666,000.00													1,666,000.00
Interest on State Highway Construction Bonds	997,895.08													997,895.08
Cost of enforcing weight-and-size limitations on motor vehicles	195,583.75													
Bond issue expenses	31,153.06													31,153.06
Inventory adjustments applicable to prior periods	27,666.58													
Net increase in book value of inventories of materials and supplies	443,269.06													
TOTAL EXPENDITURES	\$56,521,208.05	\$ 115,937.46	\$37,207,766.75	\$6,700,673.97										\$ 4,361,048.14

EXHIBIT B—Continued

EXHIBIT B— Concluded

	TOTAL	ELIMINATIONS	GENERAL CONSTRUCTION AND OPERATING FUND	MAINTENANCE FUND	COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATIONS FUND (Schedule 1)	COUNTY MAINTENANCE FUNDS (Schedule 2)	COUNTY CONSTRUCTION FUNDS (Schedule 3)	BONDED DEBT AND DEBT SERVICE FUNDS (Schedule 4)
TRANSFERS TO:								
General Construction Fund		24,984,383.26						21,984,383.26
Maintenance Fund		1,674,345.13	1,674,345.13		2,245,361.41			
County Maintenance Funds		2,245,361.41			73,126.73	75,273.15		
County Construction Funds		148,399.88						
TOTAL EXPENDITURES, INCLUDING TRANSFERS	\$56,521,208.05	\$29,168,427.14	\$38,882,111.88	\$6,700,673.97	\$7,559,923.42	\$2,292,872.44	\$908,622.08	\$29,345,431.40
BALANCE AVAILABLE TO CASU POSTION—Collection of unearned toll revenue	\$33,611,029.42		\$24,862,348.81	\$1,403,044.92	\$ 557,317.04	\$ 541,037.97	\$ 4,886.35	\$ 6,242,391.33
	236.25			236.25				
CASH BALANCE, JUNE 30, 1952 (including investment in United States Treasury obligations)	\$33,611,265.67		\$24,862,348.81	\$1,403,281.17	\$ 557,317.04	\$ 541,037.97	\$ 4,886.35	\$ 6,242,391.33

Note—The revenues in this statement do not include the proceeds from the sale or redemption of United States Treasury obligations held as investments, nor do the expenditures include the cost of United States Treasury obligations purchased. For purposes of this statement, United States Treasury obligations owned at July 1, 1951, and at June 30, 1952, are considered as the equivalent of cash.

ITALICS INDICATE RED FIGURES.

**COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATION FUND**

**STATEMENT OF REVENUES AND EXPENDITURES FOR THE FISCAL YEAR ENDED JUNE 30, 1952**

	BALANCE, JULY 1, 1951	REVENUES		TOTAL FUNDS AVAILABLE	EXPENDITURES			BALANCE, JUNE 30, 1952
		ALLOCATION OF 20% SHARE OF GASOLINE TAX AND MOTOR VEHICLE REVENUE FUNDS			PAYMENTS TO COUNTIES AND MUNI- CIPALITIES	TRANSFERS TO COUNTY MAINTEN- ANCE FUNDS	TRANS- FERS TO COUNTY CON- STRUC- TION FUNDS	
<b>COUNTIES:</b>								
Allegany		\$ 273,126.73	\$ 273,126.73	\$ 200,000.00		\$73,126.73	\$ 273,126.73	
Anne Arundel	\$ 34,029.98	385,698.84	419,728.82	391,270.35			391,270.35	\$ 28,458.47
Baltimore	65,101.80	783,093.63	848,195.43	791,285.82			791,285.82	56,909.61
Calvert		106,472.46	106,472.46		\$ 106,472.46		106,472.46	
Caroline		256,619.71	256,619.71		256,619.71		256,619.71	
Carroll	33,419.36	399,489.42	432,908.78	403,298.09			403,298.09	29,610.69
Cecil		249,180.97	249,180.97			249,180.97	249,180.97	
Charles		210,924.03	210,924.03			210,924.03	210,924.03	
Dorchester	23,000.64	278,165.29	301,165.93	278,384.03			278,384.03	22,781.90
Fredrick	45,585.89	540,316.18	585,902.07	546,245.44			546,245.44	39,656.63
Garrett	34,228.58	405,895.74	440,124.32	410,029.43			410,029.43	30,094.89
Harford	26,681.12	316,069.60	342,750.72	319,638.33			319,638.33	23,112.39
Howard	13,671.11	169,656.08	183,327.19	166,845.15			166,845.15	16,482.04
Kent		161,855.61	161,855.61		161,855.61		161,855.61	
Montgomery	35,738.62	438,718.81	474,457.43	442,161.87			442,161.87	32,295.56
Prince George's	25,565.37	311,106.32	336,671.69	314,002.87			314,002.87	22,668.82
Queen Anne's		216,860.06	216,860.06		216,860.06		216,860.06	
St. Mary's		180,484.04	180,484.04		180,484.04		180,484.04	
Somerset		161,374.16	161,374.16		161,374.16		161,374.16	
Talbot		151,122.93	151,122.93		151,122.93		151,122.93	
Washington	29,585.01	354,237.91	383,822.92	357,994.51			357,994.51	25,828.41
Wicomico		299,536.74	299,536.74		299,536.74		299,536.74	
Worcester		250,930.70	250,930.70		250,930.70		250,930.70	
<b>TOTAL COUNTIES</b>	<b>\$366,607.48</b>	<b>\$6,900,935.96</b>	<b>\$7,267,543.44</b>	<b>\$4,621,155.89</b>	<b>\$2,245,361.41</b>	<b>\$73,126.73</b>	<b>\$6,939,644.03</b>	<b>\$327,899.41</b>
<b>MUNICIPALITIES—Schedule 1a</b>	<b>221,786.58</b>	<b>627,910.44</b>	<b>849,697.02</b>	<b>620,279.39</b>			<b>620,279.39</b>	<b>229,417.63</b>
<b>TOTAL COUNTIES AND MUNI- CIPALITIES</b>	<b>\$588,394.06</b>	<b>\$7,528,846.40</b>	<b>\$8,117,240.46</b>	<b>\$5,241,435.28</b>	<b>\$2,245,361.41</b>	<b>\$73,126.73</b>	<b>\$7,559,923.42</b>	<b>\$557,317.04</b>

**COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATION FUND****STATEMENT OF REVENUES AND EXPENDITURES FOR ACCOUNT OF MUNICIPALITIES FOR THE FISCAL YEAR ENDED JUNE 30, 1952**

MUNICIPALITY	ROAD MILES MUNICI- PALITIES	BALANCE, JULY 1, 1951	REVENUES	TOTAL FUNDS AVAILABLE	EXPEN- DITURES	BALANCE, JUNE 30, 1952
<b>ALLEGANY COUNTY:</b>						
Barton	2.519	\$ 441.11	\$ 1,414.95	\$ 1,856.06	\$ 1,403.34	\$ 452.72
Cumberland	112.404	20,132.98	63,138.65	83,271.63	63,088.64	20,182.99
Frostburg	23.478	4,196.69	13,187.86	17,384.55	13,177.67	4,206.88
Lomaxing	5.965	1,077.78	3,350.61	4,428.39	3,347.69	1,080.70
Luke	2.980	1,640.36	1,673.90	3,314.26	1,640.36	1,673.90
Midland	2.755	485.58	1,547.52	2,033.10	1,546.52	486.58
Westernport	9.249	1,651.75	5,195.28	6,847.03	5,180.02	1,667.01
TOTAL	159.350	\$ 29,626.25	\$ 89,508.77	\$ 119,135.02	\$ 89,384.24	\$ 29,750.78
<b>ANNE ARUNDEL COUNTY:</b>						
Annapolis	48.075	\$ 2,964.51	\$ 27,004.29	\$ 29,968.80	\$ 21,305.58	\$ 8,663.22
<b>CALVERT COUNTY:</b>						
Chesapeake Beach	6.220	\$ 1,116.68	\$ 3,493.84	\$ 4,610.52	\$ 3,484.38	\$ 1,126.14
North Beach	5.505	1,746.27	3,092.23	4,838.50	3,845.79	992.71
TOTAL	11.725	\$ 2,862.95	\$ 6,586.07	\$ 9,449.02	\$ 7,330.17	\$ 2,118.85
<b>CAROLINE COUNTY:</b>						
Denton	8.486	\$ 2,791.01	\$ 4,766.69	\$ 7,557.70	\$ 6,027.11	\$ 1,530.59
Federalburg	6.210	1,116.00	3,488.23	4,604.23	3,482.97	1,121.26
Goldsboro	0.550	103.35	308.94	412.29	306.76	105.53
Greensboro	3.433	620.72	1,928.36	2,549.08	1,933.63	615.45
Henderson	0.375	61.39	210.65	272.04	209.32	62.72
Hillsboro	0.340	60.25	190.98	251.23	208.18	43.05
Preston	1.280	428.30	718.98	1,147.28	702.72	444.56
Ridgely	6.686	1,196.68	3,755.60	4,952.28	3,748.62	1,203.66
TOTAL	27.360	\$ 6,377.70	\$ 15,368.43	\$ 21,746.13	\$ 16,619.31	\$ 5,126.82
<b>CARROLL COUNTY:</b>						
Hampstead	1.880	\$ 331.10	\$ 1,056.02	\$ 1,387.12	\$ 1,053.91	\$ 333.21
Manchester	3.572	620.01	2,006.44	2,626.45	1,978.93	647.52
Mt. Airy	4.749	840.60	2,667.57	3,508.17	2,662.12	846.05
New Windsor	2.480	436.14	1,393.04	1,829.18	1,390.26	438.92
Sykesville	4.317	771.71	2,424.91	3,196.62	2,419.75	776.87
Taneytown	4.880	784.38	2,741.15	3,525.53	2,634.80	890.73
Union Bridge	4.560	789.24	2,561.41	3,350.65	2,523.99	826.66
Westminster	20.069	3,556.45	11,272.99	14,829.44	11,218.36	3,611.08
TOTAL	46.507	\$ 8,129.63	\$ 26,123.53	\$ 34,253.16	\$ 25,882.12	\$ 8,371.04
<b>CECIL COUNTY:</b>						
Cecilton	0.460	\$ 79.79	\$ 258.39	\$ 338.18	\$ 258.05	\$ 80.13
Charlestown	2.870	504.57	1,612.11	2,116.68	1,609.90	506.78
Chesapeake City	2.960	536.76	1,662.66	2,199.42	1,659.92	539.50
Elkton	9.520	1,702.48	5,347.60	7,049.98	5,339.38	1,710.60
North East	3.640	1,210.74	2,044.63	3,255.37	2,004.45	1,250.92
Perryville	1.381	239.90	775.72	1,015.62	774.74	240.88
Port Deposit	0.720	136.19	404.44	540.63	403.61	137.02
Rising Sun	1.700	311.43	954.91	1,266.34	953.25	313.09
TOTAL	23.251	\$ 4,721.86	\$ 13,060.36	\$ 17,782.22	\$ 13,003.30	\$ 4,778.92
<b>CHARLES COUNTY:</b>						
Indian Head	2.120	\$ 915.56	\$ 1,649.00	\$ 2,564.56	\$ 2,014.25	\$ 550.31
LaPlata	5.100	1,185.06	3,966.93	5,151.99	3,830.59	1,321.40
TOTAL	7.220	\$ 2,100.62	\$ 5,615.93	\$ 7,716.55	\$ 5,844.84	\$ 1,871.71
<b>DORCHESTER COUNTY:</b>						
Cambridge	23.772	\$ 4,223.01	\$ 13,353.01	\$ 17,576.02	\$ 13,303.00	\$ 4,273.02
Eldorado	0.280	58.09	157.28	215.37	179.16	36.21
Hurlock	6.040	1,077.23	3,292.74	4,469.97	3,377.50	1,092.47
Secretary	1.385	243.72	777.97	1,021.69	768.33	253.36
Vienna	1.435	474.66	806.06	1,280.72	785.60	495.12
TOTAL	32.912	\$ 6,076.71	\$ 18,487.06	\$ 24,563.77	\$ 18,413.59	\$ 6,150.18



**COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATION FUND**

**STATEMENT OF REVENUES AND EXPENDITURES FOR ACCOUNT OF MUNICIPALITIES FOR THE FISCAL YEAR ENDED JUNE 30, 1952**

MUNICIPALITY	ROAD MILES MUNICIPALITIES	BALANCE, JULY 1, 1951	REVENUES	TOTAL FUNDS AVAILABLE	EXPENDITURES	BALANCE, JUNE 30, 1952
<b>FREDERICK COUNTY</b>						
Brunswick	16.421	\$ 5,458.25	\$ 9,223.87	\$ 14,682.12	\$ 11,745.91	\$ 2,936.21
Burkittsville	1.370	248.31	769.55	1,017.86	768.96	248.90
Emmitsburg	4.160	1,377.60	2,336.72	3,714.32	2,979.54	734.78
Frederick	46.892	8,251.82	26,339.79	34,591.61	26,153.67	8,437.94
Middletown	3.328	586.76	1,869.38	2,456.14	1,868.32	587.82
Mt. Airy	1.026	175.69	576.31	752.00	576.18	175.82
Myersville	0.180	21.27	101.11	122.38	101.37	21.01
New Market	1.095	174.73	615.07	789.80	575.23	214.57
Thurmont	7.600	1,381.94	4,269.01	5,650.95	4,265.49	1,385.46
Walkersville	2.905	548.47	1,631.77	2,180.24	1,669.85	510.39
Woodsboro	1.817	308.82	1,020.63	1,329.45	989.63	339.82
<b>TOTAL</b>	<b>86.794</b>	<b>\$ 18,533.66</b>	<b>\$ 48,753.21</b>	<b>\$ 67,286.87</b>	<b>\$ 51,694.15</b>	<b>\$ 15,592.72</b>
<b>GARRETT COUNTY:</b>						
Accident	1.850	\$ 339.17	\$ 1,039.17	\$ 1,378.34	\$ 1,036.74	\$ 341.60
Deer Park	4.050	729.55	2,274.93	3,004.48	2,270.05	734.43
Friendsville	3.575	637.85	2,008.12	2,645.97	2,003.95	642.02
Grantsville	2.625	455.83	1,474.50	1,930.33	1,444.10	486.23
Kitzmillersville	3.490	619.38	1,960.37	2,579.75	1,956.41	623.34
Loch Lynn Heights	3.538	1,157.61	1,987.34	3,144.95	2,523.71	621.24
Mountain Lake Park	10.435	1,867.13	5,861.45	7,728.58	5,849.19	1,879.39
Oakland	9.562	1,697.84	5,371.09	7,068.93	5,360.18	1,708.75
<b>TOTAL</b>	<b>39.125</b>	<b>\$ 7,504.36</b>	<b>\$ 21,976.97</b>	<b>\$ 29,481.33</b>	<b>\$ 22,444.33</b>	<b>\$ 7,037.00</b>
<b>HARFORD COUNTY:</b>						
Aberdeen	10.176	\$ 1,715.07	\$ 5,715.98	\$ 7,431.05	\$ 5,611.23	\$ 1,819.82
Bel Air	10.097	2,749.81	5,671.61	8,421.42	4,947.20	3,474.22
Havre de Grace	24.145	4,303.12	13,562.53	17,865.65	13,533.43	4,332.22
<b>TOTAL</b>	<b>44.418</b>	<b>\$ 8,768.00</b>	<b>\$ 24,950.12</b>	<b>\$ 33,718.12</b>	<b>\$ 24,091.86</b>	<b>\$ 9,626.26</b>
<b>KENT COUNTY</b>						
Betterton	1.438	\$ 305.52	\$ 1,040.63	\$ 1,346.15	\$ 1,002.27	\$ 343.88
Chestertown	5.340	1,147.33	3,864.38	5,011.71	3,720.89	1,290.82
Galena	0.440	93.18	318.41	411.59	306.72	104.87
Millington	0.823	142.13	595.59	737.72	535.45	202.27
Rock Hall	1.640	355.78	1,186.82	1,542.60	1,142.48	400.12
<b>TOTAL</b>	<b>9.681</b>	<b>\$ 2,043.94</b>	<b>\$ 7,005.83</b>	<b>\$ 9,049.77</b>	<b>\$ 6,707.81</b>	<b>\$ 2,341.96</b>
<b>MONTGOMERY COUNTY:</b>						
Barnesville	0.450	\$ 90.27	\$ 252.77	\$ 343.04	\$ 256.81	\$ 86.23
Brookville	0.200	47.11	112.34	159.45	113.73	45.72
Chevy Chase, Section III	2.223	404.88	1,248.68	1,653.56	1,270.82	382.74
Chevy Chase, Section IV	6.212	1,120.52	3,489.35	4,609.87	3,485.21	1,124.66
Chevy Chase, Section V	1.620	541.03	909.97	1,451.00	902.23	548.77
Chevy Chase View	3.310	1,102.12	1,859.27	2,961.39	1,824.51	1,136.88
Chevy Chase Village	6.838	1,213.19	3,840.99	5,054.18	3,811.05	1,243.13
Drummond	0.390	57.24	219.07	276.31	223.78	52.53
Friendship Heights	0.875	166.73	491.50	658.23	499.77	158.46
Gaithersburg	4.876	857.51	2,738.91	3,596.42	2,722.63	873.79
Garrett Park	3.108	545.61	1,745.80	2,291.41	1,744.63	546.78
Glen Echo	1.747	574.01	981.31	1,555.32	954.21	601.11
Kensington	6.944	2,265.29	3,900.52	6,165.81	3,786.14	2,379.67
Laytonsville	0.296	36.94	166.27	203.21	136.88	66.33
Martin's Additions	2.303	417.46	1,293.62	1,711.08	1,283.41	427.67
North Chevy Chase	1.416	168.59	795.37	963.96	701.49	262.47
Oakmont	0.518	174.36	290.99	465.35	288.41	176.94
Poolesville	0.762	253.33	428.03	681.36	553.08	128.28
Rockville	23.858	3,866.91	13,401.31	17,268.22	13,159.25	4,108.97
Somerset	2.563	423.91	1,439.67	1,863.58	1,389.81	473.77
Takoma Park	17.361	3,040.57	9,751.87	12,792.44	9,668.49	3,123.95
Washington Grove	2.985	540.83	1,676.71	2,217.54	1,673.27	544.27
<b>TOTAL</b>	<b>90.855</b>	<b>\$ 17,908.41</b>	<b>\$ 51,034.32</b>	<b>\$ 68,942.73</b>	<b>\$ 50,449.61</b>	<b>\$ 18,493.12</b>
<b>PRINCE GEORGE'S COUNTY:</b>						
Berwyn Heights	5.307	\$ 952.32	\$ 2,981.00	\$ 3,933.32	\$ 2,968.88	\$ 964.44
Bladensburg	5.887	1,015.09	3,306.79	4,321.88	3,258.86	1,063.02
Bowie	3.789	609.36	2,128.32	2,737.68	2,057.88	679.80
Brentwood	6.919	1,246.27	3,886.49	5,132.76	3,887.67	1,245.09
Capitol Heights	6.070	1,075.62	3,409.59	4,485.21	3,404.59	1,080.62
Cheverly	11.917	2,136.43	6,693.92	8,830.35	6,680.74	2,149.61
College Park	19.371	3,100.28	10,880.92	13,981.20	10,513.20	3,468.00
Colmar Manor	3.724	674.34	2,091.81	2,766.15	2,094.44	671.71
Cottage City	2.398	429.93	1,346.98	1,776.91	1,338.81	438.10

EXHIBIT B, Schedule 1a—Concluded

## COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATION FUND

## STATEMENT OF REVENUES AND EXPENDITURES FOR ACCOUNT OF MUNICIPALITIES FOR THE FISCAL YEAR ENDED JUNE 30, 1952

MUNICIPALITY	ROAD MILES MUNI- CIPAL- ITIES	BALANCE, JULY 1, 1951	REVENUES	TOTAL FUNDS AVAILABLE	EXPEN- DITURES	BALANCE, JUNE 30, 1952
PRINCE GEORGE'S COUNTY—Continued						
District Heights	6.291	\$ 1,838.62	\$ 3,533.73	\$ 5,372.35	\$ 3,216.58	\$ 2,155.77
Eagle Harbor	1.785	587.32	1,002.65	1,589.97	976.38	613.59
Edmonston	4.516	813.59	2,536.69	3,350.28	2,546.10	804.18
Fairmount Heights	5.464	911.04	3,069.20	3,980.24	3,012.78	967.46
Forest Heights	3.837	682.61	2,155.29	2,837.90	2,159.52	678.38
Glenarden	2.164	348.47	1,215.55	1,564.02	1,172.10	391.92
Hyattsville	28.581	5,046.72	16,054.28	21,101.00	15,953.11	5,147.89
Landover Hills	4.200	747.52	2,359.19	3,106.71	2,338.04	768.67
Laurel	11.641	2,043.36	6,538.89	8,582.25	6,502.50	2,079.75
Morningside	3.996	716.17	2,244.60	2,960.77	2,249.86	710.91
Mount Rainier	15.111	2,707.77	8,488.02	11,195.79	8,473.39	2,722.40
North Brentwood	2.232	392.48	1,253.74	1,646.22	1,244.52	401.70
Riverdale	11.132	1,980.05	6,252.98	8,233.03	6,240.39	1,992.64
Seat Pleasant	5.325	788.28	2,991.12	3,779.40	2,833.23	946.17
Takoma Park	9.092	1,544.63	5,107.08	6,651.71	5,009.68	1,642.03
University Park	6.652	1,082.23	3,736.51	4,818.74	3,609.99	1,208.75
Upper Marlboro	2.106	700.83	1,182.97	1,883.80	1,154.75	729.05
TOTAL	189.507	\$ 34,171.33	\$106,448.31	\$140,619.64	\$104,897.99	\$ 35,721.65
QUEEN ANNE'S COUNTY:						
Barclay	0.445	\$ 244.96	\$ 249.96	\$ 494.92	\$ 244.96	\$ 249.96
Centreville	5.831	1,009.63	3,275.34	4,284.97	3,239.90	1,045.07
Church Hill	0.510	89.76	286.47	376.23	285.67	90.56
Queentown	1.220	205.19	685.29	890.48	672.33	218.15
Sudlersville	0.600	109.93	337.03	446.96	335.97	110.99
Templeville	0.120	40.22	67.41	107.63	66.03	41.60
TOTAL	8.726	\$ 1,699.69	\$ 4,901.50	\$ 6,601.19	\$ 4,844.86	\$ 1,756.33
ST. MARY'S COUNTY:						
Leonardtown	1.657	\$ 309.63	\$ 1,091.67	\$ 1,401.30	\$ 1,036.02	\$ 365.28
SOMERSET COUNTY:						
Crisfield	12.760	\$ 2,277.95	\$ 7,167.44	\$ 9,445.39	\$ 7,136.58	\$ 2,308.81
Princess Anne	4.220	684.18	2,370.43	3,054.61	2,296.02	758.59
TOTAL	16.980	\$ 2,962.13	\$ 9,537.87	\$ 12,500.00	\$ 9,432.60	\$ 3,067.40
TALBOT COUNTY:						
Easton	16.317	\$ 2,901.53	\$ 9,165.45	\$ 12,066.98	\$ 9,138.72	\$ 2,928.26
Oxford	4.446	1,479.73	2,497.37	3,977.10	2,450.68	1,526.42
St. Michaels	5.989	1,993.64	3,364.14	5,357.74	3,301.14	2,056.60
Trappe	0.894	456.87	502.17	959.04	456.87	502.17
TOTAL	27.646	\$ 6,831.77	\$ 15,529.09	\$ 22,360.86	\$ 15,347.41	\$ 7,013.45
WASHINGTON COUNTY:						
Boonsboro	4.155	\$ 745.75	\$ 2,333.91	\$ 3,079.66	\$ 2,334.66	\$ 745.00
Clearspring	2.515	832.29	1,412.72	2,245.01	1,386.51	858.50
Funkstown	3.110	541.61	1,746.93	2,288.54	1,718.57	569.97
Hagerstown	109.631	36,370.14	61,581.02	97,951.16	60,285.48	37,665.68
Hancock	2.719	497.64	1,527.29	2,024.93	1,527.47	497.46
Keedysville	2.395	433.50	1,345.30	1,778.80	1,345.63	433.17
Sharpsburg	5.130	911.39	2,881.58	3,792.97	2,882.77	910.20
Smithsburg	3.160	569.14	1,775.00	2,344.14	1,775.51	568.63
Williamsport	6.649	1,176.64	3,734.83	4,911.47	3,707.08	1,204.39
TOTAL	139.464	\$ 42,078.10	\$ 78,338.58	\$120,416.68	\$ 76,963.68	\$ 43,453.00
WICOMICO COUNTY:						
Delmar	5.440	\$ 976.33	\$ 3,055.71	\$ 4,032.04	\$ 3,063.54	\$ 968.50
Fruitland	4.347	2,441.76	2,441.76	2,441.76	1,651.41	790.35
Salisbury	57.219	9,310.03	32,140.59	41,450.62	31,168.19	10,282.43
TOTAL	67.006	\$ 10,286.36	\$ 37,638.06	\$ 47,924.42	\$ 35,883.14	\$ 12,041.28
WORCESTER COUNTY:						
Berlin	7.999	\$ 1,424.82	\$ 4,493.12	\$ 5,917.94	\$ 4,469.06	\$ 1,448.88
Ocean City	8.307	1,300.64	4,666.14	5,966.78	4,473.24	1,493.54
Pocomoke City	9.847	1,746.57	5,331.18	7,277.75	5,506.02	1,771.73
Snow Hill	7.584	1,356.94	4,260.03	5,616.97	4,254.46	1,362.51
TOTAL	33.737	\$ 5,828.97	\$ 18,950.47	\$ 24,779.44	\$ 18,702.78	\$ 6,076.66
GRAND TOTAL	1,111.996	\$221,786.58	\$627,910.44	\$849,697.02	\$620,279.39	\$229,417.63

**COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATION FUND**

**STATEMENT SHOWING ALLOCATION OF 20% SHARE OF GASOLINE TAX AND MOTOR VEHICLE REVENUE FUNDS TO COUNTIES AND MUNICIPALITIES FOR THE FISCAL YEAR ENDED JUNE 30, 1952**

	ROAD MILES			ALLOCATION BASED ON TOTAL COUNTY ROAD MILES				SHARE	
	COUNTIES (Excluding Municipalities)	MUNICIPALITIES	TOTAL	GASOLINE TAX	MOTOR VEHICLE REVENUE	MINIMUM SHARE ADJUSTMENT	TOTAL	COUNTIES	MUNICIPALITIES
<b>COUNTIES</b>									
Allegany	486.240	159.350	645.590	\$ 274,938.93	\$ 94,039.46	\$ 6,342.89	\$ 362,635.50	\$ 273,126.73	\$ 89,508.77
Anne Arundel	686.649	48.075	734.724	312,898.53	107,023.22	7,218.62	412,703.13	385,698.84	27,004.29
Baltimore	1,394.120		1,394.120	593,717.32	203,073.46	13,697.15	783,093.63	783,093.63	
Calvert	189.550	11.725	201.275	85,717.65	29,318.40	1,977.52	113,003.53	106,472.46	6,586.07
Caroline	456.853	27.360	484.213	206,212.90	70,532.61	4,757.37	271,982.14	256,619.71	15,368.43
Carroll	711.200	46.507	757.707	322,686.89	110,370.49	7,444.43	425,612.95	399,489.42	26,123.53
Cecil	443.610	23.251	466.861	198,823.39	68,004.82	4,586.88	262,241.33	249,180.97	13,060.36
Charles	271.170	7.220	278.390	118,558.67	40,551.44	57,429.85	216,539.96	210,924.03	5,615.93
Dorchester	495.210	32.912	528.122	224,912.76	76,928.36	5,188.77	296,632.35	278,165.29	18,487.06
Frederick	961.910	86.794	1,048.704	446,614.34	152,758.51	10,393.46	589,069.39	540,316.18	48,753.21
Garrett	722.605	39.125	761.730	324,399.62	110,957.05	7,483.96	427,872.71	405,895.74	21,976.97
Harford	562.690	44.418	607.108	258,550.40	88,434.12	5,964.80	341,019.72	316,069.60	24,950.12
Howard	293.660		293.660	125,061.80	42,775.67	1,818.61	169,656.08	169,656.08	
Kent	223.660	9.681	233.341	99,373.54	33,989.41	35,498.49	168,861.44	161,855.61	7,005.83
Montgomery	781.039	90.855	871.894	371,316.17	127,003.27	8,566.31	489,753.13	438,718.81	51,034.32
Prince George's	553.854	189.507	743.361	316,577.02	108,281.09	7,303.48	417,554.63	311,106.32	106,448.31
Queen Anne's	386.070	8.726	394.796	168,132.68	57,507.73	3,878.85	221,761.56	216,800.06	4,961.50
St. Mary's	273.950	1.657	275.607	117,373.27	40,146.25	24,056.19	181,575.71	180,484.04	1,091.67
Somerset	287.290	16.980	304.270	129,580.66	44,320.81	2,989.44	170,912.03	161,374.16	9,537.87
Talbot	269.040	27.646	296.686	126,350.42	43,216.52	2,914.92	166,652.02	151,122.93	15,529.09
Washington	630.640	139.464	770.104	327,965.91	112,176.81	7,566.23	432,576.49	354,237.91	78,338.58
Wicomico	533.257	67.006	600.263	255,635.44	87,436.91	5,897.55	337,174.80	299,536.74	37,638.06
Worcester	446.725	33.737	480.462	204,615.73	69,985.95	4,720.51	269,581.17	250,930.70	18,650.47
<b>TOTAL</b>	<b>12,060,992</b>	<b>1,111,996</b>	<b>13,172,988</b>	<b>\$5,610,014.04</b>	<b>\$1,918,832.36</b>		<b>\$7,528,846.40</b>	<b>\$6,900,935.96</b>	<b>\$627,910.44</b>

ITALICS INDICATE RED FIGURES.

COUNTY MAINTENANCE FUNDS

STATEMENT OF REVENUES AND EXPENDITURES FOR THE FISCAL YEAR ENDED JUNE 30, 1952

	REVENUES				TOTAL	TOTAL FUNDS AVAILABLE	EXPENDITURES			BALANCE, JUNE 30, 1952
	BALANCE, JULY 1, 1951	RENTALS BY COUNTIES	RENTAL OF COUNTY EQUIPMENT	TRANSFERS FROM COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATION FUND			MAINTENANCE COSTS	TRANSFERS TO COUNTY CONSTRUCTION FUNDS	TOTAL	
							REGULAR (EXHIBIT H)	PURCHASES OF EQUIPMENT		
CALVERT COUNTY	\$ 29,681.66	\$ 50.00	\$ 706.00	\$ 106,472.46	\$ 107,228.46	\$ 136,910.12	\$ 103,800.74	\$ 8,950.00		\$ 112,750.74
CAROLINE COUNTY	105,313.11		380.00	256,619.71	256,999.71	362,313.12	241,360.10	19,891.00		261,251.10
CECIL COUNTY	28,052.27			249,180.97	249,180.97	375,233.24	233,786.39			41,416.85
CHARLES COUNTY	18,679.37		448.00	210,924.03	211,372.03	260,051.40	222,275.97	16,788.81		239,064.78
KENT COUNTY	49,879.32			161,855.61	161,855.61	211,725.93	100,348.80		\$29,082.40	139,381.20
QUEEN ANNES COUNTY	10,954.87			216,800.06	216,800.06	227,814.93	238,789.79			238,789.79
ST. MARY'S COUNTY	19,856.92	29,320.00	112.00	180,481.04	209,946.04	229,802.06	209,554.19			209,554.19
SOMERSET COUNTY	15,129.97			161,374.16	161,374.16	176,195.13	150,620.38			20,274.87
TALBOT COUNTY	248.11	51,416.62		151,123.93	202,539.55	202,241.14	203,215.77			203,215.77
WICOMICO COUNTY	130,819.79			299,536.74	299,536.74	430,286.53	266,322.88			266,322.88
WORCESTER COUNTY	69,975.81			250,930.70	250,930.70	320,906.51	201,861.47		46,240.75	248,102.22
<b>TOTAL</b>	<b>\$506,086.38</b>	<b>\$80,786.62</b>	<b>\$1,676.00</b>	<b>\$2,245,361.41</b>	<b>\$2,327,824.03</b>	<b>\$2,833,910.41</b>	<b>\$2,171,966.48</b>	<b>\$15,632.81</b>	<b>\$75,273.15</b>	<b>\$2,292,872.44</b>

ITALICS INDICATE RED FIGURES.

**COUNTY CONSTRUCTION FUNDS**

**STATEMENT OF REVENUES AND EXPENDITURES FOR THE FISCAL YEAR ENDED JUNE 30, 1952**

	CASH BALANCE, JULY 1, 1951	REVENUES					TOTAL FUNDS AVAILABLE	EXPEN- DITURES	BALANCE, JUNE 30, 1952 (See Schedule 3a for anticipated receipts and authorized expendi- tures)
		FEDERAL AID APPOR- TIONMENT BY STATE	REMIT- TANCES BY COUNTIES	TRANS- FERS FROM COUNTIES AND MUNICI- PALITIES TAX RE- VENUES ALLOCA- TION FUND	TRANS- FERS FROM COUNTY MAIN- TENANCE FUNDS	TOTAL			
ALLEGANY COUNTY.....	\$211,182.39	\$ 22,323.60		\$73,126.73		\$ 95,450.33	\$306,632.72	\$165,549.63	\$141,083.09
ANNE ARUNDEL COUNTY.....	110,266.51	9,989.78	\$68,000.00*			58,010.22	52,256.29	41,119.28	11,137.01
BALTIMORE COUNTY.....	101,456.91	21,126.03	29,515.02			50,641.05	59,815.86	494.45	51,310.31
CAROLINE COUNTY.....	6,538.14	8,049.77				8,049.77	1,521.63	17,503.29	15,981.66
CARROLL COUNTY.....	7,007.85	16,611.10	15,837.39			32,448.49	39,456.34	62,018.70	22,562.36
CECIL COUNTY.....	29,240.45	27,706.09	17,927.81			45,633.90	16,393.45	33,602.87	17,309.42
CHARLES COUNTY.....	19,327.90	1,790.83				1,790.83	21,118.73	11,182.39	9,936.34
DORCHESTER COUNTY.....	21,556.59	10,215.31	43.77			10,259.08	11,397.42	1,513.59†	12,811.01
FREDERICK COUNTY.....	33,084.15	73,025.03				73,025.03	39,940.88	66,978.08‡	27,037.20
GARRETT COUNTY.....	35,155.61	12,360.46				12,360.46	22,795.15	100.37	22,895.52
HARFORD COUNTY.....	87,163.97	18,286.00				18,286.00	105,449.97	120,034.66	14,584.69
HOWARD COUNTY.....	11,314.22		11,314.22			11,314.22			
KENT COUNTY.....	16,621.04	17,478.79			\$29,032.40	46,511.19	63,132.23	59,271.12	3,861.11
MONTGOMERY COUNTY.....	70,764.75	89,237.20				89,237.20	160,001.95	191,262.79	31,360.84
PRINCE GEORGE'S COUNTY.....	27,809.61	11,380.70				11,380.70	16,438.91	1,254.41	17,683.32
QUEEN ANNE'S COUNTY.....	13,599.98	20,922.40				20,922.40	7,322.42	36,850.80	29,528.38
SOMERSET COUNTY.....	9,614.53	5,285.52				5,285.52	4,329.01		4,329.01
TALBOT COUNTY.....	19,403.17	18,630.00	23,779.77			42,709.77	23,306.60	31,248.93	7,944.33
WASHINGTON COUNTY.....	109,035.63	12,892.14				12,892.14	121,927.77	36.93	121,890.84
WICOMICO COUNTY.....	1,182.75	9,221.97				9,221.97	10,404.72	25,276.50	14,871.78
WORCESTER COUNTY.....	8,488.86	12,557.19			46,240.75	58,797.94	50,309.08	43,323.29	6,985.79
<b>TOTAL.....</b>	<b>\$315,300.66</b>	<b>\$419,389.91</b>	<b>\$30,417.98</b>	<b>\$73,126.73</b>	<b>\$75,273.15</b>	<b>\$598,207.77</b>	<b>\$913,508.43</b>	<b>\$908,622.08</b>	<b>\$ 4,886.35</b>

\* Refund of remittance received from Anne Arundel County during the fiscal year ended June 30, 1951.  
 † Includes \$1,500.00 of Federal Aid remitted to Dorchester County for reimbursement against projects carried on by the county.  
 ‡ This entire amount was remitted to Frederick County for reimbursement against projects carried on by the county.  
 NOTE—The Federal aid apportionment by the State Roads Commission is contingent upon the payment of matching funds by the counties.

ITALICS INDICATE RED FIGURES.

COUNTY CONSTRUCTION FUNDS

STATEMENT OF ANTICIPATED RECEIPTS IN CONNECTION WITH THE 1946-1947-1948 1950-1951-1952-1953 FEDERAL AID PROGRAM, CASH BALANCES, AND AUTHORIZED EXPENDITURES RELATED THERETO AS OF JUNE 30, 1952

	ANTICIPATED RECEIPTS (Assuming full participation by the counties in the 1946-7-8-50-1-2-3 Federal Aid Program)†					CASH BALANCE	CASH BALANCE PLUS ANTICIPATED RECEIPTS	AUTHORIZED EXPENDITURES RELATED THERETO	BALANCE FOR FUTURE AUTHORIZATION	
	FEDERAL AID APPORTIONMENT BY STATE		MATCHING FUNDS STILL REQUIRED FROM COUNTIES							TOTAL
	1946-7-8	1950-1-2-3	1946-7-8	1950-1-2-3	1950-1-2-3					
ALLEGANY COUNTY	\$ 26,177.66	\$ 204,813.29		\$ 98,321.93	\$ 329,412.88	\$ 470,485.97	\$113,858.69	\$ 356,637.28		
ANNE ARUNDEL COUNTY	24,225.16	245,908.00		319,680.40	589,813.56	600,950.57	7,072.08	593,878.49		
BALTIMORE COUNTY	48,109.25	463,653.45		602,749.49	1,114,512.19	1,063,201.88	29,515.02	1,033,686.86		
CALVERT COUNTY				162,171.19	301,094.79	285,113.13	12,196.81	272,916.32		
CAROLINE COUNTY	14,166.61	124,753.99		314,902.87	551,574.50	559,012.23	6,459.85	552,552.38		
CARROLL COUNTY	15,726.08	250,945.64		143,830.47	260,993.86	243,784.44	18,727.25	225,057.19		
CENT COUNTY	6,855.83	110,307.56		175,343.38	321,553.91	308,722.90	9,936.34	308,722.90		
CHARLES COUNTY				261,146.37	261,146.37	234,109.17	1,411.34	234,109.17		
CHESAPEAKE COUNTY	12,811.01	133,379.52		24,100.72	24,100.72	22,865.52	1,205.20	22,865.52		
FREDERICK COUNTY	29,798.14	231,348.23		213,507.84	410,046.38	385,461.69	9,918.71	385,542.98		
GARRETT COUNTY	24,100.72									
HARFORD COUNTY	12,524.11	184,014.43								
IOWA COUNTY										
KENT COUNTY		58,649.45		32,452.37	91,101.82	94,962.93	46,060.66	48,302.27		
MONTGOMERY COUNTY	25,052.24	207,351.25		483,638.18	31,269.84	452,377.34	47,672.97	404,704.37		
PRINCE GEORGE'S COUNTY	16,428.91	237,647.66		296,391.50	17,683.32	532,784.75	52,784.75	532,784.75		
QUEEN ANNES'S COUNTY	7,821.71	106,078.24		143,927.21	257,827.16	228,298.78	664.48	227,634.30		
ST. MARY'S COUNTY										
TALBOT COUNTY	6,175.30	54,611.65		65,580.38	6,175.30	1,846.29	6,841.67	1,846.29		
WASHINGTON COUNTY	22,439.82	257,992.53		\$160,263.73	120,192.03	112,249.70	897,977.22	105,408.03		
WISCONSIN COUNTY	17,238.02	197,330.32		249,037.35	463,605.69	448,733.91	10,983.36	437,750.55		
WORCESTER COUNTY	11,008.40	138,287.52		123,740.48	273,036.40	280,022.19	58,945.83	221,076.36		
TOTAL	\$320,658.97	\$3,207,072.73	\$160,263.73	\$3,528,364.85	\$7,216,380.28	\$7,221,246.63	\$370,928.72	\$6,850,317.91		

\* To be reimbursed from future share of tax revenues.

† Federal Aid Apportionments to the State Roads Commission are contingent upon the payment of matching funds by the counties. Calvert and St. Mary's Counties did not participate in the 1946-7-8-50-51-52-53 Federal Aid Program. Talbot County did not participate in the 1946-7-50-51-52-53 Federal Aid Program and Charles, Garrett, Howard, and Somerset Counties are not participating in the 1950-51-52-53 Federal Aid Program.

ITALICS INDICATE RED FIGURES.

**BONDED DEBT AND DEBT SERVICE FUNDS**

**STATEMENT OF REVENUES AND EXPENDITURES FOR THE FISCAL YEAR ENDED  
JUNE 30, 1952**

	TOTAL	STATE HIGHWAY CONSTRUCTION BOND FUND	STATE HIGHWAY CONSTRUCTION BOND SINKING FUND	4% BONDS OF 1933 DEBT SERVICE FUND
BALANCE, JULY 1, 1951.....	\$ 4,087,233.00		\$ 4,076,833.00	\$10,400.00
REVENUES:				
Portion of proceeds of 50% share of the Gasoline Tax Fund .....	\$ 4,808,165.59		\$ 4,808,165.59	
Portion of proceeds of excise tax on issuance of certificates of title to motor vehicles.....	1,556,491.99		1,556,491.99	
Net income from Unites States Treasury obliga- tions.....	120,398.83		120,398.83	
Proceeds from sale of Series D State Highway Construction Bonds (par value \$25,000,000)...	25,001,475.00	\$25,001,475.00		
Acerued interest on Series D State Highway Con- struction Bonds.....	14,061.32	14,061.32		
TOTAL REVENUES.....	\$31,500,592.73	\$25,015,536.32	\$ 6,485,056.41	
TOTAL FUNDS AVAILABLE.....	\$35,587,825.73	\$25,015,536.32	\$10,561,889.41	\$10,400.00
EXPENDITURES:				
Expenses of issuing construction bonds.....	\$ 31,153.06	\$ 31,153.06		
Redemption of State Highway Construction Bonds:				
Series A, due August 1, 1951.....	1,500,000.00		\$ 1,500,000.00	
Series B, due December 1, 1951.....	166,000.00		166,000.00	
Series C, due December 1, 1951.....	1,666,000.00		1,666,000.00	
Interest on State Highway Construction Bonds Transfer to General Construction and Operating Fund.....	997,895.08		997,895.08	
	24,984,383.26	24,984,383.26		
TOTAL EXPENDITURES.....	\$29,345,431.40	\$25,015,536.32	\$ 4,329,895.08	
BALANCE, JUNE 30, 1952.....	\$ 6,242,394.33		\$ 6,231,994.33	\$10,400.00

COMBINED BALANCE SHEET, JUNE 30, 1951 (INCLUDING ALL FUNDS EXCEPT SUSQUEHANNA RIVER TOLL, BRIDGE, POTOMAC RIVER TOLL BRIDGE, CHESAPEAKE BAY BRIDGE, AND CHESAPEAKE BAY FERRY SYSTEM)

	TOTAL	GENERAL CONSTRUCTION AND OPERATING FUND	MAINTENANCE FUND	COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATION FUND	COUNTY MAINTENANCE FUNDS (Schedule 1)	COUNTY CONSTRUCTION FUNDS (Schedule 2)	BONDED DEBT AND DEBT SERVICE FUNDS (Schedule 3)	FIXED ASSETS (Schedule 4)
<b>ASSETS</b>								
<b>CASH AND INVESTMENTS:</b>								
Cash with State Treasurer								
Investment in obligations of the United States—at cost:								
Treasury notes (including accrued interest purchased):								
Series E 11 1/2% due August 1, 1951—par value \$5,000,000	\$ 3,574,072.18	\$ 506,063.31	\$ 1,556,333.66	\$588,391.06	\$506,086.38	\$ 315,300.66	\$ 101,894.11	
Series F 11 1/2% due October 15, 1951—par value \$5,000,000	5,055,112.49	5,055,442.49						
Treasury bills (purchased on discount basis):								
Due July 5, 1951—maturity value \$5,000,000.	4,993,247.22	4,993,247.22						
Due July 26, 1951—maturity value \$4,000,000.	3,985,338.80	3,985,338.80					3,985,338.80	
Due August 30, 1951—maturity value \$5,000,000	4,980,409.72	1,980,409.72						
Working Fund:								
Payroll	472,000.00	472,000.00						
Office	25,000.00	25,000.00						
Special	3,000.00	3,000.00						
Debt Service Funds with Fiscal Agent	8,256.69						8,256.69	
Accounts Receivable:								
United States Government (Federal aid)	1,534,299.68	1,372,720.68				161,579.00		
Tenants and others	39,613.04	39,613.04						
Counties, etc.	161,089.03	161,089.03						
INVENTORIES OF MATERIALS AND SUPPLIES (Book value)	952,327.07	952,327.07						
PRELIMINARY CONSTRUCTION COSTS, ETC.	605,965.98	605,965.98						
ROADS SYSTEM CONSTRUCTION AND OTHER WORK IN PROGRESS								
ROADS SYSTEM AND OTHER FIXED ASSETS (Book value)	67,231,642.68	67,231,642.68						\$265,699,416.28
FUTURE TAX REVENUES ENCUMBERED AND PORTION OF EXISTING STAKING FUND RESERVED FOR THE REDEMPTION OF STATE HIGHWAY CONSTRUCTION BONDS	265,699,416.28							
Future Revenues Encumbered For The Completion of Authorized Projects:								
State tax revenues, bond proceeds, etc.	21,944,260.01	21,944,260.01						
County funds and Federal aid apportionments	818,792.52				298.11	818,454.41	48,334,000.00	
<b>TOTAL</b>	\$485,455,468.57	\$113,380,116.32	\$1,556,333.66	\$588,394.06	\$506,384.49	\$1,295,334.07	\$52,429,480.69	\$265,699,416.28



	TOTAL	GENERAL CONSTRUCTION AND OPERATING FUND	MAINTENANCE FUND	COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATION FUND	COUNTY MAINTENANCE FUNDS (Schedule 1)	COUNTY CONSTRUCTION FUNDS (Schedule 2)	BONDED DEBT AND DEPT. SERVICE FUNDS (Schedule 3)	FIXED ASSETS (Schedule 4)
<b>LIABILITIES</b>								
TAX APPROPRIATIONS PAYABLE TO:								
Counties	\$ 366,607.48			\$366,607.48				
Municipalities	221,786.58			221,786.58				
Unclaimed Wages, Etc.	5,252.31	\$ 5,252.31						
Matured and Called Bonds and Interest Coupons Payable Through State Treasurer or Fiscal Agent								
State Highway Construction Bonds Payable:								
Series A	21,000,000.00						\$ 18,656.69	
Series B	2,334,000.00						21,000,000.00	
Series C	25,000,000.00						2,334,000.00	
	500,000.00	500,000.00					25,000,000.00	
Due State Comptroller for Working Fund Advanced State Equity in Roads System Construction and Other Works in Progress	67,231,642.68	67,231,642.68						
State Equity in Roads System and Other Fixed Assets Reserves:	265,699,416.28							\$265,699,416.28
Completion of authorized projects	45,176,817.53		\$ 57,770.90					
State Highway Construction Bonds Sinking Fund	4,076,833.00		1,410,588.10			\$ 888,189.02	4,076,833.00	
Acquisition of capital properties	1,410,588.10		58,166.43					
Ocean City beach protection	58,166.43		29,779.23					
Sign Permit Fund	29,779.23				\$506,384.49			
Accounts receivable	1,573,913.72	1,412,333.72						
Scraples Available for New Projects, Etc.	751,980.54							
<b>TOTAL</b>	\$65,455,498.57	\$13,380,116.32	\$1,556,333.66	\$588,394.06	\$506,384.49	\$1,295,334.07	\$52,429,489.69	\$265,699,416.28

Note: The State Reads Commission is authorized to issue State Highway Construction Bonds in the aggregate principal amount of \$50,000,000 in addition to the Series A, Series B, and Series C bonds outstanding at June 30, 1991, shown by this statement.

**COUNTY MAINTENANCE FUNDS**  
**COMBINED BALANCE SHEET, JUNE 30, 1951**

	ASSETS			LIABILITIES
	CASH WITH STATE TREASURER	FUTURE RECEIPTS ENCUMBERED FOR THE COMPLETION OF AUTHORIZED PROJECTS	Total	SURPLUS AVAILABLE FOR NEW PROJECTS ETC.
CALVERT COUNTY	\$ 29,681.66		\$ 29,681.66	\$ 29,681.66
CAROLINE COUNTY	105,343.41		105,343.41	105,343.41
CECIL COUNTY	26,052.27		26,052.27	26,052.27
CHARLES COUNTY	48,679.37		48,679.37	48,679.37
KENT COUNTY	49,870.32		49,870.32	49,870.32
QUEEN ANNE'S COUNTY	10,954.87		10,954.87	10,954.87
ST. MARY'S COUNTY	19,856.02		19,856.02	19,856.02
SOMERSET COUNTY	15,120.97		15,120.97	15,120.97
TALBOT COUNTY	<i>298.11</i>	\$298.11		
WICOMICO COUNTY	130,849.79		130,849.79	130,849.79
WORCESTER COUNTY	69,975.81		69,975.81	69,975.81
<b>TOTAL</b>	<b>\$506,086.38</b>	<b>\$298.11</b>	<b>\$506,384.49</b>	<b>\$506,384.49</b>

ITALICS INDICATE RED FIGURES.

**COUNTY CONSTRUCTION FUNDS**  
**COMBINED BALANCE SHEET, JUNE 30, 1951**

	ASSETS				LIABILITIES			
	CASH WITH STATE TREASURER	ACCOUNTS RECEIVABLE UNITED STATES GOVERNMENT (Federal Aid)	FUTURE RECEIPTS ENCUMBERED FOR THE COMPLETION OF AUTHORIZED PROJECTS—COUNTY FUNDS AND FEDERAL AID APPORTIONMENTS	TOTAL	RESERVE FOR COMPLETION OF AUTHORIZED PROJECTS	RESERVE FOR ACCOUNTS RECEIVABLE	SURPLUS AVAILABLE FOR NEW PROJECTS, ETC.	TOTAL
ALLEGANY COUNTY	\$211,182.39		\$ 73,516.72	\$ 284,699.11	\$284,699.11			\$ 284,699.11
ANNE ARUNDEL COUNTY	110,266.51			110,266.51			\$110,266.51	110,266.51
BALTIMORE COUNTY	<i>101,456.91</i>		130,971.93	29,515.02	29,515.02		29,515.02	29,515.02
CAROLINE COUNTY	<i>6,528.14</i>		15,595.64	9,067.50	9,067.50		9,067.50	9,067.50
CARROLL COUNTY	7,007.85			7,007.85			7,007.85	7,007.85
CECIL COUNTY	<i>29,340.45</i>		63,283.00	34,042.55	34,042.55		34,042.55	34,042.55
CHARLES COUNTY	19,327.90			19,327.90			19,327.90	19,327.90
DORCHESTER COUNTY	<i>21,556.50</i>		21,556.50					
FREDERICK COUNTY	<i>33,084.15</i>		33,084.15					
GARRETT COUNTY	<i>35,155.61</i>		36,667.32	1,511.71	1,511.71		1,511.71	1,511.71
HARFORD COUNTY	87,163.97		60,446.63	147,610.60	147,610.60		147,610.60	147,610.60
HOWARD COUNTY	<i>11,314.22</i>		11,314.22					
KENT COUNTY	16,621.04		21,563.83	38,184.87	38,184.87		38,184.87	38,184.87
MONTGOMERY COUNTY	70,764.75		168,165.29	238,930.04	238,930.04		238,930.04	238,930.04
PRINCE GEORGE'S COUNTY	<i>27,809.61</i>		27,809.61					
QUEEN ANNE'S COUNTY	<i>13,599.98</i>		30,520.67	16,920.69	16,920.69		16,920.69	16,920.69
SOMERSET COUNTY	<i>9,614.53</i>		9,614.53					
TALBOT COUNTY	<i>19,403.17</i>		41,653.50	22,250.33	22,250.33		22,250.33	22,250.33
WASHINGTON COUNTY	109,035.63			109,035.63	41.84		108,993.79	109,035.63
WICOMICO COUNTY	1,182.75		35,468.99	36,651.74	36,651.74		36,651.74	36,651.74
WORCESTER COUNTY	<i>8,488.86</i>		37,221.88	28,733.02	28,733.02		28,733.02	28,733.02
UNDISTRIBUTED (Appor- tioned when realized)		\$161,579.00		161,579.00		\$161,579.00		161,579.00
<b>TOTAL</b>	<b>\$315,300.66</b>	<b>\$161,579.00</b>	<b>\$818,454.41</b>	<b>\$1,295,334.07</b>	<b>\$888,159.02</b>	<b>\$161,579.00</b>	<b>\$245,596.05</b>	<b>\$1,295,334.07</b>

ITALICS INDICATE RED FIGURES.

**BONDED DEBT AND DEBT SERVICE FUNDS**  
**COMBINED BALANCE SHEET, JUNE 30, 1951**

	TOTAL	STATE HIGHWAY CONSTRUCTION BONDS— BONDED DEBT FUND (Schedule 3a)	STATE HIGHWAY CONSTRUCTION BONDS— SINKING FUND	REFUNDING AND IMPROVEMENT BONDS OF 1941—DEBT SERVICE FUND	4% BONDS OF 1933— DEBT SERVICE FUND
<b>ASSETS</b>					
CASH WITH STATE TREASURER .....	\$ 101,894.11		\$ 91,494.11		\$10,400.00
INVESTMENT IN OBLIGATIONS OF THE UNITED STATES—AT COST:					
TREASURY BILLS (purchased on discount basis) DUE JULY 26, 1951—MATURITY VALUE \$4,000,000 .....	3,985,338.89		3,985,338.89		
DEBT SERVICE FUNDS WITH FISCAL AGENT .....	8,256.69		6,604.19	\$52.50	1,600.00
FUTURE TAX REVENUES ENCUMBERED AND PORTION OF EXISTING SINKING FUND RESERVED FOR THE REDEMPTION OF STATE HIGHWAY CONSTRUCTION BONDS .....	48,334,000.00	\$48,334,000.00			
<b>TOTAL .....</b>	<b>\$52,429,489.69</b>	<b>\$48,334,000.00</b>	<b>\$4,083,437.19</b>	<b>\$52.50</b>	<b>\$12,000.00</b>
<b>LIABILITIES</b>					
MATURED AND CALLED BONDS AND INTEREST COUPONS PAYABLE THROUGH STATE TREASURER OR FISCAL AGENT .....	\$ 18,656.69		\$ 6,604.19	\$52.50	\$12,000.00
STATE HIGHWAY CONSTRUCTION BONDS PAYABLE:					
Series A .....	21,000,000.00	\$21,000,000.00			
Series B .....	2,334,000.00	2,334,000.00			
Series C .....	25,000,000.00	25,000,000.00			
DEBT SERVICE RESERVE .....	4,076,833.00		4,076,833.00		
<b>TOTAL .....</b>	<b>\$52,429,489.69</b>	<b>\$48,334,000.00</b>	<b>\$4,083,437.19</b>	<b>\$52.50</b>	<b>\$12,000.00</b>

**BONDED DEBT AND DEBT SERVICE FUNDS****STATE HIGHWAY CONSTRUCTION BONDS PAYABLE, JUNE 30, 1951**

MATURITY	INTEREST RATE	PRINCIPAL	
		MATURITIES	TOTAL
<b>SERIES A, DATED AUGUST 1, 1949:</b>			
August 1, 1951	4%	\$1,500,000.00	
August 1, 1952	4%	1,500,000.00	
August 1, 1953	1 1/4%	1,500,000.00	
August 1, 1954	1 1/4%	1,500,000.00	
August 1, 1955	1 1/4%	1,500,000.00	
August 1, 1956	1 1/4%	1,500,000.00	
August 1, 1957	1 1/4%	1,500,000.00	
August 1, 1958	1 1/4%	1,500,000.00	
August 1, 1959	1 1/4%	1,500,000.00	
August 1, 1960	1 1/4%	1,500,000.00	
August 1, 1961	1 1/2%	1,500,000.00	
August 1, 1962	1 1/2%	1,500,000.00	
August 1, 1963	1 1/2%	1,500,000.00	
August 1, 1964	1 1/2%	1,500,000.00	\$21,000,000.00
<b>SERIES B, DATED DECEMBER 1, 1949:</b>			
December 1, 1951	4%	\$ 166,000.00	
December 1, 1952	4%	166,000.00	
December 1, 1953	4%	166,000.00	
December 1, 1954	1%	166,000.00	
December 1, 1955	1 1/4%	167,000.00	
December 1, 1956	1 1/4%	167,000.00	
December 1, 1957	1 1/4%	167,000.00	
December 1, 1958	1 1/4%	167,000.00	
December 1, 1959	1 1/4%	167,000.00	
December 1, 1960	1 1/4%	167,000.00	
December 1, 1961	1 1/2%	167,000.00	
December 1, 1962	1 1/2%	167,000.00	
December 1, 1963	1 1/2%	167,000.00	
December 1, 1964	1 1/2%	167,000.00	2,334,000.00
<b>SERIES C, DATED DECEMBER 1, 1950:</b>			
December 1, 1951	2 1/4%	\$1,666,000.00	
December 1, 1952	2 1/4%	1,666,000.00	
December 1, 1953	2 1/4%	1,666,000.00	
December 1, 1954	2%	1,666,000.00	
December 1, 1955	1 2/3%	1,666,000.00	
December 1, 1956	1 1/4%	1,667,000.00	
December 1, 1957	1 1/4%	1,667,000.00	
December 1, 1958	1 1/4%	1,667,000.00	
December 1, 1959	1 3/4%	1,667,000.00	
December 1, 1960	1 3/4%	1,667,000.00	
December 1, 1961	1 3/4%	1,667,000.00	
December 1, 1962	1 3/4%	1,667,000.00	
December 1, 1963	1 1/2%	1,667,000.00	
December 1, 1964	1 1/2%	1,667,000.00	
December 1, 1965	1 1/2%	1,667,000.00	25,000,000.00
<b>TOTAL</b>			<b>\$48,334,000.00</b>

EXHIBIT C, Schedule 4

STATEMENT OF ROADS SYSTEM AND OTHER FIXED ASSETS FOR THE  
FISCAL YEAR ENDED JUNE 30, 1951

	BALANCE JULY 1, 1950	ADDITIONS			DEDUCTIONS	BALANCE JUNE 30, 1951
		GENERAL CONSTRUCTION AND OPERATING FUND	MAINTENANCE FUND	TOTAL		
<b>ROADS SYSTEM:</b>						
Roads .....	\$220,561,127.57	\$15,658,614.38		\$15,658,614.38		\$236,219,741.95
Bridges (Since May, 1929) .....	18,627,938.44	3,927,113.14		3,927,113.14		22,555,051.58
Traffic Control Facilities (Since July, 1948) .....	156,286.50	64,332.63		64,332.63		220,619.13
<b>TOTAL ROADS SYSTEM.</b>	<b>\$239,345,352.51</b>	<b>\$19,650,060.15</b>		<b>\$19,650,060.15</b>		<b>\$258,995,412.66</b>
<b>OTHER FIXED ASSETS:</b>						
Lands and Buildings .....	\$ 921,194.92		\$ 43,458.71	\$ 43,458.71		\$ 964,653.63
Engineering Equipment .....	321,482.53		28,156.08	28,156.08		349,638.61
Office Equipment .....	194,011.65		36,901.08	36,901.08	\$ 4,428.43	226,484.30
Road Equipment .....	3,498,440.49		595,767.72	595,767.72	264,815.47	3,829,392.74
Shop, Storeroom, and Yard Equipment .....	959,262.15		23,185.04	23,185.04	2,699.78	979,747.41
Transportation Equipment .....	291,112.08		80,152.39	80,152.39	31,829.39	339,435.08
Snow Fences .....			15,596.85	15,596.85	945.00	14,651.85
<b>TOTAL OTHER FIXED ASSETS.</b>	<b>\$ 6,185,503.82</b>		<b>\$83,217.87</b>	<b>\$ 83,217.87</b>	<b>\$304,718.07</b>	<b>\$ 6,704,003.62</b>
<b>TOTAL.....</b>	<b>\$245,530,856.33</b>	<b>\$19,650,060.15</b>	<b>\$83,217.87</b>	<b>\$20,473,278.02</b>	<b>\$304,718.07</b>	<b>\$265,699,416.28</b>

## NOTES:

This statement does not include construction work in progress at June 30, 1951.  
The balance of \$265,699,416.28 at June 30, 1951, has not been reduced by the book value of certain capital property dispositions in prior periods not reported for record, such book value being indeterminate.

