

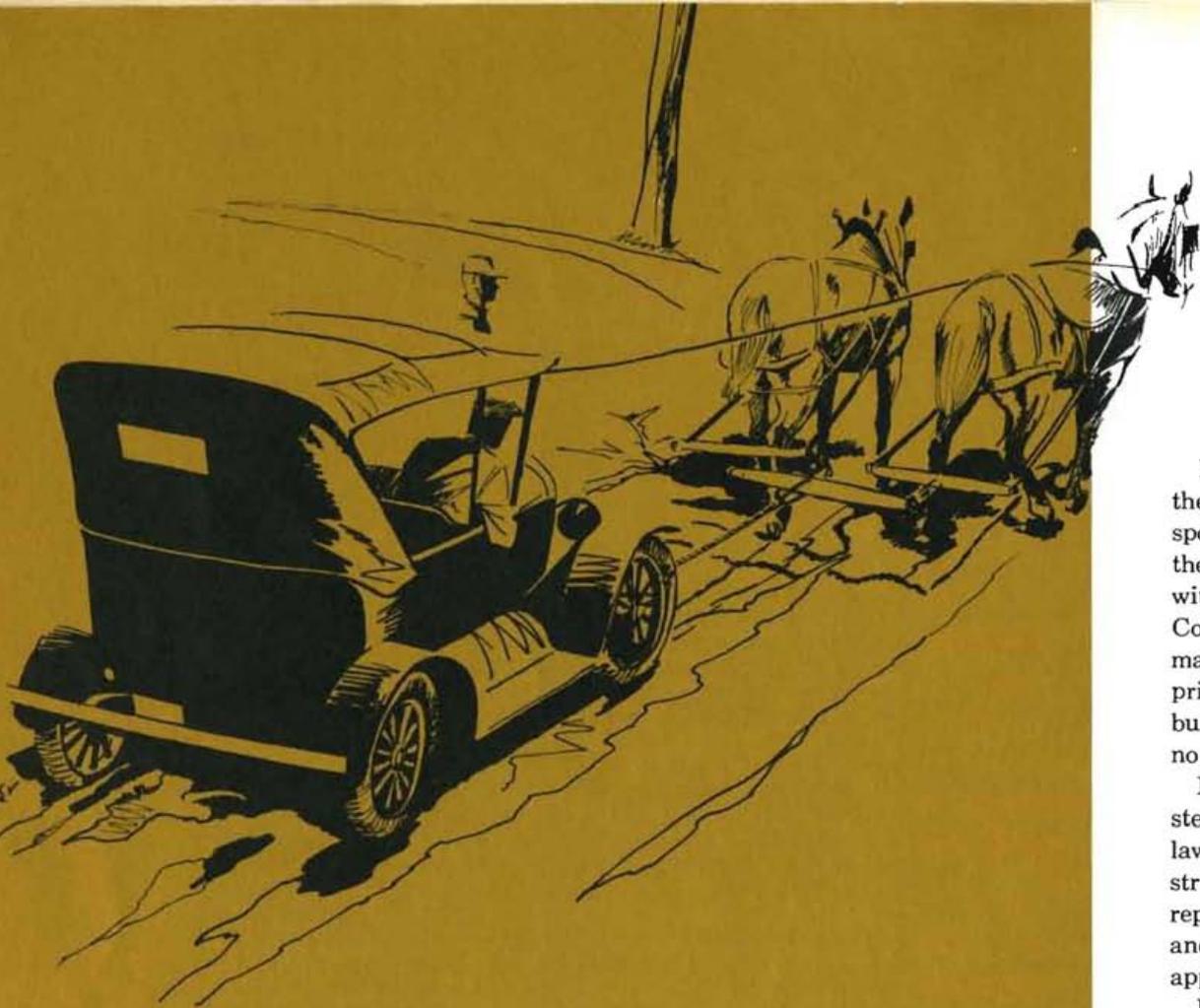
Highway

From the time of the first Swedish colonists in Delaware until the present century, roads in Delaware were entirely a county responsibility. In the earliest days, each landowner was directed by the county authorities to clear a road across his property to meet with those laid out by his neighbors on either side. Later the Levy Courts of the counties built additional roads and levied road taxes to maintain the county highway systems. During the 19th century, private turnpike companies were authorized by the legislature to build or improve a few roads along the most traveled routes, but no public funds went into these projects.