COMBINED STATEMENT OF REVENUES AND EXPENDITURES FOR THE FISCAL YEAR ENDED JUNE 30, 1951  
(INCLUDING ALL FUNDS EXCEPT SUSQUEHANNA RIVER TOLL BRIDGE, POTOMAC RIVER TOLL BRIDGE,  
CHESAPEAKE BAY BRIDGE, AND CHESAPEAKE BAY FERRY SYSTEM)

	TOTAL	ELIMINATIONS	GENERAL CONSTRUCTION AND OPERATING FUND	MAINTENANCE FUND	COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATION FUND (Schedule 1)	COUNTY MAINTENANCE FUNDS (Schedule 2)	COUNTY CONSTRUCTION FUNDS (Schedule 3)	BONDED DEBT AND DEBT SERVICE FUNDS (Schedule 4)
CASH BALANCE, JULY 1, 1950 (Including Investment in United States Treasury obligations)	\$22,933,212.55		\$18,390,515.61	\$1,371,219.92	\$ 469,985.69	\$ 356,513.59	\$ 233,281.71	\$ 2,111,656.00
REVENUES:								
Gasoline Tax Fund:								
50% portion	\$12,829,517.92							
20% portion	5,131,807.13		\$ 9,617,115.32		\$5,131,807.13			\$ 3,212,402.60
Excise tax on issuance of certificates of title to motor vehicles	7,161,520.25		6,102,633.44					1,061,886.81
Motor Vehicle Revenue Fund:								
50% portion	5,358,471.11			\$5,358,471.11				
20% portion	2,143,388.41				2,143,388.41			
Federal aid	3,591,449.87		2,991,148.44				\$ 603,301.43	
Specific work authorizations—hillwork	1,882.99		219,665.71					
Sale of specifications				1,882.99				
Sale of new, old, and scrap materials, and miscellaneous income	7,038.06			7,038.06				
Rental of properties	7,473.87			7,473.87				
Remittances by counties	343,077.36						235,943.03	
Rental of equipment	2,422.00					\$ 107,134.33		
Sign Permit Fund	10,766.73			10,766.73		2,422.00		
Net income from United States Treasury obligations	201,195.22							
Reimbursement of advances for account of Toll System Facilities, etc.	48,165.76							
Portion of Chesapeake Bay Ferry System revenues received on account of redemption of bonds	393,626.00							
Proceeds from sale of Series C State Highway Construction Bonds	25,007,250.00							25,007,250.00
Accrued interest on Series C State Highway Construction Bonds	19,748.97							19,748.97
Collections for account of State Treasurer:								
Sign licenses—General Fund		\$ 3,670.86	3,670.86					
Hauling permits—Motor Vehicle Revenue Fund		86,160.00	86,160.00					
Unclaimed payroll checks restored to cash balance	202.97		202.97					
TOTAL REVENUES	\$62,490,670.33	\$ 89,830.86	\$19,666,583.72	\$5,388,632.76	\$7,275,195.54	\$ 109,556.33	\$ 839,244.46	\$29,301,288.38
TRANSFERS FROM:								
General Construction and Operating Fund		1,007,667.05		1,007,667.05				
Counties and Municipalities Tax Revenues Allocation Fund		2,224,573.03						
County Maintenance Funds		96,621.44						
County Construction Funds		44,081.19						
Bonded Debt and Debt Service Funds		24,996,157.65						
TOTAL REVENUES, INCLUDING TRANSFERS	\$62,490,670.33	\$28,458,931.22	\$44,707,033.17	\$6,396,299.81	\$7,275,195.54	\$2,206,475.21	\$1,003,309.44	\$29,301,288.38

TOTAL.....	\$85,423,882.88	\$28,458,931.22	\$63,007,578.78	\$7,745,181.23	\$2,622,988.80	\$1,236,501.18	\$31,412,924.38
EXPENDITURES:							
Construction costs.....	\$41,401,637.62		\$40,627,989.83				
Maintenance costs.....	7,067,315.74				\$5,047,034.76		
Capital properties acquired.....	962,522.16				962,522.16		\$2,020,280.98
Ocean City beach protection.....	10,397.58				10,397.58		
Sign Permit Fund.....	10,477.89				10,477.89		
Payments of tax apportionments:							
Countries.....	4,384,507.97					\$4,384,507.97	
Municipalities.....	547,706.17					547,706.17	
Advances for account of Toll System Facilities, etc.....	43,447.84		43,447.84				
Specific work authorizations—bitwork.....	232,139.28		232,139.28				
Remittances of collections to State Treasurer:							
Sign Licenses—General Fund.....		\$ 3,670.86	3,670.86				
Hauling Permits—Motor Vehicle Revenue Fund.....		86,160.00	86,160.00				
Federal aid apportioned to:							
Baltimore City—Urban Program.....	455,212.76		455,212.76				
Frederick County—Secondary Program.....	103,561.54						103,561.54
Refunds of excise tax on issuance of certificates of title to motor vehicles.....	2,425.55		2,425.55				
Redemption of State Highway Construction Bonds:							
Series A, due August 1, 1950.....	1,500,000.00						\$ 1,500,000.00
Series B, due December 1, 1950.....	166,000.00						166,000.00
Interest on State Highway Construction Bonds.....	632,692.41						632,692.41
Costs incurred in the enforcement of weight- and size limitations on motor vehicles.....	14,207.61		14,207.61				
Bond issue expenses.....	30,841.32						30,841.32
Inventory adjustments applicable to prior periods.....	180,783.68			180,783.68			
Net increase in book value of inventories of materials and supplies.....	52,093.49		52,093.49				
Miscellaneous.....	16.68		16.68				
TOTAL EXPENDITURES.....	\$57,797,987.29	\$ 89,830.86	\$41,517,363.90	\$6,211,216.07	\$2,020,280.98	\$ 877,209.33	\$ 2,329,533.73
TRANSFERS TO:							
General Construction and Operating Fund.....		25,040,449.45					
Maintenance Fund.....		1,007,667.05	1,007,667.05		210.61	44,081.19	21,996,157.65
County Maintenance Funds.....		2,156,918.88					
County Construction Funds.....		164,064.98					
TOTAL EXPENDITURES, INCLUDING TRANSFERS.....	\$57,797,987.29	\$28,458,931.22	\$42,525,030.95	\$6,211,216.07	\$2,116,902.42	\$ 921,290.52	\$27,325,691.38
CASH BALANCE, JUNE 30, 1951 (Including Investment in United States Treasury obligations).....	\$27,625,895.59		\$20,572,547.83		\$ 588,394.06	\$ 315,300.66	\$ 1,087,233.00

**COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATION FUND**  
**STATEMENT OF REVENUES AND EXPENDITURES FOR THE FISCAL YEAR ENDED JUNE 30, 1951**

COUNTIES:	BALANCE, JULY 1, 1950	REVENUES			TOTAL FUNDS AVAILABLE	EXPENDITURES			BALANCE, JUNE 30, 1951
		ALLOCATION OF 20% SHARE OF GASOLINE TAX AND MOTOR VEHICLE REVENUE FUNDS	PAYMENTS TO COUNTIES AND MUNICIPALITIES	TRANSFERS TO COUNTY MAINTENANCE FUNDS		TRANSFERS TO COUNTY CONSTRUCTION FUNDS	TOTAL		
Allegany	\$ 19,310.56	\$ 267,651.15	\$ 200,000.00	\$ 267,651.15		\$ 67,651.15		\$ 267,651.15	\$ 31,029.98
Anne Arundel	51,170.32	393,350.98	378,631.51	112,661.51	378,631.56			714,188.53	65,101.80
Baltimore		757,631.01	806,260.33	806,260.33	741,188.53			1,033,623.51	
Calvert		103,623.51		103,623.51		\$ 103,623.51		253,421.00	
Caroline		253,421.00		253,421.00				381,684.74	
Carrall	26,729.25	391,374.89		118,188.18	381,684.74			211,188.18	33,419.36
Cecil		241,188.18		241,188.18		241,188.18		192,337.07	
Charles		192,337.07		342,367.07		192,337.07		261,765.13	23,000.61
Dorchester	18,311.61	206,451.16		261,765.13				521,581.37	45,585.89
Fredrick	38,264.78	528,873.48		567,162.26				390,500.00	31,228.58
Garratt	27,249.80	397,312.72		234,783.58	303,002.86			158,366.55	16,681.12
Harford	21,783.37	308,798.61		330,583.98				117,752.11	33,671.11
Howard	10,782.96	161,254.70		172,037.66				409,685.11	35,738.62
Kent		147,732.11		147,732.11		147,732.11		291,107.55	25,565.37
Montgomery	27,701.26	417,222.17		146,323.73				212,982.78	
Prince George's	18,701.80	298,271.12		310,972.92		291,107.55		161,677.37	
Queen Anne's		212,982.78		212,982.78				158,140.76	
St. Mary's		164,677.37		161,677.37				148,094.93	
Somerset		158,140.76		158,140.76				339,731.57	29,585.01
Talbot	23,555.59	148,094.93		148,094.93		339,731.57		285,798.32	
Washington		315,763.99		369,319.58				219,302.85	
Wicomico		285,798.32		285,798.32				\$ 6,609,681.00	\$ 666,607.48
Worcester		245,902.85		245,902.85				517,706.17	221,786.58
TOTAL COUNTIES	\$293,894.36	\$6,691,794.12	\$6,975,688.48	\$6,975,688.48	\$4,384,507.97	\$2,150,918.88	\$67,651.15	\$6,609,681.00	\$666,607.48
MUNICIPALITIES—SCHEDULE 1a	186,991.33	583,401.42	769,492.75	769,492.75	517,706.17			517,706.17	221,786.58
TOTAL COUNTIES AND MUNICIPALITIES	\$469,985.69	\$7,275,195.54	\$7,745,181.23	\$7,745,181.23	\$4,932,214.14	\$2,150,918.88	\$67,651.15	\$7,156,787.17	\$588,394.06



## COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATION FUND

## STATEMENT OF REVENUES AND EXPENDITURES FOR ACCOUNT OF MUNICIPALITIES FOR THE FISCAL YEAR ENDED JUNE 30, 1951

MUNICIPALITY	ROAD MILES MUNICIPALITIES	BALANCE, JULY 1, 1950	REVENUES	TOTAL FUNDS AVAILABLE	EXPENDITURES	BALANCE, JUNE 30, 1951
<b>ALLEGANY COUNTY:</b>						
Barton	2.500	\$ 362.03	\$ 1,376.14	\$ 1,738.17	\$ 1,297.06	\$ 441.11
Cumberland	112.404	16,549.29	61,873.56	78,422.85	58,289.87	20,132.98
Frostburg	23.478	3,451.02	12,923.63	16,374.65	12,177.96	4,196.69
Lonaconing	5.965	887.72	3,283.48	4,171.20	3,093.42	1,077.78
Luke	2.080	1,488.79	1,640.36	3,129.15	1,488.79	1,640.36
Midland	2.755	421.16	1,516.51	1,937.67	1,452.09	485.58
Westernport	9.229	1,358.51	5,980.16	6,438.67	4,786.92	1,651.75
TOTAL	159.311	\$ 24,518.52	\$ 87,693.84	\$112,212.36	\$ 82,586.11	\$ 29,626.25
<b>ANNE ARUNDEL COUNTY:</b>						
Annapolis	16.540	\$ 2,448.73	\$ 9,104.56	\$ 11,553.29	\$ 8,588.78	\$ 2,964.51
<b>CALVERT COUNTY:</b>						
Chesapeake Beach	6.220	\$ 911.28	\$ 3,423.84	\$ 4,335.12	\$ 3,218.44	\$ 1,116.68
North Beach	5.250	1,608.55	2,889.90	4,498.45	2,752.18	1,746.27
TOTAL	11.470	\$ 2,519.83	\$ 6,313.74	\$ 8,833.57	\$ 5,970.62	\$ 2,862.95
<b>CAROLINE COUNTY:</b>						
Denton	8.410	\$ 2,575.35	\$ 4,629.35	\$ 7,204.70	\$ 4,413.69	\$ 2,791.01
Federalburg	6.210	908.27	3,418.34	4,326.61	3,210.61	1,116.00
Goldsboro	0.550	84.71	302.75	387.46	284.11	103.35
Greensboro	3.433	498.79	1,889.72	2,388.51	1,767.79	620.72
Henderson	0.375	49.13	206.43	255.56	194.17	61.39
Hillsboro	0.340	48.95	187.15	236.10	175.85	61.25
Preston	1.280	393.65	704.58	1,098.23	669.93	428.30
Ridgely	6.686	972.14	3,680.55	4,652.49	3,453.81	1,198.68
TOTAL	27.284	\$ 5,530.99	\$ 15,018.67	\$ 20,549.66	\$ 11,171.96	\$ 6,377.70
<b>CARROLL COUNTY:</b>						
Hampstead	1.880	\$ 273.38	\$ 1,034.86	\$ 1,308.24	\$ 977.14	\$ 331.10
Manchester	3.530	481.79	1,943.11	2,424.90	1,804.89	620.01
Mt. Airy	4.749	680.13	2,614.12	3,294.25	2,453.65	840.60
New Windsor	2.480	360.09	1,365.13	1,725.22	1,380.08	436.14
Sykesville	4.317	638.63	2,376.32	3,014.95	2,343.24	771.71
Taneytown	4.340	650.12	2,388.98	3,039.10	2,354.72	784.38
Union Bridge	1.400	653.45	2,422.01	3,075.46	2,286.22	789.24
Westminster	19.911	2,850.35	10,960.16	13,810.51	10,254.06	3,556.45
TOTAL	45.607	\$ 6,587.94	\$ 25,104.69	\$ 31,692.63	\$ 23,563.00	\$ 8,129.63
<b>CECIL COUNTY:</b>						
Cecilton	0.460	\$ 64.44	\$ 253.21	\$ 317.65	\$ 237.86	\$ 79.79
Charlestown	2.870	425.12	1,578.81	2,004.93	1,500.36	504.57
Chesapeake City	2.960	437.02	1,629.35	2,066.37	1,529.61	536.76
Elkton	9.520	1,399.32	5,240.36	6,639.68	4,937.20	1,702.48
North East	3.640	1,112.70	2,003.66	3,116.36	1,905.62	1,210.74
Perryville	1.381	210.37	760.18	970.55	730.65	239.90
Port Deposit	0.720	111.68	396.32	508.00	371.81	136.19
Rising Sun	1.700	253.99	935.78	1,189.77	878.34	311.43
TOTAL	23.251	\$ 4,014.64	\$ 12,798.67	\$ 16,813.31	\$ 12,091.45	\$ 4,721.86
<b>CHARLES COUNTY:</b>						
Indian Head	2.120	\$ 836.54	\$ 1,516.49	\$ 2,353.03	\$ 1,437.47	\$ 915.56
La Plata	5.100	956.03	3,648.17	4,604.20	3,419.14	1,185.06
TOTAL	7.220	\$ 1,792.57	\$ 5,164.66	\$ 6,957.23	\$ 4,856.61	\$ 2,100.62
<b>DORCHESTER COUNTY:</b>						
Cambridge	23.620	\$ 3,466.02	\$ 13,001.80	\$ 16,467.82	\$ 12,244.81	\$ 4,223.01
Eldorado	0.280	48.84	154.13	202.97	144.88	58.09
Hurlock	6.500	887.71	3,324.76	4,212.47	3,135.24	1,077.23
Secretary	1.385	200.44	762.38	962.82	719.10	243.72
Vienna	1.435	423.97	789.90	1,213.87	739.21	474.66
TOTAL	32.760	\$ 5,026.98	\$ 18,032.97	\$ 23,059.95	\$ 16,983.24	\$ 6,076.71
<b>FREDERICK COUNTY:</b>						
Brunswick	16.421	\$ 5,028.96	\$ 9,039.45	\$ 14,068.01	\$ 8,609.76	\$ 5,458.25
Burkittsville	1.370	181.63	754.13	935.76	687.45	248.31
Emmitsburg	4.160	1,274.02	2,289.90	3,563.92	2,186.32	1,377.60
Frederick	46.164	6,675.69	25,411.29	32,086.98	23,835.16	8,251.82

EXHIBIT D, Schedule 1a—Continued

## COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATION FUND

## STATEMENT OF REVENUES AND EXPENDITURES FOR ACCOUNT OF MUNICIPALITIES FOR THE FISCAL YEAR ENDED JUNE 30, 1951

MUNICIPALITY	ROAD MILES MUNICIPALITIES	BALANCE, JULY 1, 1950	REVENUES	TOTAL FUNDS AVAILABLE	EXPENDITURES	BALANCE, JUNE 30, 1951
<b>FREDERICK COUNTY:—Cont.</b>						
Middletown	3.328	502.35	1,831.92	2,334.27	1,747.51	586.76
Mt. Airy	1,026	126.51	564.77	691.28	515.59	175.69
Myersville	0.180	12.56	99.08	111.64	90.37	21.27
New Market	1,095		602.75	602.75	428.02	174.73
Thurmont	7,600	1,128.22	4,183.48	5,311.70	3,929.76	1,381.94
Walkersville	2,905	445.70	1,599.07	2,044.77	1,496.30	548.47
Woodsboro	1,692	290.24	931.38	1,221.62	912.80	308.82
<b>TOTAL</b>	<b>85.941</b>	<b>\$ 15,665.88</b>	<b>\$ 47,306.82</b>	<b>\$ 62,972.70</b>	<b>\$ 44,439.04</b>	<b>\$ 18,533.66</b>
<b>GARRETT COUNTY:</b>						
Accident	1,850	\$ 280.59	\$ 1,018.34	\$ 1,298.93	\$ 959.76	\$ 339.17
Deer Park	4,050	601.96	2,229.35	2,831.31	2,101.76	729.55
Friendsville	3,575	504.38	1,967.88	2,472.26	1,834.41	637.85
Grantsville	2,576	375.09	1,417.98	1,793.07	1,337.24	455.83
Kitzmillersville	3,490	509.89	1,921.10	2,430.99	1,811.61	619.38
Loch Lynn Heights	3,459	1,032.84	1,904.03	2,936.87	1,779.26	1,157.61
Mountain Lake Park	10,435	1,539.05	5,744.02	7,283.07	5,415.94	1,867.13
Oakland	9,562	1,393.80	5,263.47	6,657.27	4,959.43	1,697.84
<b>TOTAL</b>	<b>38.997</b>	<b>\$ 6,237.60</b>	<b>\$ 21,466.17</b>	<b>\$ 27,703.77</b>	<b>\$ 20,199.41</b>	<b>\$ 7,504.36</b>
<b>HARFORD COUNTY:</b>						
Aberdeen	9,601	\$ 1,395.98	\$ 5,284.94	\$ 6,680.92	\$ 4,965.85	\$ 1,715.07
Bel Air	9,494	2,735.36	5,226.03	7,961.39	5,211.58	2,749.81
Haye de Grace	24,051	3,536.82	13,239.04	16,775.86	12,472.74	4,303.12
<b>TOTAL</b>	<b>43,146</b>	<b>\$ 7,668.16</b>	<b>\$ 23,750.01</b>	<b>\$ 31,418.17</b>	<b>\$ 22,650.17</b>	<b>\$ 8,768.00</b>
<b>KENT COUNTY:</b>						
Betterton	1,438	\$ 252.16	\$ 948.22	\$ 1,200.38	\$ 894.86	\$ 305.52
Chestertown	5,340	938.77	3,521.20	4,459.97	3,312.64	1,147.33
Galena	0,440	76.87	290.15	367.02	273.84	93.18
Millington	0,640	108.31	422.01	530.32	388.19	142.13
Rock Hall	1,640	294.48	1,081.42	1,375.90	1,020.12	355.78
<b>TOTAL</b>	<b>9,498</b>	<b>\$ 1,670.59</b>	<b>\$ 6,263.00</b>	<b>\$ 7,933.59</b>	<b>\$ 5,889.65</b>	<b>\$ 2,043.94</b>
<b>MONTGOMERY COUNTY:</b>						
Barnesville	0,450	\$ 52.76	\$ 247.71	\$ 300.47	\$ 210.20	\$ 90.27
Brookville	0,200	13.87	110.09	123.96	76.85	47.11
Chevy Chase, Section III	2,223	336.45	1,223.66	1,560.11	1,155.23	404.88
Chevy Chase, Section IV	6,212	924.42	3,419.44	4,343.86	3,223.34	1,120.52
Chevy Chase, Section V	1,620	495.54	891.74	1,387.28	846.25	541.03
Chevy Chase View	3,310	1,010.34	1,822.01	2,832.35	1,730.23	1,102.12
Chevy Chase Village	6,838	1,007.81	3,764.02	4,771.83	3,558.64	1,213.19
Drummond	0,390	51.47	214.68	266.15	208.91	57.24
Friendship Heights	0,875	121.76	481.65	603.41	436.68	166.73
Gaithersburg	4,876	693.79	2,684.03	3,377.82	2,520.31	857.51
Garrett Park	3,108	463.20	1,710.81	2,174.01	1,628.40	545.61
Glen Echo	1,747	519.81	961.65	1,481.46	907.45	574.01
Kensington	6,798	2,032.19	3,742.00	5,774.19	3,508.90	2,265.29
Laytonsville	0,296	33.19	162.93	196.12	159.18	36.94
Martin's Additions	2,303	347.75	1,267.71	1,615.46	1,198.00	417.46
North Chevy Chase	1,050	150.57	577.98	728.55	559.96	168.59
Oakmont	0,518	164.63	285.14	449.77	275.41	174.36
Poolesville	0,762	239.49	419.45	658.94	405.61	253.33
Rockville	21,728	2,174.10	11,960.32	14,134.42	10,267.51	3,866.91
Somerset	2,372	291.07	1,305.69	1,596.76	1,172.85	423.91
Takoma Park	17,023	2,472.27	9,370.43	11,842.70	8,802.13	3,040.57
Washington Grove	2,985	430.42	1,643.12	2,073.54	1,532.71	540.83
<b>TOTAL</b>	<b>87,684</b>	<b>\$ 14,026.90</b>	<b>\$ 48,266.26</b>	<b>\$ 62,293.16</b>	<b>\$ 44,384.75</b>	<b>\$ 17,908.41</b>
<b>PRINCE GEORGE'S COUNTY:</b>						
Berwyn Heights	5,307	\$ 685.71	\$ 2,921.27	\$ 3,606.98	\$ 2,654.66	\$ 952.32
Bladensburg	5,666	833.55	3,118.89	3,952.44	2,937.35	1,015.09
Bowie	3,410	505.92	1,877.06	2,382.98	1,773.62	609.36
Brentwood	6,919	1,007.36	3,808.61	4,815.97	3,569.70	1,246.27
Capitol Heights	6,070	726.67	3,341.27	4,067.94	2,992.32	1,075.62
Cheverly	11,917	1,750.02	6,559.80	8,309.82	6,173.39	2,136.43
College Park	17,392	2,578.06	9,573.55	12,151.61	9,051.33	3,100.28
Colmar Manor	3,724	545.37	2,049.90	2,595.27	1,920.93	674.34

**COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATION FUND**  
**STATEMENT OF REVENUES AND EXPENDITURES FOR ACCOUNT OF**  
**MUNICIPALITIES FOR THE FISCAL YEAR ENDED JUNE 30, 1951**

MUNICIPALITY	ROAD MILES MUNI- CIPALITIES	BALANCE, JULY 1, 1950	REVENUES	TOTAL FUNDS AVAILABLE	EXPEN- DITURES	BALANCE, JUNE 30, 1951
<b>PRINCE GEORGE'S COUNTY—Cont.</b>						
Cottage City.....	2.398	352.58	1,320.00	1,672.58	1,242.65	429.93
District Heights.....	5.523	1,488.87	3,040.17	4,529.04	2,690.42	1,838.62
Eagle Harbor.....	1.785	544.78	982.57	1,527.35	940.03	587.32
Edmonston.....	4.516	635.78	2,485.86	3,121.64	2,308.05	813.59
Fairmount Heights.....	5.085	824.05	2,799.07	3,623.12	2,712.08	911.04
Forest Heights.....	3.837	517.43	2,112.10	2,629.53	1,946.92	682.61
Glenarden.....	2.005	264.71	1,103.67	1,368.38	1,019.91	348.47
Hyattsville.....	28.327	4,145.30	15,592.80	19,738.10	14,691.38	5,046.72
Landover Hills.....	4.200	618.78	2,311.92	2,930.70	2,183.18	747.52
Laurel.....	11.405	1,649.64	6,277.96	7,927.60	5,884.24	2,043.36
Morningside.....	3.996	587.33	2,199.62	2,786.95	2,070.78	716.17
Mt. Rainier.....	15.111	2,248.93	8,317.95	10,566.88	7,859.11	2,707.77
North Brentwood.....	2.232	340.11	1,228.82	1,568.73	1,176.25	392.48
Riverdale.....	11.045	1,559.23	6,079.80	7,639.03	5,658.98	1,980.05
Seat Pleasant.....	4.470	686.73	2,460.54	3,147.27	2,358.99	788.28
Takoma Park.....	8.735	1,249.09	4,808.24	6,057.33	4,512.70	1,544.63
University Park.....	6.131	875.03	3,374.85	4,249.88	3,167.65	1,082.23
Upper Marlboro.....	2.106	640.82	1,159.27	1,800.09	1,099.26	700.83
<b>TOTAL.....</b>	<b>183.312</b>	<b>\$ 27,861.85</b>	<b>\$100,905.36</b>	<b>\$128,767.21</b>	<b>\$ 94,595.88</b>	<b>\$ 34,171.33</b>
<b>QUEEN ANNE'S COUNTY:</b>						
Barclay.....	0.445	\$ 178.66	\$ 244.96	\$ 423.62	\$ 178.66	\$ 244.96
Centreville.....	5.677	821.86	3,124.95	3,946.81	2,937.18	1,009.63
Church Hill.....	0.510	72.95	280.73	353.68	263.92	89.76
Queenstown.....	1.120	167.86	616.51	784.37	579.18	205.19
Sudlersville.....	0.600	89.95	330.27	420.22	310.29	109.93
Templeville.....	0.120	36.94	66.05	102.99	62.77	40.22
<b>TOTAL.....</b>	<b>8.472</b>	<b>\$ 1,368.22</b>	<b>\$ 4,663.47</b>	<b>\$ 6,031.69</b>	<b>\$ 4,332.00</b>	<b>\$ 1,699.69</b>
<b>ST. MARY'S COUNTY:</b>						
Leonardtown.....	1.520	\$ 237.06	\$ 934.17	\$ 1,171.23	\$ 861.60	\$ 309.63
<b>SOMERSET COUNTY:</b>						
Crisfield.....	12.760	\$ 1,889.68	\$ 7,023.83	\$ 8,913.51	\$ 6,635.56	\$ 2,277.95
Princess Anne.....	3.850	570.44	2,119.26	2,689.70	2,005.52	684.18
<b>TOTAL.....</b>	<b>16.610</b>	<b>\$ 2,460.12</b>	<b>\$ 9,143.09</b>	<b>\$ 11,603.21</b>	<b>\$ 8,641.08</b>	<b>\$ 2,962.13</b>
<b>TALBOT COUNTY:</b>						
Easton.....	16.187	\$ 2,366.43	\$ 8,910.25	\$ 11,276.68	\$ 8,375.15	\$ 2,901.53
Oxford.....	4.446	1,165.22	2,447.33	3,612.55	2,132.82	1,479.73
St. Michaels.....	5.989	1,789.36	3,296.69	5,086.05	3,092.41	1,993.64
Trappe.....	0.830	414.67	456.87	871.54	414.67	456.87
<b>TOTAL.....</b>	<b>27.452</b>	<b>\$ 5,735.68</b>	<b>\$ 15,111.14</b>	<b>\$ 20,846.82</b>	<b>\$ 14,015.05</b>	<b>\$ 6,831.77</b>
<b>WASHINGTON COUNTY:</b>						
Boonsboro.....	4.155	\$ 578.04	\$ 2,287.15	\$ 2,865.19	\$ 2,119.44	\$ 745.75
Clearspring.....	2.515	769.63	1,884.40	2,154.03	1,321.74	832.29
Funkstown.....	3.110	448.47	1,711.92	2,160.39	1,618.78	541.61
Hagerstown.....	109.386	33,416.42	60,212.28	93,628.70	57,258.56	36,370.14
Hancock.....	2.719	387.90	1,496.69	1,884.59	1,386.95	497.64
Keedysville.....	2.395	360.82	1,318.35	1,679.17	1,245.67	433.50
Sharpsburg.....	5.130	756.74	2,823.84	3,580.58	2,669.19	911.39
Smithsburg.....	3.160	473.42	1,739.45	2,212.87	1,643.73	569.14
Williamsport.....	6.649	976.44	3,659.98	4,636.42	3,459.78	1,176.64
<b>TOTAL.....</b>	<b>139.219</b>	<b>\$ 38,167.88</b>	<b>\$ 76,634.06</b>	<b>\$114,801.94</b>	<b>\$ 72,723.84</b>	<b>\$ 42,078.10</b>
<b>WICOMICO COUNTY:</b>						
Delmar.....	5.440	\$ 803.63	\$ 2,994.48	\$ 3,798.11	\$ 2,821.78	\$ 976.33
Salisbury.....	52.211	7,086.40	28,739.91	35,826.31	26,516.28	9,310.03
<b>TOTAL.....</b>	<b>57.651</b>	<b>\$ 7,890.03</b>	<b>\$ 31,734.39</b>	<b>\$ 39,624.42</b>	<b>\$ 29,338.06</b>	<b>\$ 10,286.36</b>
<b>WORCESTER COUNTY:</b>						
Berlin.....	7.999	\$ 1,138.24	\$ 4,403.10	\$ 5,541.34	\$ 4,116.52	\$ 1,424.82
Ocean City.....	7.255	978.85	3,993.57	4,972.42	3,671.78	1,300.64
Pocomoke City.....	9.847	1,448.59	5,420.35	6,868.94	5,122.37	1,746.57
Snow Hill.....	7.584	1,095.48	4,174.66	5,270.14	3,913.20	1,356.94
<b>TOTAL.....</b>	<b>32.685</b>	<b>\$ 4,661.16</b>	<b>\$ 17,991.68</b>	<b>\$ 22,652.84</b>	<b>\$ 16,823.87</b>	<b>\$ 5,828.97</b>
<b>GRAND TOTAL.....</b>	<b>1,055.630</b>	<b>\$186,091.33</b>	<b>\$583,401.42</b>	<b>\$769,492.75</b>	<b>\$547,706.17</b>	<b>\$221,786.58</b>

**COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATION FUND****STATEMENT SHOWING ALLOCATIONS OF 20% SHARE OF GASOLINE TAX AND MOTOR VEHICLE REVENUE FUNDS TO COUNTIES AND MUNICIPALITIES FOR THE FISCAL YEAR ENDED JUNE 30, 1951**

	ROAD MILES			ALLOCATION BASED ON TOTAL COUNTY ROAD MILES				SHARE	
	COUNTIES (Excluding Municipalities)	MUNICIPALITIES	TOTAL	GASOLINE TAX	MOTOR VEHICLE REVENUE	MINI- MUM SHARE ADJUST- MENT	TOTAL	COUNTIES	MUNICI- PALITIES
COUNTIES:									
Allegany	486,240	159,311	645,551	\$ 253,734.48	\$ 105,976.73	\$4,363.22	\$ 355,347.99	\$ 267,654.15	\$ 87,693.84
Anne Arundel	714,590	16,540	731,130	287,371.39	120,025.79	4,941.64	402,455.54	393,350.98	9,104.56
Baltimore	1,376,700		1,376,700	541,113.57	226,005.42	9,304.98	757,814.01	757,814.01	
Calvert	188,250	11,470	199,720	78,500.26	32,786.88	1,349.89	109,937.25	103,623.51	6,313.74
Caroline	460,383	27,284	487,667	191,678.16	80,057.60	3,296.09	268,439.67	253,421.00	15,018.67
Carroll	711,000	45,607	756,607	297,385.19	124,208.18	5,113.83	416,479.54	391,374.85	25,104.69
Cecil	443,610	23,251	466,861	183,500.21	76,642.11	3,155.47	256,986.85	244,188.18	12,798.67
Charles	268,880	7,220	276,100	108,521.36	45,325.92	43,654.45	197,501.73	192,337.07	5,164.66
Dorchester	484,060	32,760	516,820	203,136.70	84,843.57	3,493.14	284,487.13	266,454.16	18,032.97
Frederick	960,790	85,941	1,046,731	411,418.84	171,836.21	7,074.75	576,180.30	528,873.48	47,306.82
Garrett	722,205	38,997	761,202	299,191.34	124,962.44	5,144.89	419,008.89	397,542.72	21,466.17
Harford	560,986	43,146	604,132	237,454.84	99,177.05	4,083.27	332,548.62	308,798.61	23,750.01
Howard	292,947		292,947	115,143.17	48,091.53	1,980.00	161,254.70	161,254.70	
Kent	224,070	9,498	233,568	91,804.17	38,343.61	23,867.33	154,015.11	147,752.11	6,263.00
Montgomery	758,865	87,684	846,549	332,737.12	138,973.35	5,721.74	465,988.73	417,722.47	48,266.26
Prince George's	541,861	183,312	725,173	285,030.08	119,047.77	4,901.37	399,176.48	298,271.12	100,905.36
Queen Anne's	386,920	8,472	395,392	155,409.26	64,909.41	2,672.42	217,646.25	212,982.78	4,663.47
St. Mary's	267,950	1,520	269,470	105,915.44	44,237.50	15,458.60	165,611.54	164,677.37	934.17
Somerset	287,290	16,610	303,900	119,448.26	49,889.62	2,054.03	167,283.85	158,140.76	9,143.09
Talbot	269,040	27,452	296,492	116,536.57	48,673.46	2,093.96	163,206.07	148,094.93	15,111.14
Washington	628,140	139,219	767,359	301,611.29	125,973.27	5,186.51	422,398.05	345,763.99	76,634.06
Wicomico	519,202	57,651	576,853	226,732.73	94,698.87	3,898.89	317,532.71	285,798.32	31,734.39
Worcester	446,725	32,685	479,410	188,432.70	78,702.12	3,240.29	263,894.53	245,902.85	17,991.68
TOTAL	12,000,704	1,055,630	13,056,334	\$5,131,807.13	\$2,143,388.41		\$7,275,195.54	\$6,691,794.12	\$583,401.42

ITALICS INDICATE RED FIGURES

**COUNTY MAINTENANCE FUNDS**  
**STATEMENT OF REVENUES AND EXPENDITURES FOR THE FISCAL YEAR ENDED JUNE 30, 1951**

	REVENUES				TOTAL FUNDS AVAILABLE	EXPENDITURES				BALANCE, JUNE 30, 1951		
	BALANCE, JULY 1, 1950	REMITTANCES BY COUNTIES	RENTAL OF COUNTY EQUIPMENT	TRANSFERS FROM COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATION FUND		TOTAL	MAINTENANCE COSTS		TRANSFERS TO COUNTY CONSTRUCTION FUNDS		TRANSFERS TO GENERAL CONSTRUCTION AND OPERATING FUND	TOTAL
							REGULAR (EXHIBIT 1)	SPECIAL ROAD PROJECT SURFACE TREATMENT				
Calvert County	\$ 22,791.01		\$ 701.00	\$ 103,623.51	\$ 127,118.52	\$ 47,436.86		\$ 11,081.19	\$ 187.43	\$ 97,436.86	\$ 29,681.66	
Caroline County	92,678.36			253,421.00	316,099.36	196,487.63				210,755.95	105,343.41	
Cecil County	9,770.63			214,188.18	253,958.81	227,906.51				227,906.51	26,052.27	
Charles County	28,501.38		888.00	193,225.07	221,726.15	173,039.79			7.29	173,047.08	48,679.37	
Kent County	19,669.33			147,752.11	167,421.14	43,081.48		24,466.64		117,551.12	49,870.32	
Queen Anne's County	15,378.95			212,982.78	228,361.73	213,555.56		3,851.30		217,406.86	10,954.87	
St. Mary's County	36,712.85	\$ 21,000.00	830.00	189,507.37	226,220.22	206,361.20				206,361.20	19,856.02	
Somerset County	19,510.34			158,140.76	177,651.10	146,021.31		16,519.63	16.19	162,560.13	15,120.97	
Talbot County	18,277.60	83,134.33		231,229.26	212,951.76	183,365.89	\$29,883.98			213,249.87	298.17	
Wicomico County	92,835.57			285,798.32	378,633.89	210,292.03		7,462.07		247,784.10	130,849.79	
Worcester County	36,912.67			245,902.85	282,815.52	212,839.71				212,839.71	69,975.81	
TOTAL	\$356,513.50	\$107,131.33	\$2,422.00	\$2,266,475.21	\$2,622,988.80	\$1,990,397.00	\$29,883.98	\$96,110.83	\$210.61	\$2,116,902.42	\$506,086.38	

ITALICS INDICATE RED FIGURES.

**COUNTY CONSTRUCTION FUNDS**  
**STATEMENT OF REVENUES AND EXPENDITURES FOR THE FISCAL YEAR ENDED JUNE 30, 1951**

	REVENUES				TOTAL FUNDS AVAILABLE	EXPENDITURES			BALANCE, JUNE 30, 1951		
	BALANCE, JULY 1, 1950	FEDERAL AID APPROPRIATED BY STATE	REMITTANCES BY COUNTIES	TRANSFERS FROM COUNTIES AND MUNICIPALITIES TAX REVENUES ALLOCATION FUND		TRANSFERS FROM COUNTY MAINTENANCE FUNDS	TOTAL	CONSTRUCTION COSTS		TRANSFERS TO GENERAL CONSTRUCTION AND OPERATING FUND	TOTAL
ALLEGANY COUNTY	\$182,337.95	\$ 19,101.18		\$67,654.15	\$ 269,096.28	\$ 57,913.89	\$ 57,913.89		\$ 211,182.39		
ANNE ARUNDEL COUNTY	102,007.69	19,612.28			121,619.97	11,353.16	11,353.16		110,266.51		
BALTIMORE COUNTY	155,524.43	42,933.62			92,599.87	8,806.10	8,806.10		101,456.91		
CAROLINE COUNTY	9,839.21	18,240.11		\$14,081.19	72,160.81	31,607.79	\$11,081.19		78,088.98		
CARROLL COUNTY	6,476.46	33,076.66			26,630.20	19,622.35			6,528.14		
CECIL COUNTY	47,855.05	38,372.00	\$ 12,915.26		51,287.26	3,432.21	32,672.66		29,270.45		
CHARLES COUNTY	630.19	18,697.71			19,327.90				19,327.90		
DORCHESTER COUNTY	42,439.01	20,882.51			21,556.50				21,556.50		
FREDERICK COUNTY	39,261.74	109,739.13			70,477.39	103,561.51*			33,084.15		
GARRETT COUNTY	28,748.45	26,877.99			7,870.46	33,285.15			35,155.61		
HARFORD COUNTY	225,555.61	42,073.81	58,533.21		326,162.72	238,998.75			87,163.97		
HOWARD COUNTY	5,531.06	8,747.59			8,747.59	25,692.87			11,314.22		
KENT COUNTY	6,227.14	21,056.66		21,466.64	45,623.30	33,429.40			35,429.40		
MONTGOMERY COUNTY	28,403.16	28,300.61	155,511.28		51,750.11	81,673.98			16,621.04		
PRINCE GEORGE'S COUNTY	52,691.40	21,791.79			155,438.73				70,764.75		
QUEEN ANNE'S COUNTY	24,177.73	31,034.33			27,809.61				27,809.61		
SOMERSET COUNTY	2,112.01	13,362.85			21,397.88				13,509.98		
TALBOT COUNTY					10,707.90	37,385.00			9,614.53		
WASHINGTON COUNTY	88,880.68	27,843.34	8,853.25		27,470.47	19,403.17			19,403.17		
WICOMICO COUNTY	16,640.19	20,476.04			125,677.27	16,841.64			16,611.64		
WORCESTER COUNTY	3,204.43	38,074.86			44,608.30	43,425.55			1,182.75		
TOTAL	\$233,281.74	\$603,301.43	\$235,943.43	\$67,654.15	\$1,003,309.41	\$877,209.33	\$44,081.19		\$821,229.52		

NOTES: Federal aid appropriation by the State Roads Commission is contingent upon the payment of matching funds by the counties.  
 \* This entire amount was remitted to Frederick County for reimbursement against projects carried on by that county.

ITALICS INDICATE RED FIGURES

STATEMENT OF REVENUES AND EXPENDITURES FOR THE FISCAL YEAR ENDED JUNE 30, 1951

	TOTAL	STATE HIGHWAY CONSTRUCTION BOND FUND	STATE HIGHWAY CONSTRUCTION BOND SINKING FUND	4% BONDS OF 1933 DEBT SERVICE FUND
BALANCE, JULY 1, 1950.....	\$ 2,111,636.00		\$2,101,236.00	\$10,400.00
REVENUES:				
Portion of proceeds of 50% share of the Gasoline Tax Fund	\$ 3,212,402.60		\$3,212,402.60	
Portion of proceeds of excise tax on issuance of certificates of title to motor vehicles	1,061,886.81		1,061,886.81	
Proceeds from sale of Series C State Highway Construction bonds (par value \$25,000,000)	25,007,250.00	\$25,007,250.00		
Accrued interest on Series C State Highway Construction Bonds	19,748.97	19,748.97		
TOTAL REVENUES.....	\$29,301,288.38	\$25,026,998.97	\$4,274,289.41	
TOTAL FUNDS AVAILABLE.....	\$31,412,924.38	\$25,026,998.97	\$6,375,625.41	\$10,400.00
EXPENDITURES:				
Expenses of issuing construction bonds	\$ 30,841.32	\$ 30,841.32		
Redemption of State Highway Construction Bonds:				
Series A, due August 1, 1950	1,500,000.00		\$1,500,000.00	
Series B, due December 1, 1950	166,000.00		166,000.00	
Interest on State Highway Construction Bonds	632,692.41		632,692.41	
Transfer to General Construction and Operating Fund	24,996,157.65	21,996,157.65		
TOTAL EXPENDITURES.....	\$27,325,691.38	\$25,026,998.97	\$2,298,692.41	
BALANCE, JUNE 30, 1951.....	\$ 4,087,233.00		\$1,076,833.00	\$10,400.00

STATEMENT OF FEDERAL AID APPROPRIATION ACCOUNTS FOR THE FISCAL YEARS ENDED JUNE 30, 1951 AND 1952

EXHIBIT E

	Balance July 1, 1950	Increases or decreases in Appropriations	RECEIPTS		Total	BALANCE JUNE 30, 1952		Available for Project Agreements
			(Schedule 1) Fiscal Year Ended			(Schedule 1) Under Project Agreement		
			June 30, 1951	June 30, 1952		Earned Uncollected	Unearned	
Postwar Primary—(Includes 1953 Appropriation of \$1,955,063)	\$ 4,299,256.54	\$ 3,892,733.00	\$1,555,057.96	\$1,524,169.65	\$3,079,227.61	\$ 683,601.23	\$1,899,040.88	\$ 2,530,116.82
Postwar Secondary—(Includes 1953 Appropriation of \$1,182,205)	3,016,089.33	2,378,611.00	684,904.50	458,926.84	1,143,831.34	86,323.68	301,743.32	3,862,831.99
Postwar Unimproved—(Includes 1953 Appropriation of \$2,054,609)	4,776,882.53	4,125,228.00	1,282,667.63	927,469.99	2,210,128.62	382,411.62	2,351,641.38	3,954,925.91
Defense Access Roads and Bridges	130,500.00	57,379.24	71,819.78	23,301.88	95,121.66			800.00
TOTAL APPROPRIATIONS	\$12,222,729.30	\$10,362,922.76	\$3,594,449.87	\$2,933,859.36	\$6,528,309.23	\$1,152,339.53	\$4,555,48.58	\$10,348,074.72
								\$ 833,785.00
								\$4,558,767.51
								\$1,956,422.18

Note—The status of the \$10,348,674.72 available for project agreements is as follows:  
 In Planning, surveying and engineering stage.....  
 Specific projects programmed and under consideration.....  
 Unprogrammed.....  
*Italics indicate red figures.*

EXHIBIT E, SCHEDULE I  
STATEMENT OF FEDERAL AID RECEIPTS, BY PROJECT AGREEMENTS, FOR THE FISCAL YEARS ENDED JUNE 30,  
1951 AND 1952

Project Number	Route Number	Location of Project	Appropriation	Total Agreement	Receipts to July 1, 1950	Receipts Fiscal Year Ended		Balance June 30, 1952, Under Project Agreement	
						June 30, 1951	June 30, 1952	Earned—Uncollected	Unearned
A-251-1	U. S. 40	Alleghany Grove to Frostburg	FAP	\$ 775,852.96	\$ 666,800.00	\$ 109,652.96			
A-283-2	U. S. 220	Keyser, West Va. toward McCool	FAP	70,250.00	21,692.00	29,389.00			\$ 19,169.00
A-283-2	U. S. 220	Keyser, West Va. toward McCool	FAP	102,875.00	27,750.00	47,348.00			27,777.00
A-283-3	U. S. 220	Keyser-McCool Bridge toward McCool—Cumberland Road	FAP	223,169.28		97,891.00	\$ 66,744.00	\$ 8,642.87	49,891.41
A-382-1		Mill Run Road from George's Creek northwesterly toward Garrett County Line	FAS	40,000.00		16,400.00	15,600.00	1,200.00	6,800.00
A-382X2		Mill Run Road from George's Creek northwesterly toward Garrett County Line	FAS	2,050.00			1,641.00		409.00
A-423-1		Lower Town Creek Road from Flintstone toward Town Creek	FAS	22,400.00			17,926.00		2,016.00
A-424-1		Williams Road from 1.85 mi. east of Md 51 southwesterly toward Twigg town	FAS	90,000.00			35,000.00		47,700.00
AA-242-1		Friendship to Old Colony Cove	FAS	77,400.00	60,372.00				
AA-303-1		From Bridge over Little Patuxent River westerly toward Laurel	DA	340,267.08	290,700.00	49,567.08			
AA-341-2	Md. 214	Mayo Road northwesterly to Davidsonville Road	FAS	77,700.00	62,160.00	15,540.00			
AA-341-3	Md. 214	Mayo, Road northwesterly to Davidsonville Road	FAS	30,551.94		30,661.82	106.88		
AA-368-2	U. S. 1	Patuxent River Road to Hammonds Ferry Road	FAU	667,500.00	500,625.00	33,375.00			6,675.00
AA-368-3	U. S. 1	Hammonds Ferry Road to Winterson Road	FAU	454,823.73	382,960.00	71,863.73		126,825.00	
AA-368-4	B. W. Exp.	Winterson Road toward Baltimore—Friendship Airport	FAU	730,000.00	357,700.00	226,300.00		94,900.00	51,100.00
AA-368-5		Baltimore—Washington Expressway at Stoney Run	FAU	420,217.44	210,605.00	149,443.00		60,169.44	
AA-368-6	U. S. 1	Between Hanover Road and Stoney Run Bridge at Ridge Road	FAU	467,500.00	247,775.00	79,475.00	46,750.00	23,375.00	70,125.00
AA-368-7		Baltimore—Washington Expressway north of Dorsey Road to the north side of Hanover Road	FAP	485,500.00		196,554.00	81,498.00	26,471.00	180,977.00



AA-368-8		Baltimore-Washington Expressway 1.1 mile southeast of Dorsey Road northeasterly to .08 mi. north of Dorsey Road	FAP	249,500.00		4,990.00	69,860.00	4,990.00	169,660.00
AA-368-9	B. W. Exp.	.3 mi. north of the Jessup Road northeasterly to .32 mi. south of Dorsey Road	FAP	396,000.00			289,080.00	8,280.00	98,640.00
AA-368-10	Md. 175	Baltimore-Washington Expressway .46 mi. south of Jessup Rd. northeasterly to .31 mi. north of Jessup Road	FAP	370,000.00			114,700.00		255,300.00
AA-368-18	Md. 175	Baltimore-Washington Expressway at Jessup Road	FAP	144,000.00			33,120.00	5,760.00	105,120.00
AA-433		Anderson's Corner Road extending easterly from intersection of U.S. 301 and Md. 175 at Millersville	FAS	15,900.00			10,812.00	1,113.00	3,975.00
B-392-2	U. S. 1	Wilkins Ave. in Baltimore City to Baltimore-Washington Boulevard	FAU	631,768.50	\$ 520,000.00		111,768.50		
B-470-3		R.R. on Butler Road at Glenndon	FAS	220,000.00	174,031.20		45,968.80		
B-577-1	B. W. Free-way	Baltimore City line to Patuxent River	FAU	499,627.52	372,300.00		127,327.52		40,300.00
B-582	U. S. 40A	Cadossville .350' east of Inglewood Ave. to Montrose Ave.	FAU	83,000.00			42,691.00		25,800.00
C-107-1	Md. 416	.45 mi. southeast of Lyon's Creek to Paris	FAS	129,000.00		74,820.00	28,380.00		
Co-140-3		Construction of Extension of Greensboro-Burysville Rd	FAS	29,783.49	19,610.00		183.49		
Co-140-7		Greensboro-Burysville Road from Russell's Cross Roads northeasterly to Clapp's Branch	FAS	6,862.95		6,862.95			
Co-215-1 & 2	Md. 322	Andeshtown Twd. Fed-Apple Road	FAS	69,352.61	31,648.00		10,472.64	27,232.00	
Cl-316-1		Six Bridge Road from Key-tow - Appoldis Road north to Frederick County Line	FAS	5,687.83				5,687.83	
Cl-319-1		Avondale-Warfieldsburg Road from Md. 31 southward toward Md. 107	FAS	33,500.00			15,745.00		17,755.00
Cl-323X		Western Md. R.R. at Line-1 to	FAS	3,469.95			3,469.95		
Ce-290-2	Md. 282	Cecilton northeasterly to Delaware State Labr Roads Cecil County	FAS	140,096.54	89,523.00		24,157.00		
Ce-325X		Cherry Hill Elk Mills Road	FAS	16,219.26			1,900.00	16,219.26	
Ce-312X		Farmingdon toward Calvert Road	FAS	1,400.00			1,400.00		
Ce-313X		Indian Falls Road	FAS	560.00			560.00		
Ce-315X		South Jones Corner Road	FAS	1,400.00					1,400.00

EXHIBIT E, SCHEDULE 1 - Continued

EXHIBIT F, SCHEDULE 1—Continued

STATEMENT OF FEDERAL AID RECEIPTS, BY PROJECT AGREEMENTS, FOR THE FISCAL YEARS ENDED JUNE 30, 1951 AND 1952

Project Number	Route Number	Location of Project	Appropriation	Total Agreement	Receipts to July 1, 1950	Receipts Fiscal Year Ended		Balance June 30, 1952, Under Project Agreement
						June 30, 1951	June 30, 1952	
Ce-346X		Road connecting Md. 299 and Md. 282	FAS	\$ 1,470.00		\$ 1,470.00		Unearned
Ce-347X		Zion Road	FAS	1,548.00		1,548.00		
Ce-348X		Farmingington toward Barnes Corner	FAS	2,670.00		2,670.00		
Ce-349X		Pleasant Hill-Providence Road	FAS	2,252.85		2,252.85		
Ce-350X		Md. 269 east toward Delaware State Line	FAS	1,267.20		1,267.20		
Ce-351X		Mill Lane	FAS	1,540.00		1,540.00		
Ce-352X		U. S. 40 northwest toward Nottingham	FAS	1,408.05		1,408.05		
Ce-356X		Dr. Jack Battle Swamp Road	FAS	2,920.00		2,920.00		
Ch-257-2	U. S. 301	.274 mi. south of Charles County line to .4028 mi. south of Waldorf	FAP	269,000.00			\$ 51,119.00	\$ 217,881.00
Ch-276X		Waters County Road	FAS	980.00		980.00		
Ch-277X		Bumpy Oak County Road	FAS	4,330.00		4,330.00		
Ch-278X		Barnes Church County Road	FAS	670.00		670.00		
Ch-279X		For Bowie County Road	FAS	2,990.00		2,990.00		
D-102-1		Bridge over Slaughter's Creek at Taylor's Island	FAS	100,679.86	\$ 96,000.00	\$ 4,679.86		
D-200X		Waggon Road	FAS	1,500.00		1,500.00		
F-450-1		Waggon Road	FAS	7,150.00		7,150.00		
F-401-2		Old Middletown Road	FAS	22,691.56		22,691.56		
F-486		Old Frederick Road—Second Stage	FAS	33,737.51		27,600.00	6,137.51	
F-487-1		Annapolis Road—Second Stage—Construction	FAS	14,343.98		14,343.98		
F-487-2		Annapolis Road—Construction	FAS	16,911.24		16,911.24		
F-513		Flag Pond Road	FAS	52,455.30		20,736.00	31,719.30	
F-514		Pennis Ship Road	FAS	4,820.00		4,820.00		
F-515		Hornsey Road	FAS	6,220.00		6,220.00		
F-523		Morrey Road	FAS	40,700.00			12,210.00	28,490.00
G-195-1		Look Lynn to 1.5 mi. North of G. 195	FAS	147,000.00	117,600.00		27,930.00	1,470.00
H-257-1		Blairville-Castleton Road	FAS	117,750.00	27,082.50		42,389.50	21,194.50
H-319-1		Harvey southeasterly to Fountain Green	FAS	71,000.00			38,340.00	14,200.00
H-324-1		Creswell southeasterly through Harford Furnace to Md. 7	FAS	14,789.40		14,789.40		
H-349		Scarboro Road from Md. 440 toward Md. 136	FAS	3,430.00				3,430.00

11-350	St. Mary's Church Road from Md. 24 to Md. 624	FAS	6,580.00				6,580.00
11-351	Cherry Mills Road from Md. 65 toward Md. 24	FAS	5,150.00				5,150.00
11-352	3 mi. north of Madonna Mt. northwesterly toward Md. 165	FAS	6,870.00				6,870.00
11-353	High Point Road from Pleasantville to Winters Run	FAS	2,000.00				2,000.00
11-354	Trimble Road from 1 mi. west of Md. 52 toward U. S. 40	FAS	4,000.00				4,000.00
11-355	Clayton Road from Md. 461 toward Md. 7	FAS	7,150.00				7,150.00
11-356	Shucks Road from Md. 136 north of Creswell toward Patton	FAS	2,800.00				2,860.00
11-357	Earlton Road from Md. 155 toward U. S. 40	FAS	2,800.00				2,860.00
11-358	Lapidum Road from 1 mi. south of Lapidum toward Md. 155	FAS	4,000.00				4,000.00
11-359	Rock Run Road from Md. 161 at Level toward Rock Run	FAS	5,720.00				5,720.00
11-164-2	2 mi. West of Rogers Avenue toward Columbia Pike	FAS	313,555.55	268,693.53	44,862.02		
11-223-1	Whisky Bottom Road at U. S. 1, approximately 1 mi. northeast of Patuxent River extending northwesterly to Md. 216	FAS	30,794.92	23,542.00	7,252.92		
11-223-2	Whisky Bottom Road at U. S. 1 approximately 1 mi. northeast of Patuxent River extending northwesterly to Md. 216	FAS	8,717.59		8,747.59		
11-234-1	Pine Orchard to West Friendship Road	FAP	925,000.00	342,250.00	397,750.00	175,750.00	9,250.00
11-234-3	1.11 mi. West of Morgan Road northwesterly to 1.25 mi. east of Ridgeville	FAP	1,055,000.00			337,600.00	559,150.00
K-168-1 & 2	Platland Road near Chestertown at Md. 20 northwesterly toward Hanesville	FAS	30,600.14	11,611.00	18,989.14		
K-182X	Roads in Kent County	FAS	3,880.00		3,880.00		
K-184-1	Redding's corner at intersection of Md. 292 extending northeasterly to Boulden's Corner	FAS	18,800.00			13,160.00	5,640.00
M-135-2	Colesville Road northwesterly to Seminary Road	FAU	210,000.00		29,400.00	138,600.00	29,400.00
M-435-4	Seminary Road northwesterly to 700' south of Viers Mill Road	FAU	312,000.00			248,788.00	63,212.00

## REPORT OF THE STATE ROADS COMMISSION OF MARYLAND

EXHIBIT E, SCHEDULE I—*Concluded*

STATEMENT OF FEDERAL AID RECEIPTS, BY PROJECT AGREEMENTS, FOR THE FISCAL YEARS ENDED JUNE 30, 1951 AND 1952

Project Number	Route Number	Location of Project	Appropriation	Total Agreement	Receipts to July 1, 1950	Receipts Fiscal Year Ended		Balance June 30, 1952 Under Project Agreement	
						June 30, 1951	June 30, 1952	Earned—Uncollected	Unearned
M-435-6	Md. 97	Views Mill Road northwesterly to Glenmont Clopper Road beginning .5 mi. southeast of intersection of Md. 117 and Md. 118 and extending southwesterly to Clopper Road.	FAP	\$ 538,000.00		\$ 37,660.00	\$ 16,140.00	\$ 484,200.00	
M-461		1.4 mi. North of Wells Corner Southwesterly toward Cheltenham	FAS	151,000.00		86,240.00		40,010.00	
P-510-1	U. S. 301	Bridge over Western Branch on Marlboro by-pass	FAP	676,000.00	\$ 338,000.00	162,240.00	155,480.00		
P-510-2	U. S. 301	Roads in Queen Anne's County	FAS	49,350.00	39,180.00	13,047.94			493.50
Q-245X		Carsons Corner to Md. 302	FAS	1,970.00		1,970.00			
Q-246X		Ingleside toward Poe	FAS	2,030.00		2,030.00			
Q-247X		Rutshburg toward Bridge-town	FAS	1,470.00		1,470.00			
Q-248X		Barclay-Church Hill Road	FAS	1,840.00		1,840.00			
Q-249X		Wye Station toward U. S. 213	FAS	1,030.00		1,030.00			
Q-250X		Starr Road toward U. S. 213	FAS	3,449.60		3,449.60			
Q-251X		Ben Steven's Corner toward Blanca Road	FAS	2,100.00		2,100.00			
S-76-1		Rehobeth to Pocomoke Road beginning 1.5 mi. north of Rehobeth and extending northwesterly towards U. S. 13	FAS	9,508.46	9,508.46				
S-83-3	U. S. 13	North of Pa. R. R. toward Westover	FAP	313,858.72	168,350.00	145,508.72			
S-83-4	U. S. 13	Westover toward Pocomoke	FAP	205,000.00	108,875.00	55,125.00	32,397.00	8,603.00	
T-141X		Goldshoro Neck County Road from Glebe Road to Airport Road	FAS	2,800.00		2,800.00			
T-142X		Almshouse County Road from U. S. 50 to Trappe Station Road	FAS	3,020.00		3,020.00			
T-143X		Tappers Corner County Road from Tappers Corner, Md. 309, to Matthews	FAS	13,110.00		13,110.00			
W-407		Northern Avenue from U. S. 11 southwesterly to Hagers-town	FAS	7,567.21	5,330.00	2,237.21			
W-418X		Williamsport-Dowansville Road at Gower Station	FAS	8,325.00					8,325.00

REPORT OF THE STATE ROADS COMMISSION OF MARYLAND

Project No.	Description	FAS	31,750.00	15,985.00	6,950.00	7,052.15	4,762.82
W1-257-1	Barbidge Crossing Road beginning at the Pocomoke River and extending north westerly to Md. 354 near Powellville	FAS	31,750.00	15,985.00	6,950.00	7,052.15	4,762.82
W1-253-1	Herring Creek to 3 mi West of Md. 452	FAP	460,129.93	249,600.00	49,329.93		
W1-285-1	2.7 mi. southeast of U. S. 113 towards U. S. 213 at Gray's Corner	FAS	51,506.47	<i>9,493.53</i>			
W1-285-5	1.1 mi southeast of U. S. 113 towards U. S. 213 at Gray's Corner	FAS	32,049.21	27,600.00	4,449.21		
W1-320	Barbidge Crossing toward Libertytown	FAS	16,000.00			12,800.00	3,200.00
BC-182	Baltimore-Washington Expressway-Bridge under B. & O. R. R.	FAU	142,470.36	131,200.00	11,270.36		
BC-183	Baltimore-Washington Expressway-Bridge under Annapolis Road	FAU	258,000.00	188,340.00		17,715.62	21,944.38
BC-184	Grade Separation-Annapolis Road and Waterview Ave.	FAU	687,110.40	521,220.00	165,890.40		
BC-185	Baltimore-Washington Expressway-City Line to B. & O. Underpass	FAU	185,000.00	141,300.00	3,700.00	37,000.00	41,320.00
BC-186	Baltimore-Washington Expressway-B. & O. Underpass at Russell St.	FAU	220,000.00	92,232.00	83,448.00		
BC-187	Baltimore-Washington Expressway-Drainage City Line to Russell St.	FAU	58,506.05	41,520.00	16,986.05		
BC-188	Baltimore-Washington Expressway-Russell Street Viaduct	FAU	1,625,000.00		112,700.00		1,512,300.00
HPS-1(0)	State Wide Highway Planning	FAS-P-U	61,128.00	61,128.00			
HPS-1(00)	State Wide Highway Planning	FAS-P-U	58,928.00		58,928.00		
HPS-1(11)	State Wide Highway Planning	FAS-P-U	49,080.00			49,080.00	
HPS-1(02)	State Wide Highway Planning	FAP	9,000.00		9,000.00		21,000.00
HPS-1(03)	State Wide Highway Planning	FAP	21,000.00				
HPS-1(04)	State Wide Highway Planning	FAS-P-U	78,370.00				78,370.00
AW-581	Preliminary Engineering on Baltimore-Washington Expressway from Waterloo to Mulberry Streets in Baltimore City	DA	83,221.00	59,919.12	23,301.88		
A-407-1	W. of Little Tonoloway Creek to 4 mi. East of Belle Grove	FAP	916,476.83	256,256.00	381,384.00	37,552.86	146,763.97
W-302-1	Fort Meade to Laurel Road	DA	222,147.10	199,894.40			
A-303-2	Dual Bridges over Patuxent River	FAU	303,748.62	219,640.00			
P-452-2							
AA-308-1							
B-577-2							
Total			\$19,615,482.09	\$7,379,404.75	\$3,591,119.87	\$1,152,339.53	\$4,555,428.58

Italics indicate red figures.