It was not until 1903 that the legislature took the first halting steps toward a state highway system, when it passed a state aid law providing for joint State-County financing of new road construction. Unfortunately, the law met with public disfavor and was repealed within two years. The automobile was still in its infancy, and the need for a state highway system had not yet become clearly apparent.

But there were some citizens who saw the need for good roads. Prominent among them was T. Coleman du Pont, who fifty years ago envisioned a road running the length of Delaware that in permanence, width, engineering, and appearance was abreast of the most modern superhighways of today. He was determined that the State should have such a highway, even if he had to build it himself.

As spokesman for a growing group of good roads advocates, he secured enabling legislation in 1911 to permit organization of "Coleman du Pont Road, Incorporated" and began construction of a highway the same year. As built, it was but a start toward the broad six- and eight-lane divided highway conceived by du Pont, but the original two-lane concrete road was one of the finest highways of its day.



History

On April 2, 1917, the State Highway Department was created by the legislature, with the duties of acquiring full information about the roads of the State, of laying out and constructing state highways to provide roads that with reasonable maintenance should be permanent, and of maintaining the highways under its jurisdiction. The new department was organized on May 10.

The department took over construction of the Du Pont Boulevard—although du Pont continued to pay construction costs up to \$44,000 per mile—and the engineering and construction organization assembled by Coleman du Pont Road, Inc., became the nucleus of the staff for the infant State Highway Department. From its beginning, the department met requirements for federal highway grants-in-aid under the Federal Aid Highway Act of 1916.

Through the years, the department has been given added functions, and its organization has grown to cope with them. Among the responsibilities it has been given are:

- 1921—State Police, organized as sparetime volunteer force in 1919.
- 1925—Motorfuel tax collection. First 1¢/gallon tax levied 1923.
- 1929—Public lands, formerly under the Public Lands Commission.
- 1935—County roads, originally built and maintained by Levy Courts.
- 1938—Fort Christina State Park, built for tercentenary observance.
- 1940—Motor vehicle registration, formerly under Secretary of State.
- 1940—Mosquito control, begun in early 1930's by CCC.
- 1947—Delaware Memorial Bridge construction.



Road scenes from the early 1920's. Methods and roads have changed.



But throughout its four decades of existence, except perhaps during World War II when materials shortages practically halted highway work, the department has assumed these and other multiple responsibilities without interfering with its main program—constructing and maintaining the State's highway system.

Only six chief engineers have served the department in the 41 years since its creation. The first was Charles H. Upham, who served from 1917 to 1922. Under him, the Coleman du Pont Boulevard was practically completed and the last remaining toll roads acquired by the State and integrated into the state highway system as free public roads.