**GENERAL CONSTRUCTION AND OPERATING FUND**  
**STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED**  
**JUNE 30, 1951 AND 1952**

## EXPENDITURES

Date Authorized	Project Number	Route Number	Location	Description	Work in Progress				Fiscal Year 1952	Authorized to Complete Projects in Progress June 30, 1952	Total
					July 1, 1950	Fiscal Year 1951	Fiscal Year 1952	\$			
6-30-52	Cv 223-1	Md. 454	Marydel to Templeville	Preliminary engineering	\$ 1,743.79	\$ 451.97	\$ 5.77	\$ 98.03	\$ 550.00	\$ 2,200.00	
6-30-52	P 597		Naylor Avenue from Branch Avenue to D. C. line	Preliminary engineering	55.64			10.36	66.00	1,474.18	
6-26-52	P 636	Md. 4	Camp Spring to Forestville	Preliminary engineering			1,474.18				
6-26-52	A 437 X-4	Md. 36	Negro Elbow in Westernport	Place 220 ft. of asphalt coated corrugated metal pipe arch for drainage							
6-26-52	AA 389-10		Annapolis-Washington Expressway—3 mi. West of Parole to existing Expressway—1.27 mi. West of U. S. Rt. 50 near Parole Westerly over Broad Creek—323 mi.	.02 mi. grading, drainage, surfacing, and ramp connections—Penetration macadam and bituminous concrete			12,812.52	99,208.48		112,021.00	
6-26-52	AA 401-1	Md. 2	South River to Parole	Preliminary engineering	4,611.31	1,035.36	320.99	632.34	6,600.00	6,600.00	
6-26-52	B 518-1		Intersection Eastern Avenue and Stemmers Run Road at Josenhans	Preliminary engineering		389.36	16.55	54.69	440.00	440.00	
6-26-52	B 627	U. S. 1	Perry Hall and Kingsville	246 Entrances—Preliminary engineering		6,666.52	216.60	58.40	275.00	275.00	
6-26-52	C 204	Md. 231	Prince Frederick toward Patuxent River	Preliminary engineering	797.56			1,335.92	8,800.00	8,800.00	
6-26-52	D 227-1	Md. 313	Bridge over Nanticoke River at Sharpstown	Construction of treated timber floor with asphalt plank wearing surface and new steel rails and curbs			302.66	96,757.34	97,060.00	97,060.00	
6-26-52	WV 266-1			Preliminary engineering		86.97	1,058.31	174.72	1,320.00	1,320.00	
6-26-52	G 155-9	U. S. 219	McHenry to intersection of U. S. 219 and Hoyes Road	Preliminary engineering				34.41	110.00	110.00	
6-26-52	G 258	Md. 41	Mountain Lake Park	Preliminary engineering		75.59		27.90	289.93	289.93	
6-26-52	H 249	U. S. 1	Main and Bond Streets, Bel Air	Preliminary engineering		212.03		7.02	22.00	22.00	
6-26-52	H 335-1	U. S. 1	Behair By-Pass Relocation	Preliminary engineering		14.98		200.24	1,210.00	1,210.00	
6-26-52	H 340	Md. 161	Level to Darlington	Preliminary engineering		601.44	408.32	8,469.03	18,375.03	18,375.03	
6-26-52	H 344-1	Md. 136	U. S. Rt. 1 Northley to Md. Rt. 440 at Dublin and from Md. Rt. 165 Northwesterly through Whiteford	1.175 mi.—Grading and surfacing			9,906.03				
R/W											
6-26-52	H 360	Md. 452	Rutledge to Scariffs Corner	Preliminary engineering		26.50	3,568.92	391.08	3,969.00	3,969.00	
6-26-52	H 0 243	Md. 103	Columbia Pike to Washington Boulevard	Preliminary engineering	3,918.70			454.80	4,400.00	4,400.00	
6-26-52	M 474	Md. 190	Burdell Road between Severn Locks Road and Wilson Lane	Preliminary engineering	703.22	3,831.56		525.22	5,080.00	5,080.00	
6-26-52	M 489	U. S. 240	Clarksburg to Brink	Preliminary engineering		45.05	10.49	101.09	55.54	55.54	
6-26-52	M 494	Md. 410	East-West Highway at Brookville Road intersection	Preliminary engineering			338.91		440.00	440.00	
6-26-52	P 586	Md. 4	Meadows to Upper Marlboro	Preliminary engineering	14,876.10	1.59	119.63	1,622.31	16,500.00	16,500.00	
6-26-52	S 177	U. S. 13	Pocomoke City By-Pass	Preliminary engineering	2,660.76	4,523.00		3,091.01	11,000.00	11,000.00	
6-26-52	W 0 306										
6-26-52	W 410	Md. 58	Old Toll House outside of Hagerstown	Preliminary engineering		683.42	559.42	646.00	770.00	770.00	

6-26-52	W 410-1	Md. 58	150 ft. North of Hagerstown	Right-of-way adjustment	44.52	559.42	21.08	625.02
6-24-52	P 631-8	U. S. 50	Annapolis-Washington Expressway	Acquisition of right-of-way		249,841.40	105,508.60	355,350.00
6-20-52	Q 241-3	Md. 300	between Dubanel's Corner and Delaware Line	Moving poles		1,534.38		1,534.38
6-18-52	A 435X-3	Md. 55	Vale Summit toward Miller Road	Right-of-way adjustment		292.17	63.80	63.80
6-18-52	A 405-12	U. S. 220	McMullen Highway	Moving pole			292.17	292.17
6-18-52	A 443	Md. 36	Stream near Wrights Crossing	Preliminary engineering			209.00	209.00
6-18-52	AA 308-20	U. S. 1	Baltimore-Washington Expressway between Dorsey Road and Jessup Road	Preliminary engineering			550.00	550.00
6-18-52	Cl 308-2		Baltimore National Pike between South branch of Patapsco River and Md. Rt. 27 at Ridgeville	Preliminary engineering		17,050.00		17,050.00
6-18-52	F 380-2	U. S. 15	Tuscarora Bridge relocation	Moving poles		341.27		341.27
6-18-52	F 425-22	U. S. 240	Northwest of Urbana toward Frederick	Removing, re-installing, or realigning poles		854.88		854.88
6-18-52	F 509-2	U. S. 15	Eyegreen Point near Frederick toward Line Kiln	Moving poles		756.86		756.86
6-18-52	Ho 218-6	U. S. 29	.8 mi. Southwest of Seagsville Southwesterly to Burtonsville	2,259 mi. grading, drainage, and surfacing—reinforced cement concrete		5,406.83	2,277.00	7,683.83
6-18-52	Ho 234-8		Baltimore National Pike at Pine Orchard	Preliminary engineering		93.03	456.97	550.00
6-18-52	Ho 251X-2	Md. 97	Montgomery County Line through Cockeysville at U. S. 40 intersection	6.9 mi. curve modifications and widening—aspaltic concrete—Spec. 'C'		1,470.22	218,529.78	220,000.00
6-18-52	M 383-1	U. S. 240	Washington National Pike from Md. 118 to Md. 121	Acquisition of right-of-way		28,508.26	20,145.00	50,259.87
6-18-52	M 435-11	Md. 97	West side of Georgia Avenue between Oak and Wayne Avenues and East side between Bonifant Street and Silver Spring Avenue	Relocation of poles and conduit connections		563.09		563.09
6-18-52	P 714-1	Md. 602	Baltimore-Washington Expressway to Laurel By-Pass	Preliminary engineering		114.16	215.84	330.00
6-18-52	Q 168-24	U. S. 50	At intersection with Md. 18	Moving installations			7,000.00	7,000.00
6-18-52	W 369-15	Md. 65	Lappans to Sharnsburg	Moving and relocating poles			1,800.00	1,800.00
6-18-52	W 133-10	U. S. 13	North of Salisbury	Preliminary engineering		23.23	526.77	550.00
6-16-52	Ch 282	U. S. 301	Near Allen's Fresh northwesterly toward Bel Alton	.946 mi.—resurfacing—bituminous concrete		392.23	27,909.85	28,302.08
6-13-52	Q 168-23	U. S. 50	Near Stevensville	Preliminary engineering—heavy truck weighing station		46.46	503.54	550.00
6-11-52	B 578-14		Baltimore-Harrisburg Expressway, approximately .081 mi. north of Timonium Road—265 mi. North and South bound connecting roads between existing dual highway and Timonium Road—170 mi. section of Timonium Road and .322 mi. relocation	Resurfacing, grading, drainage, and relocation—reinforced concrete and macadam		31,642.71	361,453.67	393,096.38
6-4-52	B 642	U. S. 140	Reisterstown Road—Old Court Road to Woodlea Avenue in Reisterstown 7.74 mi.—intersection of U. S. Rt. 140 and Md. Rt. 30 in Reisterstown northwesterly to beginning of dual highway 1.022 mi.	Resurfacing, widening, drainage, and vertical curve adjustments, etc.		4,626.01	361,096.13	365,722.14
5-29-52	A 435-1	Md. 55	Vale Summit towards Miller	2,422 mi. grading, drainage, and resurfacing—bituminous concrete	2,234.51	13,515.96	455,056.86	470,807.33
5-28-52	A 435X-2	Md. 55	Vale Summit toward Miller	Right-of-way adjustment			165.67	165.67
5-28-52	AA 441X	U. S. 301	Governor Ritchie Highway at Ordnance Road	Install traffic signal		2,930.51	204.49	3,135.00
5-28-52	H 316-3	Md. 22	Main Street in Bel Air towards Churchville	Underground conduit relocation due to widening			990.22	990.22

**GENERAL CONSTRUCTION AND OPERATING FUND  
STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED  
JUNE 30, 1951 AND 1952**

		EXPENDITURES					
Date Authorized	Project Number	Route Number	Location	Description	Fiscal Year 1951	Fiscal Year 1952	Total
5-28-52	M 502X	Md. 193	Connecticut Avenue at Jones Bridge Road and Kensington Parkway	Conversion of existing traffic signal			\$ 2,420.00
5-28-52	W 405X-5	Md. 64	Hagerstown to Chewsville B. & O. R.R. Crossing	Right-of-way adjustment		\$ 61.92	110.00
5-28-52	W 405X-6	Md. 64	Hagerstown to Chewsville B. & O. R.R. Crossing	Right-of-way adjustment			61.92
5-28-52	W 405X-7	Md. 64	Hagerstown to Chewsville B. & O. R.R. Crossing	Right-of-way adjustment			55.00
5-21-52	A 437X-3	Md. 36	Negro elbow in Westminster Parkton to Pennsylvania State Lane	Extend pipe culvert		28.92	342.61
5-21-52	B 578-15	U. S. 111		Aerial survey and photogrammetric development by Aero Service Corp.			3,348.00
5-21-52	B 619		Loch Raven Boulevard City Lane to Joppa Road	Preliminary engineering	\$ 2,877.12	588.87	384.01
5-21-52	B 624-1	Md. 7	Golden Ring Road toward Harford County Line	Preliminary engineering	78.35	3,763.26	668.39
5-21-52	B 626		Intersection of Walker Avenue and Old Court Road	Preliminary engineering	145.91	138.91	435.18
5-21-52	C 297	Md. 280	Paris to Md. 261	Preliminary engineering	165.00		55.00
5-21-52	C 326		Westminster along Main St., Washington Road, Pennsylvania Ave., Liberty St., and Doyle Avenue	Street improvements		2,431.98	138,853.05
5-21-52	H 258	Md. 105	Rogers Avenue in vicinity of Ellicott City	Aerial photography and photogrammetric mapping			304.00
5-21-52	W 312-2	U. S. 113	Snow Hill toward Newark	Relocating power lines		4,273.06	4,273.06
5-21-52	W 318	U. S. 13	Pocomoke to Virginia Lane	Preliminary engineering	800.57	3,242.89	4,020.00
5-20-52	C 359	Md. 272	North East	Aerial photography and photogrammetric mapping			809.00
5-20-52	P 713	U. S. 301	Annapolis-Washington Expressway to T. B.	14 mi. aerial photography and photogrammetric mapping and preliminary engineering		2,970.94	7,660.00
5-15-52	AA 443X	Md. 2	Ritchie Highway opposite Warfield Road South of the Ordnance Road	Construct crossover in the median strip			391.00
5-15-52	B 892-10		Southwestern Boulevard from Wilkins Avenue to Washington Boulevard	Additional share of the cost of relocating sanitary sewers and water mains		2,901.73	2,901.73
5-15-52	B 646X	U. S. 40	Baltimore-National Pike at Coleridge Road	Construct concrete crossover			1,000.50
5-15-52	C 329-1	U. S. 222	U. S. 1 to Pennsylvania State Lane	Relocating poles		1,820.00	1,820.00
5-15-52	H 822-1	Md. 24	South of Bel Air toward Van Bibber	Construct concrete retaining wall in front of transformer station			2,439.00
5-15-52	H 241-3	Md. 27	Carroll-Frederick County Line to Montgomery County Line	Moving poles		1,992.06	1,992.06
5-15-52	Sm 205-1		Md. 5 to Md. 235	Preliminary engineering		183.97	2,566.03



5-8-52	A 437X2	Md. 36	Negro elbow in Westernport	Right-of-way adjustment	111.24	*	1,960.00	111.24	1,960.00
5-8-52	B 642-1		Reisterstown Road at Owings Mills	Raise the grade crossing of the Western Maryland Railway Co. to meet new grade when resurfaced					
5-8-52	F 425-20	U. S. 240	Bridge over U. S. 15 and Roadway	Relocate pole	80.00	*		80.00	
5-8-52	F 425-21	U. S. 240	Washington National Pike	Relocate poles	200.51	*		200.51	
5-8-52	H 363-1	U. S. 1	End of Deer Creek relocation to Conowingo Dam	Preliminary engineering	1,375.71	*	18,864.29	20,240.00	
5-8-52	H 6 258-1	Md. 105	Rogers Avenue between National Pike and Ellcroft City and U. S. 40	Preliminary engineering	110.43	*	6,379.57	6,400.00	
5-8-52	H 6 259X	U. S. 1	West Side of Laurel By-Pass	Extend sanitary sewer 190 feet	1,321.87	*	1,321.87	1,321.87	
5-8-52	W 369X-9	Md. 65	Hagerstown to Lappans	Right-of-way adjustment	51.00	*	51.00	51.00	
5-8-52	W 369X-10	Md. 65	Hagerstown to Lappans	Right-of-way adjustment	25.00	*	25.00	25.00	
5-8-52	W 369X-11	Md. 65	Hagerstown to Lappans	Right-of-way adjustment	25.00	*	25.00	25.00	
5-8-52	W 369X-12	Md. 65	Hagerstown to Lappans	Right-of-way adjustment	25.00	*	25.00	25.00	
5-8-52	W 369X-13	Md. 65	Hagerstown to Lappans	Right-of-way adjustment	25.00	*	25.00	25.00	
5-8-52	W 369X-14	Md. 65	Hagerstown to Lappans	Right-of-way adjustment	25.00	*	25.00	25.00	
5-8-52	W 404-1	Md. 60	Northern Ave. in Hagerstown to Antietam Creek	Moving poles	553.79	*		553.79	
5-8-52	W1 267X-1	Md. 349	Salisbury to Rockwalking School	Preliminary engineering	1,009.54	*	4,490.46	5,500.00	
5-8-52	W1 270	U. S. 50	Between Potomac River and Willkards Bridge—Burnt Mill Bridge	Preliminary engineering	2,011.58	*		2,011.58	
5-8-52	W 6 317-2	U. S. 50	Potomac River Easterly to Berlin Branch	Relocation work for improvement	779.18	*	779.18	779.18	
5-7-52	C 6 142	Md. 313	Bridge and approaches at Chapel Bridge	Preliminary engineering	751.38	*	402.36	1,177.10	
5-7-52	C 6 359-1	Md. 272	Md. 7 to U. S. 40	Preliminary engineering	74.62	*	12,795.38	12,870.00	
5-7-52	K 187X	Md. 20	Fairlee relocation	Preliminary engineering	815.58	*	1,364.42	2,560.00	
5-7-52	P 696	U. S. 1	Beltville	Lamination study	132.39	*	197.01	350.00	
5-2-52	C H 124-15	U. S. 301	Bridge over Potomac River between Ludlow Ferry near Dahlgren, Va. and Queenstown	Equipment for bridge	23.36	*		23.36	
5-2-52	Q 168-18	U. S. 50	Grasonville to Queenstown	Relocating installations	3,745.05	*		3,745.05	
5-2-52	Q 168-19	U. S. 50	Stevensville to Queenstown	Relocating installations	4,341.27	*		4,341.27	
5-2-52	Q 168-20	U. S. 50	Stevensville to Kent Narrows Road at Station 486	Relocating installations	322.85	*		322.85	
5-2-52	Q 168-21	U. S. 50	Kent Narrows to Grasonville Road at Station 722	Relocating installations	3,766.08	*		3,766.08	
5-2-52	S M 292-2	Md. 5	Great Mills to St. Mary's	Right-of-way adjustment	52.87	*	97.13	150.00	
5-1-52	C H 268X-5	Md. 225	La Plata to Indian Head between Stations 455 45 and 439 55	Construct gravel shoulder and bituminous concrete valley gutter	482.31	*	482.31	482.31	
4-30-52	T 127-5	Md. 333	Trappe to Peach Blossom Creek	Relocating installations	1,402.30	*		1,402.30	
4-30-52	A 435	Md. 55	Vale Summit to Miller	Preliminary engineering	3,070.39	*	870.29	2,560.00	
4-30-52	A 439	Md. 53	Winchester Road at U. S. 40 to Cresaptown	Preliminary engineering	9,581.01	*		9,581.01	
4-30-52	A 439-1	Md. 53	U. S. 40 to Cresaptown	Acquisition of right-of-way	10,655.54	*	2,060.00	12,715.54	
4-30-52	AA 432	U. S. 50	Revelt Highway from Ritchie Highway to Sandy Point	Preliminary engineering	11,869.05	*		12,491.33	
4-30-52	B 637		Rolling Road at Bloomsbury Avenue Federalsburg	Preliminary engineering	200.76	*	899.24	1,100.00	
4-30-52	C 6 224			Preliminary engineering — resurfacing streets—bituminous concrete	1,291.10	*		1,774.36	
4-30-52	C 6 334	U. S. 1	Conowingo toward Rising Sun	Preliminary engineering	2,210.35	*	2,689.88	4,180.00	
4-30-52	C H 272	Md. 231	Huglesville southeasterly toward Benedict	Preliminary engineering	6,967.85	*		9,660.18	
4-30-52	D 224	Md. 343	Cambridge toward Lloyds	Preliminary engineering	2,784.25	*		3,063.61	
4-30-52	F 490	U. S. 40	Fredrick By-Pass	Preliminary engineering	8,096.78	*		8,300.00	
4-30-52	F 521	Md. 383	West approach to bridge over Catoctin Creek, Jefferson towards Middletown	Preliminary engineering	1,110.71	*	39,800.76	41,000.00	

**GENERAL CONSTRUCTION AND OPERATING FUND  
STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED  
JUNE 30, 1951 AND 1952**

Date Authorized	Project Number	Route Number	Location	Description	EXPENDITURES				Total
					Work in Progress July 1, 1950	Fiscal Year 1951	Fiscal Year 1952	Authorized to Complete Projects in Progress June 30, 1952	
4-30-52	F 521-1	Md. 383	West approach to bridge over Cutoctin Creek	Acquisition of right-of-way		\$ 1,069.02	\$ 1,450.00	2,519.02	
4-30-52	F 525	Md. 26	Intersection with Route 71 at Ceresville	Preliminary engineering		2,178.62	325.00	2,178.62	
4-30-52	F 525-1	Md. 26	Intersection with Md. 71 at Ceresville	Acquisition of right-of-way				325.00	
					\$	3,473.59	21,354.24	3,706.41	
4-30-52	H 334	Md. 126	U. S. Rt. 1 to Dublin	Preliminary engineering	292.82	9,865.29	731.76	13,200.00	
4-30-52	K 188	Md. 217	County Md. 544 to Massy	Preliminary engineering	20.47	731.76	7,915.90	13,200.00	
4-30-52	M 440	Md. 27	South of Md. 80 to Brink	Preliminary engineering				11,511.45	
4-30-52	M 478	Md. 198	Clinton Road, Patuxent River toward Brinksville	Preliminary engineering	800.03	10,732.42			
4-30-52	M 488	Md. 195	Crutcher Avenue from Denwood to E. Allen Pk.	Preliminary engineering	650.69		1,100.31	1,750.00	
4-30-52	P 693	Md. 202	Lanoxer Road—East and West of Baltimore—Washington Expressway	Preliminary engineering	1,282.68	287.10	80.22	1,650.00	
4-30-52	S 180X	Md. 529	Allen to Loretta	2.8 mi. widening and resurfacing—Strip "B", seeding and mulching banks, excavation of drainage structures, and correction of side drainage	1,282.68	9,545.68	89,454.32	99,000.00	
4-30-52	S 180X-2	Md. 529	Allen to Loretta	Acquisition of Right-of-way			8,800.00	8,800.00	
4-30-52	W 416	Md. 60	Beltsburg to Pennsylvania State Line	Preliminary engineering	3,207.08	275.00	4,987.92	8,470.00	
4-30-52	W 199-7	U. S. 30	Northwesterly from Salisbury 2.8 Mi. Lower Chesapeake Bay	Preliminary Engineering	1,314.49	6,503.47	2,082.04	9,900.00	
4-30-52	AW 615			Study feasibility of State owned and operated ferry system		2,246.02	22,753.98	25,000.00	
4-28-52	C 228X	Md. 16	Preston to Bureau	Preliminary engineering		4,510.80	1,480.20	6,000.00	
4-28-52	C 260-4	Md. 282	Ceddon to Warwick—Interchangeization of Routes 282 and 299	Preliminary engineering		634.25	25.75	660.00	
4-28-52	C 356		Bay Bridge approach through Cecil County from Kent Line to Warwick	Preliminary engineering		2,376.45	14,673.55	17,050.00	
4-28-52	K 194X	Md. 298	Between Lynell and Redden's Corner	Preliminary engineering		173.17	426.83	600.00	
4-28-52	K 194X-1	Md. 298	Between Lynell and Redden's Corner	Acquisition of right-of-way		463.16	6,136.84	6,600.00	
4-28-52	K 194X-2	Md. 298	Between Lynell and Redden's Corner	Widen road, extend drainage, construct earth shoulders, and seed and mulch banks		928.66	37,571.34	38,500.00	
4-22-52	AA 429X-2	U. S. 301	Between Belle Grove Road and Dorsey Road	Acquisition of right-of-way		23,817.32	3,682.68	27,500.00	
4-22-52	B 578-8	U. S. 111	.14 mi. south, Shawan Road to .373 mi. north of Thomson Mill Road	2.33 mi. grading, drainage, and resurfacing—reinforced cement concrete	12,974.04	13,543.68	1,412,000.95	1,512,312.45	
4-22-52	B 583X-2	U. S. 301	City line to Belle Grove Road	Acquisition of right-of-way		22,086.44		22,086.44	
4-22-52	AA 395X-2		Wilkins Avenue at intersection of Beechfield Avenue—Kennington Road	Installation of fixed time traffic signal		701.33	233.07	935.00	
4-22-52	B 641X	Md. 372							
4-22-52	Cl 322X-4	Md. 27	Mt. Airy Road	Acquisition of right-of-way		1,120.00	1,740.00	2,860.00	
4-22-52	F 488X-2								

4-22-32	F 510X-1	U. S. 15	St. Joseph's College at Emmitsburg	Right-of-way adjustment	40,938.04	111.10	111.10
4-22-32	F 625X-1	Md. 97	Cooksville to Montgomery County line	Acquisition of night-of-way	3,063.06	3,063.06	44,000.00
4-22-32	M 467X-2	U. S. 240	Rockville to Gaithersburg	Acquisition of night-of-way	4,461.00	2,138.80	6,600.00
4-22-32	M 480X-2	U. S. 240	West of Seneca Creek River	Acquisition of night-of-way	4,901.00	9,001.00	13,900.00
4-18-32	C 341X-2	U. S. 213	Condition to Seneca River	Acquisition of night-of-way	11,152.91	2,047.00	13,200.00
4-18-32	C H 281X	Md. 213	Intersection of Md. 3 and Md. 533	Change median strip	7,246.56	7,246.56	235.50
4-18-32	K 180X-2	Md. 208	Stadsriaan to Gaithersburg	Acquisition of night-of-way	3,268.15	7,571.85	11,000.00
4-18-32	K 190X-1	Md. 208	Between Butlerstown and Lynch	Acquisition of night-of-way	8,072.30	11,000.00	11,000.00
4-18-32	S M 201-4	Md. 5	Bridge over St. Clement Creek .7 mi. West of Morgantown	Widening the reinforced concrete bridge	627.76	26,871.04	27,498.80
4-18-32	T 146X-1	Md. 332	Peach Blossom Creek to Oxford	Acquisition of night-of-way	17,953.34	17,953.34	17,953.34
4-17-32	A 442X	Md. 655	Bridge at George's Creek and Klondike Road	Repair bridge beams, repair and renew steel stringers, repair and renew wooden floor	1,400.04	777.16	2,207.20
4-17-32	AA 440X	Md. 108	Nursery Road at B. & A. Railroad	Install automatic signals with track detector	55.06	5,838.09	5,893.75
4-17-32	M 383-7	U. S. 240	Washington National Pike	Moving poles	233.25	*	233.25
4-17-32	W 392-3	U. S. 340	Sideling Hill Mountain, west of Hancock	Reinforce concrete pipe culverts	249.24	43,796.01	43,975.25
4-17-32	W 399X-8	Md. 65	Hagerstown to Lappans	Right-of-way-adjustment	1,679.25	2,519.36	2,519.36
4-17-32	W 272X	U. S. 13	U. S. 13 at State Street in Delmar	Installation of semi-actuated traffic signal	8,009.19	1,580.00	1,680.00
4-15-32	Q 254-2	Md. 300	Dulaney's Corner extending easterly to Delaware State line	4.368 mi. resurfacing—bituminous concrete	8,785.21	110,735.79	118,744.98
4-10-32	A 437	Md. 36	Negro elbow in Westernport	.036 mi. of grading and surfacing with penetration macadam	195.40	2,888.01	11,673.22
4-10-32	A 441X	Md. 656	Bridge-Hill Run and Waterliff Road in Allegany county	Additional layer of creosote treated planks on bridge floor	3,072.23	313.32	508.72
4-10-32	B 392-9	Md. 311	Southwestern Boulevard from Wilkins Avenue to Washington Boulevard	Share of cost of relocating sanitary sewers and water mains	655.03	*	3,072.23
4-10-32	Co 223-2	Md. 311	Goldstboro to Maryland	Moving poles	5,300.00	5,300.00	5,300.00
4-10-32	F 535-1	Md. 135	Hagerstown to Camp Ritchie Road from Washington County line toward Camp Ritchie	Preliminary engineering	4,386.50	31,313.50	35,700.00
4-10-32	G 200-1	Md. 485	Swanton to Bloomington	Preliminary engineering	2,618.12	681.88	3,300.00
4-10-32	G 201-1	Md. 320	Jennings towards Grantsville	Preliminary engineering	698.34	1,301.66	2,000.00
4-10-32	M 499-1	Md. 121	Long Branch Bridge on Pincey Branch Road	Preliminary engineering	1,161.69	1,161.69	1,161.69
4-10-32	M 501X	Md. 329	Near Clarksburg	Establish picnic area	1,320.00	1,320.00	1,320.00
4-10-32	S 180X-1	Md. 64	Allen to Loreta	Preliminary engineering	3,447.22	34,252.78	37,700.00
4-10-32	W 425-1	U. S. 30	Chewsville to Frederick County line	Preliminary engineering	2,788.12	2,788.12	2,788.12
4-8-32	Q 255-1	U. S. 213	2.8 mi. northwest of Salsburg westerly to 2.4 mi. southeast of Maryland Springs	Moving facilities	2,732.21	2,732.21	2,732.21
4-8-32	Q 256-1	Md. 300	Bridges between Wye Mills and Chestertown	Preliminary engineering	900.00	900.00	900.00
4-2-32	AA 263-16	Md. 300	Church Hill to Delaware line	Secure samples and wash borings at sites of proposed bridges	272.09	7,471.91	7,744.00
4-2-32	F 507-2	Md. 97	Dorsey's Creek and Weenas Creek Bridges, northwest of Annapolis	Labor, equipment and materials to explore sub-surface strata at bridge	11,563.06	1,538.66	11,563.06
4-2-32	M 435X-10	Md. 51	Potomac River at Brunswick	Improvement and planting—1.732 mi. in the median strip	1.34	493.71	1,540.00
3-26-32	A 414	U. S. 50	Georgia Avenue, from Seminary Avenue to Viers Mill Road	Preliminary engineering	506.29	506.29	1,000.00
3-26-32	AA 255-29	U. S. 50	North Branch to Old Town adjacent to Potomac River	Acquisition of night-of-way	58,164.08	12,427.74	70,592.42
3-26-32	AA 435	U. S. 50	Revel Highway, between Ritchie Highway and Bay Bridge approach	Acquisition of night-of-way	3,219.05	3,219.05	3,219.05
3-26-32	AA 435	U. S. 50	Furnace Branch Road	Acquisition of night-of-way	3,219.05	3,219.05	3,219.05

**GENERAL CONSTRUCTION AND OPERATING FUND**  
**STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED**  
**JUNE 30, 1951 AND 1952**

Date Authorized	Project Number	Route Number	Location	Description	EXPENDITURES				Total
					Work in Progress July 1, 1950	Fiscal Year 1951	Fiscal Year 1952	Authorized to Complete Projects in Progress June 30, 1952	
3-26-52	B 578-10	U. S. 111	Thornton Mill Road to Belfast Road	Acquisition of right-of-way	\$ 3,077.01	\$ 33,127.60	*	36,204.61	
3-26-52	B 611	U. S. 40	Golden Ring Interchange	Preliminary engineering	6,142.21	322.81	3,000.00	7,807.78	
3-26-52	B 643-1	Md. 26	Northwest Branch of Patuxent River	Preliminary engineering costs to study plans for new bridges and approaches by areas affected by high water				3,000.00	
3-26-52	C L 327-1	Md. 26	Snowden Creek	Acquisition of right-of-way	54,661.87	1,588.86	704,242.00	58,624.35	
3-26-52	Cl 304-1	Md. 26	Wigan Road relocation	6.983 mi. grading, drainage, and resurfacing—macadam; and acquisition of right-of-way	29,597.64	60,532.61		785,400.62	
3-26-52	Ce 334-1	U. S. 1	N. Little Neck from Conowingo Dam to Rising Sun	Preliminary engineering	3,490.08	3,961.49	325.00	7,451.57	
3-26-52	Ce 358-1	U. S. 40	Bridge over Little Elk Creek at Elkton	Relocation of electric facilities			*	2,715.69	
3-26-52	F 507-1	U. S. 219	Brunswick Bridge and Maryland approach	Moving pole lines	1,921.50	4,369.55	2,077.65	4,369.55	
3-26-52	G 155-10	U. S. 219	Oakland to McHenry	Preliminary engineering	63.78	.85	410.31	4,000.00	
3-26-52	G 155-11	U. S. 219	Kinzler Bridge	Preliminary engineering	25.91	188.60	55.83	500.00	
3-26-52	G 224	Md. 165	Silver Brook near Pylesville	Demolition of frame dwelling				244.43	
3-26-52	H 325	U. S. 40	.114 mi. west of Morgan Road northwest of U. S. 40	Preliminary engineering			1,090.25	1,500.00	
3-26-52	Ho 234X-7	U. S. 40	Laurel to 1.25 mi. east of Ridgville	Acquisition of right-of-way	2,059.68	782.20	91.88	2,750.00	
3-26-52	Ho 257	Md. 216	South of Md. 80 to Brink	Acquisition of right-of-way	2,700.78	2,131.12		5,276.48	
3-26-52	I 708	Md. 27	New Farmington Avenue	Preliminary engineering	354.58	283.03	153.30	800.00	
3-26-52	M 440-1	Md. 650	Near Metro-Weighing Station	Acquisition of right-of-way and 1.264 mi. grading, drainage, and surfacing—bituminous concrete	363.67	81,343.01	355,193.98	429,893.19	
3-26-52	P 473-1	U. S. 301	Walker Mill Road northw. to District of Columbia line (1952 costs totaled \$31,656.39; county commissioners of Prince George's County contributed \$115,000.00)		268.19				
3-26-52	P 519-7	Md. 4			157,774.03				
3-26-52	P 585-1	Md. 4							
3-26-52	P 708	Md. 27							
3-26-52	W 306-1	U. S. 13	Pocomoke City by-pass	Acquisition of right-of-way	336.00	18,680.61		19,016.61	
3-26-52	W 399-7	Md. 65	Hagerstown to Lappans	Lowering water lines			10,000.00	10,000.00	
3-26-52	W 405X-4	Md. 64	Hagerstown to Cheesville, B & O R.R. crossing	Backfill between rails with bituminous concrete		123.59		123.59	
3-26-52	W 422	U. S. 40	Stream, Huyett to Clearspring	Widening bridge—preliminary engineering		1,715.48		1,715.48	
3-26-52	W 423	U. S. 40	Bridge over Potomac River at Williamsport	Preliminary engineering		423.36	2,576.64	3,000.00	
3-26-52	Wo 300-7	U. S. 113	Pocomoke to Snow Hill	Acquisition of right-of-way for 3 bridges		2,698.21	58,737.49	61,435.70	
3-26-52	Wo 318-1	U. S. 13	Pocomoke to Virginia line	Acquisition of right-of-way			11,000.00	11,000.00	
3-26-52	Wo 321	U. S. 113	Bridges over South Branch, Middle Branch, Birch Branch, Carcy's Branch north of Bepfin	Preliminary engineering		4,926.64		4,926.64	
3-26-52	K 187X-1	Md. 20	Fairlee relocation	Acquisition of right-of-way		5,663.73	16,336.27	22,000.00	

3-20-52	K 187X-2	Md. 20	Fairlee relocation	.75 mi.—construction of relocation with compacted gravel-surface treated-black top)	16.88	54,983.12	55,000.00
3-20-52	T 126	Md. 370	Miles River Bridge	Preliminary engineering	212.00	*	2,036.36
3-19-52	A 283X-11	U. S. 220	Keyser-McCool Bridge approach	Right-of-way adjustment	145.87		307.68
3-19-52	AA 439X-3		Intersection of U. S. 301 and W. B. & A. Railroad at Millersville	Remove the concrete abutments and retaining walls to obtain a 5-foot minimum shoulder width			2,812.90
3-19-52	C 184-S	Md. 231	Approaches to Patuxent River Bridge at Benedict	Removal of pole line	574.91	*	574.91
3-19-52	M 500		Montgomery and Prince George's Counties	Salaries, expenses, and purchase of plats in connection with the obtaining of prints of all subdivisions	242.46	2,257.54	2,500.00
3-19-52	P 711			Preliminary engineering	5,076.43		5,076.43
3-19-52	P 695	U. S. 1	Anacostia River-Peace Cross	Removal of pole line	19,236.00	*	19,236.00
3-19-52	SM 294-5	U. S. 50	Md. 235 to Loveville	3.691 mi.—grading, drainage, surfacing, and stabilizing—gravel and bituminous base	112,932.39		305,423.37
3-12-52	AA 401-3	Md. 2	Md. 2	Replacing damaged well	587.24	*	587.24
3-12-52	P 391-9	Md. 5	Between Stations 96 and 99 on District of Columbia line southwesterly to Woods Corner	Installation of traffic signals and revision of existing signals to permit coordination	1,972.62	776.58	4,000.00
3-12-52	P 682X	U. S. 1	Baltimore-Washington Boulevard at Longfellow Street, Madison Street, Hamilton Street, Jefferson Street, and Oglethorpe Street	Widening bridge	6,566.60	37,896.85	44,463.45
3-12-52	W 424-1	U. S. 40	Bridge over Little Tomoloway Creek at Hancock	Purchase linen for B-W prints of right-of-way plats for filing in various counties	3,778.16	4,721.84	8,500.00
3-12-52	AW 612			Relocating pole line	535.58	*	535.58
3-5-52	C 194-2	Md. 2	.5 mi. northwest of Md. 231 extending southwesterly to Solomons Island Road	Acquisition of right-of-way	26,601.06	17,398.94	44,000.00
3-5-52	K 180X-1	Md. 298	Between Fairlee and Bartlettown	Acquisition of right-of-way	15,226.88	1,548.12	16,775.00
3-5-52	T 128X-2	Md. 328	Easton towards Marlheys	2.9 mi.—resurfacing—bituminous concrete	27,852.69	8,176.11	36,008.80
3-3-52	P 709	U. S. 301 and Md. 4	Marlboro by-pass to Federal Spring Branch via Marlboro	Widen road at gates 8 and 9	1,435.01	682.49	2,117.50
2-28-52	AA 438X	Md. 2	Ritelle Highway at Naval Academy	.636 mi.—grading, drainage and widening—bituminous concrete (includes preliminary engineering)	157,130.24	406,400.51	563,530.75
2-28-52	B 629-1	U. S. 1	Approximately 320 ft. northeast of Roll-insing Road to 2 mi. south of the Patuxent River	Install flasher signal	485.42	64.58	550.00
2-28-52	H 361X	Md. 7	At the Edlewood-Emmorton Road	Preliminary engineering	350.00	350.00	350.00
2-28-52	I 362-1	Md. 408	Bridge over Winters Run	Improvement and planting—1.16 mi. in the median strip	1,398.45	281.55	1,680.00
2-28-52	M 455X-9	Md. 97	George Avenue from Colesville Pike to Mondawmin Hills	Preliminary engineering	5,347.14	987.14	4,360.00
2-28-52	M 496	Md. 28	Downroad to Hunting Hill	Widening and resurfacing	2,292.07	19,707.93	22,000.00
2-28-52	M 408X-3	Md. 28	First Street to Reekville	Widen shoulders	1,380.00		1,380.00
2-21-52	Cs 209X-4	Md. 331	West approach to Preston	Rebarrete pole line	3,335.22	*	3,335.22
2-10-52	A 422-5	Md. 55	Class approach to Vale Summit	Rebarrete pole line	6,064.36	*	6,064.36
2-10-52	B 552-2		Porterick Road between Melvin and Montross Avenues	Rebarrete trolley car tracks	996.16		996.16
2-19-52	D 125-3	Md. 392	Hartlock to Fishville	Moving facilities	249.71	77.71	327.42
2-19-52	C 248X-12	U. S. 219	Alignment toward Hoxes	Right-of-way adjustment by the Wilson T. Ballard Co.—Joseph K. Knoerle	119,042.32	883,825.83	1,007,000.00
2-19-52	ES 150	U. S. 240	Md. 118 to D. C. line	Engineering survey by Joseph K. Knoerle, Richard Klopfer and Karl and Baker-Wilberly Co.	35,024.68	945,475.32	980,500.00
2-19-52	ES 151	Baltimore County	Polksh Highway-Baltimore-Washington Expressway				
		Beltway					

**GENERAL CONSTRUCTION AND OPERATING FUND**  
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**JUNE 30, 1951 AND 1952**

Date Authorized	Project Number	Route Number	Location	Description	EXPENDITURES				Total
					Work in Progress July 1, 1950	Fiscal Year 1951	Fiscal Year 1952	Authorized to Complete Projects in Progress June 30, 1952	
2-14-52	B 629-2 Ho 253-2	U. S. 1	West of Washington Blvd. near the bridge over the Patapsco River at Elk ridge	Relocate transmission tower			\$ 6,500.00	\$ 6,500.00	
2-14-52	F 537	U. S. 40	Between Ridgeville and Frederick	Employ Alster & Associates to make a location study and provide aerial mosaic and topographic map			5,292.00	5,292.00	
2-14-52	M 496N-1	Md. 28	Darnestown to Hunting Hill	Acquisition of right-of-way		\$ 26,708.22	89,291.78	66,000.00	
2-14-52	M 496N-2	Md. 28	Darnestown to Hunting Hill	Modification and relocation of vertical curves, and 5.45 mi. widening and resurfacing		14,060.49	387,839.51	412,500.00	
2-14-52	P 391-8	Md. 5	Between stations 96 and 99 on District of Columbia line southeasterly to Woods Corner	Lowering of two wells	\$ 9.22	180.93	*	190.15	
2-14-52	W 399	Md. 65	Hagerstown to Lappans	4.99 mi. grading, drainage, widening, surfacing, and resurfacing—bituminous concrete	\$ 372.44	1,548.65	785,913.54	922,130.00	
2-6-52	B 625-1	Md. 25	Falls Road near Butler	.275 mi. bridge over Western Run, and 30' roadway approaches—concrete bridge floor—macadam base with bituminous concrete surface for approaches	554.62	9,790.65	177,249.21	187,594.48	
2-6-52	B 639X	U. S. 140	Intersection of Reisterstown Road and Milford Mill Road	Install semi-actuated traffic signal with pedestrian push buttons		833.46	816.54	1,650.00	
2-6-52	C 184N-7	Md. 231	At intersection of Victor Friscoe Property	Laying additional pipe			125.13	125.13	
2-6-52	F 435-15	U. S. 240	Washington National Pike and intersection U. S. 15 at a point approximately 1.25 mi. south of this intersection	.925 mi. grading, drainage, and surfacing—bituminous concrete	713.98	40,522.18	281,872.94	323,109.10	
2-1-52	Q 168-17	U. S. 50	Stevensville toward Queenstown	Relocating equipment		3,115.22	*	3,115.22	
1-30-52	W 133-9	U. S. 13	1.2 mi. north of Main St. in Salisbury northeasterly to Leonards Mill Pond	Moving facilities		9,628.15	*	9,628.15	
1-28-52	P 710X	Md. 193	Intersection of University Lane and Colesville Road	Widening		1,233.50	261.50	1,495.00	
1-25-52	Q 168-15	U. S. 50	Bridge over Kent Island Narrows	Removal of existing timber highway bridge		3,311.54	16,173.46	19,485.00	
1-23-52	P 391-7	Md 5	T.B. to Charles County line	Move pole line		4,045.04	13,814.96	17,860.00	
1-23-52	CH 257-4	U. S. 50	West of bridge over Kent Narrows	Stabilize connection with new dual highway		2,701.48	*	2,701.48	
1-16-52	Q 168X-16	U. S. 140	Silver Run Bridge	Widen concrete girder bridge from 24' to 44'		1,839.15	49,039.48	50,878.63	

1-16-52	D 220X-1	Cambridge to Church Creek	Md. 16	Acquisition of right-of-way	57,492.18	17,567.82	75,000.00
1-2-52	C 337X	Perryville east for 2 mi.	U. S. 40	Mulch-seed slopes to control erosion, etc.	1,691.67	90.83	1,782.50
1-2-52	H229X-2	Bel Air to Deer Creek	U. S. 1	5.3 mi.—stabilize shoulders, 10 ft., seeding and mulching, clearing rights-of-way, etc. along section	12,897.02	58,118.98	71,016.00
12-20-51	A 422X-4	Clarysville to Vale Summit	Md. 55	Right-of-way adjustment	16,431.63	69.00	69.00
12-20-51	AA 430-1	Lipins Corner to 1 mi. east of Jacobsville	Md. 17	4.31 mi. Resurfacing—bituminous concrete	157,321.58	173,753.21	173,753.21
12-20-51	CH 257-2	.274 mi. south of Charles County line to .628 mi. south of Waldorf	U. S. 301	2.831 mi. grading, drainage, and surfacing—gravel and bituminous base	175,591.68	489,342.40	667,671.43
12-20-51	M 383-2	Washington National Pike from .2 mi. south of Charksburg Road northwesterly to .45 mi. south of the Frederick-Montgomery County line	U. S. 240	3.8 mi. grading and surfacing—bituminous concrete; installation of pipe culverts and construction of 3 concrete culverts	451,408.60	1,955,051.44	2,411,743.30
12-20-51	M 383-6	Washington National Pike at Md. 121	U. S. 240	Construction of 4-span steel I-beam bridge	24,620.49	159,492.79	184,113.28
12-20-51	W 323	Intersection of U. S. 113 and Md. 452		Acquisition of property	7,508.78	356.22	7,865.00
12-17-51	C 184-6	Bridge over Patuxent River at Benedict	Md. 231	Equipment required to control toll collections	20,750.00	3,600.00	24,350.00
12-13-51	B 894-2	.07 mi. west of Rosewick Avenue easterly to .04 mi. east of Chesaco Avenue	Md. 7	.22 mi. grading, drainage, widening, and resurfacing—penetration macadam	25,917.94	131,753.91	160,899.80
12-13-51	M 383-5	Washington National Pike at Comus Road	U. S. 240	Construction of 4-span steel I-beam bridge	16,895.84	115,804.15	132,699.99
12-13-51	M 491X	Connecticut Avenue at intersection of Jones Bridge Road and Kensington Parkway	Md. 163	Installation of a three phase fixed time traffic signal	1,385.65	*	1,385.65
12-13-51	M 493	Wisconsin Avenue at Dorset Avenue and at Grafton Avenue	U. S. 240	Construction of two storage lanes in the existing median strip	5,290.75	.....	5,290.75
12-13-51	W 226-2	Bridge over Pa. R.R. in Salisbury	U. S. 13	Construction of concrete substructure	125,113.48	348,065.82	473,129.19
12-6-51	P 707X	Intersection, New Hampshire Avenue and Ray Road	Md. 650	Change traffic signal from semi-actuated to fully actuated	1,531.45	*	1,531.45
12-4-51	AA 263-10	Severn River Bridge, Annapolis Bypass	Md. 2	Roadway and navigation lighting facilities	508.98	40,735.52	41,244.50
11-28-51	F 529X	Intersection with alternate U. S. 40 at Catoctin Country Club	U. S. 40	Wedge course on stabilized shoulder	345.98	345.98	345.98
11-28-51	F 529-1	Near intersection with alternate U. S. 40 at Catoctin Country Club	U. S. 40	Furnish and place a 1 1/2" surface of bituminous concrete and a light tack coat	2,530.00	2,530.00	2,530.00
11-28-51	W 268	Salisbury, southeasterly toward Worcester-Worcester County line	Md. 12	7.167 mi. grading, drainage, widening, and resurfacing—bituminous concrete	65,269.32	214,613.77	279,883.09
11-21-51	A 422X-3	Clarysville to Vale Summit	Md. 55	Adjustment to property due to damage when grading	194.27	*	194.27
11-21-51	F 476X-4	Mt. Pleasant to Libertytown	Md. 26	Right-of-way adjustment	52.34	167.18	219.52
11-21-51	P 631-9	Intersection of Annapolis-Washington Expressway and Crain Highway	U. S. 301	1.651 mi. grading, drainage, and surfacing—gravel and bituminous concrete	175,463.88	271,281.69	481,601.19
11-19-51	CH 273	Intersection of U. S. 301 and Md. 3		Additional traffic lane 7'00" in length—reinforced concrete	11,314.78	.....	11,314.78
11-19-51	P 510-10	1.4 mi. North of Wells Corner Southwesterly toward Cheltenham	U. S. 301	7.245 mi. Surfacing—bituminous concrete	328,122.16	33,456.69	361,581.85
11-14-51	AA 429-1	Cabin Branch North of Glen Burnie	U. S. 301	Widen concrete bridge	11,629.57	368.80	11,629.57
11-14-51	B 332-10	Between Suburban Spring Road and Waelchli Avenue in Arboretum		Construct stairway at Pa. R.R. underpass	213.77	.....	213.77
11-11-51	C 184-5	Bridge over Patuxent River at Benedict	Md. 231	Purchase furniture and fixtures for Administration Building	4,103.79	1,396.21	5,500.00
11-7-51	AA 398X-9	Annapolis-Washington Expressway at Broad Creek		Recut channel	1,672.33	1,672.33	1,672.33
11-7-51	B 638X	South of the Big Gumpowder	U. S. 1	Repair wooden bridge over stream	285.69	231.81	517.50
11-7-51	B 640	Rolling Road	Md. 166	Share of cost of drainage structure	2,331.23	*	2,331.23
11-7-51	CL 303X-6	Locust Avenue, Maple Avenue, and Leddy Road in Carroll County		.65 mi. Widening and resurfacing Streets	23,531.50	*	23,531.50

EXHIBIT F—Continued

**GENERAL CONSTRUCTION AND OPERATING FUND**  
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Date Authorized	Project Number	Route Number	Location	Description	EXPENDITURES					Total
					Work in Progress July 1, 1950	Fiscal Year 1951	Fiscal Year 1952	Authorized to Complete Projects in Progress June 30, 1952	\$	
11-7-51	F 425-18	U. S. 210	Washington-National Pike, between Stations 581 and 596	Relocate poles				411.59		411.59
11-7-51	H 231-3 C1 308	U. S. 40	.14 mi. West of Morgan Road northwesterly to 1.25 mi. east of Ridgeville	5,293 mi. Grading, drainage, and surfacing—reinforced cement concrete	\$ 539.54	\$ 2,849.68		1,031,853.18	\$ 1,259,911.36	2,298,153.76
11-7-51	W 399X-6	Md. 65	Lappans to Sharpsburg	Right-of-way adjustment			883.69		2,512.39	3,126.08
10-31-51	AA 437X	Md. 2	Ritchie Highway at Church Street, Md. 171	Construction of decelerating lanes			1,472.73		781.27	2,251.00
10-31-51	B 636	Md. 151	Eastern Avenue—North Point Road overpass	Install roadway lighting underneath overpass			1,009.60		3,211.90	4,251.50
10-31-51	F 508X-2	Md. 71	Taneytown towards Woodsboro	Right-of-way adjustment			51.64		*	51.64
10-31-51	S 187X-1	U. S. 13	Westover southeasterly to 1 mi. west of Pocomoke	Restoration of earth shoulders			2,381.92		*	2,381.92
10-29-51	Q 253X	Md. 300	At intersection with Md. 313 in Sudlersville	Fixed time traffic signal			517.36		*	517.36
10-24-51	AA 436X	Md. 713	Buckhannon's Corner Road, between Md. 175 and Md. 176	2.49 mi. Widening and resurfacing—Spec. "B", recut side and outlet ditches, seed and mulch slopes			148,849.55		74,150.15	223,000.00
10-24-51	F 125X-17	U. S. 15	Evergreen Point towards Point of Rocks	Place 1 1/2' of crusher run material on stabilized shoulders			872.44		*	872.44
10-24-51	M 458X-3	U. S. 240	Rockville Pike at Viers Mill Road and at Rockyville By-Pass	Installation of fixed time traffic signals			1,584.79		*	1,584.79
10-24-51	F 522-4	Md. 500	Queens Chapel Road near Northwest Branch	Moving pole line			4,698.00		*	4,698.00
10-18-51	K 191X	Md. 20	Between Chestertown and Rock Hall	Earth shoulders, recut side and outlet ditches and extend drainage structures			21,930.18		219,069.82	241,000.00
10-18-51	SM 292-1	Md. 5	Great Mills southeasterly to St. Mary's City	6.135 mi. grading, drainage, and widening—gravel and bituminous stabilized; also construction of several relocations	3,067.76	6,540.33		350,533.16	323,163.33	683,301.58
10-17-51	AA 389-8		Governor's bridge—Townsend's Corner Road, from .9 mi. east of Governor's bridge northerly toward the Annapolis-Washington Expressway	Construction of a steel I beam bridge			11,326.82			11,326.82
10-17-51	B 635		Carroll County Line to New Midway	Personnel used in connection with right-of-way acquisitions	6,468.10	2,252.20		2,588.36		2,588.36
10-17-51	F 508	Md. 71		2.878 mi. grading, drainage, widening, surfacing, and resurfacing—bituminous concrete, also construction of several relocations			39,154.03		395,855.00	443,729.33
10-17-51	H 347	U. S. 1	Approximately 2 mi. northeast of Kingsville toward Bel Air	3.9 mi. resurfacing—bituminous concrete			509.18		157,809.40	158,378.58
10-17-51	P 699X	Md. 650	Intersection of New Hampshire Avenue and Piney Branch Road	Installation of semi-actuated traffic signal			1,576.92		*	1,576.92



10-17-51	P 700X	Md. 501	Intersection of Chillum Road and Sargent Road	Installation of fully-actuated traffic signal	3,165.38	*	3,165.38
10-11-51	P 701	Md. 214	U. S. 301 Easterly to Patuxent River	2.58 mi. widening and resurfacing—bituminous concrete	21,883.50	62,704.66	84,588.25
10-10-51	A 438X-1	U. S. 220	McCool at Md. 135 extending north	.75 mi. of raising earth shoulders	1,072.02	*	1,072.02
10-10-51	H 0 256X	Md. 476	Morgan Road from U. S. 40 north to the intersection of the Dual Highway, New U. S. 40	.5 mi. widening and resurfacing—macadam	19,594.99	*	19,594.99
10-10-51	H 316-2	Md. 22	Between Bel Air and Churchville	Relocating poles and guy stubs	1,935.73	5,600.00	5,600.00
10-10-51	H 318	Md. 23	At intersection of Rt. 105 in Jarrettsville	Acquisition of additional rights-of-way	1,935.73	1,935.73	1,935.73
10-10-51	S 188X	Md. 627	Md. 363 Through Orpale	2.5 mi. widening and resurfacing—Macadam	40,037.56	24,202.41	64,240.00
10-10-51	W 390X-3	U. S. 40	Hagerstown to Hopewell	To grade, by cutting and filling, a street into Route 40	553.29	*	553.29
10-10-51	W 420X-1	U. S. 40	Hwyett to Wilson	Replacae stabilized and bituminous material	69.76	907.74	977.50
10-10-51	W 421-2	U. S. 40	Bridge over Conococheague Creek	Install roadway lighting on bridge	2,000.00	2,000.00	2,000.00
10-10-51	W 0 322-2	Md. 12	Bridge over Pocomoke River in Snow Hill	Installation of Roadway lighting	1,200.00	1,200.00	1,200.00
10- 4-51	T 145-1	Md. 309	3.8 mi. N. E. of U. S. 50 towards Corodova	2.27 mi. widening and resurfacing—bituminous concrete	99,499.81	29,972.08	129,471.89
10- 3-51	AA 434X	Md. 168	Nursery Road, between U. S. 301 and Hannondis Ferry Road	1.3 mi. widening and resurfacing—bituminous concrete	64,097.27	1,902.73	66,000.00
10- 3-51	D 232	Md. 331 and U. S. 50	Riodesdale Southerly to Vienna and Vienna northerly toward Mt. Holly	6,879 mi. widening and resurfacing—bituminous concrete	104,362.76	143,616.92	247,979.68
10- 3-51	F 526	U. S. 40	New Market to Monroe St. in Frederiek	6.3 mi. of resurfacing with bituminous-bound stone	72,318.85	8,608.58	80,927.43
10- 3-51	P 703	Md. 212	Riggs Road at Pisgah Church	Acquisition of right-of-way	2,127.14	2,127.14	2,127.14
9-26-51	A 438	U. S. 220	McCool at Md. 135 extending north	.75 mi. applying bituminous concrete resurfacing	24,860.49	2,556.74	27,417.73
9-26-51	B 578X-13	U. S. 111	North of Timonium Road toward Shalwan Road	Seed and mulch cut and fill slopes between stations 40 and 142	1,449.27	7,526.73	8,976.00
9-26-51	AA 398-19	U. S. 301	Hannondis Ferry to Nursery Road	Relocate and raise transmission line tower	7,647.78	*	7,647.78
9-26-51	B 633	Md. 26	Randallstown northwesterly toward North Branch	4.5 mi. resurfacing and widening—bituminous concrete	86,553.28	203,588.77	290,142.05
9-26-51	D 211-3	U. S. 50	Mt. Holly to east of Cambridge	Moving poles	13,673.74	*	13,673.74
9-26-51	G 248X-11	U. S. 219	Accident towards Hoyes	Right-of-way adjustment	510.71	*	510.71
9-26-51	Q 252-1	U. S. 50	St. Peter's Church Road to a point near Junction of Md. 604	2.37 mi. widening and resurfacing—bituminous concrete	212,238.57	29,075.13	242,154.32
9-26-51	T 146X	Md. 333	Peaeh Blossom Creek to Oxford	7.42 mi.—extend drainage, constructshoulders, recut ditches, seed and sod banks.	68,009.14	22,740.86	90,750.00
9-26-51	W 466-3	Md. 64	Hagerstown towards Chewsville	Lower water lines	12,682.44	12,682.44	12,682.44
9-26-51	W 420	U. S. 40	Hwyett to Wilson	2.96 mi. of concrete widening and patching	15,010.40	57,280.64	72,291.04
9-24-51	K 180X-1	U. S. 213	Sassafras River to Galena	1.5 mi.—widen road and resurface with specification "B"	53,542.08	67,457.92	121,000.00
9-21-51	K 190X	Md. 298	Between Butlerstown and Lynch	2.2 mi.—widen road and resurface with specification "B"	26,616.63	83,333.37	110,000.00
9-24-51	P 697X	Md. 193	University Lane and Colesville Road	Installation of semi-actuated traffic signal	1,734.95	*	1,734.95
9-20-51	P 698	Md. 500	Queens Chapel Road from Md. 410 to U. S. 1	3.37 mi.—furnishing, delivering, and applying bituminous concrete resurfacing.	117,227.48	*	117,227.48
9-19-51	Ce 336-7	Md. 213	Surfland Road from D. C. Line to Suitland	Relocating power poles	3,587.77	*	3,587.77
9-19-51	H 346	U. S. 1	Chesapeake Canal and Cayott's Corner	2.974 mi. resurfacing—bituminous concrete	4,284.68	125,242.57	129,527.25
9-17-51	Ce 341X-1	U. S. 213	along Deer Creek relocation Cecilton to Sassafras River	3 mi.—widen pavement, modify horizontal curves, extend and replace small drainage structures	151,261.11	30,226.42	181,500.00

**GENERAL CONSTRUCTION AND OPERATING FUND**  
**STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED**  
**JUNE 30, 1951 AND 1952**

Date Authorized	Project Number	Route Number	Location	Description	EXPENDITURES				Total
					Fiscal Year 1951	Fiscal Year 1952	Authorized to Complete Projects in Progress June 30, 1952	Work in Progress July 1, 1950	
9-17-51	T 126-2	Md. 370	Miles River Bridge	Robert A. Pitman—advice regarding repair of draw bridge machinery		\$ 35.40	*	\$ 35.40	
9-7-51	T 138X-1	Md. 328	Easton towards Matthews	4.366 mi. of earth shoulders, drainage, ditching, seeding, and sodding		27,306.45	\$ 1,376.07	28,682.52	
9-6-51	Q 252-2	U. S. 50	Bridge over Branch of Wye River	Widen bridge		5,236.00	31,724.15	36,960.75	
9-5-51	B 634X	U. S. 1	Baltimore City Line at Caton Avenue to Howard County Line	Install Catseyes in center line only		2,004.48	*	2,004.48	
9-5-51	B 631	Md. 126	Gwynn Oak Ave.—Baltimore City Line to Gwynn Oak .5 mi.			3,405.82	78,170.43	81,276.25	
9-5-51	Ho 255X	Md. 129	Park Heights Ave.—Baltimore City Line to Old Court Road .7 mi.	Resurfacing—bituminous concrete					
9-5-51	M 492	U. S. 1	Elkridge to Laurel			6,105.79	*	6,105.79	
9-5-51	P 702X	U. S. 240	Wisconsin Avenue, from Bradley Lane to District of Columbia Line	Installation of 9.4 mi. of "Catseyes."		45,002.65	*	45,002.65	
8-29-51	AA 431X	U. S. 1	Baltimore-Washington Blvd. in the vicinity of the Hyattsville Overhead Bridge	Installation of 11.77 mi. of "Catseyes"		8,608.02	*	8,608.02	
8-29-51	B 625X	Md. 170	Intersection of Md. 175 at Odenton	Installation of semi-actuated signal		1,891.59	*	1,891.59	
8-29-51	D 125-2	U. S. 40	West of Chesaco Avenue	Right-of-way adjustments		1,456.34	*	1,456.34	
8-29-51	G 248-10	Md. 392	Hurlock to Finchville	Moving facilities		143.29	*	143.29	
8-29-51	Ho 241-2	U. S. 219	Accident towards Hloves	Moving poles		1,553.56	*	1,553.56	
8-22-51	B 610-2	Md. 27	Washington Road, from Carroll County Line to Montgomery County Line	Moving poles		918.18	*	918.18	
8-22-51	B 630	U. S. 111	.25 mi. South of Padonia Ave. in Padonia toward Cockeysville	2.098 mi. widening, lowering of vertical curves, drainage, surfacing, and resurfacing—penetration macadam and bituminous concrete	\$ 3,589.09	156,119.33	240,467.58	400,176.00	
8-22-51	Ho 254	Md. 125	Patapsco River at Woodstock	Construct treated timber floor on bridge		8,979.38		8,979.38	
8-16-51	A 422-2	Md. 55	Charysville to Vale Summit	Moving electric flashing light signals		12,485.00	2,900.00	2,900.00	
8-16-51	F 495X-16	U. S. 240	Joppa Road from Dulaney Valley Road Northwest of Urbana toward Frederick	Storm water drainage system		30.04	*	12,485.00	
8-16-51	W 408X-2	Md. 31	Libertown towards Unionville	Right-of-way adjustment		1,166.58	*	1,166.58	
8-16-51	Co 209-3	Md. 64	Ingerstown toward Chewsville	Moving poles		1.06	33.94	35.00	
8-10-51	Co 336-6	Md. 331	In and near Bethlehem	Right-of-way adjustment		513.82	*	513.82	
8-10-51	Q 228-6	U. S. 213	Cayott's Corner to Bohemia River	Relocating line		599.20	*	599.20	
8-8-51	AA 368-10	Md. 313	Sudlersville to Barclay	Relocating utility poles		531.07	*	531.07	
8-8-51	AA 368-10	Md. 175	Baltimore-Washington Expressway .46 mi. south of Jessup Rd. northeasterly to .31 mi. north of Jessup Rd.	1.847 mi. grading and drainage—reinforced concrete and full cloverleaf interchange structure	\$ 480.54	293,072.78	547,542.06	865,718.50	
8-1-51	AA 368-18	Md. 175	Baltimore-Washington Expressway at Jessup Road relocation	Construction of steel beam bridge	610.58	67,052.27	233,838.40	301,501.25	

8-1-51	C1 305-2	U. S. 140	.11 mi. South of Pipe Creek in Union Mills—Northwesterly to the Pennsylvania State Line	4.75 mi. resurfacing and drainage—bituminous concrete	15.69	180,460.84	*	180,476.53
7-25-51	B 332X-12		Sulphur Spring Underpass	Construct concrete sidewalk to connect stairway on the south bank of east approach to underpass with Waelelli Avenue		157.19	*	157.19
7-25-51	Co 227	Md. 314	Greensboro	1.525 mi. widening and resurfacing certain streets	128.18	45,897.74	*	46,025.92
7-25-51	S 187	Md. 480	Westover southeasterly to 1 mi. west of Poconoke	6,099 mi. resurfacing—bituminous concrete	98.37	216,363.77	*	216,462.14
7-25-51	Sm 204X	U. S. 13	St. George's Island Bridge	Complete fenders on bridge		237.15	*	237.15
7-18-51	B 622-1	Md. 134	Ruxton	Repair floor system of truss bridge of Pa. R.R.	239.18	11,234.14	*	11,473.32
7-18-51	C1 250-2	U. S. 140	Reisterstown-Westminster Road on right of station 222-30	Adjustments to private property	14.38	3,384.46	*	3,398.84
7-18-51	Ho 218-5	U. S. 29	Columbia. Atholton-Seagsville Road .7 mi. northeast of Atholton southwesterly to .8 mi. southwest of Seagsville	4.54 mi. grading, drainage, and surfacing—reinforced cement concrete	78,357.89	276,089.04	877,271.17	1,232,054.74
7-18-51	W 417X-1	Al. U. S. 40	East of Antheim Creek	Construction of a picnic area		3,065.72	*	3,065.72
7-18-51	W 133-7	U. S. 13	Delmar southeasterly toward Salisbury	Moving poles		8,434.88	*	8,464.88
7-18-51	Wo 317	U. S. 50	Poconoke River easterly to Berlin	7.538 mi. widening and resurfacing—bituminous concrete and macadam	494.70	345,894.98	55,863.76	402,253.44
7-11-51	C 184-2	Md. 221	.561 mi. West of Patuxent River Bridge to .434 mi. east of Hallowing Point	.965 mi. grading, drainage, surfacing, and stabilization—gravel and bit. base	1,877.39	69,696.27	21,635.68	107,489.11
7-11-51	Co 215-6	Md. 322	2.9 mi. South of Andersontown towards Federalburg	3.125 mi. bituminous concrete surfacing	282.62	47,038.22	63,126.31	110,447.15
7-11-51	Ho 251X	Md. 97	Montgomery County Line through Cooksville to U. S. 40	6.9 mi. widening—Spec. "B", modification of curves and grading of shoulders	153,517.98	1,410.00	*	164,560.00
7-6-51	B 327-2	Md. 30	North of State Rt. 40 in Reisterstown, northerly toward Carroll County Line	Right-of-way adjustments		1,410.00	*	1,410.00
7-6-51	D 229X	Md. 16	Cambridge to Church Creek	Construction of earth shoulders and re-cutting outlet ditches		67,251.48	18,548.52	85,800.00
7-6-51	Ho 252X	U. S. 1	Laurel Bypass	Conduct test under field conditions to determine value of ash and lime as a stabilizing agent in soils	115.71		175.83	291.54
7-6-51	S 185	Md. 363	Princess Anne Westerly through St. Stephens	5.9 mi. resurfacing—bituminous concrete	292.75	174,908.42	21,097.41	196,293.58
7-5-51	P 631-10	U. S. 50	Annapolis-Washington Expressway	Raising power line		1,691.52	*	1,691.52
7-3-51	Ce 366-5	U. S. 213	Cayot's Corner to Boilemia River	Relocating 42 poles		1,604.83	*	1,604.83
7-3-51	P 391X-6	Md. 5	D. C. Line to Wood's Corner	Right-of-way adjustment		449.01	*	449.01
6-28-51	Ho 234-6	Md. 32	Relocated U. S. 40 northerly toward Sykesville	.189 mi. grading, drainage, and surfacing—macadam	302.91	35,877.12	3,901.50	40,081.53
6-28-51	T 144	U. S. 50	Choptank River Bridge to Trape	4.574 mi. widening and resurfacing—bituminous concrete	458.85	252,562.44	46,718.46	299,739.75
6-27-51	AA 429X	U. S. 301	Between Belle Grove Road and Dorsey Road	3.35 mi. widening—bituminous Spec. "B" and seeding and mulching banks		163,431.18		163,431.18
6-27-51	Ce 329	U. S. 222	U. S. 1 to Pennsylvania State Line	3.588 mi. grading, drainage, widening, and macadam and bituminous concrete surfacing	24,312.26	257,440.81	99,448.24	384,239.78
6-27-51	F 509-1	U. S. 15	Evergreen Point near Frederick toward Line Kila	2.713 mi. grading, drainage, widening, surfacing and resurfacing—concrete	1,052.29	108,480.06	186,681.09	310,007.94
6-27-51	P 523-3	Md. 500	Queens Chapel Road near Northwest Branch (1952 costs totaled \$26,807.13; Prince George's County contributed \$59,000.00)	.989 mi. grading, drainage, and surfacing—reinforced cement concrete; and widened bridge over Northwest Branch	308.61	476,807.13	154,748.55	648,865.24
6-27-51	T 137-2	Md. 333	Oak Creek Bridge	Reconstruction of treated timber floor	409.81	47,579.46	778.13	48,767.40

**GENERAL CONSTRUCTION AND OPERATING FUND  
STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED  
JUNE 30, 1951 AND 1952**

Date Authorized	Project Number	Route Number	Location	Description	EXPENDITURES							
					Work in Progress July 1, 1950	Fiscal Year 1951	Fiscal Year 1952	Authorized to Complete Projects in Progress June 30, 1952	Total			
6-27-51	W 226-1	U. S. 13	Bridge over Pa. R. R. in Salisbury	Construction of steel superstructure and concrete floor	\$	1,551.57	\$	2,433.21	\$	138,180.02	\$	142,667.80
6-24-51	W 405	Md. 61	Hagerstown toward Chewsville	2,371 mt grading, drainage, widening, and resurfacing. Bituminous concrete	\$	61,871.03		253,551.24		287,120.47		602,868.81
6-20-51	B 610-1	U. S. 111	.5 mi. north of State Rt. 131 in Lutherville toward .25 mi. south of Padonia Avenue	1.38 mi. widening, lowering of vertical curves, and resurfacing—macadam surfacing—concrete		4,906.72		103,750.43		188,611.98		297,359.13
6-18-51	F 537-1	U. S. 10	Baltimore-National Pike between Md. Rt. 27 at Ridgeville to Jug Bridge Conowingo Dam	Preliminary engineering						51,425.00		51,425.00
6-14-51	{ Co 339-1 H 313-1			Guard repairs to balustrade and fascia expansion joints along the roadway deck		274.71		13,020.29		*		13,295.00
6-13-51	A 422X-1	Md. 55	Charysville to Yale Summit	Right-of-way adjustment		66.09		<i>14.50</i>		*		51.89
6-13-51	B 332X-11		Stubbins Spring Road at Penna. Rail-road crossing in Arbutus	Special erosion control work on slopes of approaches to underpass				1,533.34				1,533.31
6-13-51	C 181-4 CUT 253-4 SM 281-8	Md. 231	Bridge over Patuxent River at Benedict	Construction of administration building		1,157.22		46,374.51		3,920.87		51,452.60
6-13-51	W 390X-5 W 405X-1	Md. 245	2.3 mi. northeast of Leonardtown to Hollywood	Adjusting water mains		600.00				*		600.00
6-13-51		Md. 65	Lappans to Sharpsburg	Right-of-way adjustment				27.70		294.20		321.99
6-13-51		Md. 64	Hagerstown toward Chewsville	Adjusting outlets from spouting to meet the new grade of road on certain properties		1,450.55		<i>970.04</i>				480.51
6-6-51	A 405X-1	U. S. 220	Cressknot toward McCool	Right-of-way adjustment		187.00		363.00		*		187.00
6-6-51	A 405X-5	U. S. 220	Cressknot toward McCool	Right-of-way adjustment				309,881.88		*		363.00
6-6-51	Ce 310	U. S. 40	Stony Run toward Elkton	3.488 mi. resurfacing—bituminous concrete		898.31				*		310,780.19
6-6-51	F 496-1	U. S. 40	2 mi. west of Frederick towards Mid-dleton	3.068 mi. grading, drainage, widening, surfacing, and resurfacing—bituminous concrete		23,524.21		383,871.62		290,886.37		706,390.85
6-6-51	G 248X-9	U. S. 219	Accident to Flatwoods	Right-of-way adjustment						43.80		43.80
5-29-51	F 524X	U. S. 240	Monocacy River Bridge at Frederick Junction	Place a 13½" specification "B" course on concrete floor of bridge.				1,037.37		*		1,037.37
5-29-51	W 410X	U. S. 40	About 6 mi. east of Hancock	Establish a safe parking area.						*		1,660.63
5-16-51	Co 209-2	Md. 331	Dover Bridge toward Preston	Relocating facilities.		18.76		1,641.87		*		1,273.05
5-16-51	K 80-2	Md. 20	Radeliffe Creek at Chestertown	Relocating pole line.		1,080.21				*		1,080.21
5-8-51	F 391-5	Md. 5	Hensons Branch near Silver Hill, Md.	Temporarily relocating power line.		1,570.00				*		1,570.00
5-8-51	W 417X	U. S. 40A	Washington Co. east of Antietam Creek	Construction of picnic area, scenic overlook and parking area		1,327.74		1,191.09				2,518.83
5-3-51	A 405X-3	U. S. 220	Cressknot toward McCool	Right-of-way adjustment						13.80		13.80
5-3-51	{ Co 173-5 Q 224-6	Md. 303	Queen Anne-Hillsboro By-pass	Reimburse Pa. R.R. for installing two automatic highway crossing flashing light signals		4,026.09				*		4,026.09

5-3-51	M 490X	Md. 28	Opposite Aberdeen Road in Rockville	800 ft.—pave earth area between roadway and sidewalk—spec. "B".	2,782.27	*	2,782.27
5-3-51	W 399X-4	Md. 65	Lappans to Sharpsburg	Right-of-way adjustment	20.36	*	134.36
5-3-51	Wo 253-5	U. S. 50	Herring Creek to .3 mi. west of Md. 452	Adjustment to facilities	8,239.21	*	154.72
5-2-51	A 283X-9	U. S. 213	Keyser-McCool Bridge approach	Right-of-way adjustments	402.02	*	8,239.21
5-2-51	Ce 336-3	Md. 6	Chesapeake Crty towards Cecilton	Right-of-way adjustments	5,318.79	*	5,492.02
5-2-51	Cb 265-4	Md. 225	La Plata to Indian Head	Relocating pole line	6,266.12	*	5,318.79
5-2-51	Ch 271-1	Md. 6	Hoff's Bottom Run near Dentonsville	Construction of concrete box culvert	14,522.37	*	6,266.12
5-2-51	H 340-2	Md. 161	Between Level and Darlington	Reconstruct reinforced backfalls on abutments of bridge over Deer Creek	5,169.97	*	14,522.37
5-2-51	M 435-5	Md. 97	Adjacent to Georgia Avenue along Hill-darose Ave., Windham Land, and vicinity	Installation of storm sewer outfalls	37,944.87	*	5,169.97
5-2-51	M 435-7	Md. 97	Adjacent to Georgia Avenue along Red-die St. and Parker Ave. vicinity	Installation of storm sewer outfalls	30,058.14	*	37,944.87
4-27-51	T 140X	U. S. 50	Barlier Road near Trappe	Installation of flasher signal	296.28	*	30,058.14
4-26-51	M 435-6	Md. 97	Viers Mill Road northwesterly to Glen-mont	2,036 mi. grading, drainage, and surfacing—reinforced cement concrete.	160,827.76	*	296.28
4-18-51	B 623X	U. S. 30	Middle River Road, Coventon Road, Allender Road, and entrance to Oak Grove Apartments	Construct 4 lanes of flexible type paving for left turn movements	218.89	*	160,827.76
4-18-51	W 41X-1	Md. 453	Woodmont Hill	.4 mi.—construct a 3-inch standard penetra-tion asphalt surface.	3,902.06	*	218.89
4-13-51	Co 215-5	Md. 322	Andersontown towards Federalsburg	Moving power lines	846.89	*	3,902.06
4-13-51	Ho 245-5	U. S. 30	Pine Orchard to West Friendship Road	Incidental work to complete surfacing contract	5,733.77	*	846.89
4-13-51	Ho 250	Md. 32	West Friendship	Construct parking area incident to right-of-way adjustments	.53	*	5,733.77
4-13-51	M 487X	Md. 5	Takoma Park, along Carroll Ave.	Minimum landscape improvements at Wildwood and Merrimac Drives	65.90	*	.53
4-13-51	SM 291X-2	Md. 5	Mechanicsville to Loveville	Erecting 2450 feet of new fence, and re-setting 300 feet of fence	746.32	*	65.90
4-13-51	SM 291X-3	Md. 5	Intersection of Md. 235 towards Love-ville	Replant trees, slumbrery, and hedge	424.42	*	746.32
4-13-51	Wj 199-6	U. S. 50	Mardella Springs to Nanticoke River	Moving pole line	1,701.31	*	424.42
4-13-51	Wj 245-2	Md. 349	Rockwalking westerly toward Tyaskin	Acquisition of right-of-way	2,531.55	*	1,701.31
4-4-51	AA 263-9	Md. 2	Sovern River Bridge, Annapolis By-pass	Construction of concrete floor, sidewalks, and hand rails	4,091.05	*	2,531.55
4-4-51	Ce 337-1	Md. 19	Weber's Bridge near Charlestown	Constructing of treated timber floor	730.44	*	4,091.05
4-4-51	Q 223-3	U. S. 30	Between Church Hill and Ingleside	Relocating power poles	4,106.62	*	730.44
4-4-51	A 407-2	U. S. 30	Sideling Hill Mountain	Moving pole lines	3,421.23	*	4,106.62
3-14-51	AA 263-12	Md. 2	Allegany Grove to Frostburg	Furnish and place 275 concrete right-of-way markers	2,505.47	*	3,421.23
3-14-51	AA 387X-1	Md. 176	Sovern River Bridge, Annapolis By-pass	Engineering survey by Eiser and Akers	1,490.63	*	2,505.47
3-14-51	F 523X	U. S. 10A	Between Shipley and Dorsey Road in 1951 year)	Prevent soil erosion	2,490.40	*	1,490.63
3-14-51	G 155X-8	Md. 560	Frederick County	Furnish and place concrete right-of-way markers	1,155.03	*	2,490.40
3-14-51	SM 291X-1	U. S. 249	Oakland toward Keyser's Ridge	Erect concrete right-of-way markers	1,155.03	*	1,155.03
3-14-51	W 413X	Md. 5	Kebo Gap to Kearney-White Church Road	Demolish loose	1,337.36	*	1,155.03
3-14-51		U. S. 30A	Northeast from Frederick County line to Antietam Creek, and southwest to Cannon Avenue in Hagerstown	Mark right-of-way boundaries with concrete markers	2,453.27	*	1,337.36

**GENERAL CONSTRUCTION AND OPERATING FUND  
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JUNE 30, 1951 AND 1952**

Date Authorized	Project Number	Route Number	Location	Description	Work in Progress July 1, 1950	EXPENDITURES			Authorized to Complete Projects in Progress June 30, 1952	Total
						Fiscal Year 1951	Fiscal Year 1952	Fiscal Year 1952		
3-6-51	Ce 339X H 343X	U. S. 1	Conowingo Dam	Preliminary engineering		\$ 37.98	\$ 40.39	*	\$ 78.37	
3-5-51	B 622	Md. 134	Ruxton	Preliminary engineering, plans, etc. for repairs to Pa. R.R. bridge		118.64	234.74	*	353.38	
3-5-51	W 390X3 Ce 335X 4	Md. 65 U. S. 213	Laripans to Sharpshurg Between Chesapeake City and Cecilton	Right-of-way adjustment		93.94	24,053.21	*	93.94	
3-1-51				Right-of-way costs on prison labor projects		32,025.38		\$ 11,421.41	\$ 67,500.00	
2-27-51	AA 368-9	BAW Exp.	.3 mi. north of the Jessup Road south- easterly to .32 mi. south of Dorsey Road	2,656 mi. grading, drainage, and surfacing — reinforced cement concrete	\$ 2,859.62	75,277.83	590,433.74	220,388.49	\$88,959.68	
2-27-51	Wo 312-4	U. S. 113	Snow Hill toward Newark	3,439 mi. grading, drainage, widening, and resurfacing—bituminous concrete and macadam	7,450.39	25,901.45	334,684.68	101,086.30	469,182.82	
2-21-51	K 173-3	U. S. 213	Lacust Grove to Galena	Moving power lines		656.31		*	656.31	
2-14-51	Ho 234-4	U. S. 40	Fine Orchard to West Friendship Road	Relocating power line		374.75	47.14	*	327.61	
2-14-51	W 390X-2	Md. 65	Laripans to Sharpshurg	Right-of-way adjustment		303.62	239.64	*	64.58	
2-8-51	Ce 303-5	U. S. 140	Southeast of Reese toward Westminster	Lower and adjust water service line			2,211.61	*	2,211.61	
2-8-51	Ce 338	U. S. 40	Bridge at Red Mill in Elkton	One-half cost of repairing wall			1,147.00	*	1,147.00	
2-8-51	H 340X-1	Md. 161	Deer Creek Bridge	Preliminary engineering		2,506.97	78.94	21.06	100.00	
2-8-51	M 482X	Md. 410	East-West Highway at Jones Mill- Beach Drive	Installation of full-actuated traffic signal			91.14	41.89	2,640.00	
1-31-51	M 486X	U. S. 240	West of Seneca Creek	.55 mi. widening—bituminous concrete		7,748.29	47.49	9,804.22	17,600.00	
1-24-51	AA 418X-2	U. S. 301	Saw Mill Creek, Glenburnie, to Dorsey Road Intersection	Spec. "P" surfacing			6,364.04	*	6,364.04	
1-24-51	B 578-12		Vicinity of Hereford and Parkton	800 ft. widening			613.00	*	613.00	
1-17-51	B 620X	Md. 139	Charles Street Avenue at Bellona Avenue	Compilation of aerial strip map by Aero Service Corporation		1,431.12		*	1,431.12	
1-17-51	B 621X	Md. 146	Between Joppa Road and McCurdy Avenue	Install semi-actuated traffic signal		2,517.45		357.55	2,875.00	
1-17-51	P 692X		Intersection of New Hampshire Ave. (Md. 650) and East-West Highway (Md. 410)	Widening, resurfacing, and raising grade		2,737.58		*	2,737.58	
1-17-51	T 127-4	Md. 333	Tripple Creek Bridge	Channelization		541.17		*	541.17	
1-15-51	Q 298-5	Md. 313	Ingliside to Barclay	Relocating power line			552.01	*	552.01	
1-11-51	H 342X	U. S. 40	Pulaski Highway southwest of Havre de Grace	Construct cross-over at B. & S. Garage		429.48	41.74	*	471.22	
1-9-51	G 155X-7	U. S. 219	4.35 mi. northeast of Oakland toward McHenry	Right-of-way adjustment		52.19		*	52.19	
1-9-51	So 293X	Md. 246	Between Great Mills and Cedar Point	Eliminate curve				2,800.00	2,800.00	
1-8-51	Q 241X-2	Md. 300	Duhamel's Corner to Delaware Line	4.6 mi. earth shoulders, ditches, seeding and mulching slopes		12,190.74	16,486.08	*	28,676.82	

1-4-51	C 197-1	Md. 416	4.5 mi. southeast of Lixon's Creek to Paris Nursery Road—2 mi. east of Hammond's Ferry Road, southeasterly to U. S. Rt. 301	174.13	197,516.12	94,994.05	.....	292,684.30
12-27-50	AA 398-13	Md. 168	North of State Route 40 in Reisterstown northerly toward Carroll County Line	2,943.70	114,900.28	672,104.22	689,136.40	1,479,084.60
12-27-50	B 327-1	Md. 30	North and south of Clinton Sudlersville northerly to Unicorn Mills	2,499.22	88,078.57	298,471.07	88,194.37	477,243.23
12-27-50	P 673-1	Md. 5	Gov. Ritchie Highway to Cherry Hill Road	.....	31,794.59	38,957.46	24,021.09	94,773.14
12-27-50	Q 235X-1	Md. 313	Goldshoro southeasterly to Maryland	.....	4,370.93	13,040.00	12,949.07	30,360.00
12-20-50	AA 427X	Md. 710	South of Dublin Pulaski Highway East of Md. Rt. 22 Intersection of Chillum Road (Md. 501) and Riggs Road (Md. 212)	.....	1,124.87	.....	*	1,124.87
12-20-50	T 127-1	Md. 333	Oxford northeasterly to Peach Blossom Creek	393.94	221,162.00	314,215.82	47,500.16	583,271.92
12-20-50	W 399-1	Md. 65	Lappans to Sharpsburg	.....	31,930.23	4,084.87	9,493.28	45,508.38
12-20-50	W 404	Md. 60	Northern Ave. in Hagerstown to Antietam Creek	.....	512.10	31.88	*	543.98
12-20-50	W1 199-5	U. S. 50	2.8 mi. northwest of Salisbury westerly to 2.4 mi. southeast of Mardela Springs south of Viers Mill Road	3,743.98	23,117.94	248,562.93	83,024.73	358,440.58
12-13-50	M 435-4	Md. 97	St. Paul's Church west to Shady Bower Prince Frederick towards Solomons	6,370.26	178,169.01	364,783.43	428,503.35	977,226.05
12-13-50	W 403-2	U. S. 40	Accident toward Hoyes Locust Grove to Galena	1,287.26	106,032.15	303,009.18	75,127.46	486,056.05
12-6-50	G 248-8	U. S. 219	North of Four Corners	.....	2,208.94	.....	*	2,208.94
12-6-50	K 173-2	U. S. 213	Ingleside to Barclay	.....	91,384.46	756,356.61	141,982.03	989,723.10
12-6-50	M 484X	U. S. 29	Westover to 7.1 mi. southwest of Marion Ritchie Highway	.....	1,680.31	.....	*	1,680.31
12-6-50	Q 228-4	Md. 313	Harundale-Guilford Road and Ritchie Highway Intersection	.....	3,003.42	.....	*	3,003.42
12-6-50	S 156-2	Md. 413	Near Timonium Fair Grounds Catonsville—350 feet east of Ingleside Avenue to Montrose Avenue	.....	7,676.85	.....	2,664.15	103,410.00
11-29-50	AA 263-11	Md. 2	Baltimore-Washington Expressway to connect Hollins Ferry Road near Baltimore City Line	.....	2,509.22	.....	*	2,504.07
11-29-50	AA 426X	Md. 2	Bridge over Nantcoke River at Sharpstown	.....	1,820.34	.....	*	1,820.34
11-29-50	B 578X-11	U. S. 111	T.B. towards Waldorf	.....	601.38	.....	*	601.38
11-29-50	B 582-1	U. S. 40A	Marlboro Pike (Md. 4) at 53rd Avenue Marlboro Pike (Md. 4) and Silver Hill Road (Md. 458)	.....	3,409.56	79,440.26	91,909.57	3,409.56
11-29-50	B 618X	Md. 46	.....	.....	2,187.16	.....	*	2,187.16
11-29-50	D 227X	Md. 313	.....	.....	243.79	.....	*	243.79
11-29-50	W 2465X	.....	.....	.....	34,223.04	2,961.28	.....	31,261.76
11-29-50	P 391-4	.....	.....	.....	1,759.58	1,215.40	.....	2,974.98
11-29-50	P 690X	.....	.....	.....	.....	822.31	937.69	1,760.00
11-29-50	P 691X	.....	.....	.....	186.83	19,021.14	.....	19,207.97
11-29-50	.....	.....	.....	.....	1,838.97	.....	.....	1,838.97
11-29-50	.....	.....	.....	.....	1,735.07	28.93	.....	1,764.00

**GENERAL CONSTRUCTION AND OPERATING FUND  
STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED  
JUNE 30, 1951 AND 1952**

Date Authorized	Project Number	Route Number	Location	Description	EXPENDITURES					Total
					Work in Progress, July 1, 1950	Fiscal Year 1951	Fiscal Year 1952	Authorized to complete Projects in Progress, June 30, 1952		
11-28-50	Q 237-2	Md. 290	Clester River Bridge at Crumpton	Repair and increase load carrying capacity of bridge	\$ 2,996.87	\$ 38.33	\$	\$ 2,958.54		
11-21-50	K 178-2 D 125-1	Md. 392	Hurlock to Finelville	4.969 mi. grading, drainage, and surfacing gravel and bituminous base	63,046.41	147,767.77	\$	6,303.38	219,520.40	
11-21-50	F 519X	U. S. 15	Near Tom's Creek	Curve modification	29,280.12	135.61	*		29,415.73	
11-15-50	B 610	U. S. 111	Joppa Road in Towson toward Cockeysville	1.96 mi. widening, lowering of vertical curves, and resurfacing—penetration macadam base course and bituminous concrete	36,645.05	180,700.18	42,325.52		200,794.00	
11-9-50	B 617X	Md. 147	Harford Road	Install fixed time signal at Linwood Ave. and modernization of signal at Taylor Ave.	1,225.60		754.40		1,980.00	
11-9-50	Ce 336X-2	U. S. 213	Bohemia River Bridge to Ceelton	4.034 mi. widening and resurfacing—Specification "B"	166,718.53	48,039.72	5,241.75		220,000.00	
11-9-50	Ho 241X-1	Md. 27	Carroll-Frederick County Line to Montgomery County Line	1.45 mi. widening, resurfacing, and curve modification	53,778.06	33,501.62	*		87,279.68	
11-9-50	M 481X	Md. 391	Dale Drive	Clearing trees, excavating and laying pipe to eliminate earth island	2,321.04		*		2,321.04	
11-9-50	M 481X-1	Md. 391	Dale Drive	Paving and installing junction boxes with manhole covers and frames—concrete	3,008.20		*		3,008.20	
11-1-50	B 582	U. S. 40A	Catonsville—350 feet east of Inglestone Avenue to Montrose Avenue	.989 mi. track relocation, grading, drainage, plain concrete pavement and bituminous concrete	18,672.87	7,757.78	23,418.89		302,449.59	
11-1-50	H 316-1	Md. 22	Main Street in Bel Air towards Churchville	6.287 mi. grading, drainage, widening and resurfacing—macadam and bituminous concrete	201,641.00	411,011.46	289,261.60		922,616.69	
11-1-50	H 339X	Md. 136	Churchville toward Dublin Road	Emergency repairs to bridge over Deer Creek	25.90		1,844.10		1,870.00	
11-1-50	H 339-1	Md. 136	Churchville toward Dublin Road	Construct emergency bridge over Deer Creek	11.81		1,396.19		1,408.00	
11-1-50	M 480X	Md. 410	East-West Highway—Grubb Road west for 1845 ft.	Grading, sodding, and seeding	1,397.38	836.47	*		836.47	
11-1-50	P 684X		Washington Boulevard at Main Street, Laurel	Installation of fixed time traffic signal	1,747.42		*		1,397.38	
11-1-50	W 408X-1	U. S. 40	Hancock between Parsonage Alley and Church Alley	Widen roadway surfacing, penetration macadam surface with 2" Specification "B" topping. Removal of 62 cubic yards of old concrete curb and gutter	1,297.52		*		1,747.42	
11-1-50	W 408X-2	U. S. 40	Hancock between U. S. 522 and Parsonage Alley	Widen roadway surfacing with paving using 2" Specification "B" topping, and removing 40 cubic yards of old concrete curb and gutter	1,297.52		*		1,297.52	
11-1-50	W 410X-2		City limits of Hagerstown, at beginning of Md. 58	Grade and fill area of acquired right-of-way	182.33		*		182.33	
10-25-50	B 615X-1	Md. 7	White Marsh Run	Construct emergency bridge	9,503.58	4,185.29	9,221.13		23,000.00	



10-25-50	B 615-2	Md. 7	Old Philadelphia Road	Emergency repairs to bridge over White Marsh Run	45,147.92		17,552.08	62,700.00
10-25-50	B 616X-1	Md. 7	Old Philadelphia Road near Cowenton	Construct emergency bridge at Honeygo Run	10,015.11	1,242.74		11,857.85
10-25-50	B 616-2	Md. 7	Old Philadelphia Road near Cowenton	Emergency repairs to bridge over Honeygo Run	40,439.65			49,439.65
10-25-50	I1337X-1	Md. 136	Dublin toward Macon Road	Construct emergency bridge over branch of Broad Creek	12,173.73	260.33	*	12,434.06
10-25-50	II 337-2	Md. 136	Dublin toward Macon Road	Emergency repairs to bridge over branch of Broad Creek	36,291.30		*	36,291.30
10-25-50	P 682X		Intersection of Chillum Road (Md. 501) and Riggs Road (Md. 212)	Installation of fixed time traffic signal	1,006.58		*	1,006.58
10-25-50	P 689		34th Street, Mt. Rainier	Improvements	5,398.45	3.34	*	5,401.79
10-25-50	T 139X		Easton	Installation of overhead warning signs	892.44		*	892.44
10-18-50	W 411X		Between Exline and Pearre	4 mi. crushed limestone	2,262.72		*	2,262.72
10-11-50	A 421N-5	Md. 453	George's Creek Road at Lomacoming	Right-of-way adjustment	681.08			681.08
10-11-50	AA 263-8	Md. 36	Annapolis By-Pass	Acquisition of rights-of-way, etc.	5,190.44			14,600.00
10-11-50	C 194-1	Md. 2	5 mi. Northwest of Md. 231 extending southeasterly to Solomon's Island Road	2.448 mi. grading, drainage, and surfacing—gravel—bituminous stabilized	17,053.97			512,386.20
10-11-50	CI 322X-3	Md. 27	Mt. Airy Road	7 mi. widening and resurfacing pavement	24,999.50		*	24,999.50
10-11-50	Ch 294-2	Md. 3	Tompkinsville to Rock Point, Md. 3	Spec. <sup>137</sup>				668,107.36
10-11-50	Ch 270-1	Md. 533	Mt. Airy Road	6.09 mi. grading, drainage, widening, surfacing, gravel and bituminous base	171,545.17	489,702.65		668,107.36
10-11-50	M 455-2	U. S. 240	Montgomery Ave. toward Gaithersburg	Right-of-way adjustments	1,605.43		1,050.00	1,650.00
10-11-50	SM 291	Md. 5	2 mi. Southeast of Meachamsville to Loveville	6.747 mi. grading, drainage, and surfacing—gravel and bituminous stabilized	102,555.95	320,683.06		552,917.60
10-4-50	AA 425X	Md. 2	North of Ritchie Memorial	Construct crossover—gravel base and bituminous concrete surface	1,133.41		*	1,133.41
10-4-50	M 435-2	Md. 97	Colesville Road northwesterly to Seminary Road	1.159 mi. grading, drainage, and surfacing—reinforced cement concrete	223,482.92	497,128.21		799,467.29
10-4-50	P 688		Along Gorman Avenue and Montgomery Avenue in Laurel	.059 mi. grading, drainage, and surfacing—bituminous concrete; and construction of sanitary sewers	45,459.02	3,295.29	*	48,754.31
10-4-50	Q 228-3	Md. 313	Ingeside to Suddlersville	Moving power line installations	450.16		*	450.16
10-4-50	W 253-4	U. S. 50	Herring Creek to 3 mi. west of Md. 452	Moving power line	6,245.17		*	6,245.17
9-27-50	B 332-9		Halethorpe grade elimination	Construction of sidewalks and stairway, north side of passenger station of Pa. R.R.	663.80	61.47	*	725.27
9-27-50	B 500X-4	U. S. 40	Pahaski Highway	Construct cross-over opposite Lawrence Avenue—Specification "P"	1,043.53		*	1,043.53
9-27-50	C 337X	Md. 207	Welser's bridge near Charlestown	Preliminary engineering	615.33	246.51		1,500.00
9-27-50	F 425-13	U. S. 240	.45 mi. South of Frederick-Montgomery County line northwesterly to the Fire Tower Road	1.576 mi. grading, drainage, and surfacing—bituminous concrete	81,209.14	433,500.75		1,132,295.98
9-27-50	G 155-5	U. S. 219	4.25 mi. Northeast of Oakland towards Mellery	3.123 mi. grading, drainage, surfacing, and resurfacing—penetration macadam	56,933.16	238,544.43		476,409.13
9-27-50	M 435-3	Md. 97	Georgia Ave., vicinity of Spring St., Ballard St., etc.	Installation of storm sewer outfalls	134,280.69	11,664.72		166,062.40
9-27-50	P 461X-5	U. S. 1	West end of Baltimore-Washington Boulevard at south end of Laurel By-Pass	Widen and stabilize surfacing	896.03		*	896.03
9-27-50	P 687X	Md. 410	Ager Road near Green Meadows	Build 2 manholes and lay pipe	67,496.58	17,730.76		1,927.20
9-27-50	S 184X	Md. 363	St. Stephens to Danvers Quarter	3.4 mi. widening—concrete	85,227.34		*	85,227.34
9-20-50	M 479X	U. S. 240	West limits of Rockville to intersection of west end of Rockville By-Pass	4 mi. widening, and resurfacing, and constructing full width pavement	8,827.05	15,653.45	*	24,480.50

GENERAL CONSTRUCTION AND OPERATING FUND  
STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED  
JUNE 30, 1951 AND 1952

Date Authorized	Project Number	Route Number	Location	Description	EXPENDITURES				Total
					Work in Progress July 1, 1950	Fiscal Year 1951	Fiscal Year 1952	Authorized to Complete Projects in Progress June 30, 1952	
9-20-50	P 519X-9		Intersection of Marlboro By-Pass, U. S. 30 and Md. 1	Installation of full-actuated traffic signal	\$ 3,182.08		*	\$ 3,182.08	
9-20-50	P 631-7	U. S. 50	Annapolis, Washington Expressway south of Prince George's Park	Construction of dual steel beam bridges	\$ 11,594.82	\$ 72,275.54	\$ 151,673.14	\$ 286,785.90	
9-20-50	P 681X		Intersection of Alger Road and Hamilton Street	Installation of three-phase traffic signal	3,263.27		*	3,263.27	
9-20-50	Q 168-13		Kent Island Narrows bridge	Field supervisory engineering by Tenney-Hanna Company	224.49	2,656.65	*	2,881.14	
9-20-50	Q 235	Md. 313	Suddersville northerly to Unicorn Mills	4.95 mi. grading, drainage widening, and resurfacing—bituminous concrete	201.30	58,728.54	43,259.19	307,039.56	
9-20-50	ES 148	U. S. 111	York Road—Towson to Cockeyville	6.118 mi. Plans and quantities for proposed improvements by Sandtless, Wienham, and Associates	16,765.84	1,733.40	*	18,499.24	
9-6-50	F 425-1	U. S. 240	Washington National Pike—1.1 mi. from U. S. 1 and Montgomery County line towards Van Bibber	2.586 mi. grading, drainage, and surfacing—bituminous concrete	362,982.90	385,248.29	806,531.65	1,573,175.28	
9-6-50	H 333-1	Md. 7	H. H. Branch southwesterly through Van Bibber and Joppa to the Baltimore County Line	5.215 mi. grading, drainage, surfacing with Specification "B"—bituminous concrete	438.79	8,432.67	47,466.25	242,347.23	
9-6-50	M 333-3	U. S. 240	Washington National Pike at Comas Road at Hyattstown, and at Comas Road over Little Bennett Creek	Construction of 2 bridges	19,703.04	272,844.40	77,722.66	370,270.10	
9-6-50	Q 168-12		Kent Island Narrows Bridge	Payment to Queen Anne's County Commissioners toward construction of a new anchorage	15,000.00		*	15,000.00	
8-30-50	A 283X-8		Certain properties at Keyser-McCool bridge	Improvement to wells—blasting damage	1,609.37		*	1,609.37	
8-30-50	Ch 260-1	Md. 6	La Plata to Clark's Run	.66 mi. grading, drainage, widening, and resurfacing—bituminous concrete	1,360.53	19,016.90	10,065.15	62,314.33	
8-30-50	Q 168-11		Kent Island Narrows Bridge	Construction of bascule span and flanking spans	39,551.71	481,013.75	163,132.89	623,698.35	
8-30-50	Wo 313		Ocean City streets	1.694 mi. widening and resurfacing—bituminous concrete	65,636.25		*	65,636.25	
8-23-50	C 322X-2 } F 483X-1 }	Md. 27	Ridgeville to R. R. tracks at Mt. Airy	Improve .8 mi. of road by lowering the grade between gutters and resurfacing—bituminous concrete—Spec. "B"	19,036.95		*	19,036.95	
8-23-50	Cs 338X-1	U. S. 213	1 mi. South of Chesapeake City to Bohemia River Bridge	4.22 mi. widening—Spec. "B"	1,318.25	31,005.73		223,500.62	
8-23-50	Ch 265-2	Md. 225	Ripley towards Indian Head	4.937 mi. grading, drainage, and surfacing—gravel and bituminous stabilized	3,378.17	142,701.65		511,248.43	
8-23-50	F 517X	Md. 80	Between U. S. 240 and Md. 75	4.7 mi. grading and widening—crusher run material	155,333.15	24,226.43	40,440.42	220,000.00	

8-23-50	P 451	U. S. 50	Bridge over Pa. R.R. tracks at Lanham	Construction of concrete floor pedestrian bridge	21,209.17	5,461.42	26,670.59
8-23-50	P 686X	Md. 564	Seabrook to Lanham	1.27 mi. widening and resurfacing—bituminous concrete	46,154.54	*	46,154.54
8-23-50	T 135	Md. 331	Easton—east to the Dover Bridge Road	4.205 mi. grading, drainage, widening, and resurfacing—macadam and bituminous concrete	46,715.42	82,712.77	374,586.20
8-16-50	Co 215-2	Md. 322	Andersontown toward Federalsburg	3.594 mi. stabilizing and surfacing—bituminous concrete	1,727.98	*	91,279.64
8-16-50	Ho 248X	U. S. 40	Near Patapsco River Bridge, opposite property of State Department of Forests and Parks	Construct crossover	297.53	*	297.53
8-16-50	P 675X-1	Md. 564	Bowie to Seabrook	Clear, grub and grade right-of-way incident to widening for 4.35 mi.	56,941.30	50.88	56,992.18
8-16-50	Q 237-1	Md. 290	Chester River Bridge at Crumpton	Construction of steel beam and concrete bridge	197,008.34	27,919.27	224,927.61
8-16-50	K 178-1	Md. 245	2.3 mi. Northeast of Leonardtown to Hollywood	2.992 mi. stabilization and surfacing—bituminous concrete	58,444.45	1,863.81	60,308.26
8-9-50	B 599-1	Md. 129	Park Heights Avenue .3 mi. south of Walnut Avenue towards Cayes Road	.189 mi. grading, drainage, and surfacing—macadam resurfacing	11,878.80	21,947.21	37,047.40
8-9-50	Co 209-1	Md. 331	Bethlehem northwesterly to Preston	3.214 mi. grading, drainage, widening, and macadam resurfacing	1,811.72	139,610.30	273,913.30
8-9-50	Co 333	U. S. 15	Elkton	3.246 mi. resurfacing certain streets	566.18	*	74,917.70
8-9-50	F 380-1	U. S. 15	1.1 mi. north of Md.26 towards Lewiston	568 mi. grading, drainage, and surfacing of a relocation with reinforced concrete; also construction of a single span steel I beam bridge over Tuscarora Creek	611.63	105,021.34	157,332.95
8-9-50	P 660	U. S. 1	Bridge over Paint Branch at College Park	Construction of two span concrete pedestrian bridge	637.06	958.41	18,407.97
8-9-50	Wo 314X	U. S. 113	Showells	Acquisition of right-of-way and modification of curve	1,274.80	*	1,274.80
8-3-50	F 425-3	Md. 80	Urbana	Construction of concrete underpass	462.83	53,496.47	150,690.35
8-3-50	F 425-12	Md. 80	Washington National Pike—Bennett Creek	Construction of steel bridge	317.08	23,229.34	130,380.30
8-2-50	AA 368-8	U. S. 40	Baltimore-Washington Expressway 1.1 mi. southeast of Dorsey northwesterly to .08 mi. north of Dorsey Road	Construction of steel bridge	109,081.72	6,731.16	303,306.23
8-2-50	B 579-5	U. S. 40	Martins Road intersection at Aberdeen	4 mi. grading, drainage, and surfacing—macadam, and construction of a grade separation	23,644.35	146,270.05	514,378.56
8-2-50	H 314-8	U. S. 40	Intersection of Second Ave. and Main Street, Laurel	Sodding medial strip along gutter areas	3,349.31	*	3,349.31
8-2-50	Q 244	Md. 5	Church Hill	Installation of fixed time traffic signal	1,115.28	*	1,115.28
8-2-50	ES 116	Md. 5	Great Mills to St. Mary's City	Installation of storm sewer and grates	615.88	*	615.88
7-27-50	ES 147	U. S. 1	Conowingo to Rising Sun	6.23 mi. engineering survey by Baker-Wilberly, Inc.	8,032.09	181.61	8,213.70
7-27-50	ES 149	Md. 7	Woodsboro to Carroll County Line	6.254 mi. survey and plans by Sandlass, Wieman and Associates	9,105.09	*	9,105.09
7-26-50	AA 401-2	Md. 2	.5 mi. North of Batlers extending northwesterly to Stevens' Corner	2.92 mi. survey and plans by Baker-Wilberly, Inc.	4,148.21	51.07	4,199.28
7-26-50	AA 422X	U. S. 240	Intersection of U. S. 50 and Md. 2 at Padesco	4.951 mi. grading, drainage, and surfacing—gravel and bituminous stabilized concrete	335,056.66	91,083.20	432,730.31
7-26-50	F 425-11	Md. 20	Washington National Pike—Fire Tower	Installation of semi-actuated signal	174.02	552.64	3,069.36
7-26-50	K 80-1	Md. 20	Rattlesnake Creek at Chestertown	Construction of steel beam and concrete overpass	504.22	19,172.45	147,333.02
7-26-50	K 80-1	Md. 20	Rattlesnake Creek at Chestertown	Construction of 3 cell reinforced concrete box culverts	2,305.60	44,037.41	121,662.16

EXHIBIT F—Continued

GENERAL CONSTRUCTION AND OPERATING FUND  
STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED  
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Date Authorized	Project Number	Route Number	Location	Description	Work in Progress July 1, 1950	EXPENDITURES			Total
						Fiscal Year 1951	Fiscal Year 1952	Authorized to Complete Projects in Progress June 30, 1952	
7-26-50	Q 243	Md. 290	Dudley Corner to Crumpton	Acquisition of right-of-way		\$ 239.00		\$ 550.00	
7-20-50	Q 241X-1	Md. 300	Dulham's Corner to Delaware Line	4.6 mi. widening with graded Specification "B"		70,272.54	\$ 6,711.75	63,560.79	
7-19-50	H 323	U. S. 1	Broadway and Hickory Avenue in Bel Air toward Conowingo	5.275 mi. widening and resurfacing—macadam and bituminous concrete	\$ 5,515.35	167,013.42	239,988.72	466,834.84	
7-19-50	P 391-3	U. S. 301	Bridge over Md. 5 at T. B.	Construction of span steel I-beam bridge	688.38	141,812.99	36,375.98	235,986.89	
7-19-50	W 403-1	U. S. 40	St. Paul's Church west to Shady Bower	.511 mi. grading, drainage, and surfacing of a grade change and the resurfacing of the existing roadway—bituminous concrete	3,054.35	74,075.50	1,957.37	83,438.73	
7-13-50	AA 389-2	U. S. 50	Parole extending westerly to South River	3.466 mi. grading, drainage, and surfacing—reinforced concrete	904,286.95	627,874.77	60,229.98	1,733,337.54	
7-13-50	Ho 234-2	U. S. 40	.5 mi. west of West Friendship—Shaeks Corner Road northwesterly to approach 114 mi. of Morgan Road.	5.25 mi. grading, drainage, and surfacing—reinforced cement concrete	73,330.51	506,881.09	1,048,732.31	1,789,113.36	
7-12-50	B 612X	U. S. 40	Rolling Road	Install flasher signal	1,761.59	144.48		1,906.07	
7-12-50	Ch 124-13	U. S. 301	Bridge over Potomac River between Ludlow, Ferry, near Dahlgren, Va.	Installation of access ladders and air navigation beacon	780.92	2,764.98		108,341.46	
7-12-50	P 680X		Intersection of Second Ave. and Bowie Road, Gaithersburg	Installation of fixed time traffic signal	568.96	55.63		624.59	
7-12-50	T 67X-6		U. S. 301 at intersection of Md. 404	Installation of flasher signal	74.58	92.75	556.71	724.04	
7-12-50	W 133-5	U. S. 13	1.2 mi. North of Main St. in Salisbury northwesterly to towards Mill Pond	2.478 mi. grading, drainage, and surfacing—reinforced cement concrete	118,224.45	649,625.64	119,079.01	946,688.34	
7-12-50	ES 143		Intersection of Back River Neck Road and Old Eastern Avenue at Closenhan's Corners	.5 mi. engineering survey by Wilson T. Ballard Co. for proposed channelization		4,842.13		4,842.13	
7-12-50	ES 144	Md. 16	Cambridge to Church Creek	6.11 mi. engineering survey by Baker-Wibberley, Inc.		4,820.26		4,820.26	
7-12-50	ES 145	U. S. 301	T. B. to Waldorf	4.293 mi. engineering survey by Wilson T. Ballard Company		9,557.34		9,557.34	
7- 6-50	Co 209	Md. 331	.43 mi. east of the Dover Bridge southwesterly to Bethlehem	2.519 mi. grading, drainage, widening, and macadam resurfacing	4,289.03	27,546.77	187,126.71	229,138.12	
7- 6-50	G 248-4	U. S. 219	Accident toward Hoyes	Acquisition of right-of-way and 3.627 mi. grading, drainage, widening, and relocation—penetration macadam	5,889.16	267,436.91	252,147.46	633,089.88	
7- 6-50	M 477		Western Avenue	Acquisition of right-of-way for street improvements	11,802.87	200.45		12,003.32	
6-29-50	Co 210-4	(Md. 313 Md. 404 U. S. 140)	Watts Creek bridge	Pave approaches to bridge			2,922.15	2,922.15	
6-29-50	Cl 303-4		Southeast of Reese toward Westminster	3.38 mi. grading, drainage, and surfacing—reinforced cement concrete	94,570.03	304,379.40	647,756.12	1,145,632.06	
6-29-50	Wi 200X-1	Md. 349	Rockwalking to Tyaskin	Construction of 12,557 mi. of 8 ft. shouldered, resurfacing outlet ditches, securing rights-of-way, and moving poles		94,096.86	72,466.54	171,575.00	
6-29-50	ES 142	Md. 392	Hurlock to Finchville	4.609 mi. engineering survey by Baker-Wibberley Co., Inc.		4,789.87		4,789.87	

6-27-50	AA 368-7	Baltimore - Washington Expressway north of Dorsey to the north side of Hanover Road	1,375 mi. grading, drainage, and surfacing—reinforced cement concrete	89,807.15	440,788.47	165,064.82	452,449.75	1,148,200.19
6-21-50	A 405	Cresaptown toward McCool	6,684 mi. grading, drainage, and widening—concrete	6,343.89	276,904.94	295,637.25	132,748.09	711,634.17
6-21-50	A 422	Clarysville to Vale Summit	2,102 mi. grading, drainage, and surfacing—penetration macadam	4,013.51	146,044.80	198,482.88	224,180.60	572,721.79
6-21-50	A 434	Pinto Bridge	Preliminary engineering	360.99	1,005.71	96.22	2,300.07	4,000.00
6-21-50	II 331-1	Bush's Corner toward Pylesville	1.33 mi. grading and surfacing of vertical curve modification—macadam	369.88	13,940.59	54.06	*	14,355.64
6-21-50	II 246X-1	U. S. 1 westerly to Howard County	4,958 mi. graded shoulders	35.40	5,819.49	369.88	7,560.63	13,750.00
6-21-50	K 179-1	Chloestown	Resurf. Spring Avenue	139,154.77	3,196.96	3,292.36	*	3,292.36
6-21-50	M 455-1	Rockville By-Pass	1,387 mi. grading, drainage, and surfacing—reinforced cement concrete	8,219.51	196,338.92	202,635.31	*	538,429.00
6-21-50	Q 241	Dulamel's Corner to Delaware Line	Acquisition of right-of-way	354.65	11,665.90	577.77	*	12,243.67
6-21-50	SM 209-1	Intersection of Main Street and Point Lookout Road, Leonardtown	Adjustments to property	160.10	104.15	*	*	8,223.66
6-21-50	S 181-1	Bridge over Manokin River in Princess Anne	Reconstruction and widening	324.53	33,516.25	3,741.86	*	37,612.76
6-14-50	Q 240	Matapeake Ferry Road	8 mi. stabilization of shoulders	817.24	3,978.94	*	*	4,796.18
6-14-50	SM 288-1	Southward from Callaway	3.57 mi. grading, drainage, and surfacing—gravel and bituminous base	16,495.15	182,286.22	56,145.28	47,711.60	303,638.25
6-14-50	T 130-1	Easton towards Cordova	3.8 mi. surfacing and widening	249.57	172,418.91	4,175.36	*	176,843.84
6-14-50	E-S 141	Queens Chapel Road to Northwest Branch	1 mi. engineering survey by Sandhass, Wieman and Associates	509.82	2,788.14	*	*	3,399.98
6-8-50	T 127-3	Tripple Creek Bridge	Repair and widen bridge	324.53	115,518.45	488.90	22,018.62	138,350.50
6-7-50	AA 368-14	Baltimore - Washington Expressway 4 mi. southeast of Nursery Road	Construction of steel beam bridges	160.10	165,257.94	76,815.31	29,003.25	271,886.30
6-7-50	AA 424	Annapolis metropolitan area	Traffic survey	324.53	9,594.74	636.61	1,698.55	12,000.00
6-7-50	W 406	East of Hagerstown city limits	Construct a cross-over	18.46	1,185.79	18.46	*	1,204.25
6-7-50	W1 263	Bridge over Wisconsin River in Salisbury	Preliminary engineering	45.96	800.00	800.00	800.00	1,800.00
6-7-50	W1 264	Bridge over Camden Avenue in Salisbury	Preliminary engineering	45.96	158.77	45.96	565.27	800.00
5-31-50	B 392X-8	Wilkins Ave. in Baltimore City to Baltimore-Washington Boulevard	Surface treat screening entrances	431.25			431.25	431.25
5-24-50	B 665X	Reisterstown Road at Sherwood Avenue	Install semi-actuated signal	2,166.58	16.36		*	2,182.94
5-24-50	P 391-1	District of Columbia Line southeasterly to Woods Corner	3,453 mi. grading, drainage, and surfacing—reinforced cement concrete	417,224.22	415,393.54	646,409.50	19,814.64	1,498,841.90
5-24-50	P 672	Intersection of New Hampshire Avenue (Md. 650) and Ray Road (Md. 204)	Installation of semi-actuated traffic signal	2,073.48		311.91	*	1,761.57
5-18-50	Co 215-3	3.6 mi. south of Andersontown to 3.8 mi. northwest of Federsburg	2.85 mi. grading, drainage and gravel surfacing—Space "B"	4,572.27	155,531.63	13,984.13	*	174,088.03
5-18-50	D 226X	On the outskirts of Church Creek	Installation of 500 feet of corrugated metal pipe	2,769.46	11.21		*	2,780.67
5-18-50	G 248-7	Gortner to Red House	Apply 3 mi. selected shoulder material	1,366.02	1,875.90		*	3,241.92
5-18-50	II 334X	Pulaski Highway-Edgewood Road	Construct a decelerating lane at intersection	865.10	152.67		*	1,017.86
5-18-50	SM 287-1	Leonardtown Northwesterly to Clements	3,449 mi. grading, drainage surfacing, and stabilizing—gravel and bituminous base	28,760.23	292,553.01	2,611.99	73,065.19	396,990.42
5-18-50	T 127-2	Peach Blossom Creek Bridge	Repair and widen bridge	585.96	137,471.76	11,975.45	15,028.72	165,061.89
5-11-50	F 425-8	Washington National Pike approximately 2.5 mi. east of Monocacy River	Construction of 4-span steel I-beam bridge to carry road over Pike	984.53	79,841.19	20,228.02	*	101,053.74
5-10-50	AA 418-1	Sawmill Creek Bridge, at the North end of Glen Burnie	Widen 10' span concrete bridge from 24' to 46.5'	2,039.49	21,069.17	4.93	*	23,113.59

**GENERAL CONSTRUCTION AND OPERATING FUND  
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Date Authorized	Project Number	Route Number	Location	Description	Work in Progress July 1, 1950	EXPENDITURES		Authorized to Complete Projects in Progress June 30, 1952	Total
						Fiscal Year 1951	Fiscal Year 1952		
5- 3-50	B 602 B 605		Kenwood Avenue from Trump Hill Road to Old Philadelphia Road and Joppa Road from York Road to Providence Road	2.52 mi. bituminous concrete	\$ 3,018.67	\$ 93,823.53	*	\$ 96,842.20	
5- 3-50	Ch 271	Md. 6	Hell's Bottom Run near Deatsville	Preliminary engineering	289.36	1,126.20	*	1,254.05	
5- 3-50	H 328	U. S. 1	Bel Air toward Cotoyungo	2.974 mi. construction of shoulders—concrete	2,339.42	89,655.62	*	92,009.16	
5- 3-50	K 183	Md. 289	End of 15' section southerly to Md. 661	2.3 mi. widening—Spec. "B"	50.87	13,631.81	*	13,682.68	
5- 3-50	T 138	Md. 328	Easton northeast towards Matthews	4.366 mi. widening and resurfacing	414.20	139,389.23	*	142,725.10	
4-30-50	A 432X	Md. 36	George's Creek Road at Mine Sink No. 2	Build up existing shoulders	2,180.65	2.35	*	2,200.93	
4-30-50	A 433		Westernport	Work on streets	1,965.68	38.22	*	2,003.90	
4-26-50	AA 392.3	Md. 2	Friendship Airport Road from Oak Road to Baltimore-Washington Expressway	1.015 mi. grading, drainage, and surfacing—reinforced concrete	12,379.80	427,518.00	\$	519,898.25	
4-26-50	AA 419		Governor Ritchie Highway at Fifth Ave. in Glen Burnie	Install traffic signal	2,620.33		*	2,620.33	
4-26-50	D 225	Md. 336	Lakesville northwesterly to Great Marsh Creek	6.8 mi. resurfacing—macadam	9,458.50	175,972.14	*	185,430.64	
4-26-50	K 181		Millington	Surface-treat shoulders	340.50	581.64	*	922.14	
4-26-50	M 471X		Intersection of Md. 194 and Md. 320	Install traffic signal	3,746.63		*	3,746.63	
4-26-50	M 473X	Md. 97	Forest Glen Road	Installation of semi-actuated traffic signal	1,889.40		*	1,966.12	
4-26-50	P 452.7		Irving Street, Laurel	.274 mi. grading, drainage, and surfacing—Spec. "B"	9,158.83	8,487.60	*	17,719.37	
4-26-50	P 519-8	U. S. 301	1.4 mi. north of Wells Corner southwesterly toward Cheltenham	Determine the elevation of the water table			286.00	286.00	
4-26-50	Q 168-10	U. S. 50	Stevensville to Queenstown Road near Queenstown	Construction of double 108' steel bridge	3,807.97	231,977.04	*	363,222.80	
4-19-50	M 461-1	U. S. 240	Charlksburg towards Hyattstown	.358 mi. grading, drainage, and surfacing—penetration macadam	10,214.45	32,609.66	*	42,824.11	
4-19-50	W1 199-3	U. S. 50	2.8 mi. northwest of Salisbury westerly to 2.4 mi. southeast of Mardela Springs	6.315 mi. grading, drainage, and resurfacing—bituminous concrete	72,099.30	540,183.05	*	821,708.57	
4-12-50	A 283-3	U. S. 220	Keyser-McCool Bridge toward McCool-Cumberland Road	1.415 mi. grading, drainage, and surfacing—penetration macadam and bituminous concrete	104,356.84	283,837.19	*	728,676.92	
4-12-50	B 606		Charles St. Avenue at Boyce Avenue	Install traffic signal	3,388.95		*	3,388.95	
4-12-50	G 192-3	U. S. 40	Keyser's Ridge to Pennsylvania State line	Moving power pole	2.91	18.00	*	816.18	
4-12-50	SM 286-4	Md. 242	Morganza southwesterly to Clements	Moving pole line		995.58	*	995.58	

4-5-50	AA 341-3	Md. 214	Mayo Road northwesterly to Davidsonville Road	1,721 mi. surfacing and stabilizing—bituminous concrete-gravel	65,801.71	1,514.87	67,316.58	*
4-5-50	AA 420X		Intersection of West Street and Division Street in Annapolis	Installation of traffic signal	872.34	1,308.51	436.17	*
4-5-50	H 332	U. S. 40	Pulaski Highway—Martin overhead crossing to Aberdeen	21,008 mi. seeding of park area	7,520.75	17,093.12	24,613.87	*
4-5-50	B 609		Intersection Md. 320 and Md. 513	Install traffic signal	3,500.39	3,500.39	3,500.39	*
4-5-50	M 470X		Intersection of Silver Hill Road (Md. 458) and Suttland Road (Md. 218)	Installation of semi-actuated traffic signal	2,005.25	2,005.25	2,012.11	*
4-5-50	AW 602-1	Md. 331	Washington metropolitan area	Continuation of transportation study	13,387.04	21,069.86	42,000.00	7,552.10
4-5-50	ES 140		Washington to Maryland	6,109 mi. engineering survey by Sandilass, Wyeman and Associates	7,681.81	521.29	16,393.96	*
3-29-50	C1 317-1	Md. 30	1 mi. north of Hampstead toward Man- chester	3,707 mi. widening and resurfacing— Spec. "B"	8,190.86	8,190.86	245,000.82	1,295.11
3-29-50	F 425-9		Washington National Pike - Araby Church Road	Construction of steel bridge	17,478.73	17,478.73	164,170.55	21,063.86
3-29-50	ES 137	Md. 60	Hagerstown toward Pennsylvania State Line	4,07 mi. engineering survey by Baker- Wibberley Company	8,424.87	4,903.84	13,328.71	*
3-29-50	AW 607		Highway Research Board Project on Route # 301	Share of the cost of a testing project to determine the effect of axle loadings on rigid type roads (transferred to main- tenance fund)	7,490.00	5,510.00	13,000.00	*
3-22-50	AA 415X-1	Md. 178	Igglehart toward Epping Forest Road	1.5 mi. resurfacing—Spec. "B"	9,433.83	9,433.83	9,532.83	*
3-22-50	B 583X-1	Md. 301	Baltimore City Line to Belle Grove Road	2,225 mi. widening and surfacing Spec- ification "B"	31,764.30	31,764.30	134,452.95	*
3-22-50	AA 395X-1	Md. 27	Mt. Airy toward Howard County line	1.29 mi. widening and resurfacing— Spec. "B"	4,436.91	71,406.06	76,100.82	*
3-22-50	Ho 218-3	U. S. 29	Columbia Pike	Adjust fuel line at certain stations	5,771.81	5,771.81	8,365.11	2,317.76
3-22-50	Ho 218-4	U. S. 29	Columbia Pike	Adjust underground cable	2,127.18	2,127.18	2,127.18	*
3-22-50	Ho 245X-2	Md. 99	Between Slacks Corner and St. Johns Lane	6.3 mi. resurfacing—Spec. "B"	2,608.64	109,535.95	112,144.59	*
3-22-50	K 179X	U. S. 213	Chester River Bridge to Goose Hill	4 mi. widening and resurfacing Spec. "B"	4,409.64	106,310.38	132,000.00	11,225.23
3-22-50	K 180X	Md. 298	Between Fairlee and Builertown	6.5 mi. widening and resurfacing Spec. "B"	574.70	106,294.59	275,000.00	53,197.49
3-22-50	M 467X-1	U. S. 240	Rockville to Gaithersburg	3.82 mi. widening and resurfacing Spec. "B"	2,281.19	171,902.54	208,703.55	10,522.06
3-22-50	P 675	Md. 564	Bowie toward Lanham	4.35 mi. widening and resurfacing Spec. "B"	73,697.82	42,489.82	116,007.64	*
3-22-50	P 676X	Md. 5	Surrattsville to T.B.	4.1 mi. resurfacing pavement and modify curves	922.29	55,301.82	100,000.00	43,775.89
3-22-50	Q 223X-2	Md. 19	Between Church Hill and Ingleside Road	7.25 mi. resurfacing bituminous concrete	8,156.67	89,420.55	120,120.00	9,547.32
3-16-50	Co 215-4	Md. 322	Andersontown towards Federalsburg	Moving power lines	779.89	779.89	779.89	*
3-16-50	C6 222	Md. 103	Denton	2,04 mi. resurfacing certain streets	4,321.67	38,456.31	43,777.98	*
3-16-50	Ho 246		Intersection of Md. 103 and Md. 175 to- ward U. S. 1	4,958 mi. widening and resurfacing— Spec. "B"	87,744.21	112,920.25	200,004.46	*
3-16-50	ES 136		Kent Island Narrows Bridge	Preparation of plans by Hardesty and Hanover	21,439.41	12,873.37	42,269.41	*
3-16-50	ES 138	Md. 64	Hagerstown toward Chewsville	3,034 mi. engineering survey by C. R. Nazum	4,345.09	3,410.38	7,755.47	*
3-16-50	ES 139	U. S. 15	Frederick toward Linekith	2,713 mi. engineering survey by C. R. Nazum	1,014.74	1,097.81	2,112.55	*
3-1-50	AA 416	U. S. 301	Seven Run Hill to 5th Avenue in Glen Burnie	5,476 mi. resurfacing Spec. "B"	991.30	160,904.01	161,955.31	*
3-1-50	B 601	U. S. 1	Nearby Avenue to Harford County line	7,894 mi. bituminous surfacing, Spec- ification "B"	226,283.37	72,454.93	398,738.30	*
3-1-50	C1 317	Md. 30	Baltimore County line to 1 mi. north of Hampstead	3.49 mi. widening and resurfacing Spec. "B"	5,844.60	154,800.57	165,123.35	*