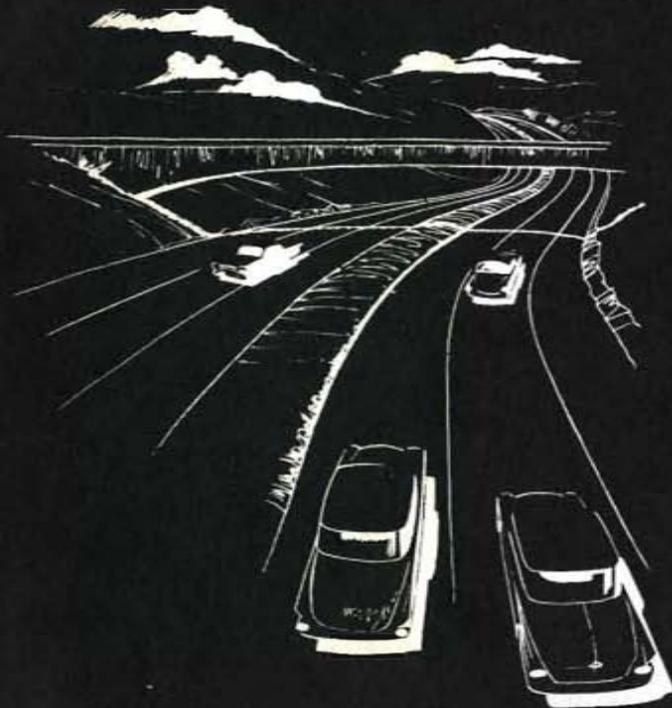
An extensive program of highway improvement was also begun under the State Aid Road Law. Under this act, counties issued "Good Roads" bonds, the State matched the county contribution, and construction was carried out by the State Highway Department. Roads to be improved under this program were jointly selected by the department and the Levy Court of the county after public hearings.

The introduction of concrete pavement, or stone roads as they were then called, found many people skeptical, but as the number of automobiles increased and people began using the new highways, the concrete roads soon became the desired type.

During these early days, many people could not understand why sharp turns and curves were being eliminated as old roads were reconstructed, and considerable difficulty was often encountered in obtaining small rights-of-way needed. Many small parcels were the subject of extended negotiation or condemnation actions, and since most of them were farmland, Highway Department officials became experts on the agricultural economics of the State, through their studies of the crop and land values on which damages were based.

Later, as agricultural marketing switched from rail and water transportation and became dependent on good highways, right-of-way difficulties eased considerably. Rural landowners began to petition the department to build new roads and in some cases even contributed necessary parcels of land.

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Seaford, 1923.
Looking towards the old bridge.

In 1922, C. Douglass Buck became chief engineer of the department, a position he was to hold until he became Governor in 1929. While he was chief engineer, the last foot of the Du Pont Boulevard was poured, and a long-range program to beautify Delaware's highways was begun. His term also saw a number of developments that signalled the State's growing dependence on highways.

In 1925, with the growth of interstate automobile and truck traffic, the Delaware-New Jersey Ferry (privately owned) was opened as a link in one of the two principal New York to Washington routes. The following year, Delaware began the elimination of railroad grade crossings.



The year 1927 saw the completion of the first of the highly successful all-weather secondary, or farm-to-market, roads. These were 18-foot roads with 3-foot shoulders on each side. However, only one 9-foot lane was paved with concrete; the other was graded and drained dirt. With the light traffic of the time, a motorist could travel long distances on modern concrete pavement, using the dirt lane only when passing an oncoming vehicle. The unusual design provided first-class roads at minimum cost.

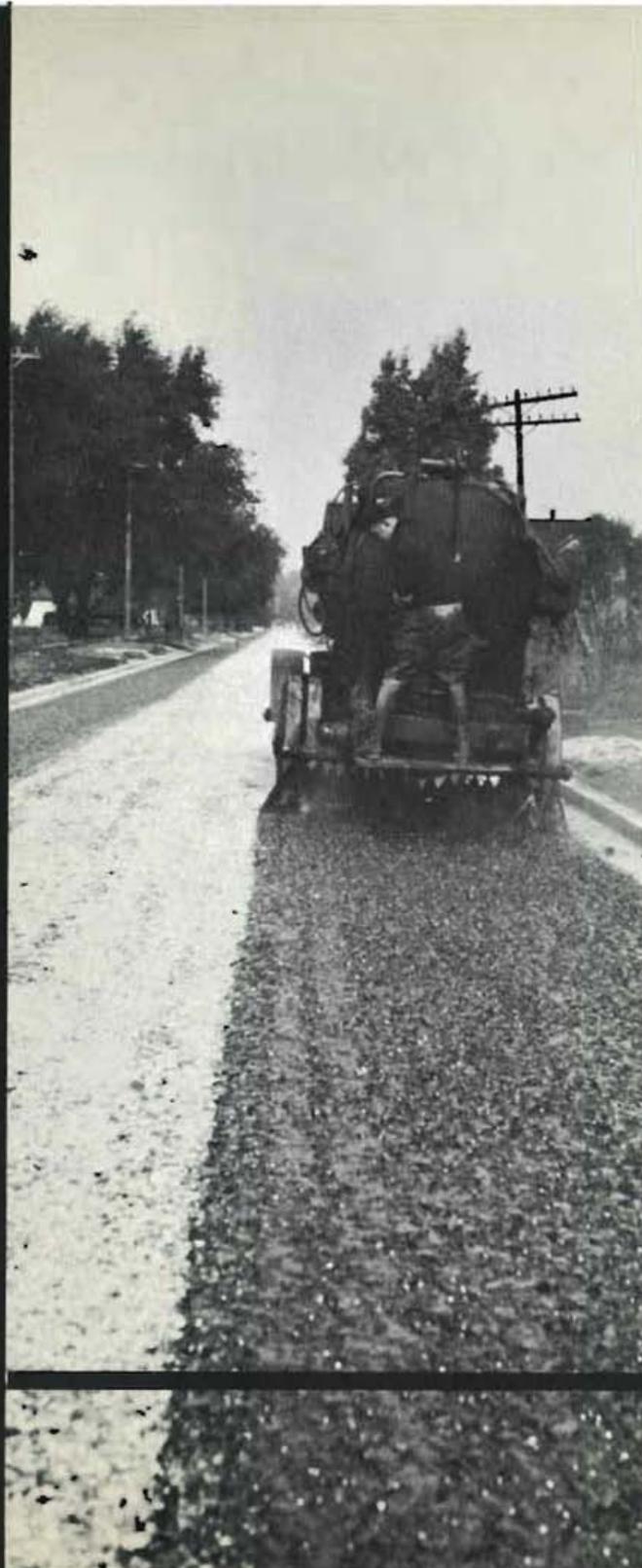
Warren W. Mack, who was to be chief engineer for 17 years, took on the job in 1929, following the resignation of C. Douglass Buck. The arrival of a new era in transportation was definitely established that year when the State Police—now grown from the original 4 highway patrolmen to a 50-man force—made the first arrest on record for “operating an airplane under the influence of alcohol.”

This was the period of modernization. The Du Pont Highway between Wilmington and Dover was completed as a dual highway in 1934—the best superhighway in the world at the time, and the longest stretch of dual road anywhere.



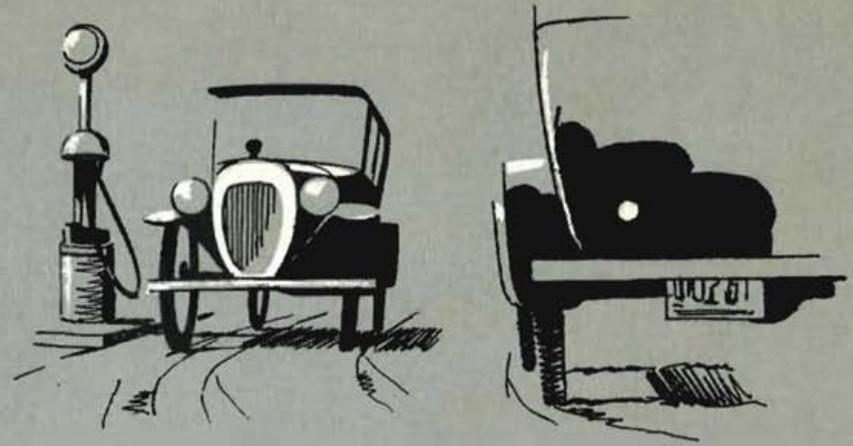


Penetration Macadam was used to give many state roads their first all-weather surface. Traffic using the road smoothed the final seal coat of stone chips.