EXHIBIT F—Continued

**GENERAL CONSTRUCTION AND OPERATING FUND  
STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED  
JUNE 30, 1951 AND 1952**

Date Authorized	Project Number	Route Number	Location	Description	EXPENDITURES				Total
					Work in Progress July 1, 1950	Fiscal Year 1951	Fiscal Year 1952	Authorized to Complete Projects in Progress June 30, 1952	
3- 1-50	Cc 328	U. S. 40	Pulaski Highway east of Susquehanna River Bridge to Jackson Station	5.095 mi. resurfacing—Spec. "B"	\$ 556.55	\$ 225,384.80	*	\$ 225,941.35	
3- 1-50 4-12-50	H 232-15	U. S. 40	Susquehanna River Toll Bridge	Preliminary engineering cost to complete the construction work on bridge—Additional construction work on east and west abutments, toll booths, and administration building	3,032.30	50,198.64	\$ 6,671.55	\$ 13,339.88	
3- 1-50	H 329	Md. 7	Old Philadelphia Road—U. S. 40 west- edly to Baltimore City line	5.99 mi. resurfacing—bituminous, Spec. "B"	75,234.86	132,758.89	18.36	208,012.11	
3- 1-50	P 666	Md. 337	Camp Springs to near Forestville	7.55 mi. widening and resurfacing—Spec. "B"	32,266.25		*	32,266.25	
3- 1-50	P 673-X	Md. 5	North and south of Clinton	Preliminary engineering	52,936.48	1,258.23		802.50	
3- 1-50	S 181	Md. 413 and U. S. 13	Marion toward Princess Anne	1.171 mi. widening and resurfacing—Spec. "B"		7,109.72	455.73	60,046.20	
3- 1-50	T 134	Md. 333	Tripple Creek Bridge	Preliminary engineering	1,046.21	11.84	*	1,058.05	
3- 1-50	T 137-X	Md. 33	Oak Creek Bridge	Preliminary engineering	267.92	234.70	12.07	535.00	
3- 1-50	W 306-2	U. S. 40	Between Hagerstown and Hopewell	Right-of-way adjustment	1,678.69	570.60	*	2,249.29	
3- 1-50	W1 250	Md. 349	Rockwalking to Tyaskin	13.58 mi. widening and resurfacing—Spec. "B"	2,040.13	296,956.74	*	299,566.87	
2- 5-50	B 607		North Point Road at Eastern Avenue	Preliminary engineering			800.00	800.00	
2- 5-50	H 83-1		Blackhorse to Jarretsville Road at Medonia	Right-of-way acquisition			278.20	278.20	
2- 2-50	A 359-2		Moscow Mills	Construction of pedestrian bridge over Georges Creek	7,266.54	1,154.52	*	8,421.06	
2- 2-50	AA 389-6		Annapolis-Washington Expressway at Patuxent River	Construction of bridge	38,012.75	384,379.87	61,755.13	484,147.75	
2- 2-50	AA 389-7		Annapolis-Washington Expressway	Engineering services of McWade & Werner for design of bridge over Patuxent River	6,600.00		*	6,600.00	
2- 2-50	G 257	U. S. 219	Wilson Run Bridge	Remove and replace sidewalk area on the west end of bridge	616.15	865.75	*	1,481.90	
2- 2-50	P 671		Bridge over Northeast Branch in Riverdale	Installation of two roadway lighting units	68.25	160.06	93.77	322.08	
1-25-50	ES 135	Md. 168	Nursery Road	1.51 mi. engineering survey by the Wilson T. Ballard Company	12,321.12	36,063.98	15,445.89	63,830.99	
1-10-50	Ch 264-3	Md. 3	Newburg southeasterly to Tompkins- ville	Moving pole line	8,189.47		*	8,189.47	
1-11-50	C 205	Md. 261	Vicinity of Naval Research Laboratory	3 mi. widening and resurfacing—Spec. "B"	7.70	4,067.30	*	4,075.00	
12-28-49	AA 384-2	Md. 176	Harnett Grade Elimination and Dor- sey Grade Elimination	.91 mi. grading, drainage, and surfacing of several sections—bituminous con- crete and macadam	298,923.36	50,812.51	7,134.62	356,870.49	
12-28-49	AA 384-6	Md. 176	Glenburnie to Dorsey	Alterations and widening of two bridges	15,711.49	21,482.01	3,112.75	40,306.25	
12-28-49	B 578-9	U. S. 111	North of Timonium Road toward Shu- wan Road	4.069 mi. grading, drainage, sodding, seed- ing, mulching, placing of top soil, ce- ment concrete	19,571.40	573,443.38	79,448.22	711,559.58	



12-28-49	CJ 314	Westminster toward Taylorsville	5,001 mi. grading, drainage, widening, and surfacing reinforced cement concrete	105,800.44	408,946.86	39,282.24	9,849.60	563,879.14
12-28-49	Ce 322-2	Sassafas River Bridge at Georgetown	Repairs to bridge	25,230.26	65,801.45	12,296.28	*	103,297.99
12-28-49	F 425-2	Northwest of Urbana toward Frederick	4,659 mi. grading, drainage, and surfacing — bituminous concrete	267,936.02	450,271.60	761,305.66	305,016.11	1,784,623.39
12-28-49	F 425-6	Urbana and Rt. 15, Frederick County	Construction of bridge over B. & O. R.R.	49,027.78	109,804.34	629.55	13,809.75	173,271.42
12-28-49	F 498	East of Libertytown toward New Windsor	3,308 mi. grading, drainage, widening, and surfacing reinforced concrete	101,883.32	400,485.74	17,385.72	26,558.17	540,312.85
12-28-49	H 322	South of Bel Air toward Van Bibber	2,652 mi. widening, and resurfacing macadam and bituminous concrete	40,403.82	179,953.95	147,015.17	29,322.99	396,695.43
12-28-49	Ho 218-1	Southwest of Elkcott City toward Aldholton	4,905 mi. grading, drainage, and surfacing — reinforced cement concrete	155,537.18	719,553.54	144,231.16	30,030.62	1,049,352.50
12-28-49	P 391-2	T.R. to 274 mi. south of Charles County line	3,388 mi. grading, drainage, and surfacing — bituminous concrete	17,675.42	539,644.30	581,116.25	570,147.01	1,708,583.18
12-28-49	Ch 297-1	Gordon's Corner southwest to Washington—Indian Head Road	3,918 mi. grading, drainage, widening, and resurfacing bituminous concrete	372,931.32	126,798.36	1,221.48	*	500,951.16
12-28-49	P 658	Cox's Creek to Kent Narrows Bridge	2,49 mi. grading, drainage, and surfacing — reinforced concrete	124,831.49	492,829.29	485,605.88	92,930.39	1,196,191.05
12-28-49	Q 168-1	Grassonville to Wye Mills	5.73 mi. grading, drainage, and surfacing reinforced concrete	53,487.44	543,836.55	912,510.61	354,450.98	1,864,285.58
12-28-49	Q 168-2	Kent Island Narrows Bridge	Construction	113,672.24	665,807.85	87,292.84	*	866,772.93
12-28-49	Q 168-4	Kent Island Narrows Bridge to Grassonville	2,706 mi. grading, drainage, and surfacing reinforced concrete	96,645.45	803,418.38	519,252.16	257,601.41	1,676,917.40
12-28-49	Q 228-2	Barclay to Sudlersville	3.15 mi. widening, drainage, and resurfacing bituminous concrete	11,943.06	129,782.28	9,861.10	24,218.46	175,804.90
12-28-49	Wt 133-6	Dedmar southeasterly toward Salsbury	2,132 mi. grading, drainage, widening, and resurfacing macadam	160,665.20	139,438.65	23,352.75	323,456.60	
12-21-49	AA 263-7	Seyern River Bridge	2,504.29	210.30	1,856,795.14	354,805.87	2,214,375.60	
12-21-49	C 184-3	Bridge over Patuxent River at Benedict	78,013.06	862,702.13	893,835.18	213,776.83	2,048,327.20	
12-21-49	Ch 253-3	Finksburg toward Westminster	Construction of steel superstructure, with swing span	396,933.10	623,124.14	194,756.60	30,056.80	1,244,870.64
12-21-49	CJ 303-1	Washington National Pike	3.5 mi. surfacing reinforced concrete	57,031.37	247,968.66	18,864.69	68,151.97	392,016.69
12-21-49	F 425-5	Bridge over Monocacy River	Construction of bridge to carry pike over U. S. 15	122,108.13	433,117.19	190,900.72	137,584.12	883,710.16
12-21-49	F 476-2	Washington National Pike	Construction of bridge	49,983.37	182,069.20	7,794.29	*	239,876.86
12-14-49	D 211-2	Mt. Pleasant to Libertytown	4,013 mi. reconstruction macadam and bituminous concrete	137,761.40	215,748.99	33,202.62	16,666.79	403,379.80
12-14-49	F 507	Mt. Holly to east of Cambridge	2.33 mi. grading, drainage, widening, and resurfacing bituminous concrete	1,932.66	3,135.91	59.69	*	5,128.26
12-14-49	K 173-1	Area near Brunswick	Aerial photography and controlled mosaic map of area	48,795.16	344,869.50	61,387.89	62,568.71	517,621.26
12-14-49	Q 236X-1	Junction with Md. 444 west of Locust Grove and easterly to Galena	4,035 mi. grading, drainage, widening, and resurfacing macadam base, bituminous concrete surface	243,574.20	41,035.16	14,851.53	19,539.11	319,000.00
12-7-49	K 177X-1	Church Hill to Dulhamm Corner	Spec. "B"	81,421.95	69,037.89	12,704.78	*	163,164.62
12-7-49	M 468	Between U. S. 213 and Md. 290	Acquisition of right-of-way	3,253.80	494.34		5,124.00	5,124.00
12-7-49	Ho 247	Columbia-Bartonsville Extension	Topographic map of vicinity	14,847.38	1,044.26		*	15,891.64
12-7-49	P 646-1	Bridge over Brer Creek on Edmondston Road	Construction of two box culverts	81,421.95	69,037.89	12,704.78	*	163,164.62
12-7-49	W 391X-2	Property of D. A. Walters	Construct new field fence	3,253.80	34.89	32.65	*	3,253.80
12-7-49	ES 134	Md. 255 to Loveville	6.74 mi. engineering survey by J. Spence Howard	14,847.38	1,044.26		*	15,891.64
11-30-49	AA 384X-3	Hartman's to Doorsey	2.3 mi. sub-sealing with bituminous material	3,914.43	141.26	56.00	*	4,111.63
11-30-49	AA 384X-4	Hartman's to Doorsey	2.3 mi. reconstruction Spec. "B"	35,292.24	34.89	32.65	*	35,359.18
11-30-49	AA 384X-5	Hartman's to Doorsey	2.3 mi. clearing rights-of-way, extending culverts and grading shoulders, seeding, mulching, sodding, etc.	34,966.61	13,962.61		*	57,366.91

**GENERAL CONSTRUCTION AND OPERATING FUND  
STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED  
JUNE 30, 1951 AND 1952**

Date Authorized	Project Number	Route Number	Location	Description	EXPENDITURES				Total
					Work in Progress, July 1, 1950	Fiscal Year 1951	Fiscal Year 1952	Authorized to Complete Projects in Progress, June 30, 1952	
11-30-49	Cc 331X		North approach to C. & D. Canal	Restoration to original condition	\$ 590.18	\$ 13.61	*	\$ 603.79	
11-30-49	Cc 332X		North East south to macadam section	Construction and surface treatment of gravel shoulders	2,055.40	1,451.81	*	3,507.21	
11-30-49	G 248-5	U. S. 219	Gortner to Red House	3.972 mi. resurfacing bituminous concrete	5,556.79	102,067.19	*	107,623.98	
11-30-49	M 435-1		Columbia Boulevard, Seminary Road, and Georgia Avenue intersection	Adjust present channelization and install fixed time signals	664.52	6,452.84	\$ 135.61	6,852.97	
11-30-49	SM 286-2	Md. 242	Morganza southwesterly to Clements	Moving power line	931.96	230.66	*	230.66	
11-30-49	W 401	Md. 60	Lettersburg Road	Surface treat shoulders	2,386.11	698.41	*	1,144.53	
11-30-49	W 402	U. S. 40	Tomoloway Relocation	Surface treat shoulders	13,805.31	3,263.07	*	3,084.52	
11-30-49	ES 133	Md. 22	Churchville to Aberdeen	5.466 mi. engineering survey by The Wilson T. Ballard Co.	45,181.97	153,988.01	*	17,008.38	
11-16-49	W 396-1	U. S. 40	East of Hinyett's Cross Road towards Hagerstown	1.896 mi. drainage and resurfacing bituminous concrete, and curves modification	160,932.54	323,697.04	\$ 365,542.78	230,988.26	
11-9-49	AA 263-5	Md. 2	Severn River Bridge	Construction of concrete substructure	641.43	237.66	*	3,935,720.00	
11-9-49	W 199-4	U. S. 50	Mardella Springs to Nanticoke River	Adjustments to private property	2,767.43	532.11	*	879.59	
10-26-49	A 421X-4	Md. 36	Lonaconing to Midland	2.82 mi. raising earth shoulders	4,362.36	10.07	*	2,707.43	
10-26-49	B 579X-4	U. S. 40	Martins Road to Cowenton	Reshape and replant roadside areas	2,044.88	3,596.31	*	4,894.47	
10-26-49	C 318X	Md. 32	Main Street-Sykesville	Eliminate entrance to property	21,924.08	32.35	*	2,054.95	
10-26-49	C 255	U. S. 50	Garrett County	Install pipe and construct headwalls	58,403.56	207,679.94	*	3,596.31	
10-26-49	P 667X	Md. 212	Riggs Road	2.59 mi. widening, drainage, widening, and resurfacing macadam base, bituminous concrete	12,617.05	69,328.08	*	40,260.00	
10-26-49	Q 228-1	Md. 313	Ingleside toward Suddlersville	.6 mi. grading, drainage, and surfacing macadam base, bituminous concrete	19,407.23	6,102.84	*	289,139.21	
10-26-49	T 118-2	Md. 33	Easton via relocation to U. S. 50	11.5 mi. engineering survey by C. R. Nazam	425,748.27	493,411.46	*	82,746.49	
10-26-49	ES 132	Md. 65	Hagerstown to Shaarpsburg	5.636 mi. grading, drainage, and resurfacing bituminous concrete	96,416.13	53,514.01	87,657.64	25,510.07	
10-4-49	W 199-1	U. S. 50	Mardella Springs to Nanticoke River	Construct bridge over-pass and .3 mi. approaches—macadam	9,118.72	9,225.49	*	1,012,504.94	
9-28-49	B 578-7	U. S. 111	Beaver Dam Road over the York Road Relocation	8.2 mi. widening and resurfacing (additional costs)	8,363.83	626.99	*	166,342.27	
9-28-49	P 663X	Md. 5	District Line and Surratts High School	Study of rural road usage in cooperation with the U. of Md. and U. S. Bureau of Public Roads	62.18	5,304.99	*	9,118.72	
9-28-49	AW 606			Moving power line installations	23,466.94		*	8,990.82	
9-20-49	T 125-2	Md. 404	Wye Mills towards Denton	6.288 mi. engineering survey by Sandhass, Wieman and Associates	717,043.24	1,208,407.48	255,818.87	62.18	
9-20-49	ES 131	Md. 331	Easton to Preston	5.985 mi. grading, drainage and surfacing—reinforced concrete				28,771.93	
9-14-49	AA 389-3	U. S. 50	South River westerly to Crain Highway					2,375,997.47	

9-8-49	Co 215-1	Md. 322	Southeast of Andersontown to Federalburg	3,594 mi. grading, drainage, and surfacing—gravel and bituminous stabilized	128,135.11	50,172.63	*	178,307.74
9-8-49	Q 224-4	Md. 300	Oxford Branch Bridge	Construction	82,736.73	58,163.64	*	141,216.13
9-8-49	Q 231-1	Md. 561	Church Hill to Sudlersville	Additional right-of-way costs	2,445.92	17.35	*	2,469.09
9-1-49	K 177X	Md. 561	Between U. S. 213 and Md. 290	4.13 mi. widening—Specification "B"	63,744.00	4,413.68	*	68,157.68
9-1-49	M 465X	Md. 97	Howard County line toward Brookville Road	4.13 mi. widening—Specification "B"	68,064.01	9,247.32	*	77,361.33
8-29-49	M 350-3	U. S. 240	Wisconsin Ave. in Betlesda toward Rockville	.65 mi. grading, drainage, and surfacing—reinforced concrete	408,443.48	71,448.99	*	539,268.41
8-24-49	A 419-1		Washington Street in Westminster	Construction of bridge over George's Creek	61,676.20	8,218.56	*	63,894.76
8-24-49	B 578-6	U. S. 111	York Road Relocation at Padonia Road	Construct underpass and reconstruct 34 mi. of approaches—macadam	147,538.05	99,898.67	23,484.69	287,546.06
8-24-49	Ch 265-1	Md. 225	Md. 3 southwesterly toward Mason Springs	5.837 mi. grading, drainage, and surfacing—gravel and bituminous stabilized	302,102.45	99,844.86	*	421,960.45
8-24-49	F 476-1	Md. 26	East of Unionville to Libertytown	3.788 mi. grading, drainage, and surfacing—penetration macadam	404,363.84	400,368.05	49,511.38	928,545.36
8-24-49	Ho 164-6	U. S. 29	Columbia Pike at St. John's Lane	Adjustments to channel intersection	1,069.63			6,142.88
8-24-49	Ho 202-2	U. S. 1	Laurel By-Pass, northwast of the Big Patuxent River to Washington Blvd.	1.555 mi. grading, drainage, and surfacing—reinforced cement concrete	540,177.37	57,241.54	5,073.25	569,816.01
8-24-49	M 444-1	U. S. 240	Bradley Boulevard at Betlesda	Construction of multiple metal pedestrian tunnel under B. & O. R.R.	29,830.02	5,323.97	*	35,153.99
8-24-49	Q 233X-1	U. S. 213	Church Hill	Acquisition of right-of-way	77.22	77.22	*	77.22
8-17-49	D 211-1	U. S. 50	West of Mt. Holly to Cambridge	1.27 mi. grading, drainage, widening, and resurfacing—bituminous concrete	234,751.30	42,856.91	*	289,077.74
8-17-49	SM 281-5	Md. 245	2.3 mi. Northeast of Leonardtown to Hollywood	2.69 mi. grading, drainage, and surfacing—gravel and bituminous stabilized	192,652.49	24,386.93	*	217,109.46
8-10-49	AA 389-4	Md. 28	Annapolis-Washington Expressway	Construction of bridge over South River	6,910.61	255,141.86	*	290,455.86
8-10-49	M 462X	U. S. 50	Betlesville to the intersection of U. S. Rt. 15	7 mi. widening—penetration macadam	68,067.43	10,633.52	*	86,001.09
8-10-49	Wo 253-2	U. S. 50	Herring Creek to .3 mi. West of Md. 452	Removal of 3 underground gasoline tanks, signs, pumps, and concrete island		636.00	*	636.00
8-10-49	Wo 300X-5	U. S. 113	Pocomoke to Snow Hill	Restoration of earth shoulders	3,330.80	2,128.51	*	6,295.83
8-3-49	A 421-2	Md. 36	Loancoming to Midland	2.822 mi. resurfacing—Spec. "B"	111,064.91	12,132.34	*	129,197.25
8-3-49	Wo 253-1	U. S. 50	Herring Creek to .3 mi. West of Md. 452	3.885 mi. grading, drainage, and surfacing—reinforced concrete	512,734.49	564,679.54	*	1,108,413.03
8-3-49	ES 130	Md. 225	Ripley toward Indian Head	4.437 mi. engineering survey by Sixe, Wilbur and Robertson	24,033.95	522.79	*	24,556.74
7-26-49	Ho 235-2	Md. 176	Dorsey grade elimination to Baltimore-Washington Boulevard	.379 mi. grading, drainage, and surfacing—penetration macadam	66,154.74	6,472.66	*	72,627.40
7-20-49	B 594-1	Md. 7	Baltimore City Line to the Golden Ring Road 2,902 mi.—Baltimore City Line to Overlea Avenue .138 mi.	100,534.20		1.67	*	100,535.87
7-20-49	D 102-1		Bridge over Shafter Creek at Taylor's Island	Resurfacing—bituminous concrete—Spec. "B"	179,689.38	38,923.84	*	218,613.22
7-20-49	F 502	U. S. 15	Intersection of Md. Rt. 28 and U. S. Rt. 15 to Point of Rocks	Construction of a treated timber pile bridge and approaches	130,730.66		*	135,888.08
7-20-49	M 459	Md. 410	Wisconsin Ave. extending Easterly to Georgia Ave.	4.633 mi. concrete shoulders	257,246.66	1,315.58	*	258,562.24
7-20-49	T 128-1	Md. 333	Bridge over Peach Blossom Creek between Easton and Oxford	Underwater investigations of the substructure	79,210.66	417.30	*	98,568.57
7-13-49	Ho 245-1	Md. 99	Between Slack's Corner and St. John's Lane	6.3 mi. widening—penetration macadam		19,331.70	*	19,331.70
7-13-49	M 458	Md. 184 Md. 515 Md. 516	Georgia Avenue to D. C. line Silver Spring to North Woodside Colesville Road to Old Bladensburg Road	2.355 mi.—resurfacing—bituminous concrete Spec. "B"	89,758.88	26.21	*	89,758.88

**GENERAL CONSTRUCTION AND OPERATING FUND  
STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED  
JUNE 30, 1951 AND 1952**

Date Authorized	Project Number	Route Number	Location	Description	EXPENDITURES				Authorized to Complete Projects in Progress June 30, 1952	Total
					Work in Progress July 1, 1950	Fiscal Year 1951	Fiscal Year 1952	Total		
7-13-49	M 460	Md. 191	Wisconsin Ave. to Leland St.	1.474 mi. resurfacing bituminous concrete, Spec. "B".	\$ 40,711.01			*	\$ 40,711.01	
7-13-49	P 596 1	Md. 52 Md. 218	Bradley Lane to East West Highway 7 mi. Southeast of D. C. Line South- west to intersection of Md. 218 with Md. 458	.959 mi. drainage and widening macadam	\$ 8,445.79			*	62,455.36	
7-6-49	AA 368-5		Baltimore - Washington Expressway at Stony Run	Construction of bridge over Pa. R.R.	155,747.87	\$ 432.08		*	580,134.93	
7-6-49	G 192-2	U. S. 40	Keyser's Ridge to Penna. State Line	3.533 mi. resurfacing with Spec. "B" curves modification and construction of retaining wall	323,402.07	26,362.20		\$ 36,713.23	642,617.85	
7-6-49	W 392-1	U. S. 40	West of Little Tomboyway Creek to 4 mi. East of Belle Grove	6.939 mi. grading, drainage, and surface- macadam	735,687.66	951,499.62	628,261.29	135,483.77	2,450,932.34	
7-1-49-	A 407-1		Various	Miscellaneous Projects	18,835.49	797.87	170.80		19,804.16	
6-30-50					55,291.30	1,170.09	3.47	*	56,427.92	
6-29-49	A 417-1	U. S. 220	Northern City limits of Cumberland toward Penna. State line	.187 mi. grading, drainage, and surfacing bituminous concrete	13.00		235.34	*	248.34	
6-29-49	AA 263-3	Md. 2	Seven River Bridge	Employ architect for designing railings and stairs						
6-29-49	B 578-4	U. S. 111	Near Timonium Fair Grounds	Construct reinforced concrete underpass and grade cuttings	55,865.86	9,469.35	632.38	667.72	66,635.31	
6-29-49	K 169-1	Md. 292	Between Stillpond and Betterton	Acquisition of right-of-way	4,195.28			*	4,195.28	
6-29-49	Q 231	Md. 300	Church Hill to Sudleyville	Acquisition of right-of-way, costs	15,410.89	2,710.46	83.85	*	18,205.20	
6-29-49	SM 286-1	Md. 242	Mangonia Southwesterly to Clements	4.265 mi. grading, drainage and surface- macadam	298,743.06	67,599.17	2,463.75	*	363,878.48	
6-22-49	Cc-209-2	Md. 282	Cecilton Northwesterly to the Delaware State line	5.73 mi. grading, drainage, and macadam surfacing	283,434.80	98,202.19	13,277.50	*	394,914.55	
6-22-49	ES 126		Bridge over Patuxent River at Benedict	Engineering survey by J. E. Greiner Com- pany	21,447.28			5,567.37	31,795.20	
6-22-49	ES 127	U. S. 111	Beaver Dam Road grade separation over York Road relocation	Engineering survey by McWade and Werner	9,215.19	3,370.50		*	3,370.50	
6-22-49	ES 128	Md. 404	Stevensville to Queenstown	1.69 mi. engineering survey by Saxe, Walker and Robertson	29,010.77	1,625.61		*	9,215.19	
6-22-49	ES 129	Md. 404	Queenstown to Grasonville	5.73 mi. engineering survey by Sandlass, Wieman and Associates				*	30,636.38	
6-15-49	F 501X	U. S. 40	Bradlock Heights	Construct a scenic overlook	147,040.99			3,910.00	3,910.00	
6-8-49	A 421	Md. 36	Southern limits of Lonaconing to Barton	3.331 mi. resurfacing—Spec. "B"	1,292.79	15,377.29		*	102,418.28	
6-8-49	Cc 322	U. S. 213	Sassafras River bridge at Georgetown	Preliminary engineering	993,656.16	94.44	37.85	*	1,425.08	
6-8-49	Uo 234-1	U. S. 40	Pine Orchard to West Friendship Road	5.49 mi. grading, drainage, and surfacing— reinforced cement concrete	1,046,412.92	11,049.20		109,665.37	2,160,783.65	
6-8-49	ES 125	Md. 24	Md. Rt. 7 toward Emmorton	2.34 mi. survey and plans by Sandlass, Wieman and Associates	10,300.44			*	10,300.44	
6-1-49	M 456X	Md. 28	Between Dawsonville and Bealesville	5.5 mi. widening—penetration macadam	60,997.13	8,245.77	416.58	*	69,659.48	

6-1-49	P 655		Intersection of Riggs Road (Md. 212) and Ager Road (Md. 410) Rockville by-pass	Installation of pipe and manhole	145.10		3,278.50	3,423.00
6-1-49	ES 122	Md. 240		1 mi. engineering survey by Saxe, William	10,472.64		*	10,472.64
5-11-49	F 449-5	Md. 32	Emmitsburg to Penna. line	1.14 mi. widening and resurfacing—Spec. "B"	70,180.71		*	70,180.71
5-11-49	Wo 301X-3	U. S. 113	Berlin to Delaware state line	Seeding and mulching, moving poles, and disposition of right-of-way	12.72	1,359.34	*	1,372.06
5-4-49	P 649	U. S. 301	Marlboro By-pass south to T. B.	6.43 mi. widening and resurfacing—Spec. "B"	91,218.72		*	91,218.72
4-27-49	Co 195-1	Md. 313	1 mi. North of Greensboro Southlury to intersection of Md. 314	1.068 mi. grading, drainage, and reinforced concrete surfacing	176,993.99	1,417.30	*	179,166.53
4-27-49	Co 195-2	Md. 313	Bridge over Choptank River at Greensboro	Construction	138,571.30		*	138,571.30
4-27-49	D 218	Md. 16 and 235	Backwater Bridge to Church Creek	3 mi. resurfacing and widening—Spec. "B"	56,246.04	21.35	*	56,267.39
4-27-49	D 219	Md. 16	Cambridge Southwest to Church Creek	6 mi. resurfacing and widening—Spec. "B"	225,536.68	48.28	*	225,574.96
4-20-49	AA 368-6	U. S. 1	Between Hanover Road and Stony Run bridge at Ridge Road	1.241 mi. grading, drainage, and surfacing, and construct grade separation reinforced concrete	566,722.85	154,720.75	*	1,016,701.31
4-20-49	S 156-1	Md. 413	Westover to 71 mi. Southwest of Marion	7.62 mi. grading, drainage, and surfacing—concrete	984,137.68	147,072.10	*	1,219,240.44
4-20-49	Wt 255X	Md. 313 and	Salisbury metropolitan area	Traffic study	6,889.93	1,458.51	*	14,000.00
4-13-49	Co 210-1	Md. 304	2 mi. South of Denton Southwesterly towards Andersontown	1.083 mi. grading, drainage, and macadam surfacing	170,473.63	1,992.98	*	183,850.90
4-13-49	S 179	Md. 363 and U. S. 13	Princess Anne toward Deal Island	5.01 mi. widening and resurfacing—Spec. "B"	99,142.29		*	99,142.29
4-13-49	S 179X-1	Md. 363	Princess Anne toward Deal Island	Replace culverts prior to resurfacing	3,114.69		*	3,114.69
4-13-49	T 125-1	Md. 404	Wye Mills Easterly towards Denton	.538 mi. grading, drainage, and concrete surfacing	103,652.00	62.18	*	104,980.82
4-7-49	P 648	Md. 202 and Md. 410	Defense Highway Southeasterly toward Landover, Hyattsville to West of New Hampshire Avenue	3.838 mi. surfacing—bituminous concrete	198,904.36		*	198,904.36
3-30-49	A 283X-6	U. S. 220	Keyser, West Va. toward McCool	Reset fence	39.50		*	39.50
3-30-49	Co 210-2		Watts Creek bridge, 2 mi. South of Denton	Construction	16,149.92		*	125,178.36
3-17-49	AA 203-2	Md. 2	Severn River bridge	Employ architect for designing railings and piers	109,028.44			800.00
3-17-49	B 332-5		Sulphur Spring Road at Pa. R.R. Crossing in Arbutus	.596 mi. grading and surfacing approach to underpass—concrete	18.38	185.42	596.20	593,052.01
3-17-49	B 578-3	U. S. 111	Beaver Dam Run	Employ architect for railing and wing design of structure	394,110.75	32,644.28	*	145.97
3-10-49	M 452X	Md. 28	Darnestown to Dawsonville	3.5 mi. widening concrete	44.84	58.91	*	35,406.51
3-9-49	Co 208X	Md. 312	North of Ridgely	Relocate curve by compacted gravel surfacing	35,406.51		*	9,440.00
3-9-49	Wt 250X	Md. 663	Bridge over Tonytank Creek in Salisbury	Preliminary engineering	9,449.69			500.00
2-25-49	B 332-8		Francis Avenue, Haleshorpe	51.85	70.28	16.38	361.49	
2-10-49	Co 173-1	Md. 404	Approximately 1 mi. West of Queen Anne toward Denton	Install two catenary spans and new duct line for grade elimination	22,815.76	108.68	*	23,132.21
2-10-49	Q 224-1	Co 173-2	Norwich Creek bridge and Tuckahoe Creek bridge	3.859 mi. grading, drainage, and surfacing—reinforced concrete	526,919.31	68,330.44	*	596,594.61
2-2-49	AA 368-4	B. W. Exp.	Winterson Road toward Baltimore-Friendship Airport	Construction	139,815.00	29,116.41	*	168,931.41
1-29-49	T 126-1	Md. 370	Miles River bridge	2.122 mi. grading, drainage, and surfacing, and interchange grade separation structures—reinforced concrete	810,551.61	525,649.45	148,597.35	1,635,943.32
1-18-49	AA 332-1	Md. 2	Friendship International Airport Road toward Washington-Baltimore expressway interchange area	Repairs to bridge	109,166.25	22,113.21	*	131,279.46
				.582 mi. grading, drainage, and surfacing—reinforced concrete	290,106.21	14,386.65	*	274,492.26

EXHIBIT F—Continued

**GENERAL CONSTRUCTION AND OPERATING FUND**  
**STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED**  
**JUNE 30, 1951 AND 1952**

Date Authorized	Project Number	Route Number	Location	Description	EXPENDITURES				Total
					Work in Progress July 1, 1950	Fiscal Year 1951	Fiscal Year 1952	Authorized to Complete Projects in Progress June 30, 1952	
1-13-49	P 522-1	Md. 500	Northwest branch Northeastly to Columbia Avenue	54 mi. grading, drainage, and surfacing concrete	\$ 435,044.89	\$ 5,226.37	\$ 254.86	\$ 430,672.78	
1-5-49	Ho 292-3	U. S. 1	Leaped by-pass at Race Track Road	Construct bridge over Patuxent River	242,484.34	261.71	69,669.10	312,415.15	
1-4-49	Ch 292-1	Md. 6	Port Tobacco Southwestly toward McConchie	567 mi. grading, drainage and surfacing—gravel and bituminous base	70,130.91		2,828.27	67,282.67	
1-4-49	Ch 264-1	Md. 3	Newburg Southeastly to Tompkinsville	5.923 mi. grading, drainage, and surfacing—gravel and bituminous base	411,024.38	23,089.91	434.02	435,148.31	
12-29-48	W 391-1	U. S. 40	Rodresville Road to East limits of Funkstown	8.304 mi. resurfacing with Spce. "B" curves modification, and widening of bridge structures	710,410.03	16,248.01	1,166.25	727,824.29	
12-22-48	AA 368-3	U. S. 1	Hampmonds Ferry Road to Winterson Road	1.535 mi. grading, drainage, surfacing, and grade elimination structure concrete	1,074,856.24	827.72	14.73	1,075,701.69	
12-22-48	B 332-6		Francis Avenue, Halethorpe	Relocation of approaches to grade-elimination		16,128.16	310.24	15,811.92	
12-22-48	B 332-7		Sulphur Spring Road at underpass Between Kennedyville and Locust Grove	Relocation and installation of water mains		12,766.88	250.33	12,516.55	
12-22-48	K 170X-1	Md 213	Tinnum toward Marble Hill Road	Acquisition of right-of-way	8,424.48			8,424.48	
12-7-48	B 378-2	U. S. 111	Cumberland	4.124 mi. grading and drainage reinforced cement concrete	918,050.29	81,737.69	49,188.52	1,249,133.62	
12-1-48	A 418X	U. S. 219	Accident to Hoyes	Traffic Survey	9,184.24	979.40		10,163.64	
12-1-48	ES 115		Calloway to Valley Lee	4.2 mi. engineering survey by C. R. Nuzum	14,251.27			14,251.27	
12-1-48	ES 119	Md. 249	Intersection of Md. 27 and Md. 80 to Henderson's Corner	3.578 mi. engineering survey by J. Shence Howard	7,610.71			7,610.71	
12-1-48	ES 121	Md. 27	Wilkins Avenue	8.07 mi. engineering survey by Turpin, Wachter and Associates	20,731.47			20,731.47	
11-10-48	B 392-5	Md. 372	Wilks Avenue	Relocate and install sanitary sewers and water mains	18.18		74,739.20	74,757.38	
11-10-48	B 392-6	Md. 372	Wilks Avenue at Herbert Run bridge	Install sewers			7,036.15	7,036.15	
11-4-48	P 519-2	U. S. 301	Baltimore-Washington expressway	Construction of steel beam bridge by-pass	88,935.75	24,068.19	125.75	113,129.69	
10-28-48	B 577-4	U. S. 1	East-West Highway to Colesville Road	Adjustments to steel tower transmission line	12.95	6,449.00		6,461.95	
10-6-48	M 354X-6		Intersection East-West Highway Blair Mill Road	Landscape traffic islands on Georgia Avenue	3,082.87			3,082.87	
10-6-48	M 443		1.4 mi. North of Wells Corner Southwesterly toward Cheltenham	Replace concrete pavement			1,774.20	1,774.20	
10-6-48	P 519-1	U. S. 301	Mt. Savage	7.245 mi. grading, drainage, and surfacing—gravel and bituminous base	940,689.49	251,675.05	32,039.64	1,224,404.18	
9-10-48	A 389-1	Md. 36	Mayo Road Northwestly to Davidsonville Road	Construction of concrete sidewalk and alterations of retaining wall	25,919.21			28,919.21	
9-10-48	AA 341-2	Md. 214		1.721 mi. grading, drainage, and surfacing—gravel and bituminous base	174,364.11	25.06		174,389.17	

9-8-48	AA 368-2	U. S. 1	Patapsco River Road to Hammonds Ferry Road	1,453 mi. grading, drainage, and surfacing—concrete	1,473,927.91	401,285.44	3,484.02	1,878,697.97
8-26-48	B 577-2	U. S. 1	Baltimore-Washington expressway	Construction of dual bridges over Patapsco River	456,555.27	196,231.35	68.90	652,855.52
8-25-48	B 577-1	Baltimore-Washington expressway	Baltimore City line to Patapsco River	Construct grade separation and 1,371 mi. grading, drainage, and surfacing—concrete	1,332,921.34	76,639.96	56.59	1,409,617.89
8-25-48	Q 223	Md. 19	Between Church Hill and Ingleside Eckhart Flat	7.25 mi. widening shoulders	19,726.97	2,783.64	806.01	23,316.62
8-11-48	AA 254-3	Md. 2	Stewart's Corner—Mt. Zion Road	4.951 mi. engineering survey by J. Spence Howard	1,719.06	1,302.35		3,021.41
8-11-48	Es 113	Md. 2	Harundale	4.451 mi. engineering survey by J. Spence Howard	20,884.35			20,884.35
8-4-48	AA 402X	Md. 2	Sulphur Spring Road at Arbutus	Classize and construct accelerating lanes at four cross-overs	2,106.71	2,320.85		4,487.56
7-29-48	B 392-4	Md. 2	Severn River bridge	Construction of underpass for Pa. R.R.	461,481.21	626.06	10,379.54	472,486.81
7-29-48	AA 223-2	Md. 176	Approx. .5 mi. Northwest of Glenbourne	New steel deck for roadway	31,479.62	4,951.78		36,431.40
7-21-48	AA 388-1	U. S. 1	.5 mi. West of Harman's Grade Elimination	4.3 resurfacing asphaltic concrete Spec. "B"	109,371.53			109,371.53
7-21-48	F 417X-6	U. S. 1	Frederick Hagerstown Highway	Seeding and mulching slopes along scenic areas	4,965.57			4,965.57
7-21-48	K 169X	U. S. 292	Between Stillpond and Betterton Hateloorpe	3.4 mi. widening—Spec. "B"	92,237.80	178.08		92,415.88
7-14-48	B 392-3	U. S. 40	Martins Boulevard to Coventon Road	Construction of bridge over Pa. R.R. tracks	726,401.27	31,382.94	4,045.14	761,829.35
6-30-48	B 579-1	U. S. 40	Pulaski Highway to Coventon Road	4.086 mi.—widening and resurfacing—reinforced concrete	1,157,415.41	1,730.43		1,157,415.41
6-30-48	Ce 320X	U. S. 40	Pulaski Highway between the Susquehanna River bridge and Pa. R.R. bridge at Elkton	11 mi. sub-sealing the concrete surfacing	61,457.70			63,188.13
6-23-48	E. S. 111	U. S. 240	Washington National Pike Frederick County line to Brink	18,628 mi. engineering survey by Ballard-Paddock Company	112,784.37	42,638.89	31,656.27	187,079.53
6-16-48	B 392-2	U. S. 1	Wilkins Avenue in Baltimore City to Baltimore - Washington Boulevard	3,174 mi. grading, drainage, and surfacing—concrete	1,954,110.55	497.92	54,396.36	1,900,212.11
6-9-48	FS 105	U. S. 140	Baltimore-Washington expressway, between Baltimore City and Airport Road	1,015 mi. engineering survey by J. E. Greiner Company	151,694.66	2,182.97	3,249.47	157,127.60
6-9-48	FS 107	U. S. 140	Reisterstown by-pass	2.33 mi. engineering survey by Whitman, Requardt and Associates	27,865.80	3,440.25		31,315.05
6-9-48	FS 108	Md. 26	Liberty Road—1.5 mi. West of Unionville to 1.5 mi. East of Unionville	3,712 mi. Engineering survey by Thompson, Grace and Mays	19,797.47	5,694.25		25,491.72
6-9-48	FS 109	U. S. 50	Crain Highway—D. C. line	12 mi. engineering survey by Sandhass, Wieman and Associates	64,809.55	924.05	8,242.62	73,976.22
5-20-48	U 314-2	U. S. 40	Little Gunpowder Falls to Bynum Run	6,157 mi.—resurfacing and widening reinforced concrete	1,485,125.50			1,485,125.50
5-20-48	A 184-1	U. S. 40	3 mi. West of Cumberland toward Allegany Grove	341 mi. grading, drainage, and surfacing, and construction of a frame bridge over Braddock Run asphaltic concrete	252,684.78	20,575.00	532.12	273,791.90
5-19-48	B 392-4	U. S. 40	Herbert Run at Winans	Construction of bridge	125,908.87	59.64	18.18	125,986.69
5-19-48	U 104-4	U. S. 40	Edmondson Ave. extended	Overhead bridge for grade separation	137,990.63			137,990.63
5-6-48	AA 393-1	U. S. 40	Sandy Point Terminal to Rutledge Highway	4,224 mi. grading, drainage, and surfacing—concrete	582,623.34	1,193.27	10.11	583,826.72
5-5-48	U 104-2	U. S. 40	2 mi. West of Rogers Avenue toward Columbia Pike	3,024 mi. surfacing—concrete	741,578.17	2,615.83	607.44	744,801.44
4-28-48	G 248	U. S. 249	Gortner Red House	4.1 mi. widening macadam	143,745.53	15,555.95	108.14	159,389.62
4-14-48	A 465-1	Md. 220	Celanese Plant to McCool	Preliminary engineering—additional costs		5,475.50		5,475.50

GENERAL CONSTRUCTION AND OPERATING FUND  
STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED  
JUNE 30, 1951 AND 1952

Date Authorized	Project Number	Route Number	Location	Description	EXPENDITURES				Authorized to Complete Projects in Progress June 30, 1952	Total
					Work in Progress July 1, 1950	Fiscal Year 1951	Fiscal Year 1952	\$		
4-14-48	G 248X-1	U. S. 219	Gortner to Red House	Preliminary engineering	\$ 4,680.06	\$ 566.13	\$ 13.07	\$	5,259.25	
4-14-48	G 248X-2	U. S. 219	Accident to Flatwoods	Preliminary engineering	107.79	17.75		1,531.96	1,747.50	
4-7-48	A 254-1	U. S. 40	Alloyon Gravel to Frostburg	6.65 mi. surfacing concrete	1,797,783.28	76,973.22	402.88		1,875,159.38	
4-7-48	A 663-1	U. S. 50	Arnolds Washington expressway between D. C. line and U. S. 301	Aerial photographs	2,678.98	1,305.96	25.44		4,010.38	
3-16-48	A 389-1	Md. 404	6.5 mi. North of Easton to a point 1.5 mi. Northwest of Wye Mills	7.175 mi. grading, drainage, and concrete surfacing	1,238,343.93	560.20	2,176.34		1,241,080.47	
3-10-48	Q 296-1	Md. 349	Rockwalking Westwiler toward Ty- rocks	12.6 mi. widening macadam	126,114.73	677.58	380.30		126,057.45	
2-25-48	G 155-2	U. S. 219	Oakland toward Keyzers Ridge	4.353 mi. grading, drainage, and surfacing macadam	712,254.69	40,391.56	1,282.85		753,929.10	
2-25-48	Wo 300	U. S. 113	Show Hill Pocomoke Road	10.65 mi. asphaltic concrete surfacing— ing macadam	1,968.09	1,450.65			3,418.74	
2-10-48	AA 391X-1	Md. 416	Waysons Corner to Calvert County line	Surveys, plans, (utilities—for widening Sewer "R", additional costs)	2,358.94	10.42	27.30	584.14	2,980.80	
2-10-48	Ho 164-3	U. S. 40	Edmondson Avenue at Columbia Pike	Construction of bridge over Frederick Road	113,189.19	1,060.00			114,249.19	
2-10-48	P 634X-1	U. S. 301	Priest Bridge to Marlboro	Preliminary engineering	2,910.59			1,359.61	4,270.20	
2-10-48	P 634X-2	U. S. 301	T. B. to Lyons Corner	Preliminary engineering	3,174.03			413.07	3,587.10	
2-10-48	WV 245-1	Md. 349	Rockwalking School to Tyveskin	Preliminary engineering (additional costs)	238,378.16	62.81	4,234.64		238,837.94	
1-29-48	K 164	Md. 445	Chesertown to Rock Hall, then North- eely to Md. 674	13.25 mi. Asphaltic concrete surfacing— ing macadam			3,996.97		3,996.97	
1-21-48	U 316X	Md. 22	From Main Street Bel Air to Church- ville	Preliminary engineering	13,419.59	2,403.64	3,680.31		6,440.00	
1-21-48	ES 100	Md. 26	West End new concrete Road to Elders- burg	3.324 mi. engineering survey by Thomp- son, Gram and Wiles, Inc.	11,450.65	4,852.54			16,303.19	
1-21-48	ES 101	U. S. 140	Finksburg Westminister by-pass	12.93 mi. engineering survey by Whitman, Prepar and Associates	49,234.22	397.50			49,631.72	
1-21-48	ES 102	U. S. 50	General Highway—Crain Highway	9.9 mi. engineering survey by Sandhaus, Wegman and Associates	76,828.15	129.06			76,957.21	
1-21-48	ES 103	U. S. 40	Magnolia Road to Aberdeen	11 mi. engineering survey by J. Spence Howard	19,461.95			2,538.05	22,000.00	
1-21-48	ES 104	U. S. 40	Siding Hill Mountain near Hancock	5 mi. engineering survey by C. R. Nuzum	29,657.65				29,657.65	
12-9-47	S 83-5	U. S. 13	Westover toward Pocomoke	Additional utility facilities	4,688.00				4,688.00	
10-28-47	Q 296-1	Md. 404	Between Queen Anne and Wye Mills	6.00 mi. widening dirt shoulders	38,127.46	8,046.41			46,173.87	
8-19-47	S 83-4	U. S. 13	Westover toward Pocomoke	2.403 mi. grading, drainage, and surfacing macadam	328,569.87	25,820.75			354,390.62	
7-23-47	Cs 194X	Md. 312	Ridgely	Erect 1500 feet guard rail				1,581.25	1,581.25	
7-23-47	G 237	U. S. 50	Comaria to West Va. State line	Construction of 9.1 mi. concrete shoulders	164,502.30	21,993.12			186,495.42	
7-9-47	M 354-2	U. S. 29	Along Georgia Ave. beginning at East- West Highway north to Westville Road (received east of \$8,000.00 from County Commissioners of Montgou- ery County in 1952)	Recovery account of project (previously closed) for .66 mi. grading, drainage— concrete surfacing		79.50	8,000.00		7,920.50	



5- 6-47	P 569	Paint Branch to District of Columbia line	5,727 mi. surfacing and widening— asphalt concrete	308,980.87	1,245.91	*	310,226.78
4- 3-47	M 401	Northford Park-Burnt Mills Dam	Erect 1500 feet of cable guard fence	966.93	1,279.90	*	2,246.83
1-16-47	K 154	Bridge over Chester River at Chester-town	Preliminary engineering	6.85		1,493.15	2,000.00
12-29-46	P 568X	Intersection of Queensburg Road and Baltimore-Washington Boulevard in Riverdale	Improve intersection	38,919.41	1,974.93		40,888.77
12- 5-46	AA 368	Baltimore-Washington Freeway adjacent to Balto. City	Preliminary engineering	914,530.33	48,664.14	600.00	992,402.61
9-24-46	M 294X	Wisconsin Avenue at Oliver Street	Construct two combination "H" inlets	3,838.72		*	3,838.72
9-18-46	AA 292-1	Stony Creek Bridge	Acquisition of right-of-way	5,942.34		*	5,942.34
7- 9-46	Q 297	Centreville	Preliminary engineering	30.03		269.47	300.00
7- 2-46	A 184	National Pike 3 mi. west of Cumberland	Repairs to bridge	6,083.24	195.72	4,626.92	2,000.00
7- 2-46	A 372	Bridge over George's Creek at Carles Junction	Preliminary engineering	7,164.03	10.75		2,919.44
7- 2-46	F 380	Bridge over Tuscorora Creek—Harmout toward Lewiston	Preliminary engineering (additional costs)	47,223.73	39.63		500.00
7- 2-46	G 155	North of Oakland	Preliminary engineering	11,237.14		47,385.73	15,000.00
7- 2-46	P 190	National Pike—Keyser Ridge to Penna. State line	Preliminary engineering	17,674.76	47.54	*	1,871.92
7- 2-46	P 510	Silver Hill to T.B.	Acquisition of right-of-way	18,808.07	163.04		17,729.30
7- 2-46	Q 206	Bridge over Patuxent River at Laurel	Preliminary engineering	12,266.64	5,003.14		17,855.85
7- 2-46	Q 206	Between Queen Anne and Wye Mills	Preliminary engineering	22,239.54	80.40		21,402.21
7- 2-46	Q 224	Queen Anne's and Hillsboro By-pass	Acquisition of right-of-way	629,694.87	127.84	21,241.00	21,241.00
7- 2-46	W 133	Sandy Hook	Construction of bulkhead	209,225.20		*	629,694.87
7- 2-46	W 199	St. Mary's River at St. Mary's City	Construction of bridge over Potomac River	61.41			209,225.20
7- 2-46	W 204-1	Sandy Hook	652 mi. Construction of road approaches to bridge over Potomac River—concrete				100.00
7- 2-46	W 204-2	Sandy Hook	Extend pipe				5,527.16
7-24-45	A 371X	3 mi. west of Charysville	3,173 mi. macadam surfacing (additional costs)	117.70	528.94	*	1,757.87
6-19-45	AA 303-1	From bridge over Little Patuxent River westerly toward Laurel	Widening bridge	175,437.29	171,748.27	84,539.13	431,900.00
5 10 45	Q 197-1	Corcora River at Centreville	Preliminary engineering	14,534.55			14,758.55
12 14 43	A 285-2	Keyser, West Va. toward McCool	Preliminary engineering	26,052.31	37,107.85	119,356.27	185,455.90
12 14 43	B 392-1	Wilkins Avenue Extension Via Arbatus to Washington Boulevard	Preliminary engineering	28,174.85	3.60	2,155.44	30,334.03
12 14 43	F 425	Rockville to Monocacy River entrance to Frederick	Preliminary engineering	52,602.98	579.66	*	53,182.64
12 14 43	M 283	Laurel By-pass	Preliminary engineering	3,609.00		*	3,165.90
12 14 43	H 6 292-1	Marlboro By-pass	Preliminary engineering				
12 14 43	P 461-1	8 mi. from Sandy Point towards R.R.	Recovery account of project (previously closed) for 2,436 mi. concrete surfacing				
8- 4-43	P 519	Birdie Highway (received cash of \$3,699.00 from Cons. Gas El. Lk. & P. Co. in 1951)	Recovery account of project (previously closed) for 2,436 mi. concrete surfacing				
9-30-41	AA 198	Jessups and approaches, and 3 mi. north of Jessups Station to Waterloo	Recovery account of project (previously closed) for 508 mi. construction of grade separation and 1,256 mi. construction of concrete surfacing				
11-6-39	H 6 199	R.R.	Recovery account of project (previously closed) for 1,61 mi.—concrete surfacing				
6-19-41	P 385-1	Along relocation at Branchville from Edmonston-Greenbelt Road to Washington Boulevard (1952 expenditures, \$93,22; cash received from B. & O. R.R., \$11,074.86)	Recovery account of project (previously closed) for 1,61 mi.—concrete surfacing	218.76			10,552.78

GENERAL CONSTRUCTION AND OPERATING FUND  
STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED  
JUNE 30, 1951 AND 1952

Date Authorized	Project Number	Route Number	Location	Description	EXPENDITURES			Authorized to Complete Projects in Progress June 30, 1952	Total
					Work in Progress July 1, 1950	Fiscal Year 1951	Fiscal Year 1952		
6-5-41	P 300-1	Md. 202	Defense Highway towards Upper Marlboro (received cash of \$1,629.66 from U. S. R. R. in 1951)	Recovery account of project (previously closed) for 1.35 mi. concrete surfacing	\$	7,632.66	\$	7,585.98	
2-6-40	C. 164-1	Md. 272	Philadelphia Road Relocation towards Bayview (received cash of \$3,994.02 from B. & O. R. R. in 1952)	Recovery account of project (previously closed) for 1.066 mi. concrete surfacing and structure			3,991.02	3,991.02	
Prior to 6-30-40				Miscellaneous Projects					
	A 254	U. S. 40	Allegany Grove to Frostburg	Preliminary engineering	\$ 8,408.78	3,833.78	3,007.40	15,249.96	
	A 283-4		Certain properties at McCool	Preliminary engineering	16,293.72			16,293.72	
	A 283-10		Approaches to McCool Bridge	Right-of-way adjustments	3,264.83			3,264.83	
	A 359 X-1		Moscow Mills at George's Creek	Relocate poles	189.15		1,253.94	1,253.94	
	A 405 X-6	U. S. 220	Cresaptown toward McCool	Preliminary engineering			404.70	404.70	
	A 405 X-7	U. S. 220	Cresaptown toward McCool	Right-of-way adjustment			387.77	387.77	
	A 405 X-8	U. S. 220	Cresaptown toward McCool	Right-of-way adjustment			488.24	488.24	
	A 405 X-9	U. S. 220	Cresaptown toward McCool	Right-of-way adjustment			581.73	581.73	
	A 405 X-10	U. S. 220	McMillen Highway	Right-of-way adjustment			79.12	79.12	
	A 405 X-11	U. S. 220	Cresaptown toward McCool	Relocate water line		42.86	253.74	253.74	
	A 421-1	Md. 36	Lonaconing to Midland	Right-of-way adjustment	1,832.85			1,832.85	
	A 431 X	Md. 36	Cresaptown to Midland	Preliminary engineering	2,092.23			2,092.23	
			George's Creek Road at Mine Sink No. 1	Build up existing shoulders			2.12	2,094.35	
	A 440		Blje Bridge over Potomac River at Cumberland	Preliminary engineering			525.72	525.72	
	AA 262	Md. 2	Stony Creek Bridge	Preliminary engineering	18,725.84		398.06	19,123.90	
	AA 263-13		.5 mi. south of Parole northwesterly to Annapolis By-pass	1.207 mi. grading, drainage, and concrete surfacing			11,370.04	11,370.04	
		Annapolis By-pass	.5 mi. west of Parole to Admiral Drive	.488 mi. grading, drainage and concrete surfacing					
	AA 263-15	Md. 214	Weenas Creek to Church Circle	Construction (initial costs)	6,041.69	170.64	78.71	78.71	
	AA 341		Mayo Road northwesterly to Davidsonville Road	Preliminary engineering				6,212.33	
	AA 390-1	Md. 148	Balto. City line to Rock Creek	Preliminary engineering			631.44	631.44	
	B 587	U. S. 111	Harford Road to Belair Road	Preliminary engineering	5.83	195.60	1,000.13	1,201.56	
	B 610-3		North of Cockeysville—15 Mile Hill and 18 Mile Hill	Preliminary engineering		697.55	1,803.69	2,500.64	
	B 612 X	U. S. 40	Rolling Road	Conversion of flasher signal		1,691.80		1,691.80	
	B 613		Baltimore-Washington Expressway at Arbutus Underpass	Preliminary engineering	141.33		.73	632.77	
	B 616 X	Md. 7	Honeygo Run at Coventon	Preliminary engineering		4,818.93	781.07	4,037.89	
	C 197	Md. 416	4.5 mi. southeast of Lyon's Creek to Paris	Preliminary engineering	11,201.98	820.49	4,033.40	16,055.87	

C 197-2	Md. 251	Along Chesapeake Beach R.R. bed from Southern Maryland Boulevard toward North Beach	Construction (initial costs)										306.18
Co 179	Md. 480	Ridgely southwesterly on Md. 312	Preliminary engineering										894.97
Co 179-1	Md. 480	Ridgely southwesterly on Md. 312	—Reinforced concrete (initial costs)										161.73
Co 195	Md. 404	Choptank River Bridge at Greensboro	Preliminary engineering										9,433.27
Co 210	Md. 422	Curve modification south of Denton	Preliminary engineering										9,436.88
Co 215	Md. 422	Andersontown to south of American Corner	Preliminary engineering										13,161.34
C1 303-2	U. S. 140	Westminster By-Pass	Construction of dual steel I beam bridges (initial costs)										28,393.55
C1 303-8	U. S. 140	Bridge over Westminster By-Pass .4 mi. north of Westminster	Preliminary engineering										493.44
C1 304	Md. 26	West end concrete road to Eldersburg	Preliminary engineering										2,666.90
C1 317-2	Md. 30	Manchester to Pa. State line	Construction (initial costs)										4,451.82
C1 325	Md. 30	Intersection of Main St. (Md. 27) and Park Avenue in Mt. Airy	Preliminary engineering										212.79
Ce 290-3	Md. 282	Cecilton to Warwick	Adjusting facilities										314.65
Ce 318	U. S. 213	Chesapeake City towards Galena	Preliminary engineering										9,434.55
Ce 355	U. S. 213	Chesapeake City towards Galena	Alternations in channelization and third lane (initial costs)										393.71
Ch 264	Md. 3	Newburg southeasterly to Tompkinsville	Preliminary engineering										14,466.51
Ch 265	Md. 225	Md. 3 southeasterly toward Mason Springs	Preliminary engineering										9,552.50
Ch 270	Md. 533	Md. 3 toward Cobb Island	Preliminary engineering										2,949.33
Ch 272-1	Md. 231	Hughesville southeasterly toward Brunsford	6,299 mi. grading, drainage, and bituminous surfacing (initial costs)										7,614.50
Ch 280	Md. 226	Marshall Hall to Bryans	Corrupt drainage										364.57
D 102		Bridge over Slaughter Creek at Taylor's Island	Preliminary engineering										2,511.00
D 211	U. S. 50	West of Mt. Holly to Cambridge	Preliminary engineering										18,971.56
D 221	Md. 744 and (D 222)	Dorchester Avenue and Maryland Avenue in Cambridge	1,043 mi. bituminous concrete resurfacing, etc. (initial costs)										315.88
D 224-1	Md. 343	Cambridge toward Loyds	3,564 mi. grading, drainage, widening, and resurfacing macadam (initial costs)										3,805.66
D 233-1		Roadside	Preliminary engineering										145.94
F 425-7	U. S. 240	Relocated U. S. 240 interchanges	Preliminary engineering										340.54
F 498-2	Md. 31	Intersection with Md. 26	Construction of utilities on certain streets										99.12
F 510	F 522	Thurmond to Emdisburg	Adjustment to width on certain streets										81.87
F 522	U. S. 15	Thurmond to Emdisburg	Preliminary engineering										11,718.40
M 11	Md. 22	Albion toward Churchville	Widening and resurfacing (initial costs)										2,782.01
M 115	Md. 165	Bush's Corner toward Pylesville	Preliminary engineering										1,847.88
M 137	Md. 136	Dublin toward Macdon Road	Preliminary engineering										33.00
Ho 218-7	U. S. 29	Bridge over Patuxent River on the Chesapeake-Burtonsville Road	Construction of concrete substructure (initial costs)										702.59
K 189	Md. 289	Westertown to intersection Md. 664	Construction										1,525.18
M 350-2	U. S. 240	Montgomery Ave. toward Rockville	Preliminary engineering										4,467.18
M 461	Md. 110	Conus Road	Preliminary engineering										1,613.26
M 476	Md. 110	East-West Highway at Grubb Road	Installation of traffic signal										1,844.52
M 482	U. S. 210	Through Charlesburg	Preliminary engineering										2,929.30
M 491-N-1	Md. 135	Intersection of Connecticut Ave. and Kensington Parkway	Conversion of fixed time signal to fully actuated										313.91
P 522	Md. 500	Northwest Branch northwesterly to Columbia Avenue	Preliminary engineering										25.85
P 616	Md. 205	Bridge over Brier Creek on Edmonds-ton Road	Preliminary engineering										5,236.79

**GENERAL CONSTRUCTION AND OPERATING FUND**  
**STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED**  
**JUNE 30, 1951 AND 1952**

Date Authorized	Project Number	Route Number	Location	Description	Work in Progress July 1, 1950	EXPENDITURES			Total
						Fiscal Year 1951	Fiscal Year 1952	Authorized to Complete Projects in Progress June 30, 1952	
	P 712X		Intersection of Md. 5 and Md. 414 at Gordon's Corner	Installation of fully actuated traffic signal (initial costs)		\$ 1,408.79		\$ 1,408.79	
	Q 168-14	U. S. 50	.45 mi. east of Queenstown northwesterly and then easterly intersecting U. S. 213 2 mi. south of Centreville to a point .16 mi. east of U. S. 213	4.92 mi.—grading, drainage, and surfacing—reinforced concrete (initial costs)		214.39	8,291.64	8,506.03	
	Q 168-22	U. S. 50	1.8 mi. southwest of Md. 456 and extending northwesterly	.375 mi.—grading, drainage, and surfacing—gravel (initial costs)			136.00	136.00	
	Q 236	Md. 300	Church Hill to Sudlersville	Widening and resurfacing	\$ 1,950.99	104.65	1,655.63	400.61	
	Q 237	Md. 290	Chester River Bridge at Crumpton	Preliminary engineering	3,011.63	1,169.56	399.96	4,491.15	
	Q 255-2	U. S. 213	At intersection with Md. 300 in Church Hill southwesterly through Centreville	9.451 mi. resurfacing—bituminous concrete (initial costs)			793.30	793.30	
	Q 255-3	U. S. 213	Branch of Corsica River south of Chestertown; Branch, Granny Finley south of Chestertown; Branch of Island Creek, south of Chestertown	Widening and reconstruction of 3 bridges (initial costs)			678.66	678.66	
	Q 255X-4	U. S. 213	South of Centreville	Relocation of two curves—gravel surfacing (initial costs)			441.91	441.91	
	SM 188		Hurry Cross Road	Grade road (additional costs)		1,183.69	1.87	1,87	
	SM 286	Md. 242	Morgana southeasterly to Clements	Preliminary engineering	2,583.22	328.94	487.60	1,882.22	
	T 118	U. S. 213	Easton By-Pass to Easton Road	Preliminary engineering	3,270.00	25.32		3,598.34	
	T 130	Md. 309	Easton towards Cordova	Preliminary engineering	889.64		30.63	914.96	
	T 137-1	Md. 33	Oak Creek Bridge	Engineering survey by J. E. Greiner Co.				158.06	
	W 212-4		Harper's Ferry Bridge	Maintenance and cost of Rental from B. & O. R.R.	37,767.66	4,969.76		42,737.42	
	W 391	U. S. 40	Fredrick County line to Hagerstown	Preliminary engineering	13,044.54		1,166.25	11,878.29	
	W 393	U. S. 40	Clear Springs	Curb and gutter	685.16	912.87		1,598.03	
	W 414	Md. 572	Warfordsburg Road	Preliminary engineering		281.55	24.91	306.46	
	W1 133-8	U. S. 13	Leonards Mill Pond to Delaware State line	2.2 mi. grading, drainage, reinforced concrete surfacing (initial costs)			289.12	289.12	
	W1 249		Pa. R.R. at Md. 351 in Fruitland	Installation of flashing lights and short armgates	18,421.28			18,421.28	
	Wo 253	U. S. 50	Herring Creek to .3 mi. west of Md. 452	Preliminary engineering	11,168.10	465.86	213.50	11,200.46	
	Wo 321-1	U. S. 113	Bridges over South Branch, Middle Branch, Birth Branch, Carey's Branch, north of Berlin	Widening and reconstruction (initial costs)			1,761.28	1,761.28	
	AW 608		Erect control markers for Bureau of Control Surveys and Maps			21.19	124.24	145.43	

B 578-16	Md. 2	Construction of 3 span steel I-beam bridge (initial costs)	527.12	527.12	527.12
AA 401	Parole to Mt. Zion	Widening and resurfacing with several grade and curve revisions (initial costs)	9,823.06	181.12	15,246.11
Wo 223-1	Pocomoke City toward Virginia State line	Preliminary engineering (additional costs)	122.43	5,356.87	5,479.30
	Various	Miscellaneous projects	5,951.00	18.31	13,122.69
	TOTAL		\$36,075,541.37	\$34,066,614.67	\$157,016,654.07
SUMMARY					
7-1-51 to 6-30-52	Projects of the Fiscal Year 1952	\$ 139,346.72	\$ 485,845.32	\$ 8,106,808.87	\$28,087,431.51
7-1-50 to 6-30-51	Projects of the Fiscal Year 1951	1,387,946.43	9,540,823.51	14,899,013.01	35,496,121.21
7-1-49 to 6-30-50	Projects in Progress July 1, 1950	12,782,024.63	26,488,945.48	11,837,596.17	56,496,117.40
Prior to 6-30-49	Projects in Progress July 1, 1949	31,746,842.96	4,065,457.38	830,655.02	37,352,274.92
	Preliminary Costs, Etc.	296,347.46	40,918.14	101,447.10	432,712.70
	TOTAL	\$46,246,508.20	\$40,627,989.83	\$36,075,541.37	\$157,016,654.07

NOTES:  
Italics indicate red figures.  
Asterisks indicate completed projects.

MAINTENANCE FUNDSTATEMENT OF EXPENDITURES FOR THE FISCAL YEARS ENDED JUNE 30,  
1952 AND 1951

	FISCAL YEAR ENDED JUNE 30	
	1952	1951
<b>MAINTENANCE COSTS, DISTRICTS—SCHEDULE 1:</b>		
District No. 1	\$ 648,380.00	\$ 556,226.21
District No. 2	849,408.91	682,730.98
District No. 3	1,245,874.28	1,131,243.80
District No. 4	891,346.82	831,797.07
District No. 5	1,018,553.15	888,577.85
District No. 6	989,775.79	925,590.94
TOTAL	\$5,643,338.95	\$5,016,166.85
<b>MAINTENANCE COSTS, STATE-WIDE PROJECTS:</b>	65,448.31	30,867.91
TOTAL	\$5,708,787.26	\$5,047,034.76
<b>ACQUISITION OF CAPITAL PROPERTIES:</b>		
Lands and buildings	\$ 122,108.97	\$ 244,396.30
Engineering equipment	44,941.70	31,483.80
Office equipment	36,950.99	37,520.24
Road equipment	618,192.53	553,953.84
Shop, storeroom, and yard equipment	27,846.44	16,072.91
Transportation equipment	61,863.04	63,648.22
Snow fences	23,299.35	15,446.85
TOTAL	935,203.02	962,522.16
OCEAN CITY BEACH PROTECTION	49,742.20	10,397.58
<b>OPERATION AND MAINTENANCE OF PATUXENT RIVER TOLL BRIDGE:</b>		
Salaries and wages, including employees' benefits	\$ 15,204.54	—
Materials and supplies	3,888.43	—
Payments to Toll Facilities Division—for supervision	2,382.03	—
Miscellaneous expenses	3,995.30	—
TOTAL	25,470.30	—
Inventories Adjustments Applicable to Prior Periods	27,666.58	180,783.68
<b>Sign Permit Revenue Fund:</b>		
Salaries and wages	\$ 6,526.64	\$ 6,007.26
Traveling expenses	587.54	468.74
Passenger car operation	893.77	592.28
Numbered metal plates, etc.	—	2,130.92
Portion of administrative and general expenses	1,053.18	1,122.61
Portion of equipment service expenses	76.64	156.08
TOTAL	9,137.77	10,477.89
<b>TOTAL</b>	<u>\$6,700,673.97</u>	<u>\$6,211,216.07</u>

ITALICS INDICATE RED FIGURES.

**MAINTENANCE FUND**

**STATEMENT OF MAINTENANCE COSTS, BY DISTRICTS, FOR THE FISCAL YEAR ENDED JUNE 30, 1952**

	TOTAL	DISTRICT					
		No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
<b>DIRECT CHARGES:</b>							
Roads—Surfacing:							
Patching, Dragging, Base and Sub Base Repairs and Retirement...	\$1,097,208.05	\$83,383.63	\$126,058.13	\$272,758.29	\$189,996.98	\$240,209.27	\$184,801.75
Mud Jack Operation .....	837.09		303.31		146.45	387.33	
<b>TOTAL—ROADS, SURFACING .....</b>	<b>\$1,098,045.14</b>	<b>\$83,383.63</b>	<b>\$126,361.44</b>	<b>\$272,758.29</b>	<b>\$190,143.43</b>	<b>\$240,596.60</b>	<b>\$184,801.75</b>
Roads—Oiling:							
Bituminous Material Including Cost of Applying Cover Material, Including Costs of Applying Sweeping and Rolling .....	\$106,239.81	\$47,749.27	\$3,274.41	\$1,766.22	\$13,498.17	\$13,432.23	\$26,519.51
	461,860.93	59,135.75	161,001.65	73,362.14	25,821.63	112,675.76	29,864.00
	29,087.43	2,670.02	5,351.38	6,340.02	3,522.24	7,856.68	3,347.09
<b>TOTAL—ROADS, OILING .....</b>	<b>\$597,188.17</b>	<b>\$109,555.04</b>	<b>\$169,627.44</b>	<b>\$81,468.38</b>	<b>\$42,842.04</b>	<b>\$133,964.67</b>	<b>\$59,730.60</b>
Roads—Shoulders:							
Patching .....	\$536,378.90	\$119,209.75	\$84,653.36	\$144,094.28	\$102,575.29	\$53,203.15	\$32,643.07
Dragging .....	183,234.41	20,733.29	23,540.96	38,337.54	7,994.15	25,614.10	67,014.37
Retirement .....	41,909.20		38,838.08	1,258.60	46.84	315.96	1,449.72
<b>TOTAL—ROADS, SHOULDERS .....</b>	<b>\$761,522.51</b>	<b>\$139,943.04</b>	<b>\$147,032.40</b>	<b>\$183,690.42</b>	<b>\$110,616.28</b>	<b>\$79,133.21</b>	<b>\$101,107.16</b>
Roads—Drainage:							
Ditches, Drains, and Culvert Cleaning .....	\$512,554.97	\$24,414.04	\$56,088.62	\$105,823.34	\$103,591.31	\$158,295.06	\$64,342.60
Drainage Structure Repairs: (Including bridges not over 20 ft. span)							
Bridges and Culverts .....	\$64,235.82	\$15,431.99	\$13,393.38	\$12,239.81	\$5,469.01	\$3,143.46	\$14,558.17
Curbs and Gutters .....	183,234.41	254.08	1,115.76	4,122.43	1,530.80	1,044.42	2,206.64
Catch Basins, Spillways and Rip-rapping .....	25,373.57	3,181.75	705.43	7,979.36	5,675.90	5,493.24	2,337.89
<b>TOTAL—DRAINAGE STRUCTURE REPAIRS .....</b>	<b>\$99,883.52</b>	<b>\$18,867.82</b>	<b>\$15,214.57</b>	<b>\$24,341.60</b>	<b>\$12,675.71</b>	<b>\$9,681.12</b>	<b>\$19,102.70</b>
Structure Repairs (Other than drainage structures):							
Guard Rails .....	\$84,074.18	\$3,170.27	\$8,510.33	\$19,891.94	\$15,975.30	\$14,962.13	\$21,564.21
Retaining and Slope Walls .....	3,985.94	4.27	656.07	2,075.04	140.82	86.57	1,023.17
<b>TOTAL STRUCTURE REPAIRS .....</b>	<b>\$88,060.12</b>	<b>\$3,174.54</b>	<b>\$9,166.40</b>	<b>\$21,966.98</b>	<b>\$16,116.12</b>	<b>\$15,048.70</b>	<b>\$22,587.38</b>
Roadsides and Dividing Parkways:							
Cutting Grass and Clearing Vegetation .....	\$509,754.42	\$71,079.52	\$58,951.82	\$90,878.12	\$77,437.95	\$101,197.08	\$110,209.93
Highway Beautification .....	61,486.03	3,254.78	4,800.95	18,715.83	26,019.80	3,344.72	5,349.95
Widening, Fills, Cuts, and Resetting Fences, Walls, Borders, etc. Removal of Debris .....	50,560.51	8,865.40	10,455.20	23,813.68	600.46	2,416.32	4,409.45
	109,721.74	7,834.44	10,769.29	26,195.47	21,431.06	17,629.36	25,862.12
<b>TOTAL—ROADSIDES AND DIVIDING PARKWAYS .....</b>	<b>\$731,522.70</b>	<b>\$91,034.14</b>	<b>\$84,977.26</b>	<b>\$159,603.10</b>	<b>\$125,489.27</b>	<b>\$124,587.48</b>	<b>\$145,831.45</b>
Traffic Service:							
Highway Signs and Markers .....	\$227,718.13	\$19,422.86	\$25,451.54	\$54,905.71	\$48,216.95	\$42,958.39	\$36,762.68
Surface Markings and Guide Lines .....	184,924.36	2,860.30	7,550.99	49,785.17	35,252.87	33,285.95	56,189.08
Snow Removal .....	101,789.08	1,806.67	10,182.57	24,738.61	18,987.89	2,845.88	43,227.46
Ice Treatment .....	229,395.52	1,813.44	15,746.76	45,675.85	43,175.00	22,284.07	100,700.40
Traffic Count .....	11,818.35	1,604.36	1,160.14	2,496.24	3,410.76	993.25	2,153.60
Traffic Lights (operating costs) .....	44,730.73	1,172.56	4,344.45	13,960.90	14,273.58	10,433.80	545.44
Erecting and Dismantling Snow Fences .....	97,647.80	5,533.95	18,881.57	22,297.64	13,840.81	10,409.71	26,684.12
Flood Water Activity .....	10,398.50	86.61	832.44	3,050.15	76.39	4,736.29	1,616.62
<b>TOTAL—TRAFFIC SERVICE .....</b>	<b>\$908,422.47</b>	<b>\$34,300.75</b>	<b>\$84,150.46</b>	<b>\$216,910.27</b>	<b>\$177,234.25</b>	<b>\$127,947.34</b>	<b>\$267,879.40</b>
Bridges (Over 20 ft. span):							
Floors .....	\$12,747.13	\$3,937.12	\$2,515.72	\$2,445.48	\$845.83	\$752.98	\$2,250.00
Balustrades, Head Walls, Abutments, Piers, and Steel Superstructures .....	8,590.83	262.11	722.29	1,187.51	2,720.93	387.62	3,310.37
Painting .....	4,457.50	691.22	498.12	956.55	238.01	291.08	1,782.52
Lighting and Telephone Service .....	21,883.29	7,785.23	4,120.35	3,707.95	4,009.11	1,605.55	655.10
Operation Costs of Draw Bridges .....	134,745.99	54,783.69	49,018.20	24,503.25		6,440.85	
<b>TOTAL BRIDGES .....</b>	<b>\$182,424.74</b>	<b>\$67,459.37</b>	<b>\$56,874.68</b>	<b>\$32,800.74</b>	<b>\$7,813.88</b>	<b>\$9,478.08</b>	<b>\$7,997.99</b>
<b>TOTAL DIRECT CHARGES .....</b>	<b>\$4,979,624.34</b>	<b>\$572,132.37</b>	<b>\$749,493.27</b>	<b>\$1,099,363.12</b>	<b>\$786,522.29</b>	<b>\$898,732.26</b>	<b>\$873,381.03</b>
<b>INDIRECT CHARGES—PORTION OF ADMINISTRATIVE AND GENERAL EXPENSES .....</b>							
	663,714.61	76,247.63	99,915.64	146,511.16	104,824.53	119,820.89	116,394.76
<b>TOTAL .....</b>	<b>\$5,643,338.95</b>	<b>\$648,380.00</b>	<b>\$849,408.91</b>	<b>\$1,245,874.28</b>	<b>\$891,346.82</b>	<b>\$1,018,553.15</b>	<b>\$989,775.79</b>

MAINTENANCE FUNDSTATEMENT OF MAINTENANCE COSTS, BY DISTRICTS, FOR THE  
FISCAL YEAR ENDED JUNE 30, 1951

	TOTAL	DISTRICT					
		No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
<b>DIRECT CHARGES:</b>							
Roads—Surfacing:							
Patching, Dragging, Base and Sub							
Base Repairs, and Retreatment	\$1,187,949.64	\$ 72,070.93	\$120,889.92	\$ 324,336.03	\$208,341.21	\$209,707.06	\$252,604.49
Mud Jack Operation	675.35				327.49	337.87	9.99
<b>TOTAL, ROADS—SURFACING</b>	<b>\$1,188,624.99</b>	<b>\$ 72,070.93</b>	<b>\$120,889.92</b>	<b>\$ 324,336.03</b>	<b>\$208,668.70</b>	<b>\$210,044.93</b>	<b>\$252,614.48</b>
Roads—Oiling:							
Bituminous Material, Including Cost							
of Applying	\$ 169,091.29	\$ 49,343.75	\$ 31,962.16	\$ 4,628.28	\$ 19,118.32	\$ 39,872.32	\$ 24,166.46
Cover Material, Including Cost of Ap-							
plying	263,249.65	63,329.68	58,435.34	33,868.72	28,662.16	51,637.95	27,315.80
Sweeping and Rolling	17,609.07	2,329.45	2,925.28	1,291.10	1,888.66	4,192.17	4,982.41
<b>TOTAL, ROADS—OILING</b>	<b>\$ 449,950.01</b>	<b>\$115,002.88</b>	<b>\$ 93,322.78</b>	<b>\$ 39,788.10</b>	<b>\$ 49,669.14</b>	<b>\$ 95,702.44</b>	<b>\$ 56,464.67</b>
Roads—Shoulders:							
Patching	\$ 526,337.18	\$ 92,711.50	\$ 46,385.81	\$ 166,824.24	\$ 86,379.99	\$104,179.16	\$ 29,856.48
Dragging	150,303.60	16,390.46	26,349.83	36,064.56	6,350.43	21,475.28	43,673.04
Retreatment	63,091.70	123.87	48,137.12	1,781.91	1,277.34	38.86	11,732.60
<b>TOTAL, ROADS—SHOULDERS</b>	<b>\$ 739,732.48</b>	<b>\$109,225.83</b>	<b>\$120,872.76</b>	<b>\$ 204,670.71</b>	<b>\$ 94,007.76</b>	<b>\$125,693.30</b>	<b>\$ 85,262.12</b>
Roads—Drainage:							
Ditches, Drains, and Culvert Clean-							
ing	\$ 383,824.63	\$ 21,429.14	\$ 43,865.74	\$ 65,649.75	\$ 76,601.79	\$129,845.23	\$ 46,432.98
Drainage Structure Repairs: (Including							
bridges not over 20 ft. span)							
Bridges and Culverts	\$ 49,294.86	\$ 7,665.93	\$ 12,706.82	\$ 6,093.42	\$ 5,005.83	\$ 2,667.00	\$ 15,155.86
Curbs and Gutters	13,664.87		233.09	3,042.13	3,713.78	1,519.52	5,156.35
Catch Basins, Spillways, and Rip-							
rapping	19,781.50	1,496.22	2,408.52	4,632.90	5,787.99	2,704.77	2,751.10
<b>TOTAL, DRAINAGE STRUCTURE</b>	<b>\$ 82,741.23</b>	<b>\$ 9,162.15</b>	<b>\$ 15,348.43</b>	<b>\$ 13,768.45</b>	<b>\$ 14,507.60</b>	<b>\$ 6,891.29</b>	<b>\$ 23,063.31</b>
Structure Repairs: (Other than drainage							
structures)							
Guard Rails	\$ 72,296.56	\$ 1,100.02	\$ 5,487.84	\$ 12,414.50	\$ 18,993.56	\$ 13,574.36	\$ 20,726.28
Retaining and Slope Walls	4,889.05	2,062.75	1,425.48	782.02	307.89	12.05	298.86
<b>TOTAL, STRUCTURE REPAIRS</b>	<b>\$ 77,185.61</b>	<b>\$ 3,162.77</b>	<b>\$ 6,913.32</b>	<b>\$ 13,196.52</b>	<b>\$ 19,301.45</b>	<b>\$ 13,586.41</b>	<b>\$ 21,025.14</b>
Roadsides and Dividing Parkways:							
Cutting Grass and Cleaning Vegeta-							
tion	\$ 437,092.37	\$ 56,863.93	\$ 49,967.83	\$ 79,600.01	\$ 82,365.60	\$ 90,048.60	\$ 78,246.40
Highway Beautification	42,839.54	384.51	2,209.59	15,188.49	18,286.04	1,738.84	5,032.07
Widening, Fills, Cuts, and Resetting							
Fences, Walls, Borders, etc.	34,862.48	9.63	9,435.05	15,733.52	1,128.82	3,505.72	5,049.74
Removal of Debris	80,079.83	5,849.88	8,621.94	22,686.71	15,839.11	8,304.02	18,778.17
<b>TOTAL, ROADSIDES AND DIVID-</b>	<b>\$ 594,874.22</b>	<b>\$ 63,107.95</b>	<b>\$ 70,234.41</b>	<b>\$ 133,208.73</b>	<b>\$117,619.57</b>	<b>\$103,597.18</b>	<b>\$107,106.38</b>
<b>ING PARKWAYS</b>							
Traffic Service:							
Highway Signs and Markers	\$ 168,112.43	\$ 15,476.86	\$ 16,777.78	\$ 35,002.17	\$ 40,409.56	\$ 27,415.79	\$ 33,030.27
Surface Markings and Guide Lines	141,328.54	24,113.91	17,559.14	35,393.65	30,658.50	13,764.88	19,838.46
Snow Removal	95,635.57	132.19	1,899.86	23,183.51	9,494.87	5,262.05	52,663.09
Ice Treatment	258,646.94	3,322.02	21,927.96	56,079.24	45,406.92	34,757.99	97,152.81
Traffic Count	10,644.14	1,473.26	2,377.78	1,649.13	2,337.75	720.80	2,085.42
Traffic Lights (operating costs)	37,362.13	827.46	2,193.39	11,315.56	11,118.90	10,730.44	1,176.38
Erecting and Dismantling Snow							
Fences	89,110.59	5,083.58	14,339.97	21,976.64	14,295.21	9,420.55	23,994.64
Flood Water Activity	12,423.71	226.30	1,437.39	2,347.85	2,599.78	5,071.39	741.00
<b>TOTAL, TRAFFIC SERVICE</b>	<b>\$ 813,264.05</b>	<b>\$ 50,655.58</b>	<b>\$ 81,513.27</b>	<b>\$ 186,947.75</b>	<b>\$156,321.49</b>	<b>\$107,143.89</b>	<b>\$230,652.07</b>
Bridges (Over 20 ft. span):							
Floors	\$ 18,158.38	\$ 3,715.73	\$ 9,057.85	\$ 1,366.72	\$ 725.83	\$ 310.83	\$ 2,981.42
Balustrades, Head Walls, Abutments,							
Piers, and Steel Super-structures,	6,608.33	385.89	545.11	1,477.68	3,700.54	420.73	850.16
Painting	3,476.23	295.42	395.43	967.55	395.96	348.13	1,073.74
Lighting and Telephone Service	17,851.82	5,704.14	2,562.33	4,176.30	3,909.51	912.65	586.89
Operation Costs of Draw Bridges	117,059.59	45,848.33	46,292.51	23,333.27		1,585.48	
<b>TOTAL, BRIDGES</b>	<b>\$ 163,154.35</b>	<b>\$ 55,177.73</b>	<b>\$ 58,853.23</b>	<b>\$ 31,321.52</b>	<b>\$ 8,731.84</b>	<b>\$ 3,577.82</b>	<b>\$ 5,492.21</b>
<b>TOTAL DIRECT CHARGES</b>	<b>\$4,493,351.57</b>	<b>\$498,994.96</b>	<b>\$611,813.86</b>	<b>\$1,012,887.56</b>	<b>\$745,429.34</b>	<b>\$796,082.49</b>	<b>\$828,143.36</b>
INDIRECT CHARGES:—PORTION OF ADMIN-							
ISTRATIVE AND GENERAL EXPENSES	522,815.28	57,231.25	70,917.12	118,356.24	86,367.73	92,495.36	97,447.58
<b>TOTAL</b>	<b>\$5,016,166.85</b>	<b>\$556,226.21</b>	<b>\$682,730.98</b>	<b>\$1,131,243.80</b>	<b>\$831,797.07</b>	<b>\$888,577.85</b>	<b>\$925,590.94</b>

ITALICS INDICATE RED FIGURES.





**COUNTY MAINTENANCE FUNDS  
STATEMENT OF EXPENDITURES FOR MAINTENANCE OF COUNTY ROAD SYSTEMS  
FOR THE FISCAL YEAR ENDED JUNE 30, 1952**

	Total	Salaries, Wages, and Employees' Benefits	Materials						General Operating Expenses					Other	
			Aggregates Graded	Aggregates Ungraded	Lumber	Pipe and Pipe Bands	Bituminous and Other	Supplies	Rental of Automotive Equipment		Uses of SRC Equipment	Contractual			
									Hauling Materials	Direct Road Work					
<b>CALVERT COUNTY</b>															
Maintenance of roads—surfacing	\$ 44,279.34	\$ 28,994.15	\$ 390.75	\$ 1,922.75			\$ 1,725.23	\$ 10.66		\$ 11,235.80		\$ 7,256.60			
Maintenance of roads—oilting	10,811.71	2,563.11		288.60						673.40					
Maintenance of road shoulders	2,101.98	1,234.26	120.00	186.30			179.02	21.87		382.40					
Maintenance of road drainage	2,849.66	5,836.78					\$ 1,216.60	33.31		741.70					
Drainage structure repairs	7,010.39	3,222.39					74.90	30.37		594.94					
Maintenance of roadsides and dividing pathways	19,875.38	14,164.14		138.70			658.29	28.58		4,792.85					\$ 6.96
Traffic services	294.14	266.14								28.00					
Maintenance of bridges (over 20 foot span)	186.20				186.20										
Undistributed costs:															
Vacation and other leave, pension contributions, etc.	3,419.51	3,419.51													
Supplies, etc.—county equipment	1,625.21	323.81					96.60	1,173.20		13.60					18.00
General repairs, etc.	24.94	24.94													
Portion of administrative and general expenses	6,321.98														
<b>TOTAL</b>	\$ 103,800.74	\$ 60,079.23	\$ 510.75	\$ 2,536.35	\$ 3,205.27	\$ 1,876.65	\$ 2,201.88	\$ 1,264.38	\$ 403.14	\$ 37,834.89	\$ 18,462.69	\$ 7,256.60	\$ 10,517.44	\$ 4,656.94	\$ 338.85
<b>CAROLINE COUNTY</b>															
Maintenance of roads—surfacing	\$ 113,162.76	\$ 43,075.69	\$ 13,615.86	\$ 747.09	\$ 870.96										
Maintenance of roads—oilting (includes indicate a deduction resulting from materials returned to stock)	13,988.45	2,195.51	6,229.48				1,078.40			162.00					
Maintenance of road shoulders	319.61	264.64													
Maintenance of road drainage	13,320.16	11,108.24					\$ 59.44	17.76							
Drainage structure repairs	20,746.88	7,482.85	30.24	12.00	2,631.09		371.00	60.98		736.28				627.30	26.46
Maintenance of roadsides and dividing pathways	31,124.94	20,690.16	29.36				48.75	58.28		4,930.65					
Traffic services	756.72	618.97					1.35								
Maintenance of bridges (over 20 foot span)	12,693.19	877.83			5,225.33			26.83						4,454.92	
Undistributed costs:															
Vacation and other leave, pension contributions, etc.	12,951.94	12,951.94													
Supplies, etc.—county equipment	4,916.35	581.34					60.88	4,272.90							1.23
General repairs, etc.	2,573.14	2,424.75			18.35		9.84	13.80							76.41
Portion of administrative and general expenses	14,806.26														
<b>TOTAL</b>	\$ 241,360.10	\$ 101,671.92	\$ 19,904.94	\$ 759.09	\$ 9,045.73	\$ 7,886.58	\$ 362.98	\$ 4,548.24	\$ 43,663.82	\$ 20,000.93	\$ 2,135.00	\$ 10,039.16	\$ 15,341.71	\$ 14,806.26	\$ 15,341.71

CECIL COUNTY

Maintenance of roads surfacing.....	\$ 100,103.73	\$ 51,105.00	\$ 7,419.72	\$10,158.19	\$ 1.28	\$ 1,220.66	\$ 37.37	\$ 1,361.00	\$ 76.50	\$ 28,383.29	\$ 11,273.00	\$ 42.00
Maintenance of roads oiling.....	31,316.69	3,922.48	17,201.23	138.60			11.09			1,931.61		
Maintenance of road shoulders.....	1,033.31	1,111.11					.60			369.60		
Maintenance of road drainage.....	30,965.31	13,771.11			151.06	\$12,137.61	71.72			3,791.32		10.00
Drainage structure repairs.....	9,238.89	3,256.33			1,310.28		5.01			265.48		327.31
Structure repairs.....	130.31		109.42									
Maintenance of roadslides and di- viding parkways.....	15,251.21	11,731.49			43.37		248.87			2,945.41		199.24
Trade services.....	1,917.46	827.39			116.22		17.05			351.08		26.51
Maintenance of bridges (over 20 foot span)	11,758.52	3,641.92			6,127.68		34.29			734.43		
Undistributed costs:												
Vacation and other leave, pen- sion contributions, etc.....	16,177.26	15,380.10										1,007.16
Supplies, etc.—county equip- ment.....	611.32	1.92					598.83					9.97
General repairs, etc.....	1,460.30	134.82					17.33					945.37
Portion of administrative and general expenses.....	14,329.05											14,329.05
<b>TOTAL.....</b>	<b>\$ 233,786.39</b>	<b>\$ 106,193.07</b>	<b>\$ 21,733.37</b>	<b>\$10,596.79</b>	<b>\$ 7,779.89</b>	<b>\$12,137.61</b>	<b>\$ 1,042.10</b>	<b>\$ 1,361.00</b>	<b>\$ 157.50</b>	<b>\$ 38,769.25</b>	<b>\$ 11,273.00</b>	<b>\$ 16,986.61</b>
<b>CHARLES COUNTY</b>												
Maintenance of roads surfacing.....	\$ 79,800.11	\$ 47,992.42	\$ 374.00	\$ 3,104.10	\$ 11.47	\$ 198.50	\$ 131.56			\$ 17,977.43		
Maintenance of roads oiling.....	46,790.69	13,274.80	12,612.15				10.00			4,117.06		
Maintenance of road shoulders.....	2,377.29	1,652.42					5.37			719.50		
Maintenance of road drainage.....	36,921.25	27,293.13			1,482.30	5,000.02	113.53			2,982.01		
Drainage structure repairs.....	18,148.16	6,830.43			6,617.81	3,686.27	56.00			729.96		21.79
Maintenance of roadslides and di- viding parkways.....	11,229.70	11,233.70			1.75		43.07			2,942.18		
Trade services.....	72.74						6.50					66.24
Undistributed costs:												
Vacation and other leave, pen- sion contributions, etc.....	9,275.74	9,275.74										
Supplies, etc.—county equip- ment.....	1,266.12						1,246.25					18.00
Portion of administrative and general expenses.....	13,403.17											13,403.17
<b>TOTAL.....</b>	<b>\$ 222,275.97</b>	<b>\$ 117,462.64</b>	<b>\$ 13,016.15</b>	<b>\$ 3,401.10</b>	<b>\$ 8,415.20</b>	<b>\$ 8,911.85</b>	<b>\$ 1,612.88</b>	<b>\$ 29,108.17</b>	<b>\$ 1,612.88</b>	<b>\$ 29,108.17</b>	<b>\$ 16,716.68</b>	<b>\$ 13,509.20</b>

EXHIBIT II—Continued

**COUNTY MAINTENANCE FUNDS**  
**STATEMENT OF EXPENDITURES FOR MAINTENANCE OF COUNTY ROAD SYSTEMS**  
**FOR THE FISCAL YEAR ENDED JUNE 30, 1952**

	Total	Salaries, Wages, and Employers' Benefits	Materials					General Operating Expenses				Other					
			Aggregates Graded	Aggregates Ungraded	Lumber	Pipe and Pipe Bands	Bituminous and Other	Supplies	Rental of Automotive Equipment	Hauling Materials	Direct Road Work		Usage of SRC Equipment	Contractual			
<b>KENT COUNTY</b>																	
Maintenance of roads, surfacing	\$ 12,520.07	\$ 22,571.16	\$ 1,258.72	\$ 1,111.90	\$ 18.38		\$ 36.13		\$ 320.20		\$ 11,203.08		\$ 260.05				
Maintenance of roads, cutting	5,638.24	1,059.17	1,697.41								621.31						
Maintenance of road shoulders	202.13	119.85									52.28						
Maintenance of road drainage	11,462.28	9,409.84									2,052.11						
Drainage structure repairs	13,203.00	7,053.93			180.13	\$ 1,000.88	139.51		\$ 86.48		1,682.07						
Structure repair	61.39	61.39									2.10						
Maintenance of roadsides and ditching parkways	10,468.28	8,461.93									2,006.35						
Traffic services	322.78	217.68									105.10						
Maintenance of bridges (over 20 feet span)	912.21	781.61									113.38					\$ 11.22	
Undistributed costs:																	
Vacation and other leave, pension contributions, etc.	10,415.30	10,415.30															
Supplies, etc.—county equipment	34.70	34.70															
General repairs, etc.	912.39	901.11															
Portion of administrative and general expenses	6,183.00																6,183.00
<b>TOTAL</b>	\$ 100,318.80	\$ 61,127.93	\$ 2,956.13	\$ 4,111.90	\$ 198.71	\$ 4,060.88	\$ 175.64	\$ 86.48	\$ 320.20		\$ 20,815.11		\$ 260.05			\$ 11.22	
<b>QUEEN ANNE'S COUNTY</b>																	
Maintenance of roads, surfacing	\$ 58,731.74	\$ 46,551.75	\$ 656.73	\$ 719.64		\$ 68.24	\$ 1,728.16		\$ 265.79		\$ 8,437.12		\$ 271.01				
Maintenance of roads, cutting	14,085.56	1,120.52	15,831.89								511.26						
Maintenance of road shoulders	2,916.10	2,600.50									315.69						
Maintenance of road drainage	17,925.16	11,281.58									781.51						
Drainage structure repairs	18,217.54	2,499.06									356.57						
Maintenance of roadsides and ditching parkways	31,339.55	20,480.05									6,617.12						
Traffic services	820.45	716.35									71.10						
Maintenance of bridges (over 20 feet span)	30.90																19.99
Undistributed costs:																	
Vacation and other leave, pension contributions, etc.	16,924.92	16,924.92															
Supplies, etc.—county equipment	30,023.78	4,925.24		8.40	11.02	683.86	308.74										161.00
General repairs, etc.	2,068.18	1,459.95									24.78						584.05
Portion of administrative and general expenses	15,075.22																15,075.22
<b>TOTAL</b>	\$ 238,789.79	\$ 111,589.92	\$ 16,508.62	\$ 728.04	\$ 8,022.63	\$ 13,360.33	\$ 2,115.18	\$ 25,101.20	\$ 11.62		\$ 17,142.12		\$ 23,875.96			\$ 20.331.27	

ST. MARY'S COUNTY										
Maintenance of roads—surfacing.....	\$ 85,511.41	\$ 49,576.23	\$ 1,587.56	\$ 7,483.95						\$ 19,480.65
Maintenance of roads—oilings.....	17,281.78	2,499.45	3,240.28							862.91
Maintenance of road shoulders.....	9.87	9.71								3,073.46
Maintenance of road drainage.....	40,520.87	37,394.01								106.48
Drainage structure repairs.....	9,657.69	2,028.56			\$ 931.32	\$ 5,779.14	\$ 7,204.85	\$ 81.28		
Maintenance of roadsides and di- viding parkways.....	20,920.22	19,375.87								
Traffic services.....	88.63	53.32								
Undistributed costs:										
Vacation and other leave, pen- sion contributions, etc.....	18,424.66									
Supplies, etc.—county equip- ment.....	5,408.87				11.01		20.81	5,011.05		
Portion of administrative and general expenses.....	12,627.16									
TOTAL.....	\$ 299,554.19	\$ 129,361.97	\$ 4,827.81	\$ 7,483.95	\$ 975.33	\$ 5,779.14	\$ 7,345.75	\$ 5,570.39	\$ 21,930.32	\$ 10,652.31
SOMERSET COUNTY										
Maintenance of roads—surfacing.....	\$ 52,245.40	\$ 21,009.42	\$ 5,457.47	\$ 2,341.30	\$ 7.88		\$ 1,187.93	\$ 55.37	\$ 396.00	\$ 15,906.66
Maintenance of roads—oilings.....	23,871.89	5,085.39	6,426.87		3.81			83.60	118.50	2,387.05
Maintenance of road shoulders.....	15.57	7.77								7.80
Maintenance of road drainage.....	5,217.20	4,479.83						47.66	390.00	269.70
Drainage structure repairs.....	11,795.08	6,418.33				\$ 4,420.81	116.32	11.89		827.73
Maintenance of roadsides and di- viding parkways.....	13,889.51	8,743.75						91.22	2,070.12	852.69
Traffic services.....	165.40	119.66								15.41
Maintenance of bridges (over 20- foot span).....	20,806.87	3,387.61			11,891.33		1,111.96	55.36		863.24
Undistributed costs:										
Vacation and other leave, pen- sion contributions, etc.....	9,343.27	9,343.27								
Supplies, etc.—county equip- ment.....	1,178.68						21.20	1,157.48		
General repairs, etc.....	2,468.46	2,468.46								
Portion of administrative and general expenses.....	9,620.35									
TOTAL.....	\$ 150,620.38	\$ 63,763.53	\$ 11,884.34	\$ 2,341.30	\$ 11,906.05	\$ 4,420.81	\$ 2,767.41	\$ 1,505.58	\$ 3,404.32	\$ 10,556.14
										\$ 12,627.16
										\$ 12,627.16
										\$ 8,781.14
										\$ 1,559.68
										1,689.31
										9,620.35
										\$ 12,869.37

EXHIBIT II—Continued

**COUNTY MAINTENANCE FUNDS**  
**STATEMENT OF EXPENDITURES FOR MAINTENANCE OF COUNTY ROAD SYSTEMS**  
**FOR THE FISCAL YEAR ENDED JUNE 30, 1952**

	Total	Materials						General Operating Expenses						
		Salaries, Wages, and Employees' Benefits	Aggregates Graded	Aggregates Ungraded	Lumber	Pipe and Pipe Bands	Bituminous and Other	Supplies	Rental of Automotive Equipment		Usage of SRC Equipment	Contractual	Other	
									Direct Road Work	Materials				
<b>TALBOT COUNTY</b>														
Maintenance of roads—surfacing	\$ 105,100.17	\$ 31,127.52	\$ 8,298.11	\$ 5,379.15		\$ 661.89	\$ 116.32	\$ 21,802.20	\$ 24,237.63	\$ 15,156.85			\$ 1,393.50	
Maintenance of roads—filling (figures indicate a deduction resulting from materials returned to stock)	229.68	328.57	331.71											
Maintenance of road drainage	27,023.08	17,867.51			\$ 1,720.18	87.66	47.56	581.00	3,159.53	3,319.51	232.82			210.10
Drainage structure repairs	5,733.67	2,057.40			2,883.41	49.08	3.80	140.00	36.00	301.63				202.45
Maintenance of roadsides and dividing parkways	33,683.11	17,284.61			111.00	36.75	137.56	3,821.00	7,635.00	4,888.77				332.69
Maintenance of bridges (over 20-foot span)	1,670.05	286.18				7.70	211.25	30.00	30.00	41.60				868.50
Undistributed costs: Vocation and other leave, pension contributions, etc.	12,048.68	12,048.68												
Supplies, etc.—county equipment	4,816.86	871.12				320.19	3,025.55							10.50
General repairs, etc.	320.01	310.11												
Portion of administrative and general expenses	12,619.26													12,619.26
<b>TOTAL</b>	\$ 203,245.77	\$ 82,181.75	\$ 7,896.70	\$ 5,379.15	\$ 194.82	\$ 1,166.27	\$ 4,142.04	\$ 26,377.20	\$ 31,498.16	\$ 23,961.58			\$ 15,697.50	
<b>WICOMICO COUNTY</b>														
Maintenance of roads—surfacing	\$ 50,071.97	\$ 13,807.50	\$ 2,567.52	\$ 1,009.79		\$ 1,996.16	\$ 23.03	\$ 23,681.99	\$ 891.75	\$ 6,982.98				
Maintenance of roads—filling	87,132.12	13,026.29	22,207.67	6,043.79			78.31	3,132.48		5,808.60			\$ 35,943.27	
Maintenance of road shoulders	40,271.76	21,616.52					1.78			19,153.46				
Maintenance of road drainage	9,600.19	7,372.58				21.25	51.00			2,002.36				150.00
Drainage structure repairs	11,192.25	1,871.60				73.29	7.88			607.30				6.00
Maintenance of roadsides and dividing parkways	13,216.82	9,732.26					132.65			2,965.28				
Traffic services	317.81	290.81								57.00				
Maintenance of bridges (over 20-foot span)	17,607.42	2,512.83				992.91	65.20			186.03			6,600.00	2,601.81
Undistributed costs: Vocation and other leave, pension contributions, etc.	17,680.96	17,680.96												
General repairs, etc.	646.82	644.58				2.24								
Portion of administrative and general expenses	18,054.76													18,054.76
<b>TOTAL</b>	\$ 266,922.88	\$ 88,555.86	\$ 24,775.19	\$ 7,053.58	\$ 6,210.69	\$ 7,094.13	\$ 362.88	\$ 26,817.47	\$ 1,338.38	\$ 37,703.01			\$ 42,543.27	\$ 20,812.57

WORCESTER COUNTY												
Maintenance of roads—surfacing	\$ 56,309.60	\$ 21,685.20	\$ 4,469.75	\$ 1,302.46	\$ 70.00	\$ 1,619.83	\$ 64.05	\$ 11,409.08	\$ 603.75	\$ 15,673.73	\$ 20,641.25	\$ 15.00
Maintenance of roads—oiling	49,062.36	3,791.32	20,132.69	2.00			3.33	1,991.25		1,902.10		
Maintenance of road shoulders	5,298.17	2,023.01					1.67	2,357.35		912.48		
Maintenance of road drainage	9,252.57	7,313.44					23.32			1,784.88		49.08
Drainage structure repairs	12,389.33	4,746.73	96.60	3.50	329.91	117.79			255.00	1,114.85		
Maintenance of roadsides and dividing parkways	27,928.33	19,302.88			26.45	243.02	308.52		4,040.25	4,007.21		8.80
Traffic services	27,315.77	237.09				3.50				66.38		
Maintenance of bridges (over 20-foot span)	5,871.56	1,519.48			3,752.20	217.28	27.88			332.10		22.62
Undistributed costs:												
Vacation and other leave, pension contributions, etc.	18,522.13											
Supplies, etc.—county equipment	2,116.84	206.56					1,903.94			4.40		
General repairs, etc.	1,568.49	1,408.09										
Portion of administrative and general expenses	13,226.32											13,226.32
TOTAL	\$ 201,861.47	\$ 80,755.93	\$ 24,699.04	\$ 1,308.46	\$ 4,178.56	\$ 2,203.25	\$ 2,332.71	\$ 15,757.68	\$ 5,002.50	\$ 25,798.13	\$ 20,641.25	\$ 13,482.33
TOTAL	\$2,171,966.48	\$1,002,743.76	\$151,713.07	\$15,702.71	\$59,922.88	\$34,146.48	\$17,568.88	\$118,419.51	\$43,436.46	\$284,274.92	\$153,814.45	\$154,213.16

**COUNTY MAINTENANCE FUNDS**  
**STATEMENT OF EXPENDITURES FOR MAINTENANCE OF COUNTY ROAD SYSTEMS**  
**FOR THE FISCAL YEAR ENDED JUNE 30, 1951**

	Total	Salaries, Wages, and Employees' Benefits	Materials					General Operating Expenses					
			Aggregates Graded	Aggregates Ungraded	Lumber	Pipe and Pipe Bands	Bituminous and Other	Rental of Automotive Equipment		Usage of SRC Equipment	Contractual	Other	
								Hauling Materials	Direct Road Work				
<b>CALVERT COUNTY</b>													
Maintenance of roads—surfacing	\$ 36,506.48	\$ 23,508.91	\$ 223.25	\$ 1,598.25	\$ 4.34		\$ 2,027.98		\$ 9,035.72				
Maintenance of roads—rolling	19,373.33	6,053.67		169.05			.81		961.25			\$12,238.55	
Maintenance of road shoulders	1,009.08	6,714.82		24.75					268.46				
Maintenance of road drainage	7,213.60	5,490.31			5.73	\$ 1,015.83	23.03		20,779				
Drainage structure repairs	4,155.20	909.30			1,896.31	1,186.36	18.65		697.91				
Maintenance of roadways and dividing parkways	17,558.76	12,626.15			51.39				104.68	\$ 10.00			
Traffic services	308.04	290.01							4,826.45			18.00	
Undistributed costs:													
Vacation and other leave, pension contributions, etc.	2,805.98	2,805.98											
Supplies, etc.—county equipment	2,979.56	818.03					49.68					12.20	
General repairs, etc.	7.54	5.61											
Portion of administrative and general expenses	5,519.29												
<b>TOTAL</b>	\$ 97,430.86	\$ 53,272.35	\$ 223.25	\$ 1,732.05	\$ 1,906.38	\$ 2,253.58	\$ 2,119.55		\$ 15,927.67	\$ 10.00		\$ 12,238.55	\$ 5,554.53
<b>CAROLINE COUNTY</b>													
Maintenance of roads—surfacing	\$99,025.62	\$ 29,719.65	\$ 627.28	\$10,022.13					\$ 17,349.95				
Maintenance of roads—rolling	12,642.98	1,222.34	6,451.10						362.98			\$ 4,607.56	
Maintenance of road shoulders	2,063.35	1,382.99							682.76				
Maintenance of road drainage	7,276.35	6,252.84				\$ 383.80	6.90		1,092.46				
Drainage structure repairs	9,828.88	2,623.82			\$ 334.93	6,239.65	128.02		487.77				
Maintenance of roadways and dividing parkways	34,022.66	23,408.74							7,017.87				\$ 1,062.70
Traffic services	430.51	310.71							48.00				48.00
Maintenance of bridges (over 20 feet span)	4,600.99	417.78			3,175.50				89.40				896.91
Undistributed costs:													
Vacation and other leave, pension contributions, etc.	10,023.90	10,023.90											
Supplies, etc.—county equipment	2,908.61	91.71											
General repairs, etc.	2,068.33	1,695.32			30.37		4.58		19.90			11.20	
Portion of administrative and general expenses	11,121.95						131.50						
<b>TOTAL</b>	\$ 196,457.63	\$ 77,179.63	\$ 7,078.38	\$10,022.13	\$ 3,540.80	\$ 6,623.45	\$ 587.51		\$ 39,703.55	\$ 3,794.26		\$ 4,618.76	\$ 13,187.13



CECIL COUNTY

Maintenance of roads, surfacing	\$ 111,083.50	\$ 53,481.91	\$ 2,363.08	\$15,384.77		\$ 54.87	\$ 6,524.13	\$ 63.70	\$ 6,291.25	\$ 166.25	\$ 20,517.60	\$ 8,055.37
Maintenance of roads, oiling	34,403.88	2,337.19	10,263.36	1,051.33			13,398.73				129.23	
Maintenance of road shoulders	1,474.67	301.71									121.00	
Maintenance of road drainage	19,051.30	9,211.36	9.00		\$ 8.40	7,608.38	19.29	12.83			2,102.84	10.00
Drainage structure repairs	5,323.71	2,418.90			1,801.73	106.86	463.08	23.52			555.60	
Structure repairs	6.85						6.85					
Maintenance of roadsides and di-												
Viding parkways	21,425.60	17,401.70		9.50				335.75			3,976.77	
Traffic services	367.46	361.64					82.12	.36			109.66	
Maintenance of bridges (over 20-	6,294.91	2,237.30										
Foot span)							914.78	15.67			367.01	41.63
Undistributed costs:												
Vacation and other leave, pen-	15,176.55	15,176.55										
sion contributions, etc.												
Supplies, etc.—county equip-	149.52	123.43										
ment	135.15	10.15										
General repairs, etc.												
Portion of administrative and	12,900.35											
general expenses												
TOTAL	\$ 227,906.54	\$102,815.10	\$ 12,635.41	\$16,615.60	\$ 4,457.23	\$ 7,830.11	\$21,511.98	\$ 155.50	\$ 6,291.25	\$ 166.25	\$ 35,910.31	\$ 8,055.37

CHARLES COUNTY

Maintenance of roads, surfacing	\$ 71,295.99	\$ 40,216.81	\$ 1,666.59	\$ 2,416.15	\$ 111.81	\$ 157.25	\$ 9,446.41	\$ 100.25		\$ 178.43	\$ 17,150.63	\$16,085.50
Maintenance of roads, oiling	28,468.52	7,012.62	2,852.00	72.60				35.97			2,201.70	
Maintenance of road shoulders	1,331.69	909.43		15.00				2.76			104.50	
Maintenance of road drainage	28,769.53	21,698.19		25.20	1,170.65	3,518.43		117.25			2,299.81	
Drainage structure repairs	3,633.06	1,609.49			1,533.17	25.76	246.91	7.89			299.41	
Maintenance of roadsides and di-												
Viding parkways	17,214.60	13,176.27						127.55			3,910.78	
Traffic services	28.81	1.48										
Maintenance of bridges (over 20-	237.40	155.74										
Foot span)												
Undistributed costs:												
Vacation and other leave, pen-	10,210.88	10,210.88										
sion contributions, etc.												
Supplies, etc.—county equip-	2,051.56											
ment												
Portion of administrative and	9,791.72											
general expenses												
TOTAL	\$ 173,039.79	\$ 95,023.91	\$ 4,518.59	\$ 2,528.95	\$ 2,911.08	\$ 3,701.41	\$ 9,763.52	\$ 2,408.76	\$ 6,291.25	\$ 178.43	\$ 26,091.86	\$16,085.50

EXHIBIT I—Continued

**COUNTY MAINTENANCE FUNDS**  
**STATEMENT OF EXPENDITURES FOR MAINTENANCE OF COUNTY ROAD SYSTEMS**  
**FOR THE FISCAL YEAR ENDED JUNE 30, 1951**

	General Operating Expenses											
	Materials					General Operating Expenses						
	Total	Salaries, Wages, and Employees' Benefits	Aggregates Graded	Aggregates Ungraded	Lumber	Pipe and Pipe Bands, and Other	Bituminous	Supplies	Rental of Automotive Equipment	Usage of SRC Equipment	Contractual	Other
<b>KENT COUNTY</b>												
Maintenance of roads—surfacing	\$ 34,903.35	\$ 20,108.49	\$ 577.62	\$ 2,081.80				\$ 96.90	\$ 11,960.51		\$ 2,340.40	\$ 75.00
Maintenance of roads—oiling	8,848.62	2,214.22	3,545.24						748.76			
Maintenance of road shoulders	501.96	272.57	61.50					11.50	243.39			
Maintenance of road drainage	8,947.42	7,484.15							1,463.27			
Drainage structure repairs	5,558.43	2,866.80		\$ 979.51	\$ 906.90	\$ 149.13	\$ 29.85		626.74			
Structure repairs	222.89	194.69							28.20			
Maintenance of roadsides and dividing parkways	16,552.73	12,952.41							3,579.07			
Traffic services	185.89	134.19							17.20			
Maintenance of bridges (over 20-foot span)	2,238.58	25.90			1,015.28	4.50			5.40			1,192.00
Undistributed costs:												
Vacation and other leave, pension contributions, etc.	8,732.83	8,732.83										
General repairs, etc.	1,032.33	786.41			28.51	15.80						65.08
Portion of administrative and general expenses	5,268.95								136.50			5,268.95
<b>TOTAL</b>	\$ 93,084.48	\$ 55,772.66	\$ 4,122.86	\$ 2,146.30	\$ 2,023.33	\$ 906.90	\$ 169.43	\$ 51.10	\$ 111.40	\$ 18,839.07	\$ 2,340.40	\$ 6,601.03
<b>QUEEN ANNE'S COUNTY</b>												
Maintenance of roads—surfacing	\$ 65,855.27	\$ 45,280.14	\$ 961.26	\$ 3,772.65		\$ 145.28	\$ 3,029.37	\$ 248.79	\$ 1,482.00	\$ 415.00		\$ 10,511.48
Maintenance of roads—oiling	58,172.34	5,239.37	33,695.85									1,220.19
Maintenance of road shoulders	1,533.49	866.43			\$ 493.14		7.70	103.05	170.20			475.25
Maintenance of road drainage	13,750.29	7,238.54			17.91		177.25	2.88	37.06			1.56
Drainage structure repairs	2,357.11	678.26			1,450.87							10.79
Maintenance of roadsides and dividing parkways	26,565.83	21,480.44	36.36		8.39		56.92	376.99	4,363.18	240.00		3.55
Traffic services	656.79	506.89							149.90			
Maintenance of bridges (over 20-foot span)	29.07								6.27			22.80
Undistributed costs:												
Vacation and other leave, pension contributions, etc.	12,810.67	12,810.67										
Supplies, etc.—county equipment	18,540.42	2,374.32		106.50	13.46	74.50	15,808.44	8.30				110.00
General repairs, etc.	1,192.30	659.00										525.00
Portion of administrative and general expenses	12,091.98						\$ 6,079.53	\$ 10,548.45	\$ 1,482.00	\$ 655.00	\$ 18,016.93	12,091.98
<b>TOTAL</b>	\$ 213,555.56	\$ 97,143.06	\$ 34,693.47	\$ 3,879.45	\$ 1,983.80	\$ 3,345.74	\$ 6,079.53	\$ 16,548.45	\$ 1,482.00	\$ 16,958.73	\$ 18,016.93	\$ 12,769.40

ST. MARY'S COUNTY										
Maintenance of roads—surfacing	\$ 75,049.71	\$ 41,601.90	\$ 2,409.87	\$ 5,606.10	\$ 3,282.98	\$ 207.14	\$ 7,086.69	\$ 134.62	\$ 16,020.53	\$ 29,107.00
Maintenance of roads—odling	48,907.41	7,788.73	6,939.60					29,326	2,033.32	
Maintenance of road shoulders	1,482.28	1,246.91				\$ 4,525.80	233.28	70.25	254.00	
Maintenance of road drainage	13,400.29	11,430.18						50.80	732.72	
Drainage structure repairs	13,269.32	4,860.11							316.29	
Maintenance of roadsides and di-										
viding parkways	23,051.66	21,908.75					1.75	296.84	877.32	
Traffic services	1.38							1.38		
Undistributed costs:										
Vacation and other leave, pen-										
sion contributions, etc.	15,366.91	15,366.91								
Supplies, etc.—county equip-	4,170.36							4,170.36		
ment	20.69	20.69								
General repairs, etc.										
Portion of administrative and										
general expenses	11,680.99									\$ 11,680.99
TOTAL	\$ 296,364.20	\$110,224.18	\$ 9,348.87	\$ 5,696.10	\$ 3,282.98	\$ 4,732.94	\$ 7,321.72	\$ 4,724.44	\$ 20,244.98	\$ 29,107.00
SOMERSET COUNTY										
Maintenance of roads—surfacing	\$ 31,956.62	\$ 17,952.97	\$ 1,205.55	\$ 1,752.85	\$ 12.75		\$ 280.65	\$ 88.41	\$ 12,356.50	\$ 11,071.34
Maintenance of roads—odling	34,197.37	2,477.77	14,099.64					30.78	1,749.34	
Maintenance of road shoulders	1,317.32	710.56						40	386.50	
Maintenance of road drainage	5,462.74	4,386.12				\$ 7.05		47.33	469.74	444.50
Drainage structure repairs	19,157.72	6,981.22			1,052.12	9,737.27	52.15		1,222.16	
Maintenance of roadsides and di-										
viding parkways	8,621.60	6,682.33						61.08	1,090.69	
Maintenance of bridges (over 20-										
foot span)	21,270.21	2,761.25			12,100.00		1,127.84	39.26	1,006.31	1,700.00
Undistributed costs:										
Vacation and other leave, pen-										
sion contributions, etc.	9,391.05	9,391.05								
Supplies, etc.—county equip-	1,266.45	38.73								
ment	1,914.23	1,914.23						1,227.72		
General repairs, etc.										
Portion of administrative and										
general expenses	8,265.50									8,265.50
TOTAL	\$ 146,024.31	\$ 83,266.23	\$ 15,845.19	\$ 1,752.85	\$13,255.26	\$ 9,744.32	\$ 1,760.61	\$ 1,111.98	\$ 1,723.50	\$ 16,185.84
										\$ 10,246.93

EXHIBIT I—Continued

**COUNTY MAINTENANCE FUNDS**  
**STATEMENT OF EXPENDITURES FOR MAINTENANCE OF COUNTY ROAD SYSTEMS**  
**FOR THE FISCAL YEAR ENDED JUNE 30, 1951**

	Total	Materials										General Operating Expenses				
		Salaries, Wages, and Employees Benefits		Aggregates, Graded		Aggregates, Ungraded		Lumber	Pipe and Pipe Bands	Bituminous and Other	Supplies	Rental of Antimotive Equipment		Usage of SRC Equipment	Contractual	Other
												Hauling Materials	Direct Road Work			
<b>TALBOT COUNTY</b>																
Maintenance of roads - surfacing	\$ 85,703.92	\$ 28,990.26	\$ 4,499.67	\$ 5,791.45					\$ 126.15	\$ 16.37	\$ 21,112.90	\$11,088.50	\$ 13,058.79	\$ 385.78	\$ .75	
Maintenance of roads - oiling	2,312.89	101.32	2,178.63							4.11			25.80			
Maintenance of road shoulders	169.60	75.00											91.60			
Maintenance of road drainage	25,758.11	12,823.85							130.17	241.09	4,177.50	2,181.25	3,290.17			
Drainage structure repairs	134.82	106.02											28.80			
Structure repairs	151.90	136.16											15.11			
Maintenance of roadsides and ditches	11,381.17	22,111.58					7.50	61.40	119.61	211.85	1,115.50	9,180.75	1,993.91		213.31	
Viding parkways	136.92	257.32							87.00				92.60			
Maintenance of bridges (over 20 foot span)	628.25	66.00					2.13		18.32	8.11					533.66	
Undistributed costs:																
Vacation and other leave, pension contributions, etc.	9,890.51	9,890.51														
Supplies, etc. county equipment	4,851.16	811.76	15.51	156.30				18.40	7.32	3,815.17			9.50			237.57
General repairs, etc.	1,564.10	1,317.63														
Portion of administrative and general expenses	10,379.18															10,379.18
<b>TOTAL</b>	\$ 183,365.89	\$ 77,050.11	\$ 6,693.81	\$ 5,950.75	\$ 18.52	\$ 3,002.12	\$ 788.90	\$ 4,302.76	\$ 29,735.90	\$ 22,453.50	\$ 21,528.91	\$ 385.78	\$ 11,391.50	\$ 385.78	\$ 11,391.50	
<b>WICOMICO COUNTY</b>																
Maintenance of roads - surfacing	\$ 33,173.30	\$ 12,338.18	\$ 3,977.69	\$ 723.88					\$ 2,571.76	\$ 47.16	\$ 7,309.06	\$ 1,016.55	\$ 5,395.98	\$ 137.20		
Maintenance of roads - oiling	82,678.21	6,070.55	31,255.47							5.49	628.26	2,501.50	2,174.85	36,697.42		
Maintenance of road shoulders	37,078.61	19,539.46											16,811.18			
Maintenance of road drainage	8,512.26	6,909.48								52.18			1,518.85			
Drainage structure repairs	9,563.73	3,026.11							31.75				736.08			
Structure repairs	33.87	26.67							313.76				7.20			
Maintenance of roadsides and ditches	17,174.16	13,012.01								42.98		47.45	3,295.91		\$ 520.75	
Viding parkways	102.22	91.02											11.20			
Maintenance of bridges (over 20 foot span)	22,170.88	1,450.01							830.67	199.57				6,400.00	9,761.87	
Undistributed costs:																
Vacation and other leave, pension contributions, etc.	15,900.16	15,900.16														
General repairs, etc.	3.15	3.15														
Portion of administrative and general expenses	13,601.45															13,601.45
<b>TOTAL</b>	\$ 240,292.63	\$ 78,367.13	\$ 38,233.16	\$ 820.38	\$ 3,500.21	\$ 5,477.19	\$ 3,750.94	\$ 347.38	\$ 8,750.83	\$ 3,606.00	\$ 30,320.12	\$ 43,234.62	\$ 23,884.07	\$ 43,234.62	\$ 23,884.07	

WORCESTER COUNTY											
Maintenance of roads—surfacing.....	\$ 75,167.12	\$ 18,486.05	\$ 1,691.74	\$ 5,200.05	\$ 12.00	\$ 793.54	\$ 77.08	\$ 31,500.70	\$ 134.00	\$ 14,057.86	\$ 3,124.10
Maintenance of roads—oilings.....	43,994.25	4,428.33	18,206.30	.....	1.47	.....	2.64	2,647.06	172.50	1,724.88	16,811.07
Maintenance of road shoulders.....	1,189.26	608.55	.....	41.75	.....	.....	.....	220.93	38.88	279.15	.....
Maintenance of road drainage.....	3,940.94	3,200.43	.....	5.60	.....	20	2.95	.....	.....	731.76	.....
Drainage structure repairs.....	28,084.80	12,565.42	19.98	40.45	.....	61.23	23.59	63.75	60.00	3,490.11	.....
Structure repairs.....	58.04	48.84	.....	.....	.....	.....	.....	.....	.....	9.20	.....
Maintenance of roadsides and di- viding parkways.....	25,988.07	14,675.51	.....	.....	56.17	89.05	211.79	1,182.50	3,744.02	3,478.01	\$ 2,537.50
Traffic services.....	205.11	164.15	.....	.....	.....	.....	.16	.....	.....	40.80	.....
Maintenance of bridges (over 20- foot span).....	2,623.73	1,055.98	.....	.....	701.85	.....	385.52	.....	.....	432.56	9.00
Undistributed costs:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vacation and other leave, pen- sion contributions, etc.....	15,838.55	15,838.55	.....	.....	.....	.....	.....	.....	.....	.....	.....
Supplies, etc.—county equip- ment.....	2,751.29	397.89	.....	.....	.....	43.20	2,390.90	.....	.....	7.60	.....
General repairs, etc.....	950.63	787.33	.....	.....	.....	.....	.....	.....	.....	7.60	.....
Portion of administrative and general expenses.....	12,047.53	.....	.....	.....	.....	.....	.....	.....	.....	.....	156.00
TOTAL.....	\$ 212,839.71	\$ 72,290.03	\$ 19,918.02	\$ 5,287.85	\$ 771.49	\$ 11,862.61	\$ 1,245.87	\$ 35,714.94	\$ 4,149.40	\$ 24,259.53	\$ 19,944.17
TOTAL.....	\$1,990,397.00	\$872,404.45	\$159,311.04	\$56,462.11	\$97,651.08	\$62,274.49	\$52,395.80	\$124,400.11	\$36,676.34	\$253,550.40	\$170,212.92
											\$ 2,537.50
											9.00
											3.75
											156.00
											12,047.53
											\$ 14,744.78
											\$132,927.48