In 1931, the Lea Boulevard in Wilmington was completed; in 1932 and 1933 the Ocean Highway from Rehoboth to Bethany Beach was built. A new engineering technique was developed for the Dover by-pass, which had to cross a marsh 50 feet deep with mud—after earth fill was placed and allowed to settle, dynamite was exploded beneath it to blast out the remaining mud and allow the fill to settle to solid earth. At the same time, once-adequate 14 and 16 foot roads were being widened to 18 and 20 feet to meet the heavier traffic demands.





In 1935, all county roads were transferred to the Highway Department; this immediately tripled the mileage under its care—from 1,240 to 3,800 miles. The following year, it also assumed responsibility for several main streets in Wilmington.

Between 1934 and 1940, the Governor Printz Boulevard, from below Wilmington to Claymont, was built. In 1935 and 1936, Route 40 was made a dual road. Opening of Delaware Park in 1937 created a real need for improved roads between Stanton and Wilmington, and during the next two years the Capitol Trail, Route 2, was dualized from Wilmington through Elsmere to Price's Corner.

Then came World War II. Shortages of materials as well as manpower forced abandonment of new construction, and even maintenance fell below minimum acceptable standards. The only major project undertaken was construction of the new high-level St. Georges Bridge on Route 13, to replace the lift bridge knocked down by a freighter in 1939. However, long-range planning continued.



The Delaware River Crossing Division was formed in 1947 to construct a bridge across the Delaware, and when Chief Engineer Mack left to become consultant on the bridge, William A. McWilliams became fourth chief engineer of the department.

Colonel McWilliams left the department to join the crossing division in 1949, being succeeded by M. Allan Wilson, who died after only a short time. On his death, the present chief engineer, Richard A. Haber, was named to the job.

This was the period of the great post-war construction program. Among projects started during this period were the 50-mile dualization of Route 13 from Dover to Delmar, the dualization of Route 202 north of Wilmington, improvement of Route 2 from Wilmington to Newark, and reconstruction

and widening of Lancaster and Pennsylvania Avenues in Wilmington.

In 1953, Mr. Haber left the department to join a consultant firm, and Colonel McWilliams returned to his former position, serving until his retirement in 1955. Walter B. McKendrick then became the sixth man to hold the chief engineer's title. When he left to direct a national test-road project in 1956, Mr. Haber returned to the department.

Several years ago, the legislature authorized a bond issue to surface the state's remaining dirt roads with all-weather pavement. Of the original 1,626 miles, 630 have been surfaced, in the first 3 years of the program. Since then, the General Assembly has designated additional roads and streets as part of the program, increasing the total mileage involved.





South Market Street, 1937, before the construction of the Causeway. Note gasoline price at left.



South Market Street Bridge, 1926. Note horse and carriage "speeding" out of Wilmington. Bridge speed limit was 8 miles per hour.

As the department rounded out its 40th year in 1957, a 19-mile dual lane was completed between Harrington and Greenwood. With it, Coleman du Pont's dream of 50 years earlier had finally become a reality—a continuous multi-lane divided highway the length of the state.

The preceding 40 years of progress is merely prologue. As highway travel continues to increase, so too must new highways be designed and built to satisfy the needs and wants of the motoring public. Already Delaware is embarked on building highways designed for use a generation hence—the Delaware portion of the Federal System of Interstate and Defense Highways. Their design is based on today's best estimate of what the needs of the 1970's will be. Today's best roads were foreseen in all their essentials 40 years ago by a few farsighted individuals who were awake to the implications of the automobile and the way it could revolutionize American living habits. But who is rash enough to say with assurance what the highway needs of the year 2000 will require? The most that can be foretold is this: Delaware's highway agency will furnish the people of the state with a system as advanced as the people need and want.