**COUNTY CONSTRUCTION FUNDS**  
**STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED**  
**JUNE 30, 1951 AND 1952**

Date Authorized	Project Number	Location	Description	Work in Progress, July 1, 1950	Fiscal Year 1951	Fiscal Year 1952	Authorized to Complete Projects in Progress, June 30, 1952	Total
<b>ALLEGANY COUNTY</b>								
7-29-47	A 381-1	Vocke Road from Allegany Grove southwesterly to Wheelster Road	.587 mi. grading, drainage, and surfacing—penetration macadam (additional costs)			\$ 447.26	*	\$ 447.26
8- 3-50	A 382-1	Mill Run Road from George's Creek northwesterly toward Garrett County Line	1.191 mi. grading, drainage, and surfacing—sandstone base course	\$ 521.45	\$37,887.11	38,685.39	\$ 10,676.69	\$7,770.84
6- 6-51	A 382X-2	Mill Run Road from George's Creek northwesterly toward Garrett County Line	11,400 sq. yds. double-armor coat—bituminous			4,422.28	*	4,422.28
4- 4-51	A 382-3	Mill Run Road from George's Creek northwesterly toward Garrett County Line	Moving poles		587.47		*	587.47
10- 4-50	A 423-1	Lower Town Creek Road from Flintstone toward Town Creek	.997 mi. grading, drainage, and surfacing—bituminous armor coat	4,754.05	7,086.32	40,291.57		52,731.94
1-30-52	A 423-2	Lower Town Creek Road from Flintstone toward Town Creek	Moving poles			1,018.83	631.17	1,650.00
3- 5-51	A 424-1	Williams Road from 1.85 mi. east of Md. 51 south-easterly toward Twigtown	.983 mi. grading, drainage and resurfacing—Macadam	6,848.44	11,752.99	80,684.30	102,533.58	201,819.31
5- 3-51	A 424X-2	Williams Road from 1.85 mi. east of Md. 51 south-easterly toward Twigtown	Adjustments to boardwalk to private property				17.25	17.25
			Total.....	\$ 12,124.14	\$ 57,913.89	\$165,549.63	\$113,858.69	\$ 349,446.35
<b>ANNE ARUNDEL COUNTY</b>								
11-10-48	AA 242-1	Friendship to Old Colony Cove	2.487 mi. grading, drainage, gravel surf. course	\$ 182,391.64	\$ 816.75	\$ 62.10	*	\$ 183,270.49
4-22-52	AA 242X-4	Friendship to Old Colony Cove	Regrading and surfacing with bank run gravel entrance to private property, and erecting 2700 lin. ft. of fence				\$ 2,035.50	2,035.50
			Preliminary engineering	6,843.13			*	6,843.13
			3.958 mi. grading, drainage, and surfacing—gravel surface course	6,558.70	6,333.43	40.83	*	12,932.96
			Preliminary engineering	8,779.87	112.23	473.49		8,448.61
			Right-of-way and other costs	5,570.05	4,091.05	14,607.92		24,269.02
5- 4-49	AA 412X	Bridge over Weems Creek	Preliminary engineering	1,305.04				1,305.04
1-10-52	AA 433	Anderson's Corner Road extending easterly from intersection of U.S. 301 and Md. 175 at Millersville	.38 mi. grading, drainage, and surfacing—gravel—bituminous surface treated			26,851.92	5,036.58	31,888.50
			Total.....	\$ 211,478.43	\$ 11,353.46	\$ 41,119.28	\$ 7,072.08	\$ 271,023.25
<b>BALTIMORE COUNTY</b>								
			Preliminary engineering (additional costs)				*	\$ 30.92
6- 9-48	B 470-2	Butler Road from north of Reisterstown extending easterly to Worthington Avenue	1.181 mi. grading, drainage, and surfacing—Macadam (additional costs)			\$ 30.92	*	71.76
4- 9-47	B 470-3	Bridge over Western Md. R.R. on Butler Road at Glyndon	Construction	\$ 313,313.22	8,773.74	141.98	*	322,228.94

9-24-46	B 470-4	Bridge over Western Md. R.R. on Butler Road at Glyndon	Lower water mains					\$ 29,515.02	29,515.02
3- 1-50	B 470X-7 B 614	Butler Road in Glyndon Bridge over Gwynns Falls on Painter's Mill Road	Right-of-way adjustment Preliminary engineering	206.66			321.55	*	206.66 342.15
			Total	\$ 313,519.88	\$ 8,866.10		\$ 494.45	\$ 29,515.02	\$ 352,385.45
5-11-50	Co 140-6	<b>CAROLINE COUNTY</b> Greensboro-Burrisville Road from Chapel Branch southwesterly to Bursville	2,219 mi. stabilization—bituminous base course	\$ 380.09	\$ 20,288.16			*	\$ 20,068.25
5-18-50	Co 140-7	Greensboro-Burrisville Road from Russell's Cross Roads southeasterly across Chapel Branch	1,067 mi. stabilization—bituminous base course	477.26	14,319.63			*	14,796.89
5-22-50	Co 179-1 Co 215-3	Ridgely By-Pass Along a relocation between Andersontown and Federalsburg	Miscellaneous costs 2.85 mi.—grading, drainage, and gravel surface course (share of State construction project)	13.31	44,081.19			*	13.31 44,081.19
5-15-52	Co 229X	Boyce Mill Road	1.65 mi. surface treatment			\$ 5,493.20		\$ 2,347.60	7,840.80
5-15-52	Co 230X	Hillsboro toward Griffin	2.25 mi. surface treatment			4,481.40		6,210.70	10,692.10
5-15-52	Co 231X	Nicholas to Greer's Crossroads	2.35 mi. surface treatment			7,528.69		3,638.51	11,167.20
			Total	\$ 870.66	\$ 78,688.98		\$ 17,503.29	\$ 12,196.81	\$ 109,259.74
9-17-41	Cl 293 Cl 257-1 Cl 279 Cl 316 Cl 316-1	<b>CARROLL COUNTY</b> Baclman Mills to Ebbvale Uniontown to Taneytown Baclman Mills—Melrose Road Six Bridge Road from Keynar-Appolds Road northerly to Frederick County line Six Bridge Road from Keynar-Appolds Road northerly to Frederick County line Awordale—Warfieldsburg Road from Md. 31 southwesterly toward Md. 407 Western Md. R.R. at Lineboro	Preliminary engineering Construction of roadway (additional costs) Preliminary engineering (additional costs) Preliminary engineering .424 mi. grading, drainage, and surfacing—Macadam 1.318 mi. grading, drainage, and surfacing—Macadam Flashing light signals	221.20	1,381.24	53.42 10.21		*	53.42 10.21 1,381.24 221.20
5-18-50	Cl 316-1			2,254.54	12,238.07			*	14,492.61
9-26-51	Cl 319-1			2,616.66	2,319.59		62,168.57	\$ 6,459.85	73,564.07
	Cl 323X				3,683.45		213.50	*	3,469.95
			Total	\$ 5,092.40	\$ 19,622.35		\$ 62,018.70	\$ 6,459.85	\$ 93,193.30
7- 2-47 6- 5-47	Ce 227-1 Ce 229-1	<b>CECIL COUNTY</b> Cherry Hill—Elk Mills Road Little Elk Creek northwesterly through Pleasant Hill to Bayview-Andora Road Elk Mills—Delaware Line Road Roads in Cecil County Cherry Hill—Elk Mills Road Farmington toward Calvert Road Indian Falls Road South Jones Corner Road Road connecting Md. 299 and Md. 282 Zion Road Farmington toward Barnes Corner Pleasant Hill—Providence Road Md. 299 east toward Delaware State Line Mill Lane U. S. 40 northwest toward Nottingham Dr. Jack Battle Swamp Road Warwick—Middleneck Road Red Hill Road Cathers Corner to Md. 274	Additional right-of-way cost 2,656 mi. grading, drainage, and surfacing gravel Preliminary engineering (additional costs) Preliminary engineering (additional costs) 15.65 mi. surface treatment 1.35 mi. surface treatment 4 mi. surface treatment 1 mi. surface treatment 1.4 mi. surface treatment 1.9 mi. surface treatment 1.2 mi. surface treatment 1.7 mi. surface treatment 1 mi. surface treatment 1.1 mi. surface treatment 1.1 mi. surface treatment 2.08 mi. surface treatment 7 mi. surface treatment 1.8 mi. surface treatment	10,577.39	18,414.69 3,900.32 1,111.30 1,571.48 1,001.49	25.44 150.53 1,304.87 49.23 1,348.13 1,701.61 2,770.89 405.28 3,181.87 33.66 4.24 1,429.55 8.48	10.62	*	25.44 28,992.08 3,450.85 2,416.17 1,020.71 2,349.62 3,560.63 2,915.89 4,326.58 3,587.15 2,585.82 2,836.78 2,625.17 5,147.76 3,097.80 1,971.00 5,702.40
4-20-50	Ce 283				25.44			*	25.44
6- 0-51	Ce 325X				18,414.69			*	18,414.69
6- 0-51	Ce 342X				3,900.32			*	3,900.32
6- 0-51	Ce 343X				1,111.30			*	1,111.30
6- 0-51	Ce 344X				1,571.48			*	1,571.48
6- 0-51	Ce 345X				1,001.49			*	1,001.49
6- 0-51	Ce 346X				1,214.28			*	1,214.28
6- 0-51	Ce 347X				1,701.61			*	1,701.61
6- 0-51	Ce 348X				2,770.89			*	2,770.89
6- 0-51	Ce 349X				1,555.69			*	1,555.69
6- 0-51	Ce 350X				3,181.87			*	3,181.87
6- 0-51	Ce 351X				33.66			*	33.66
6- 0-51	Ce 352X				4.24			*	4.24
6- 0-51	Ce 353X				1,429.55			*	1,429.55
5-15-52	Ce 360X				1,065.62			*	1,065.62
5-15-52	Ce 361X				1,260.93			*	1,260.93
5-15-52	Ce 362X				8.48			*	8.48
					1,836.87			\$ 1,836.87	1,836.87
					1,253.11			1,253.11	1,253.11
					717.89			717.89	717.89
					1,871.35			1,871.35	1,871.35

**COUNTY CONSTRUCTION FUNDS  
STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED  
JUNE 30, 1951 AND 1952**

Date Authorized	Project Number	Location	Description	Work in Progress, July 1, 1950	Fiscal Year 1951	Fiscal Year 1952	Authorized to Complete Projects in Progress, June 30, 1952	Total
<b>CECHE COUNTY—Continued</b>								
5-15-52	Ce-365X	Mechanics Valley	1 mi. surface treatment			1,093.70	1,722.40	2,816.10
5-15-52	Ce-361X	Town Point Road	1.1 mi. surface treatment			5.30	3,091.60	3,096.90
5-15-52	Ce-366X	Earleville to U. S. 213	1.3 mi. surface treatment			1,511.63	2,118.97	3,660.60
5-15-52	Ce-366X	Md. 283 toward Harcks Point	1.3 mi. surface treatment			1,536.63	2,121.27	3,660.90
5-15-52	Ce-367X	Appleton—Pennsylvania State Line Road	1.8 mi. surface treatment			2,319.82	2,718.98	5,068.80
		<b>Total</b>		\$ 10,577.39	\$ 32,672.66	\$ 33,602.87	\$ 18,727.25	\$ 95,580.17
<b>CHARLES COUNTY</b>								
3-20-52	Ch-274	Bridge over Mattawoman Creek on Sharpsville to Berry Road	Preliminary engineering			\$ 223.79		\$ 223.79
5-21-52	Ch-276X	Walters County Road	.95 mi. surface treatment			1,681.01	*	1,681.01
5-21-52	Ch-277X	Bumpy Oak County Road	1.2 mi. surface treatment			1,086.39	*	1,086.39
5-21-52	Ch-278X	Rapist Church County Road	.65 mi. surface treatment			981.85	*	981.85
5-21-52	Ch-279X	Joe Bowie County Road	2.9 mi. surface treatment			4,206.35	*	4,206.35
		<b>Total</b>				\$ 11,182.39		\$ 11,182.39
<b>DORCHESTER COUNTY</b>								
	D-230X	Dorchester County	Federal Aid apportionment—secondary program			\$ 1,500.00		\$ 1,500.00
	D-231X	Egypt Road	Surface treatment			7.11		7.11
		Rayswood Road from Middletown Road to Draw-bridge Road	Surface treatment			6.48		6.48
		<b>Total</b>				\$ 1,513.59		\$ 1,513.59
<b>FREDERICK COUNTY</b>								
		Frederick County	Federal Aid apportionment—secondary program		\$103,561.51	\$ 66,978.08		\$ 170,539.62
<b>GARRETT COUNTY</b>								
5-11-48	G-105-1	Loch Lynn to 1.5 mi. North of Gorman	2.405 mi. grading, drainage, and surfacing—Macadam	\$ 278,276.59	\$ 33,285.15	\$ 100.37	\$ 1,411.31	\$ 313,073.45
	G-233	Oakland—Grantsville Road	Preliminary engineering	30.85				30.85
		<b>Total</b>		\$ 278,307.44	\$ 33,285.15	\$ 100.37	\$ 1,411.31	\$ 313,104.30
<b>HARFORD COUNTY</b>								
1-18-50	H-15-1	Flintville—Cusketon Road	2.013 mi. grading, drainage, and surfacing—Macadam	\$ 81,155.66	\$13,209.00	\$ 67,191.14	\$ 9,918.71	\$ 271,474.51
4-26-50	H-319-1	Hickory southeasterly to Fountain Green	3.026 mi. grading, drainage, and surfacing—Macadam	13,187.75	94,197.14	52,781.55		160,169.44
		Crosswell southeasterly through Harford Furnace to Md. 7	Preliminary engineering	1,601.53	21.20	2.15	*	1,624.88
	H-324-1	Crosswell southeasterly through Harford Furnace to Md. 7	Preliminary engineering	1,077.20	31,571.41		*	32,648.61



II 349	Scarboro Road from Md. 410 toward Md. 136	Expenses in connection with resurfacing roadway				5.91			5.91
II 350	St. Mary's Church Road from Md. 24 to Md. 621	Expenses in connection with resurfacing roadway				2.76			2.76
II 351	Clermont Mills Road from Md. 65 toward Md. 24	Expenses in connection with resurfacing roadway				2.76			2.76
II 352	3 mi. north of Madonna northeasternly toward Md. 163	Expenses in connection with resurfacing roadway				5.51			5.51
II 353	High Point Road from Pleasantville to Winters Run	Expenses in connection with resurfacing roadway				5.94			5.94
II 354	Trimble Road from 1 mi. west of Md. 52 toward U. S. 40	Expenses in connection with resurfacing roadway				5.51			5.51
II 355	Clayton Road from Md. 461 toward Md. 7	Expenses in connection with resurfacing roadway				5.94			5.94
II 356	Shucks Road from Md. 136 north of Crosswell toward Fulton	Expenses in connection with resurfacing roadway				5.51			5.51
II 357	Earlton Road from Md. 155 toward U. S. 40	Expenses in connection with resurfacing roadway				5.51			5.51
II 358	Lapidum Road from 1 mi. south of Lapidum toward Md. 155	Expenses in connection with resurfacing roadway				5.51			5.51
II 359	Rock Run Road from Md. 161 at Level toward Rock Run	Expenses in connection with resurfacing roadway				5.93			5.93
	<b>HOWARD COUNTY</b>								
10- 6-48	Whiskey Bottom Road at U. S. 1, approximately 1 mi. northeast of Patuxent River extending northwesterly to Md. 216	2,081 mi. grading, drainage, and surfacing—bituminous	\$ 97,022.14	\$238,998.75	\$ 120,081.66	\$ 9,918.71	\$ 465,974.26		
8-23-50	Whiskey Bottom Road at U. S. 1 approximately 1 mi. northeast of Patuxent River extending northwesterly to Md. 216	2,081 mi. bituminous stabilization	\$ 62,729.24	\$ 6,485.69		*	\$ 69,214.93		
				19,107.18		*	19,107.18		
	<b>KENT COUNTY</b>								
K 168	Flatland Road near Chestertown at Md. 20 northwesterly toward Hanesville	Preliminary engineering	\$ 4,563.72	\$ 6.36		*	\$ 4,570.08		
K 168-1	Flatland Road near Chestertown at Md. 20 northwesterly toward Hanesville	2,254 mi. grading, drainage, and surfacing—gravel surface course	15,216.62	5,633.93	\$ 59.36	*	50,909.91		
K 168-2	Flatland Road near Chestertown at Md. 20 Northwesterly toward Hanesville	2,254 mi. stabilizing—bituminous base course surface course	421.33	18,849.32	94.70	*	19,365.35		
K 168-3	Flatland Road, 2.254 mi. northwest of Md. 20 near Chestertown toward Hanesville	1,458 mi. grading, drainage, and surfacing—gravel surface course	304.79		832.33	\$ 26,549.23	27,656.35		
K 182X	Roads in Kent County	2.76 mi. surface treatment				*	7,243.60		
K 182X	Intersection of Md. 292 at Redding's Corner northwesterly to Boulden's Corner	1,392 mi. grading, drainage, and surfacing—gravel surface course	3,484.18	3,629.12	32,612.63	4,843.35	41,466.65		
K 184-1	Intersection of Md. 292 at Redding's Corner northwesterly to Boulden's Corner	1,392 mi. surface treatment				2,001.88	4,575.90		
K 184-3	Intersection of Md. 292 at Redding's Corner northwesterly to Boulden's Corner	Relocating equipment				*	2,136.12		
K 184-4	Intersection of Md. 292 at Redding's Corner northwesterly to Boulden's Corner	Moving installations				44.80	44.80		
K 192	Intersection of Md. 299 at Sussexfras to Delaware Line	Preliminary engineering				3,856.05	3,856.05		
K 193	Intersection of Md. 299 and U. S. 213 at Absey to Delaware Line	Preliminary engineering				2,954.71	2,954.71		
K 195X	Bay Shore Road	2.5 mi. surface treatment				3,207.62	7,920.00		
K 196X	Edesville toward Crosby	1.65 mi. surface treatment				1,204.77	5,227.20		
K 197X	Stillpond Neck Road	2.1 mi. surface treatment				3,553.24	6,652.20		
K 198X	Hurlbrook's Corner to Gods	2.4 mi. surface treatment				3,586.77	7,603.20		
	<b>Total</b>		\$ 51,090.94	\$ 35,129.40	\$ 59,271.12	\$ 46,060.06	\$ 195,152.12		

**COUNTY CONSTRUCTION FUNDS**  
**STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED**  
**JUNE 30, 1951 AND 1952**

Date Authorized	Project Number	Location	Description	Work in Progress July 1, 1950	Fiscal Year 1951	Fiscal Year 1952	Authorized or Complete Projects in Progress June 30, 1952	Total
7-21-48	M 398	<b>MONTGOMERY COUNTY</b>						
11-29-50	M 464	River Road, 1.5 mi. north of Potomac toward Seneca Clopper Road beginning .5 mi. southeast of intersection of Md. 117 and Md. 118 and extending south-easterly to Clopper	3.375 mi. grading, drainage, and surfacing—Macadam (additional costs) 1.87 mi. grading, drainage, and surfacing—Macadam		\$ 84,673.98	\$ 191,257.07	\$ 47,672.97	\$ 323,604.02
		<b>Total</b>			\$ 84,673.98	\$191,257.07	\$ 47,672.97	\$ 323,604.74
7-31-41	P 419-1	<b>PRINCE GEORGE'S COUNTY</b>						
3-26-52	P 694 Ch. 274 P 704	Between Beltsville and Old Riggs Mill Road from Old Powder Factory Road Bridge over Mattawoman Creek on Sharpsville to Berry Road Bridge over Walker Mill Branch on Brookland Bridge Road near Laurel	2.624 mi. gravel surfacing, bituminous stabilization (additional costs) Preliminary engineering Preliminary engineering			\$ 41.34 237.89 271.11	*	\$ 41.34 237.89 271.11
	P 705 P 706-1	Bridge over Ifenson Creek on Brinkley Road Mayhew Road from Md. 458 to Md. 337	Preliminary engineering Miscellaneous costs			697.79 6.28		697.79 6.28
		<b>Total</b>				\$ 1,254.41		\$ 1,254.41
8- 4-48	Q 108-1	<b>QUEEN ANNE'S COUNTY</b>						
2-28-41	Q 113-1	Queen Anne—Starr—Centreville Road from 3 mi. north of Queen Anne toward Centreville Centreville toward Ruttsburg	2.324 mi. grading, drainage, and surfacing—gravel surface course (additional costs) 2.159 mi. soil cement—bituminous surfacing (additional costs)		\$ 149.62 369.93		*	\$ 149.62 369.93
	Q 154-1 Q 156 Q 238X Q 245X Q 246X Q 247X Q 248X Q 249X Q 250X Q 251X Q 252X Q 253X Q 254X Q 255X Q 256X Q 257X Q 258X Q 259X Q 260X Q 261X Q 262X Q 263X Q 264X	Millington—Crumption Road Church Hill—Barelay Road Roads in Queen Anne's County Carson Corner to Md. 392 Ingleside toward Roe Ruttsburg toward Bridgetown Barelay—Church Hill Road Wye Station toward U. S. 213 Starr Road toward U. S. 213 Ben Stevens—Blanco Road Roe toward Ingleside Md 313 to Ben Stevens Corner Wye Station toward Starr Ruttsburg—Bridgetown Road Powell Road Burrsville Road Ruttsburg toward Hope Perry's Corner toward Grasonville	Construction of roadway Preliminary engineering 11.65 mi. surface treatment 1.50 mi. surface treatment 1.55 mi. surface treatment 1 mi. surface treatment 1.25 mi. surface treatment .7 mi. surface treatment 2.2 mi. surface treatment 1.6 mi. surface treatment 1.75 mi. surface treatment .7 mi. surface treatment 1.65 mi. surface treatment 1.75 mi. surface treatment 1.7 mi. surface treatment 1.4 mi. surface treatment	\$ 266.11 269.49 15,538.98	115.96 9,581.38 2,147.73 1,967.06 1,624.55 1,800.97 985.39 3,305.00 2,260.29	1.18 191.05 197.41 143.29 179.10 100.40 684.58 210.30 2,800.95 5,373.98 1,989.42 4,982.78 5,227.20 5,087.47 5,345.44 243.82 3,821.17	*	392.07 270.07 25,119.46 2,338.78 2,164.47 1,767.84 1,980.07 1,085.79 3,989.58 2,470.59 2,810.10 5,373.98 1,989.42 5,227.20 5,087.47 5,385.60 243.82 3,942.60
		<b>Total</b>		\$ 16,073.68	\$ 241,307.88	\$ 36,850.80	\$ 664.48	\$ 77,896.84

7-12-50	S 76-1	<b>SOMERSET COUNTY</b> Rehobeth to Pocomoke Road beginning 1.5 mi. north of Rehobeth and extending northeasterly towards U. S. 13	1.999 mi. bituminous surfacing	\$ 273.66	\$ 20,351.51	*	\$ 20,625.17
9-20-50	S 76-2	Rehobeth to Pocomoke Road beginning approximately 3.4 mi. north of Rehobeth and extending northeasterly to U. S. 13	1.9 mi. bituminous surfacing and stabilization		17,012.29	*	17,012.29
8-30-46	S 151-1	Revel's Neck Road at U. S. 13 towards Revel's Neck	.964 mi.—stabilized base roadway (additional costs)		21.20	*	21.20
		<b>TALBOT COUNTY</b>	Total	\$ 273.66	\$ 37,385.00		\$ 37,658.66
4-26-51	T 141X	Goldshoro Neck County Road from Glebe Road to Airport Road	1.3 mi. surface treatment		\$ 2,798.62	\$ 3,725.42	\$ 6,524.04
4-26-51	T 142X	Abnshouse County Road from U. S. 50 to Trappe Station Road	1.5 mi. surface treatment		3,181.27	3,975.81	7,157.08
4-26-51	T 143X	Tappers Corner County Road from Tappers Corner, Md. 399 to Matthewsstown	5.4 mi. surface treatment		13,423.28	15,605.37	29,028.65
5-15-52	T 148X	Trappe toward Island Creek	2.4 mi. surface treatment		6,823.20	6,848.80	12,672.00
5-15-52	T 149X	Road from U. S. 50 to the Pa. R.R. near Md. 333	.4 mi. surface treatment		1,119.13	2,112.00	992.87
		<b>WASHINGTON COUNTY</b>	Total		\$ 19,403.17	\$ 31,248.93	\$ 6,841.67
10-25-50	W 407	Northern Avenue from U. S. 11 southeasterly to Iagerstown	.609 mi. resurfacing—bituminous concrete spec "B"		\$ 16,411.41	\$ 24.32	\$ 16,435.73
	W 409	Pinesburg Road from Williamsport toward Clear-spring	Construction of roadway		230.23	4.66	234.89
	W 418X	Williamsport—Downesville Road at Gower Station	Construction of railroad flashing signals			7.95	7.95
		<b>WICOMICO COUNTY</b>	Total		\$ 16,641.64	\$ 36.93	\$ 16,678.57
	Wi 145	Bridge on Powellville—Libertytown Road over Pocomoke River at Barbage	Preliminary engineering	993.01	\$ 148.40	\$ 13.04	\$ 1,154.45
6-25-47	Wi 232-1	From Md. 352, westerly via Capitola, toward Cox's Corner	1.679 mi. grading, drainage, surfacing—sand bituminous road mix (additional costs)		229.58	63.60	293.18
11-15-50	Wi 257-1	Barbage Crossing Road beginning at the Pocomoke River and extending northwesterly to Md. 354 near Powellville	1.261 mi. grading and drainage—bituminous surfacing	157.99	43,017.57	25,183.22	79,372.14
	Wi 269	Bateman Street south of Salsbury	Flashing light signals and gates			16.61	16.61
		<b>WORCESTER COUNTY</b>	Total	\$ 1,151.00	\$ 43,425.55	\$ 25,276.50	\$ 80,836.41
	Wo 285	2.7 mi. southeast of U. S. 113 towards U. S. 213 at Gray's Corner	Preliminary engineering	6,300.36	\$ 36.64		\$ 6,337.00
4-7-49	Wo 285-1	2.7 mi. southeast of U. S. 113 towards U. S. 213 at Gray's Corner	1.893 mi. grading and drainage	142,101.94	2,727.45	\$ 906.29	143,922.70
5-11-49	Wo 285-2	2.7 mi. southeast of U. S. 113 towards U. S. 213 at Gray's Corner	Acquisition of right-of-way	17.02			17.02
5-11-49	Wo 285-3	2.7 mi. southeast of U. S. 113 toward U. S. 213 at Gray's Corner	Moving facilities			80.48	80.48
5-11-49	Wo 285X-1	2.7 mi. southeast of U. S. 113 towards U. S. 213 at Gray's Corner	Moving equipment	431.96		411.46	843.42
4-5-50	Wo 285-5	1.1 mi. southeast of U. S. 113 towards U. S. 213 at Gray's Corner	1.562 mi. grading, drainage, and surfacing—stabilized base course	13,600.62	16,373.45	13,600.79	73,631.86
5-16-51	Wo 285-6	Gray's Corner at U. S. 213	Moving equipment		631.01		631.01

EXHIBIT J—Continued

**COUNTY CONSTRUCTION FUNDS**  
**STATEMENT OF PROJECT EXPENDITURES FOR THE FISCAL YEARS ENDED**  
**JUNE 30, 1951 AND 1952**

Date Authorized	Project Number	Location	Description	Work in Progress July 1, 1950	Fiscal Year 1951	Fiscal Year 1952	Authorized to Complete Project in Progress June 30, 1952	Total
8-16-51	Wo 285-7	2.7 mi. southeast of U. S. 113 toward U. S. 213 at Gray's Corner	Moving facilities			80.48	*	80.48
11-7-51	Wo 320	Burbage Crossing toward Libertytown	2.9 mi. scarifying, reshaping, stabilization and bituminous surface treatment			29,237.09	\$ 2,803.66	32,040.75
5-21-52	Wo 324	Whaleysville by-pass from Whaleysville to U. S. 50	Preliminary engineering			739.68	958.97	1,698.65
5-28-52	Wo 325	Ebenezer Church to U. S. 113	Preliminary engineering			2.80		2.80
5-28-52	Wo 326 X	Ironshire to Libertytown	4.7 mi. surface treatment			5.60	25,409.40	25,415.00
5-28-52	Wo 327 X	Public landing toward Boxiron	3.49 mi. surface treatment			5.60	18,969.40	18,975.00
5-28-52	Wo 328 X	Gardletree to Boxiron	2 mi. surface treatment			5.60	10,804.40	10,810.00
		<b>TOTAL</b>	<b>Total</b>	\$ 162,451.90	\$ 49,768.15	\$ 43,323.29	\$ 58,945.83	\$ 314,489.17
				\$1,225,762.90	\$921,290.52	\$908,622.08	\$370,928.72	\$3,426,604.22

\* Indicates closed projects.  
*Italics indicate red figures.*

STATEMENT OF ADMINISTRATIVE AND GENERAL EXPENSES FOR THE FISCAL YEAR ENDED JUNE 30, 1952

	Total	Salaries and Wages	Pay For Vacation, Sick, and Other Leave	Workmen's Compensation Insurance and Medical Services	Pension Contributions	Passenger Car Costs	Telephone, Telegraph, and Postage	Traveling Expenses	Rental of Land, Buildings, and Equipment	Supplies—Office, Laboratory, etc.	Insurance	Printing	Light, Heat, Power, and Water	Repairs		
														Miscellaneous	Salaries and Wages	Materials, Contractual Services, etc.
<b>GENERAL DIVISIONS:</b>																
Engineering—General Office	\$ 66,060.09	\$ 47,383.23	\$ 6,808.42	\$ 2,454.75	\$ 1,791.00	\$ 1,203.30	\$ 691.86	\$ 21.45	\$ 3,846.86	\$ 1,156.16	\$ 330.70	\$ 312.36				
Maintenance	67,018.73	41,812.55	9,457.27	3,260.11	3,453.31	2,954.84	1,454.51	1,909.45	1,901.88	1,029.96	1,037.95	73.90				
Special Operating (Prison Labor)	20,062.55	3,346.62	5,631.85	2,182.98	4,002.26	1,709.43	176.90	816.00	1,473.22	17.49	207.49	381.93				
Commission—Administration (Miscellaneous, \$55,881.67, includes professional and technical services, research work, etc.)	210,497.92	78,672.24	8,036.15	3,752.10	4,083.80	8,652.75	9,637.27	8,263.80	5,118.25	2,847.17	25,358.46	214.26				
Accounting	298,043.59	190,354.58	32,983.12	10,656.49	1,060.14	5,717.26	596.95	6,438.70	10,521.37	17.50	4,527.42	1,471.88				
Engineering—Chief	78,025.78	50,608.43	6,978.23	3,351.53	3,491.69	4,721.57	2,527.30	53.45	1,251.14	32.19	4,844.70	155.81				
Road Design	168,888.86	45,622.77	69,842.41	21,204.15	10,585.28	2,143.52	1,507.98	3,388.40	12,931.69	705.06	145.74	760.86				
Bridge Design	77,736.11	32,829.66	16,922.36	6,107.69	2,209.29	1,288.87	730.44	11,005.69	3,392.38	211.98	2,839.82	207.93				
Sign Shop (Baltimore)	25,188.11	9,677.46	8,505.04	2,211.32	1,893.12	388.18	938.43	713.35	713.35	16.29	231.04	52.86				
Materials	136,696.45	67,394.49	21,309.60	7,850.44	9,168.90	4,798.43	2,234.39	30.25	14,806.32	37.00	1,548.31	1,814.86				
Legal	35,911.91	30,191.97	928.49	603.47	1,774.51	432.85	667.49		819.50	16.29	439.25	18.09				
Repair Shop (Baltimore)	33,865.73	20,379.84	4,646.55	1,449.91	1,923.17	821.02	56.65		1,312.53	16.29	279.80	287.06				
Traffic—General	187,186.17	111,893.09	18,595.63	6,036.41	8,347.67	2,289.37	7,809.59	10,200.61	4,559.27	14,898.28	872.35	1,723.00				
Construction Inspection	223,940.41	20,447.54	143,995.89	48,276.03	7,670.83	990.33	4,412.62		1,124.11	16.29	609.71	146.54				
Right-Of-Way	147,060.68	68,555.60	32,739.07	11,518.32	23,291.45	4,119.31	1,186.27	25.70	4,649.65	219.06	1,216.03	94.05				
Personnel	58,701.38	12,651.93	1,942.42	563.76		897.11	48.27		526.05	16.29	4,381.08	6,311.94				
Office Building Service	50,618.21	24,544.57	2,194.91	818.84	10.27			258.00	3,061.14			406.90				
Highway Location and Survey	19,600.06	9,201.46	3,969.78	2,194.08	2,239.12	31.66	394.57		1,005.12	157.37						
<b>TOTAL</b>	<b>\$1,874,982.74</b>	<b>\$865,568.93</b>	<b>\$395,637.19</b>	<b>\$38,588.86</b>	<b>\$134,492.38</b>	<b>\$86,995.83</b>	<b>\$43,139.80</b>	<b>\$32,061.58</b>	<b>\$44,508.11</b>	<b>\$72,612.83</b>	<b>\$2,874.32</b>	<b>\$44,140.53</b>	<b>\$20,220.48</b>	<b>\$79,823.96</b>	<b>\$237.86</b>	<b>\$14,020.08</b>
<b>DISTRICT DIVISIONS:</b>																
District No. 1	\$ 125,909.31	\$ 58,084.15	\$ 34,022.05	\$ 13,658.74	\$ 7,113.64	\$ 5,301.19	\$ 1,030.85	\$ 853.00	\$ 2,073.67	\$ 1,161.51	\$ 8.89	\$ 754.80	\$ 1,876.82			
District No. 2	219,586.55	80,438.90	67,204.78	22,925.30	6,494.93	9,385.52	1,627.64	1,105.70	2,854.26	477.29	1,236.89	16,943.70	8,801.64			
District No. 3	271,988.14	107,641.39	94,479.11	31,918.14	6,815.11	6,395.09	2,132.39	11.60	4,306.62	636.23	149.25	9,789.82	4,283.87			
District No. 4	149,334.80	39,002.15	64,926.59	23,182.65	3,133.93	5,396.97	1,453.05	1,960.00	2,148.11	192.53	126.54	4,425.99	3,386.07			
District No. 5	241,025.45	92,021.71	96,950.77	30,492.35	5,014.08	8,024.74	2,286.87	1,300.60	2,488.74	7.45	1,578.54	2,017.09				
District No. 6	232,825.97	81,177.43	82,763.58	30,361.88	6,836.49	12,242.78	1,255.05	2,472.60	3,550.01	243.64	714.07	9,527.58	1,702.86			
<b>TOTAL</b>	<b>\$1,240,668.02</b>	<b>\$458,365.73</b>	<b>\$440,337.42</b>	<b>\$152,539.06</b>	<b>\$35,408.18</b>	<b>\$50,113.29</b>	<b>\$8,785.89</b>	<b>\$7,703.50</b>	<b>\$17,077.11</b>	<b>\$2,944.01</b>	<b>\$ 2,243.09</b>	<b>\$32,990.43</b>	<b>\$22,160.35</b>	<b>\$43,228.26</b>	<b>\$36,180.43</b>	

STATEMENT OF ADMINISTRATIVE AND GENERAL EXPENSES FOR THE FISCAL YEAR ENDED JUNE 30, 1951

	Total	Salaries and Wages	Pay For Vacation, Sick, and Other Leave	Workmen's Compensation Insurance and Medical Services	Pension Contributions	Passenger Car Costs	Telephone, Telegraph, and Postage	Traveling Expenses	Rental of Buildings, and Equipment	Supplies, Office, Laboratory, etc.	Insurance	Printing	Light, Heat, Power, and Water	Miscellaneous	Salaries and Wages	Materials, Contractual Services, etc.
<b>GENERAL DIVISIONS:</b>																
Engineering (General Office Maintenance)	\$ 59,337.09	\$ 42,381.34	\$ 5,941.27	\$ 2,192.68	\$ 2,976.64	\$ 1,213.18	\$ 1,955.21	\$ 698.74	\$ 422.40	\$ 2,585.85	\$ 59.11			\$ 1,627.35	\$ 259.96	
Special Operating (Prison Labor)	59,907.99	35,300.61	9,321.07	2,976.64	1,756.97	2,836.98	3,048.24	894.00	2,437.90	2,065.88	142.21			608.49	36.97	
Commission—Administration	11,363.32		3,811.87			3,134.88	7,683.83	380.30	46.50	1,317.53	121.04			12.15	13.25	
Accounting	211,218.52	68,544.73	6,035.96	8,398.16	3,381.36	3,219.70	6,928.63	4,860.20	9,822.52	1,897.70	69,053.02	\$17,227.32	\$ 2,329.97	10,663.32	959.97	
Engineering (Chief)	232,416.69	161,008.67	26,065.94	3,308.10	7,321.15	7,321.15	6,002.96	529.67	7,375.33	12,568.87	31.06			5,507.55	1,570.97	
Road Design	64,920.32	45,704.99	4,748.48	3,000.60	2,433.53	4,330.78	2,514.98	1,224.98	606.53	1,102.36	489.73			3,837.80	118.71	
Bridge Design	181,352.70	42,306.04	78,008.16	23,734.05	10,664.66	2,258.80	1,922.80	1,211.05	1,210.65	2,643.00	82.40			4,899.87	1,741.71	
Sign Shop (Baltimore)	87,074.27	36,000.87	19,297.98	6,363.39	1,782.81	1,541.61	1,541.61	1,004.02	13,650.04	2,643.00	109.42		23.09	4,899.87	403.22	
Sign Shop (Baltimore)	18,275.13	5,902.87	6,633.41	1,867.92	1,499.17	1,440.59	5,055.56	3,409.24	13,837.15	606.93	313.74		3,836.60	5,438.21	1,735.65	
Materials	124,998.92	57,488.44	18,565.80	6,961.46	8,397.07	1,660.85	5,055.56	3,409.24	13,837.15	606.93	313.74			5,438.21	930.60	
Legal	34,140.85	26,855.51	905.13	425.70	1,060.85	1,060.85	484.10	863.40	132.00	1,424.37	35.64			949.65	9.30	
Repair Shop (Baltimore)	29,948.54	16,150.05	4,475.41	1,317.16	1,517.29	538.51	538.51	41.10	140.25	1,682.31	179.00			245.71	253.99	
Traffic (General)	166,493.59	96,961.72	17,601.48	5,606.40	6,388.08	2,504.17	7,120.28	1,120.28	10,651.71	4,999.42	500.67			767.71	28.22	
Construction—Inspection	206,387.32	21,681.84	127,049.98	46,947.95	6,133.47	1,057.43	1,057.43	1,208.80	132.00	1,932.11	223.40			37.35	3.00	
Right-Of-Way	124,595.62	56,499.90	28,453.15	9,639.84	19,459.96	3,881.98	841.71	320.90	2,807.42	750.85				1,760.26	119.69	
Personnel	53,361.61	14,535.00	2,617.81	701.97	1,019.97	701.97	1,000.96	33.12	2,006.46	631.03				27.50	124.25	
Police Building Service	53,232.66	17,572.41	2,611.63	721.05	1,019.97	701.97	1,000.96	33.12	2,006.46	631.03				27.50	124.25	
Traffic—Truck Weight Enforcement (excluding expenditures in June, 1951, recoverable from Motor Vehicle Revenue Fund)	160,962.20	121,361.75	10,149.10	2,379.46	\$ 78,805.18	\$ 2,890.41	\$ 161.42	\$ 10,955.35	\$ 48,867.19	\$ 77,584.25	\$ 72,206.61	\$ 30,379.53	\$ 17,798.93	\$ 51,697.56	\$ 657.05	\$ 23,126.38
TOTAL	\$1,879,987.34	\$ 866,436.84	\$373,430.49	\$31,683.51	\$128,072.70	\$ 78,805.18	\$42,159.78	\$37,080.74	\$48,867.19	\$77,584.25	\$72,206.61	\$30,379.53	\$17,798.93	\$51,697.56	\$ 657.05	\$23,126.38
<b>District Divisions:</b>																
District No. 1	\$111,311.18	\$ 50,859.75	\$ 26,511.34	\$ 11,977.75	\$ 11,977.75	\$ 6,431.70	\$ 5,385.44	\$ 991.25	\$ 1,090.75	\$ 3,020.33	\$ 605.38			\$ 917.70	\$ 2,536.72	\$ 891.00
District No. 2	186,202.34	69,579.01	56,375.21	21,074.06	21,074.06	5,204.11	8,600.43	1,441.28	1,686.60	3,092.58	448.26			876.99	1,083.83	12,970.73
District No. 3	204,132.39	66,336.33	75,747.25	28,198.53	28,198.53	4,466.12	4,837.66	8.75	4,837.66	469.97	438.26			1,250.26	66.46	4,680.68
District No. 4	381,784.15	34,991.06	58,116.30	22,941.63	22,941.63	1,806.86	5,851.15	1,067.94	1,825.50	2,240.91	333.97			33.59	107.46	8,849.33
District No. 5	204,388.07	76,353.72	80,407.79	26,705.09	26,705.09	3,989.53	7,607.99	1,320.00	1,320.00	2,578.92	480.03			239.18	2,800.43	1,013.70
District No. 6	203,945.05	70,693.66	69,316.93	26,653.31	26,653.31	5,676.00	12,414.79	1,865.74	2,201.05	3,490.35	422.47			763.54	7,002.86	2,267.15
TOTAL	\$1,041,763.18	\$ 368,839.53	\$366,474.82	\$137,550.67	\$137,550.67	\$ 27,574.32	\$48,387.87	\$ 7,822.04	\$ 8,132.65	\$19,260.75	\$ 9,761.08			\$ 4,111.26	\$ 2,217.28	\$34,502.22
TOTAL	\$2,921,750.52	\$1,235,276.37	\$739,905.31	\$265,623.37	\$265,623.37	\$108,379.50	\$90,557.65	\$44,902.78	\$56,999.84	\$96,845.00	\$74,967.69	\$30,379.53	\$21,910.19	\$63,914.84	\$35,159.87	\$57,245.07

EXHIBIT M

STATEMENT OF OPERATING EQUIPMENT EXPENSES FOR THE FISCAL YEAR ENDED JUNE 30, 1952

	Total	District						State Wide
		No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	
Salaries	\$ 334,954.31	\$ 41,329.83	\$ 68,346.44	\$ 54,446.61	\$ 53,799.06	\$ 63,735.55	\$ 49,256.80	\$ 4,040.02
Insurance	13,552.50	1,722.56	2,747.69	2,008.03	1,623.07	2,362.98	2,726.51	361.66
Light, Heat, Power, and Water	18,774.34	993.18	3,991.47	4,187.03	3,051.29	3,117.76	3,433.61	
Rental of Land and Buildings	1,112.00	100.00	480.00				484.00	48.00
Telephone, Telegraph, and Postage	135.32		45.30	73.85				16.17
Traveling Expenses	955.75	10.05	263.96	126.50	183.00	190.00	53.60	128.64
Fuel Oil—Diesel	21,978.68	5,799.46	8,030.13	1,440.34	597.82	2,980.11	1,287.60	1,843.22
Gasoline	235,568.99	29,116.59	54,162.44	34,195.23	22,959.81	47,598.29	40,282.98	7,253.65
Kerosene	9,215.21	1,365.05	2,019.99	2,347.78	1,185.32	1,209.73	1,083.94	3.40
Lubricating Oil	13,793.60	2,509.38	3,930.25	2,006.49	849.98	2,210.95	1,837.57	448.98
Parts and Repairs	246,124.41	50,165.55	61,384.60	34,161.41	18,293.45	39,497.43	21,753.45	20,868.52
Shop Supplies	37,266.30	4,440.67	9,396.09	6,778.49	3,813.85	5,716.32	6,261.83	859.05
Tires and Tubes	91,083.31	13,751.67	23,608.05	11,906.08	8,654.97	17,160.39	12,496.75	3,505.40
Miscellaneous Expenses	7,049.92	641.82	1,995.69	999.30	860.00	755.91	1,331.37	465.83
<b>TOTAL</b>	<b>\$1,031,564.64</b>	<b>\$151,945.81</b>	<b>\$240,402.10</b>	<b>\$154,677.14</b>	<b>\$115,871.62</b>	<b>\$186,535.42</b>	<b>\$142,290.01</b>	<b>\$39,842.54</b>

EXHIBIT N

STATEMENT OF OPERATING EQUIPMENT EXPENSES FOR THE FISCAL YEAR ENDED JUNE 30, 1951

	Total	District						State Wide
		No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	
Salaries	\$318,729.07	\$ 34,161.42	\$ 62,952.85	\$ 71,027.19	\$ 52,093.37	\$ 56,313.17	\$ 39,158.49	\$ 3,022.58
Insurance	11,183.00	1,387.12	2,168.58	1,741.50	1,378.70	1,938.76	2,388.43	179.91
Light, Heat, Power, and Water	15,598.80	591.48	2,863.18	3,854.07	2,550.70	2,527.40	3,209.69	2.28
Rental of Land and Buildings	891.00	30.00	445.00				406.00	10.00
Telephone, Telegraph, and Postage	1,168.47	48.53	329.26	474.45	261.18	55.05		
Traveling Expenses	1,040.04	45.06	257.58	92.45	236.24	163.65		245.06
Fuel Oil—Diesel	24,124.73	6,902.39	7,121.78	1,427.61	2,285.58	3,777.26	1,418.02	1,192.09
Gasoline	238,874.72	29,397.12	52,429.13	32,866.33	23,551.32	49,242.43	45,788.44	5,599.95
Kerosene	9,751.82	1,178.40	2,119.42	2,730.29	1,098.81	1,253.05	1,359.72	12.13
Lubricating Oil	14,151.51	2,484.38	4,307.43	1,899.56	895.21	2,452.29	1,741.66	370.98
Parts and Repairs	241,606.12	45,792.88	55,186.58	33,043.26	19,667.11	33,947.88	39,943.46	14,024.95
Shop Supplies	29,271.70	2,842.29	6,599.45	4,249.46	3,707.13	5,723.42	5,926.84	223.11
Tires and Tubes	62,609.83	10,755.11	13,673.65	10,783.00	5,194.02	11,722.19	8,628.13	1,853.73
Miscellaneous Expenses	7,221.31	1,192.40	1,258.93	1,714.81	598.89	985.67	1,448.62	21.99
<b>TOTAL</b>	<b>\$976,222.12</b>	<b>\$136,808.58</b>	<b>\$211,712.82</b>	<b>\$165,903.98</b>	<b>\$113,518.26</b>	<b>\$170,102.22</b>	<b>\$151,417.50</b>	<b>\$26,758.76</b>

COMBINED STATEMENT OF EXPENDITURES, BY OBJECTIVE CLASSIFICATION, FOR THE FISCAL YEAR ENDED JUNE 30, 1952  
(INCLUDING ALL FUNDS EXCEPT SUSQUEHANNA RIVER TOLL BRIDGE, POTOMAC RIVER TOLL BRIDGE, CHESAPEAKE BAY BRIDGE, AND CHESAPEAKE BAY FERRY SYSTEM)

	General Construction and Operating Fund						Maintenance Fund	Counties and Municipalities Tax Revenues Allocation Fund	County Maintenance Funds	County Construction Funds	Bonded Debt and Debt Service Funds
	Eliminations	Administrative and General Expenses	Equipment Service Costs	General	General Construction						
	Other Than Repairs	Repairs									
<b>SALARIES, WAGES, AND EMPLOYEES'</b>											
<b>DEBTS:</b>											
Staff salaries	\$1,173,649.99		\$17,065.00	\$94,668.08	\$1,719,012.13	\$173,712.42		\$4,781.31	\$52,927.83		
Contract salaries	86,327.41	\$21,619.83	248,004.13	23,278.35	59,068.19	1,118,155.80		522,428.03	7,530.05		
Hourly labor	63,057.26	21,008.46	69,785.18	84,567.54	58,737.84	1,382,463.96		331,132.21	9,041.35		
Sick leave	186,297.53			1,962.04		162.84		21,379.41			
Vacation leave	357,285.18			4,601.60				34,028.97			
Military leave	9,230.01			401.15				152.67			
Holiday or other leave	373,879.53			8,517.15		31.56		42,375.54			
Medical services	2,938.65					5.00		12,455.02			
Workmen's compensation insurance	45,147.01							33,390.60			
Pension contributions	287,031.44			4,309.66		351.82					
								154.75			
<b>MATERIALS:</b>					519.80			138,011.24	62,470.76		
Additive with bituminous material											
Aggregate, graded stone, slag, gravel, sand, and screenings		1,696.88		23,021.71		417,534.79					
Aggregate and graded bank-run gravel and sand	46.50		1.86	1,735.33		51,713.33		61,313.23			
Bituminous materials			523.36	1,391.14		129,288.16		16,578.02	1,498.98		
Brick						37.33		631.38			
Cable						166.25		80.64			
Calcium chloride (salt)						532.80		1,163.79			
Cement						1,540.70		3,004.57			
Cinders						9.00		546.32	6.00		
Coarse						403.75		361.40			
Crusher-run stone and slag						193.94					
Lumber						756.11		323.40			
Highway beautification						3.80		13.50			
Paint	227.77	2,264.62	1,053.27	6,301.73	20,404.31	12,639.34		57,044.31	131.78		
Pipe and pipe bands	45.64		153.08	1,903.41		71,207.74		78,825.66	108.64		
Pre-mixed bituminous material			35.48	2,208.63	58,098.69	31,969.74		8,265.66			
Steel and iron				7.80		9,691.25		127.62			
Wire						1,085.02		8,268.51			
Miscellaneous	40.28	1,005.19	1,069.03	3,665.67	18,587.39	6,031.05		612.88	44.19		
	33.30	2,883.19	1,134.26	18,832.82	15,105.03	51,678.47		3,655.90	3.70		
<b>SUPPLIES:</b>											
Diesel or fuel oil											
Gasoline	28,159.49		21,978.68	6.00	3,029.00	1,370.46		1,772.27			
Grader blades and chains	254,119.42		265,568.99		917.16	1,200.00		16,373.27			
Kerosene	14,142.47		9,873.70		1,730.20	738.61		1,799.90			
Laboratory and traffic equipment supplies	13,782.51	45.93	9,215.21	17.98	1,042.55	2,317.44		1,047.37	14.60		
Lubricating oil	46,038.17	66.76	13,793.60	2,833.40	18,812.75	9,718.58		1,115.96			
	15,180.99			98.45		142.98					



Office building service supplies.....	4,613.38	4,237.13	201.00	6.00	844.19	4.10	171.15	66.00
Office supplies.....	65,003.80	58,338.41	265.45	235,925.71	.....	3,118.00	3,230.30	16,637.40
Parts and repairs.....	253,763.19	.....	.....	.....	.....	442.41	492.22	.....
Small tools and miscellaneous road supplies.....	33,149.21	1,801.03	260.83	7,520.42	275.58	5,945.50	14,207.23	2,980.34
Shop supplies.....	32,529.74	1,111.12	239.78	29,745.88	2.19	114.80	733.05	582.92
Snow plow blades and parts.....	2,064.98	.....	.....	325.00	.....	.....	2,630.01	97
Tires and tubes.....	96,746.80	29.16	.....	91,053.31	.....	.....	151.55	5,182.87
Miscellaneous.....	15,761.20	9,400.07	267.32	3,129.43	982.72	950.63	1,022.08	8.95
GENERAL OPERATING EXPENSES:								
Advertising.....	27,765.14	1,904.00	.....	.....	.....	21,081.30	3,979.09	800.75
Books, subscriptions, and dues.....	2,513.11	2,513.11	.....	.....	.....	.....	1,134.50	1,097.16
Insurance.....	18,658.48	2,874.32	.....	13,552.50	672.50	299.74	34,626.19	410.75
Laundry service.....	1,157.21	463.84	93.51	20.87	.....	.....	.....	.....
Light, heat, power, and water.....	77,279.02	23,104.49	.....	18,774.34	.....	.....	.....	.....
Office cleaning service.....	1,180.19	1,180.19	.....	.....	.....	.....	.....	.....
Office meal allowance.....	25,897.17	9,870.57	.....	.....	.....	.....	.....	.....
Passenger car costs.....	133,622.65	122,404.01	126.09	10,637.50	180.00	15,712.00	72.60	2.00
Photostats, blueprints, and films.....	15,797.58	12,545.45	.....	39.08	.....	.....	1,081.14	.....
Printing.....	32,087.72	31,861.38	.....	228.87	.....	2,906.07	29.98	.....
Professional and technical services.....	295,651.21	143.65	.....	292.75	.....	.....	63,910.72	5,088.25
Rental of automotive equipment for hauling materials.....	56,666.74	28,844.91	.....	.....	.....	.....	241.18	337.25
Rental of automotive equipment for direct road work.....	410,818.53	.....	.....	2,492.66	.....	208,044.52	81,315.37	117,353.58
Rental of land and buildings.....	309,765.10	44,789.46	100.00	891.00	.....	183,237.24	72,569.40	43,506.46
Rental of office equipment.....	48,866.60	40.00	.....	1,112.00	.....	1,734.14	230.00	941.00
Repair services (purchased) other than road equipment.....	7,510.15	7,482.15	.....	.....	.....	.....	.....	.....
Telephone, telegraph, and postage.....	39,066.99	599.97	20,530.96	15.75	1,278.69	1,579.17	4,529.46	10,522.99
Traveling expenses.....	96,487.50	93,253.09	.....	135.32	1,117.91	1,411.19	475.15	92.84
Payments to contractors—oiling roads, painting bridges, etc.....	285,390.27	40,847.43	1,080.70	955.75	9,374.78	219,788.35	7,539.15	366.22
Signs and markers (Includes manufacturing cost of signs and markers withdrawn from stock).....	473,112.37	.....	.....	.....	30,990.59	1,139.37	236,479.52	149,071.08
Research work.....	77,100.61	304.96	42.94	.....	89.50	14,516.03	62,005.65	95.53
Radio and television broadcasts.....	18,976.84	18,976.84	.....	.....	.....	.....	.....	.....
Uniforms.....	3,770.00	3,770.00	.....	.....	.....	.....	538.00	.....
Payments to Toll Facilities Division for administration.....	538.00	.....	.....	.....	.....	.....	.....	.....
Other.....	2,382.63	12,823.44	2,550.00	171.43	139.80	3,498.54	2,382.03	2,605.90
UNALLOCABLE RECEIPTS APPLIED IN REDUCTION OF EXPENDITURES:								
Payments to contractors—construction projects.....	3,369.86	.....	.....	.....	.....	.....	3,369.86	.....
Right-of-way payments.....	28,403,290.40	.....	.....	.....	2,941.00	27,806,938.69	29,215.81	567,135.90
Professional and technical services.....	2,100,340.43	.....	.....	.....	.....	2,073,529.86	7,999.17	15,483.00
Relocating power lines, etc., upon acquisition of rights of way.....	284,969.18	.....	.....	.....	.....	284,969.18	.....	.....
Purchases of fixed assets (exclusive of overhead and equipment service costs).....	306,421.98	.....	.....	.....	60.10	290,377.37	13,000.00	204.28
.....	992,438.77	18,477.76	.....	.....	.....	25,030.79	903,797.41	45,632.81

COMBINED STATEMENT OF EXPENDITURES, BY OBJECTIVE CLASSIFICATION, FOR THE FISCAL YEAR ENDED JUNE 30, 1952  
(INCLUDING ALL FUNDS EXCEPT SUSQUEHANNA RIVER TOLL BRIDGE, POTOMAC RIVER TOLL BRIDGE, CHESAPEAKE  
BAY BRIDGE, AND CHESAPEAKE BAY FERRY SYSTEM)

	General Construction and Operating Fund								County Maintenance Funds	County Construction Funds	Bonded Debt and Debt Service Funds	
	Total	Eliminations	Administrative and General Expenses		Equipment Service Costs	General	General Construction	Maintenance Fund				Counties and Municipalities Tax Revenues Allocation Fund
			Other Than Repairs	Repairs								
Net increase in book value of inven- tories of materials and supplies (after excluding salaries and wages, and equipment service costs, totaling \$41,825.35)	\$ 372,039.32				\$ 372,039.32							
Materials, supplies, etc., furnished other departments	28,334.81				28,334.81							
Federal aid apportioned: To Frederick County	216,834.05				216,834.05							
To Baltimore City	66,978.08											
To Dorchester County	1,500.00								\$ 66,978.08			
Redemption of State Highway Con- struction Bonds	3,332,000.00								1,500.00			
Interest on State Highway Construc- tion Bonds	997,895.08										\$3,332,000.00	
Bond issue expenses	31,133.06										997,895.08	
Payments of tax apportionments:	4,621,155.80										31,133.06	
Counties	620,279.39								\$4,621,155.80			
Municipalities	2,145.46								620,279.39			
Refunds of excise tax on issuance of certificates of title to motor ve- hicles	27,696.58							\$ 27,696.58				
Inventory adjustments applicable to prior periods	1,100.47											
Miscellaneous—net												
PORTION OF EQUIPMENT SERVICE COST TRANSFERRED												
AMOUNTS RECEIVED FROM COUNTIES AND OTHERS IN REDUCTION OF COSTS, ETC.	266,220.28											
INTER-FUND TRANSFER												
REMITTANCES OF COLLECTIONS TO STATE TREASURER:												
Sign licenses—General Fund		\$ 3,987.46										
Hauling permits—Motor Vehicle Revenue Fund		111,950.00										
TOTAL (before Fund distribu- tion of administrative and gen- eral expenses, and equipment service costs)	\$56,521,208.05	\$115,337.46	\$3,036,898.67	\$1,756.43	\$1,031,564.64	\$1,101,186.30	\$33,790,012.38	\$5,345,655.21	\$5,241,435.28	\$1,795,703.76	\$851,884.70	
APPLICATION OF:												
Administrative and general expenses			3,036,898.67	81,756.43								
Equipment service costs					1,031,564.64							
TOTAL EXPENDITURES	\$56,521,208.05	\$115,937.46			\$1,132,225.38	\$36,075,541.37	\$6,700,673.97	\$8,217,599.29	\$5,241,435.28	\$2,217,599.29	\$4,361,048.14	



COMBINED STATEMENT OF EXPENDITURES, BY OBJECTIVE CLASSIFICATION, FOR THE FISCAL YEAR ENDED JUNE 30, 1951  
(INCLUDING ALL FUNDS EXCEPT SUSQUEHANNA RIVER TOLL BRIDGE, POTOMAC RIVER TOLL BRIDGE, CHESAPEAKE BAY BRIDGE, AND CHESAPEAKE BAY FERRY SYSTEM)

	General Construction and Operating Fund										Counties and Municipalities Tax Revenues Allocation Fund	County Maintenance Funds	County Construction Funds	Bonded Debt and Def. Service Funds	
	Administrative and General Expenses		Equipment Service Costs		General Construction		Maintenance Fund	County Maintenance Funds	County Construction Funds	Bonded Debt and Def. Service Funds					
	Other Than Repairs	Repairs	Equipment Service Costs	General Construction	Maintenance Fund										
<b>TOTAL</b>															
SALARIES, WAGES, AND EMPLOYEES'															
BENEFITS:															
Staff salaries	\$3,049,612.32			\$39.74	\$16,107.38	\$22,914.94	\$1,721,717.81	\$131,154.05				\$2,008.52	\$64,248.99		
General salaries	1,753,028.61			14,677.36	213,158.99	29,380.24	56,307.07	960,089.41				434,046.06	2,249.28		
Hourly labor	1,889,134.77			20,442.77	89,462.70	29,497.29	58,533.28	1,255,629.55				309,215.89	2,697.57		
Sick leave	182,534.37			161,954.40								20,579.97			
Vacation leave	297,976.83			271,328.65								26,648.18			
Military leave	7,535.51			7,535.51								37,912.75			
Holiday or other leave	336,999.50			299,086.75		77.34						2,000			
Medical services	4,698.17			4,618.83								11,324.35			
Workmen's compensation insurance	38,509.03			27,184.68								29,663.16			
Pension contributions	295,793.28			266,130.12								296.47			
<b>MATERIALS:</b>															
Additive with bituminous material	7,736.36								3,768.65			3,671.24			
Aggregates, graded stone, slag, gravel, and sand	711,172.21			641.20		45,892.12	89,872.69	383,745.78				159,830.46			
Aggregates, ungraded for bank-run gravel and sand	150,170.23			470.20		1,220.70	47,374.26	44,050.56				56,918.01			
Bituminous materials	236,363.87			850.11		1,748.14	20,192.25	176,524.97				37,048.40			
Brick	1,197.31					18.96	524.95					48.94			
Calc. cl.	4,640.70						3,920.15					132.15			
Calcium chloride (sft)	42,812.77					720.84	769.94	39,250.86				2,071.13			
Cement	4,133.07			63.95		4.25	1,297.01	30,731.55				311.08			
Clippers	30,828.65			294.45		45.85	7,036.28	13,500.35				106.80			
Concrete	21,117.78			142.75			22,863.52	10,361.05				240.35			
Gravel	32,424.99			1,535.82		650.37	12,635.79	24,129.07				50.00			
Highway beautification	77,695.96			607.17		492.28	55,273.81	55,273.81				37,651.08			
Paint	57,143.63			233.27		3,466.04	60,594.14	29,417.96				176.48			
Pipe and pipe bands	157,393.65						5,104.95					62,563.12			
Posts and guard rails	12,784.71					7,711.24	1,052,910.91	214,874.00				6,754.91			
Pre-mixed bituminous material	1,282,951.06			149.97		732.35	91,364.77	6,086.52				1,680.79			
Steel and iron	109,006.82			341.41		32.42	3,595.64	1,243.06				177.18			
Wire	3,285.13			1,413.36		151.29	5,405.47	37,456.16				3,165.73			
Miscellaneous	47,622.76														
<b>STRUCTURES:</b>															
Diesel or fuel oil	29,554.01			10.76		172.39	1,323.93	2,107.53				1,814.67			
Gasoline	252,794.23			3.10		70.73	614.53	1,223.88				11,995.87			
Grader blades and chains	14,529.51			1.50		7.44	138.74					1,019.94			
Kerosene	14,822.71			451.68		10.13	1,063.32	3,004.37				331.02			
Laboratory and traffic equipment supplies	42,105.88			89.29		1,330.22	20,157.76	6,470.90				945.27			
Lubricating oil	20,848.95					20.63	1,048.63	4,682.91							

Office building service supplies.....	4,701.78	23.97	45.51	14.25	62.50	
Office supplies.....	58,953.93		11.18	363.30		24.00
Parts and repairs.....	246,142.89	141.65	460.00	186.26	14,616.33	
Small tools and miscellaneous road supplies.....	36,808.26	572.59	225.30	6,635.23	2,822.72	25.05
Shop supplies.....	26,642.24	108.51	9.26	17.15	339.16	
Snow plow blades and parts.....	2,624.24				2.23	
Tires and tubes.....	66,696.45		62,609.83	11.61	3,931.90	
Miscellaneous.....	22,384.70	594.58	46.25	332.85	311.08	.56
<b>GENERAL OPERATING EXPENSES:</b>						
Advertising.....	24,750.77		384.62	20,109.39		3,042.06
Books, subscriptions, and dues.....	5,549.30		5,549.12	3.18		
Insurance.....	86,149.69		74,967.69	7.00		
Laundry service.....	936.21		901.15	1.37		35.06
Light, heat, power, and water.....	67,407.20	35.51	15,598.80		227.09	
Office cleaning service.....	1,370.65					439.00
Office meal allowance.....	29,982.50		2.40	17,829.00		
Passenger car costs.....	108,043.36			212.79		89.02
Photostats, blueprints, and films.....	7,371.17			1,572.83		
Printing.....	30,637.03	129.50	601.50	241.00		
Person labor.....	196,939.44			143,308.69		4,218.50
Professional and technical services.....	37,773.06		9,062.45	28,481.80		23.80
Rental of automotive equipment for hauling materials.....	340,496.72		4,640.77	159,418.97		1,564.50
Rental of automotive equipment for direct road work.....	208,332.28		672.25	121,890.21		30,801.16
Rental of land and buildings.....	53,583.50		5.00	1,976.50		1,051.00
Rental of office equipment.....	7,340.65		891.00	6.00		
Repair services (purchased) other than road equipment.....	28,416.04	18,927.26		910.89		3,993.88
Telephone, telegraph, and postage.....	92,809.88	.57		618.21		91.20
Traveling expenses.....	293,040.73		1,040.04	227,961.47		22.42
Payments to contractors, oiling roads, painting bridges, etc.....	526,609.65	385.22		7,600.30		36,664.40
Signs and markers.....	60,195.94	32.82		8,860.48		154.00
Research work.....	9,007.64					90.80
Improvements: Quantico Road Camp.....	5,209.19			5,209.19		
Alterations to leased property.....	550.00					
Alterations No. 108 East Lexington Street.....	9,231.05		40.80	8,035.73		3,048.00
Other.....	23,573.28	38.54				
<b>UNALLOCABLE RECEIPTS APPLIED IN REDUCTION OF EXPENDITURES.....</b>	<i>472.96</i>		<i>472.96</i>			
<b>TRANSFER OF COSTS INCURRED IN THE ENFORCEMENT OF WEIGHT-AND- SIZE LIMITATIONS ON MOTOR VEHICLES.....</b>						
Payments to contractors, construc- tion projects.....	31,411,914.20		21,712.41	30,855,452.27		534,749.52
Right-of-way payments.....	3,068,699.69		995.00	3,027,565.95		34,005.64
Professional and technical services.....	276,353.67			276,353.67		
Relocating power lines, etc., upon ac- quisition of rights-of-way.....						
Purchases of fixed assets (exclusive of overhead and equipment service costs).....	201,910.61		1,125.50	194,252.95		226.41
	897,929.59			897,929.59		

COMBINED STATEMENT OF EXPENDITURES, BY OBJECTIVE CLASSIFICATION, FOR THE FISCAL YEAR ENDED JUNE 30, 1951  
(INCLUDING ALL FUNDS EXCEPT SUSQUEHANNA RIVER TOLL BRIDGE, POTOMAC RIVER TOLL BRIDGE, CHESAPEAKE  
BAY BRIDGE, AND CHESAPEAKE BAY FERRY SYSTEM)

	Total	General Construction and Operating Fund						County Maintenance Funds	County Construction Funds	Bonded Debt and Debt Service Funds		
		Eliminations	Administrative and General Expenses		Equipment Service Costs	General	General Construction				Maintenance Fund	Countries and Municipalities Tax Revenues Allocation Fund
			Other Than Repairs	Repairs								
Other Expenditures - Continued												
Net increase in book value of inventories of tools and supplies												
Costs, excluding salaries and wages, and maintenance service costs, totaling \$86,849.41	\$ 15,244.08			\$ 15,244.08								
Materials, supplies, etc., furnished other departments	43,670.23			43,670.23								
Payroll and apportionment: To Baltimore City	455,212.76											
To Frederick County	103,561.54											
Redemption State Highway Construction Bonds	1,666,000.00			455,212.76				\$103,561.54				
Interest State Highway Construction Bonds	632,692.41								\$1,666,000.00			
Bond issue expenses	30,841.32								632,692.41			
Payments of tax apportionments: Counties	4,384,507.97								30,841.32			
Municipalities	547,706.17											
Refunds of excise tax on issuance of certificates of title to motor vehicles	2,425.55			2,425.55								
Inventory adjustments applicable to prior periods	180,783.68					\$ 180,783.68						
Reimbursement to Queen Anne's County on account of new anchorage for bridge	15,000.00			1,275.94		\$ 15,000.00	58.00					
Miscellaneous net	1,333.94											
Portion of Equipment Service Costs TRANSFERRED FROM COUNTIES AND OTHERS IN REDUCTION OF COSTS, ETC.	67,533.69					2,792.41						
INTER-FUND TRANSFERS REMITTANCES OF COLLECTIONS TO STATE TREASURER:												
General Fund	\$ 3,670.86					3,670.86						
Handling permits - Motor Vehicle Revenue Fund	86,160.00					86,160.00						
TOTAL (before Fund distribution of administrative and general expenses, and equipment service costs)	\$57,797,987.29	\$89,830.86	\$2,850,576.48	\$976,222.12	\$ 843,348.46	\$38,390,501.28	\$5,009,986.19	\$4,432,214.14	\$1,649,632.09			
APPLICATION OF:												
Administrative and general expenses			2,850,576.48	976,222.12								
Equipment service costs						2,182,145.55	559,075.12					
						55,343.00	641,554.76					
									114,363.43			
									256,285.46			
									1,638.96			
									\$871,209.33			
TOTAL EXPENDITURES	\$57,797,987.29	\$89,830.86	\$2,850,576.48	\$976,222.12	\$ 889,374.07	\$40,627,989.83	\$6,211,216.07	\$4,432,214.14	\$2,020,280.98			
									\$2,329,533.73			

MAINTENANCE FUNDSTATEMENT OF TRAFFIC VOLUME AND TOLL INCOME OF PATUXENT RIVER  
TOLL BRIDGE, BY CLASSIFICATIONS, FOR THE PERIOD FROM  
DECEMBER 1, 1951 (OPENING DATE), TO JUNE 30, 1952

	Toll Rate	Traffic Volume	Toll Income
Passenger Cars and Light Commercial Vehicles:			
Passenger cars, taxicabs, ambulances, etc.	\$1.25	20,035	\$25,043.75
Light panel trucks, station wagons, pick-up trucks	1.25	1,814	2,267.50
Motorcycles	.50	14	7.00
Official duty vehicles	Free	1,783	.....
Heavy Commercial Vehicles:			
Trucks and tractors	1.50	1,825	2,737.50
Busses	1.50	60	90.00
Tractors and semi-trailers, trucks, busses, passenger cars and semi-trailers	2.00	384	768.00
Tractors and trailers, passenger cars and trailers, trucks and busses	2.50	54	135.00
Unusual vehicles, 5 or more axles, heavy equipment, etc.	Various	1	3.00
TOTAL		25,970	\$31,051.75
Collections in Excess of Calculated Tolls, Etc.—net			125.44
TOTAL INCOME			\$31,177.19

NOTE—The expenses of this bridge for the period from December 1, 1951, to June 30, 1952, as shown by Exhibit G, amounted to \$25,470.30, leaving \$5,706.89 available for State Highway Construction Bonds Sinking Fund at June 30, 1952. The net income of \$5,706.89 is included under "Reserves" in the accompanying combined balance sheet (Exhibit A).

**TOLL BRIDGE FUNDS**  
**COMBINED BALANCE SHEET, SEPTEMBER 30, 1952 (Bridge Revenue Bonds Series 1948)**

	Total	Revenue Projects		Interest and Sinking Fund		Bridge Construction Funds		Bonded Debt
		General Fund	Reserve Fund	Bond Service Account	Reserve Account	Susquehanna River And Potomac River	Chesapeake Bay	
<b>ASSETS:</b>								
Cash on deposit:								
Baltimore National Bank								
County Trust Company				\$614,025.19	\$ 760,083.83		\$ 1,740,833.07	
Bank								
County Trust Company	16,625.40							
Equitable Trust Company	50,000.00						50,000.00	
Cash in hand:	250,000.00						250,000.00	
Undeposited collections	14,786.10							
Change funds	22,500.00							
Investment in obligations of the United States—at cost:								
Treasury Savings Notes—Series D:								
Due October 1, 1952, par value \$1,000,000	1,000,000.00							
Due November 1, 1952, par value \$1,000,000	1,000,000.00						1,000,000.00	
Due January 1, 1953, par value \$1,256,000	1,256,165.18				256,165.18		1,000,000.00	
Due August 1, 1953, par value \$270,000	270,053.75				270,053.75		1,000,000.00	
Treasury U.S.G. Certificates of Indebtedness, Series F, due October 1, 1952, par value \$1,030,000 (including accrued interest purchased)	1,035,253.37				1,035,253.37			
Treasury 3 1/2% Bonds, due September 15, 1953, par value \$290,000	292,740.87				292,740.87			
Funds with State Treasurer for completion of construction	36,187.02					\$ 36,187.02		
Guaranty deposits with Baltimore National Bank, Trustee	6,100.00							
Insurance proceeds with Baltimore National Bank, Trustee	6,357.14					2,359.62	3,997.52	
Accounts Receivable:								
Toll tickets	2,589.15							
Toll charges	18,452.05							
Toll Bridge Capital Properties	50,195,259.65							
Future toll bridge revenues encumbered and portion of existing sinking fund available for paying principal of Bridge Revenue Bonds (Series 1948)	43,007,000.00							\$43,007,000.00
<b>TOTAL</b>	\$101,902,084.55	\$163,857.70	\$224,895.48	\$614,025.19	\$2,614,269.00	\$10,333,518.90	\$14,945,087.98	\$43,007,000.00



<b>LIABILITIES:</b>						
Reserves created under Article V of Trust Agreement:						
For operating expenses.....						
For debt service.....						
Construction reserves:						
For encumbrances account of Chesapeake Bay Construction contract awards.....	\$ 313,871.48					
For further Chesapeake Bay Bridge Construction costs.....	3,228,291.49					
For completion of Susquehanna River and Potomac River Toll Bridges.....	4,086,453.15					\$ 4,086,453.15
Other reserves:	954,379.92					954,379.92
For guaranty deposits.....	36,187.02					\$ 36,187.02
For insurance proceeds.....	6,100.00					
For toll tickets sold for future use.....	68,781.70					3,987.52
Bonds payable only from toll bridge revenues (Schedule I).....	43,007,000.00					\$13,007,000.00
State equity in toll bridge capital properties represented by:						
Portion of proceeds from sale of Bridge Revenue Bonds (Series 1948).....	39,314,611.73					38,982,257.39
Federal Grants for construction of Susquehanna River and Potomac River Toll Bridges.....	4,331,189.28					4,331,189.28
Toll bridge income.....	6,519,428.64					5,601,428.64
<b>TOTAL.....</b>	<b>\$101,902,084.55</b>					<b>\$10,333,518.90</b>
						<b>\$44,915,087.98</b>
						<b>\$33,007,000.00</b>

**TOLL BRIDGE FUNDS**

**STATE OF MARYLAND BRIDGE REVENUE BONDS PAYABLE (SERIES 1948),  
SEPTEMBER 30, 1952**

Maturity	Principal Amount	Interest Rate
<b>SERIAL BONDS:</b>		
October 1, 1953	\$ 946,000.00	3 <sup>07</sup> / <sub>10</sub> %
October 1, 1954	974,000.00	2 <sup>12</sup> / <sub>10</sub> <sup>07</sup> / <sub>10</sub> %
October 1, 1955	1,003,000.00	2 <sup>12</sup> / <sub>10</sub> <sup>07</sup> / <sub>10</sub> %
October 1, 1956	1,033,000.00	2 <sup>12</sup> / <sub>10</sub> <sup>07</sup> / <sub>10</sub> %
October 1, 1957	1,064,000.00	2 <sup>12</sup> / <sub>10</sub> <sup>07</sup> / <sub>10</sub> %
October 1, 1958	1,096,000.00	2 <sup>12</sup> / <sub>10</sub> <sup>07</sup> / <sub>10</sub> %
October 1, 1959	1,129,000.00	2 <sup>12</sup> / <sub>10</sub> <sup>07</sup> / <sub>10</sub> %
October 1, 1960	1,163,000.00	2 <sup>34</sup> / <sub>10</sub> <sup>07</sup> / <sub>10</sub> %
October 1, 1961	1,198,000.00	2 <sup>34</sup> / <sub>10</sub> <sup>07</sup> / <sub>10</sub> %
October 1, 1962	1,234,000.00	2 <sup>34</sup> / <sub>10</sub> <sup>07</sup> / <sub>10</sub> %
October 1, 1963	1,271,000.00	2 <sup>34</sup> / <sub>10</sub> <sup>07</sup> / <sub>10</sub> %
October 1, 1964	1,309,000.00	2 <sup>34</sup> / <sub>10</sub> <sup>07</sup> / <sub>10</sub> %
October 1, 1965	1,348,000.00	3 <sup>07</sup> / <sub>10</sub> %
October 1, 1966	1,389,000.00	3 <sup>07</sup> / <sub>10</sub> %
October 1, 1967	1,425,000.00	3 <sup>07</sup> / <sub>10</sub> %
<b>TERM BONDS:</b>		
October 1, 1972	25,425,000.00	3 <sup>12</sup> / <sub>10</sub> <sup>07</sup> / <sub>10</sub> %
<b>TOTAL</b>	<b>\$43,007,000.00</b>	

EXHIBIT BB

**TOLL BRIDGE FUNDS**

**DEBT SERVICE REQUIREMENT, BY FISCAL YEARS—STATE OF MARYLAND  
BRIDGE REVENUE BONDS (SERIES 1948)**

Fiscal Year Ending, September 30,	Total	Interest	Principal
1953	\$ 2,240,127.50	\$ 1,294,127.50	\$ 946,000.00
1954	2,239,747.50	1,265,747.50	974,000.00
1955	2,244,397.50	1,241,397.50	1,003,000.00
1956	2,249,322.50	1,216,322.50	1,033,000.00
1957	2,254,497.50	1,190,497.50	1,064,000.00
1958	2,259,897.50	1,163,897.50	1,096,000.00
1959	2,265,497.50	1,136,497.50	1,129,000.00
1960	2,271,272.50	1,108,272.50	1,163,000.00
1961	2,277,290.00	1,076,290.00	1,198,000.00
1962	2,277,345.00	1,043,345.00	1,234,000.00
1963	2,280,410.00	1,009,410.00	1,271,000.00
1964	2,283,457.50	974,457.50	1,309,000.00
1965	2,286,460.00	938,460.00	1,348,000.00
1966	2,287,020.00	898,020.00	1,389,000.00
1967	2,281,350.00	856,350.00	1,425,000.00
1968	813,600.00	813,600.00	
1969	813,600.00	813,600.00	
1970	813,600.00	813,600.00	
1971	813,600.00	813,600.00	
1972	26,238,600.00	813,600.00	25,425,000.00
<b>TOTAL</b>	<b>\$63,488,092.50</b>	<b>\$20,481,092.50</b>	<b>\$43,007,000.00</b>

NOTE: The annual amount required to amortize all outstanding bonds in accordance with the principle of level debt service was \$2,909,300.00 at October 1, 1952.

**TOLL BRIDGE FUNDS**

**STATEMENT SHOWING CHANGES DURING THE FISCAL YEAR ENDED  
SEPTEMBER 30, 1952, IN RESERVES CREATED UNDER ARTICLE V OF  
TRUST AGREEMENT DATED OCTOBER 1, 1948**

	Revenue Projects General Fund	Operations Reserve Fund	Revenue Projects Interest and Sinking Fund	
			Bond Service Account	Reserve Account
BALANCE, October 1, 1951	\$ 53,630.37	\$232,695.50	\$ 204,744.83	\$1,740,237.04
<b>ADDITIONS:</b>				
Income—Exhibit DD—Toll income based on toll transactions and other related revenue	\$4,060,232.93			\$ 11,206.02
Income from investments				
Cash transfers from Revenue Projects General Fund		\$226,418.69	\$2,648,948.16	862,825.94
<b>TOTAL ADDITIONS</b>	<b>\$4,060,232.93</b>	<b>\$226,418.69</b>	<b>\$2,648,948.16</b>	<b>\$ 874,031.96</b>
<b>TOTAL</b>	<b>\$4,113,863.30</b>	<b>\$459,114.19</b>	<b>\$2,853,692.99</b>	<b>\$2,614,269.00</b>
<b>DEDUCTIONS:</b>				
Expenses—Exhibit DD:				
Operating, maintenance, insurance, and purchase of capital properties	\$ 224,380.77	\$224,711.86		
Administrative and general expenses—net	62,313.74	9,506.85		
Interest on Bridge Revenue Bonds (Series 1948):				
Due April 1, 1952			\$ 660,833.75	
Due October 1, 1952			660,833.75	
Redemption of Bridge Revenue Bonds (Series 1948) due October 1, 1952			918,000.00	
Cash transfers to:				
Operations Reserve Fund:				
Annual Statement requirements for the fiscal year ended September 30, 1952	172,000.00			
Unexpended balance of Annual Budget for the fiscal year ended September 30, 1952	54,418.69			
Revenue Projects Interest and Sinking Fund:				
Bond Service Account	2,648,948.16			
Reserve Account	862,825.94			
<b>TOTAL DEDUCTIONS</b>	<b>\$4,024,887.30</b>	<b>\$234,218.71</b>	<b>\$2,239,667.50</b>	
BALANCE, September 30, 1952	\$ 88,976.00	\$224,895.48	\$ 614,025.49	\$2,614,269.00

TOLL BRIDGE FUNDS

STATEMENT OF INCOME AND EXPENSES OF SUSQUEHANNA RIVER, POTOMAC RIVER, AND CHESAPEAKE BAY TOLL BRIDGES FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 1952  
(BRIDGE REVENUE BONDS—SERIES 1948)

	TOTAL		SUSQUEHANNA RIVER TOLL BRIDGE		POTOMAC RIVER TOLL BRIDGE		CHESAPEAKE BAY TOLL BRIDGE	
	Revenue Projects General Fund	Operations Reserve Fund	Revenue Projects (General Fund)	Operations Reserve Fund	Revenue Projects General Fund	Operations Reserve Fund	Revenue Projects General Fund	Operations Reserve Fund
<b>INCOME:</b>								
Toll income based on toll transactions:								
Cash tolls	\$4,792,554.10		\$1,395,676.50		\$1,548,390.55		\$78,574.05	
Ticket tolls	228,815.78		196,736.63		12,389.05		19,690.10	
Charge tolls	31,755.95		2,227.00		19,164.35		13,364.60	
Total toll income based on toll transactions	\$4,952,125.83		\$1,594,640.13		\$1,549,853.95		\$911,628.75	
Collections in excess of calculated tolls—net	3,059.50		1,184.45		1,875.05			
Miscellaneous, including insurance recoveries for minor damages to bridges	1,050.60		940.99		69.80		39.81	
<b>TOTAL INCOME</b>	\$4,960,232.93		\$1,596,765.57		\$1,551,798.80		\$911,668.56	
<b>EXPENSES, EXCLUDING ADMINISTRATIVE AND GENERAL EXPENSES:</b>								
Operating:								
Salaries	\$165,978.53	\$1,471.39	\$98,797.17	\$975.15	\$53,544.20	\$499.24	\$13,637.16	
Electricity for lighting	6,041.79	400.90	3,785.91	3,521.32	2,110.79	1,974.48	145.09	
Fuel for heating	1,817.45	66.31	1,192.28	66.31	361.83	361.83	263.34	
Printing, including toll tickets	4,868.04		3,248.42		658.00		961.62	
Automobile expense, including employees' meals	686.30	120.86	193.49	36.96	401.90	318.00	100.91	
Supplies	5,089.49	389.34	2,519.31	317.18	1,955.43	1,883.27	614.75	
Telephone	1,832.74	12.45	1,018.90	12.45	721.35	721.35	92.49	
Uniforms	1,473.81	76.29	949.51	76.29	520.00	520.00	4.30	
Other	2,206.32	2,566.36	954.29	17,879.03	15.20	15.20	1,236.83	
Maintenance:								
Salaries	20,445.39	1,131.76	11,805.76	2,566.36	2,993.02	2,993.02	5,646.61	
Materials and other expenses	5,765.81		4,414.87	1,131.76	812.84	812.84	538.10	
Independent contractors (including tender repairs to Potomac River Toll Bridge, \$18,143.30)	26,518.42	21,010.90	7,396.81	5,080.81	19,119.96	425.06	1.65	
Insurance	198,649.68	197,462.30	10,607.71	647.63	11,527.21	458.75	176,514.76	
Capital properties acquired	7,708.86	7,708.86	5,289.99	5,289.99	2,379.83	2,379.83	39.04	
Total expenses, excluding administrative and general expenses	\$49,092.63	\$224,711.86	\$152,174.42	\$194,451.29	\$97,121.56	\$66,563.59	\$199,796.65	\$23,365.89
<b>NET OPERATING INCOME</b>	\$3,611,140.30		\$224,380.77	\$17,723.13	\$92,121.56	\$90,557.97	\$176,430.76	

ADMINISTRATIVE AND GENERAL EXPENSES:	\$	\$ 35,415.00	\$ 35,063.88	\$	351.12
Salaries and employees.....		741.46	705.01		36.45
Trustee's fees.....		6,473.00	2,931.15		3,541.85
Fiscal agent's fees.....		3,523.76	3,523.76		
Accounting and legal fees.....		4,759.11			4,759.11
Consulting engineer's fees.....		7,000.00	7,000.00		
Printing monthly financial reports.....		2,891.40			2,891.40
Depository service charge.....		1,976.00	1,976.00		618.65
Office rent.....		1,440.32	1,440.32		
Printing, stationery, and office supplies.....		1,791.18	1,766.28		24.90
Association dues.....		200.00	200.00		
Workmen's compensation insurance.....		109.36	109.36		
Telephone and telegraph.....		498.34	413.75		84.59
Automobile and traveling expense.....		1,223.73	1,137.81		85.92
Publicity and advertising.....		520.00	520.00		
Office furniture and fixtures.....		151.48	150.19		1.29
Miscellaneous expenses.....		2,197.79	2,197.79		
Capital properties acquired.....		2,702.31	2,702.31		
<b>TOTAL.....</b>		<b>\$ 71,235.89</b>	<b>\$ 61,729.04</b>		<b>\$ 9,506.85</b>
Less amount received from State Roads Commission for services in connection with operation of Patuxent River Toll Bridge, \$2,382.03, and miscellaneous credits, \$33.27.....					
<b>REMAINDER—administrative and general expenses—net.....</b>		<b>2,415.30</b>	<b>2,415.30</b>		
<b>NET INCOME.....</b>		<b>\$ 71,820.59</b>	<b>\$ 62,313.74</b>		<b>\$ 9,506.85</b>
		<b>\$9,539,319.71</b>			

Note.—The amounts shown in this Exhibit relating to the Chesapeake Bay Toll Bridge are for the period from 6:00 P. M., July 30, to 12:00 midnight, September 30, 1952.

TOLL BRIDGE FUNDS  
 COMBINED BALANCE SHEET, SEPTEMBER 30, 1951 (Bridge Revenue Bonds—Series 1948)

ASSETS:	Total	Revenue Projects General Fund	Operations Reserve Fund	Revenue Projects Interest and Sinking Fund		Bridge Construction Funds		Bonded Debt
				Bond Service Account	Reserve Account	Susquehanna River And Potomac River	Chesapeake Bay	
Cash on deposit:								
Baltimore National Bank	\$ 1,684,550.12	\$19,719.00	\$232,695.50	\$204,744.83	\$ 711,950.07		\$ 482,440.72	
County Trust Company	50,000.00						50,000.00	
Equitable Trust Company	250,000.00						250,000.00	
Cash in hand:								
Undeposited collections	19,939.80	19,939.80						
Change funds	8,000.00	8,000.00						
Investment in obligations of the United States - at cost:								
Treasury Savings Notes, Series D—								
Due October 1, 1952, par value \$6,000,000	6,004,026.36						6,004,026.36	
Due November 1, 1952, par value \$2,000,000	2,000,000.00				258,165.18		2,000,000.00	
Due January 1, 1953, par value \$1,256,000	1,256,163.18				270,165.75		1,000,000.00	
Due August 1, 1953, par value \$270,000	270,653.75							
Treasury F. S. Certificates of Indebtedness (including accrued interest purchased):								
Series B, due July 1, 1952, par value \$4,000,000	4,000,000.00						4,000,000.00	
Series B, due April 1, 1952, par value \$5,000,000	5,063,281.25						5,063,281.25	
Treasury Bills (purchased on discount basis):								
Due November 1, 1951, maturity value \$202,000	200,317.04				200,317.04			
Due November 8, 1951, maturity value \$300,000	298,743.00				298,743.00			
Funds with State Treasurer for completion of construction	169,766.66					\$ 109,766.66		
Guaranty deposit with Baltimore National Bank, Trustee	1,100.00	1,100.00						
Insurance Proceeds with Baltimore National Bank, Trustee	3,997.52						3,997.52	
Accounts Receivable:								
Toll tickets	1,238.50	1,238.50						
Toll charges	16,151.00	16,151.00						
Damage claim	110.55	110.55						
Toll Bridge Capital Properties	36,055,076.40							
Future toll bridge revenues encumbered and portion of existing sinking fund available for paying principal of Bridge Revenue Bonds (Series 1948)	43,925,000.00							\$43,925,000.00
TOTAL	\$101,157,525.13	\$96,258.85	\$232,695.50	\$204,744.83	\$1,740,237.04	\$10,331,189.28	\$44,627,399.63	\$43,925,000.00

<b>LIABILITIES:</b>									
Reserves created under Article V of Trust Agreement:									
For operating expenses.....	\$ 286,325.87	\$53,630.37	\$232,695.50	\$204,744.83	\$1,740,237.04				
For debt service.....	1,944,981.87								
Construction reserves:									
For encumbrances account of Chesapeake Bay Construction									
contract awards.....	18,789,748.33							\$18,789,748.33	
For completion of Susquehanna River and Potomac River									
Toll Bridges.....	109,766.66						\$ 109,766.66		
Other reserves:									
For guaranty deposit.....	1,100.00	1,100.00							
For insurance proceeds.....	3,997.52	41,528.48						3,997.52	
For toll tickets sold for future use.....	41,528.48								
Bonds payable only from toll bridge revenues (Schedule 1).....	43,925,000.00								\$43,925,000.00
State equity in toll bridge capital properties represented by:									
Portion of proceeds from sale of Bridge Revenue Bonds (Series									
1948).....	26,196,038.12						362,384.34	25,833,653.78	
Federal Grants for construction of Susquehanna River and									
Potomac River Toll Bridges.....	4,331,189.28						4,331,189.28		
Toll bridge income.....	5,527,849.00						5,527,849.00		
<b>TOTAL.....</b>	<b>\$100,157,525.13</b>	<b>\$96,258.85</b>	<b>\$232,695.50</b>	<b>\$204,744.83</b>	<b>\$1,740,237.04</b>	<b>\$10,331,189.28</b>	<b>\$14,627,399.63</b>	<b>\$43,925,000.00</b>	

TOLL BRIDGE FUNDSSTATE OF MARYLAND BRIDGE REVENUE BONDS PAYABLE (SERIES 1948),  
SEPTEMBER 30, 1951

Maturity	Principal Amount	Interest Rate
SERIAL BONDS:		
October 1, 1952	\$ 918,000.00	3%
October 1, 1953	946,000.00	3%
October 1, 1954	974,000.00	2½%
October 1, 1955	1,003,000.00	2½%
October 1, 1956	1,033,000.00	2½%
October 1, 1957	1,064,000.00	2½%
October 1, 1958	1,096,000.00	2½%
October 1, 1959	1,129,000.00	2½%
October 1, 1960	1,163,000.00	2¾%
October 1, 1961	1,198,000.00	2¾%
October 1, 1962	1,234,000.00	2¾%
October 1, 1963	1,271,000.00	2¾%
October 1, 1964	1,309,000.00	2¾%
October 1, 1965	1,348,000.00	3%
October 1, 1966	1,389,000.00	3%
October 1, 1967	1,425,000.00	3%
TERM BONDS:		
October 1, 1972	25,425,000.00	3½%
TOTAL	\$43,925,000.00	



**TOLL BRIDGE FUNDS**

**STATEMENT SHOWING CHANGES DURING THE FISCAL YEAR ENDED SEPTEMBER 30, 1951, IN RESERVES CREATED UNDER ARTICLE V OF TRUST AGREEMENT DATED OCTOBER 1, 1948**

	Revenue Projects General Fund	Operations Reserve Fund	Revenue Projects Interest and Sinking Fund	
			Bond Service Account	Reserve Account
BALANCE, October 1, 1950.....	\$ 32,877.06	\$212,464.08	\$ 184,868.10	\$ 729,505.54
ADDITIONS:				
Income—Exhibit GG—Toll income based on toll transactions and other related revenue.....	\$2,672,169.80			
Income from investments.....				\$ 1,856.00
Cash transfers from Revenue Projects General Fund.....		\$ 94,294.74	\$1,341,544.23	1,008,875.50
TOTAL ADDITIONS.....	\$2,672,169.80	\$ 94,294.74	\$1,341,544.23	\$1,010,731.50
TOTAL.....	\$2,705,046.86	\$306,758.82	\$1,526,412.33	\$1,740,237.04
DEDUCTIONS:				
Expenses—Exhibit GG:				
Operating, maintenance, insurance, and purchase of capital properties.....	\$ 152,916.19	\$ 65,510.93		
Administrative and general expenses—net.....	53,785.83	8,552.39		
Interest on Bridge Revenue Bonds (Series 1948):				
Due April 1, 1951.....			\$ 660,833.75	
Due October 1, 1951.....			660,833.75	
Cash transfers to:				
Operations Reserve Fund:				
Annual Statement requirements for the fiscal year ended September 30, 1951.....	\$4,000.00			
Unexpended balance of Annual Budget for the fiscal year ended September 30, 1951.....	10,294.74			
Revenue Projects Interest and Sinking Fund:				
Bond Service account.....	1,341,544.23			
Reserve Account.....	1,008,875.50			
TOTAL DEDUCTIONS.....	\$2,651,416.49	\$ 74,063.32	\$1,321,667.50	
BALANCE, September 30, 1951.....	\$ 53,630.37	\$232,695.50	\$ 204,744.83	\$1,740,237.04

**TOLL BRIDGE FUNDS**  
**STATEMENT OF INCOME AND EXPENSES OF SUSQUEHANNA RIVER AND POTOMAC RIVER TOLL BRIDGES FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 1951 (BRIDGE REVENUE BONDS—SERIES 1948)**

	TOTAL				SUSQUEHANNA RIVER TOLL BRIDGE			POTOMAC RIVER TOLL BRIDGE		
	Income	Revenue Projects General Fund	Operations Reserve Fund	Revenue Projects General Fund	Operations Reserve Fund	Revenue Projects General Fund	Operations Reserve Fund	Revenue Projects General Fund	Operations Reserve Fund	
<b>INCOME:</b>										
Toll income based on toll transactions:										
Cash tolls	\$2,441,275.05				\$1,167,672.05					\$1,273,603.00
Ticket tolls	193,733.23				186,387.28					7,347.35
Clarke tolls	35,002.20				2,495.70					32,506.50
Total toll income based on toll transactions	\$2,670,012.48				\$1,356,555.03					\$1,313,456.85
Collections in excess of calculated tolls—net	1,789.19				718.34					1,070.85
Miscellaneous, including insurance recoveries for minor damages to bridges	308.13				156.12					211.71
<b>TOTAL INCOME</b>	<b>\$2,672,109.80</b>				<b>\$1,357,430.39</b>					<b>\$1,314,739.41</b>
		Revenue Projects General Fund	Operations Reserve Fund	Revenue Projects General Fund	Operations Reserve Fund	Revenue Projects General Fund	Operations Reserve Fund	Revenue Projects General Fund	Operations Reserve Fund	
<b>EXPENSES, EXCLUDING ADMINISTRATIVE AND GENERAL EXPENSES:</b>										
<b>Operating:</b>										
Salaries	\$ 113,482.04	\$112,332.07	\$ 1,149.97	\$ 71,898.04	\$ 72,617.07	\$ 719.03	\$ 40,804.97	\$ 430.94	\$ 430.94	
Electricity for lighting	5,401.06	5,271.39	129.47	3,454.84	3,454.84		1,946.22	129.47	129.47	
Fuel for heating	1,262.80	1,213.26	49.54	804.38	804.38		458.42	49.54	49.54	
Printing, including toll tickets	4,227.19	4,227.19		3,693.48	3,693.48		533.71	533.71	533.71	
Automobile expense, including employees meals	751.12	595.39	155.73	173.01	211.96		539.16	422.38	116.78	
Supplies	3,281.40	3,048.60	232.80	1,887.07	1,887.07		1,394.33	47.80	47.80	
Telephone	1,574.62	1,568.30	6.32	992.00	992.00		982.02	6.32	6.32	
Uniforms	3,488.60	3,488.60		2,246.45	2,246.45		1,212.15	1,212.15	1,212.15	
Other	1,176.48	1,164.48	12.00	965.79	965.79		210.69	198.69	12.00	
Maintenance:										
Salaries	10,076.80	8,528.35	1,548.45	7,696.89	9,245.34	1,548.45	831.46	831.46	831.46	
Materials and other expenses	1,831.75	1,497.20	334.55	1,393.24	1,723.39	334.55	108.36	103.96	4.40	
Independent contractors	2,261.45	2,202.20	59.25	1,569.06	1,569.06	45.75	752.39	736.89	15.50	
Insurance	63,536.55	1,703.70	61,832.85	917.31	32,368.98	917.31	31,167.37	736.89	30,381.18	
Capital properties acquired	6,105.26	6,105.26		5,858.82	5,858.82		246.44	246.44	246.44	
<b>TOTAL EXPENSES, excluding administrative and general expenses</b>	<b>\$ 218,427.12</b>	<b>\$152,916.19</b>	<b>\$65,510.93</b>	<b>\$103,262.23</b>	<b>\$ 137,579.23</b>	<b>\$34,317.00</b>	<b>\$ 80,847.89</b>	<b>\$49,653.96</b>	<b>\$31,193.93</b>	
<b>NET OPERATING INCOME</b>	<b>\$2,453,742.68</b>									

ADMINISTRATIVE AND GENERAL EXPENSES:			
Salaries			
Expenses of administrative officers and employees	\$ 28,019.26	\$ 27,821.51	\$ 197.75
Trustee's fees	532.49	532.49	
Fiscal agent's fees	6,500.47	3,942.00	2,558.47
Accounting and legal fees	3,689.40	3,467.80	221.60
Consulting engineer's fees	4,377.22		4,377.22
Printing monthly financial reports	6,000.00	6,000.00	
Depository service charge	3,343.35	2,965.35	378.00
Office rent	969.48	969.48	
Printing, stationery, and office supplies	1,260.00	1,260.00	
Premium on fidelity bonds	2,413.66	2,383.23	30.43
Association dues	72.33	72.33	
Workmen's compensation insurance	200.00	200.00	
Telephone and telegraph	291.64	109.36	182.28
Automobile and traveling expense	573.99	483.32	90.67
Office furniture and fixtures	978.40	971.31	7.09
Miscellaneous expenses	217.77	213.26	4.51
Capital properties acquired	1,305.28	1,305.28	
	1,692.22	1,357.85	334.37
<b>Total</b>	<b>\$ 62,607.16</b>	<b>\$ 51,054.77</b>	<b>\$ 8,552.39</b>
Less miscellaneous credits	268.91	268.91	
<b>REMAINDER—administrative and general expenses—net</b>	<b>\$ 62,338.22</b>	<b>\$ 53,785.83</b>	<b>\$ 8,552.39</b>
<b>NET INCOME</b>	<b>\$2,391,404.46</b>		

**TOLL BRIDGE FUNDS****STATEMENT SHOWING DEPOSITS AND WITHDRAWALS, CHESAPEAKE BAY BRIDGE CONSTRUCTION FUND, BY PERIODS, FROM OCTOBER 1, 1948, TO SEPTEMBER, 30, 1952**

	October 1, 1948, to September 30, 1950	Fiscal Year Ended September 30		October 1, 1948, to September 30, 1952
		1951	1952	
<b>DEPOSITS:</b>				
Proceeds from sale of Bridge Revenue Bonds (Series 1948) dated October 1, 1948:				
\$37,500,000 par value sold October 27, 1948	\$ 37,500,000.00			\$ 37,500,000.00
\$6,425,000 par value sold November 1, 1949, including premium of \$154,000.	6,579,500.00			6,579,500.00
<b>TOTAL</b>	\$ 44,079,500.00			\$ 44,079,500.00
Less portion applied toward redemption of Bridge Revenue Refunding Bonds (Series 1941)	362,384.34			362,384.34
Remainder available for construction costs	\$ 43,717,115.66			\$ 43,717,115.66
Proceeds from sale or redemption of investment securities—United States Treasury obligations	62,660,491.69	\$22,988,032.83	\$19,497,864.40	105,146,388.92
Interest on United States Treasury obligations:				
Earned	605,018.95	318,444.79	318,393.54	1,241,857.28
Recovery of accrued interest purchased	109,589.95	17,367.33	4,026.36	130,983.64
Sale of unused materials, etc.		35,711.27	43,341.30	79,052.57
<b>TOTAL DEPOSITS</b>	\$107,092,216.25	\$23,359,556.22	\$19,863,625.60	\$150,315,398.07
<b>WITHDRAWALS:</b>				
For account of construction:				
Expenditures:				
Preliminary expense, including legal fees for issuance of bonds	\$ 212,589.75	\$ 603.72	\$ 316.03	\$ 213,509.50
Land and rights-of-way	44,144.60	10,369.55	25,194.61	79,708.76
Engineering	1,561,486.68	428,811.35	316,845.00	2,307,143.03
Legal and administrative	51,381.15	89,444.50	38,647.07	179,472.72
Other	3,928.29	630.92	76,976.96	81,536.17
Construction work:				
In progress	7,360,785.60	9,611,426.95	1,315,748.57	18,287,961.12
Completed:				
Substructure etc.	1,351,004.25	4,771,252.14	12,292,875.37	18,415,131.76
Test borings and test piles	335,794.33			335,794.33
<b>TOTAL</b>	\$ 10,921,114.65	\$14,912,539.13	\$14,066,603.61	\$ 39,900,257.39
Adjustment to withdrawals basis—Proceeds from sale of unused materials, and miscellaneous receipts applied in reduction of expenditures for construction work		35,711.27	43,341.30	79,052.57
<b>WITHDRAWALS FOR ACCOUNT OF CONSTRUCTION</b>	\$ 10,921,114.65	\$14,948,250.40	\$14,109,944.91	\$ 39,979,309.96
Purchase of investment securities—United States Treasury obligations	94,674,142.27	8,994,840.79	4,495,288.34	108,164,271.40
Accrued interest on United States Treasury obligations purchased	114,033.58	16,950.06		130,983.64
<b>TOTAL WITHDRAWALS</b>	\$105,709,290.50	\$23,960,041.25	\$18,605,233.25	\$148,274,565.00
Excess of Deposits Over Withdrawals (Excess of withdrawals in italics)	\$ 1,382,925.75	\$ 600,485.03	\$ 1,258,392.35	\$ 2,040,833.07
Cash Balance at Beginning of Period		1,382,925.75	782,440.72	
Cash Balance at End of Period	\$ 1,382,925.75	\$ 782,440.72	\$ 2,040,833.07	\$ 2,040,833.07
Investment in United States Treasury obligations—at cost	32,006,006.13	18,007,307.61	3,000,000.00	3,000,000.00
<b>Total Cash and Investments at End of Period</b>	\$ 33,388,931.88	\$18,789,748.33	\$ 5,040,833.07	\$ 5,040,833.07

**TOLL BRIDGE FUNDS**

**STATEMENT OF TRAFFIC VOLUME AND TOLL INCOME, BY TOLL BRIDGES AND CLASSIFICATIONS, FOR THE FISCAL YEARS ENDED SEPTEMBER 30, 1952 AND 1951**

	Toll Rate	Fiscal Year Ended September 30			
		1952		1951	
		Traffic Volume	Toll Income	Traffic Volume	Toll Income
<b>SUSQUEHANNA RIVER TOLL BRIDGE:</b>					
Passenger cars, etc.	\$ .20	5,350,084	\$1,070,016.80	4,293,801	\$ 858,760.20
Busses on Scheduled Run (commutation rate)	.15	50,420	7,563.00	38,652	5,797.80
Passenger cars, etc. (commutation rate)	.03	1,190,856	35,725.68	1,061,056	31,831.68
2-Axle vehicles	.25	208,115	52,028.75	198,100	49,525.00
3-Axle vehicles	.40	311,891	124,756.40	334,901	133,960.40
4-Axle vehicles	.40	384,938	153,975.20	323,819	129,527.60
2-Axle vehicles (commutation rate)	.20	43,282	8,656.40	40,919	8,183.80
3-Axle vehicles (commutation rate)	.30	229,652	68,895.60	285,901	85,770.30
4-Axle vehicles (commutation rate)	.30	233,048	69,914.40	173,525	52,067.50
Unusual vehicles	Various	3,811	3,107.90	1,182	1,141.35
Official duty vehicles	Free	18,210		19,413	
<b>TOTAL</b>		<b>8,024,307</b>	<b>\$1,594,640.13</b>	<b>6,771,269</b>	<b>\$1,356,555.63</b>
<b>POTOMAC RIVER TOLL BRIDGE:</b>					
Passenger cars, etc.	\$ .75	234,050	\$ 175,537.50	190,839	\$ 143,129.25
Passenger cars, etc., with 1 passenger	.90	552,020	496,818.00	450,208	405,187.20
Passenger cars, etc., with 2 passengers	1.05	235,512	247,287.60	195,556	205,333.80
Passenger cars, etc., with 3 passengers	1.20	174,722	209,666.40	144,911	173,893.20
Passenger cars, etc., with 4 passengers	1.35	157,453	212,561.55	126,133	170,279.55
Passenger car trailers and motorcycles	.40	16,443	6,577.20	15,652	6,260.80
Trucks, under 2-ton capacity	1.00	46,634	46,634.00	46,417	46,417.00
Trucks, 2 to 5-ton capacity	1.25	23,982	29,977.50	26,445	33,056.25
Trucks, over 5-ton capacity	1.50	34,378	51,567.00	41,772	62,658.00
Tractor-trailer units, 4 axles or more	2.50	26,014	65,035.00	23,244	58,113.50
Pedestrians and passengers in addition to those scheduled	.15	51,722	7,758.30	59,716	8,957.40
Bicycles	.20	9	1.80	34	6.80
Unusual vehicles	Various	81	432.10	34	164.10
Official duty vehicles	Free	1,805		1,511	
<b>TOTAL</b>		<b>1,554,825</b>	<b>\$1,549,853.95</b>	<b>1,322,472</b>	<b>\$1,313,456.85</b>
<b>CHESAPEAKE BAY TOLL BRIDGE (From 6 P.M., July 30, 1952):</b>					
Passenger cars, etc.	\$1.40	389,517	\$ 545,323.80		
Passengers in vehicles	.25	1,046,174	261,543.50		
Passenger cars, etc. (Commutation rate)	.70	4,542	3,179.40		
Passengers in vehicles (Commutation rate)	.10	2,783	278.30		
Buses on scheduled runs	1.50	1,758	2,637.00		
2-Axle vehicles	2.25	12,443	27,996.75		
3-Axle vehicles	3.50	11,755	41,142.50		
4-Axle vehicles	4.50	5,782	26,019.00		
5-Axle vehicles	5.00	81	405.00		
Passenger car with one-axle trailer	2.10	1,305	2,740.50		
Motorcycles	1.00	288	288.00		
Unusual vehicles	5.00	15	75.00		
Official duty vehicles	Free	6,365			
<b>TOTAL</b>		<b>1,482,808</b>	<b>\$ 911,628.75</b>		

**CHESAPEAKE BAY FERRY SYSTEM FUND**  
**BALANCE SHEET, MAY 31, 1952 AND 1951**

	May 31, 1952		May 31, 1951	
<b>ASSETS</b>				
Cash:				
With State Treasurer—operating funds .....	\$	411,637.75	\$	162,188.69
Petty Cash and Change Funds .....		7,200.00		7,200.00
Inventories of Materials and supplies .....		16,260.63		23,991.42
Accounts Receivable:				
Sundry debtors—book tickets and tolls .....	\$44,767.00		\$42,283.02	
Others .....	2,097.93		1,899.12	
<b>TOTAL</b> .....	\$46,864.93		\$44,182.14	
Less reserve for doubtful accounts .....	5,150.71	41,714.22	3,052.78	41,129.36
Insurance claims .....		37,138.99		35,831.83
Fixed Assets—at cost .....		5,209,884.53		4,977,178.16
<b>TOTAL</b> .....		\$5,723,836.12		\$5,247,519.46
<b>LIABILITIES</b>				
Due to United States Government—Federal tax on cost of transportation of personal property .....	\$	3,970.11	\$	3,515.71
Due to Department of Motor Vehicles .....		40.00		40.00
Guaranty Deposits—Toll accounts .....		6,500.00		5,500.00
Toll Tickets Sold For Future Use .....		14,539.00		12,153.40
Insurance claims deferred .....		37,138.99		35,831.83
State Equity in Fixed Assets .....	5,209,884.53		4,977,178.16	
Earned Surplus .....		451,763.49		213,300.36
<b>TOTAL</b> .....		\$5,723,836.12		\$5,247,519.46

EXHIBIT BBB

CHESAPEAKE BAY FERRY SYSTEM FUND**STATEMENT OF REVENUES AND EXPENDITURES, ADJUSTED TO CASH POSITION, FOR THE FISCAL YEAR ENDED MAY 31, 1952**

REVENUES:		
Tolls .....		\$1,953,108.64
Concessions and rents .....		93,560.20
Recoveries of insurance .....		23,941.58
Miscellaneous .....		1,960.21
<b>TOTAL REVENUES .....</b>		<b>\$2,072,570.63</b>
EXPENDITURES:		
Operating Expenses:		
Salaries .....	\$940,839.72	
Expenses of employes .....	11,737.45	
Light, heat, and telephone .....	10,393.42	
Ticket office supplies and expenses .....	1,457.17	
Food and kitchen expenses for ships' crews .....	101,360.50	
Cabin expense, laundry, and supplies .....	10,267.33	
Fuel oil and lubricating oil .....	99,527.67	
Other miscellaneous expenses .....	3,417.83	\$1,179,001.09
Maintenance and Repairs:		
Buildings .....	\$1,002.82	
Wharves and docks .....	11,893.48	
Toll booths .....	494.29	
Storerooms and workshops .....	2,136.71	
Vessels .....	61,127.13	
Machinery .....	16,079.49	
Equipment .....	31,693.89	124,427.81
General Expenses:		
Salaries .....	\$117,983.98	
Contribution to employes' pension fund .....	27,927.88	
Advertising .....	33,482.94	
Insurance .....	45,071.44	
Expenses of employes .....	3,488.89	
Passenger car costs .....	776.81	
Office supplies and expenses .....	2,543.16	
Stationery and printing .....	1,879.01	
Rent .....	1,890.00	
Postage, telephone, and telegraph .....	8,606.69	
Contractual services, audits, trustees, etc. ....	1,507.25	
Payment of claims for injuries and damages .....	26,453.75	
Other miscellaneous expenses .....	2,129.92	273,741.72
Acquisition of Capital Properties .....		3,624.46
Paid to State Roads Commission for reimbursement of costs incurred in improvements and repairs to ferry properties .....		51,205.37
<b>TOTAL EXPENDITURES .....</b>		<b>1,632,000.45</b>
Excess of Revenues Over Expenditures .....		\$ 440,570.18
Surplus Charges:		
Paid to State Roads Commission for use of Construction Fund, incident to Chesapeake Bay Ferry System Improvement Bonds Redemption .....	\$ 200,000.00	
Creation of Reserve for Accounts Receivable, etc. ....	2,107.05	
<b>TOTAL SURPLUS CHARGES .....</b>		<b>202,107.05</b>
Net Increase in Surplus .....		\$ 238,463.13
Add—Adjustment to Cash Position (Resulting from net changes in certain asset and liability accounts) .....		10,955.93
Net Increase in Cash Balance .....		\$ 249,419.06
Cash Balance, June 1, 1951 .....		169,388.69
Cash Balance, May 31, 1952 .....		<b>\$ 418,837.75</b>

NOTE—There is a surplus of \$451,763.49 at May 31, 1952, arrived at by applying the net increase of \$238,463.13 in surplus for the year as shown by this statement to the surplus of \$213,300.36 at May 31, 1951.

**CHESAPEAKE BAY FERRY SYSTEM FUND****STATEMENT OF REVENUES AND EXPENDITURES, ADJUSTED TO CASH POSITION, FOR THE FISCAL YEAR ENDED MAY 31, 1951**

REVENUES:			
Tolls		\$1,762,479.09	
Concessions and rents		82,004.96	
Recoveries of insurance		1,978.90	
Miscellaneous		5,101.50	
TOTAL REVENUES			\$1,851,564.45
EXPENDITURES:			
Operating Expenses:			
Salaries	\$704,309.66		
Expenses of employes	13,450.12		
Light, heat, and telephone	11,169.58		
Ticket office supplies and expenses	1,508.45		
Food and kitchen expenses for ships' crews	89,910.97		
Cabin expenses, laundry, and supplies	9,688.74		
Fuel oil and lubricating oil	91,345.45		
Other miscellaneous expenses	4,737.47	\$ 926,120.44	
Maintenance and Repairs:			
Buildings	\$ 1,275.88		
Wharves and docks	79,315.35		
Toll booths	108.79		
Storerooms and workshops	1,520.37		
Vessels	129,525.37		
Machinery	13,597.69		
Equipment	25,852.64	251,196.09	
General Expenses:			
Salaries	\$ 94,350.87		
Contribution to employes' pension fund	32,972.52		
Advertising	25,585.22		
Insurance	80,115.95		
Expenses of employes	3,393.31		
Passenger car costs	1,204.27		
Office supplies and expenses	3,774.30		
Stationery and printing	915.07		
Rent	1,890.00		
Postage, telephone, and telegraph	3,127.64		
Contractual services, audits, trustees, etc.	1,711.55		
Injuries and damages to other than ferry employes	3,955.84		
Other miscellaneous expenses	2,573.98	255,570.52	
Acquisition of Capital Properties		7,828.89	
TOTAL EXPENDITURES			1,440,715.94
Excess of Revenues Over Expenditures			\$ 410,848.51
Surplus Charge—Paid to State Roads Commission for use of Construction Fund, incident to Chesapeake Bay Ferry System Improvement Bonds Redemption			644,589.00
Net Decrease in Surplus			\$ 233,740.49
Add—Adjustment to Cash Position (Resulting from net changes in certain asset and liability accounts)			22,412.70
Net Decrease in Cash Balance			\$ 256,153.19
Cash Balance, June 1, 1950			425,541.88
Cash Balance, May 31, 1951			\$ 169,388.69

NOTE—There is a surplus of \$213,300.36 at May 31, 1951, arrived at by applying the net decrease of \$233,740.49 in surplus for the year as shown by this statement to the surplus of \$447,040.85 at May 31, 1950.



CHESAPEAKE BAY FERRY SYSTEM FUND**STATEMENT OF PASSENGERS AND VEHICLES TRANSPORTED BY FERRIES, BY TOLL CLASSIFICATIONS, FOR THE FISCAL YEARS ENDED MAY 31, 1952 AND 1951**

	Toll Rate	Fiscal Year Ended May 31			
		1952		1951	
		Traffic Volume	Toll Income	Traffic Volume	Toll Income
<b>SANDY POINT-MATAPEAKE:</b>					
Passengers (adults) one-way trip . . . . .	\$ .25	1,328,363	\$ 332,090.75	1,183,491	\$ 295,872.75
Passengers (children 6 to 12 years) one-way trip . . . . .	.10	90,299	9,029.90	83,142	8,314.20
Automobiles, including driver over 114 inch wheel base, one-way trip . . . . .	1.54	589,007	907,070.78	516,490	795,394.60
Automobiles, including driver, 114 inch wheel base or less, one-way trip . . . . .	1.28	177,448	227,133.44	160,339	205,233.92
Trucks and busses, including driver, (other than busses operating on regular-run franchise):					
Length 20 feet or less, single trip . . . . .	2.06	11,565	23,823.90	10,196	21,003.76
Length 20 feet and not more than 25 feet, single trip . . . . .	2.57	50,724	130,360.68	52,119	133,945.83
Length over 25 feet and not more than 30 feet, single trip . . . . .	3.60	11,081	39,891.60	10,666	38,397.60
Length over 30 feet and not more than 35 feet, single trip . . . . .	4.12	15,939	65,668.68	15,631	64,399.72
Length over 35 feet and not more than 40 feet, single trip . . . . .	4.63	46,001	212,984.63	38,618	178,801.34
Motorcycles, and motorcycles with side-car, including driver, single trip . . . . .	1.03	471	485.13	571	588.13
Busses operating on regular-run franchise, including driver, but not including passengers, single trip . . . . .	1.54	10,116	15,578.64	9,567	14,733.18
Unusual vehicles, single trip . . . . .	Various	3,336	17,318.30	5,635	28,685.18
Official Duty, Etc.:					
Passengers . . . . .	Free	23,730		16,495	
Vehicles . . . . .	Free	25,683		21,764	
<b>TOTAL</b> . . . . .		<b>2,383,763</b>	<b>\$1,981,436.43</b>	<b>2,124,724</b>	<b>\$1,785,370.21</b>
<b>ROMANCOKE-CLAIBORNE:</b>					
Passengers (adults), one-way trip . . . . .	\$ .25	13,412	\$ 3,353.00	16,770	\$ 4,192.50
Passengers (children 6 to 12 years) one-way trip . . . . .	.10	1,143	114.30	1,422	142.20
Automobiles, including driver, over 114 inch wheel base, one-way trip . . . . .	1.03	7,887	8,123.61	9,749	10,041.47
Automobiles, including driver, 114 inch wheel base or less, one-way trip . . . . .	1.03	2,033	2,093.99	2,457	2,530.71
Trucks and busses, including driver, (other than busses operating on regular-run franchise):					
Length 20 feet or less, single trip . . . . .	1.28	149	190.72	427	546.56
Length 20 feet and not more than 25 feet, single trip . . . . .	1.55	959	1,486.45	777	1,204.35
Length over 25 feet and not more than 30 feet, single trip . . . . .	2.06	61	125.66	38	78.28
Length over 30 feet and not more than 35 feet, single trip . . . . .	2.31	24	55.44	29	66.99
Length over 35 feet and not more than 40 feet, single trip . . . . .	2.58	37	95.46	62	159.96
Motorcycles, and motorcycles with side-car, including driver, single trip . . . . .	.51	3	1.53	2	1.02
Official Duty, Etc.:					
Passengers . . . . .	Free	3,236		3,982	
Vehicles . . . . .	Free	5,922		5,379	
<b>TOTAL</b> . . . . .		<b>34,866</b>	<b>\$ 15,640.16</b>	<b>41,094</b>	<b>\$ 18,964.04</b>
<b>GROSS TOTAL</b> . . . . .		<b>2,418,629</b>	<b>\$1,997,076.59</b>	<b>2,165,818</b>	<b>\$1,804,334.25</b>
Transportation Tax (included in above rates)			<i>43,401.89</i>		<i>39,342.05</i>
Refunds and Abatements . . . . .			<i>566.06</i>		<i>2,513.11</i>
<b>NET REVENUE FROM TOLLS</b> . . . . .			<b>\$1,953,108.64</b>		<b>\$1,762,479.09</b>

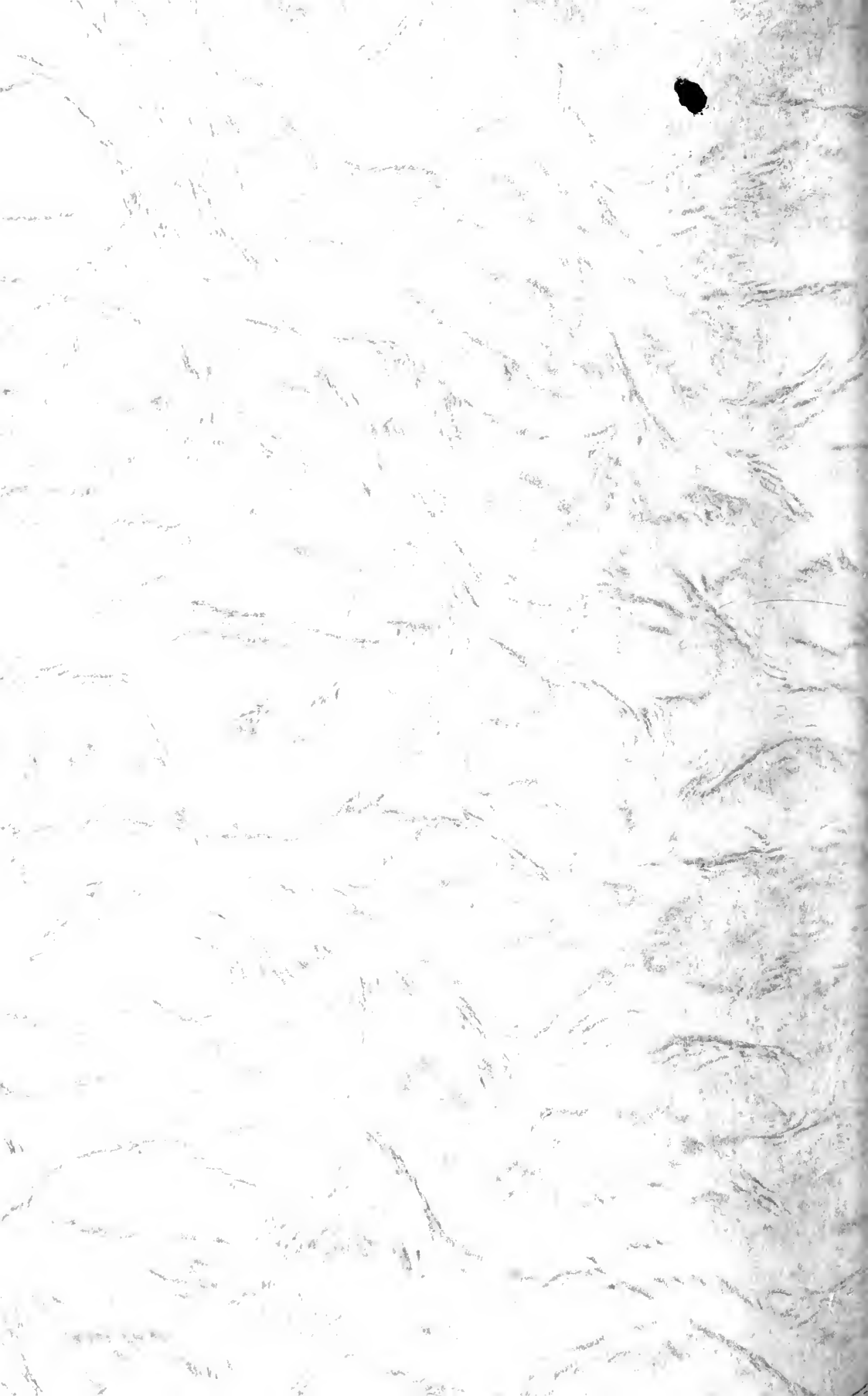
NOTE: *Italics* indicate red figures.

Date Due \_\_\_\_\_

**DO NOT CIRCULATE**



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**DO NOT CIRCULATE**

